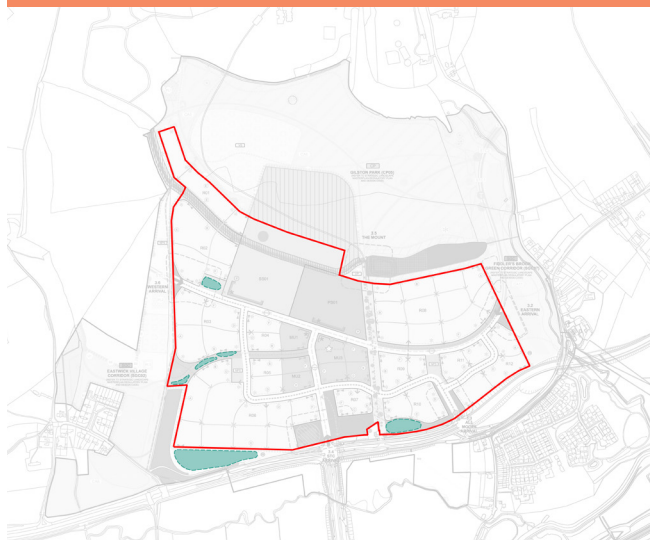


4. Green & Blue Infrastructure

4.6 Blue Infrastructure Components

Key Plan



Key Design Principles

- SuDS basins **should** be designed to integrate with the wider landscape structure.
- SuDS basins in the Western Arrival and the smaller green spaces **should** be designed with a minimum of 1 in 3 side slopes, or shallower (where practically possible to do so) to ensure they contribute to functional open space.
- Planting **should** be used in all basins to maximise the biodiversity potential of the system, and assist with the integration of the basins into the landscape.

Dry Basins

The dry attenuation basins are positioned in areas of the site, designed to temporarily store runoff water during heavy rainfall events. These basins are designed to be dry during normal conditions, blending into the landscape while providing effective flood control.



Dry basins can have multiple functions and should be well maintained



Dry swales provide opportunities for landscape features such as bridges and walls

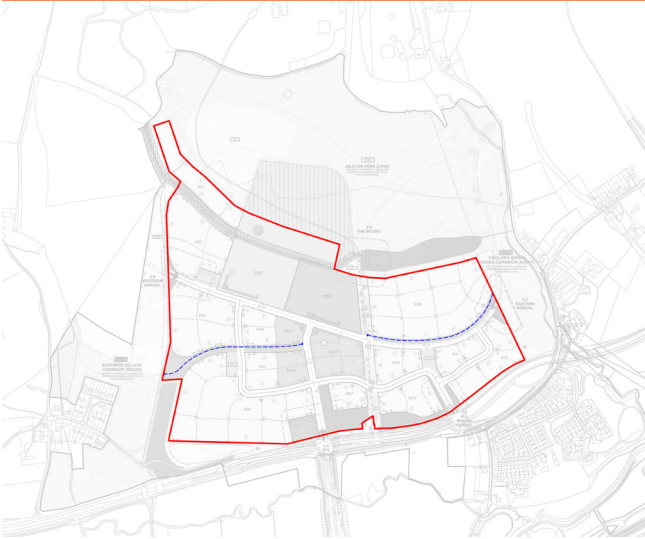


Planting of dry swales can enhance biodiversity

4. Green & Blue Infrastructure

4.6 Blue Infrastructure Components

Key Plan



Swales

The swales are strategically placed and designed to direct and manage stormwater runoff. These shallow, vegetated channels help to slow and filter the water, enhancing both water quality and the site's natural drainage system.

Key Design Principles

- Swales are proposed within open spaces and **should** feature gently sloping sides so as to integrate within the landscape.
- Swales **should** be designed as landscape features, to enhance interest and habitat benefits to the spaces.
- Swales **should** be planted to maximise the biodiversity potential of the system, and assist with the integration of the basins into the landscape.
- The use of buried pipes can be considered.



Swales can create natural transitions between boundaries and frame parcels



Swales can create opportunities for play

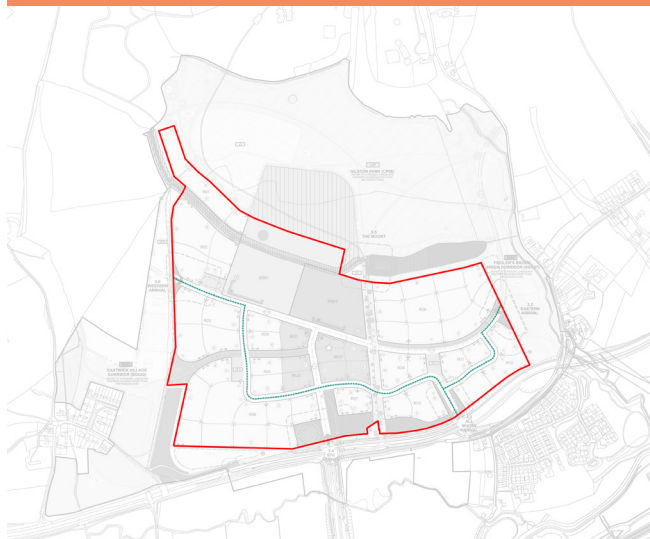


Planting of swales can make them attractive features

4. Green & Blue Infrastructure

4.6 Blue Infrastructure Components

Key Plan



Key Design Principles

- Rain gardens **should** be used along the Primary Street and STC.
- These **should** be linear planted bioretention features, directly connected to the carriageway to allow surface water to drain onto the surface of the raingarden.
- Where trees are proposed within narrower verges, rain gardens **should** be piped through the tree pits. In wider verges, the tree planting **should** sit behind the rain gardens.

Rain Gardens

The rain gardens are carefully located along the Primary Street, designed to capture and filter stormwater runoff. These vegetated spaces help improve water quality while adding aesthetic value to the landscape.



Rain gardens can animate small spaces between buildings



Rain gardens can help intercept and filter surface run-off



Rain gardens can provide integrated play

4. Green & Blue Infrastructure

4.6 Blue Infrastructure Components

On-Parcel and On-Plot SuDS Features

On-Parcel and on-plot SuDS features are critical in managing surface water sustainably within individual development parcels. These components are designed to control runoff at source, reduce flood risk, improve water quality, and contribute to biodiversity and amenity.

All SuDS features **must** align with the principles set out in the CIRIA SuDS Manual (C753), Non-Statutory Technical Standards for Sustainable Drainage Systems (Defra, 2015), and Lead Local Flood Authority (LLFA) guidance. SuDS components **must** be designed with future maintenance responsibilities clearly identified (e.g. homeowner, management company, local authority). Where adoption is required, SuDS features **must** meet national standards and adoption criteria.

On-plot SuDS features **must** be incorporated into the landscape and public realm design. The list below outlines potential options, however this is not an exhaustive list. Other innovative solutions **should** be explored, as appropriate to the site's context.

- Bioretention features,
- Landscaped channels and swales,
- Permeable Surfacing
- Soakaways
- Residential on-plot attenuation features

Bioretention Features

Bioretention features, such as rain gardens, are shallow, vegetated basins that treat stormwater runoff by filtering it through engineered soils and plants. They reduce pollutants and runoff volume via infiltration and evapotranspiration.

Bioretention features **must** be designed to detain, filter, and convey stormwater before discharging to the main drainage network or ground. Excess flows from large storms **must** be safely conveyed through overflow routes, or discharged via underdrains where infiltration isn't feasible.

Bioretention features fit efficiently into site layouts with minimal land use and are ideal for parking bays, road verges, landscaped margins, and private gardens receiving roof runoff. They provide both functional drainage and visual amenity.

Engineered tree trenches (e.g. the Stockholm system) are a form of bioretention using structural soil layers to retain and treat runoff while supporting healthy tree growth and biodiversity. Concrete support boxes can be used to stabilise paved areas, and perforated inlets allow stormwater entry and root aeration. Planting **should** prioritise native or climate-resilient species suited to urban environments.



Rain gardens along verge add multifunctional landscape amenity to the street.



Bioretention features can uplift the landscape & visual amenity of parking areas



A mixture of permeable paving and bioretention features in parking provide effective on-plot drainage features and breakup hard landscaped areas

4. Green & Blue Infrastructure

4.6 Blue Infrastructure Components

Landscaped Channels and Swales

Vegetated channels, including swales and shallow landscaped depressions, are linear SuDS features that convey surface water runoff while also delivering water quality, amenity, and biodiversity benefits. Rainwater is directed from impermeable areas into the channel, where it flows through and alongside vegetation that helps to slow, filter, and partially treat the runoff. These features can also provide temporary storage and promote sediment deposition, particularly when designed with check dams, weirs, or shallow pools to enhance attenuation.

Swales can be effectively integrated into verges, shared surface streets and public open spaces. In such settings, they contribute to the landscape character of the site while delivering a clear drainage function. Planting schemes may range from regularly mown, grass-dominated swales to more naturalistic, species-rich mixes, depending on their location, function, and maintenance regime.

Swales **must** be vegetated and integrated into the landscape design, serving dual functions of drainage and amenity. Side slopes **should** not exceed 1:3 (preferably shallower for amenity areas). Where possible, swales **should** be designed to infiltrate. If not it **should** include an underdrain or connection to a further SuDS component.

Permeable Surfacing

Permeable surfacing enables rainwater to infiltrate through the surface into underlying layers, where it is temporarily stored before infiltration to the ground, reuse, or controlled discharge to a drainage system. The sub-base **must** be designed to accommodate design storage volumes and provide infiltration or attenuation as required.

Where infiltration is not viable, due to low-permeability soils, shallow groundwater, or contamination risks, a lined system with controlled outflow to the drainage network **should** be provided. Permeable paving can be used for driveways, private access roads, parking courts, and footpaths. This approach supports sustainable drainage while also providing opportunities to visually differentiate between parking zones and vehicle routes using different surface finishes.

Soakaways

Soakaways are a type of drainage system designed to manage surface water runoff by allowing it to infiltrate directly into the ground rather than flowing into sewers or watercourses. They are usually a pit or trench filled with rubble or permeable material. Surface water (like rainwater from roofs or paved areas) is directed into the soakaway via a pipe. The water slowly soaks into the surrounding soil through the permeable material and the pit's walls and helps reduce runoff volume and prevent flooding or overload of drainage systems.

Soakaways **must** only be where the ground is permeable enough to allow infiltration. They **must** be sized and located away from building foundations and groundwater sources following BRE Digest 365, CIRIA C753 guidance.



A mixture of permeable paving and bioretention features in parking provide effective on-plot drainage features and breakup hard landscaped areas



Landscape channels can also act as a form of traffic calming in the street

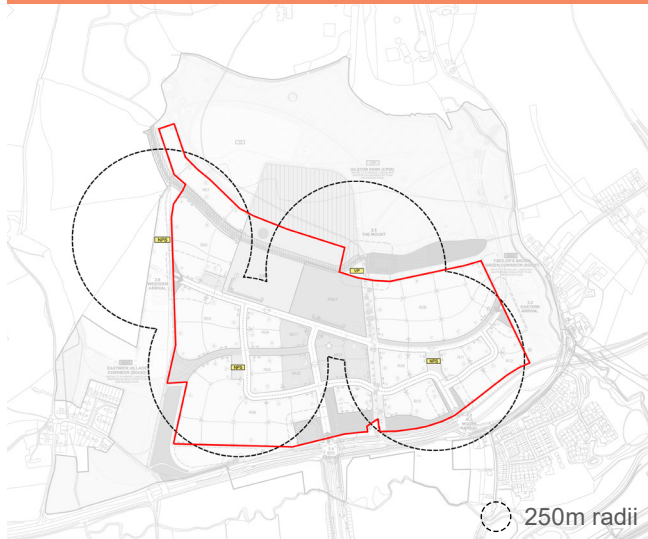


Landscape channels and swales can provide biodiversity value to SuDs

4. Green & Blue Infrastructure

4.7 Play and Sports Provision

Key Plan



Play Provision

- Play is an important development need and contributes significantly to well-being.
- Opportunities for enabling play **should** be explored in all public spaces.
- Play provision **must** be inclusive with opportunities for play available for all ages, including adults and the elderly, as well as those with additional physical, sensory or processing needs.
- Play provision **must** be delivered through a combination of formal equipped spaces as well as informal play opportunities.
- Each play space **must** have its own identity but **must not** limit the range of users or functions of each space.
- The quantum of formal provision **must** be in accordance with the Development Specification (paragraph 3.7.4).
- Formal equipped play areas are located at key areas of Village 1, often linked to larger open spaces and routes and **must** include:
 - a safety information board indicating the intended use and age suitability of equipment as well as stating dogs are prohibited from the area.
 - planting to provide sensory interest through colour, scent, texture and taste.
 - seating which **should** be located in both shaded and unshaded positions.
 - waste bins.
- Formal play areas **must** provide diverse and stimulating play experiences as described by Fields in Trust.
- Play elements are defined in this code as equipment or structures delivering a primary play experience. Each play element **must** deliver one primary play experience.
- At least 75% of play elements in a formal play area **must** provide distinct experiences. Duplication of popular experiences, such as swings, **should** be included for larger areas.
- Functional groupings (e.g. balance trails) **must** be treated as one play element if they cannot be used individually.
- Play provision **must** actively encourage play for young and teenage girls. The "Make Space for Girls" campaign **should** guide play space design to better accommodate girls.
- Multi-element structures **should** be counted as individual play elements based on distinct experiences offered.



Careful use of colour to relate play areas to their surroundings



Play mounds create additional play value



Challenging play is important for development

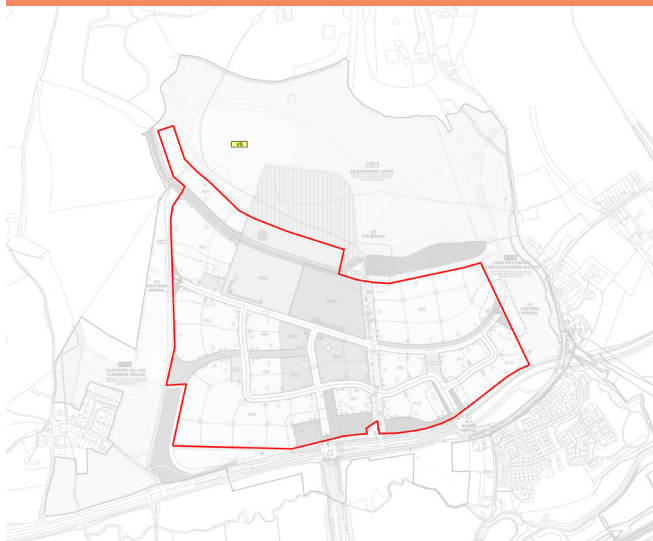


Formal play areas can act as attractive focal points

4. Green & Blue Infrastructure

4.7 Play and Sports Provision

Key Plan



Sports Provision

- Sports provision for Village 1 is located with the SLMP and is subject to the SLMP Design Code.
- Village 1 **must** deliver the requirements set out in 3.7 of the Development Specification i.e. one playing field of at least 0.8ha.
- Designs **must** comply with the SLMP Design Code.
- Designs **should** consider the current guidance from Sport England to ensure quality and fitness for purpose.
- Outdoor fitness equipment, flat spaces for outdoor classes such as Tai Chi, yoga or HIT activities **should** be considered

Village Park

- The Village Park **must** be at least 1ha in total area and **must** provide 2000sqm of play provision in the form of a Village Playground.
- It **must** provide a level of provision equivalent to a combined NEAP + LEAP + LAP as defined by Fields in Trust.
- Play equipment in the Village Park **should** use natural materials, such as timber or stone, where possible reflecting its situation on the edge of Gilston Park outside the Village 1 boundary.
- Safety surfacing **should** comprise bonded rubber bark mulch in muted colours.
- Fencing **should** be avoided to seamlessly integrate the play area with the surrounding landscape.

Neighbourhood Greens

- Neighbourhood Greens **must** provide 2,000sqm of open space and 625sqm to include formal and informal play equipment provision.
- Neighbourhood Greens **should** provide a focal point for local areas and incorporate: informal recreation, opportunities for socialising, open space, network of paths, seating, lighting and integrated SuDS.
- The Neighbourhood Greens have a more urban context than the Village Park. Materials **should** reflect this and may include greater use of painted or bare metal finishes.
- Safety surfacing **should** comprise bonded rubber bark mulch in muted colours.
- Fencing **should** only be included to prevent children from running into roads. Fencing **should** be sympathetic to its surroundings and softened through planting.



Planting can help play areas integrate into their surroundings



Natural materials such as boulders create tactile play experiences



Trees felled on site can be used to create play features

4. Green & Blue Infrastructure

4.7 Play and Sports Provision

Informal Play

- Informal play **must** be provided as set out in *Sections 4.3 - 4.5* of this Design Code, ensuring that it is well-distributed across the Village.
- Opportunities for incidental and sensory play **should** be designed where possible.
- Areas of shorter grass (still using a flowering lawn mix) **should** be created to allow for running and informal ball games.
- Felled trees from site **should** be reused where possible as play features.
- Opportunities for play with water **should** be utilised.
- Opportunities for creating playful interaction with landscape features **should** be utilised:
 - Challenging users to find particular elements in the landscape such as different types of leaves or a sequence of hidden sculptures.
 - Fitness challenges for users such as challenging them to run around a particular feature as many times as they can in a given time.
- Opportunities for integrating play into street furniture and public art **must** be utilised. This may include but not be limited to:
 - Chess boards in picnic benches.
 - Challenges on wayfinding signs or public art.
- Other informal play features **should** include (but not limited to):
 - Stepping and balancing logs.
 - Mounds and banks which could assist with level changes.
 - Boulders.
 - Living willow structures.
 - Mazes.
 - Designing gravelled areas that could be used for Pétanque.

* Fields in Trust (2008) 'Planning and Design for Outdoor Sport and Play'



Stepping logs and mounds



Gravel surfaces allow games such as pétanque to be played



Chessboards can be integrated into tables

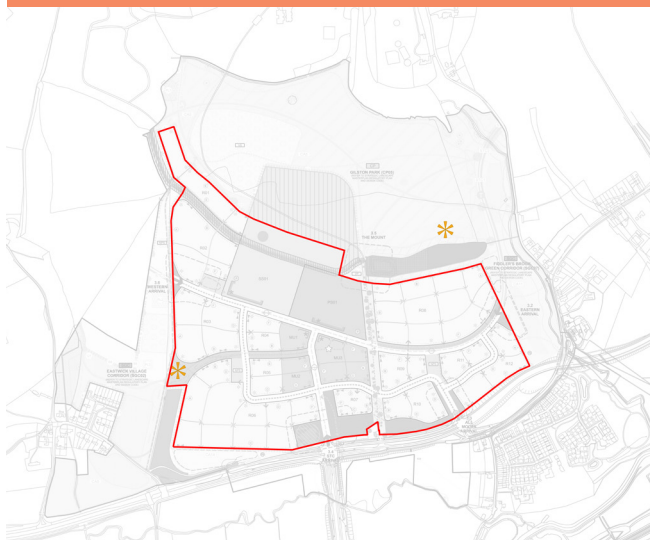


Mazes can be created using a range of materials

4. Green & Blue Infrastructure

4.8 Community Orchards

Key Plan



Character and Form

- Two community orchards associated with Village 1 are proposed. One to the north of the Chase (refer to SLMP) and the other at the western end of the East-West Green Link.
- They **must** be integrated into the design of the surrounding landscape.
- Total provision **should** be approximately 0.75 hectares.
- They **should** take the form of a traditional orchard with non-dwarfing rootstocks and wide spacings to contribute to the landscape structure of the site.
- The detailed design of each orchard may vary from location to location

- Species-rich grassland **must** be managed on the orchard floor, with hay crop to be cut and removed between July and September. Vary cutting heights for invertebrates. Keep base of new trees clear. Retain windfall fruit in winter for bird and invertebrates. Regulated pruning with consideration to the overall structure. Pruning **must** be appropriate to species / variety.

Function

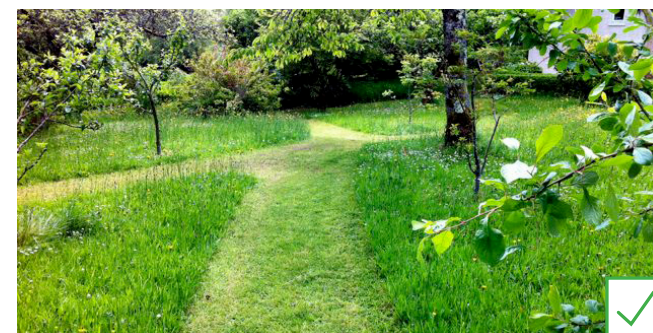
- Community orchards **must** be accessible for all users and the entire community.
- They **must** provide opportunities for community events and social interaction.
- They **must** provide usable public open space and contribute to wider public open space provision for the Village.

Features

- Community orchards **should** be designed as community spaces and may incorporate features that enable their use by the community such as:
 - Outdoor event space
 - Picnic areas
 - Welfare facilities such as drinking water taps and toilets
 - Shelter
 - Tool storage
 - Composting and refuse points
 - Provision **should** be made for vehicular access and parking to facilitate maintenance and community activities.



Varieties of fruit trees can be used for community use



Orchards can provide biodiversity and pollinator benefits



Orchards can provide attractive landscape features

4. Green & Blue Infrastructure

4.9 Ecology & Biodiversity

Future proposals will seek to retain, protect and enhance key ecological features such as woodland blocks, waterbodies and grasslands.

Connectivity will be promoted through the green infrastructure corridors towards Gilston Park and the Stort Valley, with wider connectivity to the neighbouring strategic green infrastructure.

Existing retained waterbodies and watercourses will be enhanced to improve their water quality, biodiversity and suitability for species of conservation interest. Proposed SuDS elements that hold water for long lengths of time **should** be designed as wildlife habitat. Proposed swales **must** use appropriate vegetation and **should** act as movement corridors for amphibians, reptiles and invertebrates.

To support wildlife connectivity, the urban landscape **must** include wildlife features such as boxes (e.g. bird and bat) and hedgehog holes in garden fencing, while the proposed green infrastructure **must** act as movement corridors containing appropriate planting, hedgerows, SuDS features, and **must** include hibernation areas such as log piles.

The proposed community orchards will provide areas of habitat creation. Local varieties of fruiting trees and pollinator friendly planting will be proposed to support local wildlife and biodiversity objectives.

Ecologically sensitive lighting designs **must** support nocturnal species, particularly north of the Park Pale which have been identified as an area of sensitivity.

- Existing habitats to be retained **must** be protected and enhanced where appropriate according to the Village Ecology Strategy.
- Protection and mitigation of impacts to protected and priority species **must** be in line with legislation.
- Habitats supported by veteran trees, hedgerows and woodlands **must** be managed and enhanced.
- Key retained habitats (hedgerows, woodlands and watercourses) **must** be protected by appropriate buffer zones where possible. Buffers and habitat buffer treatment are defined in the Development Specification (section 4.3). Watercourse buffers will be defined through the discharge of planning conditions (Condition 44). Buffer zones **should** be managed as semi-natural vegetation.
- New water features **must** consider biodiversity value.
- Installation of bat boxes in retained habitats and incorporation of roost features in suitable buildings **must** be explored.
- New habitat creation and landscaping **should** include flower rich mixes for invertebrates and fruiting and seeded tree and scrub species for birds.
- Provision of habitats including bee bricks and loggeries for insects and integrated bird nesting bricks/boxes for swifts **must** be explored.
- Habitat creation for reptiles including rough tussocky grassland surrounded by areas of scrub **must** be explored.
- Reptile hibernacula and egg laying sites for grass snakes in receptor areas **must** be explored.



Species-rich grassland acting as a buffer for woodland habitats



Species-rich grassland provides value for pollinators



Tussocky grassland can support a range of species, including reptiles



There is an opportunity to replace the lost pond

4. Green & Blue Infrastructure

4.10 Climate Change & Biosecurity Strategy

Climate Change

- Green and blue infrastructure **must** be designed to address future climatic changes to enhance ecosystem resilience.
- Designs **must** account for extreme weather events and **should** integrate adaptive solutions at all project stages.

SuDS (Sustainable Drainage Systems)

- Water sensitive landscape design **must** address the potential for future issues of heavy rainfall and storm events.
- Wetlands and permanent water features **should** be incorporated to store rainwater and cool air during hot periods.

For further details on the SuDS provision, refer to Section 4.6 Blue Infrastructure Components.

Plant Selection

- Planting has a positive affect on the environment, not least they provide an attractive, pleasant and healthy livable place. Planting helps to cool air and improve air quality by removing carbon and harmful particulate, important for human health.
- Hardy, drought, and storm-resistant species **must** be prioritised.
- Native and non-native species **must** be selected for resilience to future climates and support wildlife.
- Tree planting **should** be designed to avoid large similar-species clusters larger than five to limit disease spread, with adequate spacing to slow transmission. There may be exceptions to this, for example where avenues are proposed.

- Trees **should** be sourced from reputable UK nurseries with robust biosecurity practices.
- Planting **should** follow RHS's "Plants for Pollinators" list to enhance biodiversity and support struggling wildlife.

Biosecurity

- Biosecurity is unfolding as a major threat to ecosystem resilience. Planting design **must** address potential future climatic and biosecurity events, to mitigate and prevent harm.
- Plant selection **must** comply with Schedule 9 of the Wildlife and Countryside Act (1981). Invasive species **must not** be used (e.g., Japanese Knotweed, Himalayan Balsam, Water Fern).
- Planting design **should** refer to Defra's UK Plant Health Risk Register and the Landscape Institute's Plant Health Toolkit.
- Plant material **should** be sourced from reputable UK nurseries with robust biosecurity practices. Where appropriate control measures can include provision of plant passport, or quarantine.



Species should be chosen that are resistant to disease, such as Ulmus 'New Horizon', and able to adapt to a changing climate



Many natives are highly ornamental and support a range of wildlife



Using reputable UK nurseries reduces the risk of introducing pests



Removal of invasive species such as Japanese Knotweed protects habitats from harm

4. Green & Blue Infrastructure

4.11 Wayfinding

The landscape framework seeks to implement a clear and legible wayfinding system within the Village.

Legibility is important, not just for those visiting or passing through, but for the new community. There is a requirement to identify where you are and how you move through the newly developed masterplan, on both a practicable level, as well as aesthetic.

The future wayfinding strategy, which **must** be agreed before first occupation, is to:

- Be informative
- Encourage community interaction
- Evoke an awareness and connection with nature
- Encourage physical activity, and
- Utilise the built environment.

Natural wayfinding has been incorporated into the urban design of the masterplan, but can be enhanced with defined spaces for certain activities, planting and changes in materials through spaces and recognition of landmarks.

Key points to adhere to:

- The wayfinding strategy **must** identify decision making locations and **must** furnish those locations with appropriate signage to aid in the decision making
- Signage **must** be consistent and uniform, whilst also responding to the setting, being sensitive to existing elements and features.
- Signage **must** allow a user to identify different Villages. The signage will be detailed as part of the Reserved Matters Application.

- The wayfinding strategy **must** integrate into other elements where appropriate, such as with public art or street furniture.
- Visibility is a key part of a wayfinding strategy, as such, open space design **must** ensure that important landmarks are visible at key junctions and locations
- The wayfinding strategy **must** identify key recreational destinations, such as play spaces, routes and trails (including fitness trails) to be implemented on public footpaths, that link to wider movement corridors suitable for walking and cycling.
- Information boards **should** be used to identify on-site wildlife and biodiversity initiatives, highlighted in relevant areas, to inform people of nature-sensitive corridors and habitats.
- Wayfinding **should** link to heritage trail and coordinate with the SLMP Design Code where appropriate.
- Technology such as QR codes can be integrated into the wayfinding elements.



Signage integrated into architectural buildings



Clear, easy to understand directions



Focal landscape features



Information integrated into surfaces



History detailed within hard surfaces

4. Green & Blue Infrastructure

4.12 Public Art

Design Principles

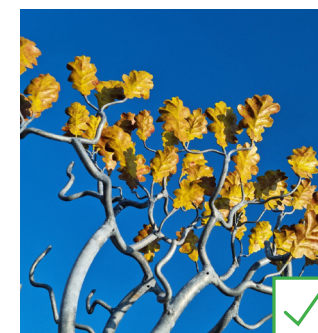
- Public art plays a pivotal role in shaping the identity, character, and experience of the Village. The following guiding principles are to inspire meaningful, high-quality public art that aligns with the overarching vision for sustainable, resilient, and vibrant communities. While this design code provides direction, the separate Public Art Strategy **must** take precedence, detailing specific requirements and project implementation.
- Gilston benefits from a strong sense of place, and significant areas of high quality interconnected public spaces. These two elements can be combined to inform a placemaking and public arts strategy.
- There is an opportunity to unify the placemaking and public art elements of the development, through the use of landscape, wayfinding and education to create a strong identity for Gilston as a whole.
- Landscape elements **should** function as placemaking features, to give character and identity to a place. These elements can take the form of planting, play spaces, the use of materials and the use of the spaces.
- Public art **should** be embedded in the landscape and may take the form of landscape features.
- Planting, boundaries, access routes and play **should** all form part of the identity of a place and contribute to legibility.
- A clear palette of materials and their consistent use **should** be used to enable users to navigate around the site.
- The use of waymarking trees of distinct seasonal colour/form and use of colour blocking etc **should** be considered.



Artwork can reflect the site's heritage



Materials respectful of surroundings



Creative reuse of materials is encouraged



Sculptural focal points

4. Green & Blue Infrastructure

4.13 Soft Landscaping Palette

Function

Planting has an important function in softening built form, framing views and enhancing biodiversity. It can also provide amenity, shading and cooling (reducing the 'urban heat island' effect), improving air quality by removing carbon and harmful particulate, surface water management, and biodiversity. There are also opportunities to use planting as an educational resource, for example orchards are a key opportunity to engage children / communities with food growing and local heritage.

Planting **must** reinforce and enhance the character of the Village and contribute to placemaking and wayfinding. Planting **should** introduce seasonal changes to both residential streets and public open space. This will enhance the amenity value of the Village whilst reflecting the seasonal character of the wider landscape and its cultural importance.

Features

- As per *Section 4.9 Ecology & Biodiversity*, approximately 70% of ornamental planting and hedging **should** comprise either native species, cultivars of native species or listed in the most current RHS 'Plants for Pollinators' scheme.
- Refer to *Section 4.13* to assist in plant selection
- Planting **should** be selected in consideration of the *Boundary Typologies Library* in *Section 6.11*.

Ornamental Planting

- Ornamental planting **must** avoid excessive use of static evergreen shrub planting as this breaks our cultural connections with our landscapes and results in generic places.
- Ornamental planting area **must** comprise a mix of shrub and herbaceous plants to create varied visual interest, greater climate resilience and biodiversity benefits. Retain diversity in plant lists to ensure planting arrangements are diverse and do not contain large blocks of same genus
- Block planting **should** be restricted to bolder statement planting in key locations where immediate effect is required, such as gateways. Diversity in plant lists **should** be retained to ensure planting arrangements do not contain large blocks of the same genus.
- The following species or similar **should** be used where appropriate:
 - Achillea 'Terracotta'
 - Anemone x hybrida 'Honorine Jobert'
 - Armeria maritima
 - Cornus alba 'Aurea'
 - Bistorta amplexicaulis 'Blackfield'
 - Buddleja davidii 'Black Knight'
 - Brachyglottis 'Sunshine'
 - Digitalis grandiflora
 - Euphorbia amygdaloides var. robbiae
 - Geranium x oxonianum 'Wargrave Pink'
 - Hedera helix 'Parsley Crested'
 - Helleborus foetidus
 - Primula veris
 - Sarcococca confusa
 - Salvia nemorosa 'Caradonna'
 - Skimmia japonica 'Nymans'
 - Veronica 'Red Edge'
 - Veronicastrium virginicum 'Album'
 - Viburnum opulus 'Compactum'

Ornamental Hedging

- Hedging **should** be used to reinforce landscape structure along streets
- Hedging **should** be non-variegated to create a muted foil for built form and to ensure subtle transitions between hedging types.
- Diversity in plant lists **should** be retained to ensure planting arrangements do not contain large blocks of the same genus.
- The following species or similar **should** be used where appropriate:
 - Berberis darwinii
 - Elaeagnus x submacrophylla
 - Escallonia 'Apple Blossom'
 - Escallonia 'Iveyi'
 - Escallonia 'Red Dream'
 - Ilex aquifolium
 - Laurus nobilis
 - Lonicera ligustrina var. pileata
 - Lonicera ligustrina var. yunnanensis 'Maigrün'
 - Ligustrum ovalifolium
 - Prunus laurocerasus 'Otto Luyken'
 - Veronica brachysiphon
 - Veronica 'Great Orme'
 - Veronica 'Midsummer Beauty'
 - Veronica 'Sapphire'
 - Osmanthus x burkwoodii

4. Green & Blue Infrastructure

4.13 Soft Landscaping Palette

Sustainable Drainage Planting

- SuDS planting **must** support drainage performance by slowing flows, aiding infiltration, stabilising soils, and improving water quality.
- Species **must** be selected for their hydrological tolerance (permanently wet, seasonally wet, occasionally wet, free-draining).
- Planting **should** enhance biodiversity and habitat connectivity, prioritising native species in naturalistic areas and ornamentals in residential settings.
- Planting **should** contribute to visual quality and seasonal interest without compromising maintenance access, safety, or SuDS function.
- Species **must** be robust, non-invasive, and low-maintenance, with root structures appropriate for slopes, swale bases, and basin edges.

Native planting **should** include the following or similar species:

Permanently Wet / Standing Water

- *Potamogeton natans*
- *Ceratophyllum demersum*
- *Schoenoplectus lacustris*

Frequently Wet / Seasonally Inundated

- *Iris pseudacorus*
- *Mentha aquatica*
- *Lythrum salicaria*

Occasionally Wet / Periodically Inundated

- *Molinia caerulea*
- *Angelica sylvestris*
- *Eupatorium cannabinum*

Free-Draining / Marginally Damp

Leucanthemum vulgare
Cornus sanguinea
Viburnum opulus

Ornamental planting **should** include the following or similar species:

Permanently Wet / Standing Water

- *Pontederia cordata*
- *Iris × robusta* 'Gerald Darby'
- *Butomus umbellatus*

Frequently Wet / Seasonally Inundated

- *Iris sibirica* cultivars
- *Primula Candelabra* cultivars
- *Hesperantha coccinea* 'Major'

Occasionally Wet / Periodically Inundated

- *Geranium* 'Rozanne'
- *Persicaria affinis* 'Darjeeling Red'
- *Deschampsia cespitosa* 'Goldtau'

Free-Draining / Marginally Damp

- *Salvia uliginosa*
- *Carex morrowii* 'Everglow'
- *Cornus sericea* 'Kelsey'

4. Green & Blue Infrastructure

4.13 Soft Landscaping Palette

Street Tree Selection

In addition to their role in providing structure to the landscape street trees have an important role in supporting wildlife. Street trees selection **must**:

- Support pollinating insects.
 - Provide fruits or nuts (where fruit fall would not be problematic) to support insects and birds.
 - Comprise a range of native and non-native species and their cultivars to improve resilience to climate change and extend the period of foraging opportunities and range of species supported.
- Proposals **must** seek to maximise opportunities for street tree planting.
 - Street trees selection **should** aim to use the largest species practical for a given situation.
 - The use of evergreen tree species **should** be considered if proposed in an appropriate layout and ratio.
 - Trees **should** include (but not be limited to) the those included on the following page.
 - *Refer to Section 4.2 for Existing Vegetation and Features*
 - Successful trees result from careful tree selection, a good-quality rooting environment, high-quality plant material, and sound arboricultural practices. This process **should** be guided by the principle of planting "the right tree in the right place" and by relevant Trees & Design Action Group guidance.

Street Tree Requirements

- Street trees **should** be planted so that there are at least:
 - 10 trees per 100m along the Primary Street and STC.
 - 5 trees per 100m along other residential streets.
- Requirements for street tree provision **must** be considered when designing foundations, services, drainage and lighting.
- Tree planting adjacent to areas within the SLMP **must** reflect the 'GPE Strategic Design Guide' including (but not limited to) *Tilia cordata* (Lime), *Acer campestre* (Field Maple) and *Carpinus betulus* (Hornbeam).
- Street trees **should** be of a suitable size to provide immediate structure to the street scene and robustness to vandalism.

Orchard Trees

- A range of orchard species **must** be used to provide a range of fruit types to reduce gluts of fruit littering the ground.
- Orchard trees **must** be grafted onto rootstocks suitable for the site conditions and ensuring longevity.
- Cultivar selection **should** be varieties of local provenance, enable effective cross pollination, maximise the length of the fruiting season and provide a range of uses.
- Orchard trees **should** be labelled including species, cultivar, rootstock, grafting date and planting date to ensure that educational value is maintained.
- Orchard trees **should** be set within wildflower meadow grassland to enhance ecological value.
- Other ecological enhancements such as beehives, hibernacula, bird and bat boxes **should** be included where appropriate.
- Educational information **should** be provided on the varieties selected which may include recipes using the fruit.
- Sourcing trees of local provenance **should** be explored such as from the historic Rivers Nursery in High Wych.

4. Green & Blue Infrastructure

4.13 Soft Landscaping Palette

Selected Street Trees

Taxon	Approx. height at 25 years (m)**	Approx. width at 25 years (m)	Water Demand	ZOI* (m)
<i>Acer campestre</i> 'Elsrijk'	12	6	Moderate	9
<i>Acer platanoides</i> 'Emerald Queen'	18	8	Moderate	14
<i>Aesculus indica</i>	20	10	Moderate	15
<i>Amelanchier</i> 'Ballerina'	6	3	Moderate	5
<i>Catalpa bignonioides</i> 'Aurea'	8	6	Moderate	6
<i>Celtis australis</i>	20	8	Moderate	15
<i>Corylus columna</i> 'VDB Obelisk'	12	3	Low	6
<i>Crataegus x persimilis</i> 'Splendens'	8	4	High	10
<i>Gleditsia triacanthos</i> 'Sunburst'	10	5	Low	5
<i>Koelreuteria paniculata</i>	17	7	Moderate	13
<i>Malus</i> 'Evereste'	8	4	Moderate	6
<i>Prunus avium</i>	20	7	Moderate	13
<i>Prunus</i> 'Pandora'	6	3	Moderate	5
<i>Prunus</i> 'Tai-haku'	7	4	Moderate	5
<i>Prunus x subhirtella</i> 'Autumnalis Rosea'	8	4	Moderate	6
<i>Sorbus aria</i> 'Majestica'	12	7	Moderate	9
<i>Sorbus</i> 'Astrid'	5	3	Moderate	4
<i>Sorbus aucuparia</i> 'Sheerwater Seedling'	12	4	Moderate	9
<i>Sorbus x hybrida</i> 'Gibbsii'	7	5	Moderate	5
<i>Tetradium danielli</i>	12	6	Moderate	9
<i>Tilia cordata</i> 'Winter Orange'	10	6	Moderate	8
<i>Tilia platyphyllos</i> 'Rubra'	15	7	Moderate	11
<i>Tilia tomentosa</i> 'Wandell'	15	7	Moderate	11
<i>Ulmus</i> 'Frontier'	10	5	High	13
<i>Ulmus parvifolia</i> 'Dynasty'	12	8	High	15

*Acer campestre* 'Elsrijk'*Acer platanoides* 'Emerald Queen'*Aesculus indica**Koelreuteria paniculata**Malus* 'Evereste'*Sorbus aucuparia*
'Sheerwater Seedling'

4. Green & Blue Infrastructure

4.14 Hard Landscaping Palette

Function

- Material colours **must** be muted and of natural tones to complement rather than detract from the buildings and landscape setting.
- The materials palette **must** also adapt to accommodate the evolving Sustainable Drainage Strategy - for example, by using pervious paving or permeable bound surfacing systems.
- Hard landscaping **must** reinforce and enhance the character of the Village and contribute to placemaking and wayfinding.
- A range of appropriate adoptable materials **should** be used in order to reinforce the street hierarchy and create a safe, comfortable neighbourhood identity.
- Manholes **should** be in hard and not soft surfaces.

Features

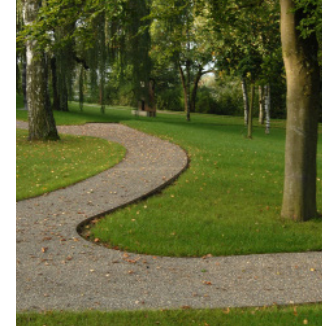
- The landscape and public realm materials **must** be selected to uphold the highest standards of ethical and sustainable procurement.
- Hard landscaping **must** respond to the topography of the site. Pedestrian and cycle routes **should** be designed to accessible gradients where possible. Retaining structures **should** be sensitively designed to enhance the landscape.

Materials

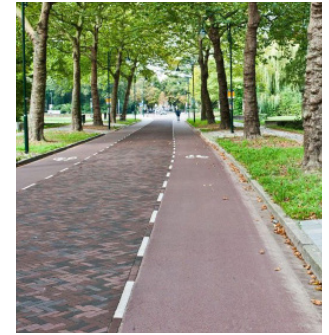
- Pedestrian footpaths (off-road) **must** be a minimum 2m wide self-binding gravel.
- Shared footpath / cycleways (off-road) **must** be a minimum 3m wide resin bound gravel.
- Adoptable shared footpath / cycleways **must** be a bituminous surface.
- Materials **must** be selected based on supply, durability, longevity and ease of replacement or replication.
- The adjacent page provides a table of streetscape materials, which sets out the typical standard required with specific products to be agreed at a later stage. More bespoke materials for key public spaces **should** also be agreed at detailed stage.



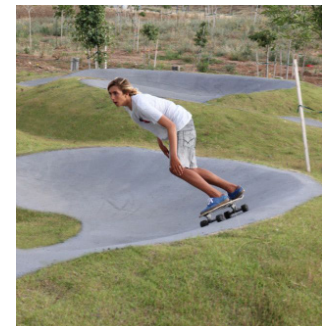
Self-binding gravel for pedestrian walkways



Bituminous surfaces for cycleways



Resin-bound gravel surfaces for shared path types

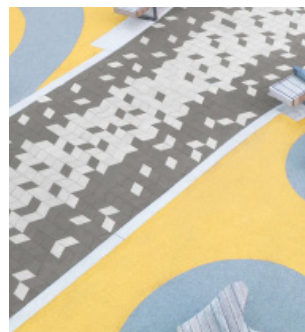


4. Green & Blue Infrastructure

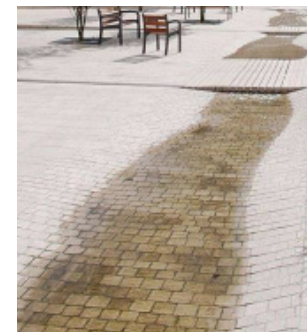
4.14 Hard Landscaping Palette

Further considerations

- Material choice **should** consider local environmental impact and endeavour to use low carbon options where possible.
- The use of porous materials **should** be considered. Such as permeable block paving.
- Consideration **should** be given to albedo on materials in order to limit urban heat island effect.
- Variations of colour **should** be considered to denote changes in typology surface type and provide contrast.
- Any materials used **must** be suitable for their application; this is a fundamental requirement of good design. Refer to Section 5.9 Access for All.



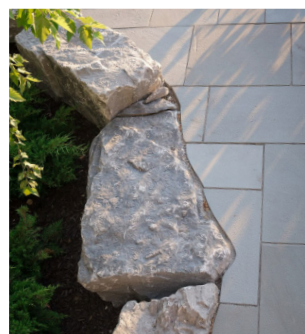
Colour in hard landscape can animate play spaces.



Hard landscaping can create focal features.



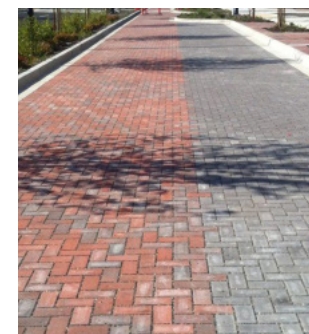
Colour variations in resin bonded materials for play areas.



Craftsmanship can add value and detail to spaces.



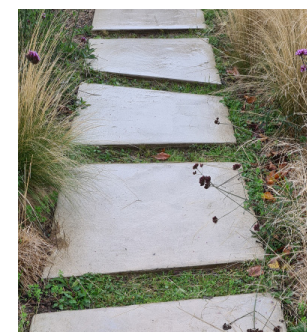
Paving can animate a streetscene.



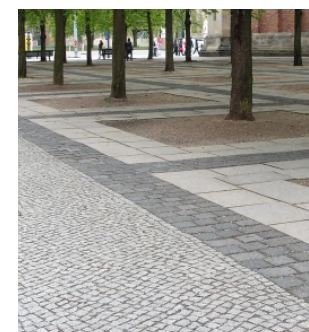
Block paving can be used to demarcate a shared surface.



Imprinted finish in-situ concrete.



Informal concrete stepping stones.



Feature paving for public spaces.

4. Green & Blue Infrastructure

4.15 Street Furniture Palette

Design Principles:

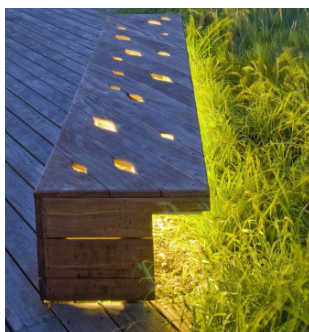
- Street furniture selection **should** have an emphasis on simple, contemporary design with consistent product types to be used across Village 1. Products **should** be sourced from established suppliers with a consistent proven supply chain, wherever possible, to ensure a reliable procurement and replacement process. However, the above criteria **should not** preclude the proposals of new, innovative products and suppliers, where appropriate.
- The types and locations of street furniture **must** be defined at the Reserved Matters stage for each parcel or phase of development. The selection of products **must** have a coherent design that is consistent to the character across the public realm over the lifetime of the development.
- Litter bins (general, dog waste and recycling) **must** be a part of a coordinated strategy across the site to minimise quantity but also to have provision at key nodes - at paths and road junctions; entrances and exits from key areas i.e. play spaces; and in appropriate places for waste collection to avoid maintenance vehicles tracking across soft landscape areas. They **must not** be located adjacent to seats.
- Open spaces **must** be protected from unauthorised vehicular access. Landscape solutions such as small mounds and ditches **should** be considered. Where fencing, knee rails or bollards are used these **must** be appropriate to the surrounding character.
- Vehicular restraint systems **must** be provided where required by highway standards or safety audits. These **should** be appropriate to the surrounding character with timber restraint systems preferred.
- Along key movement routes within public open spaces seating **should** be provided at intervals of no greater than 100m intervals.
- Street furniture **should** be from sustainable sources such as timber from accredited forests and/or recycled materials.
- Furniture materials **should** typically be hardwood timber and either unfinished metal (galvanised or weathered) or matt powder coated.
- Street furniture **should** be installed in a hardstanding base to provide users with a consistent flat area and a tidy edge to the adjacent soft landscape to avoid maintenance issues around furniture legs and bases.
- Cycle parking facilities **should** be logically incorporated into the streetscape, ensuring cycle use within the site is easy and convenient. They **should** generally be set in spaces between trees or in more open areas of paving near junctions or commercial frontages.
- Use of bollards **should** be limited, as appropriate to a low-speed, pedestrian and cycle focussed scheme
- Traffic signs, hard edges and road markings **should** only be used where necessary, as they contribute to urbanising the surrounding area.
- A detailed signage and wayfinding strategy **must** be developed alongside the street furniture palette with elements combined where appropriate (mounted on lighting columns etc) to reduce street clutter.

Mandatory Requirements and Guidance:

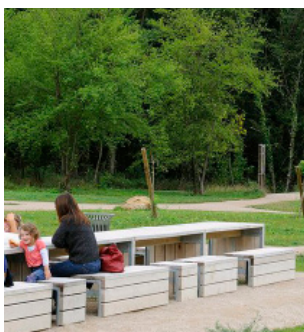
- Selected products **must** be robust in construction and contemporary in style. Off-the-shelf and bespoke products **must** be consistent in style.
- Proposed elements **must** be durable and sourced from recognised suppliers to ensure a reliable procurement and replacement process.
- Elements will generally be grouped together or treated as combined elements to avoid unnecessary 'standalone' items. Furniture **must** be sited to ensure footways are clear and streetscapes are not cluttered.
- Seating **must** include designs of varying height, a proportion of which **must** feature backs and arm rests to assist with standing and sitting. Appropriate space for wheelchair users and / or prams **must** be provided.

4. Green & Blue Infrastructure

4.15 Street Furniture Palette



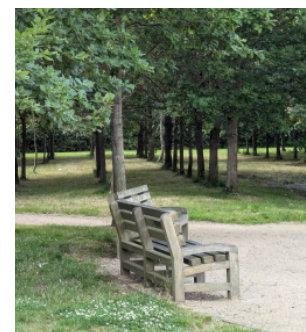
Lighting can be used within furniture to animate spaces.



Outdoor seating for recreational areas.



Seating can be playful and aesthetic.



Timber benches compliment natural settings



Hardwood bollards are long lasting



Lighting can be incorporated into structural features.



Signage and wayfinding elements using natural materials



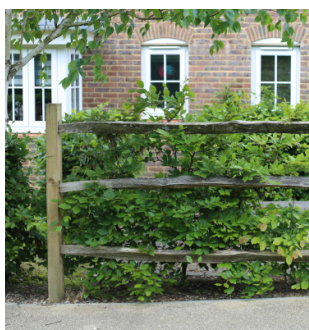
Informal features can be incorporated into the streetscape.



Seating arrangements can increase social activity.



Traditional materials compliment certain heritage settings.



Traditional fencing methods compliment a natural setting.



Furniture can blend into surroundings.



Sustainable materials.



Street furniture can be multi-functional.



Built structures can utilise urban greening.



Access & Movement

Chapter 5

5. Access & Movement

5.1 Introduction

Village 1 lies in a key strategic location, at the confluence of a number of movement corridors which not only provide access for Village 1 residents and visitors, but also for the remaining Villages forming part of the Gilston Park Estate.

At the heart of the design lies the principle of a 'walkable neighbourhood', which was originally enshrined within the Manual for Streets guidance. The concept has taken more prominence through the increasing focus there has been for new sustainable settlements to establish 20-minute neighbourhoods where possible, supported by a range of facilities that can be easily accessed.

This is one reason why it is important for Village 1 to be arranged in such a way that a permeable network of streets is created in order to enhance pedestrian and cycle movements. Priority is also provided for public transport, through the establishment of dedicated bus corridors, alongside this pedestrian/cycle infrastructure.

In doing so, the permeability of the layout for Village 1 is best described as being 'filtered', with a positive skew towards sustainable modes of travel. Whereas active travel and bus corridors are direct, legible and prioritised through the layout of Village 1, the comparable vehicular routes **must** be less direct, more sinuous in character and slower.

The natural choice for internal travel **must** therefore always be for people to walk, cycle, wheel or take the bus. However, some car travel **must** be facilitated in simple recognition that some end users of the Village may have originated from places that do not lend themselves as well to alternative modes of transport. This echoes with the objective of seeking for 60% of all journeys to be made via sustainable modes, supported by the wider HGGT aspiration for a 50% sustainable mode journey share for all of Harlow.

The design choices that have been made are therefore about maximising travel choice for residents, employees, students and/or visitors and, where car travel is unavoidable, to ensure that sufficient provision is provided to ensure such movements are accommodated, including through the provision of Electric Vehicle charging points, a legible street network and parking provision where required.

The outcome of the approach is a form of development that is primarily designed to be at a human scale, with a clear focus on priority spaces and corridors for people to move freely or congregate.

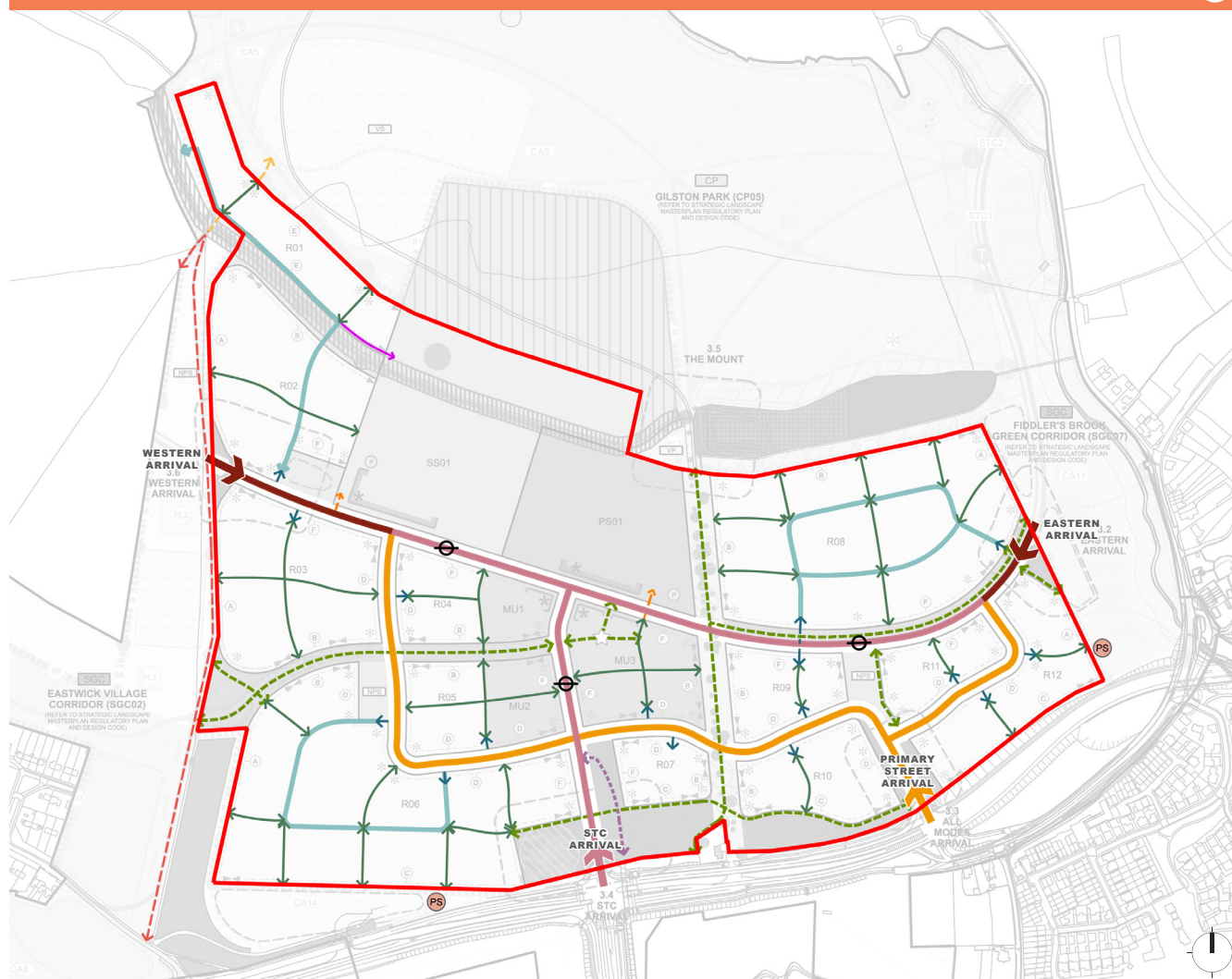
In providing design guidance for movement and access the following elements are covered:

- V1MP Access Points;
- Street Hierarchy;
- Streets as Spaces;
- Traffic Calming Features;
- Bus Network;
- Active Travel Network;
- Mobility Hub;
- Access For All;
- Parking Strategy;
- Electrical Vehicles & Cycle Parking; and
- Utilities, Noise & Lighting.

5.2 V1MP Regulatory Plan

V1MP Regulatory Plan - Access and Movement

M



Key

Village 1 Access Points

- ➔ Access A: Southern STC (Sustainable Modes Only)
- ➔ Access B: STC (All Modes)
- ➔ Access C: Southern Access (All Modes)

Street Hierarchy

- Street Type A - STC (Sustainable Modes Only)
- Street Type B - STC (All Modes)
- Street Type C - Primary Street (All Modes)
- Street Type D - Secondary Street (Indicative alignment)
- Street Type E - Tertiary Street and Cross Parcel Permeability (Indicative alignment)

Access to Minor Routes and Parcels

- ➔ Access Point: Fixed Location (+/- 10m flexibility permitted)
- ➔ Vehicular Route to Schools (+/- 10m flexibility permitted)
- ➔ Emergency & Maintenance access to Secondary School (Indicative location)

Active Travel Network

- Existing Footpath (Public Right of Way)
- Indicative alignment of Rerouted Footpath (Public Right of Way)
- Location of Proposed Foot/Cycle Bridge
- Indicative alignment of Leisure Route

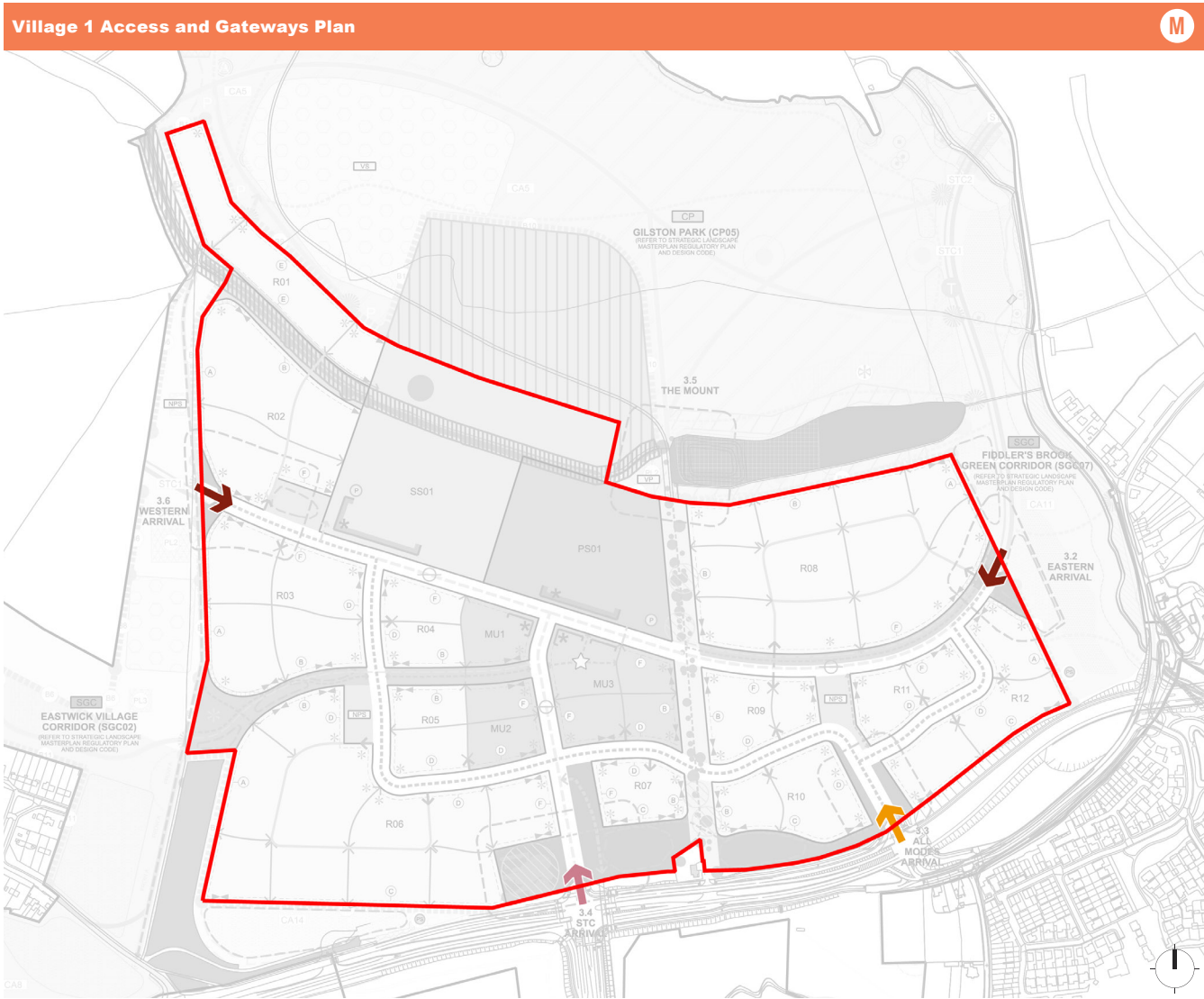
Bus Network

- Indicative Bus Stop

Utilities

- Indicative location of foul water pumping station

5.3 Access



Key

Village 1 Access Points

- Access A: Southern STC (Sustainable Modes Only)
- Access B: STC (All Modes)
- Access C: Southern (All Modes)

Village 1 integrates with the neighbouring area via a series of multi-modal connections. The Village 1 Access and Gateways Plan highlights the locations of these principal connections, where access for pedestrians, cyclists and vehicles will be achieved.

In terms of the overall network hierarchy, Eastwick Road provides the primary means through which the development will be accessed, either through the creation of new junctions delivering access or through new crossing points, including a grade-separated foot/cycle bridge. The volume of background traffic using these external routes means that the most efficient way to manage conflicting movements will generally be best achieved through signalisation.

The detailed design of Access Points A & C into Village 1 are fixed by the approved planning consent.

Access A: Southern STC (Sustainable Modes Only)

The north-south centrally aligned bus and active travel corridor leads directly from the Central Stort Crossing at Fifth Avenue (now Zelensky Avenue). It provides primary access for bus and active travel modes through a modal filter. All other vehicular traffic **must** enter Village 1 via Access B or Access C.

Pedestrian and cycle movements across busy roads **should** be secured by means of both at-grade crossing points, as well as through the foot/cycle bridge. Any new pedestrian/cycle infrastructure **should** follow or re-enforce the future desire line to/from Harlow Town and its railway station.

Access B: STC (All Modes)

The continuation of the STC corridors, to the west and east of Village 1 will provide a means of connection with other Villages at Gilston Park.

Access C: Southern Access (All Modes)

In the south-east of Village 1, the creation of a new access provides an opportunity to secure a primary point of vehicular access, backed by the proposed re-alignment of Eastwick Road. The configuration of the access comprises traffic signals, which is best in providing a degree of control for how traffic is able to exit the development, while at the same time manage through-traffic on the Eastern Stort Crossing. Traffic signals will also enable the prioritisation of pedestrians and cyclists through controlled crossing facilities.

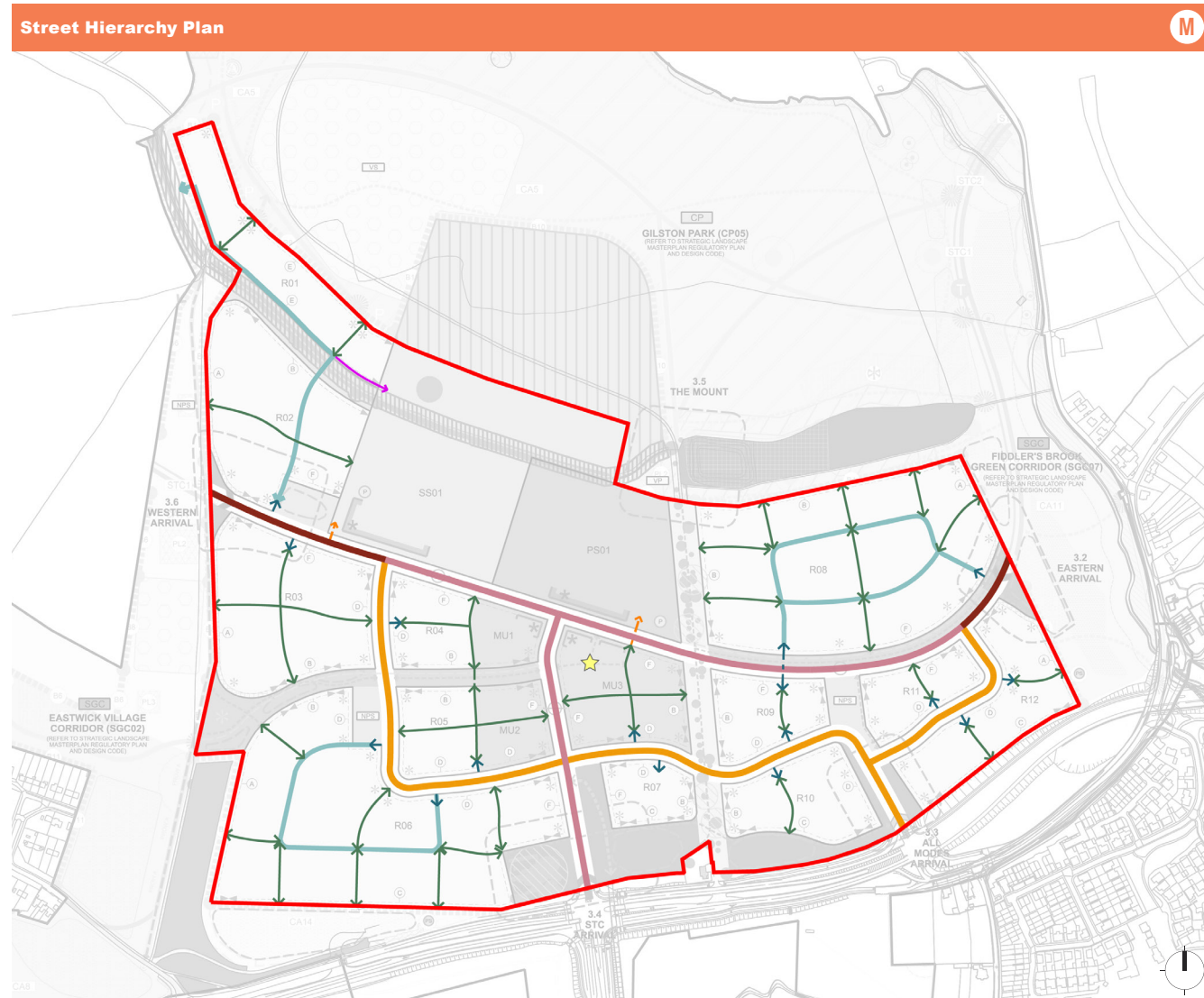


Gateway features integrated with pedestrian/cyclist routes help activate the space



Ponds with platforms allowing people to get close to the water help to create attractive, active gateway features

5.4 Street Hierarchy



Key

★ Village Square

Street Hierarchy

- Street Type A - STC (Sustainable Modes Only)
- Street Type B - STC (All Modes)
- Street Type C - Primary Street
- Street Type D - Secondary Streets (Indicative alignment)
- Street Type E - Tertiary Streets and Cross Parcel Permeability (Indicative alignment)

Access to Minor Routes and Parcels

- Access Point: Fixed Location (+/- 10m flexibility permitted)
- Vehicular Route to Schools (+/- 10m flexibility permitted)
- Emergency & Maintenance access to Secondary School (Indicative location)

5.4 Street Hierarchy

The development **must** provide a well-connected network of streets, differing in character across the Village. The difference in character and degree of enclosure is key to ensuring legibility and identity. Individual development parcels **must** provide cross parcel permeability. This **must** include a network of tertiary streets and pedestrian/cycle routes to create a legible block structure that facilitates access into development and encourages ease of movement for pedestrians and cyclists.

Key cross parcel connections are identified on the V1MP Regulatory Plan. These represent Tertiary streets; while their alignments are indicative, pedestrian and cycle permeability **must** be delivered between the points shown on the Regulatory Plan.

This Design Code sets out the key principles and design fixes for the STC, primary, secondary and tertiary street design. Design specifications for each street type are shown within tables that provide design details and technical requirements and are supported by drawings that illustrate the form of the street, which broadly correspond with the road and street types specified in HCC's highway design guide.

Sustainable Transport Corridor (Sustainable Modes Only)

The Sustainable Transport Corridor is a 'car-free' route which prioritises sustainable modes of transport including pedestrians, cyclists, scooters and buses over the private vehicle. This route provides direct connections towards Harlow Town Centre and the station. No direct plot access serving dwellings is permitted along this route.

Sustainable Transport Corridor (All Modes)

To allow connectivity between Village 1 and future Villages within the Gilston Area, limited sections of the Sustainable Transport Corridor permit the use of the route by all modes of transport including the private vehicle. No direct plot access serving dwellings is permitted along this route.

Primary Street

The Primary Street is the main route for private vehicles linking future Villages with Village 1. The Primary Street will change in character along its length as it passes through and responds to the different neighbourhood characteristics, such as the mixed use Village Centre, where the street character will be of a formal, urban nature, creating narrower sections to slow traffic and prioritise pedestrian and cycle movement crossing the street. Opportunities for landscaping will be provided along stretches of the street, within the civic spaces and at locations where the street crosses green corridors.

Secondary Street

Secondary Streets are residential street in character, providing a loop route to service the larger parcels of the development. This route provides direct plot access to homes within the residential parcel.

Tertiary Streets & Cross Parcel Permeability

A network of Tertiary Streets provide cross parcel permeability through the residential parcels from the Primary and Secondary Streets. Tertiary Streets will predominantly be used by people living in or visiting that area and will be narrower and less formal in character than Secondary Streets. They will have greater flexibility to provide increased areas of landscaping, horizontal deflection and surface treatment to slow traffic and create interest along the street. Tertiary Streets may have a dropped kerb line and no road markings to encourage reduced speeds and enable pedestrian priority.

Access to Minor Routes & Parcels

The V1MP Regulatory Plan illustrates points of access from the STC and Primary Street into minor routes and development plots.

The exact position of these points of access will be determined at a later stage as detailed design proposals are prepared for each development parcel, with due consideration to proximity to junctions and other highway design issues. Direct plot access to individual properties from the various street types will be specified in the following pages alongside detailed specifications for each.

5. Access & Movement

5.4.1 Sustainable Transport Corridor (Sustainable Modes Only)

Sustainable Transport Corridor (Sustainable Modes Only)

The Sustainability Transport Corridor (STC) will provide the highest order route for multi-modal movement and, once complete, create a sustainable transport route along which pedestrian, cycle and bus movement within Village 1 will be given priority.

On sections where no cars will be allowed, the 'make-up' of the STC within Village 1 allows for cyclists to use a dedicated active and sustainable travel corridor, with an appropriate allowance made in terms of its cross-section. A shared footway and cycleway provides an additional option for young children, less confident cyclists, or other wheeled modes such as scooters.

Recognising the integration that needs to be achieved to minimise the severance effects of the STC, meaningful opportunities **must** be provided for planting and play to occur along its length.

The table on the adjacent page sets out some of the technical information pertinent to the design of the STC. The illustrative axonometrics show potential scenarios for the design of STC depending on the character of the area it passes through.

The following sets out essential key design principles for the STC which will ensure that future Reserved Matters Application(s) will deliver the quality and character that is intended.

Key Design Principles

- The character **must** change along the route as it passes through different built form uses and landscaped spaces.
- A section of the STC will act as an extension to the East-West Green Link. This segment **must** be designed holistically and feature high-quality landscaping. *Refer to Section 4.4 Green Corridors & Buffers - East-West Green Link (Eastern Section).*
- The STC **must** be humanised through measures like reduced street widths, landscaping, and traffic calming, ensuring safe, convenient travel for pedestrians and cyclists. Innovative design and soft landscaping are key. Surface materials **must** be carefully chosen for quality, appearance, durability, and maintenance, as they are key to delivering a high-quality public realm.
- Street trees **must** be proposed along the STC to provide new habitat and interest complementing the existing trees and woodland along the route. Tree mix **should** be diverse in species to suit the changing built form and environment along the route. The location of trees **should** be carefully coordinated with lighting. Street trees **must** comply with the Soft Landscape Palette in *Section 4.13*.
- Trees and vegetation **must** be planted early to establish character along the STC.
- Along straighter sections of the STC where there is a clear line of sight for bus drivers to see on-coming vehicles, the carriageway **should** be reduced in width.
- Where possible, the use of surface-water drainage features, i.e. swales or rain gardens alongside the route **should** be used. *Refer to Section 4.6 Blue Infrastructure Components.*

Example 1



Example 2

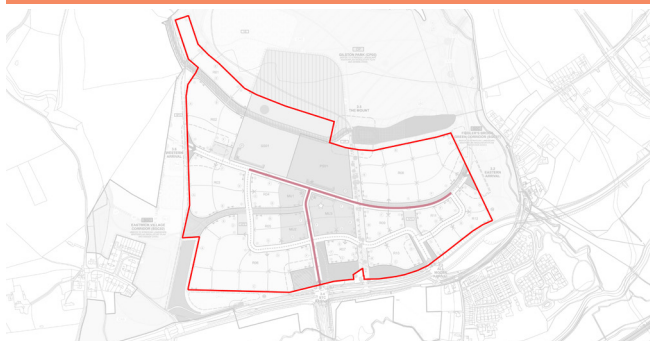


* Localised widening may occur on bends subject to swept path analysis. Localised narrowing may occur along straight sections of the carriageway where there is a clear line of sight for buses.

5.4.1 Sustainable Transport Corridor (Sustainable Modes Only)

Street Type A - STC (Sustainable Modes Only)

M



GENERAL INFORMATION

Street Type	Sustainable Transport Corridor (STC).
Location	As indicated on the V1MP Regulatory Plan.
Character	Sustainable transport modes only.

STREET DESIGN

Total Corridor Width	Max. 20m
Footways/ Cycleways	2m footway on one side of carriageway and 3m shared use footway/cycleway on the other to accommodate vulnerable cyclists (cyclists accommodated predominantly on carriageway).
Carriageway	Generally up to 6.5m width to accommodate two-way bus movement. Widths may reduce along straight sections of the carriageway where there is a clear line of sight for buses.
Public Transport Route	Yes.
Traffic Calming	At intersections, with bus priority maintained at all times.
Utilities corridor	Utilities to be accommodated in footway/cycleway or soft verge, where possible. If located in soft verge these must not conflict with any proposed street planting.
Surface Finishes	Varying materials to suit locations. Stone Mastic Asphalt or Hot Rolled Asphalt, with colour variations, block paving or stone setts. Refer to Hard Landscape Palette.

Kerbs	Concrete or stone, in particular in the Village Centre, and as appropriate to character area. Bus boarder kerbs at bus stop locations. Kerbing within the Village Centre may be flush. Refer to Hard Landscape Palette.
Street Furniture	At key locations.
Street Lighting	Yes.
On street parking	No.
TECHNICAL DETAILS	
Target Speed	20mph.
Road markings	At transitions and crossovers only.
Junction Spacing (centreline-centreline)	No specific standards.
Junction radii	Specific to location depending on likely vehicle swept path.
Forward visibility	25m (Manual for Streets 20mph).
Visibility Splays	2.4m x 25m.
Centreline radii	Generally 41m minimum with potential reduction to 16m minimum where lower speeds are anticipated (in accordance with HCC Place & Movement Planning and Design Guide).
STREET LANDSCAPING	
Verge width	Varying width along corridor dependent on utility and drainage requirements. Verges must not be less than 1.2m wide if accommodating trees. For avenue trees, pits are likely to be larger and anchoring systems must be provided.
Street Trees	Yes, generally located in soft verge.
Planting Palette	Refer to Soft Landscape Palette.
INTERACTION WITH HOMES	
Direct Access to homes	No direct vehicular plot access permitted.



Appropriately sized verges allow for quality new street trees



Structural and amenity landscaping and play elements should be integrated with the STC design according to Section 4.7 Play and Sports Provision.



5. Access & Movement

5.4.2 Sustainable Transport Corridor (All Modes)

Sustainable Transport Corridor (All Modes)

The Sustainability Transport Corridor (STC) comprises sections where buses and cars will naturally mix. This is primarily at the edge of Village 1 where the function of the corridor is to facilitate throughput of all modes, including pedestrians and cyclists.

The character of the STC in these locations will be different to those within the built-up areas, where cycle and pedestrian priority will be provided through the introduction of Copenhagen-style crossings, where turning vehicles **must** expect to stop.

The table on the adjacent page sets out some of the technical information pertinent to the design of the STC. The illustrative axonometrics show potential scenarios for the design of STC depending on the character of the area it passes through.

The following sets out essential key design principles for the STC which will ensure that future Reserved Matters Application(s) will deliver the quality and character that is intended.

Key Design Principles

- The character **must** change along the route as it passes through different built form uses and landscaped spaces. The character **must** respond to the differing role of the route as well as the residential character areas.
- The STC **must** be 'humanised' (through reduced street widths, landscaping, traffic calming etc.) and allow pedestrians, cyclists and scooters to safely and conveniently travel along it. The combination of innovative infrastructure design and soft landscaping are critical elements that will contribute to improving local air quality.
- The quality, appearance, durability and maintenance of materials used in surfacing this route **must** be carefully selected as they play a crucial role in the creation of a high quality public realm.
- Street trees **must** be proposed along the STC to provide new habitat and interest complementing the existing trees and woodland along the route. Tree mix **should** be diverse in species to suit the changing built form and environment along the route.
- Trees and vegetation **must** be planted early to establish character along the STC.
- Where possible, the use of surface-water drainage features, i.e. swales or rain gardens alongside the route **should** be utilised.

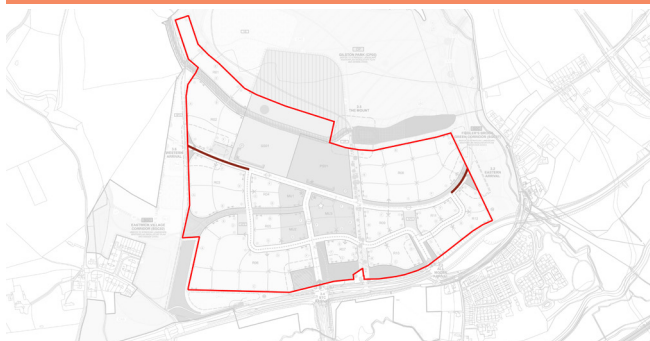


* Local widening may occur

5.4.2 Sustainable Transport Corridor (All Modes)

Street Type B - STC (All Modes)

M



GENERAL INFORMATION

Street Type	Sustainable Transport Corridor (STC).
Location	As indicated on the V1MP Regulatory Plan.
Character	All modes permitted on this section of the STC.

STREET DESIGN

Total Corridor Width	Max. 20m.
Footways/ Cycleways	2m footway on both sides of carriageway and 3m dedicated cycleway on one side to accommodate vulnerable cyclists.
Carriageway	Generally up to 6.5m width to accommodate two-way bus movement. Width may vary around drainage and traffic calming features.
Public Transport Route	Yes.
Traffic Calming	At intersections, with bus priority maintained at all times.
Utilities corridor	Utilities to be accommodated in footway/cycleway or soft verge, where possible. If located in soft verge these must not conflict with any proposed street planting.
Surface Finishes	Varying materials to suit locations. HRA/SMA with colour variations, block paving or stone setts. Refer to Hard Landscape Palette.

Kerbs	Concrete or stone as appropriate to character area. Bus boarder kerbs at bus stop locations. Kerbing within the Village Centre may be flush. Refer to Hard Landscape Palette.
Street Furniture	At key locations.
Street Lighting	Yes.
On street parking	Permitted only in selected locations to be determined at detailed design stage.
TECHNICAL DETAILS	
Target Speed	Up to 30mph.
Road markings	At transitions and crossovers only.
Junction Spacing (centreline-centreline)	No specific standards.
Junction radii	Specific to location depending on likely vehicle swept path.
Forward visibility	43m (Manual for Streets 30mph).
Visibility Splays	2.4m x 43m minimum.
Centreline radii	Generally 41m minimum with potential reduction to 16m minimum where lower speeds are anticipated (in accordance with HCC Place & Movement Planning and Design Guide).
STREET LANDSCAPING	
Verge width	Varying width along corridor dependent on utility and drainage requirements. Varying width along corridor dependent on utility and drainage requirements. Verges must not be less than 1.2m wide if accommodating trees. For avenue trees, pits are likely to be larger and anchoring systems must be provided.
Street Trees	Yes, generally located in soft verge.
Planting Palette	Refer to Soft Landscape Palette.
INTERACTION WITH HOMES	
Direct Access to homes	No direct vehicular plot access permitted.



Appropriately sized verges allow for quality landscaping



Structural and amenity landscaping and play elements should be integrated with the STC design

5. Access & Movement

5.4.3 Primary Street

Primary Street

The Primary Street fulfils a function of distributing movements by all modes of transport within the proposed development. They are generally less direct than the STC but are configured in such a way their journey times are less favourable than comparable direct routes.

The 'make-up' of the Primary Street corridor will have cycle and footways adjacent to or close to carriageway and accommodate two-way vehicular movement. It will further provide verges of varying width along its length with opportunities for meaningful tree planting to occur.

The table on the adjacent page sets out some of the technical information pertinent to the design of the street. The illustrative axonometrics show potential scenarios for the design of the Primary Street depending on the character of the area it passes through.

The following sets out essential key design principles for the Primary Street and ensures that future Reserved Matters Application(s) will deliver the quality and characters that is intended.

Key Design Principles

- The detailed alignment of the Primary Street **must** be determined by the arrangement of buildings along its length and the desire to create varied and interesting places.

- The Primary Street **must** respond to its immediate built form and landscape spaces as it changes in character along the route.
- The East-West Green Link **must** run continuously across the Primary Street to ensure priority is given to pedestrian and cycle movement.
- The Primary Street **must** be designed to naturally slow traffic to 20mph or below by visual cues such as built frontage, on-street parking, horizontal deflections in the carriageway, landscape and surface materials.
- The Primary Street **must** be 'humanised' (through reduced junction radii and street widths, landscaping, traffic calming etc.) and allow pedestrians and cyclists to safely and conveniently cross.
- Street trees **must** be proposed along the Primary Street to provide rhythm and interest to the streetscene whilst forming a bridge in scale between the built form and the public realm spaces.
- Long straight sections of street **should** generally be avoided. Where this is not possible, additional measures such as those set out in the following pages, **should** be used to limit speeds.
- Where possible, the use of surface-water drainage features, i.e. swales or rain gardens alongside the route **should** be used.
- Verges **should** include, where appropriate, flowering lawn grass mixes and in key areas low-growing ornamental shrubs to contribute towards the Village habitat mosaic.
- Inappropriate parking (e.g. on verges or pavements) **should** be discouraged, utilising elements such as street furniture, bollards, trees or understorey planting.

Example 1



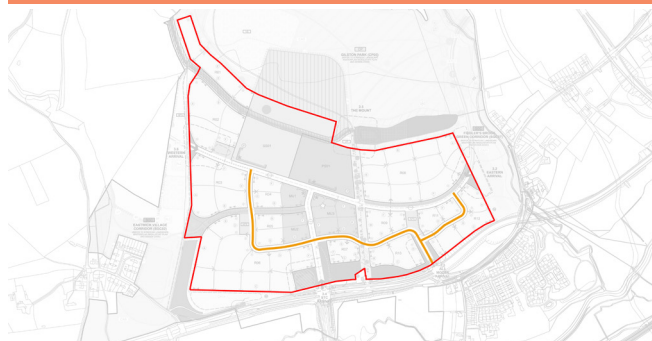
Example 2



5.4.3 Primary Street

Street Type C - Primary Street

M



GENERAL INFORMATION

Street Type	Primary Street.
Location	As indicated on the V1MP Regulatory Plan.
Character	All modes street with movement and place function.

STREET DESIGN

Total Corridor Width	Max. 20m.
Footways/ Cycleways	2m footway on one side of carriageway and 3m shared use footway/cycleway on the other to accommodate vulnerable cyclists (cyclists accommodated predominantly on carriageway).
Carriageway	Varying width with minimum of 6.5m for two-way movement, with the exception of traffic calmed sections.
Public Transport Route	No.
Traffic Calming	Yes, in specified locations.
Utilities corridor	Utilities to be accommodated in footway/ cycleway or soft verge, where possible. If located in soft verge these must not conflict with any proposed street planting.
Surface Finishes	Varying materials to suit locations. Predominantly Stone Mastic Asphalt or Hot Rolled Asphalt with block paving or stone setts used to define character features and traffic calming. Refer to Hard Landscape Palette.

Kerbs	Concrete with bus boarder kerbs at bus stops. Refer to Hard Landscape Palette.
Street Furniture	Street furniture to adoptable standards.
Street Lighting	Yes to adoptable standards.
On street parking	Yes, generally parallel visitor parking bays in selected locations to be determined at detailed design stage.

TECHNICAL DETAILS

Target Speed	20mph.
Road markings	Yes.
Junction Spacing (centreline-centreline)	25m.
Junction radii	No specific standards as junctions will be generally designed to accommodate pedestrian and cycle priority.
Forward visibility	25m (Manual for Streets 20mph).
Visibility Splays	2.4m x 25m.
Centreline radii	Generally 41m minimum, however this can be lower where speed control is required through traffic calming or irregular form.

STREET LANDSCAPING

Verge width	Variable. Verges must not be less than 1.2m wide if accommodating trees. For avenue trees, pits are likely to be larger and anchoring systems must be provided.
Street Trees	Yes, within verges.
Planting Palette	Refer to Soft Landscape Palette.

INTERACTION WITH HOMES

Direct Access to homes	Limited frontage access to be considered at RMA stage.
------------------------	--



Road side swales/raingardens with flowering lawn grass add to the street character



Street bollards and hedge planting prevent inappropriate parking



5. Access & Movement

5.4.4 Secondary Streets

Secondary Streets

The Secondary Street will provide connectivity from the Primary Street to the residential development parcels, providing direct access to residential plots.

Planting along these streets will be provided primarily in verges or in private front gardens.

The detailed alignment of these routes will be determined through the layout of subsequent Reserved Matters Applications.

Key Design Principles

- The design speed **must** be 20mph or less and be controlled primarily through the permitted traffic calming measures. Vertical speed control measures **should** be reserved for use around intersections and crossings as part of ensuring pedestrian priority.
- Streets **must** be 'humanised' (through reduced junction radii and street widths, landscaping, traffic calming etc.) to allow pedestrians and cyclists to safely and conveniently cross.
- Whilst secondary streets are quieter residential streets, they **should** create a positive pedestrian/cycle environment. Designers **should** apply a user hierarchy to the design process with pedestrians at the top in line with Manual for Streets.

- Streets trees and SuDS **should** be incorporated and designed alongside the street lighting and utility requirements.
- Where curtilage parking is provided at the front of dwellings secondary streets will have frequent driveway access. Level footways **should** be maintained across these access points.
- Inappropriate parking (e.g. on verges or pavements) **should** be discouraged, utilising elements such as street furniture, bollards, trees or understorey planting.
- Defined car parking bays may be used on one or both sides of the carriageway, particularly in areas of mixed land use, however their use **should** be coordinated with private driveway crossovers.
- The street **must** allow for specialist service vehicles (i.e. refuse, delivery, emergency services) to manoeuvre through the Village.
- Road markings and street signage **should** be avoided as much as possible to reduce road clutter and maintenance costs.

Example 1



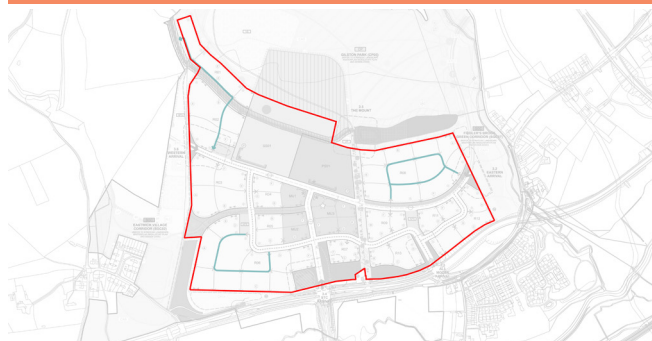
Example 2



5.4.4 Secondary Streets

Street Type D - Secondary Streets

M



GENERAL INFORMATION

Street Type	Secondary Street.
Location	As indicated on the V1MP Regulatory Plan.
Character	Local street providing access to all modes through the residential areas.

STREET DESIGN

Total Corridor Width	Max. 17m.
Footways/ Cycleways	Footway on one side of carriageway (minimum 2m). 3m shared cycle-footway on one side to accommodate vulnerable cyclist (cyclists accommodated predominantly on carriageway).
Carriageway	5.5m - 6.0m.
Public Transport Route	No.
Traffic Calming	Yes.
Utilities corridor	Utilities to be accommodated in footway/ cycleway or soft verge, where possible. If located in soft verge these must not conflict with any proposed street planting.
Surface Finishes	Refer to Hard Landscape Palette.

Kerbs	Refer to Hard Landscape Palette.
Street Furniture	Street furniture to adoptable standards.
Street Lighting	Yes.
On street parking	Yes, generally parallel visitor parking bays in selected locations, to be determined at detailed design stage.
TECHNICAL DETAILS	
Target Speed	20mph.
Road markings	Minimal and where necessary.
Junction Spacing (centreline-centreline)	25m.
Junction radii	No specific standards as junctions will be generally designed to accommodate pedestrian and cycle priority.
Forward visibility	25m (Manual for Streets 20mph).
Visibility Splays	2.4m x 25m.
Centreline radii	N/a.
STREET LANDSCAPING	
Verge width	Variable. Verges must not be less than 1.2m wide if accommodating trees. For avenue trees, pits are likely to be larger and anchoring systems must be provided.
Street Trees	Yes, within verges.
Planting Palette	Refer to Soft Landscape Palette.
INTERACTION WITH HOMES	
Direct Access to homes	Yes.



Street furniture and planting prevent inappropriate parking



Designed in on-street visitor parking and use of bollards helps control visitor parking

5. Access & Movement

5.4.5 Tertiary Streets & Cross Parcel Permeability

Tertiary Streets & Cross Parcel Permeability

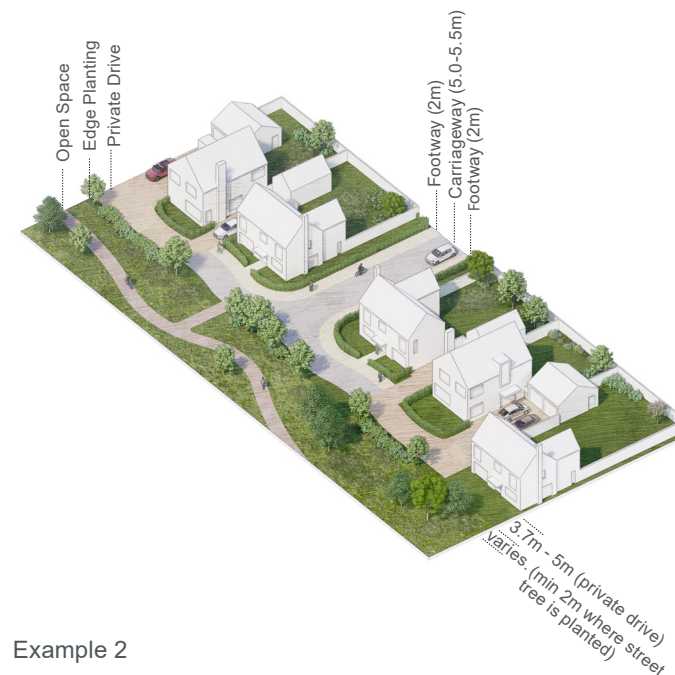
Tertiary streets are quieter, well enclosed residential streets that will be provided to serve dwellings within the development parcels. Tertiary streets will predominantly be used by people living or visiting that area, and will therefore be narrower and less formal in character than a secondary street. Tertiary Streets also include mews and streets designed to homezone principles - *discussed further in Section 5.5 'Streets as Spaces'*.

The detailed alignment of these routes will be determined through the layout of subsequent Reserved Matters Applications.

Key Design Principles

- Design speeds **must** be between 10-20mph.
- Vehicles **should** have a lower priority than all other user movements and this **should** be reflected in their design.
- Tertiary streets **should** be low trafficked connected streets and can have a level surface with an at grade kerb line, with small kerbs required as necessary (such as for drainage) or delineation.
- Longer tertiary streets **should** provide occasional tree lined verges on one side which could contain areas of on-street parking.
- Shorter streets **should** include incidental street trees, informally arranged.
- Tertiary streets **should** contain a variety of traffic calming measures, focusing on horizontal deflection to control speeds and increase safety for pedestrians and cyclists.
- Junctions **should** use minimum kerb radii to emphasise pedestrian priority but allow specialist vehicles to complete their intended service.
- Tertiary streets **should** be designed (through control of traffic volumes and speeds) to allow cycling on the carriageway.
- Road markings and street signage **should** be avoided as much as possible to reduce road clutter and maintenance costs.
- Tertiary streets could be designed as car free streets where appropriate.

Example 1



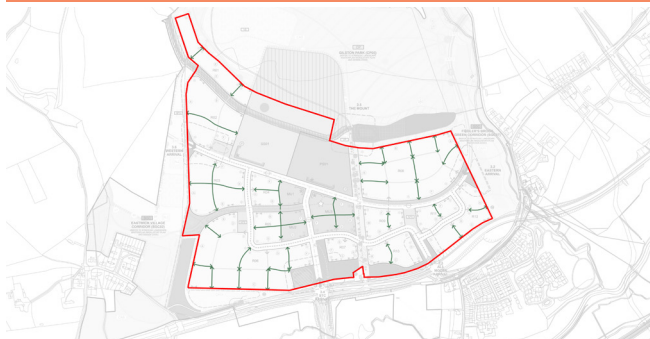
Example 2



5.4.5 Tertiary Streets & Cross Parcel Permeability

Street Type E - Tertiary Streets and Cross Parcel Permeability

M



GENERAL INFORMATION

Street Type	Tertiary Street.
Location	Within residential parcels, as indicated on the V1MP Regulatory Plan. Exact alignment to be confirmed at reserved matters.
Character	Minor routes providing access within residential parcels.

STREET DESIGN

Total Corridor Width	Max. 11.5m.
Footways/ Cycleways	2m footway on one or both sides of the carriageway. Cyclists to ride within the main carriageway.
Carriageway	5.0m - 5.5m.
Public Transport Route	No.
Traffic Calming	Yes.
Utilities corridor	Utilities to be accommodated in footway/ cycleway or soft verge. If located in soft verge these must not conflict with any proposed street planting.

Surface Finishes

Varying materials to suit locations. Predominantly Stone Mastic Asphalt or Hot Rolled Asphalt with block paving or stone setts used to define character features and traffic calming. Refer to Hard Landscape Palette.

Kerbs

Refer to Hard Landscape Palette.

Street Furniture

Street furniture to adoptable standards.

Street Lighting

Yes.

On street parking

Uncontrolled visitor parking permitted within the carriageway or integrated within on-street parallel bays within localised widening where appropriate.

TECHNICAL DETAILS

Target Speed	10-20mph.
Road markings	Minimal and where necessary.
Junction Spacing (centreline-centreline)	None.
Junction radii	No specific standards as junctions will be generally designed to accommodate pedestrian and cycle priority.
Forward visibility	25m (Manual for Streets 20mph).
Visibility Splays	2.4m x 25m.
Centreline radii	N/a.

STREET LANDSCAPING

Verge width	Variable. Verges must not be less than 1.2m wide if accommodating trees.
Street Trees	Yes, within verges, chicanes and/or buildouts.
Planting Palette	Refer to Soft Landscape Palette.

INTERACTION WITH HOMES

Direct Access to homes	Yes.
------------------------	------



Coordinated hard and soft landscaping design



Coordinated hard and soft landscaping design

5. Access & Movement

5.5 Tertiary Streets as Spaces

Tertiary Streets as Spaces

Shared surfaces streets can create public spaces with landscape features and low vehicular speeds where vehicles, pedestrians and cyclists share the road space, as demonstrated in the illustrative examples shown. This slows vehicular speeds and raises the priority for pedestrians and cyclists by ensuring visibility and shared use.

These public spaces are multi-functional, allowing for public congregation and informal play, adopting some of the principles that were historically associated with Home Zones.

Features such as contrasting materials will delineate areas where vehicular traffic is permissible, while generally adopting shared level surfaces where such streets provide non-through routes.

Key Design Principles

- Street furniture, such as benches and cycle parking, **must** be provided as necessary to encourage informal use by residents to encourage activity within spaces.
- Adequate on-plot and visitor parking **must** be provided in line with the *Section 5.11 Parking Strategy and Section 6.5 Urban Design Principles* to ensure parking does not dominate the space.
- Parking areas **must** be defined by landscaping such as trees, hedges and planted verges.
- The hard landscaping treatment for parking areas **should** be demarcated in a low key manner, for example, with pressed concrete paviors or similar hard landscape treatment.

- Buildings surrounding the space **must** create enclosure through the appropriate use of boundary walls and dwelling frontages.
- The carriageway does not require definition through materials and **must** merge with the surrounding spaces.
- Refuse collection **must not** dictate the design of a street but **should** be integrated as part of the servicing plan. Streets **should** be no wider than is absolutely essential for vehicles to pass and ensure access for fire appliance. For secondary and tertiary streets it is acceptable to have larger vehicles taking up more than one lane, provided cyclists can still pass safely and there are spaces for vehicles to pull in to allow oncoming traffic to pass.
- Road markings and street signage **should** be avoided.
- A minimum 6m clear width **should** be provided where perpendicular parking space are used to allow sufficient room for cars to access the space.
- Central drainage channels **should** be used to drain surface run off within spaces, whilst also acting as a traffic-calming measure.
- Where required soil volume cannot be achieved in soft landscaping for the desired tree species, a structural or cellular pit below paving **should** be used.

Example 1



Example 2



5.5 Streets as Spaces

Tertiary Streets as Spaces		M	
GENERAL INFORMATION			
Street Type	Tertiary Street.	Street Furniture	Street furniture to adoptable standards.
Location	Within residential parcels, as indicated on the V1MP Regulatory Plan. Exact alignment to be confirmed at reserved matters.	Street Lighting	Yes.
Character	Minor level surface streets providing access within residential parcels.	On street parking	Uncontrolled visitor parking permitted within the carriageway or integrated within on-street parallel bays within localised widening where appropriate.
STREET DESIGN		TECHNICAL DETAILS	
Total Corridor Width	Max. 6.8m.	Target Speed	10-20mph.
Footways/ Cycleways	Within shared surface.	Road markings	Minimal and where necessary.
Carriageway	6.0m - 6.8m shared surface inclusive of paved maintenance strips.	Junction Spacing (centreline-centreline)	None.
Public Transport Route	No.	Junction radii	No specific standards as junctions will be generally designed to accommodate pedestrian and cycle priority.
Traffic Calming	Yes.	Forward visibility	25m (Manual for Streets 20mph).
Utilities corridor	Utilities to be accommodated within service strips.	Visibility Splays	2.4m x 25m.
Surface Finishes	Refer to Hard Landscape Palette.	Centreline radii	N/a.
Kerbs	Refer to Hard Landscape Palette.	STREET LANDSCAPING	
		Verge width	N/a
		Street Trees	Yes subject to detailed design.
		Planting Palette	Refer to Soft Landscape palette.
		INTERACTION WITH HOMES	
		Direct Access to homes	Yes.



Coordinated hard and soft landscaping design



High quality, permeable paving

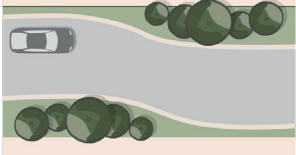
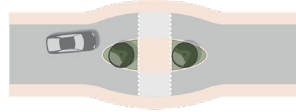
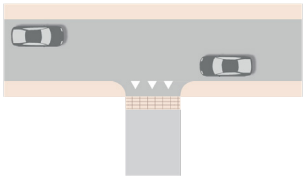
5. Access & Movement

5.6 Traffic Calming Features

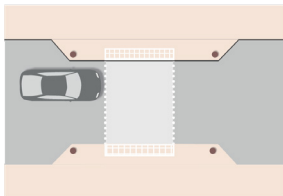
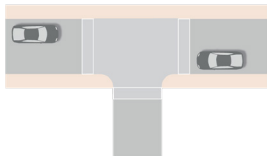
Where possible, streets **should** be designed to achieve the required design speed without the need for additional speed restraint measures. Speed restraint features **must** be provided in locations where design speeds cannot be achieved solely through horizontal alignments and design.

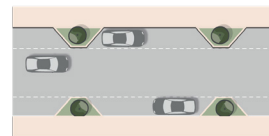
A hierarchy of possible measures is set out in the table below, ordered from most favourable at the top to least favourable at the bottom. It is intended that proposals **should** take a creative and innovative approach to incorporating these measures into their street design utilising a mix of measures appropriate to the built form as set out in the table.

All measures set out will be subject to traffic regulation orders, safety audits and, in the case of roundabouts, junction modelling.

Speed Restraint Features		
Speed Restraint Features	Description	Example
Horizontal Carriageway Shifts	Speed restraint bends should be incorporated, where possible, to control speeds.	
Lozenges (Central Islands)	- Lozenges should include planting to soften the urban scene and create visual interest. - Lozenges on lower order streets can be used to reinforce the road space allocated to different users - these should be illuminated. - Lozenges should consider buses and other special vehicle requirements if required. - Lozenges could be used in locations where they can also act as a pedestrian refuge (min. 3m) to enable crossing the carriageway in two stages (subject to carriageway widths). - Lozenges could also function as rain gardens, <i>refer to Section 4.6 Blue Infrastructure Components</i>.	
Gateways / Entry Treatments	- Gateways should typically include a change in road surface and/or carriageway narrowing to alert drivers that they are entering a lower traffic speed area, and should be situated where they are visible to approaching drivers to give them sufficient time to adjust their speed. - Intersections should include raised tables and other features that give priority to pedestrians and cyclists. - Strategically positioned priority road junctions, could be used to effectively control speeds by requiring vehicles to give way to priority traffic. - Gateways could be provided on tertiary streets to make drivers aware they have left a primary or secondary street.	

5.6 Traffic Calming Features

Speed Restraint Features		
Speed Restraint Features	Description	Example
Build Outs / Road Narrowings	- Build outs could be constructed to narrow lane widths and force drivers to deviate from their path to reduce their speed. - Where possible, build outs should be used in locations where they can also act as a pedestrian refuge to enable crossing the carriageway in two stages (subject to carriageway widths). - Subject to ensuring appropriate visibility, build outs could include planting to soften the urban scene and create visual interest. - Build outs can be viewed as retrofit design and do not encourage consistent vehicle speeds so should only be used where horizontal carriageway shifts cannot be achieved. - Build outs should be illuminated.	
Raised Junctions	- Raised junctions could be constructed in selected locations with high demand for pedestrian movement, such as outside schools and local centres, and can allow for easier pedestrian crossing by raising the carriageway to the level of the footway (subject to a minimal kerb upstand). - Raised junctions can help enhance the appearance of a road and cause drivers to reduce their speed by the use of vertical deflection. - Raised junctions should be sparingly used on primary streets or bus routes. They are most appropriate for street types with a design speed of 20mph and their use should generally be restricted to tertiary streets where horizontal measures are unsuitable.	

Speed Restraint Features		
Speed Restraint Features	Description	Example
On-Street Parking	- On-street parking must not be located where it materially impacts safety or visibility splays. - On-street parking could be used as a positive speed restraint measure in selected locations by reducing capacity and encouraging lower speeds. To perform a traffic calming feature parking should be: - In properly marked out bays, or - Differently surfaced bays, and - Protected / supported by other features such as build-outs or street furniture. - Parking is transient and should only be used as a supplementary measure to reinforce other features. - On-street parking bays should only be implemented on streets with sufficient width to ensure vehicles do not park on footways or verges. - On-street parking should be discouraged within areas likely to be popular for children's play or where there is likely to be a high demand for pedestrian/cycle movement across the carriageway.	
Surface Treatment	- A change in carriageway colour and/or texture (such as block paving) could be used to emphasise a change in environment such as at entrance zones. - Familiarity reduces the effectiveness of surface treatments as a speed control measure so it should only be used to complement other measures such as gateways and raised tables in selected locations.	