4. LANDSCAPE & ARBORICULTURAL

Stonebond.

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Introduction

This strategy has been prepared by Charnwood Landscape Design Ltd in collaboration with Edgingtons, on behalf of Stonebond Properties (Guildford) Ltd to illustrate the soft landscape proposals for the proposed residential development at Bartons Road, Havant.

Landscape

A well designed public realm can contribute significantly to the quality of the built environment and play a key role in the creation of sustainable, inclusive, neighbourhood environment.

The aim of this section of the document is to provide a set of outline principles in which the vision for the public realm will be developed to ensure that high quality public realm spaces are designed and delivered as part of this development.

A key objective of the proposal is to establish a clear identity for this development, promoting an environment where the quality of life and the quality of the environment are integral to enrich the experience of the residents and their visitors. This is to be achieved by strengthening the local connections to neighbouring areas and open spaces, through the creation of legible pedestrian routes and new public spaces.

A pre-requisite to achieving a successful public realm is to create an inclusive environment in which people will feel comfortable and enjoy spending time, where they will participate in social activities and help to promote a sense of pride.

The proposals illustrated in the masterplan are based on a number of integrated principles, set out below to produce an attractive, distinctive and inclusive place which enhances the area's character and identity.

- Defining Spaces, Connections and Permeability
- Defensible Space
- Comfort and Safety
- Planting

The public realm should be designed to bring these principles together in a cohesive manner that will contribute to the overall character of the area, integrating it within the surrounding context to create a lively, diverse and safe series of places where people will want to live and visit.

Analysis

Access

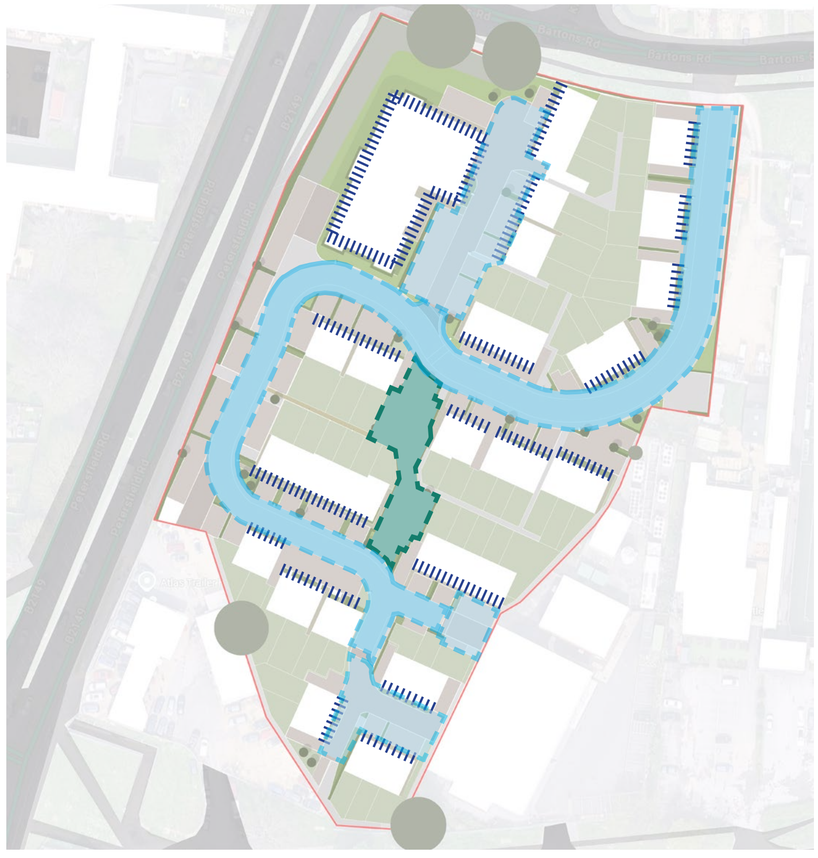
Vehicular access to the north east of the site. Pedestrian access is from the north east, west and south.

- Vehicle access
- Pedestrian access

Circulation

The vehicular entrance is to the north east corner of the site. At this point the streetscape is a traditional design. Once at the first corner the design switches to a shared surface.

- Vehicle circulation
- Vehicle and pedestrian circulation
- Primary pedestrian circulation
- Secondary pedestrian circulation
- Shared surface

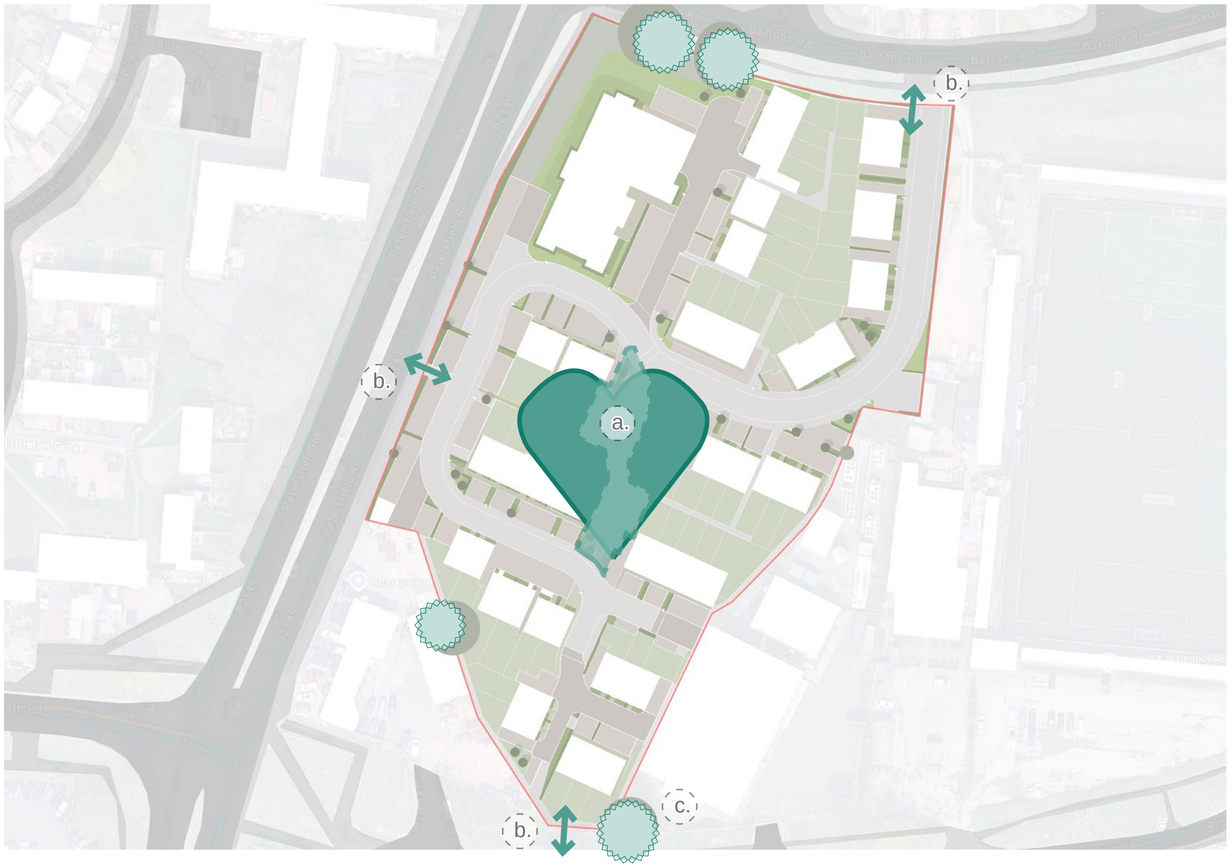


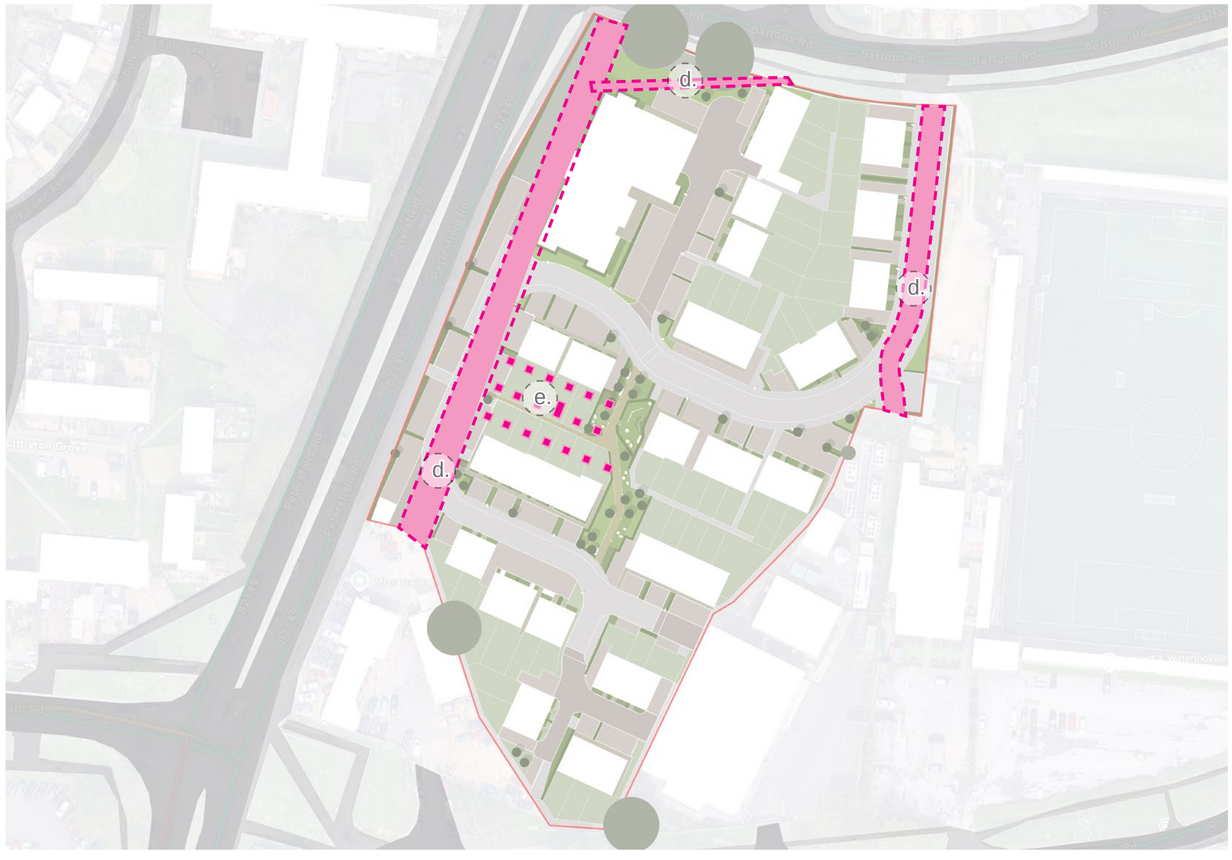
Spatial Usage

A Shared surface has been created through the site to allow more pedestrian activities to take place across the site. The shared surface surrounds a central green heart space and all dwellings have a defensible space to the circulation routes.

- Traditional street
- Shared surface
- Open green space
- Defensible space

Opportunities and Constraints





Opportunities

a. Open green heart
The site is set out around a planted and managed space containing a doorstep play area, seating, and open lawn areas.

b. Pedestrian permeability
Three pedestrian entrances will be created into the site, seeking a maximise permeability through the site..

c. Retained existing trees
The existing trees around the site have been accommodated by the proposed development.

Constraints

d. No build zone
No trees can be located within this area.

e. Existing piles
No trees can be located on top of these obstructions.

Key Principles

Defining Spaces, Connections and Permeability

A legible landscape will be provided throughout the development, allowing pedestrians to understand their position within it and its relationship with the surrounding neighbourhoods. The design will draw on the importance of integrating with the existing buildings to provide clear cohesive links. The proposals seek to develop active neighbourhood spaces and environments of high quality, both in their materiality and design.

Defensible Space

The transition between the public, semi-public, and private spaces will be carefully considered in order to ensure clarity of definition between them. Activity and interest is achieved on the street level through building entrances and active frontages.

When enhancing these streetscapes it is important to consider a defensible buffer to protect the privacy of residents and to provide a transitional space between the street and front door. The proposed soft landscape within will be used to provide defensible space.

Comfort and Safety

The length of time people spend in a public space is a key indicator to its comfort. Comfort can be defined by its physical properties, such as providing a range of seating types, shelter from rain and sun etc. Comfort can also be defined by psychological effects such as the perception of safety, a sense of refuge, the character and ambience a place creates. The character for the public realm will address this by acknowledging that people have different requirements and that by providing diversity within the design a range of people's needs can be accommodated. Appropriate public realm management and maintenance is vital to its success, since even the best-designed spaces need to be cared for, and inappropriate behaviour needs an effective response. The design of the site will foster perceptions of safety and a degree of self-regulation of behaviour through encouraging active, positive uses by a diverse mix of users, while offering specific places for all people to meet.

Designing Streets as Social Places

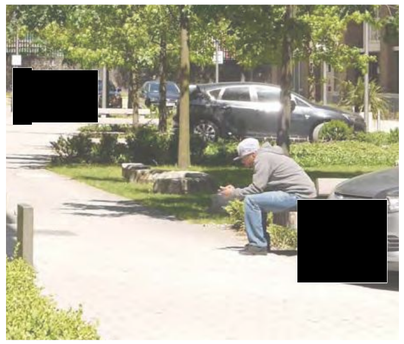
A key principle underpinning the streetscape strategy is the emphasis on the spatial qualities of the streets. Where there is an emphasis on place making, streets must be social spaces and can encourage informal meetings at intersections - they are the arena in which everyday life takes place, chatting, playing and wandering happens. Focal points will be provided along the routes to provide spaces to stop and promote a sense of place.

Planting

The design will use planting in a variety of ways within the landscape to:

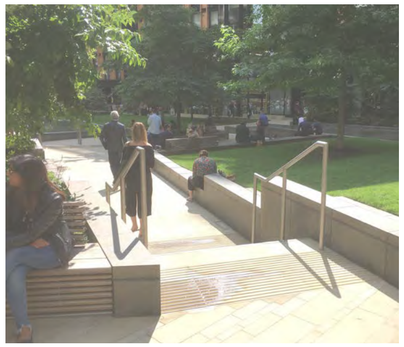
- Define key routes and desire lines through the use of structure planting.
- The use of specimen species to create a focal point within a space.
- Reinforce the spatial definition of a space.
- Establish and reinforce key views.
- Improve the micro-climate through air quality and reduction in noise levels in problem areas, for example tree planting along roads.
- Provide shelter from wind and rain, or reduce glare and reflections.
- Demarcate different uses, for example between traffic and pedestrian routes.
- Low level planting to allow natural surveillance through the site.

Celebrating building entrances
(Accordia, Cambridge)



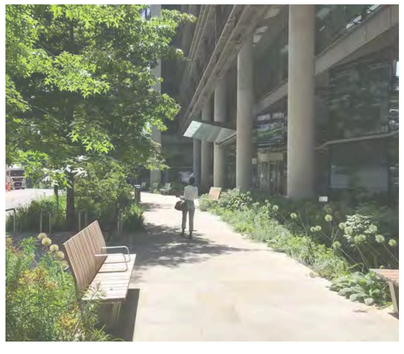
Creating pockets of seating
(Bromley-by-Bow, London)

Focal points
(Accordia, Cambridge)



Integrated access
(Pancras Square, London)

Safe and secure spaces
(Berlin, Germany)



Street tree and general planting
(Canal Reach, London)

Landscape Masterplan

The key tenet of the landscape masterplan is to maximise the open space within the site. The main open space is situated within the heart of the site and aims to increase the pedestrian permeability across the development.

The main road within the site is designed a well proportioned streetscape. This section of the road is designed to Hampshire County Council Highway standards.

The open spaces are important elements of the site and will be developed in accordance with the principle aim of creating high quality public spaces that are safe and accessible to all of the borough's residents and visitors.

As a result the public realm recognises the importance of permeability and main pedestrian connections through the development connecting with the wider community. The following section describes the character and key elements for each of the main spaces.

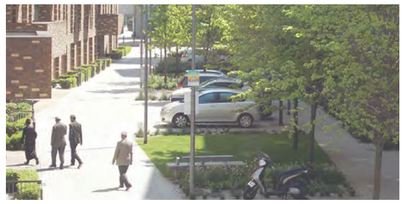
Masterplan Character Areas

The design for the landscape and public realm of Bartons Road aims to improve permeability and create enjoyable connections through the site by establishing a series of interconnecting spaces.

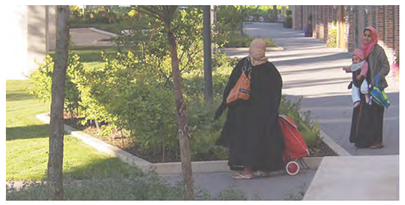
The landscape has been divided into 3 distinct character areas:

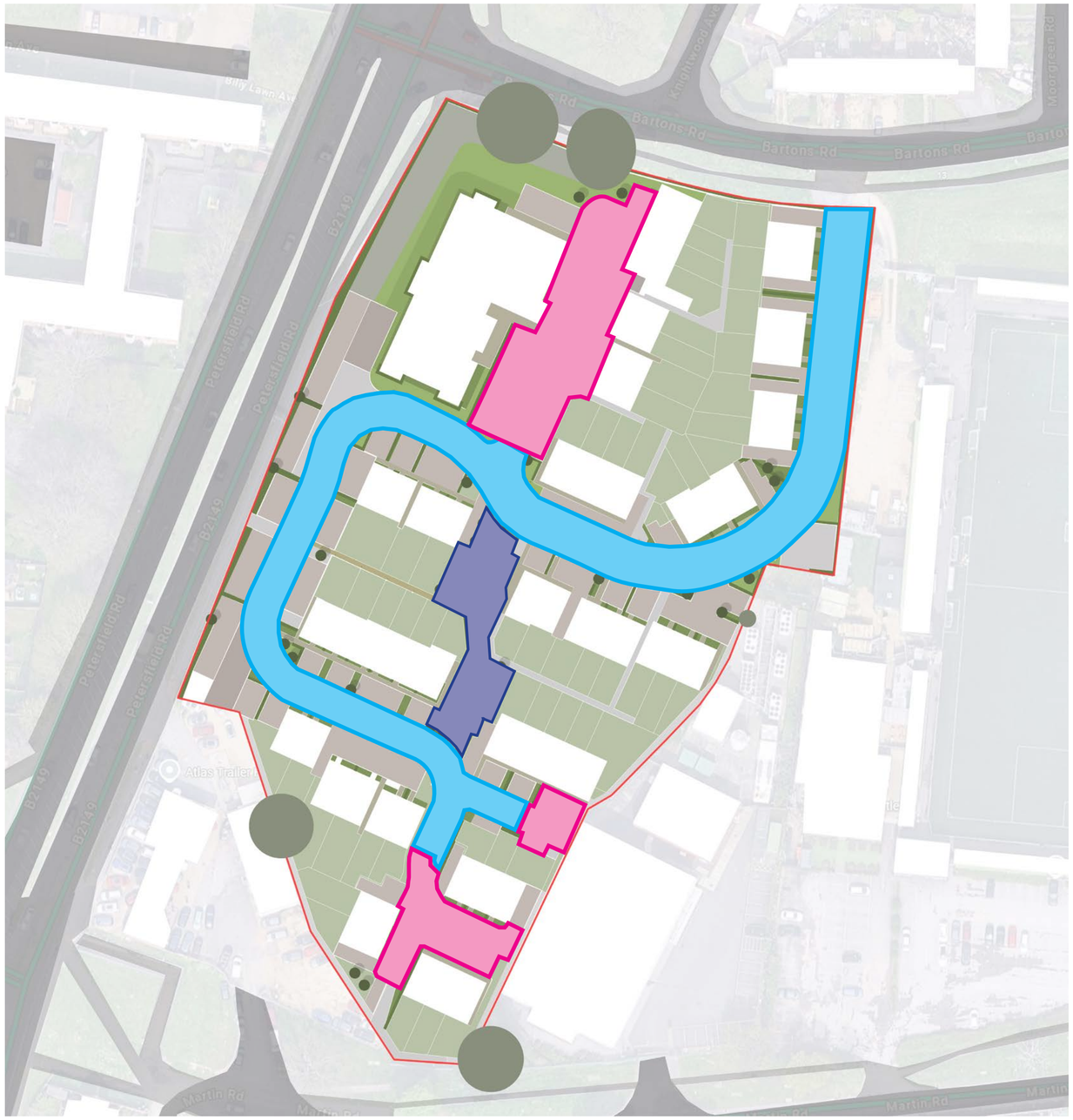
1. Streetscape
(to adoptable standards)

2. Shared surface street



3. Central open space





Central open space

The central open space is designed to contain pedestrian routes, a doorstep play area and open spaces to encourage informal social opportunity.

The design is arranged to provide a series of sub spaces for use by the local neighbourhood in a large group, and down to families and individuals.

The surface finishes and furniture palette area all high quality and will provide a durable and robust public realm. The seating is positioned to allow parents and guardians watch children playing in the space and also allow people to mix easily and comfortably.

a. Self-binding Golden Amber gravel surface

b. High quality PC concrete slabs under tree planting

c. Ornamental tree planting

d. Comfortable timber bench seating

c. Smooth boulders

f. Mown grass and meadow

Residential Streets

The residential streets should be social places, creating pedestrian priority spaces in which the choice of materials, planting and street furniture has a large part to play in achieving a sense of place.

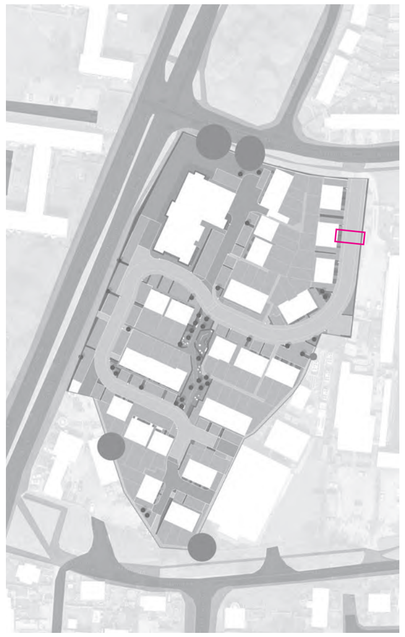
The green residential streets will act as heart of the development, providing an attractive setting for the new residential buildings and a valuable amenity for the residents and wider community. The streets will demarcate the arrival and destination points into the site in which people will be able to easily and enjoyable navigate and move through to the wider community.

The use of street trees and street planting which will define the routes and reinforce the linear quality of the street and provide year round foliage and interest.

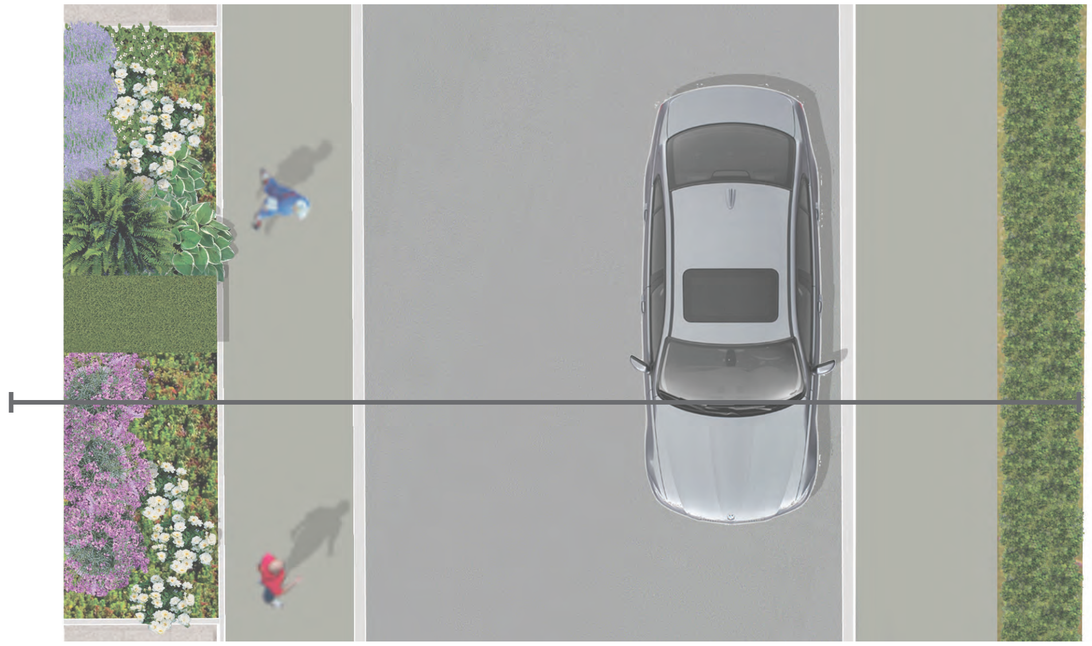
Ground floor residential units (whilst having a degree of buffer planting) will be open, active and transparent, adding to feelings of security and increasing natural surveillance. A defensible buffer will be created to protect the privacy of the residents and transitional space to building entrances, this will take the form of a low hedge and railings, further increasing the green presence of the street.

The shaded surface streets will be developed based on the following principles:

- Private defensible planting to the residential units.
- Maintain clear vehicle access route for maintenance and fire vehicle access.
- Tree planting and specimen shrubs will often the space, creating a human scale to the development, as well as providing a variety of colour, texture and scent throughout the year.
- High quality surface materials will be laid to create legible routes through the space

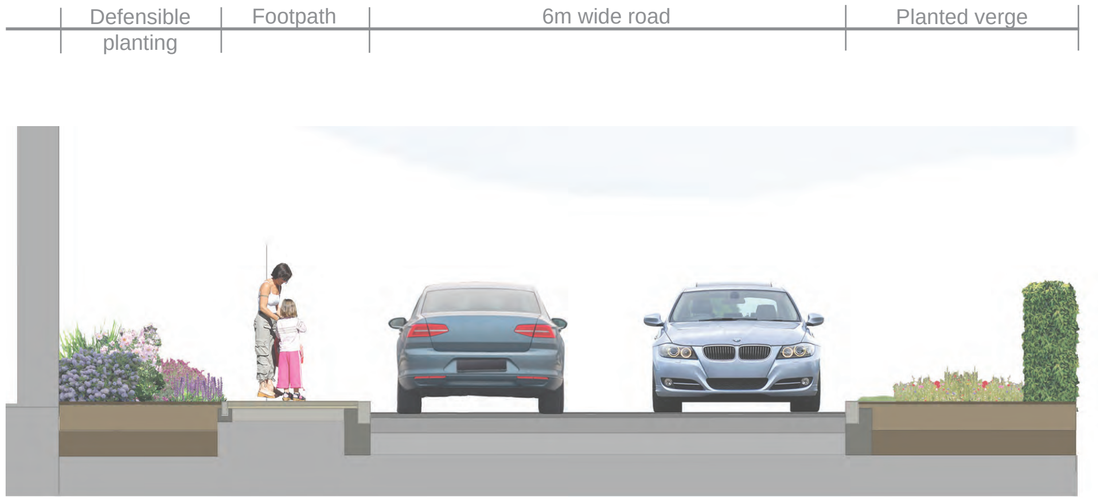


Location plan

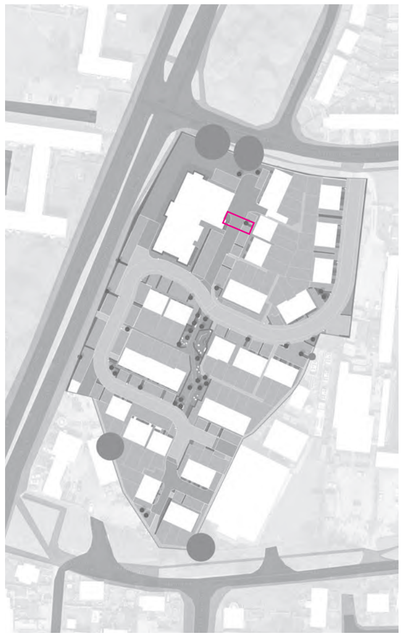


Illustrative plan across the traditional street design to the north east entrance road

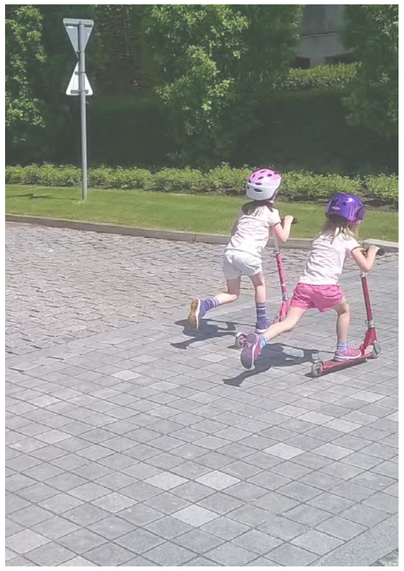
President images: Defensible planting



Illustrative section across the traditional street design to the north east entrance road



Location plan



Streetscape offering playable surface

Illustrative plan across a shared surface between the apartment block and house

Illustrative section across a shared surface between the apartment block and house

Landscape Design & Access Statement
Bartons Road, Havant

CLDL 2445 (08) 1010 P03

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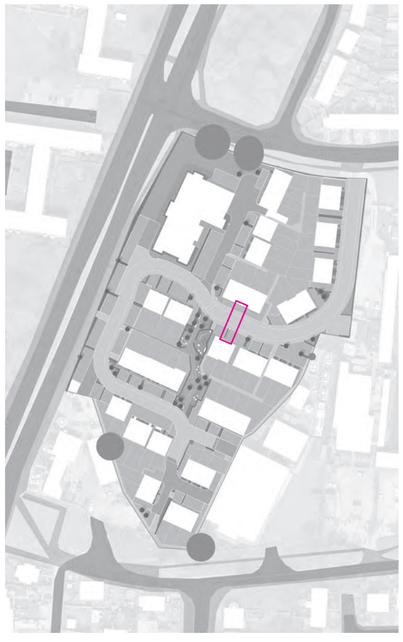
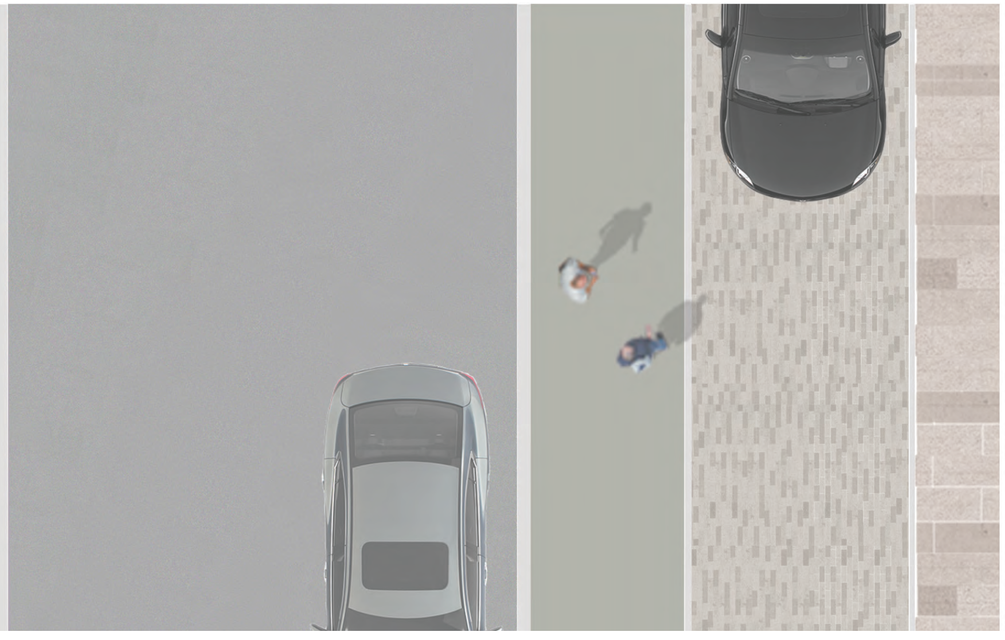


Location plan

Illustrative plan across a adoptable standard street between facing houses



Illustrative section across a shared surface between facing houses

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Doorstep play

This play strategy sets out how the development will give proper recognition of children and young people's need and wish for play and recreation. The key principles are multi- functionality, design quality, permeability, and effective, sensitive management and maintenance.

The aim is to create a public realm that is genuinely child-friendly and inclusive. As much of the public realm as possible will be in the form of 'playable space', where children's play and recreation is one legitimate use amongst a range of uses without compromising other residents and users needs and enjoyment.

Play facilities will mainly located in the central open space. Open space and facilities for games, wheeled activities, and incidental features that encourage children to play. Different age groups should be able to make use of the spaces through varying activities at different times of the day.

Carefully selected play equipment, facilities and non-prescriptive features such as changes of level, hard and soft landscaping, and other landscape features will create playful offers that merge into the wider open space, encouraging a wide range of play activities while also allowing the space to be enjoyed by adults.

a. Smooth boulders

b. Timber balance beam

c. Spinning bowl

d. Timber stepping logs

e. Planting

Child cycling

Hard Surfaces

The surface materials and street furniture can contribute greatly to the character of a place and the quality of the public realm is derived from simplicity through the selection of a restrained palette of complimentary materials and simple coordinated details. Irrespective of the material used, a high quality of workmanship is essential for the quality of finish and the longevity of the landscape. The aim is to create a cohesive, coordinated palette of hard landscape materials which are easy to use, maintain, and be controlled.

Surface treatments

The design and construction of the campus will follow the principles as set out below:

- High quality of workmanship used throughout.
- Restrained in the use of colour and texture.
- Robust enough to withstand the location and the anticipated amount and type of use for the area.
- Ensure street furniture, tree pits/grilles, manhole covers and gullies are at right angles to the direction of the paving units to avoid awkward cuts and junctions.
- Ensure that manholes and inspection covers are concealed with recessed access covers and filled with the same material as the surrounding areas.

Permeable paving

In line with the site development strategy permeable paving and build up will be installed to the car parking spaces.

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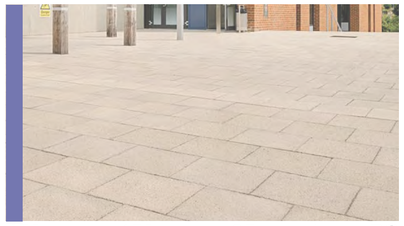
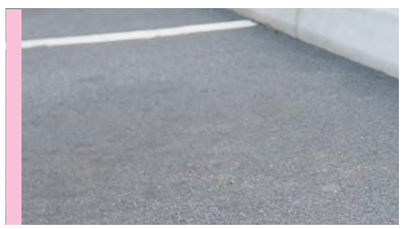
Indicative paving palette



450mm x 450mm x 35mm deep PC concrete Saxon Natural coloured, textured finish slab paving by Marshalls or similar approved

200mm x 100mm x 60mm deep PC concrete block paving by Marshalls or similar approved. Available colours: Brindle, Brown, Buff & Grey

Self binding Golden Amber gravel by Breedon or similar approved



Asphalt

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Street Furniture

Street furniture is an important element in creating a sense of place and a legible public realm and includes, amongst others: benches, bollards, litter bins, street lighting, traffic lights, traffic signs and bus stops. The selection of street furniture should be considered in a comprehensive manner to ensure a common language of elements is maintained across the public realm.

The design and placement of street furniture should follow the principles as set out below:

- Street furniture should be kept to a necessary minimum to reduce possible clutter and maintenance requirements.
- Ensure a simple, consistent range of materials which are robust, high quality and durable. All metalwork should be to a consistent RAL colour.
- All disability requirements will be considered in the selection/design of benches, including the need for arm and back rests.

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Indicative furniture palette

Timber bench

Litter bin

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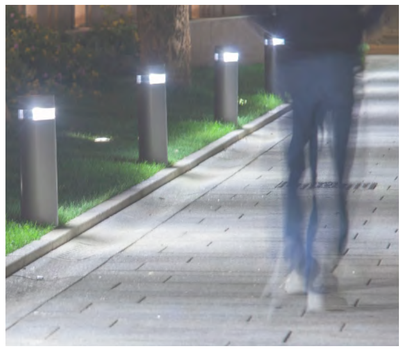
Lighting

The external lighting strategy is to provide a well lit series of space which are safe and secure for all users. A modern palette of fittings will be installed, and these elements will be positioned to minimise street clutter.

The lighting colour and direction is designed to be sensitive to bats and ensure there is no spill of light onto sensitive areas.

Indicative lighting palette

Lighting column



Illuminated bollard

Tree uplighter

Planting & Ecology

The planting and ecology strategy is based on a number of key objectives;

- Provide a network of trees and green spaces
- Enhance wildlife habitats in this urban area
- Promote sustainable planting
- Improve local biodiversity

Provide a network of trees and green spaces

Tree planting within an urban context can be used to unify spaces and routes, frame views and highlight desire lines and focal points. Trees can provide shelter from wind and rain, buffer noise and pollution and create shade.

Enhance wildlife habitats

Low level planting will be used to create visually interesting areas and evergreen planting will create a year round carpet of green, whilst a range of herbaceous planting will provide injections of year round colour.

Varied planting will allow a prolonged flowering season and planting fruit and nectar rich species will provide food for birds and insects (and in turn food for bats). The form and structure of the planting will also create sheltered nesting opportunities for birds.

Promote sustainable planting & Improve local biodiversity

Co-ordination with the design team ecologist has provided opportunity for a low-nutrient mosaic landscaping within our constrained site.

Proposed mixed scrub and grassland habitats will be created on low nutrient soil, to recreate the early successional and mosaic habitats that were previously on site. These elements aim to enhance biodiversity net gain.

Planting which will help to define the character of each individual space, as well as provide year round colour and interest.

A mixture of native and non native species have been chosen, which includes several plants with known benefits to local fauna.

All planting species selected promote sustainable planting principles by developing planting designs that are appropriate for their location, and the intended use of those specific areas.

Scented plants will be incorporated within the landscape to assist with wayfinding and orientation for blind and partially sighted people.

Plan showing a mosaic of low nutrient planting through the site

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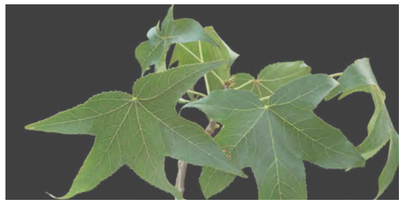
Tree Planting

The tree planting within the site will enhance the key qualities of the landscape character.

Architecturally these trees have a strong ornamental appeal which will provide visual interest throughout the year. This will be achieved with changes in leaf colour, flowers, fruits, canopy form and architectural stem habit.

The tree palette will consist of mainly native species with occasional ornamental species in amenity areas. The plant selection will build of the site character and help strengthen local bio-diversity by providing a source of food and shelter.

The size of the proposed trees has also been considered to ensure each species thrives within its given site location.



Acer campestre
(Field maple)

Amelanchier lamarckii
(Snowy mespilus)

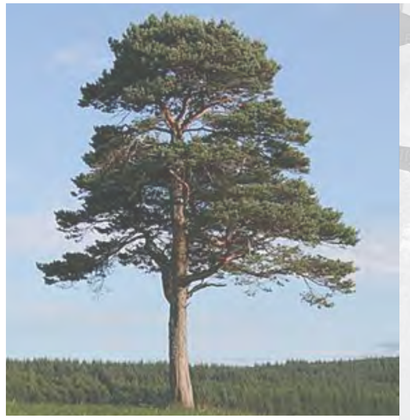
Corylus avellana
(Hazel)

Liquidambar styraciflua
(Liquidambar)

Tree Planting

Prunus Accolade
(Cherry Accolade)

Pyrus chanticleer
(Pear Tree)



Pinus sylvestris
(Scot's Pine)

Maintenance and management

The maintenance of the site during construction, initial establishment and post-establishment is critical to the long-term development of a sustainable and attractive visual and ecological resource.

Maintenance operations will be put in place within a wider framework of management objectives to guide the short, medium and long-term development of the landscape.

The key objective is to improve and maintain the existing and new landscape and ecological structure through the implementation of regular and responsive maintenance operations within an overall managed framework.

All work undertaken on the site by contractors, volunteers or direct employees must comply with the appropriate legislation relating to health and safety and the control of hazardous substances.

Machines and tools are to be used that are suitable for the site conditions and the work to be carried out. Use hand tools around trees, plants and in confined spaces where it is impracticable to use machinery.

The Contractor shall maintain all areas to be clean and litter free by removing all litter inline with the Landscape Management Plan (which will be secured by condition).

Semi-mature, Advanced Nursery Stock and Standard Trees

Additional tree planting is proposed to enhance and reinforce the existing tree stock within the site and to introduce structural planting within the streetscene and immediate hospital setting.

The detailed specification of stock and planting zones will promote good establishment which will be supported through regular maintenance visits and site checks to monitor progress and general health and vigour.

Prune to remove dead, dying and diseased branches. The Maintenance Contractor shall notify the site manager of any major works required and if necessary obtain an assessment from an approved arboriculturalist.

Re-firming of trees as required after strong winds, frost heave and other disturbances. Adjustments to stakes and ties to ensure stability and upright position are achieved.

At each scheduled visit and after high winds, check condition of stakes and ties. Adjust as necessary to prevent rubbing of bark and to ensure that tree is upright. Remove stake or cut down to ground level 3-5 years after date of planting dependant on stability of the tree.

The Maintenance Contractor shall ensure that sufficient water is applied to maintain healthy growth and, dependant on location, shall apply N.P.K slow release fertiliser on an annual or two-yearly basis.

Intervention after the initial establishment stage will be minimal and associated predominantly with maintaining a healthy tree stock.

Ornamental Shrub planting

Maintenance operations during the initial establishment period will promote good growth through appropriate weed control and monitoring the general health and vigour of newly planted stock.

The Maintenance Contractor shall ensure that sufficient water is applied to maintain healthy growth and, dependant on location, shall apply N.P.K slow release fertiliser on an annual or two-yearly basis. Prune only as required in accordance with good horticultural practice and to remove dead, broken or damaged branches and stems.

The intention is to encourage the establishment of planting to provide continuous cover using a balanced mixed shrub layer. Consistent coverage is to be established with species groups to be maintained to reflect their particular characteristics. Pruning and any necessary infill/ replacement planting shall be undertaken to respect the original design intent of promoting the development of a layered structure (i.e. with emergent specimen planting, medium and tall shrubs).

Tree management to increase visual linkages

Quality assurance which will promote the landscape as a usable space

Accessibility

Inclusive design

Inclusive design is an evolving set of principles aiming to produce aesthetically pleasing, functional environments usable by all, taking into account differences in age, gender, and disability. The six guiding principles are set out below:

It is necessary to recognise that disabled people are not a homogenous group. All people are different and have varying abilities.

Ease of use

There should be a comfortable route for all people across the site.

Freedom of choice and access to mainstream activities

Independent access should be available but if support and assistance is required it should be to hand.

Quality

The needs of disabled people must be met however the minimum standards should be exceeded as the designer strives to produce the best scheme possible.

Legibility and predictability

The design language, layout, and material palette must be rationalised and used judiciously to help clarify way finding. The legibility of the proposed scheme will help to orientate people without the need for elaborate signage.

Safety

Safety is at the heart of design and all people using the site must be able to feel safe and secure at all times.

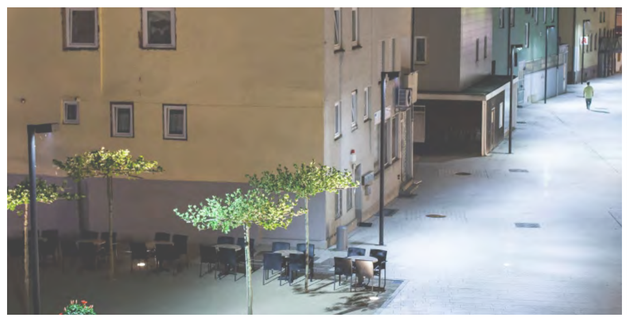
The design of the scheme public realm will provide a clear and inclusive environment suitable and safe for everybody, including people with disabilities, the elderly, and children in pushchairs.

Level change

Most of the gradients across the development will be less than 1:21 and have a landing for every 500mm change in level where possible and subject to levels details secured by condition. Where practical slopes will be installed in place of steps, where steps are necessary the design will comply with Part M of the Building Regulations.

Street furniture

Street furniture can contribute positively to the character of a place, and it is proposed that a simple, consistent palette of benches, cycle stands and little bins will be selected. Benches will be comfortable and durable with the necessary support, and set out no more than 50m apart. The bench design and exact locations of all street furniture will be subject to further detailed design development.



Lighting

Vehicular Circulation - Clear and direct entrance points improve accessibility for all.

Accessibility - suitable tactile corduroy paving

Demarcation - Kerbs of contrasting colour to pavement & road aid the partially sighted

Permeability - A hierarchy of legible pedestrian routes and new public spaces responding to existing urban context will improve permeability and wayfinding.

Street Furniture - inclusive seating will be provided throughout the development.

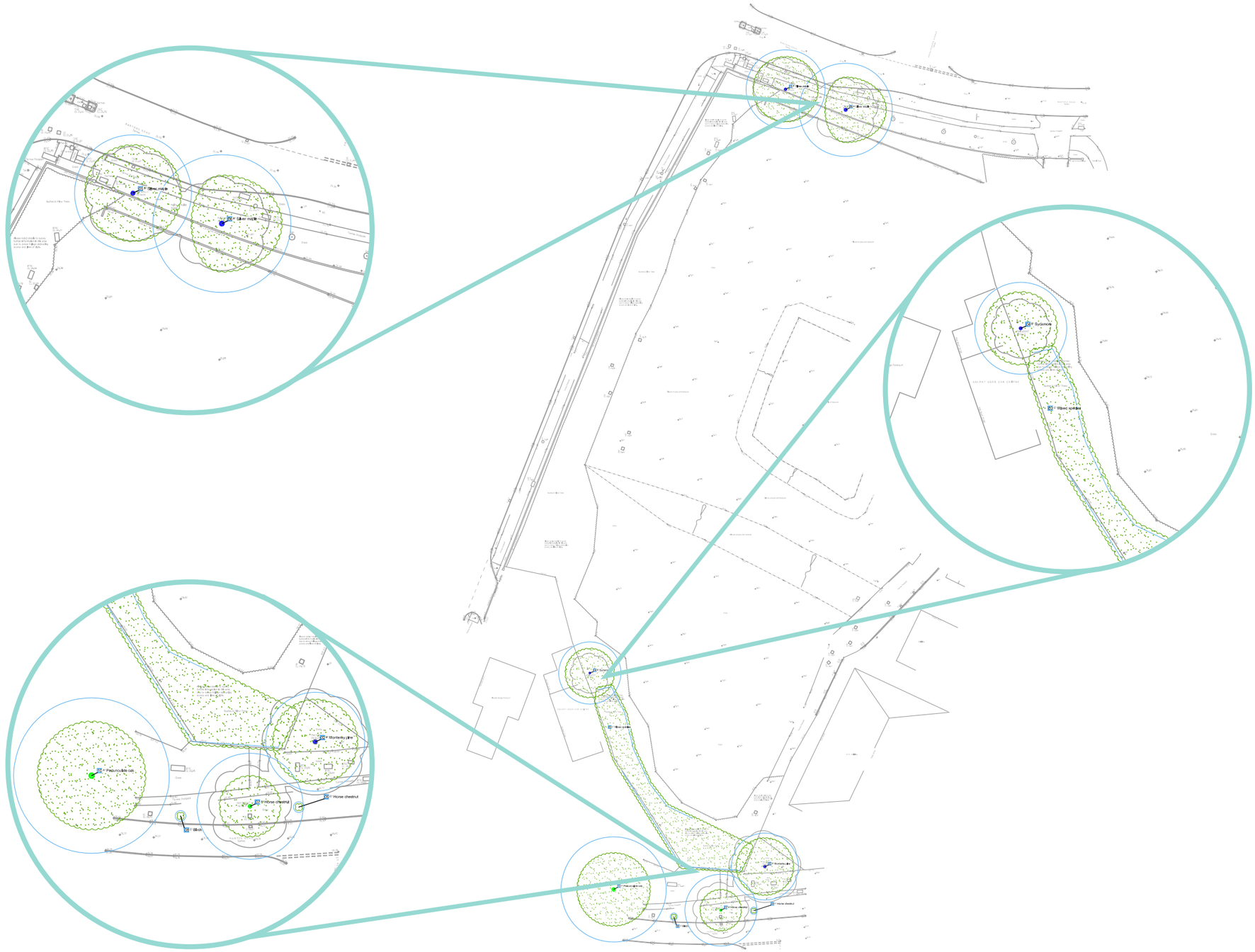
4.2 ARBORICULTURE

An Arboricultural Report has been prepared which includes a BS5837:2012 compliant tree survey, arboricultural impact assessment, and tree protection strategy that includes a method statement and tree protection plan.

The arboricultural works package includes a survey and assessment of the existing tree stock on the site and immediately adjacent to the site boundary. The purpose of the survey is to identify and record the principal tree constraints on site to inform feasibility studies and design options, in accordance with BS5837:2012 Trees in Relation to Design, Demolition, and Construction.

To facilitate the proposals, a group of low-quality scrub and young naturally regenerating trees will be removed. All other trees on and off the site can be adequately protected during all construction. Tree protection commitments include erecting barriers and a pre-start audit/meeting. Provided the protection strategy is implemented as outlined, this application has a low arboricultural impact and is thus acceptable.

Further detail can be found within the Arboricultural Report, accompanying this application.



KEY:

- Category A Tree
- Category B Tree
- Category C Tree

5. TECHNICAL CONSIDERATIONS

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5.1 SUSTAINABILITY TARGETS

ENERGY

The strategy for reducing energy use and associated carbon emissions through the design of the scheme follows the energy hierarchy of 'Be Lean', 'Be Clean' and 'Be Green'.

The proposed development has been assessed using Elmhurst Energy's latest version of their SAP software which uses the SAP 10.2 methodology. This assessment has determined the Building Regulations Part L baseline, to which the scheme must comply with, and each stage of the energy hierarchy will be compared against.

Firstly, the energy demand is reduced at the 'Be Lean' stage of the energy hierarchy. This includes a set of energy efficiency measures, including the following:

- The thermal performance of the proposed fabric will exceed Part L (2021) minimum requirements in terms of U-values and air tightness.
- Orientation has been considered in the design of the facades to ensure energy use is balanced through daylight provision and thermal comfort.
- Where applicable, the detailed design will independently assess the thermal junctions to ensure insulation and continuity for minimising thermal bridging.
- Solar control glass will be utilised to ensure solar gains are balanced to lower the head demand but also assist in mitigating the risk of overheating.
- Light fittings of low energy types will be specified throughout the scheme.

The 'Be Clean' stage of the energy strategy explores the potential for a district heat network to serve the scheme. However, this development proposal is deemed unsuitable for this type of heat network. Alternatively, individual heating systems have been specified for the dwellings.

The 'Be Green' stage of the energy hierarchy introduces low carbon energy supply systems to the houses in the form of individual air source heat pumps. These will efficiently supply the houses with space heating and hot water. The apartments will also benefit from heat pump technology in the form of domestic hot water heat pump, which will serve the apartment as a low carbon solution to supplying hot water.

The proposed fabric specification is summarised in the below table:
The following table presents the carbon savings achieved after the 'Be Green' stage of the energy hierarchy.

Element	Part L 2021 Limiting U-value	Proposed U-value	Improvement (%)
Ground Floor	0.18	0.12	33.3
Exposed Floor	0.18	0.12	33.3
External Wall (to houses)	0.26	0.18	30.7
External Wall (to apartments)	0.26	0.19	26.9
Communal Wall	0.26	0.26	0
Party Walls	0.20	0.00	100
Cold Roof	0.16	0.08	50
Sloping Roof	0.16	0.16	0
Flat Roof	0.16	0.13	13.8
Windows	1.60	1.30	18.8
Bi-Fold / Patio Doors	1.60	1.40	12.5
Entrance Doors	1.60	1.20	25%

This shows that a 65% improvement is achieved in comparison to the Part L baseline. This is in line with the adopted planning policy requirements at both national and local levels.

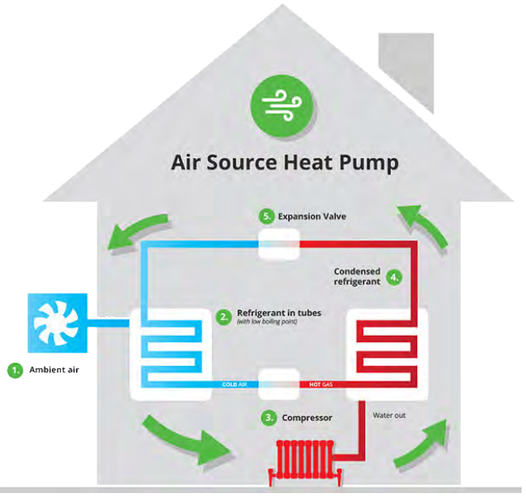
Strategy of Energy Hierarchy	Regulated CO2 Emissions (tonnes/year)
Total Part L 2021 Baseline	93.90
Total After 'Be Lean'	91.17
Total After 'Be Green'	33.11
Total Saving	60.79
Total Improvement	65%

We acknowledge the incoming Future Homes and Buildings Standard. These new regulatory standards are due to come into effect in 2025, however, the details are yet to be finalised.

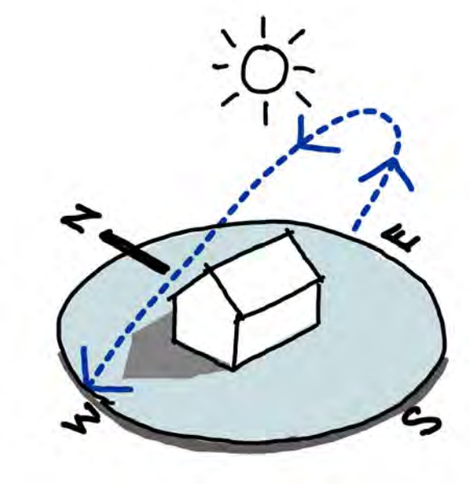
It is possible that due to the anticipated construction programme of the proposed development, the dwellings may be built after the Future Homes and Building Standard comes into effect. The construction specifications will therefore need to be reviewed as the programme progresses to ensure that all dwellings remain compliant with the relevant regulatory requirements. It may be necessary for some specification upgrades, although it is unclear exactly what will be required until the standard is published.

The energy strategy has been developed using the assessment tools that are currently available and demonstrates full compliance with the current Building Regulations requirements, and the requirements of Havant Borough Council.

Further detail can be found within the Energy & Sustainability Statement, accompanying this application.



ASHP Example



Building Orientation

SUSTAINABLE MATERIALS

The selection of materials is determined by a number of factors, such as architectural context, design rationale, carbon embodiment and maintenance requirements. The proposed development will concentrate on sustainable design, with materials to be selected in line with local vernacular and landscape character.

The BRE Green Guide to Specification is a simple guide for design professionals. The guide provides environmental impact, cost and replacement interval information for a wide range of commonly used building specifications over a notional 60-year building life. The construction specification will prioritise materials within ratings A+, A or B. Preference will be given to the use of local materials & suppliers where viable to reduce the transport distances and to support the local economy.

Wherever feasible, there will be a commitment to using materials that are all from renewable sources and recycled e.g. secondary aggregates. The use of recycled materials (e.g. crushed concrete from waste used for hard-standing or recycled fibreglass insulation) has zero embodied energy impact, other than that expended in their processing or transport.

Timber would be sourced, where practical, certified by FSC, PEFC or an equivalent approved certification body and all site timber used within the construction process would be recycled.

All insulation materials will have a zero-ozone depleting potential.

Construction Waste will be managed during both the construction and operational phases according to the waste hierarchy.

WATER EFFICIENCY

The water efficiency standard of the dwellings will be designed to achieve less than or equal to 110 litres per person per day. This will be achieved by implementing the following water saving measures:

- Water efficient taps
- Water efficient cisterns
- Low output showers
- Flow restrictions to manage water pressures to achieve optimum levels
- Water meters to all premises with guidance on water consumption and savings
- Installation of water efficient appliances

Water efficiency is considered during the construction process and the following practices on site will reduce usage and waste:

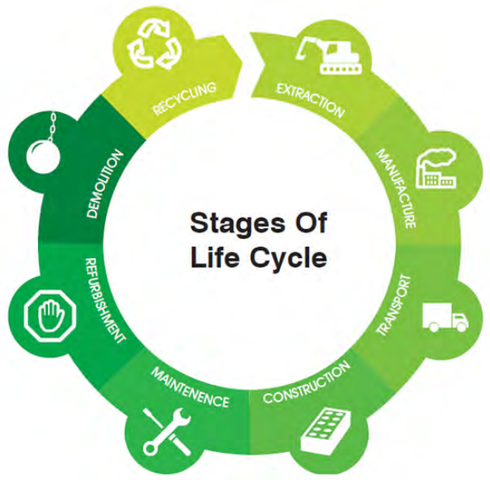
- High pressure low volume power hoses
- Waterless wheel washing
- Installing water meters and monitoring, reporting and setting targets for water consumption

ECOLOGY

A Preliminary Ecological Appraisal (PEA) of the site, dated September 2024, to identify any ecological constraints to development, inform scheme design, highlight opportunities for ecological enhancement and present the findings of additional investigations/surveys.

The desk study revealed that the application site is not statutorily or non-statutorily designated for its wildlife interest and has no protected/notable species on records.

A Biodiversity Net Gain Assessment has also been prepared. For further details please refer to the Energy & Sustainability Statement accompanying this application.



Sustainable Material Life Cycle

Water efficient taps, showers and appliances

FSC or equivalent approved timber

Recycled and secondary aggregates

5.2 REFUSE STRATEGY

A full review of the layout has been undertaken, including swept path analysis for refuse collection and emergency access.

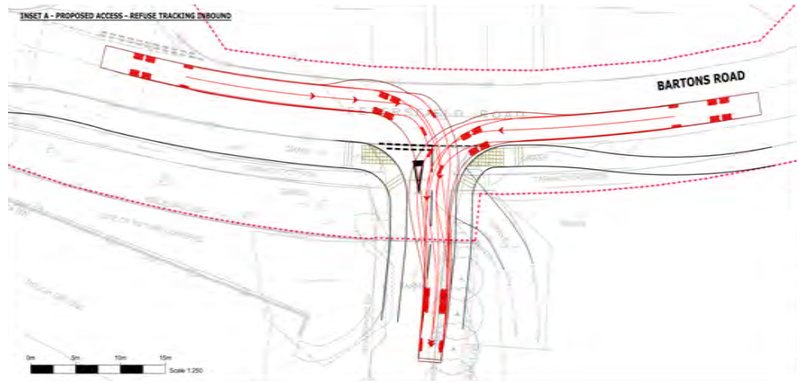
Refuse would be collected by Havant Borough Council (HBC). The tracking indicated that the refuse vehicles can enter and exit the site in forward gear.

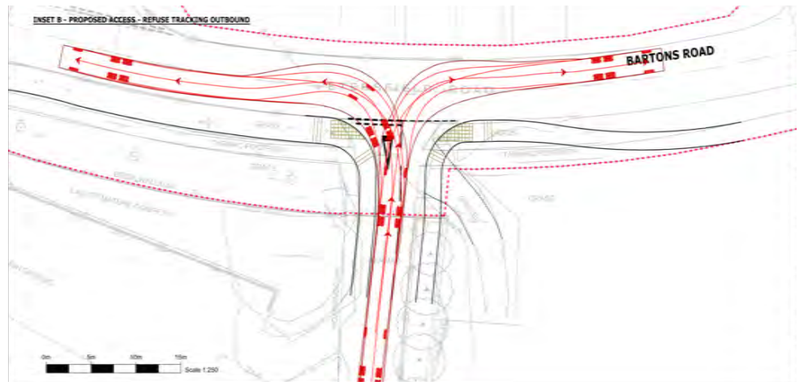
The layout review also shows that the maximum distances refuse should be carried to in order to reach either a bin store or an appropriate collection location is within the maximum permissible threshold. This is in accordance with the Building Regulations: Drainage and Waste Disposal (2010), which states "Storage areas for waste containers and chutes should be situated so that the distance householders are required to carry refuse does not usually exceed 30m. Containers should be within 25m of the waste collection point specified by the waste collection authority.

Each dwelling house will have a rear or side path which provides accessible routes to drag bins to a collection point if required.

The flats will have accessible but well concealed servicing provision located at the ground floor of the block.

For further details please refer to the Transport Assessment accompanying this application.





5.3 DRAINAGE

EXISTING FLOOD RISK & SURFACE - FOUL WATER DRAINAGE

The site is brownfield in nature with its historic building and hardstanding connection to the Southern Water Ltd public sewer networks, for both foul and surface water, within the immediate vicinity of the site. Several foul and surface water public sewers cross the site with associated easements that will need to be respected.

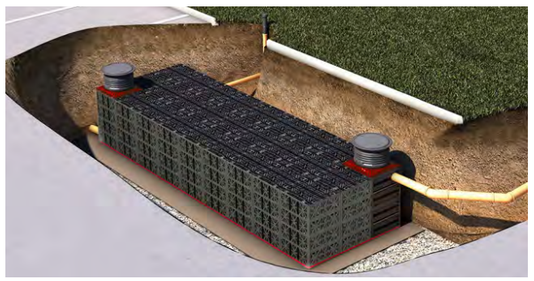
The site is located in Flood Zone 1, the lowest level of flood risk. Therefore, the site is considered at a low-risk fluvial flooding. Surface water flood maps were obtained from the Government website. These maps show there is some surface water flood risk on the site. These risks fall into two categories:

- A surface water flow path running north/south through the site along the western boundary.
- Localised ponding within the site.

The Level 1 SFRA includes a plan showing sewer flooding events recorded by Southern Water. None of these are close to the site therefore, the risk of flooding from sewers is very low.

The Level 1 SFRA provides mapping on susceptibility of Groundwater Flooding. The site has a "Limited potential for groundwater flooding to occur".Furthermore, from the site infiltration testing done by BRD Environmental there was no groundwater seepage in the three trial pits which were dug. Therefore, the risk of groundwater flooding is very low.

The site is clear of the maximum extent of flooding from reservoirs. Therefore, the site is considered to be at very low risk from flooding from artificial sources.



SUDs Underground storage crates

DRAINAGE DEVELOPMENT PROPOSALS

A comprehensive sustainable drainage system will be implemented to prevent runoff from this development increasing flood risk to other areas. This will be fully detailed at the detail drainage design stage of the proposed development, although an indicative strategy to demonstrate that a satisfactory SuDS solution can be delivered has been produced. The surface water drainage scheme has been designed to ensure:

- Post development run off for peak storm events does not exceed pre-development levels.
- Sustainable Urban Drainage systems are wholly incorporated within the scheme.
- Consideration is given for the improvement of water quality within the design.
- The designed drainage scheme can satisfactorily retain a critical 1 in 100 year storm event with a 45% climate change allowance.

Due to the constrained nature of the site the range of possible viable attenuation devices is limited. A mixture of surface attenuation measures (non-infiltration) are proposed as the principal method of surface water attenuation for this development. These will include permeable paving with no infiltration to ground and underground geocellular attenuation crates.

The surface water network and SuDS will collect all the surface water runoff from the highways, private drives and roofs of houses and apartment blocks. All surface water runoff from the main road will be collected by the piped network and all surface water runoff on roofs, private drives and shared surfaces will be collected by a permeable paving and then stored within the paving or in tanks which will then discharge into the piped network.

A foul water drainage strategy for the site has been proposed, this shows that it is possible to drain the entire site via gravity to a connection point in to the 300mm dia Southern Water foul sewer in the south eastern corner of the site. This connection would be carried out under the terms of a Section 106 Agreement in accordance with the Water Industry Act 1991.

For further details please refer to the Flood Risk Assessment and Drainage Strategy accompanying this application.

5.4 NUTRIENT NEUTRALITY

The site is affected by nitrate neutrality. Natural England's Solent Nutrient Budget calculator suggests the total nitrogen load to mitigate (due development impact) will be in the region of 83.22kg TN/yr.

We understand Havant are promoting their own nutrient mitigation scheme to mitigate development within HBC's Local Plan. However, we note that only planning applications for 15 dwellings or less (net) or regeneration projects within specific regeneration areas will be able to use this scheme. Bartons Road does not meet these criteria. Therefore we understand we will be expected to use a third-party mitigation scheme.

We have secured credits and Stonebond have entered into a Deed of Allocation with Albion Water to use the scheme at Knowle.

5.5 CONSULTATION STRATEGY

We have undertaken a three-stage consultation process to demonstrate to political and community stakeholders that we are providing an opportunity for local people, groups and other stakeholders to inform the proposals.

PRE-CONSULTATION

We identified the key stakeholders and wrote to them on Tuesday 10th June to inform them that we had commenced preparation of a planning application, providing information about the proposals and inviting them to a briefing and tour of the site.

FORMAL CONSULTATION

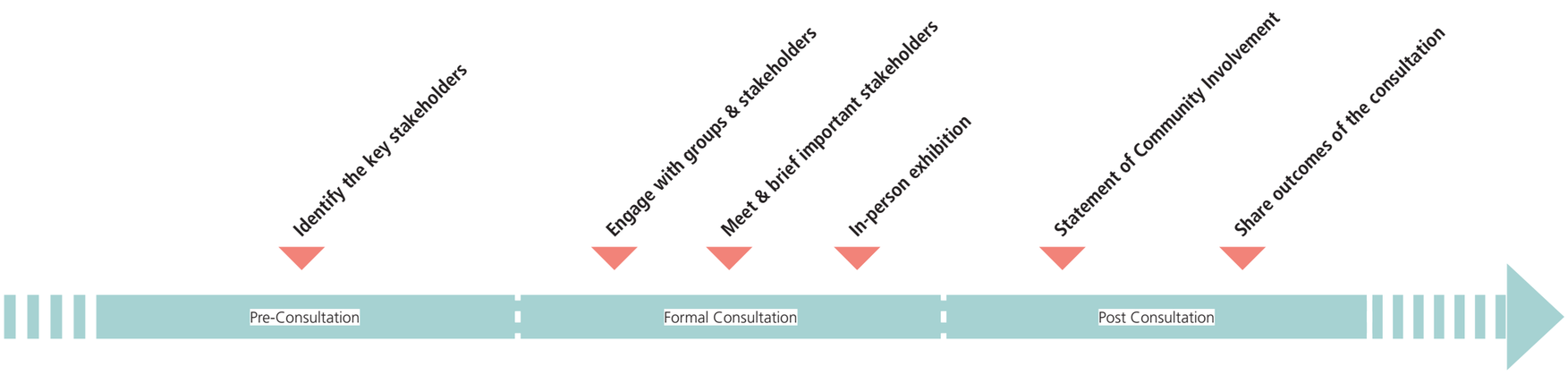
The formal consultation period took place from Monday 7th July 2025 to Sunday 20th July 2025. This included:

- Following up with stakeholder on 23rd June to inform them of our public consultation.
- Sending flyers First Class delivery to 993 residences and businesses on Tuesday 24th June 2025 to inform them about the proposals for the redevelopment of the site, with information about the public exhibition event, consultation period and website.
- Producing a consultation website, which included a summary of the proposals and electronic versions of all consultation materials, with an opportunity to provide feedback through the website.
- Holding one in-person consultation exhibition on 5:00pm - 8:00pm Wednesday 9th July 2025 at the Leigh Park Centre, Havant.

Feedback was provided by several channels including via the feedback form and email.

POST CONSULTATION

Following the public consultation period, our third stage was documenting the engagement activity within the Statement of Community Involvement, which has informed our final proposals for the site. We are committed to ongoing engagement with the local community for the duration of the proposed development. We will continue to listen to and respond proactively to feedback from residents and local councillors.



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