
GARDEN WALK

3.0 Site Wide Built-Form Design Principles

The built-form principles provide detail on how the volumes secured by parameter plan will resolve into interesting, diverse and attractive buildings that contribute positively to the rhythms and richness of Cambridge.

3.0 Site Wide Built-Form Design Principles

3.1 Massing

The following guidance sets out strategies to help break down the massing and perceived bulk of the large format footprints required to support the proposed uses. The application of the codes within this section will create an attractive, varied, and diverse townscape, that integrates successfully with the fabric of Cambridge.

The Design Codes will shape each building beyond the massing envelope defined by the Parameter Plans to articulate, sculpt and refine each building to be highly responsive to its plot, character area, the site and the wider setting.

3.1.0 Proposals *must* collectively create a coherent place comprised of buildings that form a responsive and positive contribution to the skyline of Cambridge and respect relevant policy views and key landmarks.

3.1.1 The Legibility Framework *must* inform the detailed massing strategies such that the intended urban hierarchy is achieved.

3.1.2 Reserved Matters applications *must* evidence that the relationship with all plots has been considered and that the visual relationship between buildings has been tested in both near and long distance viewpoints. Relevant TVIA viewpoints to be agreed at outset of reserved matters applications.

3.1.3 Each building *must* respond to adjacent buildings in scale and character and avoid visual coalescence of massing and built forms.

3.1.4 The architecture and materiality of a building *must* respond to nature of the character area(s) it sits within. Façades *must* be clearly divided into a top-middle-base order through materiality or articulation or both.

3.1.5 Buildings adjacent to each other *must* complement one another through similar proportions, architectural elements and rhythmic composition.

Modulated Massing

3.1.6 Buildings *must* employ a modulated approach to the massing, breaking down large footprints into smaller, more distinct architectural entities.

3.1.7 Subdivided volumes *must* be articulated to be visually distinct, create visual interest and reduce the perceived scale and bulk of the building.

3.1.8 Longer façades *should* be subdivided by vertical articulation to reflect the finer grain of Cambridge's fabric.

Variation in Height, Form and Silhouette

3.1.9 Buildings *must* introduce variation in height and form between each other, and employ diverse roofscape solutions to create a sense of variety to their silhouettes

3.1.10 To avoid coalescence, roofscape articulation and massing breaks *must* be legible and appreciable in relevant local TVIA views from outside the site.

Setbacks

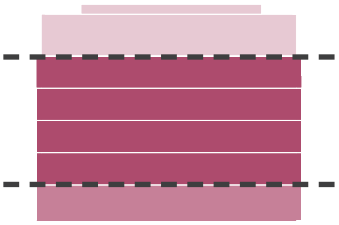
3.1.11 Buildings *should* use setbacks, stepped plans and angled façades to reduce the visual impact of mass and break down bulk, and to create opportunities for green roofs and amenity terraces.

Materiality and Facade Articulation

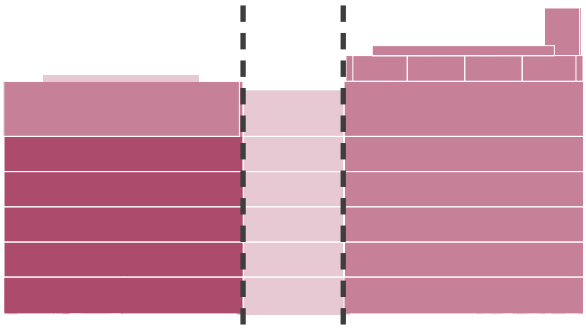
3.1.12 Buildings *must* use a diverse palette of high quality materials and façade treatments to enhance visual differentiation between massing volumes.

3.1.13 Repetitive grid elevations applied to whole façades without variation *should* be avoided.

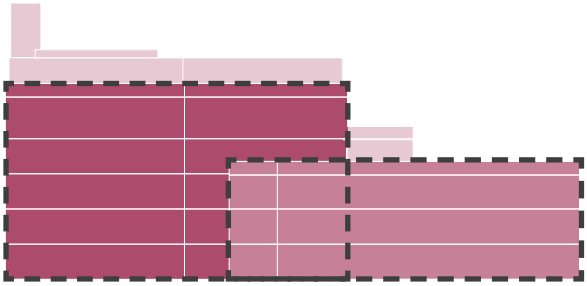
3.1.14 Façade elements *should* be grouped to emphasise smaller vertical volumes and reinforce smaller segments.



3.1.4 Clearly divided top-middle-base. [Illustrative Diagram].



3.1.6 Using a central set-back as a method of enhancing verticality, where the facade is longer than the height. [Illustrative Diagram].



3.1.7 Using step-ups of varying volumes as a method of enhancing verticality, where the facade is longer than the height. [Illustrative Diagram].

Vertical and horizontal articulation to create visually distinct volumes.
Great George Street, Liverpool, Brock Carmichael

Subdivision of a larger volume into smaller architectural elements.
Ruby Lucy Hotel, London, Kyson Studio

Application of fine grain articulation to break down a larger mass into smaller elements with an articulated silhouette.
Keybridge, London, Allies and Morrison

Vertical expression and subdivision combine with materiality to break down volumes into smaller elements.
30 Broadwick, London, Emrys Architects

3.0 Site Wide Built-Form Design Principles

3.2 Materiality

The materiality of the proposed buildings in terms of colour, tone and texture is an important factor in delivering a new area of the city which successfully knits in with its context as experienced in both near and far views.

3.2.0 All Reserved Matters applications *must* illustrate the decision making process that has guided the proposed materiality for the building in question and how the materials complement context.

3.2.1 This material selection process *must* be informed by local and city wide context.

3.2.2 Reserved Matters applications *must* evidence testing of materiality against the materiality of all plots with extant Reserved Matters such that the influence of tones, lightness and texture of the chosen materials can be fully understood.

3.2.3 This testing *must* demonstrate how materiality will break down the cumulative mass of proposals by creating suitable contrast between buildings.

3.2.4 The materiality of taller elements of the Proposed Development *must* be contrasting, distinct from, or appropriately harmonious with historic tall elements so as to minimise competition with the historic core and to make legible the evolution of the skyline.

3.2.5 The material choices and proposed articulation *must* address texture, depth, identity and playfulness.

3.2.6 The material choices *must* reflect the National Design Guide principles, be appropriate for construction, practical, durable, affordable and attractive.

3.2.7 An understanding of the embodied carbon of selected materials *should* be demonstrated.

3.2.8 The materiality *should* aim to harmonise with the established city material palette and not unnecessarily assert the proposals in the overall skyline whilst still allowing suitable variation of tone and colour to signify markers and points of interest.

3.2.9 The tone and lightness of materiality of plots that are aligned in key viewpoints *should* appropriately contrast one another to enable the legibility of individual buildings. This is particularly relevant in the Castle Hill Mound and Red Meadow Hill viewpoints as established in Chapter 10 of the Environmental Statement.

3.2.10 Slender and darker marker points *should* be introduced for legibility and variation on the skyline.

3.2.11 Material treatment *should* be used to differentiate elements of the facade composition.

Note:
The Level 3 Accurate Visuals Representations (AVR views), opposite, show the illustrative massing of the proposed scheme with applied architecture and materiality. The Illustrative massing shows the expected footprints and maximum height of the proposed buildings. Please see Chapter 10 of the Environmental Statement for further detail regarding AVR views.

View from Coldham's Common

View from Castle Hill Mound

View from Red Meadow Hill

3.0 Site Wide Built-Form Design Principles

3.3 Base: Ground Floor Activation, Transparency and Entrances

People friendly places are those that have a scale, which people can relate to. Therefore, the ground floor plane of the development including the spaces and the buildings, is a key element of the proposal to create a place that is inclusive, vibrant, attractive and a coherent relationship between ground floor uses and the public realm.

3.3.0 Buildings *must* have well-designed ground floor frontages that respond to the hierarchy of public space that they bound.

3.3.1 The ground floor of buildings *must* be informed by the Spatial Hierarchy and Public Realm Framework, and Legibility Framework.

3.3.2 Buildings *must* be well coordinated with the landscape design in order to create a positive ground floor experience with suitable space for circulation (informed by expected population and peak arrival numbers), building entrances and thresholds, short stay cycle parking and seating areas.

3.3.3 The main entrances to ground floor uses *must* be legible, well defined and contained within Primary Façades.

3.3.4 Entrances to workplace lobbies *must* be generous, welcoming, transparent and positioned to activate the key spaces of the masterplan.

3.3.5 The key public spaces of Maple Square and Hive Park *must* be framed by ground floor active uses.

3.3.6 Where markers are identified, ground floor activation *must* be incorporated into the architecture.

3.3.7 Active frontages *must* be delivered in line with the broad principles set out within 2.2 although, precise layout is Reserved.

3.3.8 The design of shopfronts *must* be in accordance with the principles set out within the Shopfront Design Guide included within the Cambridge Local Plan (2018).

3.3.9 Largely opaque, obscure or heavily fritted glass *must* not form the primary glazing material within ground floor façades unless required to mask back of house uses or to mitigate security issues.

3.3.10 Entrances and routes for building services (e.g refuse storage and collection) *must* be well coordinated with the proposed ground floor frontages, public realm and highways.

3.3.11 Reserved Matters Applications *should* illustrate how the articulation of the facade and any set backs have been designed to positively and appropriately define the sense of scale within the streets that they define.

3.3.12 The designated character areas *should* inform the activities within the building and the chosen offering(s) at ground floor level.

3.3.13 Where there are public uses on the ground floor, the architecture *should* allow for visibility of internal activity.

3.3.14 The ground floor units *should* incorporate visual and physical connections to one another, where possible.

3.3.15 Views *should* be provided out of internal spaces onto streets or public spaces where possible.

3.3.16 The entry sequence into each building *should* be illustrated in Reserved Matters applications to ensure that conflicts are reduced between building users and those passing through the space on foot and by bike.

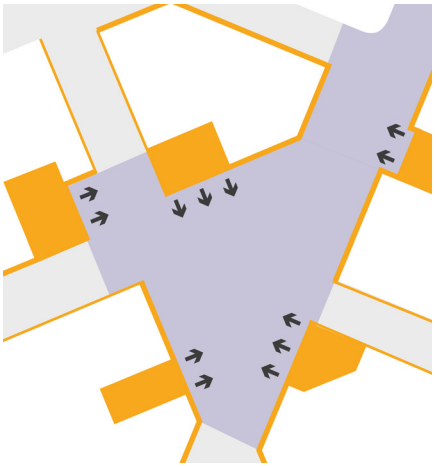
3.3.17 Secondary streets *should* either support site connectivity or create secondary spaces that support activities within primary streets.

3.3.18 Where practicable, secondary façades *should* benefit from additional entrances to buildings in order to enhance the activation of these façades and the spaces that they bound.

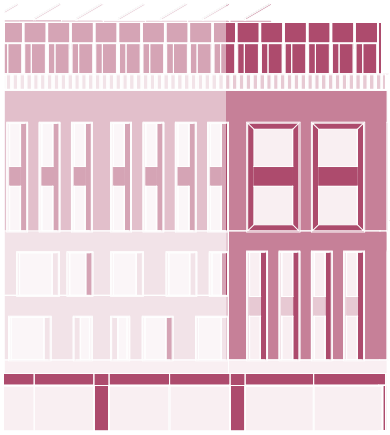
3.3.19 Where a blank facade element is unavoidable within an overall frontage that is well active and balanced by more active sections, architectural devices and treatments *should* be employed to provide relief and contribute to the sense of a dynamic façade.

3.3.20 Where ventilation grilles or service equipment are unavoidable, they *should* be limited in extent and well-integrated to create a cohesive and attractive elevation.

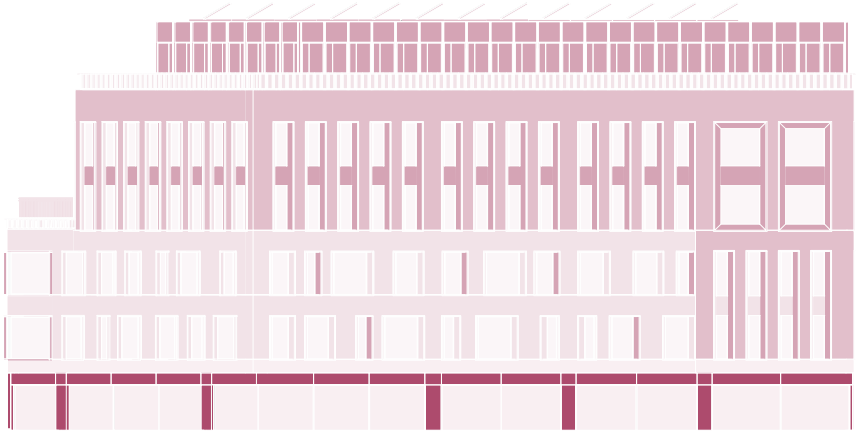
Public Space
Lobby
Primary Frontage
Secondary Frontage
Active Frontage (With Entrance)



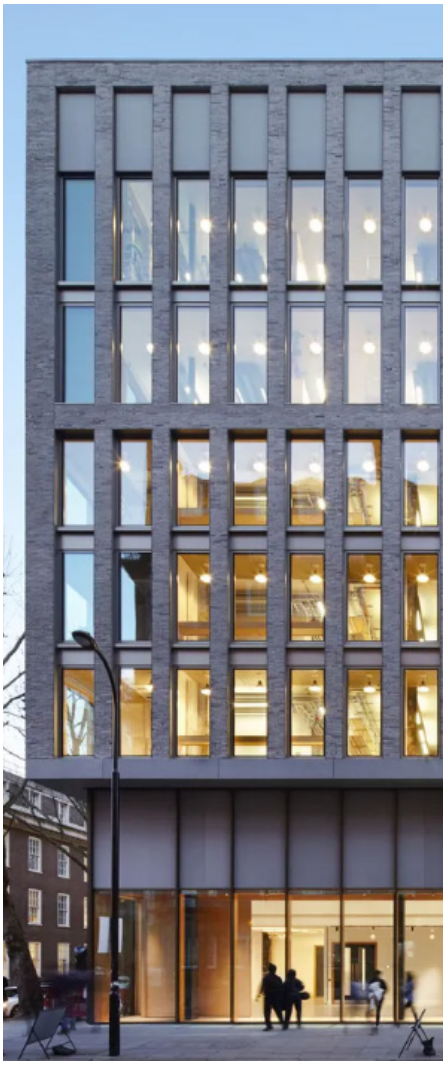
3.3.0 Main entrances and primary facades that address public space. [Illustrative Diagram].



3.3.6 Unique architectural treatment on the corners to represent a marker. [Illustrative Diagram].

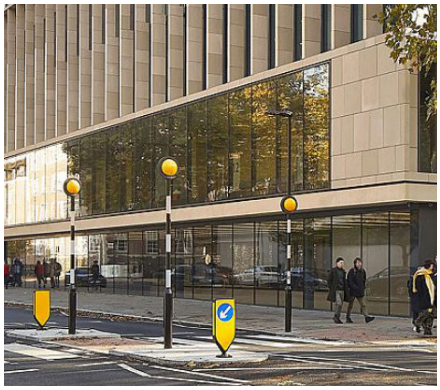


3.3.8 Shopfronts and lobby entrances integrated into the facade strategy. [Illustrative Diagram].



Visibility of ground floor activity
The Bartlett, London, Hawkins Brown

High quality non-active frontage
Judge Business School, Cambridge, Stanton Williams



Example of science on show in a laboratory building.
Zayed Centre, London, Stanton Williams

An active ground floor that positively contributes to the public realm.
430 Astrazeneca, Cambridge, Herzog & de Meuron

3.0 Site Wide Built-Form Design Principles

3.4 Middle: Facade Hierarchy

The architecture of the primary facade elements that sit between the ground floor and roof are key to defining the character of the spaces that they contain.

Creating a clear and understandable façade hierarchy to buildings is crucial to creating a cohesive place when viewed in both local and more distinct viewpoints. It is also an important in creating a scale of building and space to which people can relate.

3.4.0 All building façades *must* be thoughtfully designed, regardless of hierarchy, and *should* create elevations that provide a 21st Century response to the rhythms and richness found in the character of Cambridge.

3.4.1 Building façades *must* respond to the site wide spatial and street hierarchy they frame and define.

3.4.2 Facade design *must* be carefully designed to create varied architectural silhouettes.

3.4.3 Façades *must* respond to plot orientation and integrate solar shading design to prevent overheating.

3.4.4 Façade components and elements *should* have predominantly vertical expression to break up larger volumes and long façades unless designs can demonstrate that an alternative approach can still comply with the massing codes under section 3.1.

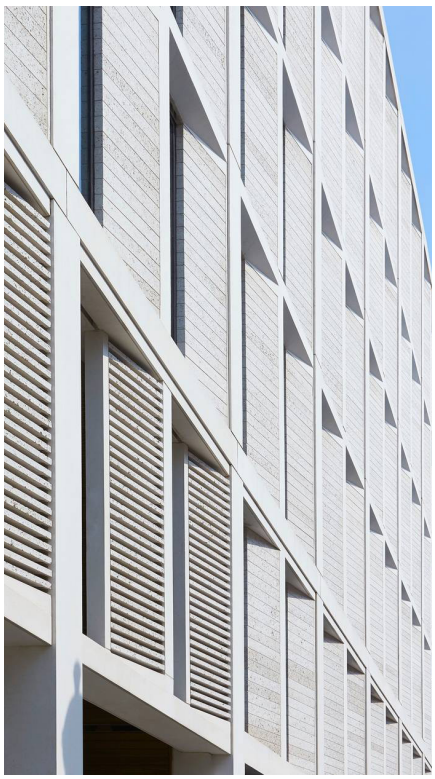
3.4.5 Set-backs *should* differentiate in materiality or articulation or both to create distinction between the facade below.

3.4.6 Facade design along Coldham's Lane *should* positively contribute to the street scene.

3.4.7 Facade design bordering Hive Park *should* enable the successful transition between the architecture of the Mill Road Conservation Area and the Proposed Development.

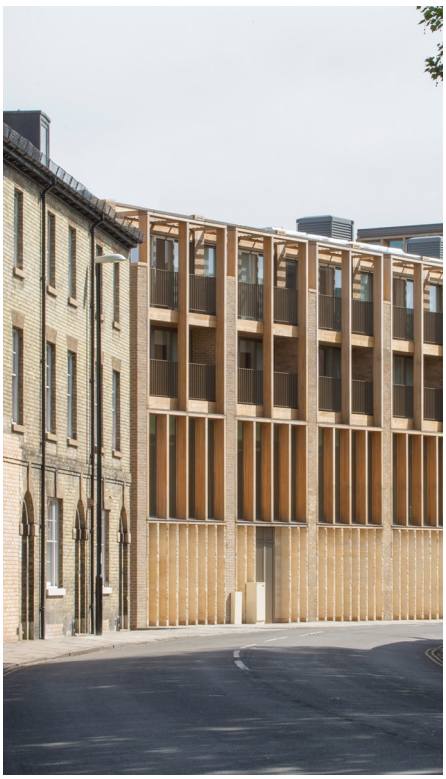
3.4.8 Façades *should* adhere to a maximum glazing amount of 40% of the total facade area per the LETI Climate Emergency Design Guide.

3.4.9 All external services *should* be incorporated into the facade design for a cohesive appearance.



High quality articulation and materiality
Fitzroy Place, London, Sheppard Robson

Vertical expression with horizontal detail.
Eddington, Cambridge, Stanton Williams



A contemporary response to the rhythms and richness of Cambridge.
Jesus College, Cambridge, Niall McLaughlin

A contemporary response to the rhythms and richness of Cambridge.
Anglia Ruskin University, Cambridge, Richard Murphy Architects

Facade step and material change to break up building mass.
Fearthersone Building, London, Morris + Company

Clear hierarchy of facade, dynamic central plane and appreciable upper floor set-back.
KPMG HQ, Berlin, KSP Engel

3.0 Site Wide Built-Form Design Principles

3.5 Top: Rooftops

Rooftops must be varied and be designed to be read independently to avoid the coalescence of plots and massing, and to support an attractive and rich townscape character that can respond to varied placemaking opportunities and different edge contexts

There are a number of strategies defined in the below codes that will enforce the delivery of high quality roofscapes at Reserved Matters Applications.

3.5.0 The rooftops *must* be varied in character across the character areas.

3.5.1 The articulation of rooftops *must* mitigate massing impacts in local and townscape views, as identified in the townscape visual assessment chapter of the Environmental Statement.

3.5.2 Efforts to create variation of form at rooftop plant level will be encouraged and Reserved Matters applications *must* illustrate how the roofscape has been designed to minimise visual impacts and create an articulated roofscape.

3.5.3 Rooftop plant *must* be well considered and integrated into the overall roof character to create a coherent and attractive architectural composition.

3.5.4 Buildings *must* have an uncluttered roof profile with all functional elements forming an integral part of the overall building forms

3.5.5 Ventilated façades *must* be designed as part of the wider architectural composition.

3.5.6 To mitigate the coalescence of buildings in townscape views a variety of materials *must* be used on the top floors to create distinction between buildings.

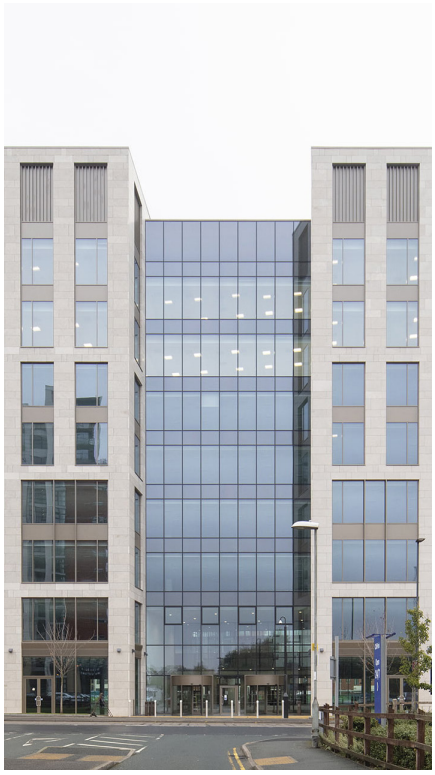
3.5.7 The combined roof profiles of Plots 2, 3, 4 and 5 *must* create a varied roofscape when viewed from Coldham's Common.

3.5.8 Rooftops of neighbouring plots *must* be varied in articulation and tone when viewed from Red Meadow Hill and Castle Hill Mound.

3.5.9 The shape and silhouette rooftops *should* work to create prohibit coalescence with adjacent buildings, with varied forms creating complementary mix throughout the character areas

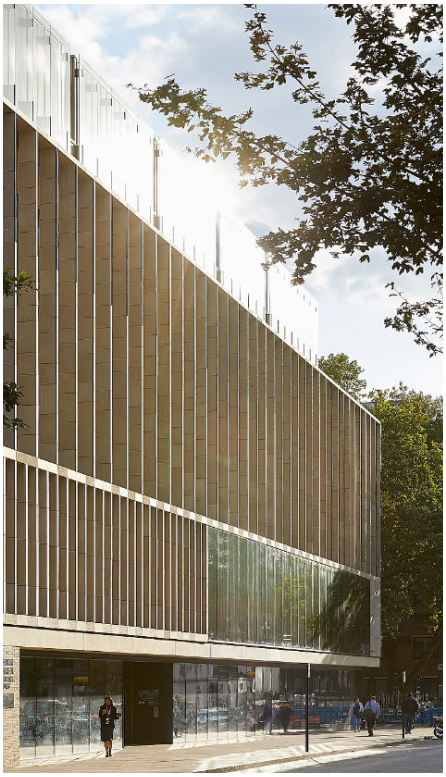
3.5.10 Roof design *should* maximise areas and angles for PVs in the most suitable orientations.

3.5.11 Green and brown roofs *should* be used where practicable to increase potential for Biodiversity Net Gain and sustainable drainage.



Plant screen integrated into glazing pattern
Wellington Place, Leeds, Sheppard Robson

Sculptural and detailed plant.
Victoria Gate, Leeds, ACME



Recessive top architectural element.
Zayed Centre, London, Stanton Williams

Variety of form and setbacks combining to create an articulated roofscape.
Brooklands, Cambridge, Allies and Morrison

Architecturally integrated plant screen.
R7 Kings Cross, London, Morris + Company

Angled plant screening creating variety of form.
KAB HQ, Copenhagen, Henning Larsen

3.0 Site Wide Built-Form Design Principles

3.6 Top: Rooftop Plant

The Proposed Development has been designed to be highly sustainable and therefore requires a high allocation of rooftop plant, particularly on those buildings designated for laboratory use. The following page outlines the potential opportunities for differing plant level facade design as illustrative material.

3.6.0 Significant efforts have been made throughout the outline application process to minimise rooftop plant whilst maintaining suitable building performance and allowance for the long-term adaptability of the buildings. It *must* be demonstrated how the footprint required for rooftop plant has been minimised at the outset of any RMA.

3.6.1 It is proposed that there are a number of approaches to the design of rooftop plant areas as defined below. Reserved Matters applications *should* follow these where appropriate, with alternative proposals to be allowed which minimise visual impact in TVIA views provided that architectural quality is not compromised.

Single Storey Plant

3.6.2 Where a single level of plant is to be provided on any building it *should* be designed as a single ventilated facade including, but not limited to, vertical or horizontal louvres or fins.

3.6.3 A single level of ventilated facade *should* be a recessive architectural element unless a clear and reasonable architectural rationale for not doing so can be provided.

Double Storey Plant

3.6.4 Where providing two levels of rooftop plant is unavoidable, they *should* be expressed as two separate storeys,with the lower storey to appear as a version of the primary building facade and the upper level designed to follow the codes for single level screened plant (above).

3.6.5 The lower level of plant *should* read as a continuation of the primary facade with glazing replaced for the necessary ventilation louvres.

3.6.6 Modifications to the primary facade articulation at this level, for example to achieve the necessary free area for ventilation, *should* not compromise the architectural quality of the facade.

Two Storey Plant Expressed as a Single Element

3.6.7 In certain instances it may be appropriate to express two plant storeys as a single element. This is to be agreed within Reserved Matters applications and if this approach is not agreed to be appropriate then the codes for two storey plant expressed as separate elements *must* be followed (above).

3.6.8 Where a two storey plant volume is to be expressed as a single element it *must* be done so to create a unique, high-quality architectural feature.

3.6.9 The two storey element *must* be subject to all relevant facade codes regarding townscape impact and relationship with neighbouring buildings.

Other Rooftop Elements

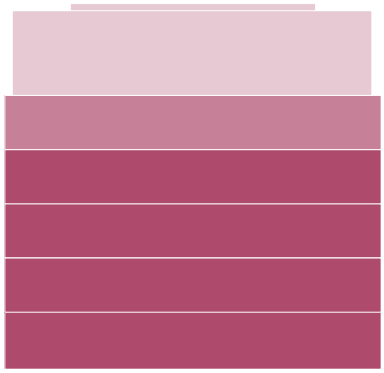
3.6.10 Efforts to create variation of form at parapet level (whether roof or terrace) will be encouraged and Reserved Matters applications *must* include exploration of how this may be appropriately incorporated into designs, with the proposed solution supported by evidence.

3.6.11 There is an allowance for photovoltaics (PV) at roof level on all buildings, the townscape impact and appearance of this provision *must* be tested in Reserved Matters applications.

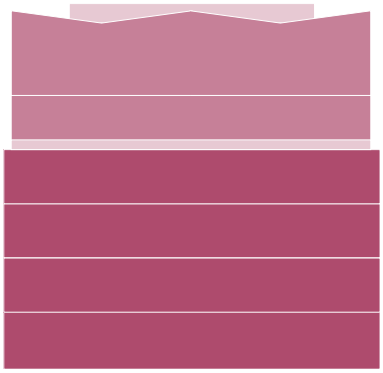
3.6.12 PV zones will require edge protection for safety during maintenance. The appearance and impact of this edge protection *must* be tested in Reserved Matters applications and *must* be appropriate for the wider architectural strategy of the building.

3.6.13 All flat roofs (excluding amenity terraces) *must* be used positively for renewable energies, blue, brown and/or green roofs.

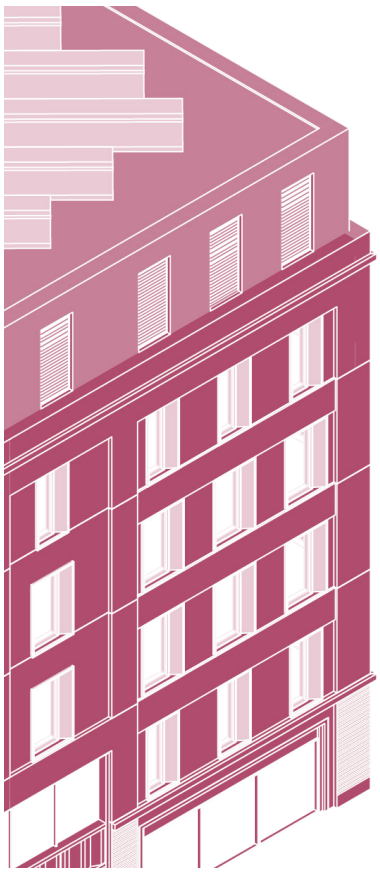
3.6.3 Plant expressed as a single level recessed architectural element



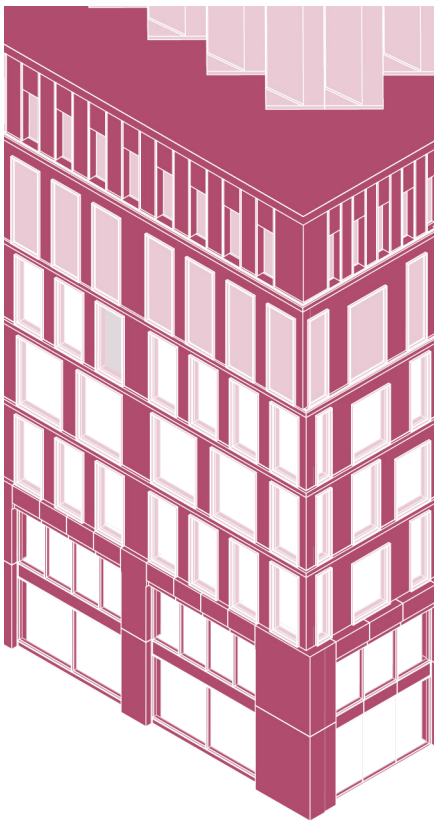
3.6.4 Double plant expressed as two storeys, the first appearing as a version of the primary facade



3.6.7 Double plant expressed as a two storey architectural element



3.6.2 Plant expressed as a single level recessed architectural element and horizontal fins



3.6.5 First level of double plant expressed as part of the primary facade, where glazing appears solid

3.0 Site Wide Built-Form Design Principles

3.7 Top: Flues

The ability to bring forward buildings for wet lab use is included within the proposal for Plots 2, 3, 5 and 6. It is expected that these buildings will require fume cupboard extract flues.

It is recognised that these extract flues will be visible in some views both locally and within the wider townscape. The following codes aim to ensure that the opportunity to create high quality architectural features within the skyline is realised within Reserved Matters Applications.

3.7.0 It *must* be evidenced at the outset of any Reserved Matters Application that the footprint and height of any flues has been minimised without incurring compromise to building function or future flexibility.

3.7.1 Flues *must* be a positive contribution of incidents on the skyline of Cambridge and not compete with the historic landmarks.

3.7.2 Reserved Matters applications *must* evidence that the relationship with all plots with extant Reserved Matters approvals has been demonstrated and that the visual relationship between flues has been tested in both near and long distance viewpoints.

3.7.3 The appearance of flues *must* undergo visual testing to determine the appropriateness of their placement, materiality and articulation in relation to other flues.

3.7.4 The design of any flues *must* be fully integrated with the architectural strategy for the building and create an opportunity for high quality architectural expression at roof level.

3.7.5 The flues *should* be articulated as a maximum of two stacks per building.

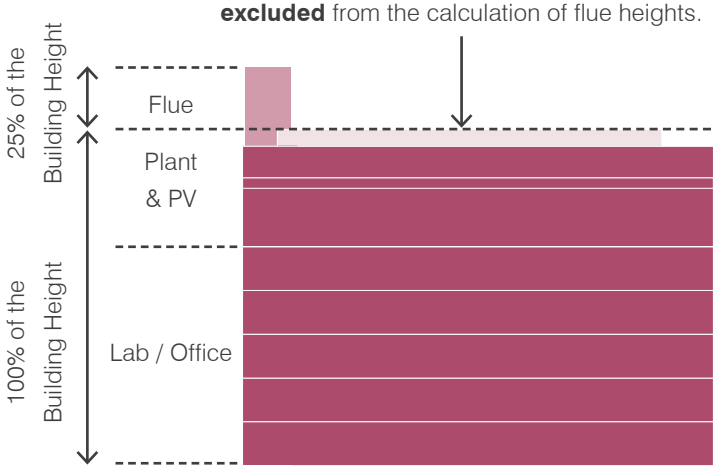
3.7.6 Where multiple stacks are adopted they *should* be grouped together to limit the number of locations where the prevailing roofscape of the proposal is broken.

3.7.7 The design of flues *should* reflect the innovative spirit of the laboratory whilst respecting the historic context of Cambridge.

3.7.8 Flues *should* not out-compete or overly dominate the historic spires of Cambridge

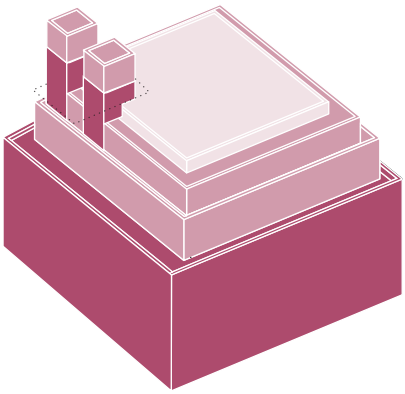
3.7.9 The Maximum Building Height used to calculate flue height is defined in the Parameter Plans. It is recommended that the PV zone *should* be excluded from the height used to calculate flue heights provided that it is technically allowable to do so based on the design of the PV array and edge treatment.

Maximum Parameter Height: PV zone **is included**.
Design Code 3.7.10 recommends that the PV Zone should be **excluded** from the calculation of flue heights.

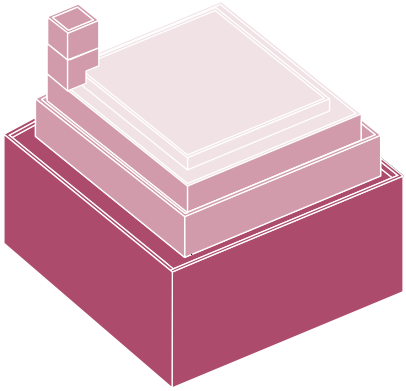


Exposed height of flues beginnings at the top maximum height shown on the parameter plans (the top of the PV level) and is 25% of the total height of the building (including all plant and PV levels).

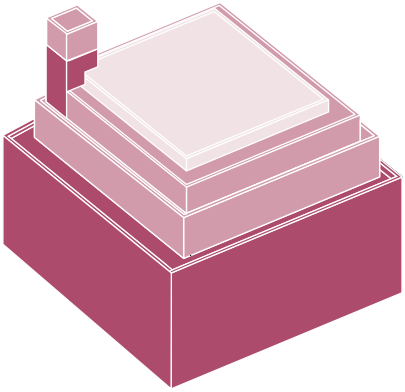
Note:
Flue heights as shown in the illustrative drawings and parameter plans will have an exposed height of 25% of the highest point of the building below it (excluding zones of PV without solid parapets), measured from ground floor level. This height is to be viewed as a maximum and reserved matters applications must demonstrate how the final proposed height of flues relate to the proposed maximums within the parameter plans.



3.7.5 Flues integrated with the architectural strategy - grouping of two flues



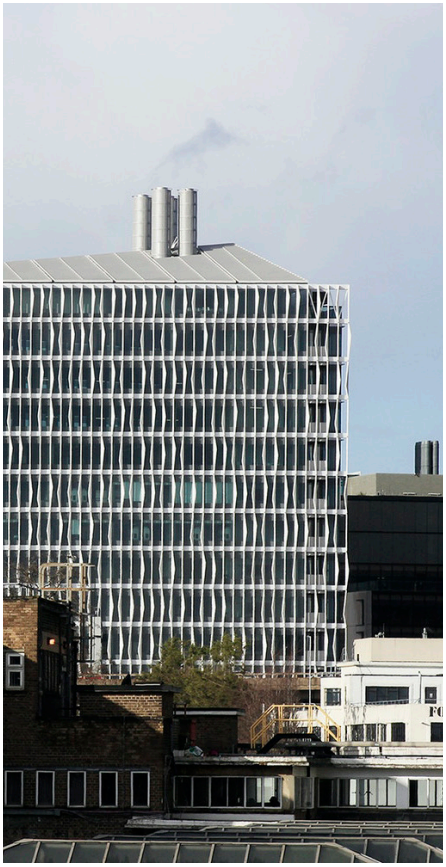
3.7.5 Flues integrated with the architectural strategy - with plant screen materiality.



3.7.5 Flues integrated with the architectural strategy - with primary facade material.

Flue design that reflects innovative spirit of laboratory and respects the historic context.
Anglia Ruskin University, Cambridge, Richard Murphy Architects

Flues that are integrated into the architectural strategy with high quality architectural expression.
Discovery Drive, Cambridge, NBBJ



Grouped flue articulation
Sir Michael Uren Hub, London, Allies and Morrison


1
2
Abbey Grove
3
10
Garden Walk
4
The Lanes
9
8
Beehive Greenway
5
Maple Square
7
6
Hive Park

4.0 Character Areas

The open spaces of the innovation district naturally divide into areas of distinct character that contribute to creating a varied and interesting place. These Character Areas will be informed by the codes of the Masterplan Framework which are supplemented in the following pages by codes which add detail to the requirements for each of the key spaces.

4.0 Character Areas

4.1 Abbey Grove

Abbey Grove is a key entry and gateway space to the north of the site. Whilst maintaining site functionality and connectivity, it will achieve a woodland character with significant tree planting and diverse planting areas. This entry space will transition visitors into the centre of the development. To ensure a welcoming space for all, there will be opportunities for gathering and activity.

Spaces

4.1.0 Abbey Grove character area *must* respond to its significance as the sole entrance from the north and primary arrival point for vehicle arrivals.

4.1.1 A diverse and resilient green buffer zone, planted with trees, *must* be created to act as a green screen to the neighbours of Silverwood Close. Refer to Section 2.14

4.1.2 Abbey Grove must create an area with significant tree planting, retained and new, between the access road and the new building frontages, refer to Section 2.13.

4.1.3 Priority of movement for pedestrians and cyclists at the crossing point with the service road must be made legible by the design of routes and crossing points supported by landscape materials and signage.

4.1.4 Priority of movement for pedestrians and cyclists at the crossing point with the service road must be made legible by the continuation of landscape materiality of pedestrian and cyclist routes over the crossing point.

4.1.5 The landscape design of Abbey Grove *should* be distinct in character to other Nodal Zones and include extensive tree planting. Refer to Section 2.3.

4.1.6 The separation between the road and the cycle route *should* be no narrower than 75cm to allow for hedge or shrub planting.

4.1.7 All entry points *should* be clearly legible and suitably signified by appropriate signage and wayfinding.

4.1.8 The landscape proposal *should* provide opportunities for outdoor amenities such as social seating.

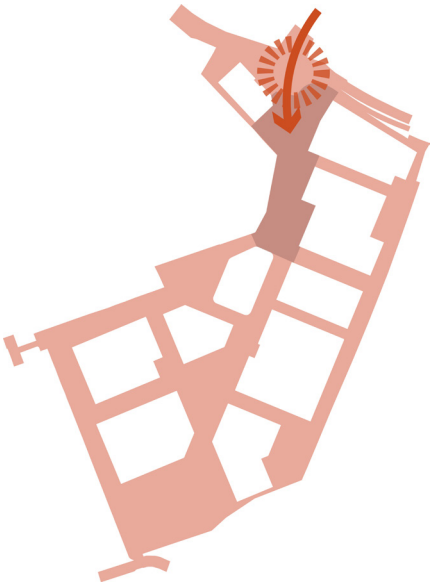
4.1.9 Reserved Matters application *should* evidence how the landscape areas interact with the buildings to activate frontages.

Built Form (Plots 1, 2 & 3)

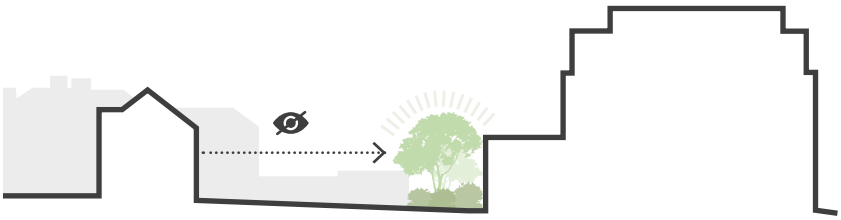
4.1.10 Reserved Matters applications *must* evidence how the design responds to the facing conditions with Silverwood Close.

4.1.11 Reserved Matters applications *should* demonstrate how the design of Abbey Grove will create a positive new street frontage and improved entrance experience.

4.1.12 Primary entrances to buildings *should* be facing Abbey Grove, except for Plot 1 which *should* address Coldhams Lane.

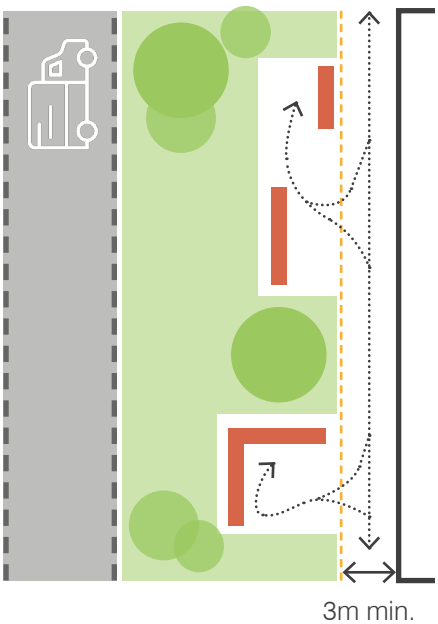


4.1.0 Abbey Grove character area is a sole entrance for vehicles. [Illustrative Diagram].

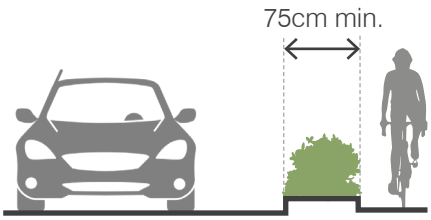


4.1.1 Inclusion of green buffers at boundary edges. [Illustrative Diagram].

4.1.4 Using materiality to signify a pedestrian prioritised crossing point with vehicles. [Illustrative Diagram].



4.1.2 Inclusion of significant tree planting between the access road and the buildings with seating areas 4.1.8. [Illustrative Diagram].



4.1.6 Appropriate green buffer separation between pedestrians and vehicles. [Illustrative Diagram].

4.0 Character Areas

4.2 Garden Walk

Garden Walk is a space that will prioritise pedestrian movement and connect visitors from the entry space of Abbey Grove to the main civic space of the development, Maple Square. This linear space will include legible and comfortable pedestrian routes, segregated by cycle routes with clearly legible pedestrian crossing points, social seating and a variety of trees and planting. The surrounding plots will contribute to the highly activated green street character with active frontages and local centre ground floor uses.

Spaces

4.2.0 The Garden Walk *must* prioritise pedestrian movement by being direct and unambiguous with clear lines of sight to destination, refer to Section 2.5.

4.2.1 The width of pedestrian and cycle routes *must* be determined by expected flow rates, refer to Section 2.6.

4.2.2 The Garden Walk *must* create areas for tree planting, retained and new.

4.2.3 Priority of movement for pedestrians at crossing points on the cycle route *must* be made legible by the design of routes and crossing points supported by landscape materials and signage.

4.2.4 The space between the building line and the planting areas *must* be no narrower than 3m to allow for pedestrian movements. Refer to Section 2.9 and 2.12.

4.2.5 Where activities other than pedestrian circulation are to be included within this space (for example, lobby entrances, spill out spaces or seating zones), hard landscaped circulation zones *must* be suitably widened to accommodate these uses with the specified dimensions justified within Reserved Matters Applications.

4.2.6 The Garden Walk *must* incorporate SuDS or rain gardens within the planting beds to support runoff water drainage. Refer to Section 2.15.

4.2.7 The landscape design of Garden Walk *should* soften the transition between an entry space and central space within the masterplan as a designated Threshold. Refer to Section 2.3.

4.2.8 Planting areas *should* not limit visibility and legibility for cyclists and pedestrians moving through the space.

4.2.9 The landscape proposal *should* provide opportunities for break out space, gathering and activity for a variety of users.

4.2.10 Break out spaces *should* be designed to create a sense of enclosure with planting for shade and creation of sub-spaces.

4.2.11 The Garden Walk *should* incorporate public art.

4.2.12 Reserved Matters application *should* evidence how the landscape areas interact with the buildings to activate frontages.

Built Form (Plots 4, 5, 9 & 10)

4.2.13 Buildings *must* frame the Garden Walk to create a space with distinct character within the masterplan.

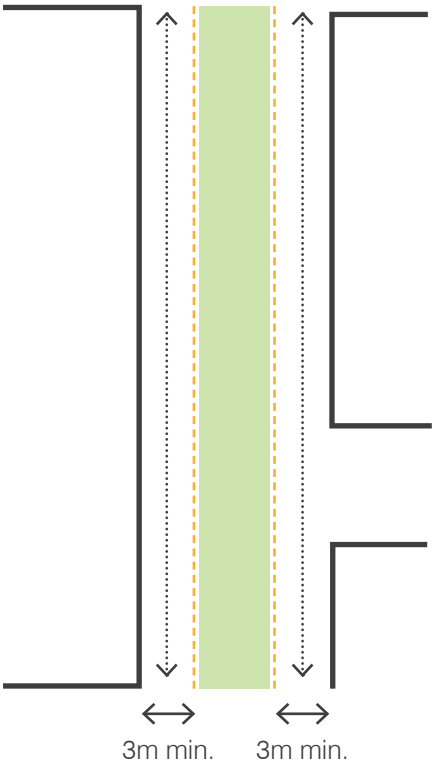
4.2.14 Buildings *must* create a varied and active mixed-use ground floor experience.

4.2.15 Reserved Matters applications *should* evidence how the design of Garden Walk will create a highly activated green street that prioritises pedestrian movement.

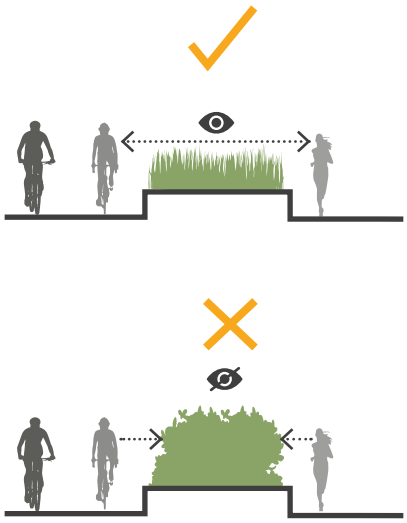
4.2.16 Entrances *should* be coordinated with the landscape design to create legible thresholds into buildings and allow for easy movement around the Garden Walk.

4.2.17 Ground floor frontages facing the Garden Walk *should* contribute to its activity through a variety of active and positive uses including restaurants, cafes, retail entrances, workspace and entrance lobbies.

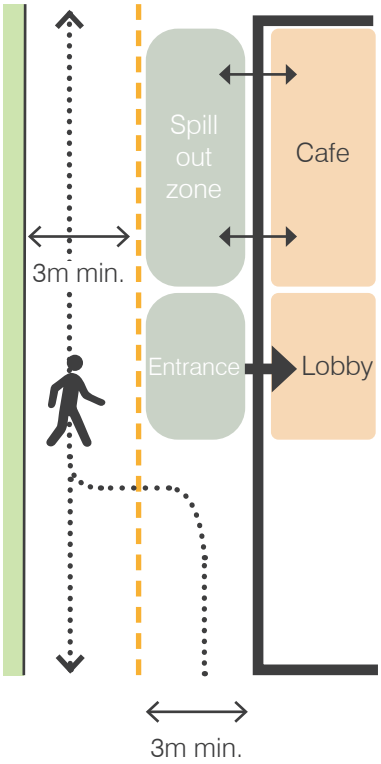
4.2.18 Buildings *should* be designed with consideration given to their visibility in long distance views through the site such that they can positively contribute to legibility and wayfinding.



4.2.4 Prioritised pedestrian movement with a minimum 3m pathway along the building lines [Illustrative Diagram].

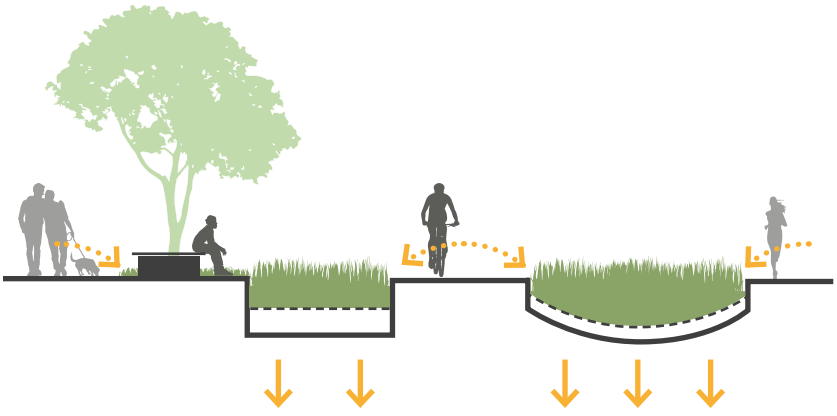


4.2.8 Lines of sight between cyclists and pedestrians should not be interrupted by the landscape design. [Illustrative Diagram].



4.2.5 Pedestrian circulation cannot be interrupted by activity zones. [Illustrative Diagram].

4.2.3 Crossing points on cycle routes legible through material change. [Illustrative Diagram].



4.2.6 SuDs or rain gardens incorporated into the landscape design to support run-off water drainage. [Illustrative Diagram].

4.0 Character Areas

4.3 Maple Square

Maple Square is the new flexible civic plaza that signifies the central Nodal Zone of the new Innovation Neighbourhood. It is a place designed to host events throughout the year including a series of community events, installations, and cultural celebrations. Existing trees will be retained and complimented by new tree planting and rain gardens to green and soften the space, to provide important amenity value and shade for pedestrians in the hotter summer months. This area forms the active centre of the development with good workplace addresses alongside mixed use space, all connected to high quality open space.

Spaces

4.3.0 The Maple Square character area *must* respond to its significance as the central civic space of the development.

4.3.1 Maple Square *must* create a legible environment for safe pedestrian movement, refer to Section 2.6.

4.3.2 A continuous and direct cycle route *must* run from Garden Walk through to Hive Park via Maple Square, refer to Section 2.5.

4.3.3 Priority of movement for pedestrians and cyclists at the crossing point with the one-way loop service road must be made legible by the design of routes and crossing points supported by landscape materials and signage.

4.3.4 Priority of movement for pedestrians at crossing points on the cycle route *must* be made legible by the design of routes and crossing points supported by landscape materials and signage.

4.3.5 Maple Square *must* create areas for tree planting, retained and new.

4.3.6 Maple Square *must* be designed to be flexible in use, with consideration given for scale and capacity testing, appropriate material, furniture and lighting selection, necessary management access and security, and connections to power and water.

4.3.7 Where activities other than pedestrian circulation are to be included within this space (for example, lobby entrances, spill out spaces or seating zones), hard landscaped circulation zones *must* be suitably widened to accommodate these uses with the specified dimensions justified within Reserved Matters Applications.

4.3.8 Maple Square *must* allow for emergency vehicle access.

4.3.9 Maple Square *must* incorporate SuDS or rain gardens within the planting beds to support runoff water drainage. Refer to Section 2.15.

4.3.10 The landscape design of Maple Square *should* be distinct in character to other Nodal Zones and include extensive tree planting. Refer to Section 2.3.

4.3.11 The landscape proposal *should* support the functionality of the square, offering opportunities for break out space, gathering, events and activity for a variety of users.

4.3.12 Break out spaces *should* be designed to create a sense of enclosure with planting for shade and creation of sub-spaces.

4.3.13 The bus stop *should* be visible, well-lit and accessed from Maple Square.

4.3.14 Maple Square *should* incorporate public art.

4.3.15 Reserved Matters application *should* evidence how the landscape areas interact with the buildings to activate frontages.

Built Form (Plots 5, 6, 7, 8 & 9)

4.3.16 Buildings *must* frame Maple Square to create a space with distinct character within the masterplan.

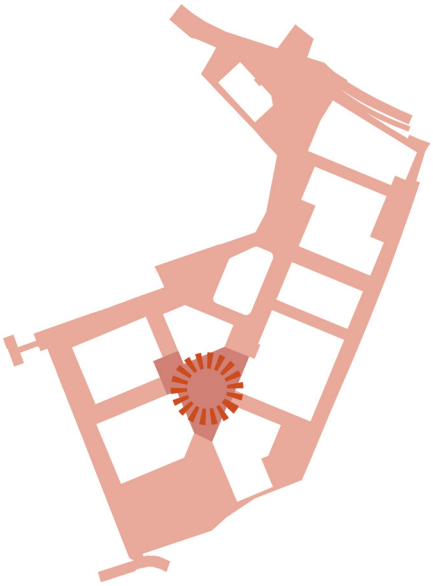
4.3.17 Buildings *must* create a varied and active mixed-use ground floor experience.

4.3.18 Primary entrances to buildings *must* be facing Maple Square, unless otherwise addressing a different character area.

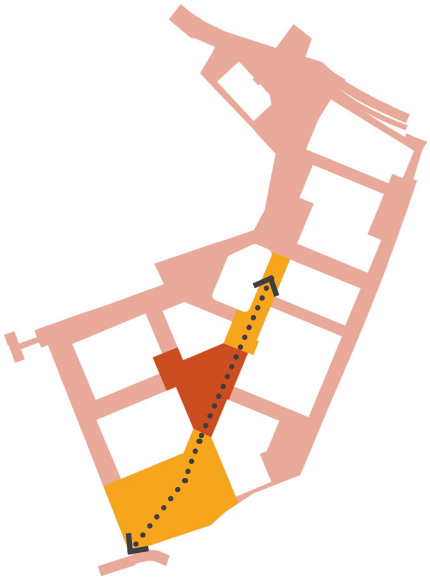
4.3.19 The buildings surrounding Maple Square *must* be designed to support the expected activities within the area.

4.3.20 Ground floor frontages facing Maple Square *should* contribute to its activity through a variety of active and positive uses including restaurants, cafes, retail entrances, workspace and entrance lobbies.

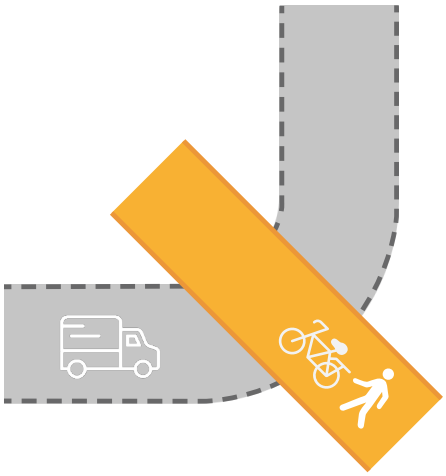
4.3.21 Buildings *should* be designed with consideration given to their visibility in long distance views through the site such that they can positively contribute to legibility and wayfinding.



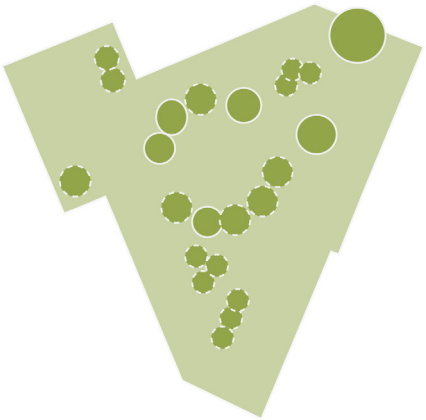
4.3.0 A civic space at the centre of the development.
[Illustrative Diagram].



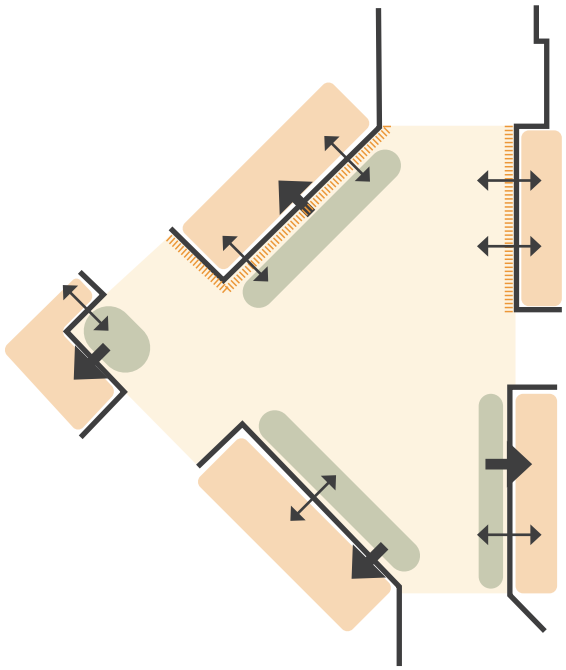
4.3.2 As part of the Beehive Greenway the combined pedestrian and cycle route will run directly through Maple Square. [Illustrative Diagram].



4.3.4 Use of materiality change on the road surface to signify pedestrian priority. [Illustrative Diagram].



4.3.5 Maple Square must create areas for tree planting, retained and new [Illustrative Diagram].



4.3.18 Primary entrances and buildings that surrounded and activate the square to create a relationship between the buildings and the landscape. [Illustrative Diagram].

4.0 Character Areas

4.4 Hive Park

Hive Park is a new green park activated by parkside cafes and restaurant at the southern entry point to the site. This space will contribute to a welcoming and exciting entrance experience with large tree planting, green open space and opportunities for play, work and rest for all.

Spaces

4.4.0 Hive Park *must* respond to its significance as the primary entrance from, and interface with, the adjoining Conservation Area from the south for pedestrians and cyclists.

4.4.1 A diverse and resilient green buffer zone, planted with trees, *must* be created to act as a green screen to the neighbours of Sleaford Street and York Street. Refer to Section 2.14.

4.4.2 Hive Park *must* create a legible environment for safe pedestrian movement, refer to Section 2.6.

4.4.3 A continuous and direct cycle route *must* run from the Sleaford Street entrance through Hive Park to Maple Square and moderate cyclist speed through the park, refer to Section 2.5.

4.4.4 Priority of movement for pedestrians at crossing points on the cycle route *must* be made legible by the design of routes and crossing points supported by landscape materials and signage.

4.4.5 Hive Park *must* create an area with significant tree planting, refer to Section 2.13.

4.4.6 The levels across the Hive Park character area must be suitably graded for accessible routes for pedestrians and cyclists.

4.4.7 Hive Park *must* provide opportunities for outdoor amenities and play for all such as social seating, play-on-the-way and incidental play.

4.4.8 Hive Park *must* incorporate perimeter seating throughout the park in sunny and shady spots.

4.4.9 Where activities other than pedestrian circulation are to be included within this space (for example, spill out spaces or seating zones), hard landscaped circulation zones *must* be suitably widened to accommodate these uses with the specified dimensions justified within Reserved Matters Applications.

4.4.10 The landscape design of Hive Park *should* be distinct in character to other Nodal Zones and include extensive tree planting and space for play. Refer to Section 2.3.

4.4.11 The landscape design of Hive Park *should* soften the transition between an entry space and central space within the masterplan as a designated Threshold. Refer to Section 2.3.

4.4.12 All entry points *should* be clearly legible and suitably signified by appropriate signage and wayfinding.

4.4.13 Reserved Matters application *should* evidence how the landscape areas interact with the buildings to activate frontages.

4.4.14 Hive Park *should* incorporate SuDS or rain gardens within the planting beds to support runoff water drainage. Refer to Section 2.15.

4.4.15 The existing boundary wall *should* be an opportunity for community murals and artwork.

Built Form (Plots 5, 6, 7, 8 & 9)

4.4.16 Buildings *must* frame Maple Square to create a space with distinct character within the masterplan.

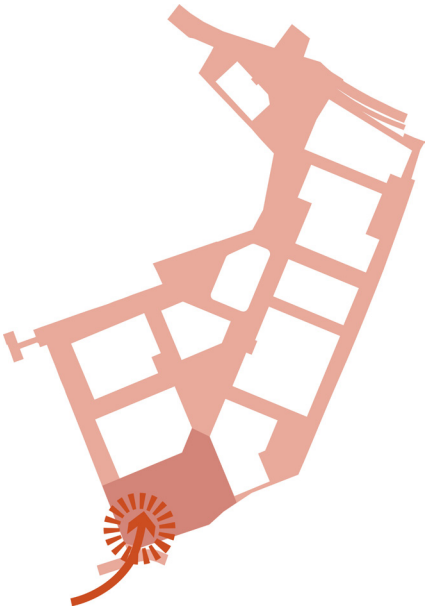
4.4.17 Buildings *must* create a varied and active mixed-use ground floor experience.

4.4.18 Reserved Matters applications *must* demonstrate how the design responds to the facing conditions with Sleaford Street and York Street.

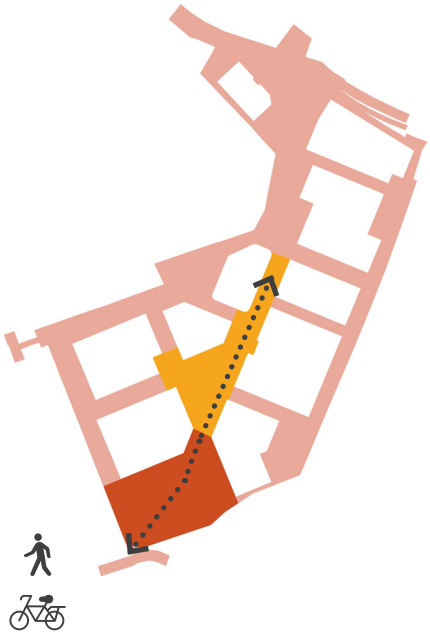
4.4.19 Ground floor frontages facing Hive Park *should* contribute to its activity through a variety of active and positive uses including, but not limited to, restaurants, cafes, retail entrances, workspace and entrance lobbies.

4.4.20 Perimeter seating *should* be provided adjacent to active frontages.

4.4.21 Buildings *should* be designed with consideration given to their visibility in long distance views through the site such that they can positively contribute to legibility and wayfinding.

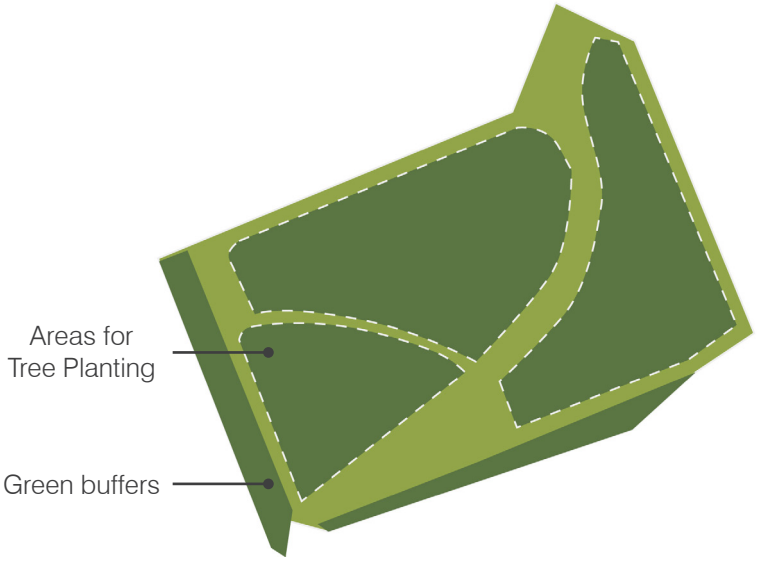


4.4.0 Hive Park is the main entrance from the south for cyclists and pedestrians. [Illustrative Diagram].

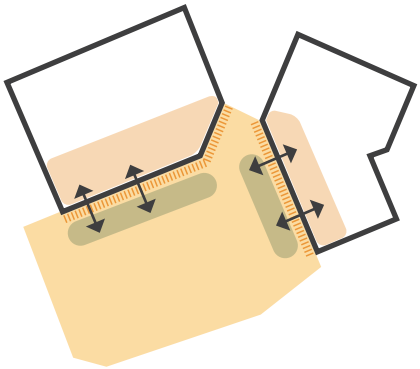


4.4.3 Hive Park forms part of the Beehive Greenway, the primary cyclist and pedestrian route through the site. [Illustrative Diagram].

4.4.12 Alongside the Beehive Greenway route, there will be additional routes through the park with clear wayfinding. [Illustrative Diagram].



4.4.1 Green buffer zones on the boundaries with the opportunity for significant tree planting, including large trees, within Hive Park (4.5.5). [Illustrative Diagram]



4.4.19 The built forms will relate and connect to the landscape through active ground floor uses. [Illustrative Diagram]

4.0 Character Areas

4.5 The Lanes

The Lanes are a key piece of urban design that connects York Street and St Matthews Gardens directly to the centre of the masterplan and connects the historic street pattern with the public-realm led layout of the proposals, stitching together the distinct character areas. These linear spaces will include planting and trees, whilst enabling pedestrian and cyclist circulation, building functions and entrances. The Lanes will create a new collection of streets that will be activated by retail and mixed use spaces for the much of their length. The creation of an appropriate streetscape will be key to the success of the space.

Spaces

4.5.0 The Lanes *must* respond to their significance as entrance points, and interface with, the adjoining Conservation Area.

4.5.1 The Lanes *must* create a legible environment for safe pedestrian movement, refer to Section 2.6.

4.5.2 A diverse and resilient green buffer zone, planted with trees, *must* be created to act as a green screen to the neighbours of York Street, Silverwood Close and St Matthews Gardens. Refer to Section 2.14.

4.5.3 The Lanes *must* create areas for tree planting, retained and new, in all new streets.

4.5.4 Priority of movement for pedestrians at crossing points on the cycle route must be made legible by the design of routes and crossing points supported by landscape materials and signage.

4.5.5 Priority of movement for pedestrians and cyclists at the crossing point with the one-way loop service road must be made legible by the continuation of landscape materiality of pedestrian and cyclist routes over the crossing point.

4.5.6 The space between the building line and the planting areas must be no narrower than 3m to allow for pedestrian movements. Refer to Section 2.12.

4.5.7 The separation between the road and the cycle route should be no narrower than 75cm to allow for hedge or shrub planting.

4.5.8 All entry points should be clearly legible and suitably signified by appropriate signage and wayfinding.

4.5.9 The Lanes *must* provide accessible parking for the surrounding plots.

4.5.10 The Lanes *must* be designed to incorporate planting beds and tree planting within the area for accessible parking and service bays.

4.5.11 Along the boundaries to The Lanes, existing trees and vegetation *should* be retained and enhanced for potential habitat creation.

4.5.12 Materiality at the entrance points *should* indicate right of way for pedestrians and aid legibility for cyclists and pedestrians to prevent conflict.

4.5.13 The Lanes *should* incorporate SuDS or rain gardens within the planting beds to support runoff water drainage. Refer to Section 2.15.

4.5.14 Reserved Matters application *should* demonstrate how the landscape areas interact with the buildings to activate frontages.

4.5.15 Planting areas *should* not limit visibility and legibility for cyclists or offer barriers for movement.

4.5.16 Trees *should* be planted with varying size and species to ensure diverse and resilient planting.

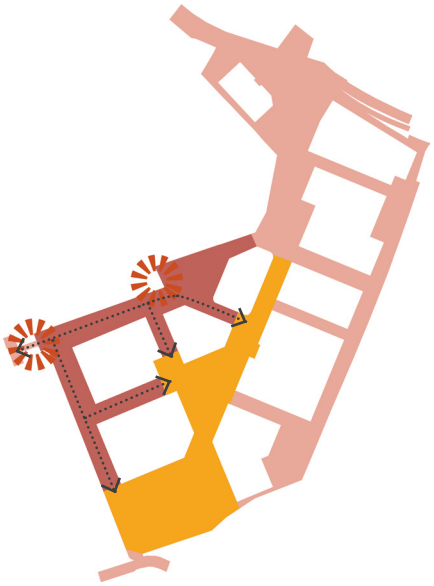
Built Form (Plots 7, 8, 9 and 10)

4.5.17 Reserved Matters applications *must* evidence how the design responds to the facing conditions with York Street, Silverwood Close and St Matthews Gardens.

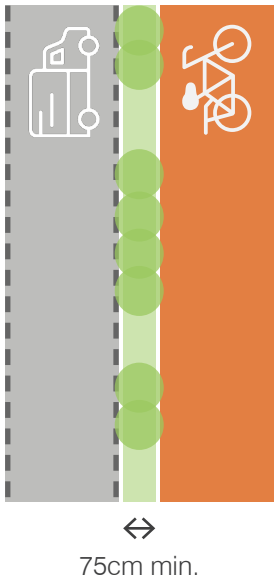
4.5.18 Buildings *must* create a varied and active mixed-use ground floor experience.

4.5.19 Ground floor frontages facing into The Lanes *should* contribute to its activity through a variety of active and positive uses including, but not limited to, restaurants, cafes, retail entrances, workspace and entrance lobbies.

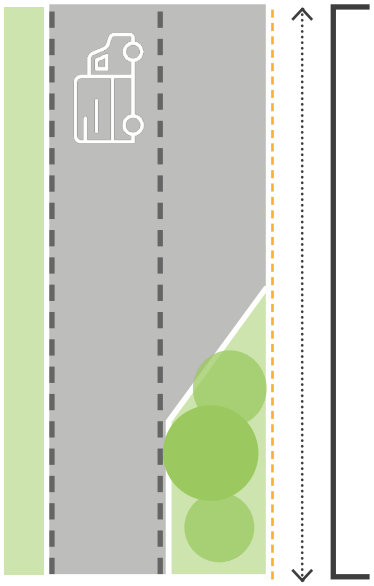
4.5.20 Buildings *should* be designed to enable legibility of the route through the Beehive Greenway towards Hive Park and vice versa, to Abbey Grove, and beyond.



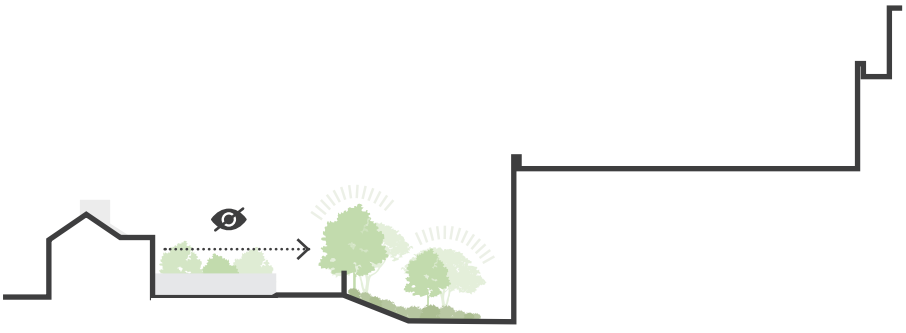
4.5.0 The Lanes create an arrival space with two entry points. [Illustrative Diagram].



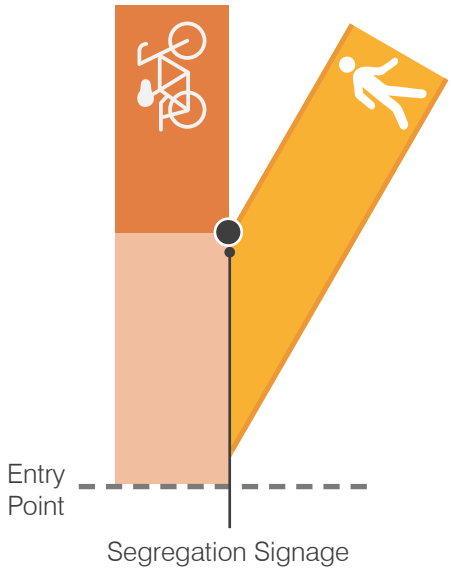
4.5.7 Minimum planting width between the road and cycle route. [Illustrative Diagram].



4.5.10 Opportunities to create planting beds within the servicing zone layout. [Illustrative Diagram].



4.4.2 Opportunity to introduce and enhance green screen buffers on the boundary edges of The Lanes. [Illustrative Diagram].



4.5.12 Materiality at entry points should clearly signify the difference between shared space, segregated cycle routes and pedestrian priority routes. [Illustrative Diagram].

4.0 Character Areas

4.6 Railway Corridor

The Railway Corridor is designated for servicing the laboratory plots along the railway boundary. The space will be designed to be private for the safety of visitors as it will contain bulk gas storage and service bays for large HGV vehicles.

Spaces

4.5.0 The Railway Corridor *must* create a safe and legible environment for the movement of service vehicles.

4.5.1 The space *must* be designed to discourage use and access by a member of the general public.

4.5.2 Pedestrian pathways, loading zones and the service road *must* be made legible by landscape materials and signage.

4.5.3 The landscape strategy *must* accommodate suitably sized turning circles for the expected HGVs and delivery vehicles.

4.5.4 The Railway Corridor *must* include green boundaries where possible, to enhance and support the biodiversity of the railway margins.

4.5.5 The entry point to the Railway Corridor on the road between Plot 3 and 4 *must* be clearly legible and suitably signified by appropriate signage and wayfinding.

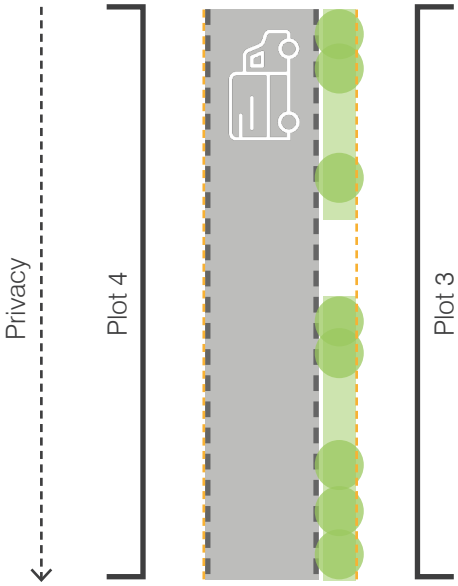
4.5.6 Planting areas *should* not limit visibility and legibility for vehicle drivers.

Built Form (Plots 2, 3, 4, 5 and 6)

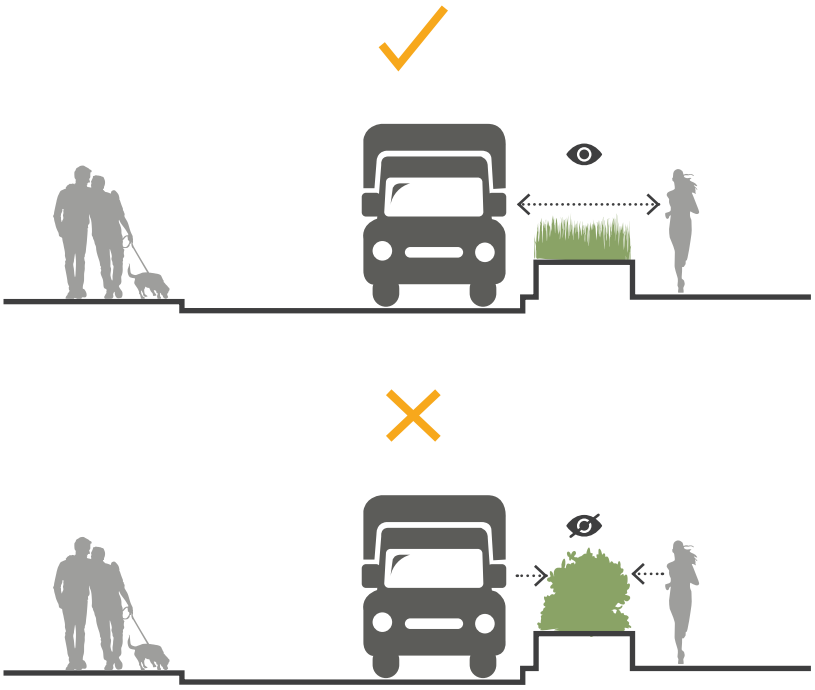
4.5.7 Reserved Matters applications *must* evidence how the design responds to the facing conditions with the railway boundary and residential buildings to the east.

4.5.8 Façades along the Railway Corridor that are designated as tertiary façades *must* not result in undue downgrade in architectural quality. Refer to Section 2.2.

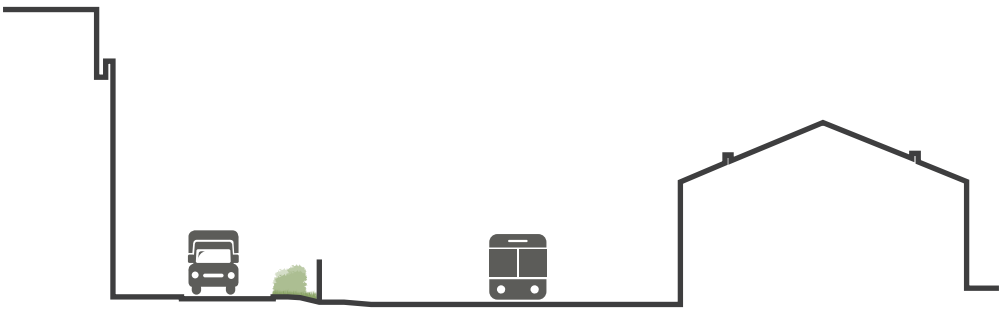
4.5.9 Entrances and routes for building services (e.g refuse storage and collection) *must* be well coordinated with the proposed ground floor frontages, public realm and highways. Refer to Section 3.3.



4.5.1 The design will increase privacy towards the Railway Corridor. [Illustrative Diagram].



4.5.6 The landscape design will not obstruct the visibility between pedestrians and vehicle drivers. [Illustrative Diagram].



4.5.4 Green buffers at the boundary with the railway to contribute to biodiversity. [Illustrative Diagram].