“The masterplan is a forthright step in the direction set by the Local Planning Authority who defined this area as the preferred location for employment growth.”

6.0 / Masterplan Proposal

In this section, I will set out the proposed masterplan of the Appeal Site in more detail.

6.1 / Overview

Fig. 83 Diagram highlighting key character areas

The masterplan for the Appeal Site proposed an employment led mixed use development extending from the train station towards the north on existing urban brownfield land. The masterplan is a forthright step in the direction set by the Local Planning Authority who defined this area as the preferred location for employment growth. The proposed mix of uses will make this a lively urban quarter with a wide range of active uses at ground level, creating a new quarter of Cambridge rather than a mono-cultural business park of dormitory town.

6.1.1 The masterplan for the Appeal Site defines a number of and character areas. The masterplan is structured around three principal streets, namely Chesterton Way situated to the west, Milton Avenue located centrally, and Station Row to the east. These three streets establish a sequence of character areas centred around open spaces. The four key open spaces, which act as key civic and landscape spaces for the development, comprise Chesterton Gardens, Chesterton Square, the Central Plaza and Wild Park in the north. Chesterton Square will act as a catalyst, creating the essential east-west link between the residential and the commercial quarter, and create a civic heart at the centre of the scheme. Smaller, secondary streets provide a fine grain of north-south and east-west connections throughout the site.

6.1.2 The masterplan is designed around two main quarters, a residential quarter to the west and a commercial quarter to the east. This allocation of uses is in alignment with the established principles of open spaces, which aim to create a diversity of programs and spatial typologies across different scales and dimensions throughout the Appeal Site. At ground level, programs such as shop fronts, front doors, and amenity spaces are located strategically to activate and enliven key routes of the scheme. This reinforces the envisioned character areas for the Appeal Site, creating an environment that is both functional and attractive and delivering on the transformation set forth in the vision.

6.1.3 The buildings identified in the masterplan are assigned names ranging from S1 to S21, with the letter 'S' serving to signify their location to the South of Cowley Road.

6.1.4 Milton Avenue and Station Row, the two main streets running north-south through the Appeal Site, define the following three urban blocks.

6.2 / Urban Blocks

Fig. 84 Roof Plan

6.2.1 The western Urban Block, bound by Chesterton Way and Milton Avenue, is a mixed use block containing office, retail and residential uses. The block has been identified to be suitable for office use in its southern part due to its proximity to Cambridge Square. The block has been identified for residential use in its northern part, as this part is sufficiently distant from the Sewage works odour, the aggregates railhead and the train tracks. The block has a civic space, Chesterton Gardens, at its heart, and steps in height from 30.8m in the south to generally 14-30m in the north. The edges of the block are articulated with built form, to provide active and defined edges to the surrounding streets. East-West routes for Cyclists and Pedestrians are integrated in the block, as well as a future pedestrian connection through the centre of the block that has the potential to become a future pedestrian desire line towards Cambridge Business Park.

6.2.2 The eastern Urban Block, bound by Station Row and the train tracks, is a mixed use block containing lab buildings, a Mobility Hub, a hotel, the train station and station cycle facilities, supported by retail units at grade. The block has been identified to be suitable for hotel use in its southern part due to its proximity to Cambridge North Station. The block has been identified for science laboratory use in its northern part as the site allows for the provision of buildings with floorplates suitable for laboratory and science users. The block fronts onto three civic spaces along its western edge, Cambridge Square, Central Piazza and Chesterton Square.

6.2.3 The edges of the block are articulated with built form, to provide active and defined edges to the surrounding streets. East-West routes are created between the buildings, to create visual breaks between the building blocks, and articulate the townscape when seen from longer distances. The Block steps in height from South to North, with the existing hotel at 25,8m and Mobility Hub and lab buildings at 14,2m to 22,1m in height.

6.2.4 The central Urban Block, bound by Milton Avenue and Station Row, is a triangular shaped block containing office and laboratory buildings supported by retail units at grade.

6.2.5 Due to its location at the centre of the masterplan, framed by the two main streets, this block contains the three key civic spaces at the hearth of the Appeal Site, namely Central Piazza, Chesterton Square and Wild Park. The edges of the block are articulated with built form, to provide active and defined edges to the surrounding streets, square and park. The heights of the buildings in the central block step from low points of 20.8 m to high points of 25,8m. Given its central location, the block sits at the intersection of all north-south and east-west routes across the site, and fulfils a key civic function as the heart of the development.

6.3 / Buildings

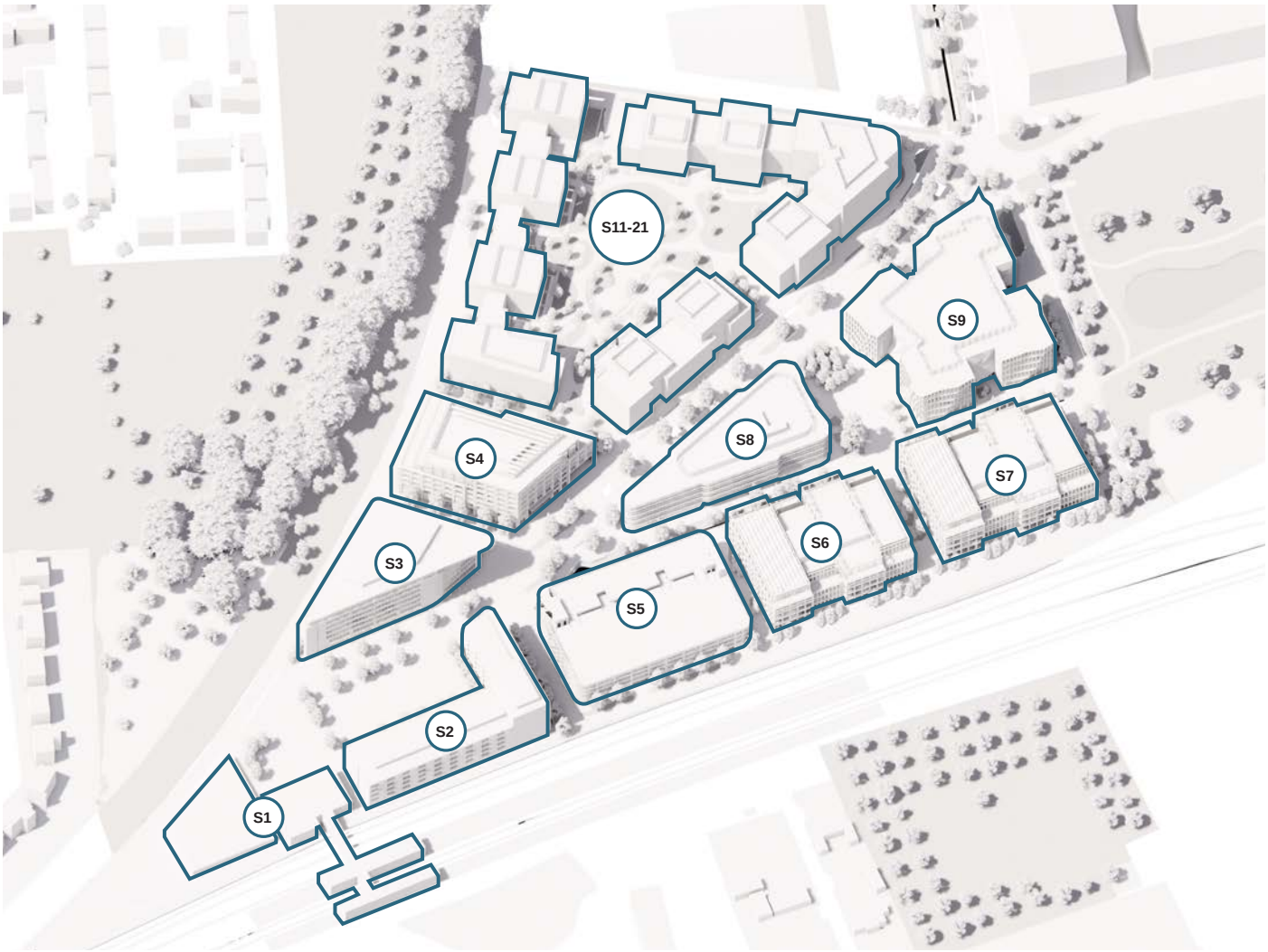


Fig. 85 Masterplan Buildings Isometric

6.3.1 This section is intended to give a very brief overview of the 16 proposed buildings in the Appeal Site.

6.3.2 The proposals are the outcome of careful testing, optioneering, and careful consideration of the constraints and potentials for harm and opportunity as set out in the sections above. Each building forming part of the wider masterplan has been considered and designed with careful attention. The three existing buildings on site have provided an initial building context for consideration:

- S1, the existing Station building, is a low rise building on Cambridge Square, with a perforated metal facade inspired by Rule 30, a cellular automaton introduced by Stephen Wolfram in 1983.
- S2, the existing Novotel Cambridge North, is a 6 storey tall brick building on Cambridge Square, containing 271 bedrooms as well as leisure and retail uses at grade. The architects of this building are Formation Architects.
- S3, One existing Cambridge Square, is a 7 storey tall office brick clad building on Cambridge Square, containing contemporary office space as retail uses at grade. The architects of this building are Perkins & Wills.

6.3.3 The masterplan proposed 16 new buildings on the Appeal Site, each one carefully designed to respond to the Constraints and Opportunities as set out in previous sections and with due consideration for the Masterplan Design Principles.

6.3.4 S4, One Milton Avenue, is a 5-7 storey tall office building clad in brick and metal, on Milton Avenue. The building is intended to mediate between the bulk and massing of S3 and the lower and finer grain of the residential precinct located to the north, and provide a framed opening to Chesterton Gardens. The building massing is articulated by stepping both in plan and in section. Terraces are planted to soften the building edges and careful consideration has been given to the material palette. The architects of this building are MAKE. Please see the Design and Access Statement, Pages 212 to 241 and the Proof of Evidence by Greg Willis for further information.

6.3.5 S5, The Mobility Hub, is a 3-4 Story Split-level structure providing replacement parking in lieu of the existing surface parking facility. It is the simplest and lowest building along the eastern edge. Its primary function is the provision for parking and charging spaces for cars and cycles. It is accessed from Station

Row, and provides an active retail frontage along this important pedestrian and cycle route. An iconic feature staircase on the southwestern corner of the building contributes to the placemaking and street-scape of the Appeal Site. Its facade is made from folded metal inspired by Dorothy Hodgkins work on the base structure of the vitamin B-12 molecule as the base module of the facade petals. The architects of this building are ACME. Please see the Design and Access Statement, Pages 288 to 333 and Section 7 of this document for further information.

6.3.6 S6 - S7, with their address as 1-3 Station Row, have been designed as two office buildings for life sciences, research and development. These laboratory buildings have been strategically situated on the eastern edge of the site to create buildings for science that can be seen from the train, and create an articulated, stepped edge towards the eastern boundary. The design of 1-3 Station Row has carefully adhered to the building design principles set for the Masterplan (see Section 5 of this document), which resulted in the division of the bulk of the building mass into a series of 'fingers'. These "fingers" have been expressed in form and materiality to create a cohesive rhythm across both the western and eastern elevations. The architects of this building are MAKE. Please see the Design and Access Statement, Pages 242 to 286 and the Proof of Evidence by Greg Willis for further information.

6.3.7 S8, with its address as Two Milton Avenue, has been designated a landmark office building for life sciences, research and development. This building at the heart of the Masterplan frames the Central Piazza and Chesterton Square. The curved geometry of the building and its horizontal emphasis celebrate the triangular geometry of the plot by drawing the eye along the building. It provides active uses at grade to activate the surrounding streetscape. The architects of this building are ACME. The building designs are indicative only, this building forms part of the Outline Planning Application. Please see the Design and Access Statement, Pages 166 to 177 and Section 8 of this document for further information.

6.3.8 S9, with its address as One Chesterton Square, is the largest office building for life sciences, research and development in the Masterplan. The massing of the building has been broken into four quarters, to create a finer rhythm of frontages along its edges. Its materiality and facade geometry are subtly varied, to create changes in rhythm and colour when seeing the building from close and afar. It provides active uses at grade to activate the surrounding streetscape. The architects of this building are ACME. The building designs are indicative only, this building forms part of the Outline Planning Application. Please see the Design and Access Statement, Pages 151 to 165 and Section 8 of this document for further information.

6.3.9 S11-21 are 11 buildings comprising the residential quarter. The 11 buildings are heavily articulated with stepping in plans and elevations to give them individuality and a human scale, and to prevent them from being perceived as three oversized blocks. Chesterton Gardens, the heart of the residential quarter, will be a heavily greened lung providing areas for young play, resting, and leisure for both residents and those working in the surrounding buildings. Play spaces for older children have been located towards the north of the Appeal Site, where a softscaped area called 'Wild Park' is proposed, which will be accessible to all and will include a water body and play areas. These open spaces are long term open spaces and will continue to exist when future phases of the surrounding areas come forward. Active uses have been designated at street level of Buildings S11-21, facing Milton Avenue to the east and Milton Walk to the south. The architects of these buildings are ACME. The building designs are indicative only, this building forms part of the Outline Planning Application. Please see the Design and Access Statement, Pages 50 to 71 and Section 9 of this document for further information.

6.4 / Distribution of Uses

Fig. 86 Plan Ground Floor level

6.4.1 It is generally agreed that great cities are mixed in their building use to ensure vitality and occupancy throughout the day and at night. The Masterplan devised for the Appeal Site encompasses a variety of uses within the Application Boundary, as well as in its upcoming phases.

6.4.2 The allocation of uses within the Appeal Site was determined by taking into account principles of proximity to noise, transport, servicing and landscape amenity. Residential uses have been allocated in the quietest area, removed from the train station and tracks, while the office and laboratory buildings have been allocated near the station and alongside the tracks. To minimise the land allocation for car use, the existing surface parking has been compressed into a multi-storey Mobility Hub. Active ground floor uses have been integrated into the residential, office, and Mobility Hub developments ensuring an active streetscape.

6.4.3 The Masterplanner has reviewed carefully the provision in the neighbourhood for schools and kindergartens, community facilities, retail and F&B. The Masterplanner and wider design team have consulted extensively with the neighbouring community to understand their needs. This has informed the brief for the site to create an active mixed use community with facilities at ground floors of buildings to support the daily needs of the new neighbourhood. Large supermarkets and school facilities were carefully considered by the Appellant, but based on the demand evidence, these facilities were considered better placed to be delivered elsewhere in the wider AAP site in future phases and are not part of the brief for this phase.

Fig. 87 Plan Typical level

6.5 / Height and Scale, Built Form

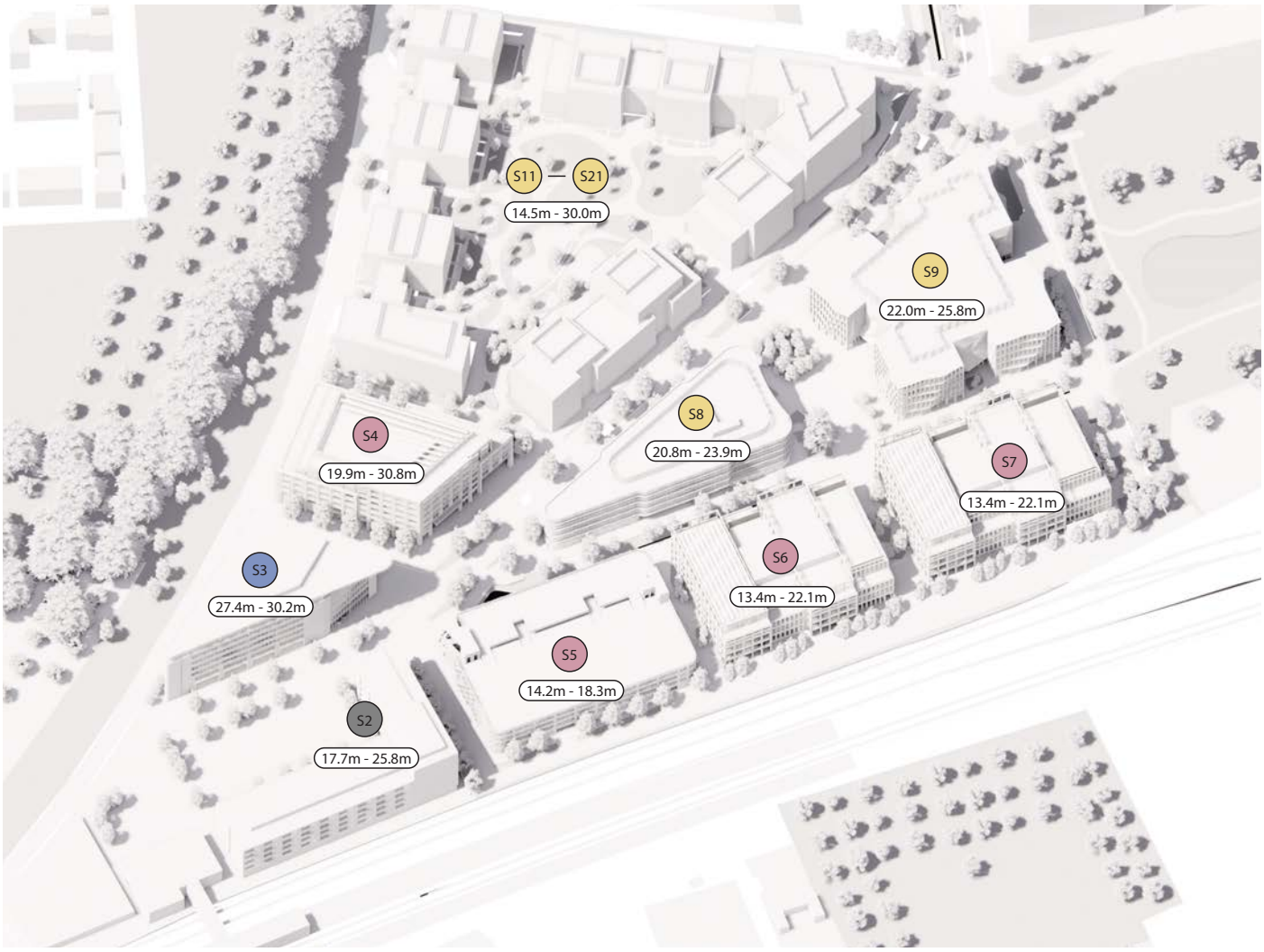


Fig. 88 Building Heights Diagram

6.5.1 Density

Generally agreed Urban Design Principles usually assign higher heights and densities to transport nodes. This is reflected in many international, national and local urban planning guidelines, for example the Greater London Authorities Tall Building Policy and Development Guidelines for the London Boroughs.

We concur with the prevalent professional opinion that train stations and high quality transport nodes are the best possible, sustainable locations to create dense clusters of employment and housing while minimising car usage. Optimising the usage of brownfield land in 1-5 minutes walking distance and creating a local town centre are our ambition as design team, and the masterplan thus strikes a careful balance in defining density with a tight set of rules that ensure the scheme delivers beautiful and sustainable placemaking and minimises townscape harm.

The Appellant has carefully modelled options for the densities proposed, and compared these using Floor Area Ratio (FAR) as a measuring scale. Comparisons were made to the FAR densities achieved elsewhere in Cambridge, and in other larger scale Masterplan in London focused on the knowledge economy, in similar sensitive townscape contexts such as Bloomsbury, Euston, Kings Cross and European examples. Based on the comparison with precedents, and based on the testing of the townscape on site in computer and physical models, it is my professional opinion that the FAR densities proposed are appropriate for a mixed use development directly adjacent to a train station on brownfield land. (Appeal Site FAR is 1.6, assuming Appeal Site area of 99,411m^2 and GEA incl Basement and Mobility Hub of 162,272m^2)

6.5.2 Height and massing parameters

The massing parameters of the masterplan have been developed in an iterative process with the Planning Authority and against Planning Policy and Townscape considerations. Extensive amounts of research have been undertaken into the existing and historic fabric of Cambridge to determine what the unique characteristics of the Cambridge Townscape are, that should be adopted and adhered to in the wider masterplan. Given the flat geography of Cambridge and the Appeal Site, all development of any significance is visible. Good design is thus of clear townscape significance to ensure development has a

positive impact on long distance views, and creates an attractive urban edge of Cambridge when seen from the Cam Valley.

6.5.3 Historic Townscape of Cambridge

When designing a significant new extension to the City of Cambridge, it is important to understand the historic and existing townscape of the City, and to determine what massing and townscape is most appropriate. It is not always necessary or appropriate to mirror existing configurations, but often, solutions departing from the local status quo are perceived as potentially more harmful.

Cambridge is a city defined by its natural fen landscape context. The city is flat, with little by way of topography offering elevated vistas close to the town centre. The city's origins are closely linked to the river Cam. The waterbody was originally running through a wide area of wetland, creating large open floodplains without trees. The river formed a natural linear edge to the city, and the city responded by building linear structures along this edge, which became the dominant appearance of the city when seen from further afar. Etchings of the city of Cambridge from the 17th and 18th century show the city dominated by a series of college buildings appearing as large horizontal structures, forming large linear urban edges as a backdrop to the landscape of the Cam.

6.5.4 Local Heights context of the NECAAP

The primary Planning Guidance from the Local Planning Authority in regards to heights and density applicable to the Appeal Site was the Draft NECAAP, which assumed height up to 10 floors in the centre of the AAP area, heights up to 10 stories along the western edge and heights up to 8 stories along the eastern edge of the train tracks.

However, these Draft AAP heights are a matter of ongoing consultation, and while useful for general guidance, it is understood that all heights must be tested against townscape harm. Notwithstanding this, it is important to acknowledge that the Local Authorities ambition to deliver employment and up to 30,000 new homes in the NECCAP area is impossible to achieve without significant height, and that the height and massing proposed for the Appeal Site must be considered on its own and within the context of the potential future NECAAP massings.

The Masterplanning team has undertaken detailed testing to assess the Appeal Site on its own, and within the context of the AAP heights, to understand their impact, in particular onto designated local long-distance views.

Please refer to Mike Derbyshire's Proof of Evidence for a more detailed assessment of the Masterplan against Draft AAP guidance on density, heights and uses.

Fig. 89 Cambridge City Center

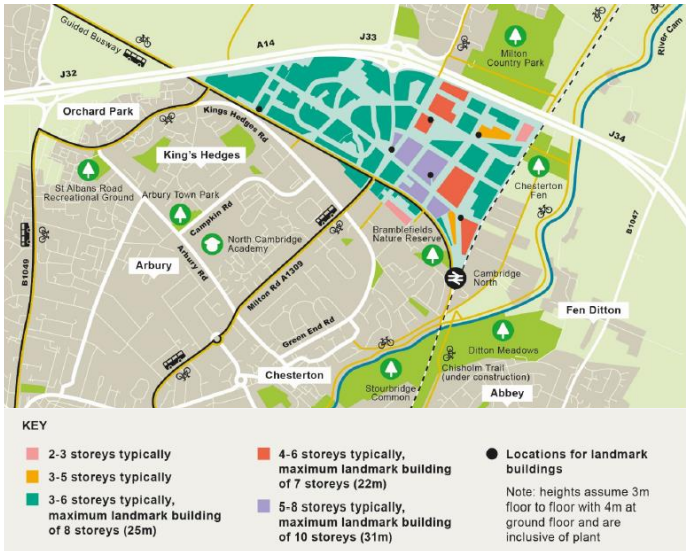


Fig. 90 NECAAP, Heights Diagram

6.5.5 Townscape and LVIA

Over a period of 12 months, the ACME team worked with Cityscape as Townscape Consultant to understand the Landscape and Visual Impact of different heights and massing approaches, before a final Landscape and Visual Impact Assessment (LVIA) was undertaken. From the outset, Local views of importance were agreed with the Local Planning Authority, and options were modelled and discussed in interactive workshops with the LPA, including life adjustments to the model to understand the impact of change from different viewpoints.

Rather than retrofitting the assessment around a preconceived design, the quantum of change to the heights and massing modelled by the Appellant throughout the design process indicates how the scheme evolved in response to townscape outcomes. The formal LVIA was undertaken at the correct moment in the design phase to validate the results of 12 months of interactive testing with Cityscape.

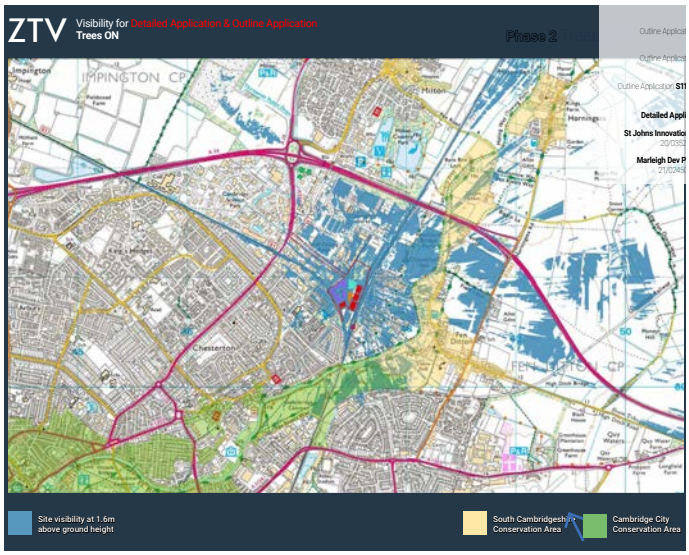


Fig. 91 LVIA Visibility Study

6.5.6 Height and Massing Concept

On an urban scale, the buildings range in heights from 4-7 floors, mediated by setbacks, with street widths of 18m to 26m for primary routes and 12m for laneways. These proportions feel comfortable and familiar, and create the townscape of a medium sized town, with a good sense of enclosure without becoming overbearing or lacking sunlight.

The height concept for the Appeal Site defines two high points at the centre of the site, clustered around Cambridge Square (S1/S2 - existing) and Chesterton Square (S8/S9). Heights taper down from these high points towards the edges, to create articulation and variation in the long distance views, and create a varied streetscape at local scale. In order to give all the buildings articulated roofscapes and prevent the buildings from creating an overtly long, blocky appearance in long distance views, which was considered harmful by the Local Planning Authority, Masterplan design guidelines for Commercial and Residential buildings were devised, mandating how masterplan building heights must be articulated to achieve a successful townscape and appearance across scales.

6.5.7 Proposed Heights

Through an iterative process we have defined heights of 14m to 22.1m for the buildings along the train tracks, heights of 14.5 to 31m for the buildings along the busway, and 21m to 26m in the centre of the site. In conjunction with these heights, the aforementioned Masterplan Design Principles, utilising Best Practice for Urban Design, set rules for massing, elevation, heights and articulation. These design guidelines have been utilised in the Detailed parts of the Application, and for the illustrative material provided for Outline Blocks. The purpose of the rules is to provide principles that define how these minimum and maximum heights must be deployed to achieve a townscape that feels ‘of Cambridge’ and minimise harm caused by new buildings appearing incongruous and out of character with the wider townscape context.

The masterplan heights concept and the Masterplan Design Principles allow each of the blocks to be locally responsive, articulate a well considered relationship to its context, and reflect the local input received throughout consultation. They put in place the building blocks of good urban and architectural design that allows each of the buildings to become a valuable addition to the emerging North Cambridge townscape.

Densities and internal streetscape were discussed extensively with the Local Planning Authority at Pre-Application workshops, and there was consensus that the proportions of heights to widths for spaces between buildings were comfortable and appropriate

6.6 / Urban Edges

Fig. 92 1743 view showing defined urban edge of Cambridge (Samuel and Nathaniel Buck)

6.6.1 The site is invisible from the centre of Cambridge. The site is visible from a number of viewpoints within the landscape that affect the perception of Cambridge as an urban form within open landscape, which have been carefully assessed as visible in the townscape evidence. Urban Design Principles prescribe a varied urban silhouette when seen from afar by massing setbacks, stepping and variation in plot heights between blocks. The heights have been developed against the backdrop of an evolving Draft AAP context, that only gives broad indications of height datums across the Appeal Site. While the heights proposed come close to and in some instances exceed the heights anticipated in the Draft AAP, it is my professional opinion that the heights and urban silhouette as illustrated in the application creates a varied townscape that successfully modulates large buildings into a varied urban experience at street level. I consider the variations in heights and stepping of massing to be successful to modulate the massing and create a streetscape that feels human and comfortable, and in keeping with the urban character of Cambridge. Ever since the construction of the first significant colleges in Cambridge, the silhouette of the city has been characterised by empty foregrounds defined by the River Cam, with a clearly defined urban edge consisting of long horizontal buildings appearing behind it. Cambridge North is a significant new extension of Cambridge. It will and it should have a presence within the urban silhouette for the city. Being visible does not equate with harm. The creation of a new train station was intended to give rise to new development on the brownfield land around it, and this application delivers the first part of that as envisaged in National and Local policy. It should not be judged on its 'invisibility', but the quality of the townscape. Well designed buildings can have a positive landscape and visual effect (LVIA PoE, Page 42, Paragraph 124-125), and great care has been taken to create design guidelines and principles that will bring about good design, benefiting the landscape and appearance of

Fig. 93 Jesus College, Cambridge, from the Close (William Westall), (1781 – 1850)

Fig. 94 View of Cambridge from Castle Hill, 1840 (James Ward 1769–1859)

the scheme.

6.6.2 The urban edges of the development, where it faces out into the context, have been carefully considered within the masterplan. All linear obstacles such as rivers, busways or trainlines create large linear edges to urban fabric. Masterplan guidelines have been used to ensure that buildings and landscape create variation in massing and materiality to modulate the scale of buildings when seen from afar across the tracks. The masterplan creates a high quality urban streetscape along these edges, but does not create parks or squares facing the tracks or the busway. Instead, urban desire lines and significant open spaces are directed away from the tracks, as these spaces will always abut an inanimate Network Rail palisade fence and a Network Rail maintenance yard for the foreseeable future. The masterplan thus defines two approaches. Firstly, to work with landscape and massing to create a varied long distance impact. Secondly, to work with alternative urban desire lines to avoid pedestrians and cyclists having to use a one-sided street environment facing the tracks. Longer term, we expect to see development across the wider AAP area along the train tracks as well as development on the other side of the tracks, and this is reflected in the unusually high care placed upon facades and spaces facing the train tracks.

6.6.3 As the Application is the first part of a wider regeneration, careful consideration must be given to the concept of 'blending in'. 'Blending in' is easily defined in a homogeneous context, such as the historic fabric in the centre of Cambridge, or other comparable city centres. Blending in becomes hard to define, or use as a design yardstick in areas where there is a very diverse context, ranging from floodplains to caravan parks to allotments to business parks and industrial batching facilities. Who gets to decide what to blend in with, what is 'acceptable' context, and what must be ignored? The wider vision of the AAP adds a further layer of complexity, as the scale and massing proposed of the AAP exceeds anything seen anywhere else in the local area, or anywhere else in Cambridge. Where future plans exist, does one need to blend in now, or is it more important to blend in with the new City that is yet to come?

6.6.4 In response to the factors outlined, the masterplan has taken a strategic approach that aims to strike a balance between preserving and showcasing elements of the site's character, while also delivering a scheme that fully realises the potential of the site. The masterplan seeks to preserve as much of the existing biodiversity as possible, expanding and enhancing existing open mosaic habitats to showcase the ecological value present on the site (Refer to Landscape Proof of Evidence for further information). Furthermore, it has been designed to reflect existing connections across the site, while accommodating more ambitious connections to extend pedestrian and cycling networks in the future. The masterplan represents a forthright step into the future, meeting short-term needs and facilitating long-term strategic growth for the city of Cambridge.

Fig. 95 Eastern Edge of Site

Fig. 96 Western Edge of Site

Fig. 97 View across application site towards central Cambridge

6.6.5 Cambridge North has an incredibly diverse urban context. The historic city context of Cambridge itself is a clear historic precedent of a city as a series of long horizontal structures, clearly visible from afar. It is my professional opinion that a significant new urban quarter of Cambridge should not 'blend into' the neighbouring caravan park, allotments or NR Maintenance Yard. It should stand as the beginning of a proud new city quarter. An extension for Cambridge through a whole new city quarter as envisaged in the AAP should be done with careful consideration but also with confidence, in the spirit of the traditional Cambridge townscape, which never sought to disappear, but created a varied set of facades defining a clear edge of the city to come.

6.7 / Eastern Edge

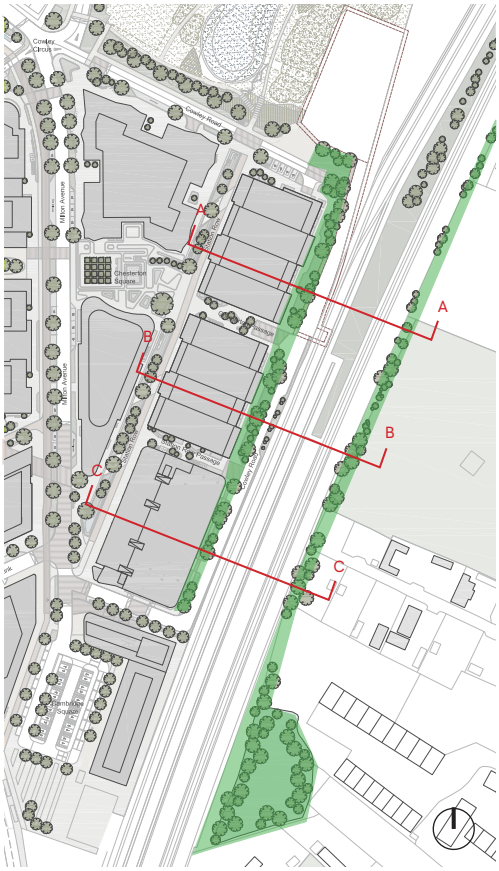
Fig. 98 Illustrative view along the Eastern Edge

In this section, I will set out the urban design considerations that have shaped the townscape approach for the eastern edge of the site.

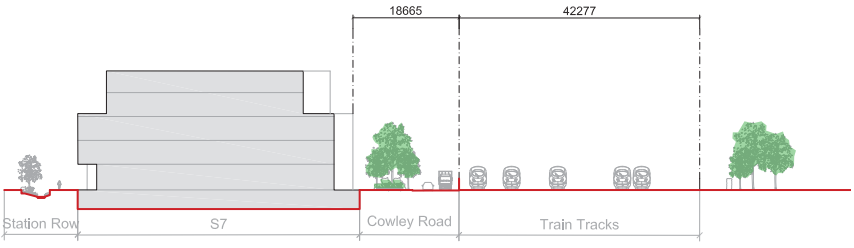
The eastern edge of the site sits adjoining the NR rail tracks. The neighbouring context east of the site comprises mostly low-lying residential and industrial developments with the River Cam situated further beyond. The palisade fence of the trainline and the private nature of the adjacent Caravan parks create a very impermeable local context for the eastern edge.

However, while the fen landscape is structured by a number of tall tree clusters, along the river and along hedgerows, creating a dense branch and foliage backdrop especially in summer, all structures above two stories appear in the wider Fen landscape, due to the flat nature of the Fen Landscape context.

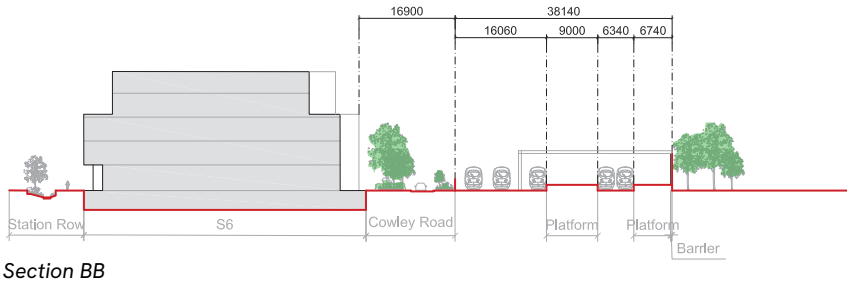
Given this character of the surrounding wider context to the east, as well as the possible ramifications for the visual perspectives from the Fen, particular attention was paid to the massing and landscaping strategy along this edge.



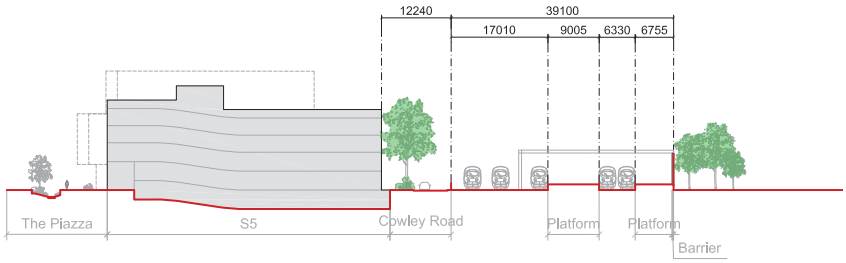
Plan indicating section locations



Section AA

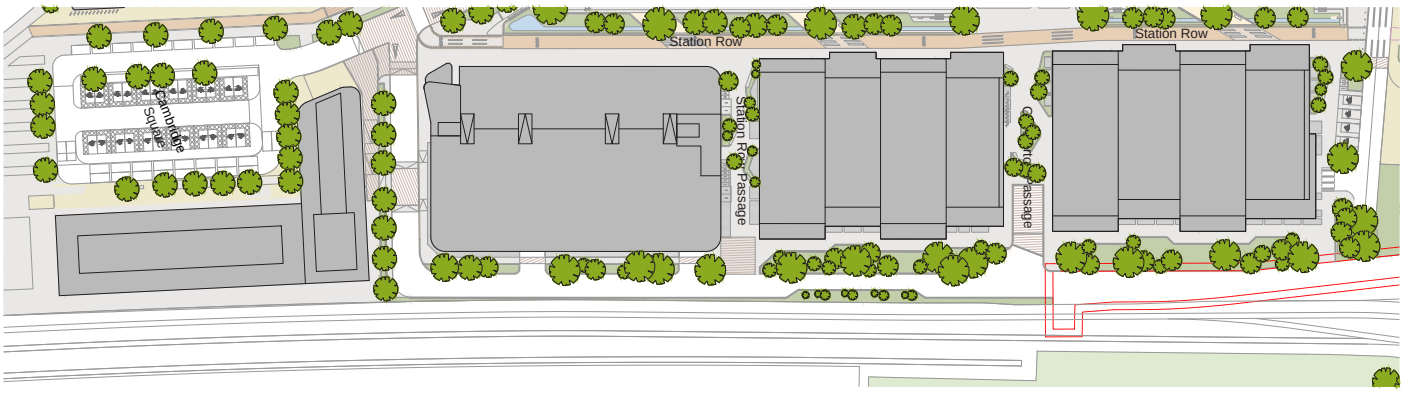


Section BB

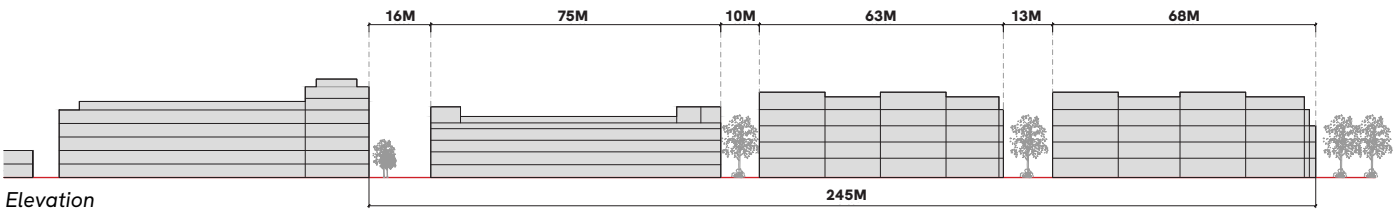


Section CC

Fig. 99 Sectional Study of the Eastern Edge



Plan



Elevation

Fig. 100 Elevational Study of the Eastern Edge

6.7.1 Existing visual edge

An existing tree beltline sits east of the tracks, lining the edge of the residential area providing a certain level of green buffering from long distance views. A sound barrier following the edge stretching along the length of the platform also contributes to the overall long distance view mitigation of the site.

6.7.2 Facades facing tracks

The buildings positioned along the rail tracks have not been regarded as the rear-facing portion of the Appeal Site, as has been customary in the past, wherein the area of the city where trains enter is deemed less desirable and less important. In the Appeal Site, equal consideration has been given to all faces, both the inward and eastern train track-facing facades, and treated as front-facing facades of the development. This approach ensures the creation of high-quality buildings that are visually appealing when viewed from within the Appeal Site, as well as from its surroundings.

6.7.3 Planting along the Edge

The Masterplan has ensured adequate distancing of the buildings facing the tracks, to allow the planting of mature trees along the eastern edge. The trees proposed are London Planes, and the space provided is designed to allow Planes trees to reach their full natural height, which can reach more than 30m over the next 100 years. A strategy of tree clustering has been adopted to create a more harmonious and natural integration of the tree line into its surroundings. This serves as a secondary layer of vegetation to enhance the existing tree line east of the tracks. Further elaboration on this topic can be found in the Proof of Evidence by Robert Myers, the Landscape Designer.

6.7.4 Massing along the Edge

A Significant number of options were produced to test the massing along the eastern edge. The chosen option was selected in consultation with the townscape and heritage team.

Given that the edge is perceived from a number of different local viewpoints, never at right angle to the edge itself, it would have been artificial to create moments of long-distance permeability through the eastern edge. A visual break designed for one of the LVIA viewpoints would be invisible in any of the other LVIA viewpoints, so literal through-cuts in the massing along the eastern edge proved ineffective as design tools.

A concept for architectural ‘fingers’, setbacks and material difference were identified as the most successful way to create a sense of rhythm and variation along the eastern edge, and these have been defined as part of the Masterplan Design Principles that must be used in the design of buildings along the Eastern Edge.

Fig. 101 Aerial view of existing visual edge

Fig. 102 Planting along the Eastern edge

Fig. 103 Massing along the Eastern edge

6.7.5 Building S5 within the Eastern Edge

The structure of the Mobility Hub (S5) has been designed to have a considerably lower building height compared to its adjacent buildings, facilitated by the incorporation of 2 basement parking levels. Additionally, the implementation of significantly large trees along the eastern edge serves to minimise visibility of the Mobility Hub from long distance perspectives. For more detailed visual representations, please refer to the Landscape and Visual Impact Assessment (LVIA) studies incorporated in the planning application. The low height of the building, which makes it in effect invisible from long distance views, is important to create a visual break between S2 to the South and S6/7 to the North, giving variety to the perception of the edge.

6.7.6 Building S6/7 within the Eastern Edge

1-3 Station Row are articulated both in plan and massing in line with the masterplan finger concept to structure the overall mass of the buildings. A planting strategy has been adopted on the terrace levels of the buildings as well as on the facade in designated areas, in conjunction with the tree planting, to create additional green breaks along the length of the eastern elevation. A deliberate selection of lighter and darker materials in carefully selected areas on the eastern facade aids the articulation of this eastern elevation. For further detailed information on 1-3 Station Row, please refer to the Proof of Evidence by Greg Willis.

6.7.7 Conclusion

In conclusion, the Eastern Edge of the Appeal Site will be formed through a group of buildings carefully composed to create a varied edge to the development. By its nature as a development against train tracks, the edge will appear linear when seen from a long way away. This is not unique to the Appeal Site, but needs to be seen in the context of the wider edge eventually anticipated in the Draft AAP, and the traditional appearance of other parts of Cambridge, including the historic centre, which by its nature as a city on the edge of a river, will appear linear when seen from long distance. In my professional opinion, the appearance of the development on its eastern edge is appropriate in scale, composition and appearance, and befitting the appearance of a new urban neighbourhood in Cambridge.

6.8 / Western Edge

Fig. 104 Illustrative image of the Western Edge

In this section, I will set out the urban design considerations that have shaped the townscape approach for the western edge of the site.

6.8.1 Western Edge Context

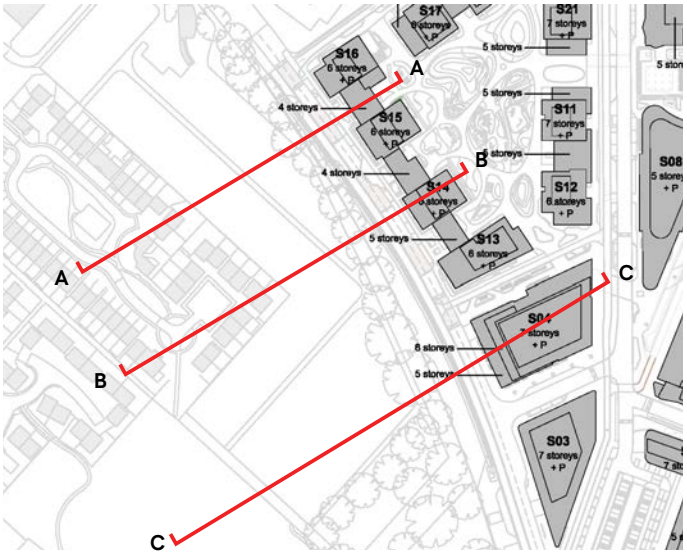
The western edge of the site adjoins the Bramblefields local nature reserve and Discovery Way, a residential area characterised by low-rise buildings and an adjacent allotment area. To the north, Cambridge Business Park can be found, featuring three-storey office buildings. To the south of the Appeal Site, One Cambridge Square (S3), an office building with a height of 30.2m, is currently nearing completion.

6.8.2 Existing visual edge

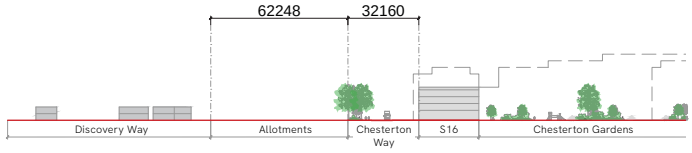
The Cambridge urban context is similar to many other cities of similar size and age in the UK, characterised by homogeneous development areas, interspersed with edges of abrupt change. In Europe, urban planning guidelines have enforced a more consistent pattern of urban development. In the UK, a historically more liberal approach to urban planning has resulted in towns and cities that are much more varied in townscape, with more emphasis on private developers developing their land in accordance with their needs and wishes. By necessity, this approach leads to more diversity in the townscape, and more diverse edges, where different developments and philosophies abut each other over the course of time. Chesterton is a good example of this situation, with Discovery Way, the Cambridge Business Park, the railway sidings and the Allotments each showing a very consistent, almost monotonous character internally, vastly different from any other in direct neighbourhood. Here, as in many other places, highly divergent urban fabric meets along urban edges with little or no attempt of mediation. At Chesterton, an existing tree beltline sits west of the busway, separating the busway from the adjacent allotments, creating a visual buffer between the different characters. While the allotments are located lower than the busway, there is no visual permeability between the busway and the context, even in winter. The very dense planting and the green buffer formed by the allotments is visually impenetrable at street level, and contributes significantly to the existing long distance view mitigation of the site.

6.8.3 Masterplan Approach

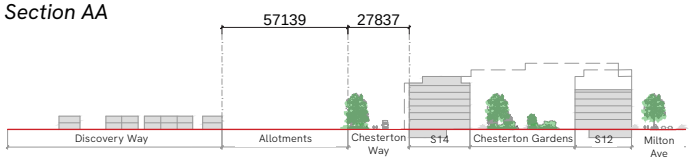
Urban edges with contrasting scales are not out of character for Chesterton, or the wider Cambridge urban context. The masterplan approaches hard edges with a sense of optimism that the Appeal Site is a first step in the wider regeneration of the area. Where the existing edges of the Appeal Site are traffic dominated, inactive and soulless, the masterplan must nonetheless provide well considered, active edges that encourage change. While the existing edge context is currently visually impenetrable, inactive and traffic dominated, the masterplan seeks to treat every edge as a potential future active edge that needs to be designed with care and attention. Elements used in this respect include the articulation of massing, the activation of the ground plane, the location of entrances and the landscape treatment of the streetscape.



Plan indicating section locations



Section AA



Section BB

Section CC

Fig. 105 West-East Sectional Study of Western Edge

Fig. 106 Existing Western Edge Condition

6.8.4 Massing along the Edge

The massing along the western edge of the Site has been carefully considered as a mediator between One Cambridge Square and Cambridge Business Park. The buildings along this edge, namely Two Milton Avenue (S4) and the Residential Quarter (S11-21), have been proposed in adherence to the design guidelines specified in the masterplan brief. These guidelines call for the creation of articulated buildings, both in plan and in elevation, as well as planted terraces where deemed appropriate. Greening and softscaping have been thoughtfully integrated between the building masses to ensure the creation of high-quality public spaces along the eastern edge.

Consideration has been given to the placement of streets and through routes at regular intervals throughout the Appeal Site, thereby ensuring a sense of connectivity from the western boundary all the way through to the heart of the scheme at Chesterton Square and to the eastern edge.

The location of existing houses at Discovery Way is at least 80m away from the Western Edge, and the location of the Nuffield Road allotments is at least 30m away from the Western Edge. Ample precedent exists for edge conditions like this, in Cambridge and further afield. Local examples that have been reviewed as good precedents included the award winning Accordia Development in Cambridge, where a long line of 5 storey buildings on Kingfisher Way have been constructed 28m away from the existing Empty Common Community Garden Allotments. These precedents have been helpful in validating the massing approach for the Western Edge, and providing build references to confirm the solutions proposed are appropriate.

6.8.5 Landscaping along the Edge

As part of the western edge landscaping strategy, space has been allowed along the residential buildings on Chesterton way to provide zones for tree planting and landscaping. Investment commitments have been made for the beltline, to fill in any breaks across the green buffer and improve the very informal and incidental planting to ensure a consistent, attractive green buffer is maintained along the western edge. To ensure that the western edge does not appear as a linear wall of development, the residential facades are articulated in plan and elevation along the street, supported by strategic mature tree planting between these 'fingers' of development, thus creating a visual rhythm of development blocks interspersed with landscape.

6.8.6 Chesterton Way Streetscape

The streetscape of Chesterton Way is defined by two very different edges, the green treeline beltway to the west and the articulated residential and office facades to the east. The height and massing have been specified to create an urban character framed by mid rise buildings and a dense tree line. The street itself is designated for residential and busway traffic access only, complemented by the existing cycle lanes that run parallel to the busway. The road will not be used by any private through traffic, and traffic calming measures in combination with landscaping and tree planting will ensure that the streetscape is decidedly pedestrian and cycle priority. In order to strengthen the local and residential character of the road, apartment block entrances and two-story duplex residential units have been located along Chesterton Way, all with their entrances on the street. This was done to ensure the street has a distinct group of families that overlook the street, and have their private front doors on this street, to create a sense of ownership and oversight.

Fig. 107 Chesterton Way Landscape Design

6.8.7 Conclusions

In conclusion, the Western Edge of the Appeal Site will be formed through a group of buildings carefully composed to create a varied edge to the development. The proposed buildings are low to mid-rise, located at least 80m away from the next habitable dwelling, buffered by extensive existing vegetation and proposed new vegetation on the Appeal Site. The western edge does not visually appear in any important local views. In my professional opinion, the appearance of the development on its western edge is appropriate in scale, composition and appearance, and befitting the appearance of a new urban neighbourhood in Cambridge.

6.9 / Movement

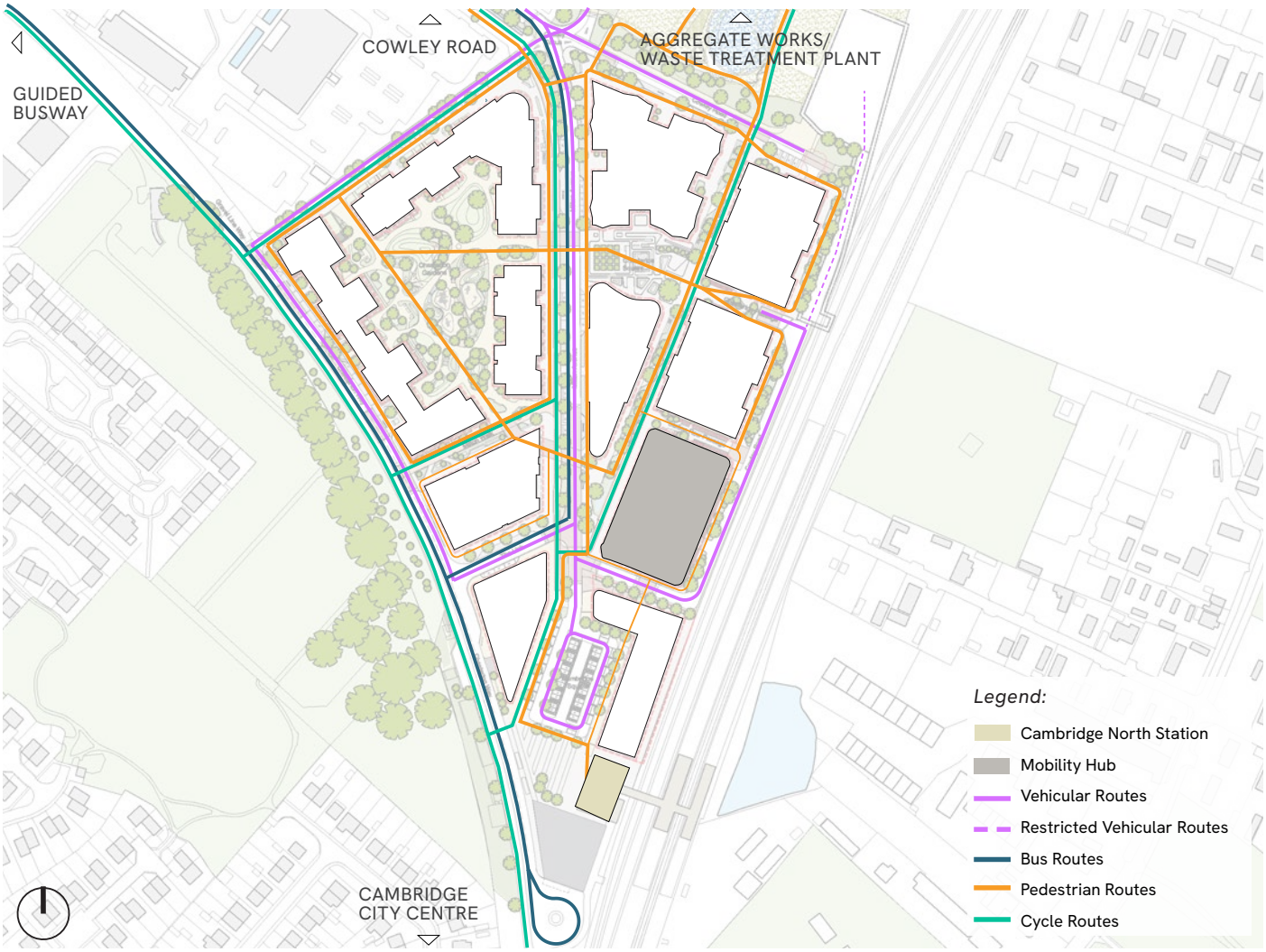


Fig. 108 Connectivity Diagram for Appeal Site

6.9.1 The routes within the Appeal Site have been designed to create a mixed use development with a sense of character and place that is pedestrian priority, green and active. The Planning Authority has been consulted extensively regarding route options, including considerations of dimension, hierarchy and orientation; and the Application proposal is supported by precedent studies and references.

6.9.2 The pedestrian and cycle movement focused approach has resulted in a mostly segregated approach to cycleways, reflecting input from Camcycles and other stakeholders outlining the benefits of segregation for the safety and convenience of all users. Car traffic has been limited to the edges of the development, with a minimum of crossing over points.

6.9.3 The scheme is in harmony with the overarching NEC AAP plan, with a focus on incorporating some of the primary routes proposed in the spatial framework. The Masterplan is designed to work independently while allowing flexibility for the scheme to sit coherently with any future development in the surrounding context, such as the waste treatment plant relocation and the proposed development that would replace it.

6.10 / Highway Hierarchy

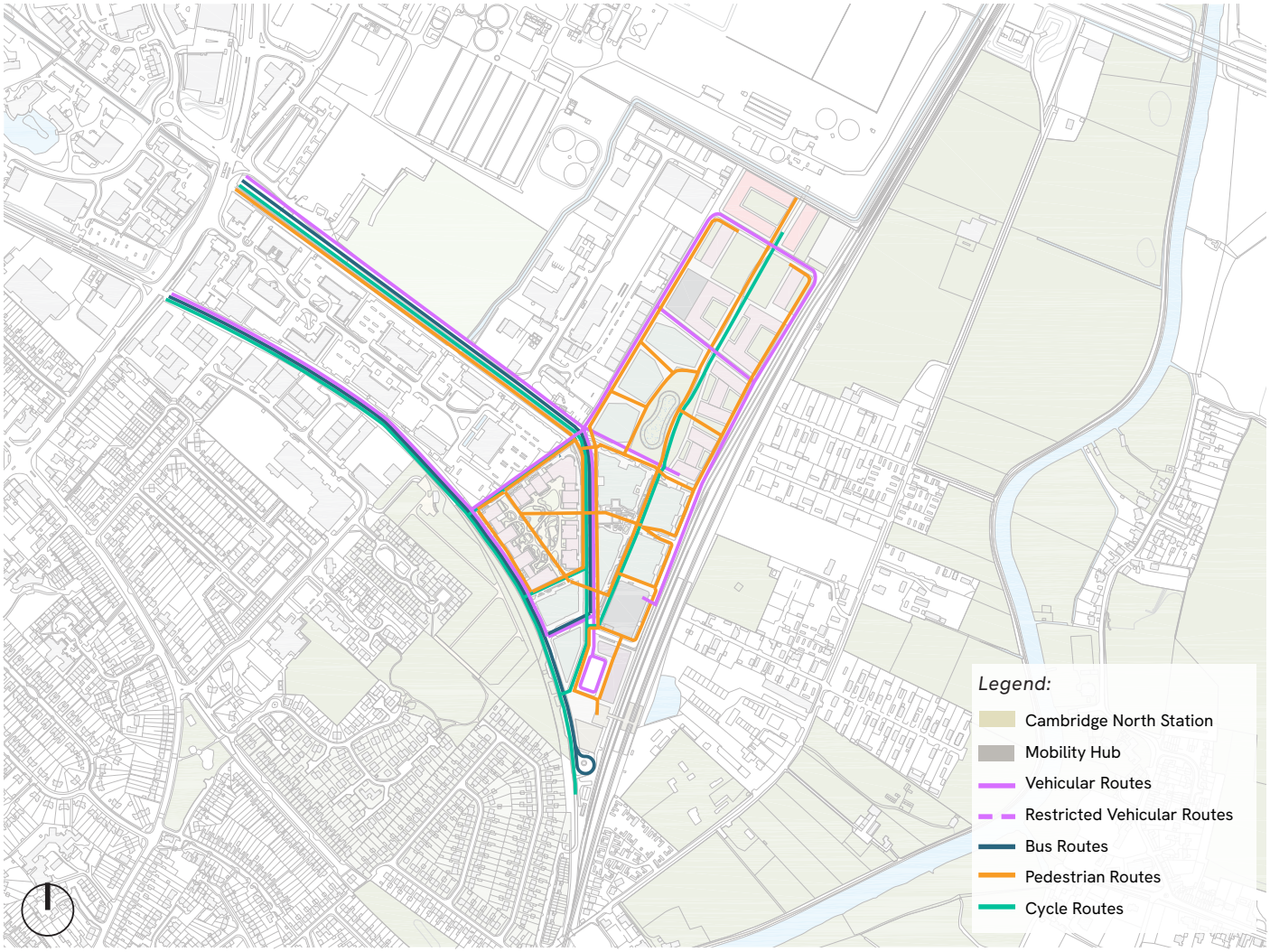


Fig. 109 Illustrative Connectivity With Full Site Vision

6.10.1 Through careful planning, the amount of highways within the development has been reduced to an absolute minimum and all vehicular traffic has been directed towards the periphery.

6.10.2 By consolidating the majority of the required parking of the Appeal Site into the Mobility Hub (S5) the amount of vehicular roads in the scheme is minimised, thus creating pedestrian and cycle led streetscapes which has been further broken down into distinct character areas to cater for the various needs of the users of the site. The Mobility Hub is located adjacent to the Novotel, linking in directly to the primary north-south connection, Milton Avenue. Traffic has been specifically directed along Cowley Road and the Mobility Hub to free up the entire commercial quarter allowing for a fully pedestrianised area in line with the masterplan vision to be cycle and pedestrian led.

6.10.3 Cycle priority has been a key element of the strategy. This involved limiting vehicular crossover with pedestrian and cyclist routes and limit vehicular access across the scheme. Careful consideration has been made to create comfortable and intuitive cycle connections across the Appeal Site through to the wider context and providing adequate infrastructure with regards to architectural design, materiality and facilities to support these goals.

6.10.4 In line with these aspirations, the connectivity strategy has evolved in line with consultation with local planners but also in response to feedback received from Cam Cycle. These responses to Cam Cycle are further illustrated and highlighted in CD2.03 (Camcycle Consultation Responses).

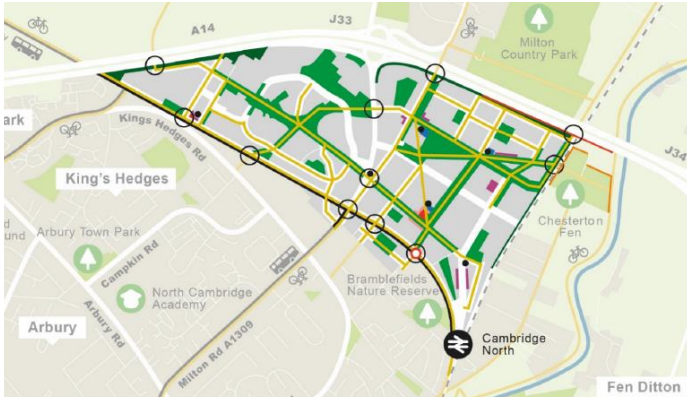


Fig. 110 AAP Spatial Framework Diagram

6.10.5 Street Identities

Three streets exist on site today, Milton Avenue, Chesterton Way and Cowley Road. Given the masterplans focus on creating a pedestrian and cycle priority masterplan, the creation of new streets has been limited to the minimum necessary to provide delivery access and access to the Mobility Hub and other parking spaces, while providing continuity of access to the train station and the Network Rail maintenance yard. I will briefly outline in this section the key street and public square identities of the masterplan.

6.10.6 Milton Avenue

Milton Avenue has been designed as the primary urban boulevard, utilising the highway infrastructure installed in 2017, but formalising it with active built edges and additional planting. Both the Appellant and the Local Planning Authority felt that the road is in danger of appearing overly wide at 26m, and potentially inactive, which has been addressed through the design of building frontages incorporating projects and external seating, to give the streetscape as much definition as possible. Segregated Cycleways are located on the western side, linking to Cowley Road. The Junction with Cowley Road and the junction with Milton Way are intended to become signalised junctions in the future, providing safe and secure crossing points from the residential areas to the Wild Park areas, to Chesterton Square and to the Central Piazza.

6.10.7 Station Row

Station Row is a new street of 16-18m widths, providing the quieter pedestrian and cycle route alternative to Milton Avenue. Station Row incorporates a swale landscape feature in its centre, and a defined cycle route, giving this street a very different character to other streets in the Appeal Site. Station Row is designed as the main route linking the Appeal Site to the next phases of Cambridge North in the future, and ultimately to the AAP site and a potential track crossing to provide a direct link to the Cam, as identified in the NECAAP with potential track crossings locations connecting the wider site with the Chesterton Fen region. (Proposed Submission, NECAAP, Nov 2021, Fig.10 Page 31)

Fig. 111 Illustrative Render Along Milton Avenue, looking South

Fig. 112 Illustrative Render Along Milton Avenue, looking North

Fig. 113 Illustrative Render Along Station Row, looking South

6.11 / Public Spaces

Fig. 114 Public Spaces Within Masterplan

6.11.1 Planning policy and good master planning practice necessitates an appropriate allocation of both hard and soft open spaces to support urban development. The wider Fen area offers an exceptional green landscape amenity space. Extensive work with the Planning Authority has been undertaken to establish a good balance of complementary soft and hard landscaping within the confines of the Appeal Site, that works in conjunction with the open spaces.

6.11.2 The quanta, types and number of open spaces across the Appeal Site has been carefully defined to allow for a diverse provision of public spaces that caters to all ages and needs. This balance has been curated to ensure no specific programme carries any significant prominence over any other, creating a well balanced master plan that is meaningfully activated. As defined by the SCDC Open space SPD, open space is characterised as informal open space and formal and informal play spaces. The masterplan delivers a large overall area of open space with a provision that goes beyond the required minimums set forth in the document. (Refer to Proof of Evidence by Robert Myers for further information). To support the master plan's vision to provide quality public space, the masterplan further expands on these categorisations to provide an even wider mix of play types, such as LEAP and LAP as well as incidental and doorstep play. Facilities have been thoughtfully distributed across the Appeal Site to further deliver on these objectives.

6.11.3 Pedestrian and cycle space have been maximised, featuring two well-defined urban routes, a spacious civic square, a sizeable residential park and a natural wildlife area. All of the spaces are significant in scale, and varied in their character, drawing from relevant precedents and comparisons in the Cambridge area. I will outline briefly the four key open spaces that anchor the Public Realm Strategy of the Masterplan below. Please refer to the Proof of Evidence of Robert Myers and Section 8 of the Design and Access Statement.

Fig. 115 Illustrative render of Central Piazza

Fig. 116 Illustrative render of Chesterton Square

Fig. 117 Illustrative render of Chesterton Gardens

6.11.4 Central Piazza

A small predominantly hard space at the entrance of the Appeal Site when approached from the South and Cambridge Square. The piazza provides a moment of pause and orientation at the junction of several important routes, primarily Milton Avenue, Chesterton Way and Station Row. It marks the beginning of the landscape swale feature running northwards from here, and an important crossing point for pedestrians, cyclists and cars accessing the Mobility Hub.

6.11.4 Chesterton Square

The central space of the Masterplan is a civic square, located at the intersection between workspaces and living spaces, and with connections and sightlines into all character areas of the masterplan.
Hard spaces in combination with good tree planting, an interactive water feature are important to create a civic heart for the development that can be a playful space for families, a destination for drinks after work and a flexible canvas for events and markets.

6.11.5 Chesterton Gardens

Chesterton Gardens is a predominantly green space at the centre of the residential quarter of the Appeal Site. It is the green counterpoint to Chesterton Square, a landscape oasis with diverse green character to create a wide range of different character areas. The space includes formal and informal play for young children. The space is accessible from all sides opening into the Appeal Site but also creating potential future connections to the Cambridge Business Park and the allotments to the West of Chesterton Way.

6.11.6 Wild park

The largest green space, located north of Cowley Road, is land occupied by railway sidings historically, but re-colonized by nature since 1989. Since the land has fallen out of railway use, it has become home to first coloniser railway fauna and slowly evolved into a more complex part of City Nature continuing rare butterflies and plants seldom found elsewhere. The Wild Park will preserve some of the wild nature that has evolved over the last years, but make it accessible, and add features for stormwater retention, adding to the biodiversity of the area. More mature play areas will be integrated into the landscape, to make this a wild and exciting park for all. The core features and the majority of the Wild Park area are designated as open parkspace in the wider North Cambridge masterplan , thus ensuring that the investment made in landscape in the first phase is not undone at the next stage.

6.11.7 Public Space Conclusion

The mix of open spaces in the Cambridge North Masterplan for the Appeal Site reflects the nature of the land use as an employment-led mixed use scheme. The scheme intermixes high quality hard and soft spaces, integrated in a Sustainable Urban Drainage Strategy, to provide spaces for all ages and seasons, contributing to human wellbeing and biodiversity. It is my professional opinion that the quantum of open space, the quality and the diversity of open space provided are appropriate for this location, and will create a very high quality public realm that will be instrumental in the placemaking of Cambridge North as a place people aspire to live and work in.

Fig. 118 Landscape masterplan for the Appeal Site

6.12 / A Sustainable Masterplan

Fig. 119 View from the wild park looking South

6.12.1 The masterplan is embedding the highest standards of sustainability possible for this stage. It challenges parking standards usually applicable in Cambridge, delivering 425 housing units without dedicated parking, and with exceptionally low parking numbers for employment use.

6.12.2 The Sustainability Design Principles as defined in Section 5.7 have been incorporated in the proposals for the Detailed Plots in the Appeal Site.

6.12.3 The Sustainability Design Principles will ensure that each of the buildings incorporates passive design features to minimise energy use and use of carbon in construction. It will become the most sustainable Quarter of Cambridge, enabling occupiers and residents to work towards Zero Carbon in use due to its energy infrastructure and sustainable transport connectivity, reflecting best in practise environment design.

6.13 A Cambridge Identity

Fig. 120 Local Cambridge

The urban and architectural identity of Cambridge can be recognized in a number of scales, from the urban scale of the city in the fen landscape to its unique college typologies and its emphasis on strong horizontal facade articulation. The material use of Cambridge is characteristic and consistent, with a limited palette of local stone, brick and timber. In line with the masterplan design principles, the scheme has reflected Cambridge street scale and proportions in its urban design, with a variety of public space ranging from grand, semi public, to informal, but with a sense of overall coherence. The scheme has incorporated Cambridge materiality and facade emphasis in its building blocks, to create a new extension of Cambridge that feels grounded in its architectural context.

6.14 / A masterplan that allows for change

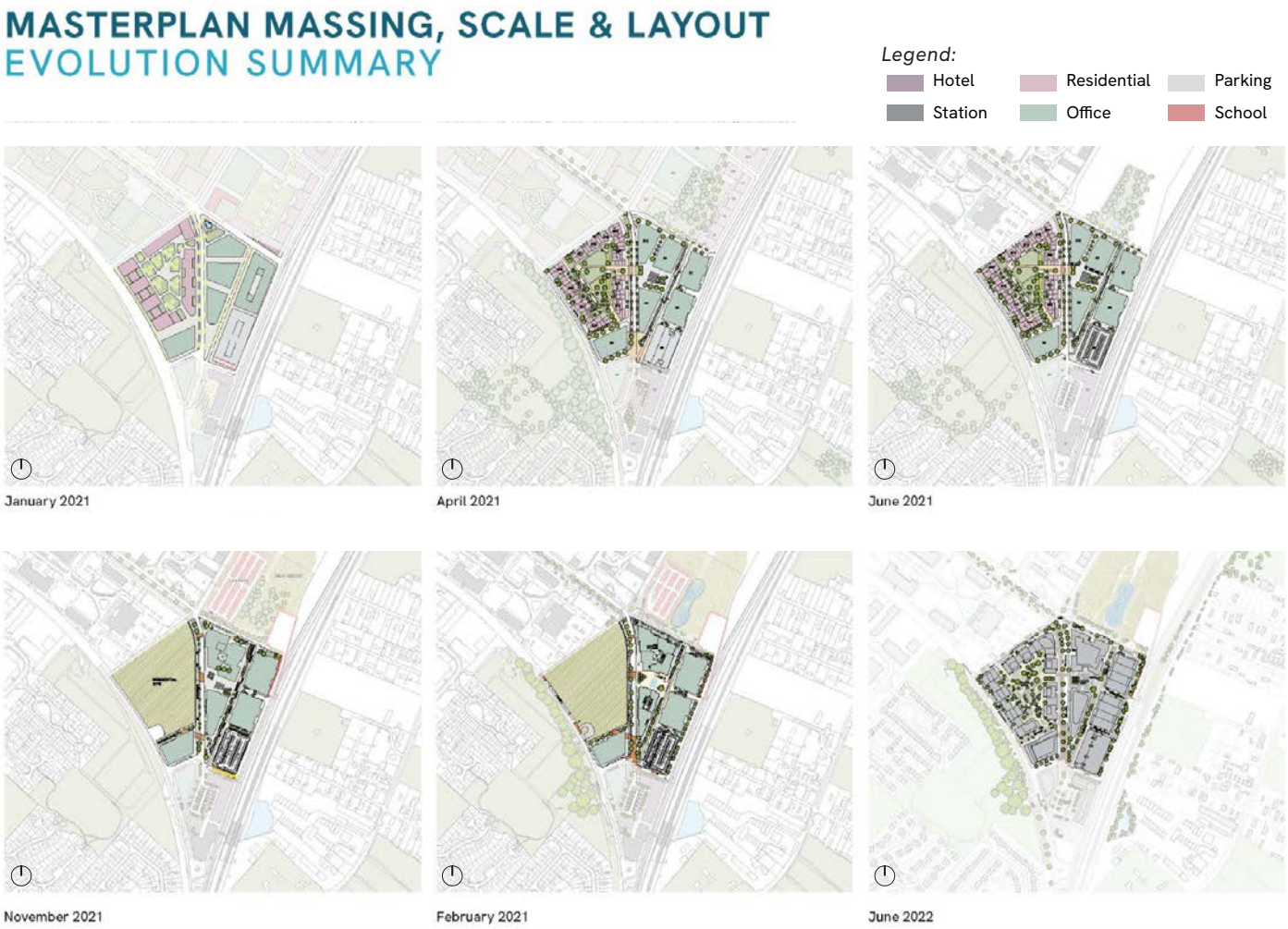


Fig. 121 Extract of the Design and Access Statment illustrating the evolving Masterplan

The brief for the project that has crystallized itself over these 18 month period of workshops reflects the input from the Local Planning Authority and other stakeholders, from local residents and the neighbouring U+I masterplanning team for the AAP site, from Network Rail, Brookgate, future Science Users and Housing Operators, as well as best urban design and landscape design principles. The initial phase of masterplanning was characterised by fundamental changes, with subsequent iterations getting increasingly more detailed and finer in scale, with increasing levels of interrogation of LVIA, flooding and similar subject matters being incorporated. The resultant masterplan translates all of these inputs into a set of plans and guidelines. While the plans and guidelines as proposed are fixed, they allow for future development and evolution.

6.15 / Outline Planning Application

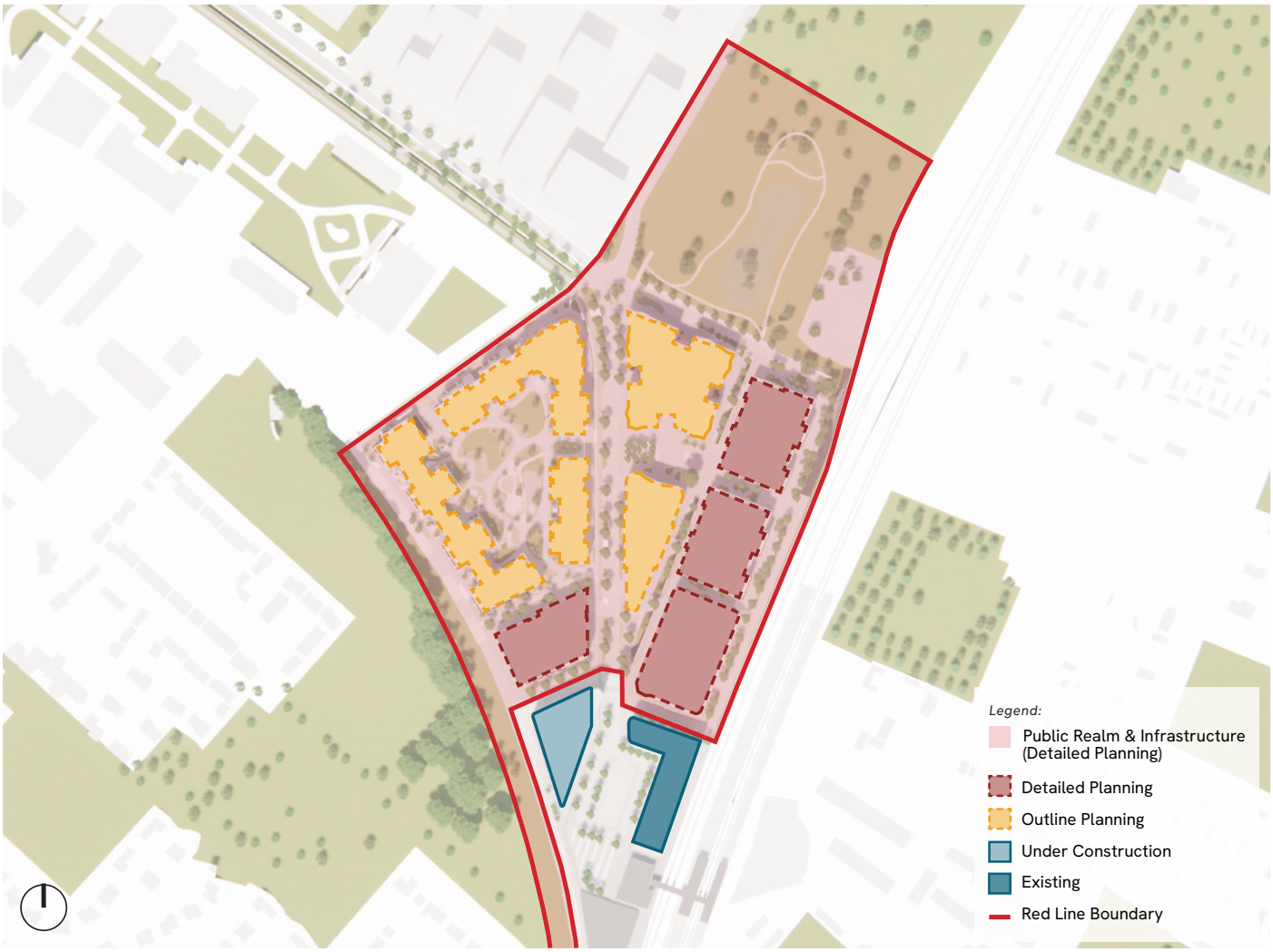


Fig. 122 Plan setting out matters in Outline and Detailed Planning

The Masterplan as defined in its Outline Planning Parameters delivers a placemaking framework that will enable the development of this site with a layout that has all the ingredients to create a great new quarter of Cambridge. Outline Planning by its very nature is flexible, as it sets out to define principles, guidelines and parameters for plot architects to follow. It therefore does not represent a final product, or is impervious to change. It creates a framework that allows plots to come forward, and it allows each of the plots to evolve as reserved matters in consultation with the Planning Authority.

6.16 / Matters of Outline & Detail

The masterplan has evolved as a comprehensive masterplan. As set out in Section 4.2 to 4.8 of this document, the masterplan has proven resilient in dealing with changes of planning strategy, by providing a flexible framework for some elements to come forward in outline, and others in detail. Buildings S4, S5, S6 and S7 and the public realm are submitted in detail, and the remainder submitted in outline. There is no lack of desire to deliver the remainder of the plots, Outline Consent was sought to speed up the delivery progress, and not hold up the development of the site as a whole while discussions were still ongoing with specific tenants and operators. Planning Consent for the Appeal Site will provide further certainty of delivery, and given the known lack of supply and demand for Employment Space and Housing in Cambridge, there is committed funding set aside for the next phases. The Appellant is working to submit Reserved Matter applications for the Residential component following determination of the appeal, and has progressed funding discussions for S8 and S9 to enable these buildings to progress quickly.

6.17 / A resilient & flexible wider masterplan

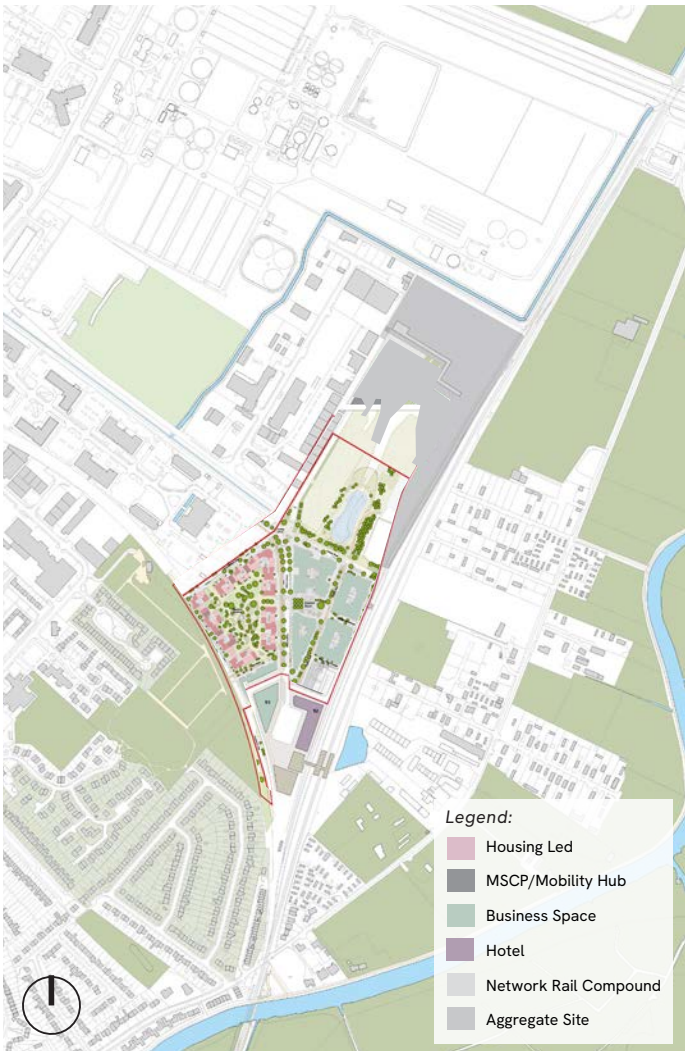


Fig. 123 Proposed Masterplan

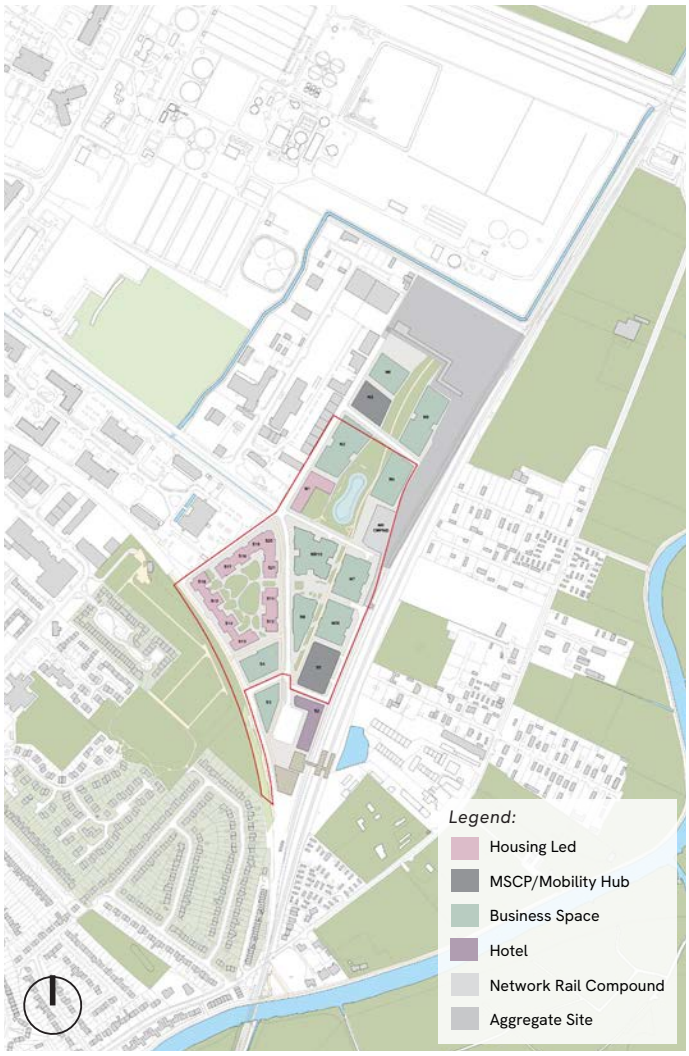


Fig. 124 Masterplan Vision Assuming No Relocation of the sewage works

6.17.1 The Masterplan has been developed as a wider masterplan for the entire site, to ensure it is a comprehensive development proposition and anticipates, enables and is complementary to the wider AAP. The Application brings forward the first phase of the masterplan and preserves the ability for later phases to adjust to the evolving Sewage works and APP development.

6.17.2 Proposals have been included as part of the Application to illustrate how the wider part of the site north of the current Planning Application can come forward once the sewage works are relocating, which will enable parts of the site further north to have residential uses.

6.17.3 Alternative proposals have been included if the sewage works do not relocate, and the Odour Contour maps thus remain in place, indicating how the wider part of the site north of the Appeal Site can come forward as an employment-led development.

6.17.4 The wild park provided as part of the Appeal Site north of Cowley road is carefully designed to provide a green amenity, now and in future masterplans with or without the relocation of the Sewage Works. The main features of the wild work consists of two elements, existing wild tree groupings and a lake water feature. Both of these features are central features in the wild park, and defining features of the long term future Central Park. Silver Birches and other first-colonizer trees self-seeded in 1990 in the tracklands, and have grown into small dense clusters of 35 year old trees, not dissimilar to the landscape planting in front of Tate Modern along the Thames. This character will be preserved in the Wild Park and future Central Park. A waterfeature as a balancing pond will be created in the wild park, as a water management device and special natural habitat. This feature is designed as a permanent feature.

In summary, while the appearance of the Wild park is changing once future phases are implemented, the key landscape characters of the Wild Park will be retained in any future development, and are not a temporary scheme that will be undone by future phases.

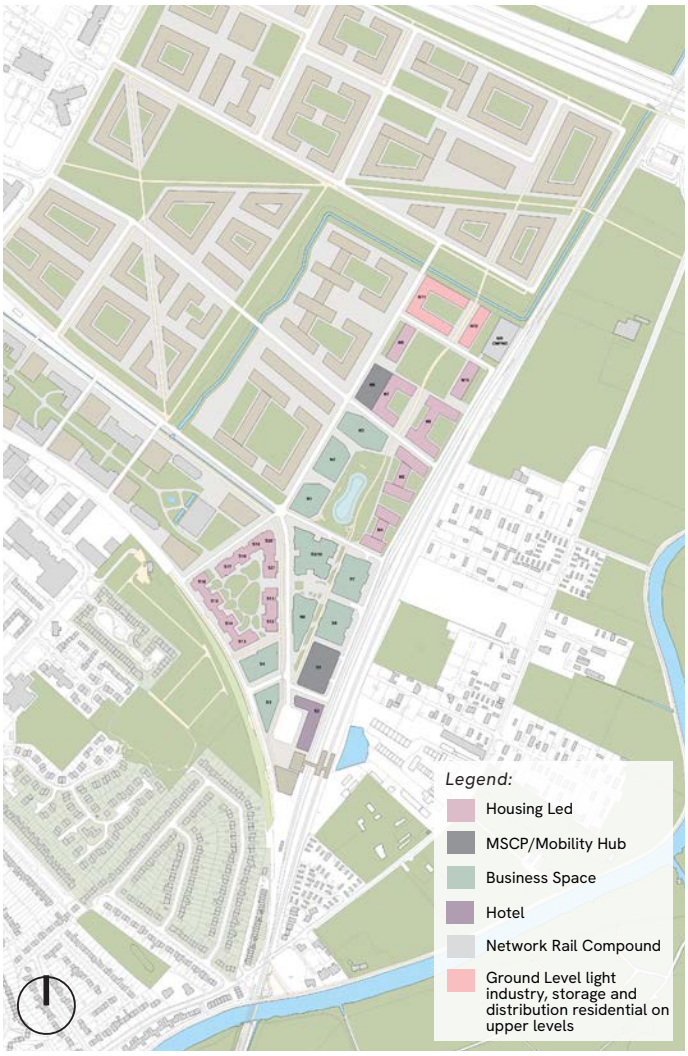


Fig. 125 Masterplan Vision Assuming the NECAAP Enabled

6.17.5 The masterplan seeks approvals for some matters in detail, for others in outline, to enable the first development to come forward as quickly as possible. As set out in consultation with the planning authority, this is not due to a lack of commitment to all parts of the application. The residential elements are in outline due to the time required to develop details with the residential housing partner. A larger level of detail than usual is provided for the outline residential elements of the masterplan to illustrate the scheme coming forward as a Reserved Matter. Plots S8/9 are in outline to provide flexibility to the Appellant to market the commercial opportunity to a number of interested parties with varying configurations to attract the best possible tenant. The commitment of the Appellant to develop the Application scheme as defined in the masterplan can be seen in the detail provided for routes, spaces and landscape.

6.18 / Enabling the wider development of the area

6.18.1 The development of the Appeal Site will enable other developments to come forward. The development vision is complementary to the Council's evolving AAP and will not prejudice the NECAAP or other schemes in the area from coming forward.

6.18.2 To the contrary, I firmly believe that the delivery of the Appeal Site proposals will enable the wider AAP development to come forward. Delivery of development on the Appeal Site will establish the transport infrastructure, the placemaking and commercial values that will support the viability of the wider AAP area to attract the tenants, residents and investment that have been targeted. To deliver the aims of the AAP for a sustainable development, the new station quarter and its proposed routes for pedestrians, cyclists and cars will be a key stepping stone, enabler and link between the new station and the wider site context. The development will bring about transformational change that will benefit not only the local area and Cambridge but support broader strategic national policy objectives as well.

6.18.3 The Appellant's Proposals and the AAP proposals will deliver complementary schemes of appropriate density for the location, transport infrastructure and local economy and housing needs. Delivery of the Appeal Site in advance of the AAP will establish the potential of the wider area, and give more certainty to the whole of the North East Cambridge Opportunity area and the growth of Cambridge as a hub of education, life science and technology.