

# CAMBRIDGE NORTH

## Planning Access Statement

May 2022

**DAVID BONNETT ASSOCIATES**  
*inclusive design consultancy & research*

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# 1. Introduction

## 1.1 Description of the Development

A hybrid planning application comprising:

a) an Outline Application with all matters reserved (except for access and landscaping) for the construction of three new residential buildings of four to eight storeys, providing flexible Class E and Class F uses on the ground floor, and two commercial buildings of five storeys for Use Classes E(g) i (offices), ii (research and development), providing flexible Class E and Class F uses on the ground floor, with associated car and cycle parking and infrastructure works; and

b) a Full Application for the construction of three commercial buildings of four and seven storeys for Use Classes E(g) i (offices), ii (research and development), providing flexible Class E and Class F uses on the ground floor, with associated car and cycle parking, a multi-storey car and cycle park and associated landscaping and infrastructure works.

## 1.2 Purpose of the report

This Access Statement has been prepared by David Bonnett Associates (DBA) to support the planning application of the Cambridge North development in Cambridge on behalf of Chesterton Partnership.

DBA was appointed by Brookgate as Access Consultant to the Cambridge North design team in November 2021.

## 1.3 Method of review

The Access Statement describes the access provisions using a journey around the Proposed Development as follows:

- Arrival at the site and circulation through the masterplan;
- Public realm and approaches to the buildings;
- Entrances;
- Overview of horizontal and vertical circulation within buildings; and
- Overview of the emergency evacuation strategy within buildings.

Step-free external and internal routes, lifts, stairs, WCs and other access features are highlighted on access overlays throughout this Access Statement.

The statement does not describe or evaluate any part of the development that is used solely for inspection, repair or maintenance of any service or fitting, in accordance with Approved Document M. If a disabled person requires access to these areas as part of their work then their employer is expected to take all reasonable steps to ensure that there are no barriers to them carrying out their work. Any building adjustments that are required would be carried out at that time.

The Access Statement describes how the scheme has been progressed with consideration of the principles of inclusive design. The report considers the requirements of all users, residents, visitors, staff and wider community including:

- People with mobility impairments;
- People with visual impairments;
- People who are neuro-divergent;
- Deaf people;
- Older people; and
- Small children.

The meaning of 'disabled' in this Access Statement is as defined by Equality Act 2010.

## **1.4 Project constraints**

There are currently no known constraints that will require an innovative or managed approach to access.

## **1.5 Consultation**

Various consultation activities have taken place as part of the pre-application and design processes. These include, but are not necessarily limited to:

- presentation to the Cambridge Disability Panel; and
- public consultation events in December 2021 (prior to the reintroduction of the residential quarter) and March 2022.

Refer to the consultation information submitted as part of this application.

## 2. Relevant standards and policy

### 2.1 The standards

The current standards of the Approved Document Part M Volumes 1 and 2 will be the applicable standards for the scheme in relation to access and inclusive design.

- *The Building Regulations 2010, Approved Document M (Access to and use of buildings) Volume 1: Dwellings*, HM Government, 2015 edition incorporating 2016 amendments. (Hereafter referred to as AD M Vol.1).
- *The Building Regulations 2010, Approved Document M (Access to and use of buildings) Volume 2: Building other than dwellings*, HM Government, 2015 edition. Note: Amendments to AD M Volume 2 published in July 2020 took effect on 1 January, 2021. (Hereafter referred to as AD M Vol.2).

Refer to Appendix 1 for a full list of references and a description of relevant legislation, regulations, standards and guidance.

### 2.2 Policy

The following list sets out the national, regional and local policy regarding access and inclusive design that applies to the scheme.

- **National Planning Policy Framework (NPPF), Chapter 8 and 12**, Ministry of Housing, Communities and Local Government, 2021.

The NPPF sets out government's planning policies for England and how these are expected to be applied.

Chapter 8 reads:

*92. Planning policies and decisions should aim to achieve healthy, inclusive and safe places*

Chapter 12 reads:

*130. Planning policies and decisions should ensure that developments:*

*f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users, and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.*

- **South Cambridgeshire Local Plan, Chapter 5**, South Cambridgeshire District Council, September 2018

Policy HQ/1: Design Principles:

*1. All new development must be of high quality design, with a clear vision as to the positive contribution the development will make to its local and wider context. As appropriate to the scale and nature of the development, proposals must:*

*g. Provide safe and convenient access for all users and abilities to public buildings and spaces, including those with limited mobility or those with other impairment such as of sight or hearing.*

Policy H/9: Housing Mix:

*1. A wide choice, type and mix of housing will be provided to meet the need of different groups in the community including families with children, older people, those seeking starter homes, people wishing to build their own homes, people seeking private rented sector housing, and people with disabilities.*

*4. 5% of homes in a development should be built to the accessible and adaptable dwellings*

*M4(2) standard rounding down to the nearest whole property. This provision shall be split evenly between the affordable and market homes in a development rounding to the nearest whole number.*

#### Policy H/12: Residential Space Standards

*New residential units will be permitted where their gross internal floor areas meet or exceed the Government's Technical Housing Standards.*

### 2.3 Other references for inclusive design

Other documents referred to during the design of the scheme include:

- *The Building Regulations 2010, Approved Document K (Protection from falling, collision and impact)*, HM Government, 2013 edition.
- *British Standard 8300:2018 Design of an Accessible and Inclusive Built Environment, Part 1: External Environment - Code of Practice, Part 2: Buildings - Code of Practice*, British Standards Institution, 2018.
- *British Standard 9999:2017 Code of Practice for Fire Safety in the Design, Management and use of Buildings*, British Standards Institution, 2017.
- *Inclusive Mobility: A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure*, Department for Transport, December 2021.
- *Inclusive Urban Design: A guide to creating accessible public spaces*, David Bonnett Associates, BSI, 2013.
- *A Guide to Inclusive Cycling (fourth edition)*, Wheels for Wellbeing, 2020.
- *Cycle Infrastructure Design: Local Transport Note 1/20*, Department for Transport, 2020.

- *Cycle Parking Guide for new residential developments*, Cambridge City Council, 2010.
- *The principles of inclusive design*. CABE, 2006
- *Designing for Accessibility*, CAE/RIBA Publishing, 2012.

#### **Note:**

DBA provides guidance and advice as access consultants. The consultancy does not officially approve designs, nor does it provide confirmation that a design complies with statutory standards. This remains the responsibility of the designers and the approvals authority.

### 2.4 Interpretation of the standards

*Approved Documents M, K and BS 8300:2018 provide general access advice, but refer to other standards and regulations about specific aspects of buildings and their immediate surroundings. Therefore, several separately authored documents are referred to, including good practice guidance books written by specialists.*



There are no national regulatory controls governing extended external spaces and landscaping other than Best Practice Guidance. For primary routes and approaches to buildings Approved Documents M are taken as a bench mark for determining accessibility. With regards to streetscape and pavement design, guidance is provided by the Department for Transport's Inclusive Mobility Guide and Transport Notes and BS8300:2018, Part 1: External Environments.

Access standards are in a continuing state of development because of changing expectations and legislation. The nature of these changing requirements and standards can result in anomalies and contradictions. Therefore it is important that access and inclusivity are considered and refined throughout the design process. The design of the scheme should seek to interpret these standards to provide the best possible level of inclusive design and this Access Statement describes situations and solutions where interpretation may be necessary.

## 2.5 The Equality Act

The Equality Act 2010 ('the Act') combines and supersedes previous separate discrimination legislation (including the Disability Discrimination Act 1995 as amended ('the DDA') and the disability discrimination provisions of SENDA 2001 for England, Wales and Scotland. People are protected from discrimination and harassment based on 'protected characteristics'; victimising anyone as a result of action taken in connection with the Act is also unlawful. There are nine different protected characteristics under the Act which have different levels of protection depending on the context (such as employment, provision of goods and services or the provision of education). This Access Statement focuses on the protected characteristic of disability; the definition of disability is essentially the same as under the DDA.

The types of discrimination that can arise in relation to disability are:

- Direct disability discrimination;
- Indirect disability discrimination;
- Treating disabled people unfavourably because of

something arising in consequence of their disability without justification; and

- A failure to make reasonable adjustments for disabled people ('the RA duty'). The RA duty works in different ways depending on who requests the reasonable adjustments to be made, for example an employee or a member of the public.

The Act also provides protection for people who are treated less favourably because of their relationship with a disabled person (such as a carer) or for people treated less favourably because they are mistakenly believed to be disabled. A disabled person can always be treated more favourably than a non-disabled person.

If an employer is a listed public authority (such as a local authority) they will be subject to the public sector equality duty. If the employer is not a public authority but carries out a public function as part of its work, it will be covered by the general part of the equality duty in relation to the exercise of that function.

### **The Reasonable Adjustment Duty and specific building provisions**

The Equality Act does not contain any specific requirements for the built environment and therefore has no relevance to 'compliance' in respect of physical building standards.

### **Statutory Consents**

When considering a reasonable adjustment to a physical feature, the Act does not override the need to obtain consents such as planning permission, building regulations approval, listed building consent, scheduled monument consent and fire regulations. If the consent is not given, there is still a duty to consider a reasonable means of avoiding the feature.

### **Design standards**

Service providers and public authorities carrying out their functions do not have to remove or alter a physical feature of a building for a period of 10 years from construction or installation if it accords with the relevant objectives, design considerations and provisions in Approved Document M. They may still need to consider a reasonable means of avoiding the feature if it presents a barrier to inclusion.

# 3. Overview of proposals

## 3.1 Access aims

The proposed development is designed to be as inclusive as possible so that it can be comfortably and independently used by residents, people working in and visiting the development, and the wider community.

The Development has the potential to meet the guidance of Approved Document M, Volumes 1 and 2, and the access and inclusive design policies of the South Cambridgeshire policies as a minimum.

Designing Inclusively is defined by The Commission for Architecture and the Built Environment (CABE) as:

- Placing people at the heart of the design process;
- Acknowledging diversity and difference;
- Offering choice where a single design solution cannot accommodate all users;
- Providing for flexibility in use; and
- Providing buildings and environments that are convenient and enjoyable to use for everyone.

## 3.2 Summary of access provisions

The proposals for the development at this stage demonstrate that a good level of inclusive design will be achieved by the finished scheme, subject to further design development.

The key access provisions for the proposed development include:

- Incorporation of the principles for inclusive design wherever possible;
- Accessible routes to all connections with local pedestrian routes and public transport;
- Safe spaces and routes for pedestrians and cyclists, segregated from vehicle traffic;
- Routes will be step-free, level or gently-sloping with gradients at 1:21 or gentler;
- 5% of the total car parking for commercial demises within the application boundary is designed to be suitable for wheelchair users;
- Provision of disabled car parking bays to the 5% of the affordable dwellings and the build to rent dwellings being offered with discounted market rent, and potential to provide additional disabled bays to the 5% of the total number of dwellings;

- Accessible cycle parking spaces for residents, staff and visitors in line with the local policies;
- Wheelchair-accessible sanitary facilities alongside ground floor accessible cycling facilities (in commercial buildings); and
- Step-free access to all parts of the commercial and residential buildings, including terraces.

## 4. Masterplan strategies - Arrival & Site context

### 4.1 Description of the site context

The Proposed Development site is located in South Cambridgeshire District Council to the north of the consented Phase 1 development, which is currently under construction, and sits within the North East Cambridge Area Action Plan (NEC AAP).

The site is bounded by the Novotel hotel to the south, an existing estate road which forms an extension to the Cambridgeshire Guided Busway to the west, the railway to the east and former rail land to the north.

The levels across the site are flat.

### 4.2 Public transport connections

The proposed development benefits from access to a range of public transport services which connect the site with Cambridge City Centre, local regional destinations and national destinations via the rail network.

Nearest bus stops are located within 400m distance from the site, served by Cambridgeshire Guided Busway B and Citi 2.

Cambridge North Station is located approximately at 100m to the south of the proposed development site. This station provides step-free access to all platforms via lifts.

Since the public transport is not accessible for all, the development has made the following provision for alternative means of access to the site, which are described in the sections that follow:

- suitable drop-off points close to the entrances of all buildings;
- accessible car parking for all uses close to the buildings they serve;
- accessible cycle storage in all buildings.

## 4.3 Pedestrian, Cycle and Vehicular movement

### Road Hierarchy

The proposed development proposes different types of streets with the aim to provide vehicular access to all buildings while providing an enjoyable public realm to pedestrians. Street types are as follows:

#### PRIMARY STREETS

The primary streets that provide access to the site and link the site with the wider highway network are Milton Avenue and Chesterton Way. Both are 2-way roads with car parking on one side on Chesterton Way and both sides on Milton Avenue to accommodate disabled parking and loading bays. They have also dedicated cycle lanes. Footpaths will be usually at least 2m wide as recommended by BS8300-1 and the Inclusive Mobility. Footpaths will be separated from the carriageway by a raised kerb. Careful consideration will be made to ensure that pedestrians cannot inadvertently walk into vehicular/ cycle lanes.

#### SECONDARY STREETS

Secondary streets link primary streets within the site: Bramblefields Way, Cowley Road and the Link. The design will follow the principles of the primary streets, and careful consideration will be made to ensure that streets are safe and convenient for everyone regardless their age and abilities.

#### PEDESTRIAN AND CYCLE ROUTES

Additional pedestrian and cycle routes are provided within the site to provide a greater permeability through the site. Station Row and Milton Walk will be designed with dedicated cycle lanes and wide footpaths on both sides. In order to avoid pedestrian walking inadvertently into the cycle lanes, landscaping have been provided next to cycle lanes where possible, and low raised kerbs where pedestrian paths are next to cycle lanes. Further details such as visual contrast and tactile paving will be further developed at the next stage to ensure that public realm is safe and convenient for everyone regardless their age and abilities.

### Access provisions in the public realm

Streetscape will be designed in accordance to the guidance from BS8300-1 and the Inclusive Mobility, including but not limited to:

- A legible layout for visitors with predictable spaces, facilitating wayfinding for people who are blind or partially sighted.
- Individual character of the spaces to assist visitors and residents navigating through the site and allow them to identify correct arrival points. This is particularly valuable to people with a dementia related condition or first time visitors.
- Level or gently-sloping circulation routes.
- Suitable non-slip, even, level walking surfaces.
- Resting places every 50 m that provide a choice of seating.
- Any street furniture placed alongside circulation routes will not create barriers or hazards for people with impaired vision.

## 4.4 Car parking

The proposed development will provide a total of 1081 car parking spaces distributed across the application site, including a mix of on-street car parking spaces, basement car parks, and a Mobility Hub (S5 - see further details in section 5 below). 439 car parking spaces will be for the use of the demises located within the application boundary, while the remaining 642 spaces will be for Cambridge North station use (622 spaces) and the existing hotel (20 spaces), both of which are located outside the application boundary. 24 disabled badge holder parking bays for public use are located within 50m of the existing hotel entrance (outside the application boundary, but shown on masterplan drawings).

All parking within the application boundary will be controlled / managed. It is anticipated that this will include measures such as issuing passes / permits to staff and visitors for use of the disabled badge holder parking bays, and monitoring of the use of bays to ensure no unauthorised use. Additional disabled badge holder parking bays could be allocated within the basement car parks for staff use if required in future to meet demand.

5% of total parking capacity for the commercial demises within the application boundary will be designated accessible disabled badge holder bays. In lieu of providing designated accessible spaces for commercial use in the Mobility Hub (S5), spaces will be located in close proximity to commercial buildings across the site.

The proposed car parking provision is as follows:

- Six accessible disabled badge holder car parking bays dedicated to the M4(3) residential units, spread across the residential quarter to ensure that accessible bays are within 50 metres of the building they serve. This equates to 5% of the affordable dwellings and the build to rent dwellings being offered with discounted market rent. Capacity for a further 16 spaces has been provided (bringing the total number of bays to 22) to allow for conversion at a future date. The additional 16 spaces reflects provision equivalent to 5% of the total number of dwellings. Otherwise, the residential part of the development is proposed to be car-free.

- Mobility Hub (S5) will provide 725 car parking spaces as follows:
  - 83 spaces for use by the commercial part of the development at basement level;
  - 20 spaces at basement level for use by the existing hotel to the south of the application boundary; and
  - 622 spaces for Cambridge North rail passenger use, including ten designated accessible disabled badge holder spaces at ground level.
- On-street accessible disabled badge holder parking bays for the commercial part of the development are proposed in the following locations:
  - 3 bays on Milton Avenue within 50m of the One Milton Avenue (S4) main entrance;
  - 3 bays on Milton Avenue within 50m of the Two Milton Avenue (S8) main entrance;
  - 3 bays on Milton Avenue within 50m of the One Chesterton Square (S9) main entrance; and
  - 4 bays on Cowley Road to the north of 3 Station Row (S7) - the nearest bay will be circa 50m of the S7 main entrance with the remaining bays within 60m.

- Basement car parking is proposed for the commercial part of the development as follows:
  - One Milton Avenue (S4) with vehicle access via two vehicle lifts off Chesterton Way. 60 bays are proposed, including 1 disabled badge holder bay;
  - Two Milton Avenue (S8) and One Chesterton Square (S9) combined basement with vehicle access via a vehicle ramp off Cowley Road (via S9). 141 bays are proposed, including 3 disabled badge holder bays.
  - 1 and 3 Station Row (S6 and S7) combined basement with vehicle access via a vehicle ramp off Cowley Road (via S7). 120 bays are proposed, including 4 disabled badge holder bays - 3 for S6 and 1 for S7.

Disabled badge holder car parking spaces will be designed to meet dimensional and other specifications set out in AD M, BS 8300-1, and local authority requirements.

Routes from the disabled badge holder parking bays to building entrances and passenger lifts will be generally level or gently sloping, with a suitable firm ground surface.

Where electric charging facilities are proposed, designated accessible disabled badge holder bays will be provided with electric charging points.

## 4.5 Drop-off points

Some users will rely on community transport, taxis, minicabs, or private vehicle drop-off and pick-up. No designated passenger drop-off / pick-up points are currently proposed as required by AD M. It is proposed that the on-street loading / delivery / service bays could be used for passenger drop-off / pick-up - this will need to be agreed with Building Control at the next stage. It is also proposed that passengers can be dropped-off / picked-up at the rear of Chesterton Passage off Cowley Road (South) for access to 1 and 3 Station Row. The intent is that passengers will be able to be dropped-off / picked within 50 metres of most building and demise entrances; the travel distance to the 1 and 3 Station Row main building entrances however is likely to exceed this, however mitigation measures, such provision of seating along the route will be considered.

Details of kerbs, dropped kerbs, etc will be further developed at the next stage.

## 4.6 Cycle parking

Short-stay cycle parking will be provided in the public realm near each commercial building and within the residential quarter. 310 short-stay spaces are proposed across the site, including 34 spaces (approximately 9%) for larger / non-standard cycles.

2191 secure, indoor, long-stay cycle parking spaces are proposed for the commercial part of the development - most spaces will be provided with the basement of each building. The cycle parking will be designed in accordance with the guidance contained in *Cycle Parking Guide for new residential developments* and LTN 1/20 and will include cycle parking spaces that can accommodate larger cycles, including adapted cycles used by disabled people as follows:

- 20% of the total cycle spaces in each building will be Sheffield stands;
- 10% of the total cycle spaces in each building will be larger spaces capable of accommodating non-standard cycles;
- 5% of the larger spaces will be located at ground floor.

Ground floor and accessible cycle facilities will be provided with an equal level of amenity as standard and basement cycle parking including electric charging points and cycle repair stations (if provided) - this will be developed at the next stage.

Cyclist sanitary facilities will be provided in each commercial building, with wheelchair-accessible facilities of an equal amenity provided at ground floor - refer to sections on commercial buildings below for further details.

Residential long-stay cycle storage will be provided in secure, sheltered cycle stores at ground floor across the residential quarter. There will be direct access from the street and the central garden. Routes from the cycle parking to the buildings will be generally level or gently sloping, with a suitable firm ground surface.

## 4.7 Landscape

The Proposed Development will create a network of green and public spaces that will link the areas of the scheme while providing high-quality open spaces.

The main public spaces are:

- *Chesterton Square*: located between the Science Hub and Two Milton Avenue, will provide a public square to be enjoyed by all commercial buildings. The square is proposed with green and water features, with seating spread across the space.
- *Piazza*: it's a small square that sits on the southern edge of Two Milton Avenue. It will provide some seating with water and landscape features.
- *Chesterton Gardens*: located on the inner side of the residential element, will provide clear routes to access the residential buildings and informal play area, accompanied with a variety of planting.

All landscape areas have been carefully designed in consideration with the requirements of all users, regardless their abilities or age, so that they can be comfortably and independently used by residents, people working in and visiting the development, and the wider community, in line with good practice guidance and local policies.



The main access provisions to ensure the comfort of all pedestrians using the landscape are to include:

- Footpath will be at least 1800mm wide, and where possible 2000mm wide.
- Routes will be generally level or gently sloping, with gradients between 1:21 and 1:60, and level landing at every 500mm rise. Cross-falls will not exceed 1:50.
- Walking surfaces will be firm and smooth. Uneven surfaces, surfaces of loose materials, or surfaces with large gaps between paving materials will be avoided.
- Surface decoration that can be mistaken by steps, or very dark surfaces that may give the appearance of a hole to some people will be avoided.
- Footpaths will have continuous detectable physical edges which people who are blind or partially sighted can follow.
- Street furniture will be located outside access routes where possible so do not create barriers or hazards for people with impaired vision.

- Where street furniture is located within an access route, they will be clearly apparent and contrast visually with the background.
- Street furniture will be placed in a predictable way.
- There will be provision of resting areas at not more than 50m apart for people with limited mobility.
- Resting areas will provide a variety of seating options, including seating with armrests and backrests, seating with different seat height, and seating that allows wheelchair users to transfer to a bench.
- There will be appropriate space for wheelchair users be integrated in the general seating provision.
- Seating will contrast visually with the background which it's seen.
- Lighting will be even, avoiding creating glare, pools of bright light or strong shadows.

- Glare from bright patches of light will be avoided as they may be confusing to some visually impaired people or people who have sensory/neurological processing difficulties.
- Uplighters located at low levels on access routes will be avoided as they can also cause glare problems for some people.



Fig.1 Landscape masterplan (by Robert Myers Associates).

# 5. Mobility Hub (S5)

A mobility hub is proposed to the north of the Novotel building to re-provide the existing surface car parking spaces, and accommodate additional car parking to the commercial development.

## 5.1 Entrances

Pedestrian entrances into the building will be from Station Row at both ends of the building. Vehicular access and exit will be from Cowley Road.

Pedestrian entrances will be easily identifiable through the facade design or via signage. Entrances will have level access over the threshold and have an unobstructed level landing of at least 1500mm by 1500mm immediately in front.

All entrances will be designed to meet the requirements of AD M Vol.2, with a 1000mm clear opening width through a single leaf door or one leaf in double-leaf doors. Weather protection will be considered over entrance doors that are not automated.

Guarding will be considered to all outward opening doors, other than escape doors or doors that are normally kept shut and locked to plant/maintenance areas.

Further details will be subject to detail design and are expected to comply with AD M Vol. 2 standards and guidance from BS8300.

## 5.2 Horizontal circulation

All internal doors will have a minimum clear opening width of at least 800/825mm depending on the approach, through a single leaf door, or one leaf of a double leaf door, unless power operated or held open.

All internal doors will have an unobstructed space of at least 300 mm on the pull side of the door between the leading edge of the door and any return wall.

Further details will be subject to detail design and are expected to comply with AD M Vol.2 standards and guidance from BS8300.

## 5.3 Vertical circulation

### 5.3.1 Lifts

Two cores provide pedestrian access to all floors which comprises 2 passenger lifts and one stair in each core.

Passenger lifts will have internal lift car dimensions of 1100mm wide by 1400mm deep as a minimum and a power operated sliding door of at least 800mm effective clear width. A level landing of at least 1500mm by 1500mm will be provided in front of the lift doors on all floors clear of door swings.

Details of lifts will be developed at a subsequent stage of design development, and are expected to meet the guidance of AD M Vol.2 and BS EN 81-70.

### 5.3.2 Stairs

All internal stairs will be designed to meet the requirements of Part K for 'general access stair', and will be detailed at a later stage, including dimensions that suit ambulant disabled people, tonal contrast to aid people with impaired sight, and handrails that extend horizontally 300mm beyond the top and bottom riser.

All stairs will have a width of minimum 1200mm between walls and 1000mm between handrails, and flights of stairs will not have more than 12 steps. Landings at the top and bottom of each flight will be 1200mm long clear of door swings.

## 5.4 Accessible car parking spaces

Mobility Hub (S5) will provide 725 car parking spaces as follows:

- 83 spaces for use by the commercial part of the development at basement level. No disabled badge holder car parking for the commercial development is proposed within the mobility hub as it was determined that it would be located too far from the buildings it serves. Provision of 5% of the total car parking for the commercial development, including the mobility hub, has been located within the basement of the commercial buildings or on-street close to the buildings.
- 20 spaces at basement level for use by the existing hotel to the south of the application boundary; and
- 622 spaces for Cambridge North rail passenger use, including ten designated accessible disabled badge holder spaces at ground level.

Disabled badge holder car parking spaces will be designed to meet dimensional and other specifications set out in AD M, BS 8300-1, and local authority requirements.

Routes from the disabled badge holder parking bays to building entrances and passenger lifts will be generally level or gently sloping, with a suitable firm ground surface.

## 5.5 Emergency egress

The fire strategy for Cambridge North / Mobility Hub will take precedence over this section. The strategy should include best practice procedures for the evacuation of disabled people from all parts of the buildings, based on BS 9999:2017 and Regulatory Reform (Fire Safety) Order Supplementary Guidance.

The following measures for the evacuation of disabled staff and visitors should be considered:

- Designated escape routes from each part of the building that allow wheelchair users and others to reach a safe area to await assistance;
- Provision of safe refuge with a two-way communications system, within reach of a wheelchair user, to allow direct communication with the fire controlling authority in accordance with BS 9999:2017;
- Use of lift(s) as part of the evacuation strategy (this will be confirmed at the next stage); and

Evacuation chairs are designed to carry people to a place of safety in areas accessed by stairs. Upwards evacuation will require motorised chairs. Evacuation chairs should be considered a last resort for the safe evacuation of wheelchair users. They should be regularly maintained and inspected, and relevant staff trained in their use.

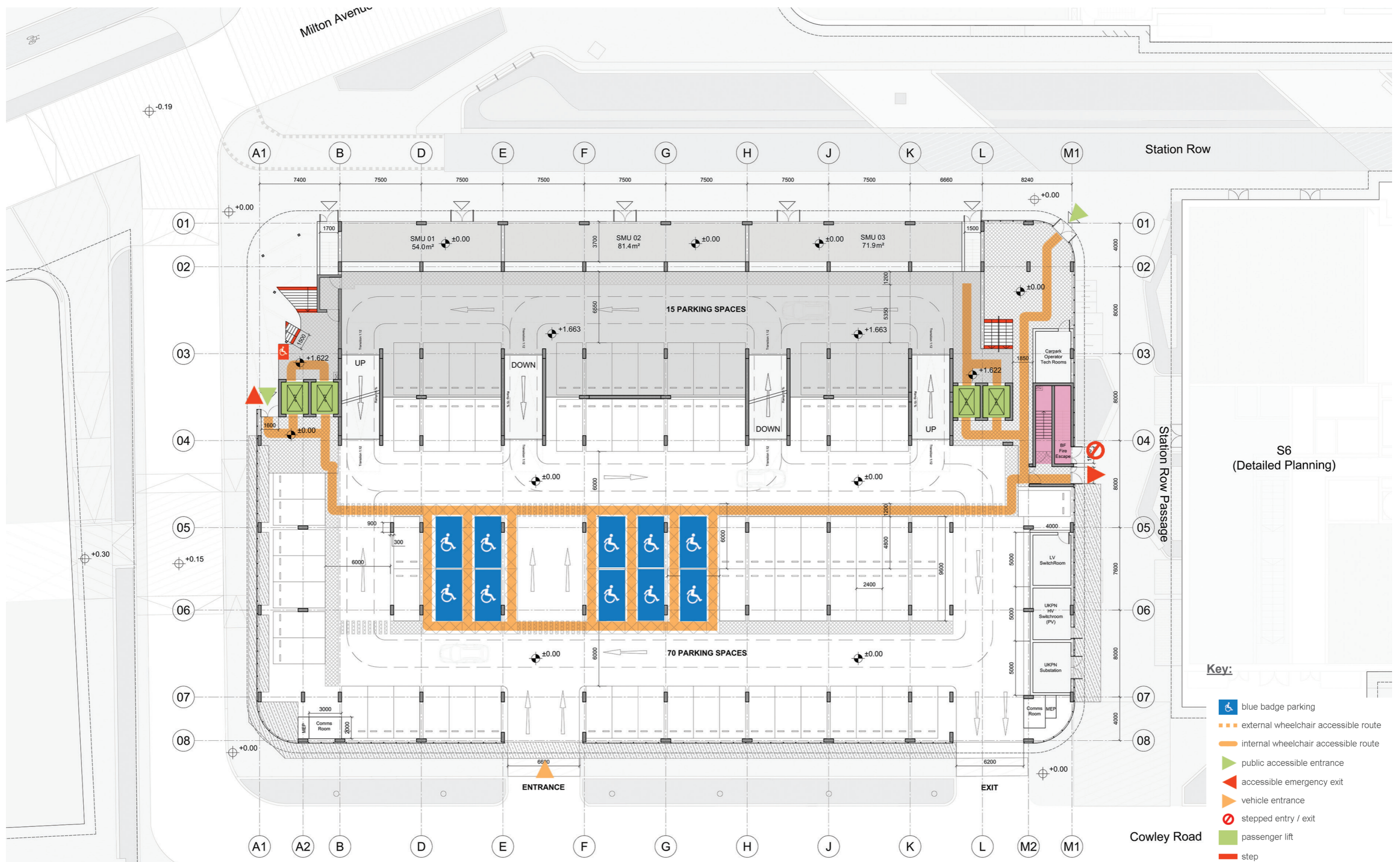


Fig.2 Mobility Hub - Ground floor | access overlay.

## 6. One Milton Avenue (S4)

One Milton Avenue (S4) is predominantly office use, however a retail unit will be provided in the southwest corner of the building at ground floor. The retail unit will have access to a shared BOH / escape corridor. Car and cycle parking is proposed at basement level, accessible cycle parking at ground floor, and office space at ground floor through level 06.

### 6.1 Entrances

All entrances will be designed to meet the guidance of AD M Vol.2; details will be further developed at subsequent stages of design development.

Approaches to entrances will be level or gently sloping. Level landings at least 1500mm by 1500mm clear of door swings will be provided in front of each entrance.

The main entrance to the building is off Milton Avenue. Two large automatic circular sliding 'drum' doors are proposed.

The retail entrance, also off Milton Avenue, is proposed to have a double-leaf entrance door with a clear opening width through each leaf of 1000mm.

A cyclist entrance is proposed off Milton Walk (with access via a cycle path). Power-operated double-leaf doors with a clear opening width through each leaf of 1000mm are proposed.

Multiple external double-leaf doors with a clear opening width through each leaf of 1000mm are located in the façades of the ground floor 'office and future activation spaces'. These may be used as entrances as well as escape, subject to tenant requirements.

### 6.2 Reception and lobby

Details of the entrance lobby and reception area will be developed at subsequent stages of design development, however they will be designed to meet AD M Vol.2 including, but not limited to, the provision of fixed hearing enhancement system(s) at reception and service desks and lower sections of desk / counter that are permanently accessible to wheelchair users.

Security barriers between the reception area and the main core will feature at least one barrier in each location with a minimum clear-opening width of 1000mm.

No wheelchair-accessible WC (AWC) is currently proposed on the 'public' side of the secure line, but services will be provided to allow provision at a subsequent stage.

### 6.3 Horizontal circulation

Details of horizontal circulation for the base-build will be developed further at a subsequent stage of design development; details of tenant fit-out of areas will form a separate application. Elements of horizontal circulation such as internal doors, internal lobbies, and corridors will be designed to meet the guidance of AD M Vol.2; good practice recommendations of BS 8300-2:2018 will be also be considered. Consideration will be given to materials and finishes at the appropriate stage of design development in order to avoid the use of visually and acoustically reflective surfaces and the use of bold patterns that could create visual confusion or be mistaken for changes in level. Secure access controls, where provided, will be designed to be accessible.

Generous circulation spaces are proposed within the core.

Open-plan office floor plates are currently shown at ground through level 06. Any future subdivision of the floor plates will retain access to the core (lifts, stairs, WCs) for each tenant.

## **6.4 Vertical circulation**

### **6.4.1 Lifts**

Details of passenger lifting devices will be developed at a subsequent stage of design development, however lifts will be designed to meet the guidance of AD M Vol.2, and, for passenger lifts, BS EN 81-70.

Three passenger lifts serving basement through Level 06 are proposed in the central core. One enlarged passenger lift to act as a service lift, also located in the central core, will serve basement through Level 07 plant.

A fire-fighting lift is located in the same lobby as one of the general access and escape stairs. It is anticipated that the fire-fighting lift can be used for evacuation, but this will be confirmed at the next stage.

As noted in 4.4 above, vehicle lifts (not for passenger use) are proposed for vehicle access to the basement car parking from Chesterton Way.

### **6.4.2 Stairs**

Two general access and escape stairs serving all levels are proposed in the central core.

A cycle stair with wheel channels either side is proposed to provide stepped access to the basement cycle parking.

All internal stairs will be designed to meet the requirements of Part K for 'general access stair', and will be detailed at a later stage, including dimensions that suit ambulant disabled people, tonal contrast to aid people with impaired sight, and handrails that extend horizontally 300mm beyond the top and bottom riser. It is understood that young children will not be regular users of the office areas of the building. Should young children be anticipated to be regular users of the building, the design of stairs and guarding in those areas will take this into account.

### **6.4.3 Ramps**

No internal ramps (gradients of 1:20 or steeper) or gradients (1:21 or gentler) are currently proposed. Should any ramps be proposed in future, they will be designed to meet the guidance of AD K Section 2.

## **6.5 Access to facilities / specific areas**

Tenant terraces are proposed at two levels. No meeting rooms, shared refreshment facilities, or other amenities are currently proposed. If proposed in future, they will be designed to meet AD M Vol.2, and where feasible, the good practice guidance of BS 8300-2:2018.

### **6.5.1 Terraces**

Terraces for tenant use are proposed at Levels 05 and 06. All tenant terraces will be generously sized and will provide wheelchair manoeuvring space of at least 1500mm by 1500mm as recommended by BS 8479:2020, subject to fit-out.

Details of terraces will be further developed at the next stage of design development, including accessible terrace doors, thresholds, access route widths, and surfaces. The good practice guidance of BS 8300-1:2018, including provision of a variety of seating, will be considered. Terrace fit-out will need to maintain adequate circulation and manoeuvring spaces.

## 6.6 Sanitary provision

Sanitary facilities will be provided at all levels from basement through level 06. Provision of sanitary facilities in the retail unit will be the responsibility of the tenant fit-out.

At ground floor through level 06, separate-sex toilets and an adjacent unisex wheelchair-accessible WC (AWC) are proposed in the core. A WC compartment for use by people with ambulant mobility impairments will be provided in each separate-sex toilet facility. Where there are four or more WC compartments, an enlarged (1200mm-wide) WC compartment for use by people who require extra space is proposed.

No AWC is currently proposed within reception or on the public side of the secure line, but is advised to meet AD M Vol.2. Services provision allows for the inclusion of an AWC during detailed design development subject to prospective tenant requirements.

AWCs are proposed to exceed AD M Vol.2 minimum dimensions; they will be at least 1700mm wide as per BS 8300-2:2018 good practice guidance.

The travel distance to reach an AWC—subject to internal layout and any tenancy subdivision—is generally within 40m, however exceeds 40m from some parts of the floor plates (up to circa 48 to 55m depending on the size of the floor plate). Travel distance will be considered as the design develops; where a distance greater than 40m is proposed, this will be discussed with Building Control.

A choice of AWC transfer layout will be provided; this will be resolved at the next stage.

An AWC and an adjacent combined wheelchair-accessible WC and shower room will be located within the accessible cycle parking area at ground floor. Additional WCs—including an AWC—showers, lockers, and drying rooms will be located at basement where the majority of the cycle parking is located. Access between the basement cycle parking and the changing facilities is through the car park, which is far from ideal. Details regarding how pedestrians and cyclists will be protected from vehicle traffic will be developed at the next stage if crossing the car park cannot be avoided.

The ground floor wheelchair-accessible facilities should have an equivalent level of amenity as the basement changing facilities, including grooming facilities (if provided), drying room, and convenient access to lockers; this will be addressed at the next stage.

No baby change facilities are currently proposed or anticipated given the office use of the building. Should baby change facilities be required in future, they should be wheelchair-accessible, but should not be located within AWC(s).

Note: Amendments to AD M Vol.2 that came into effect on 1st January, 2021 require the provision of a Changing Places toilet in certain types of buildings including in retail premises with a gross floor area of 2500m<sup>2</sup>. The retail area is unlikely to meet this trigger.

Details of sanitary facilities will be further developed at subsequent stages of design development, however they will be designed to meet AD M Vol.2, and where feasible, the good practice guidance of BS 8300-2:2018.

All sanitary compartment doors will be capable of being opened outwards from the outside in event of an emergency.



## 6.7 Signage

A consistent signage and wayfinding strategy will be developed at the relevant stage of design development. Good practice guidance, such as BS 8300:2018 and Sign Design Guide, will be considered.

## 6.8 Emergency egress

The fire strategy for Cambridge North / One Milton Avenue will take precedence over this section. The strategy should include best practice procedures for the evacuation of disabled people from all parts of the buildings, based on BS 9999:2017 and Regulatory Reform (Fire Safety) Order Supplementary Guidance.

The following measures for the evacuation of disabled staff and visitors should be considered:

- Designated escape routes from each part of the building that allow wheelchair users and others to reach a safe area to await assistance;
- Provision of safe refuge with a two-way communications system, within reach of a wheelchair user, to allow direct communication with the fire controlling authority in accordance with BS 9999:2017;

- Alarm systems that provide visual as well as audible signals in isolated locations such as WCs;
- Use of lift(s) as part of the evacuation strategy (this will be confirmed at the next stage); and
- Management procedures that include the appointment and regular training of staff to assist with the evacuation of disabled people.

Evacuation chairs are designed to carry people to a place of safety in areas accessed by stairs. Upwards evacuation will require motorised chairs. Evacuation chairs should be considered a last resort for the safe evacuation of wheelchair users. They should be regularly maintained and inspected, and relevant staff trained in their use.

The use of suitable warning systems, such as vibrating pagers may be considered for individual members of staff, following a Personal Emergency Egress Plan (PEEP) assessment.