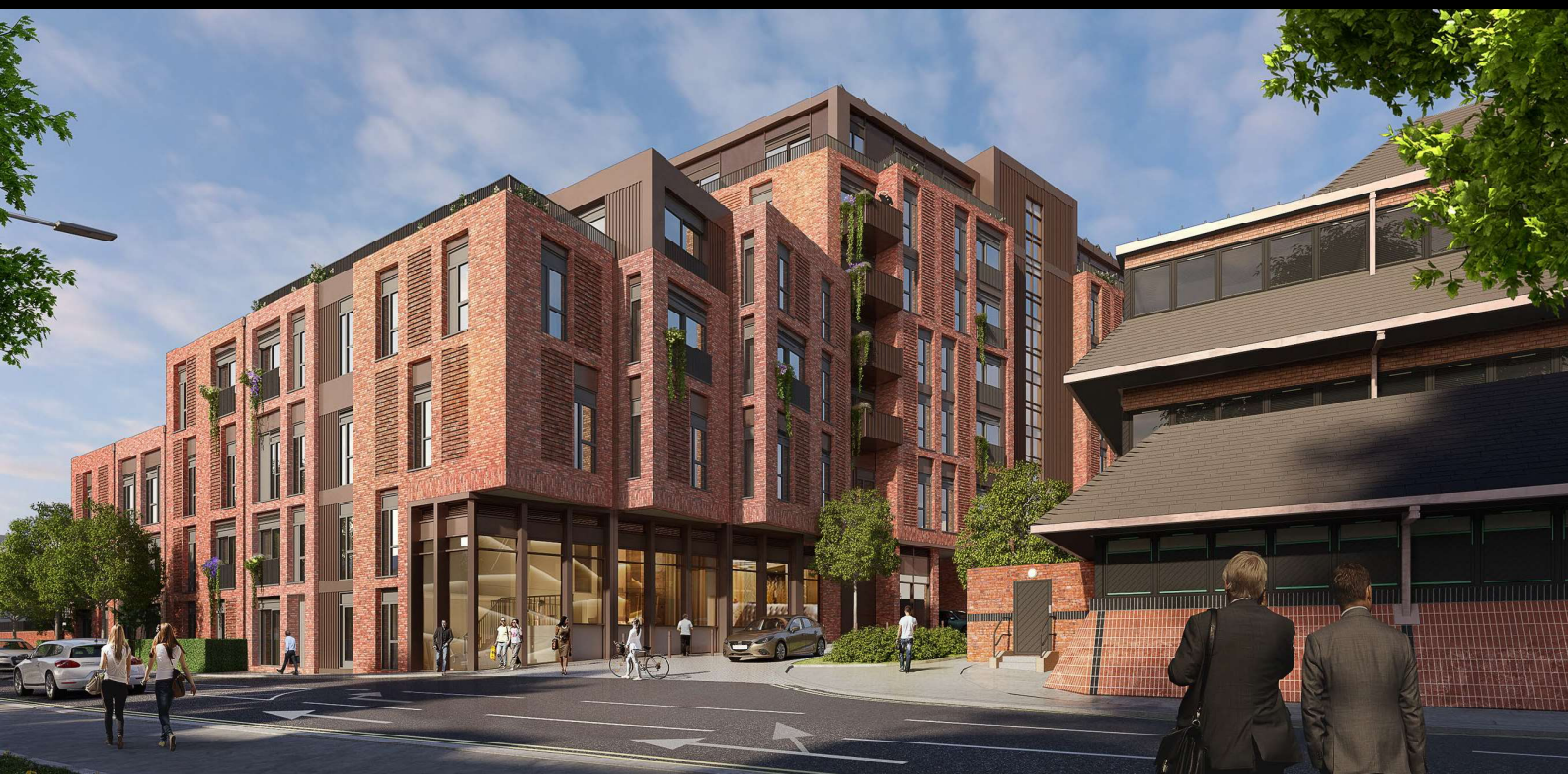
GUILD LIVING @ UXBRIDGE.

Transport Assessment

SEPTEMBER 2020

GUILD LIVING | Legal & General



Pell Frischmann

Senior Living Urban (Uxbridge) Limited (Guild Living)

Land off Harefield Road (Units 1 and 2), Uxbridge, UB8 1JS

Transport Assessment

104182

04/09/2020

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Document Information

Prepared for	Senior Living Urban (Uxbridge) Limited (Guild Living)
Project Name	Land off Harefield Road (Units 1 and 2), Uxbridge, UB8 1JS High Road
File Reference	104182 Guild Living Uxbridge TA D1.docx
Project Number	104182
Publication Date	04/09/2020

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Document Control

Version	Date	Prepared by	Reviewed by	Approved by
D1	14/08/2020	Pearl Ahrens	David Watson	Victoria Balboa
Description	Draft for Client / Project Team review and comment			
F1	04/09/2020	Pearl Ahrens	David Watson	Victoria Balboa
Description	Final draft for submission			

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Appendix C Healthy Streets Design Check
Appendix D Active Travel Routes Audit
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1 Introduction

General

1.1 This Transport Assessment has been prepared by Pell Frischmann to accompany an application for full planning permission being submitted by the Applicant, Senior Living Urban (Uxbridge) Limited (Guild Living), to the London Borough of Hillingdon (LBH). The proposal is for a comprehensive redevelopment of the site comprising demolition of existing buildings to provide residential care accommodation (C2), café and nursery (E), car parking, landscaping and associated works.

1.2 LBH act as the local planning and highways authority. The application is referable to the Mayor of London and therefore TfL have been consulted as regional highways authority.

1.3 The schedule of accommodation and GIA of development use classes is shown in **Table 1-1**.

Table 1-1: Schedule of Accommodation

Use Class	GIA (sqm)	Units
Guild Living Residences (C2) Guild Care Suites (C2) Guild Care Residences (C2)	11,276 654 391	161 26 7
Nursery (E)	319	-
Café (E)	152	-
Restaurant/bar (E)	368	-
Wellness Centre (D2)	303	-
Total	**13,463**	**194**

Source: Marchese & Partners

1.4 An indicative map showing the site location is shown below in **Figure 1.1**.

Figure 1.1: Indicative Site Location



Source: Open Street Maps (2020) with Pell Frischmann annotations

1.5 The scope of the report has been discussed with both LBH Highways on 22nd July 2020 and with TfL Spatial Planning on 3rd July 2020 and 5th August 2020.

1.6 The report has been prepared with due consideration given to national, regional and local policy and has been prepared in conjunction with TfL Healthy Streets TA guidance (June 2019). As such the structure of this report is as follows:

Chapter 1 – Introduction

Chapter 2 – Transport Planning for People

Chapter 3 – Site and Surroundings

Chapter 4 – Active Travel Zones

Chapter 5 – London-wide Network

Chapter 6 – Construction

Chapter 7 – Conclusion

1.7 The following Policy documents have been referenced in the production of this TA:

- *The National Planning Policy Framework (NPPF) (2019);*
- *The Intend to Publish London Plan (2019);*
- *Hillingdon Local Plan Part 1 - Strategic policies (adopted November 2012)*
- *Hillingdon Local Plan: Part 2 – Development Management Policies and Site Allocations and Designations (adopted January 2020)*
- *Hillingdon Air Quality Action Plan, 2019-2024.*

Healthy Streets, London Plan Vision Zero (the Mayor's Transport Strategy) and Hillingdon Local Plan

Healthy Streets

1.8 The proposed development will align with TfL's core principles of healthy streets and active travel. Healthy Streets is an approach for creating fairer, sustainable and attractive urban spaces. The primary aim is to create an area which, through design (in its widest sense) promotes feelings of safety and security, with numerous places for people to visit and things for them to do, alongside ensuring the area is somewhere that people want to spend time.

1.9 Compliance with these principles calls for the design of streets to ensure they are readily accessible for all users and easy to cross and navigate, ensuring that local infrastructure promotes walking, cycling and public transport over car use. The principle area within the red line boundary, where this policy will be considered, is the design of the internal road and open square.

1.10 This development complies with the Healthy Streets agenda in its pedestrian and cycle access arrangements, and through its location near to Uxbridge Underground Station and adjacent to many bus stops and a permeable neighbourhood.

1.11 The proposed development will help deliver the Healthy Streets agenda by reducing the number of vehicle trips to the site and creating a new publicly accessible green open space in Uxbridge town centre. These design proposals will make **people feel relaxed** which is Healthy Streets Indicator 7 and include **places to stop and rest** which is Healthy Streets Indicator 6.

1.12 In addition, the proposed development will help **people choose to walk, cycle and use public transport** by its ease of access to bus stops and wide pavements on the surrounding streets. The routes chosen to nearby public infrastructure (parks, train stations, town centre, doctor's surgery) are all walking routes of a high standard.

1.13 The location of the proposed development adjacent to the high street enables the masterplan to incorporate a high quality pedestrian route to the High Street. This means **people feel safe** when entering and leaving the development, which is Healthy Streets Indicator 4.

1.14 Further details on how this development meets the Healthy Streets agenda are provided in the Healthy Streets designers' check in Chapter 3 of this TA.

'Intend to Publish' Draft London Plan (December 2019)

1.15 Further details on how this development meets the Healthy Streets agenda are provided in the Healthy Streets designers' check in Chapter 3 of this TA.

1.16 The principle of the development of this site comes forward in the context of paragraph 4.1.3. of the Intend to Publish London Plan (December 2019), which states:

1.17 Transport is central to this vision, as paragraph 1.2.4. of the Intend to Publish London Plan confirms:

"*Making the best use of land means directing growth towards the most accessible and well-connected places, making the most efficient use of the existing and future public transport, walking and cycling networks. Integrating land use and transport in this way is essential not only to achieving the Mayor's target for 80 per cent of all journeys to be made by walking, cycling and public transport, but also to creating vibrant and active places and ensuring a compact and well-functioning city*."

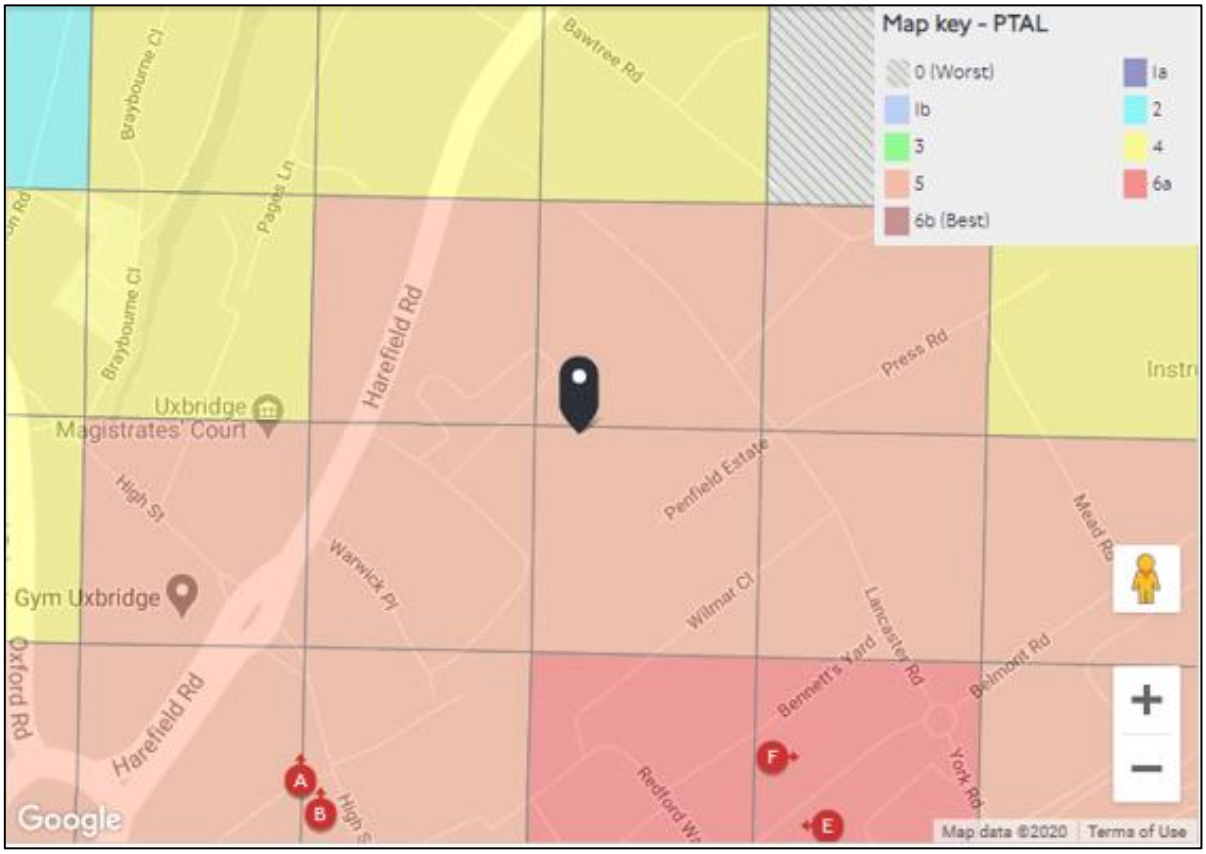
1.18 The proposed development is able to take advantage of a high level of public transport accessibility of the site, with a Public Transport Accessibility Level (PTAL) of 5 ('Very good') (0 being the lowest and 6b being the highest), and a high level of local pedestrian and cycling infrastructure as this report will set out. This allows for a highly sustainable development to be delivered at the site which takes account of Healthy Streets, the Mayor's Transport Strategy, the London Plan and the Lambeth Local Plan.

Public Transport Accessibility Levels (PTALs)

1.19 The site is well connected to local public transport networks, as indicated in the site's Public Transport Accessibility Level (PTAL) rating of 5, indicating a 'very good' level of accessibility. The site's area covers approximately three squares of the PTAL map, all of which are rated '5'.

1.20 The site is a good opportunity for this development because of its location close to local facilities and public transport. The PTAL score for the site is 5 and this is shown in **Figure 1.2**.

Figure 1.2: PTAL Map



Source: Transport for London (2020)

1.21 The PTAL Output report is available at **Appendix A**.

Vision Zero Action Plan (in the Mayor's Transport Strategy)

1.22 The Mayor's Transport Strategy sets out an ambition for 80% journeys to be made by sustainable modes - public transport, walking and cycling by 2041. This is supported by tackling the dangers that tragically result in road collisions, with lives lost, serious injuries sustained, and the fear of these dangers discouraging walking and cycling.

1.23 The Vision Zero Action Plan focuses upon reducing road danger, including deaths and injuries, on London's roads and streets. This aims to make London a safer and healthier place that promotes Active Travel.

1.24 To achieve this the programme adopts a Safe System approach by considering the following principles:

1. People make mistakes, so our transport system needs to accommodate human error and unpredictability
2. There are physical limits to what the human body can tolerate. Our transport system needs to be forgiving, so that the impact of a collision is not sufficient to cause fatal or serious injury
3. All those with a role in designing, building, operating, managing and using our streets have a responsibility to reduce danger

1.25 The development layout considers how safety can be maximised. In particular the design of the development has focused on minimising vehicle movements within the centre of the site where the active frontages of commercial units and residential access integrate and a high-quality place of people is provided with pedestrians and cyclists prioritised and protected.

Hillingdon Local Plan

1.26 Hillingdon Local Plan's Part 2: Development Management Policies acknowledges the increasing need for elderly care facilities (Paragraph 4.25.), and its Policy DMH 8: Sheltered Housing and Care Homes states that:

A) "The development of residential care homes and other types of supported housing will be permitted provided that:

i) it would not lead to an over concentration of similar uses detrimental to residential character or amenity and complies with Policy DMH 4: Residential Conversions;

ii) it caters for need identified in the Council's Housing Market Assessment, in a needs assessment of a recognised public body, or within an appropriate needs assessment and is deemed to be responding to the needs identified by the Council or other recognised public body such as the Mental Health Trust;

iii) the accommodation is fully integrated into the residential surroundings; and

iv) in the case of sheltered housing, it is located near to shops and community facilities and is easily accessible by public transport.

B) Proposals for residential care establishments which fall under Use Class C2 must demonstrate that they would provide levels of care as defined in Article 2 of the Town and Country Planning (Use Classes) Order 1987 (as amended)."

1.27 The development proposals relating to this TA are in line with this Policy.

1.28 Hillingdon Local Plan's Part 2: Development Management Policies acknowledges the need for nurseries amongst community infrastructure (Paragraph 7.2.), and its Policy DMCI 2: New Community Infrastructure states that:

A) "Proposals for the refurbishment and re-use of existing premises for community facilities will be supported.

B) Proposals for the provision of new community facilities will be supported where they:

i) are located within the community or catchment that they are intended to serve;

ii) provide buildings that are inclusive, accessible, flexible and which provide design and space standards that meet the needs of intended occupants;

iii) are sited to maximise shared use of the facility, particularly for recreational and community uses; and

iv) make provision for community access to the facilities provided.

C) New cultural facilities that are expected to attract significant numbers of visitors should be located in Town Centres."

1.29 The development proposals relating to this TA are in line with this Policy.

2 Transport Planning for People

2.1 The purpose of this chapter of the Transport Assessment is to set out who the development is for, when they will travel and why. This will set the scene for the remaining parts of the report as it will inform thinking around how the development will need to be configured to meet the needs of the future generations.

2.2 Applying assumptions based on the Transport Classification of Londoners report results in a development catering for a wide range of site users. Each land use is discussed below.

Later living community Residents

2.3 Characterised as land use category C2 (residential Care Home), there are three types of care offerings inside the building:

- **Guild Living Residences** (GLR) – Provides care in a style that can respond flexibly to increasing need while helping the individual to retain their place within their existing community. The units require tenancy agreements and are restricted to over 65s (unless they have a partner who will also be living in the accommodation). A minimum of 2.5 hours a week of personal care/support will be provided.
- **Guild Care Residences** (GCR) – Functions as traditional care home accommodation and personal care and accommodation are provided together as a package. The units are available to rent and are restricted to over 65s (unless they have a partner who will also be living in the residences). Typically, there will be at least 3 hours of care per day for those with mobility, nursing or cognitive needs, but could also include companionship and company.
- **Guild Care Suites** (GCS) - Functions very similar to GCR with an added level of care. End of life needs can be managed here, as can nursing and dementia needs. The units are restricted to over 65s (unless care is required for under 65s).

2.4 The Transport Classification of Londoners report's elderly persons segment, 'Detached Retirement', is fairly specific and does not adequately cover the differing travel profiles of the expected staff, for the restaurant/bar, wellness centre and café on the site. However, it is the closest description of the majority of the residents.

2.5 It is expected that all types of residents in the later living community will receive visitors, from Uxbridge and from surrounding towns, as they will maintain connections with family and friends. The Transport Classification of Londoners Report puts the most common segments living in Hillingdon at:

- Detached retirement – 'Empty nest'/retired, Very high car, Very low levels of change (31%)
- Settled suburbia – Lower income families, High car, Below average level of change (30%)
- Suburban moderation – Families with children, High car, some bus, Average level of change (26%)

2.6 The occupants of the Guild Living Residences will have likely downsized from larger houses and will be accustomed to having access to a car. It is therefore considered important for them to retain their independence by providing them with a parking space. However, as their personal needs change, they may well give up their car in the future. The site has been selected because it is located in area with good accessibility to other modes which provides the opportunity for residents and their visitors to avoid car usage if they wish.

2.7 Residents of the Guild Care Residences and Care Suites will require more care and as such will unlikely to be able to drive, as well as being less independent in terms of leaving their house unsupervised for activities such as trips to the local shops and services.

2.8 For staff, it is expected that they will come from the surrounding areas. The Transport Classification of Londoners Report puts the most common segments (excluding detached retirement, who would not work) living in Hillingdon at:

- Settled suburbia – Lower income families, High car, Below average level of change (30%)
- Suburban moderation – Families with children, High car, some bus, Average level of change (26%)
- Family challenge – Low income families, High bus, average others, Higher level of change (7%)

2.9 The staff shifts will generally be between 08:00-20:00 and 20:00-08:00 and therefore still within the hours that public transport is operating. Whilst car usage is high in the borough, it is expected that these staff trips will be using either public transport or walking / cycling as they will be relatively short local journeys and people commuting within the Borough rather than into Central London or outside of the M25.

Nursery

2.10 The nursery on the site will be operated by a nursery provider and will be run as a typical nursery accepting admissions from the general public. Parents are expected to reside in the local area, and the location of the nursery in proximity to Uxbridge Underground station has the potential to attract parents who want to drop their children off at nursery on the way to work.

2.11 The nursery is also set up to allow grandchildren of the people in the care residences to be looked after, in the same location. This facilitates easier visiting for families (and in transport terms may take some trips off the highway network), and allows the elderly and young to interact throughout the day.

2.12 Staff at the nursery are expected to come from the surrounding areas. The Transport Classification of Londoners Report puts the most common segments (excluding detached retirement, who would not work) living in Hillingdon at:

- Settled suburbia – Lower income families, High car, Below average level of change (30%)
- Suburban moderation – Families with children, High car, some bus, Average level of change (26%)
- Family challenge – Low income families, High bus, average others, Higher level of change (7%)

2.13 As previously noted, whilst car usage is high in the borough, it is expected that these staff trips will be using either public transport or walking / cycling as they will be relatively short local journeys and people commuting within the Borough rather than into Central London or outside of the M25.

Wellness Centre / Café / Bar / Restaurant

2.14 Unlike the nursery, the other ancillary uses are designed to be of use primarily by the residents in the development, although they will be open to members of the general public. Due to this, the vast majority of trips to the ancillary uses will likely be made from residents of the site.

2.15 Staff at the ancillary uses are expected to have similar travel behaviour to the nursery staff and will likely live in Uxbridge or the surrounding area. Therefore, the trips are likely to be local and either by public transport / walking or cycling.

3 Site and Surroundings

Overview

3.1 This section of the report sets out details regarding the proposed development and a review of the baseline and future conditions in the area inside the red line boundary and its immediate surroundings. The review focuses on access, public realm, servicing, and parking.

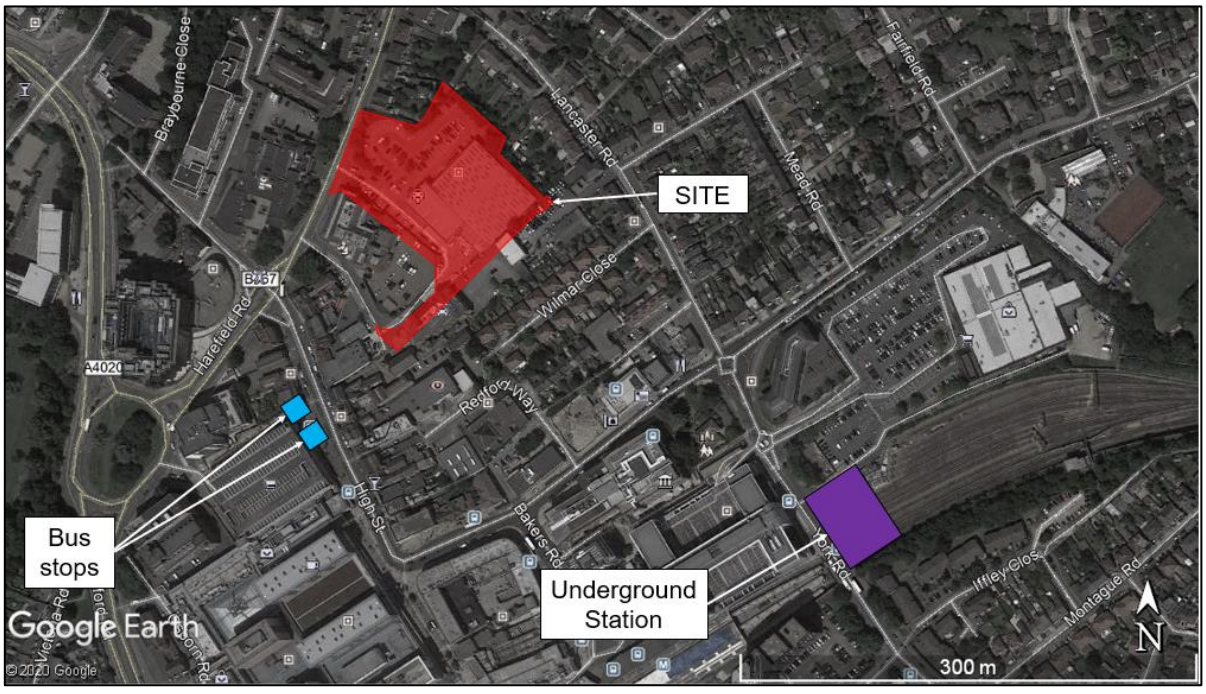
Existing Site

3.2 The site comprises two low density attached retail warehouse buildings (Use Class A1), currently occupied by Wickes (Unit 1) and Halfords (Unit 2). The buildings are set back within the site which includes a large car park situated in front of the buildings. The site benefits from existing landscaping which is generally limited to eastern and northern boundaries. The site is currently raised above Harefield Road which is fronted by a retaining wall to the car park. The site benefits from existing vehicular and pedestrian access from Harefield Road, with a separate access to a loading bay off Warwick Place.

3.3 The site is located to the east of Harefield Road and north of Warwick Place within Uxbridge Town Centre. It is bound by the rear gardens of the residential properties of Harefield Road and Lancaster Road to the north; Warwick Place and Beasley Court to the south; Penfield Estate to the east; and Harefield Road to the west.

3.4 The surrounding area is characterised by a mix of uses, services and facilities including residential, retail, civic and commercial uses. A strategic site location plan, showing the location of the site in relation to the wider area and key public transport interchanges, is provided in **Figure 3.1**.

Figure 3.1: Site Location Plan

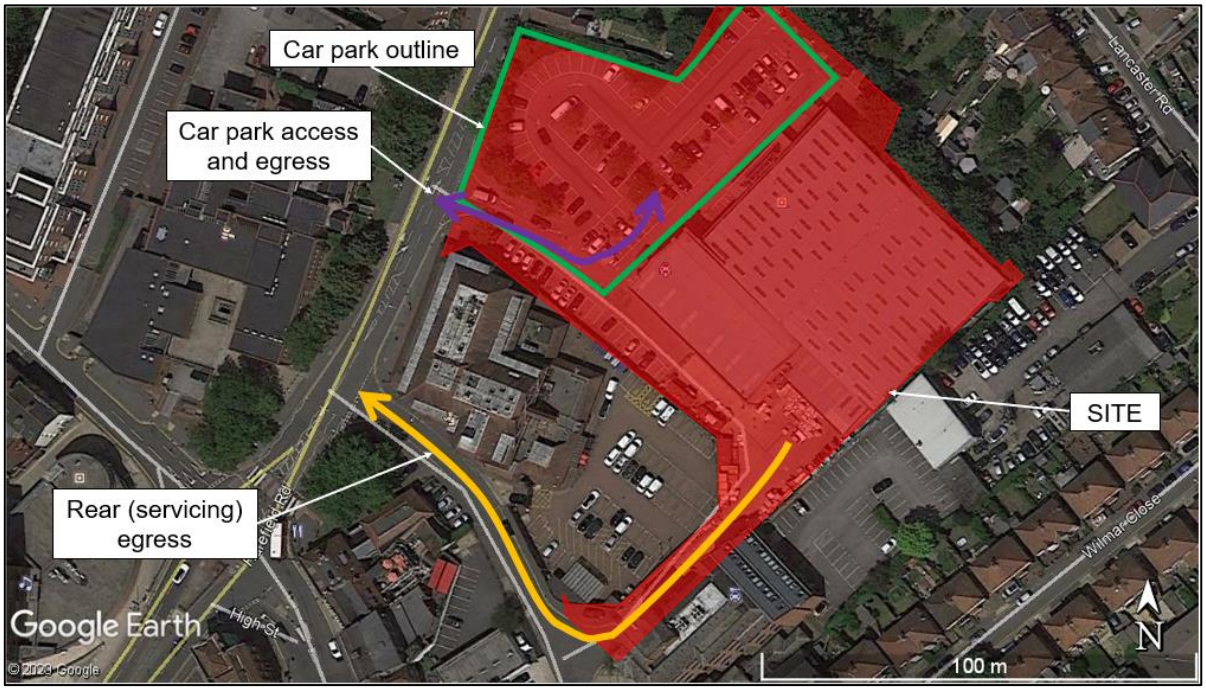


Source: Google Earth (2020) with Pell Frischmann annotations

3.5 The site currently has a two-way access/egress into its public car park, and the width of the road is therefore facilitates two-way traffic movements from Harefield Road. The rear entrance is for deliveries only and exits onto Warwick Place, which in turn connects back up to Harefield Road.

3.6 These are both shown on **Figure 3.2**.

Figure 3.2: Existing accesses and egresses



Source: Google Earth (2020) with Pell Frischmann annotations

Access to the Site

Pedestrian

3.7 Pedestrian footways and street lighting are provided on roads surrounding the site, and footways are generally of a good width and quality.

3.8 Existing pedestrian conditions provide convenient connections to local stations and local amenities in the area.

3.9 There are dedicated pedestrian crossing facilities (zebra and pelican) in the vicinity of the site which consist of dropped kerbs and tactile paving making them suitable for all users.

Cycling

3.10 As shown in **Figure 3.3**, the site is just 400 metres from the National Cycle Network, with the traffic free Route 6 stretching from Colham Green, through Uxbridge up to Rickmansworth and Watford. Although not traffic-free for the entire route, it is traffic free for a good four kilometres whilst it passes through Uxbridge.

Figure 3.3: Local section of National Cycle Network



Source: Ordinance Survey and National Cycle Network (2020) with Pell Frischmann annotations

Public Transport

3.11 The site is located within a 500 m walk of Uxbridge London Underground Station which provides access to Piccadilly and Metropolitan Line services as a terminus.

3.12 **Table 3-1** below details selected train frequencies from Uxbridge. The lines both have a good service into central London.

Table 3-1: Train frequencies from Uxbridge

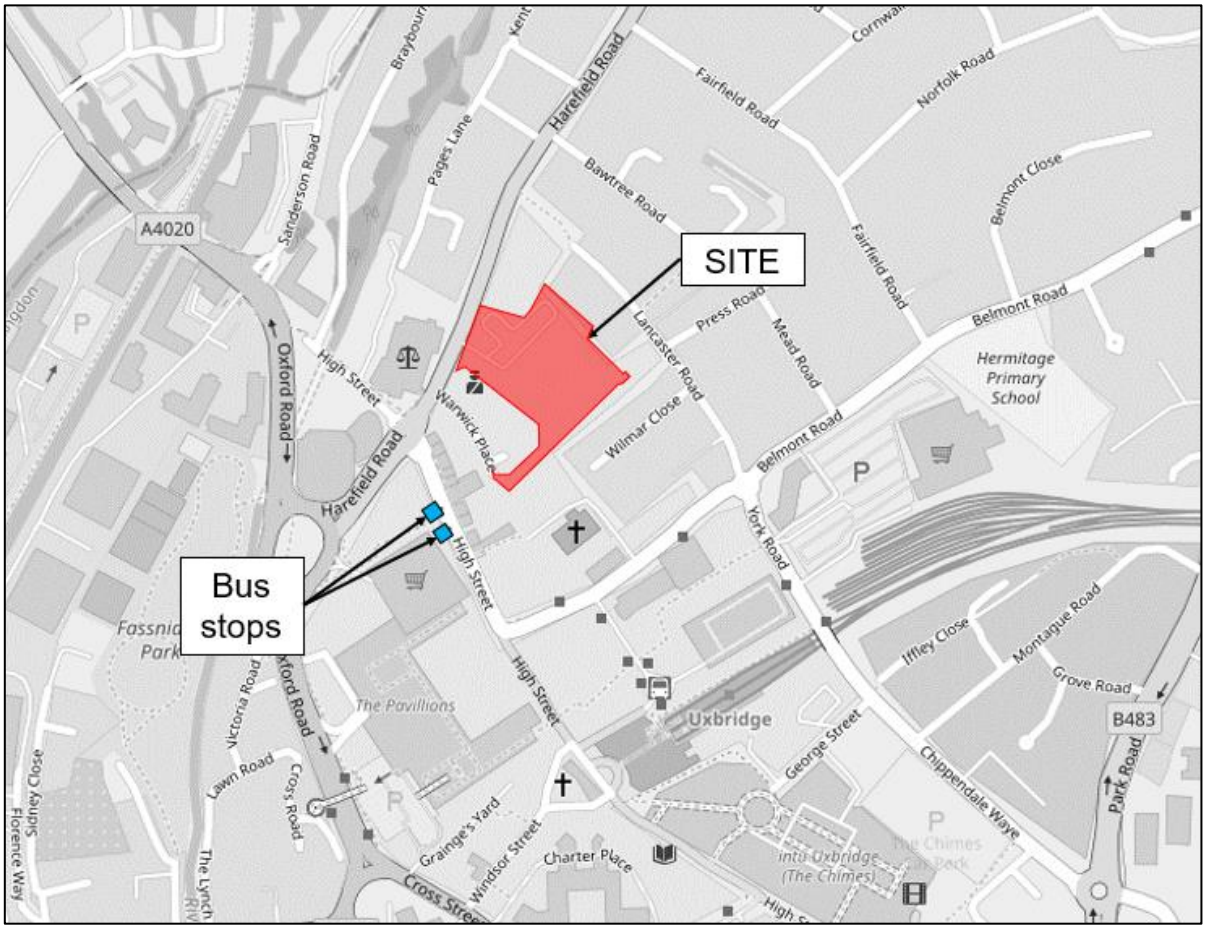
Underground Line	Destination	Frequency (minutes)				
		Weekday			Saturday 12:00-13:00	Sunday 12:00-13:00
		08:00-09:00	12:00-13:00	17:00-18:00		
Piccadilly Line	Park Royal	8-9	20	15	20	20
Piccadilly Line	Hammersmith	8-9	20	15	20	20
Metropolitan Line	Northwick Park	8-9	7.5	7.5	7.5	7.5

Source: TfL.gov.uk. Accessed 23rd July 2020. Note that these timetables were obtained during the coronavirus restricted service period and therefore may not reflect the full service available at other times.

3.13 The site is situated in close proximity to a number of bus stops providing access to a variety of destinations in the local area and wider west London.

3.14 Numerous TfL and non-TfL buses serve the pair of bus stops 'High Street' approximately 200 m south of the site. This is the closest pair of bus stops to the site, and are marked on the map in **Figure 3.4.**

Figure 3.4: Closest Bus Stops to the Site



Source: OpenStreetMap (2020) with Pell Frischmann annotations.

3.15 Bus routes serving these stops are outlined in **Table 3-2** below, which also indicates the frequency of local bus services.

Table 3-2: Bus services and frequencies

Operator	Route	Destination/s	Frequency (Minutes)				
			Weekday			Saturday	Sunday
			AM	Daytime	PM		
First Group	3	Uxbridge Station / Slough via Iver Heath	60	60	60	60	60
Carousel	101 Chiltern Hundreds	High Wycombe / Uxbridge	60	60	60	60	-
Carousel	102 Chiltern Hundreds	Heathrow / High Wycombe	90	60	60	60	60
Carousel	105 Chiltern Hundreds	Hemel Hempstead / Uxbridge	60	60	60	60	-
Transport for London	331	Ruislip Station / Uxbridge Station	15	20	30	20	30
Transport for London	427	York Road, Uxbridge / King Street, Acton	10-12	10-12	10-12	10-12	10-12
Carousel	580	Uxbridge / High Wycombe	30	120	-	120	-

Transport for London	N207	Uxbridge Station / Bloomsbury Square	Midnight – 4.30am every night: every 30 minutes				
Transport for London	U1	Ruislip Station / West Drayton Station	13-14	15	20	-	-
Transport for London	U3	Uxbridge Station / Heathrow Central Bus Station	20	20	20	20	20
Transport for London	U4	Uxbridge Station / Prologis Park, West Drayton	15	15	20	15	15
Transport for London	U7	Lombardy Retail Park, Hayes / Uxbridge Station	30	30	30	30	?
Transport for London	U9	Uxbridge Station / Harefield Hospital	30	20	30	20	60
Transport for London	U10	Glenhurst Avenue, Ruislip / Uxbridge Station	60	60	60	-	-

Source: TfL.gov.uk and Carousel buses.co.uk. Accessed 28th May 2020. Note that these timetables were obtained during the coronavirus restricted service period and therefore may not reflect the full service available at other times. Note that Carousel Buses' full service resumes on most routes from 1st June 2020.

3.16 The above public transport networks combine to give the site its PTAL score of 5, which is considered to be a 'very good' level of public transport accessibility.

3.17 In addition, Paragraph 4.8 of the Hillingdon Local Plan Part 1 states that:

> "*Transportation improvements are key to ensuring the future success of Uxbridge as a Metropolitan Centre. An enhanced transport interchange is proposed, including improved underground links to the capital*."

3.18 And the same document's Chapter 9 on Transport and Infrastructure states that Strategic Objective 22 is to:

> "*Promote efficient use of public transport and particular, the enhancement of Underground services to Uxbridge and faster services to central London*."

Vehicular access and local highway network

3.19 The primary vehicle access point to the site is off the south side of Harefield Road and enters into the large car park at the front of the existing industrial units. An image is displayed in **Figure 3.5**. This is used by the public on foot, in cars and on cycles who are accessing the industrial units and exiting the car park, and by deliveries and servicing vehicles.

Figure 3.5: Existing site entrance seen from south-western footway



3.20 A secondary vehicle access is located behind the existing buildings and towards the south side of the site. This is a back entrance used for deliveries and servicing vehicles to exit the site. There is no public access. It exits onto Warwick Place, which in turn comes off Harefield Road. It is shown in **Figure 3.6** and **Figure 3.7**.

Figure 3.6: Existing site egress at south of site, seen from Warwick Place



Figure 3.7: Existing site egress Warwick Place onto Harefield Road



3.21 Currently, deliveries and servicing occur at the rear of the development. It is proposed to change this traffic pattern, instead constructing a one-way through route through the site from north to south.

B467 Harefield Road

3.22 B467 Harefield Road runs along the north-west edge of the site. The existing entrance to the site is currently located along this street, but it also has residential frontage. The proposed access will also meet Harefield Road at the same location.

3.23 High quality footways run along the north-west and south-east sides of the carriageway, becoming raised from the carriageway and separated by a fence approximately 280 m north of the site access. The carriageway operates a speed limit of 40mph along the site frontage.

3.24 There is a controlled parking zone (CPZ) operating in the area around the site.

3.25 Double yellow lines operate on both sides of the carriageway near the current site access, restricting parking at all times. Just north of the current site access, the south-east side commences a single yellow line and the parking bays commence on the north-west side.

High Street

3.26 Uxbridge High Street provides retail frontage and parking bays on both sides of the carriageway and bus stops accommodated on wide footways. It is a two-way street connecting Harefield Road to Uxbridge Underground Station.

3.27 The southern part of the High Street is pedestrianised, meaning no traffic is present on the immediate approach to the station.

Belmont Road

3.28 Belmont road meets the east side of the High Street and runs east-west almost along the southern edge of the site. At its eastern end, it is wider than High Street, with one lane in each direction and extra width on each side for bus stops and parking bays. Further west, nearer the proposed egress road from the site, there are double yellow lines on the northern side of the road and parking bays on the southern side.

3.29 There are footways on both sides and dropped kerbs and tactile paving at appropriate crossing points.

Summary of proposed development

3.30 The proposal is for a comprehensive redevelopment of the site comprising demolition of existing buildings to provide residential care accommodation (C2), café and nursery (E), car parking, landscaping and associated works.

3.31 The schedule of accommodation and GIA of development uses is shown in **Table 3-3**. Note that ancillary uses are included in parking calculations.

Table 3-3: Schedule of Accommodation

Use Class	GIA (sqm)	Units
Guild Living Residences (C2) Guild Care Suites (C2) Guild Care Residences (C2)	11,276 654 391	161 26 7
Nursery (E)	319	-
Café (E)	152	-
Ancillary to C2 use		
Restaurant/bar	368	-
Wellness Centre	303	-
Total	**13,463**	**194**

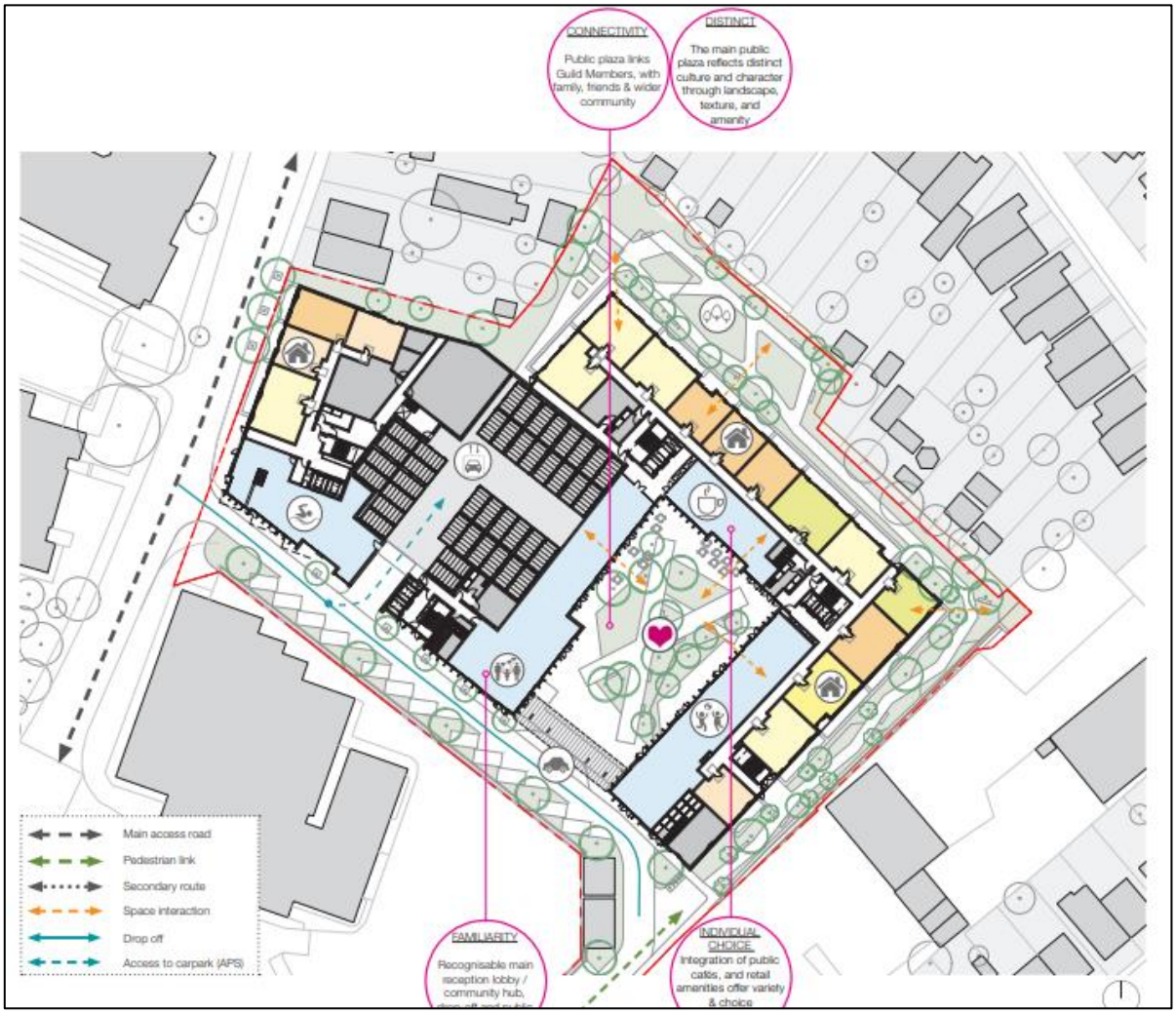
Source: Marchese & Partners

3.32 There are a number of key benefits associated with the development proposals and these include:

- A new publicly accessible route through the site from Harefield Road to Warwick Place (linking existing pedestrian infrastructure to the High Street) has been designed into the scheme. This will increase passing pedestrian traffic on the site contributing to a pleasantly busy atmosphere and increasing feelings of safety for site users, whilst improving pedestrian and cyclist connectivity for all users of Uxbridge town centre.
- The one-way, shared surface access road through the site will slow traffic passing through the site. This will make the site a pleasant place with low traffic numbers travelling at slow speeds.
- The new use classes on the site will reduce the number of HGVs servicing the site compared to the existing use, as well as reducing the number of vehicle trips. For the proposed site uses, the biggest vehicle expected to regularly service the site is a box van (aside from the usual bin lorry).

3.33 The proposed ground floor layout is illustrated in **Figure 3.8** alongside the main vehicle, pedestrian and cyclist accesses into the site.

Figure 3.8: Masterplan image and accesses



Source: Marchese & Partners

Access

Pedestrian and Cycle

3.34 Hillingdon Local Plan's Part 2: Development Management Policies' Policy DMT 5: Pedestrians and Cyclists states that:

> "A) Development proposals will be required to ensure that safe, direct and inclusive access for pedestrians and cyclists is provided on the site connecting it to the wider network, including:
>
> i) the retention and, where appropriate, enhancement of any existing pedestrian and cycle routes;
>
> ii) the provision of a high quality and safe public realm or interface with the public realm, which facilitates convenient and direct access to the site for pedestrian and cyclists;
>
> iii) the provision of well signposted, attractive pedestrian and cycle routes separated from vehicular traffic where possible; and
>
> iv) iv) the provision of cycle parking and changing facilities in accordance with Appendix C, Table 1 or, in agreement with Council."

3.35 The proposed development's pedestrian and cycle access is in line with this Policy, as the main pedestrian and cyclist access will be via a shared surface. A segregated 1.2 m wide footway on the north-west side of the access road provides a refuge for pedestrians when there are vehicles on the road.

3.36 The pedestrian footway is a minimum 1.2 m in width throughout, and the crossover into the car park has a dropped kerb and tactile paving. There are some bollards along the boundary between the pedestrian strip and the carriageway, to prevent vehicles mixing with pedestrians. There is also a change in surfacing which distinguishes the different uses.

3.37 In addition, pedestrians are able to walk around the entire circumference of the buildings, although public access is restricted to the residents' only garden area at the northern corner of the site. However, the public will have access to the courtyard just off the access road which will be a pleasant place to stop and rest just near to the town centre.

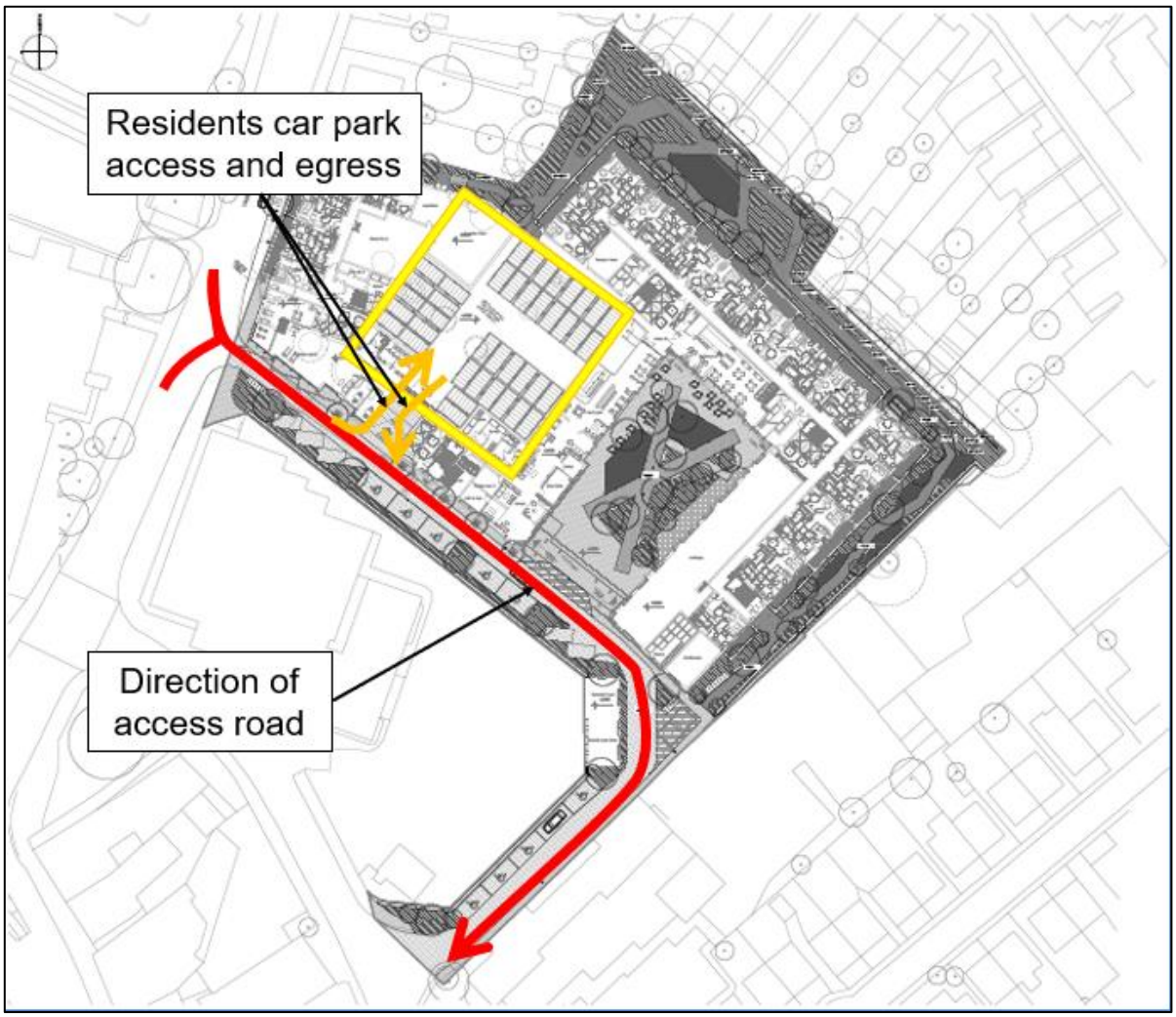
3.38 The existing gradient of the access road will be eased as part of the development proposals, to better incorporate the needs of cyclists, wheelchair users and mobility scooter users.

3.39 The wider pedestrian and cycle connections are discussed further in Chapter 4 of this TA.

Vehicle

3.40 The vehicle access strategy overall is a one-way private access road running through the site, with the access point on Harefield Road and the egress point onto Warwick Place. This is shown in **Figure 3.9**.

Figure 3.9: Vehicle Access



Source: Marchese & Partners with Pell Frischmann annotations

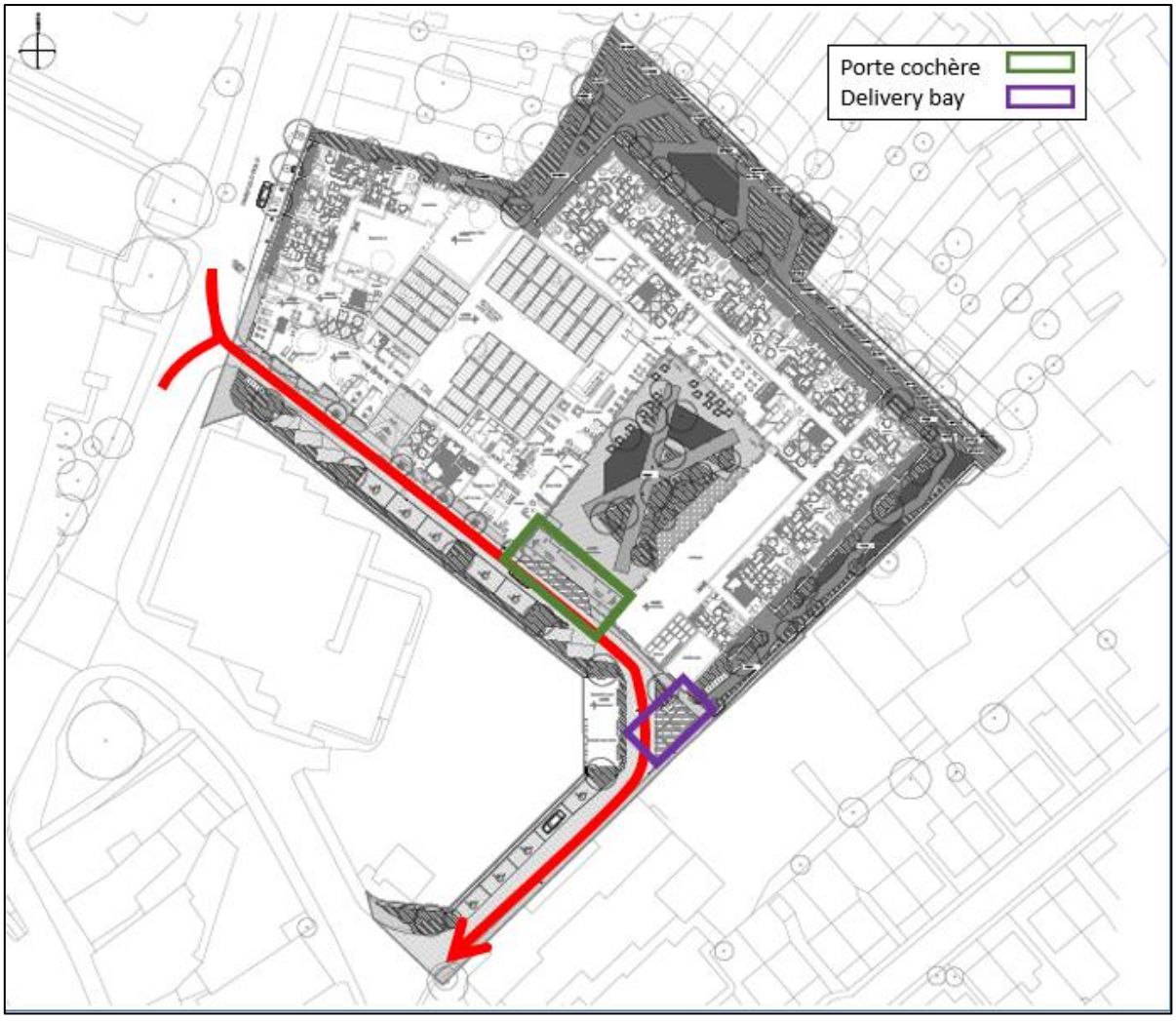
3.41 The vehicle access point will remain in the same location as the existing vehicle access point, however it will be refigured to one-way, with localised narrowing at the junction. This will reduce the width of the carriageway and make it easier for pedestrians on Harefield Road to cross compared with the existing two-way access.

3.42 The vehicle egress point will remain in the same location as the existing servicing vehicle egress point, however it will allow public access and be refigured and landscaped accordingly.

3.43 Once a vehicle has entered the site, there is a formal place to pull in and drop off passengers or deliveries in the form of a porte cochère in front of the courtyard area. For larger delivery and servicing vehicles, there is a delivery bay located at the eastern end of the access road (marked on **Figure 3.10**).

3.44 **Figure 3.9** above also shows the location of the car park access, however this will only be used by staff who will park the cars under a valet arrangement. The parking arrangement is described in more detail under car the car parking section later in this chapter.

Figure 3.10: Locations of drop-off points



Source: Marchese & Partners with Pell Frischmann annotations

3.45 The servicing strategy, including emergency access, is discussed below.

3.46 Full swept path drawings of vehicles entering and exiting the site are available at **Appendix B**.

On-site / Public Realm

3.47 The Hillingdon Local Plan Part 1's Chapter 9 on Transport and Infrastructure states that:

> "*The cycling and walking networks form part of a comprehensive transport network. Journeys by foot have reduced in recent years, while there has been only a slight increase in cycle journeys. These modes of transportation have an important role in helping to create healthier lifestyles and reduce the level of harmful emissions from vehicles*."

3.48 And Part 2 Development Management Policies' Paragraph 8.25 states that:

> "*All development proposals are required to provide good connectivity for pedestrians and cyclists and good permeability within the site where relevant. Connections are required to be of high quality, with safety and ease of access in mind. Development proposals must ensure that any existing pedestrian or cycle access is retained without deterioration to convenience or usability. Public routes must comply with the principles of Secured by Design through consultation with Hillingdon's Designing Out Crime Officer. They must comply with the principles of inclusive access and meet the requirements of the Accessible Hillingdon SPD*."

3.49 In line with this, the proposed development provides extensive public open space and safe pedestrian infrastructure. A new connection to the High Street and town centre will be provided, which increases the connectivity of the north of Uxbridge to the centre.

3.50 In addition, the area forming the perimeter of the buildings and along the entrances to the residential development have the potential to positively contribute to the public realm in the area. Proposals include a large open square containing benches, trees and green space. Trees will line the new street, providing not only increased drainage and greening but shade and shelter in very hot or rainy weather conditions.

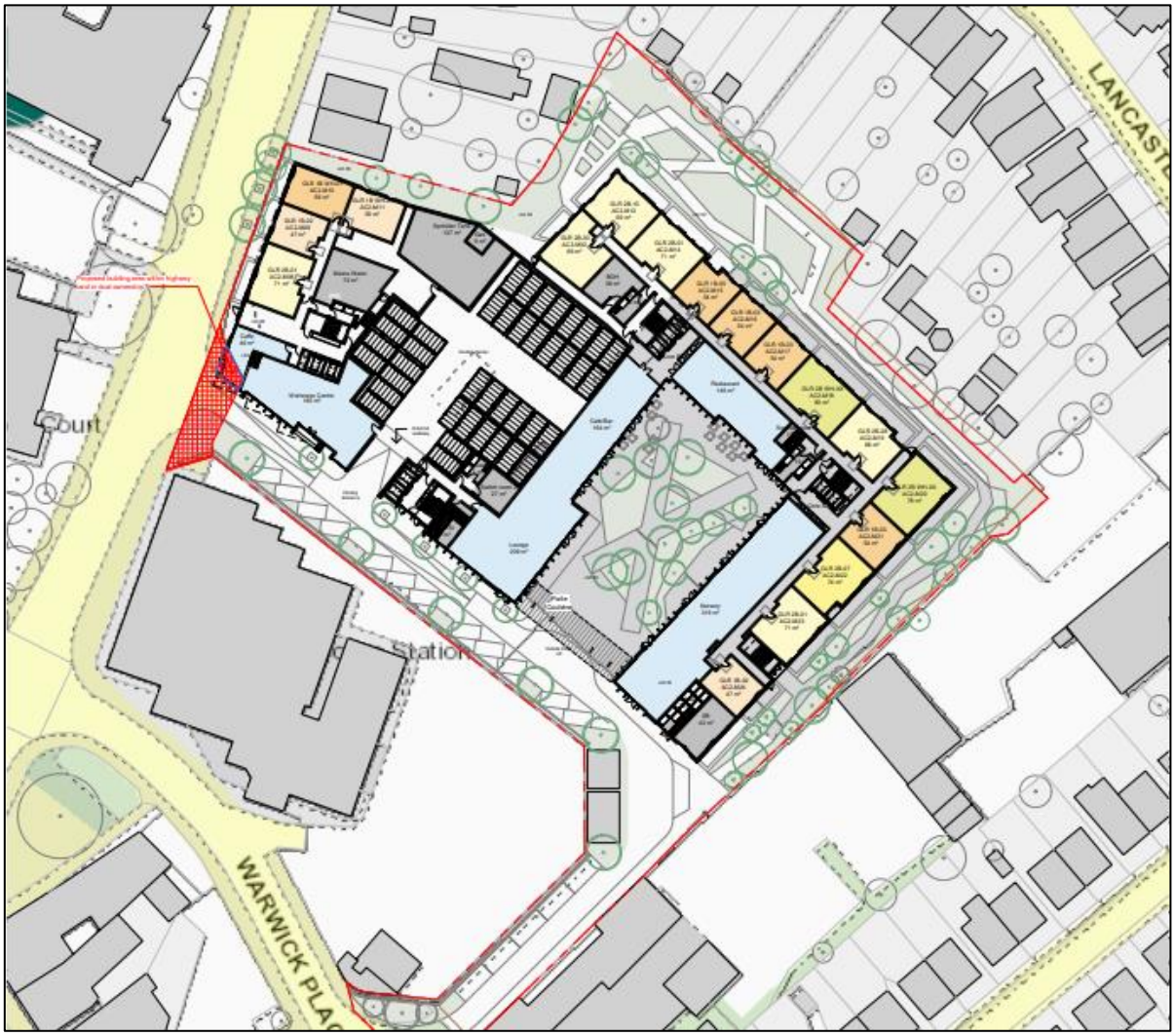
3.51 This is discussed further in the 'Healthy Streets Check for Designers' section below.

Stopping up the Adopted Highway

3.52 The existing access road is adopted highway for a short length into the site. A section of this adopted highway will be required to be stopped up for the purpose of delivering the proposed development as the proposed building line extends into the access road. This was discussed with LBH at a meeting on 22nd July 2020 and agreed as being acceptable in principle.

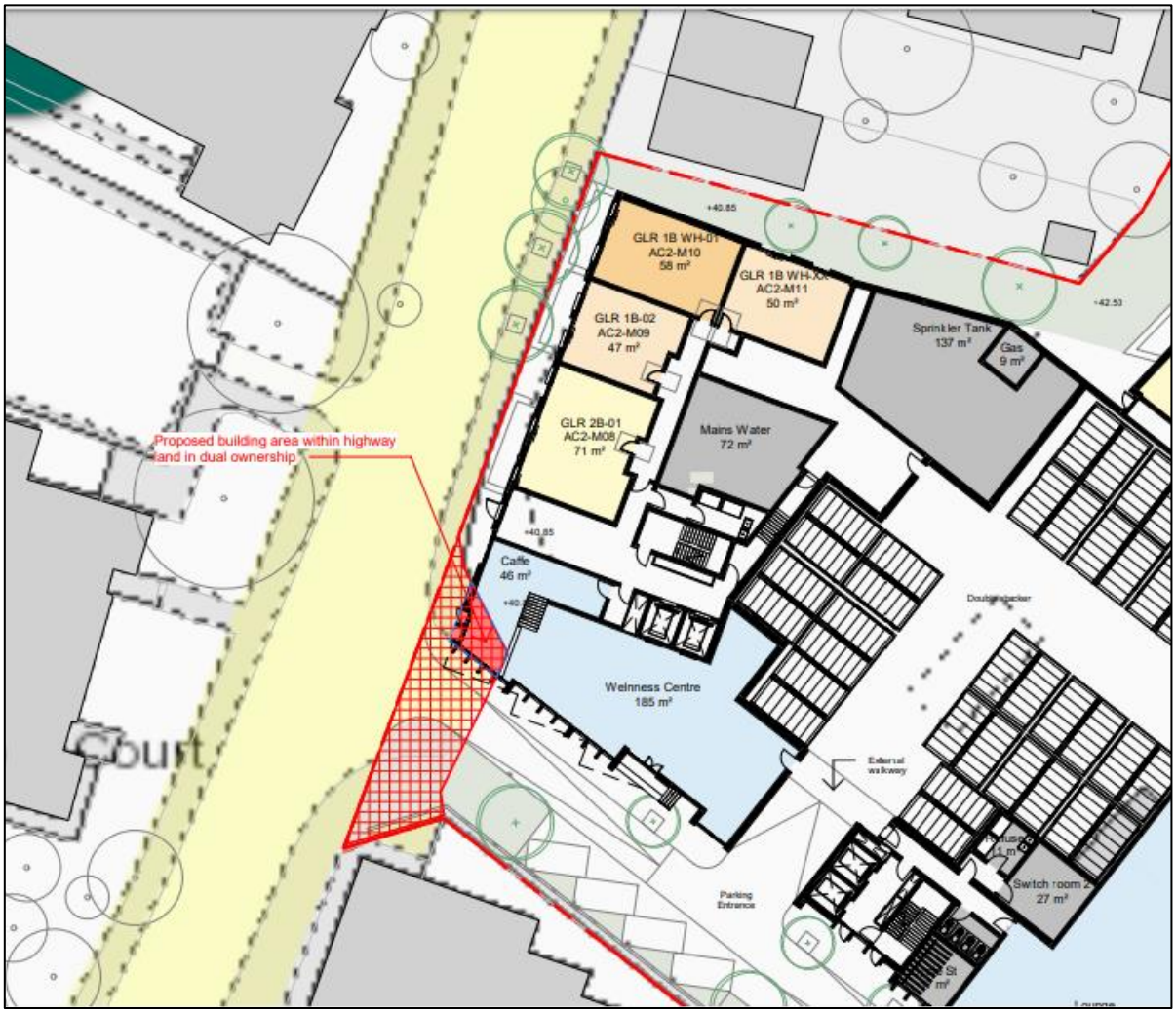
3.53 The extent of the adopted highway that sits within the red line is marked on **Figure 3.11** and **Figure 3.12** shows the area to be stopped up.

Figure 3.11: Extent of Adopted Highway



Source: Marchese & Partners

Figure 3.12: Proposed stopped-up area (close-up)



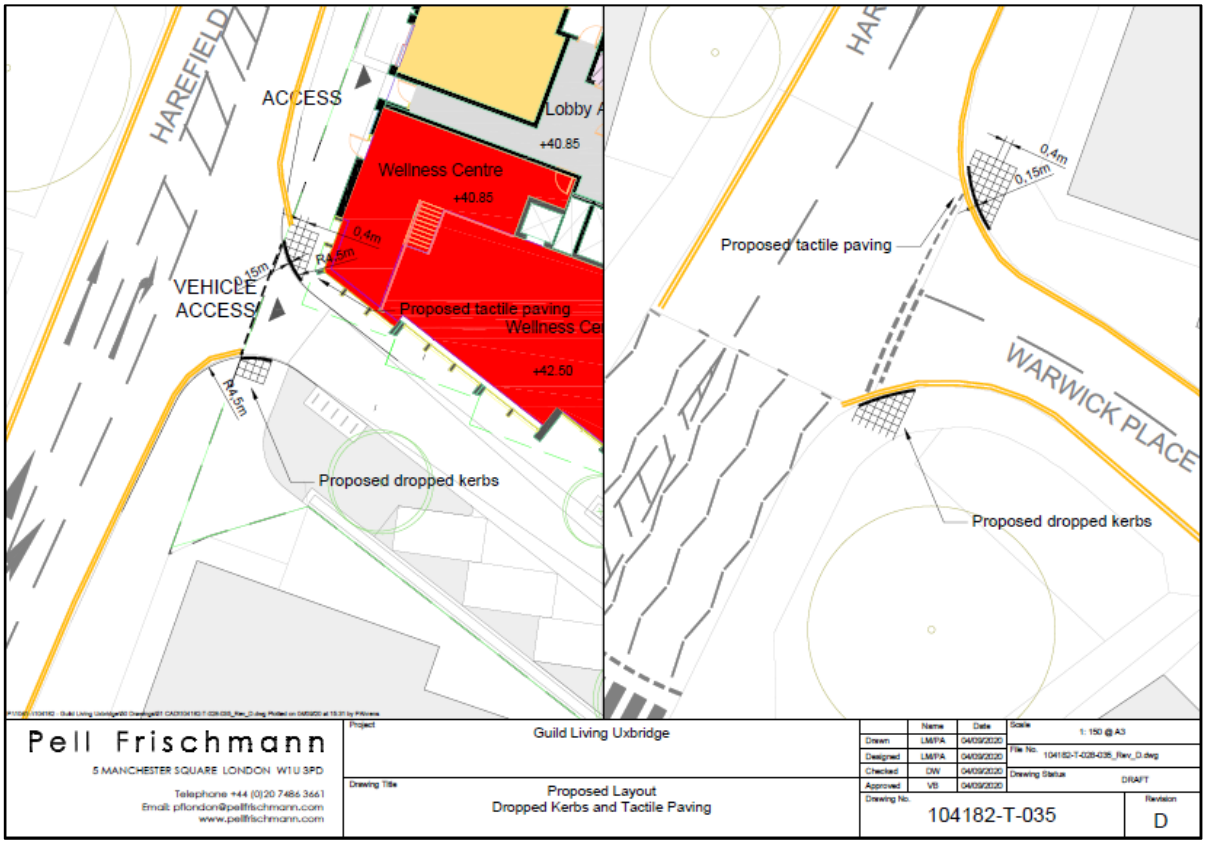
Source: Marchese & Partners

Junction improvements

3.54 Two junction improvements are proposed as part of the development: the junction of the site access road and Harefield Road, and the junction of Warwick Place and Harefield Road. The site access will be narrowed and improved dropped kerbs and tactile paving is proposed at the junction of Warwick Place and Harefield Road. Both of these schemes will improve the pedestrian experience along Harefield Road.

3.55 The proposed layout of the site access road and Harefield Road (on the left), and of Warwick Place and Harefield Road (on the right) is shown in **Figure 3.13**, and at **Appendix B**.

Figure 3.13: Proposed junction improvements on Harefield Road



Healthy Streets Check for Designers

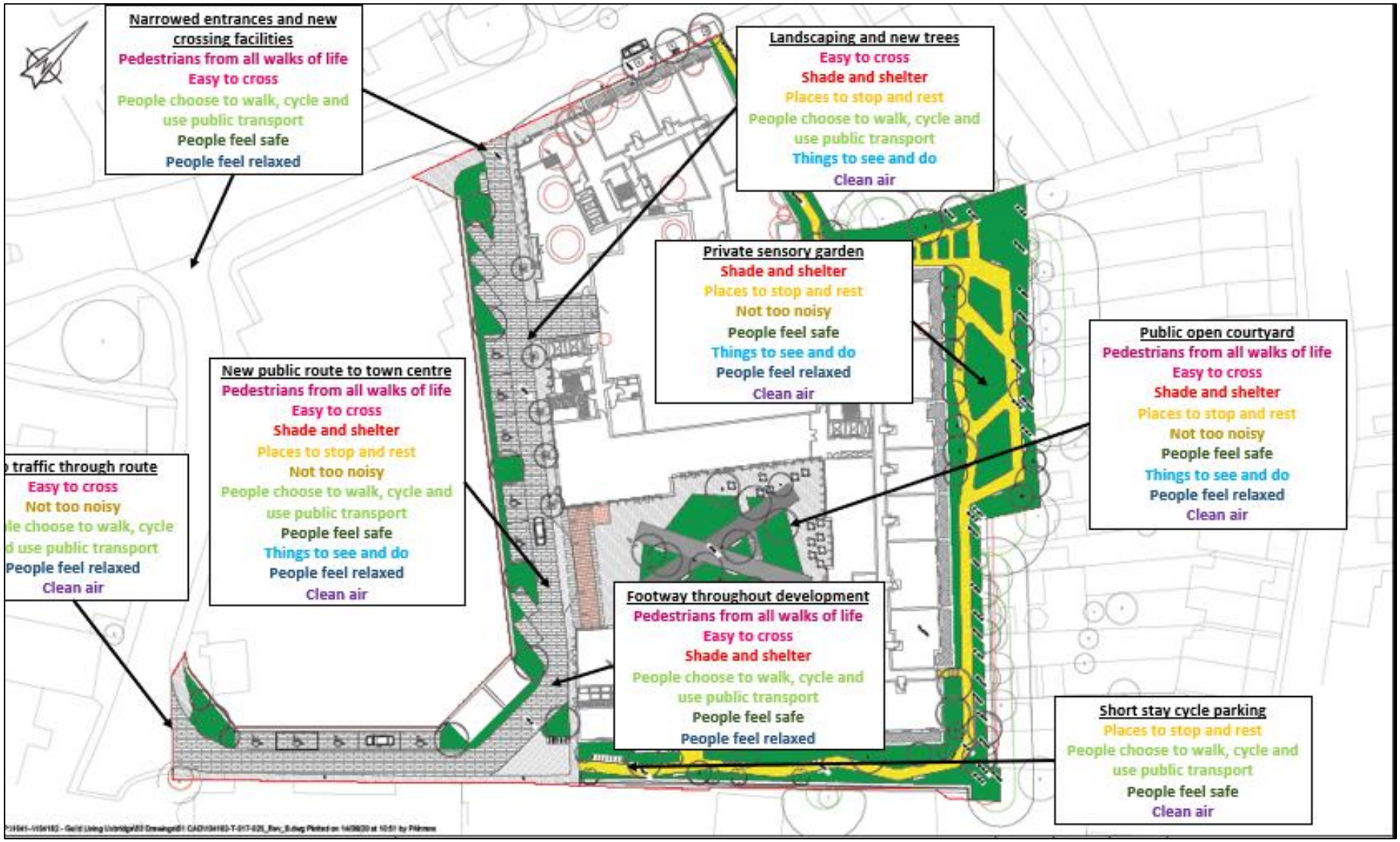
3.56 A Healthy Streets Check for Designers has been completed and a summary is below in **Figure 3.15**, the full check is available at **Appendix C**.

3.57 The primary proposal which positively contributes to the healthy street indicators is the pedestrian and cycle route into the site which will initially benefit those visiting and living within the development, although it will be publicly accessible throughout. Not only will this route provide access to the site but it will positively contribute to the healthy street indicators by increasing the quality of life of those living and working within the local area.

3.58 The changes to the public realm within the site include adding green space, trees, benches with opportunities for social integration between site users, alongside general improvements to the streetscape. The courtyard can be a pleasant place for passers-by to stop and rest on their way to the shops, or for restaurant visitors to wait while their table is being prepared.

3.59 **Figure 3.14** below highlights some of the features which have contributed to the proposed development's high Healthy Streets score.

Figure 3.14: Healthy Streets Check for Designers highlights

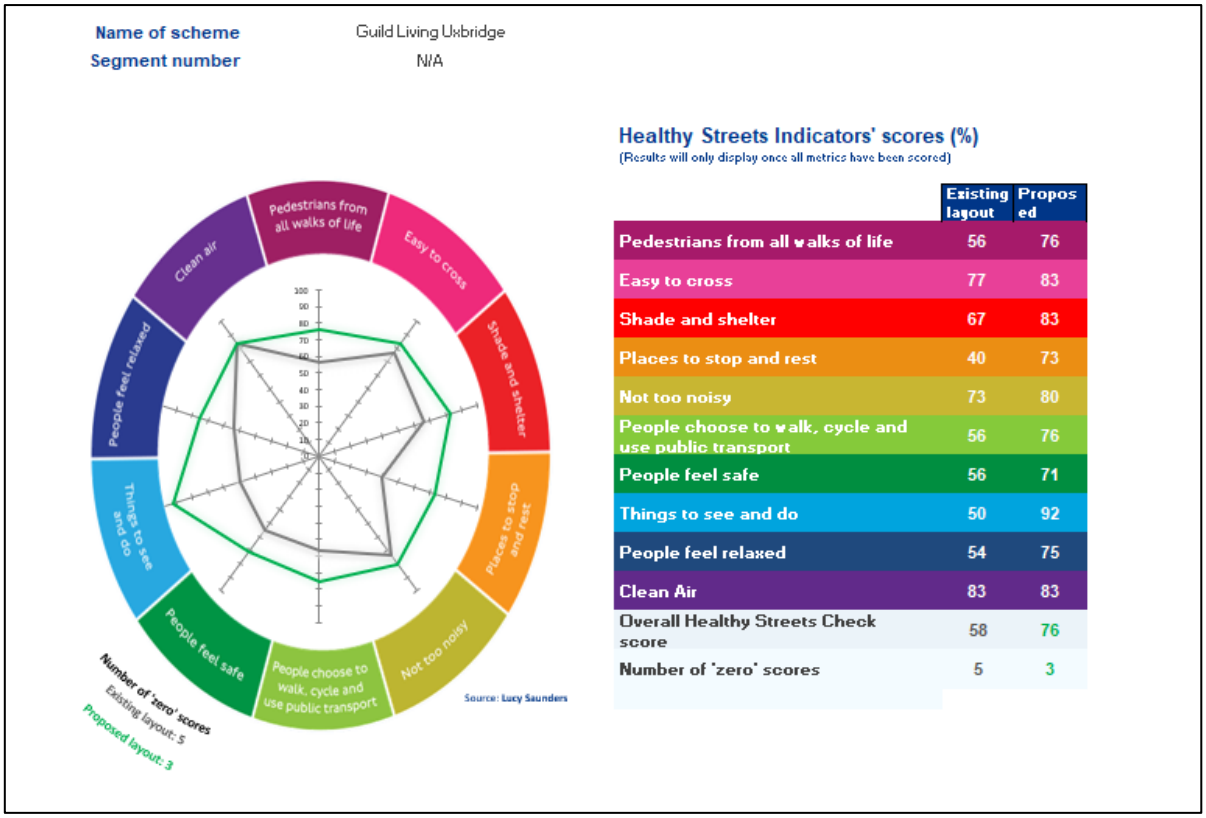


3.60 The scheme has been assessed in accordance to the Healthy Streets indicators and the proposed layout has resulted in an 18 percentage point increase in the Healthy Streets Check score from 58% to 76%.

3.61 Indicators which experience the highest improvement in score include 'Places to stop and rest' and 'Things to see and do' with an increase from 40% to 73% and 50% to 92% for each respectively. The new route to the town centre from the north of Uxbridge, the amenity provision and new public courtyard area provide things to see and do for people of all ages within the area.

3.62 Other key indicators which have positively contributed to the score include 'Shade and shelter' and 'People feel relaxed'.

Figure 3.15: Healthy Streets Check for Designers Summary



Healthy Streets Indicators' scores (%)
(Results will only display once all metrics have been scored)

	Existing layout	Proposed
Pedestrians from all walks of life	56	76
Easy to cross	77	83
Shade and shelter	67	83
Places to stop and rest	40	73
Not too noisy	73	80
People choose to walk, cycle and use public transport	56	76
People feel safe	56	71
Things to see and do	50	92
People feel relaxed	54	75
Clean Air	83	83
Overall Healthy Streets Check score	58	76
Number of 'zero' scores	5	3

Cycle parking

3.63 Note that the A1 and A3 use classes are designated E from September 2020. The Hillingdon Local Plan and London Plan have not been updated and therefore reference to the previous use class has been used to derive the cycle parking figures.

3.64 Hillingdon Local Plan's Part 2 Development Management Policies Appendix C Table 1 states:

Table 3-4: Reproduction of sections of Hillingdon Local Plan Part 2 Appendix C Table 1.

Bicycle parking **Maximum requirement** **(1 space per sqm of gross floorspace unless otherwise stated)**
A1 Food [sic]
(b) A3 Café & restaurant 1 per 20 staff + 1 per 20 customers.
Residential Institutions (Including care homes)
(a) Care homes - 1 per 3 staff

(b) Other uses – level of provision subject to appraisal.
Day care centres, pre-school play and nurseries
Level of provision subject to transport assessment.
Health Clubs Licensed Clubs and Sports Facilities Without a Licensed Club House, Swimming Pools
(a) Leisure facilities - 1 per 10 staff and 1 per 20 peak period visitors (b) Others – level subject to appraisal

Source: Hillingdon Local Plan (2020)

3.65 Using the above standards, the cycle parking would result in the numbers in **Table 3-5**.

Table 3-5: Hillingdon Local Plan Cycle Parking figures

Previous Land Use Designation	Long Stay	Short Stay	Total
C2 Later living community	7	0	7
D1 Nursery	4	0	4
D2 Wellness Centre	1	0	1
A3 Restaurant/bar	1	2	3
A3 Cafe	1	1	2
Total	**14**	**3**	**17**

3.66 As the scheme is referable to TfL, cycle parking will be provided in accordance with the Intend to Publish London Plan standards, as set out below in **Table 3-6**. The cycle parking requirement calculations split by land use are shown in **Source:** Intend to Publish London Plan (2019)

3.67 Table 3-7.

Table 3-6: Reproduction of sections of Intend to Publish London Plan cycle parking Table 10.2

Land use	Long stay	Short stay
A2-A5 financial / professional services; cafes & restaurants; drinking establishments; take-aways above 100 sqm	1 space per 175 sqm (GEA)	• rest of London: 1 space per 40 sqm (GEA)
C2 care homes / secure accommodation	1 space per 5 FTE staff	1 space per 20 bedrooms
D1 Nurseries	1 space per 8 FTE staff + 1 space per 8 students	
D2 sports (e.g. sports hall, swimming, gymnasium, etc.)	1 space per 8 FTE staff	1 space per 100 sqm (GEA)

Source: Intend to Publish London Plan (2019)

Table 3-7: Intend to Publish Cycle Parking figures

Previous Land Use Designation	Long Stay	Short Stay	Total
C2 Later living community	4	10	20
D1 Nursery	4	10	14
D2 Wellness Centre	2	4	5
A3 Restaurant/bar	3	10	13
A3 Cafe	1	4	5
Total	**14**	**38**	**52**

3.68 In order to be robust, the highest number from each column of each table has been combined to make a 'hybrid' cycle parking figure of 14 long-stay spaces and 38 short stay spaces, totalling 52 cycle parking spaces. This is shown in **Table 3-8**.

Table 3-8: 'Hybrid' cycle parking figures

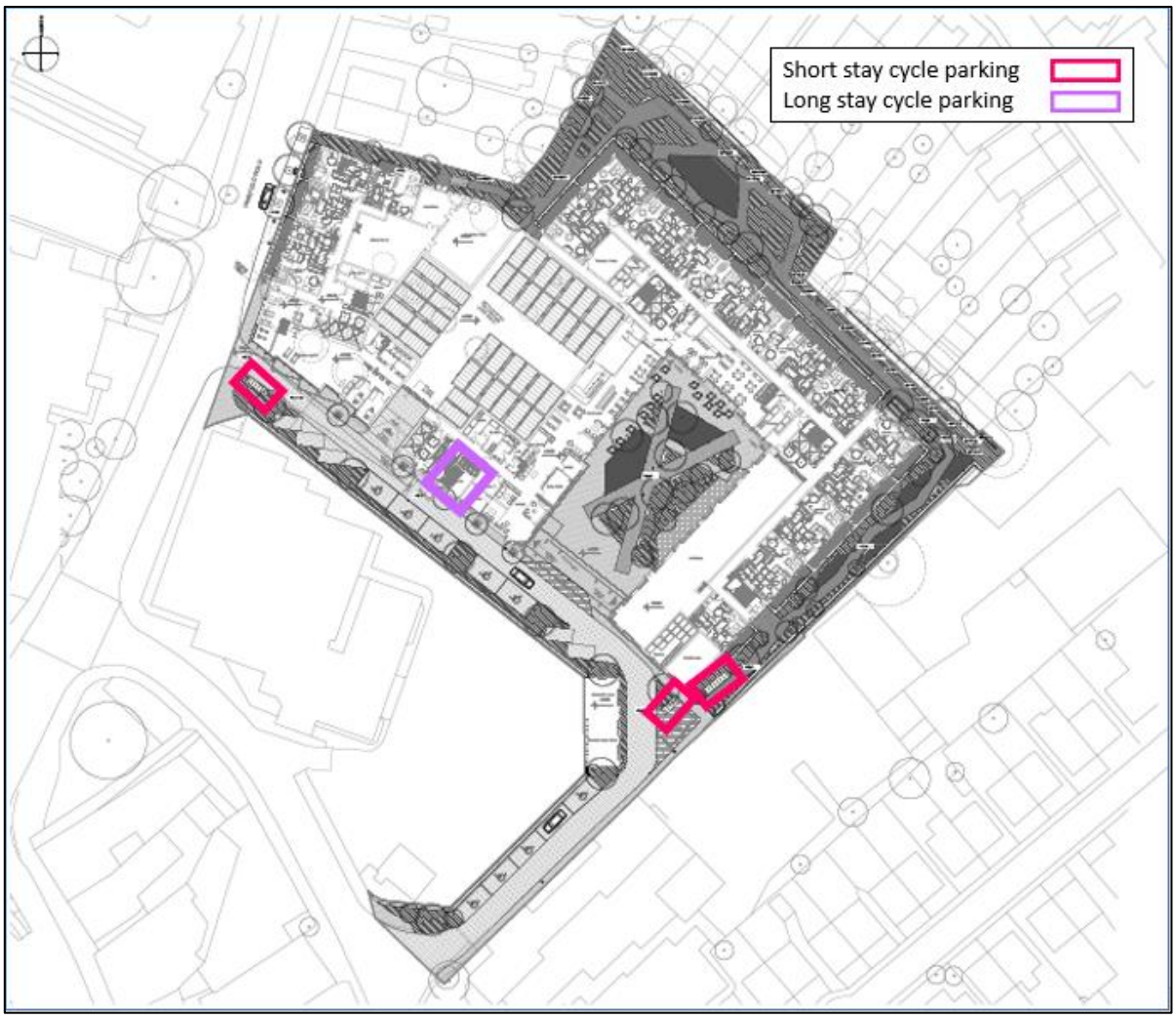
Previous Land Use Designation	Long Stay	Short Stay	Total
C2 Later living community	7	10	17
D1 Nursery	4	10	14
D2 Wellness Centre	1	4	5
A3 Restaurant/bar	1	10	11
A3 Cafe	1	4	5
Total	**14**	**38**	**52**

3.69 Both long stay and short stay cycle parking has been designed in line with the LCDS requirements.

3.70 It has been possible to overprovide the long-stay cycle parking so that 20 cycle parking spaces are provided on 10 double stackers inside the building. This exceeds the demands of either standard.

3.71 The short stay spaces will be provided within the public realm and off the public highway for convenience of use by short stay users of the proposed development. **Figure 3.16** shows the locations of short stay cycle parking provision distributed across the site.

Figure 3.16: Short and long stay cycle parking



Source: Marchese & Partners with Pell Frischmann annotations

Mobility scooter parking

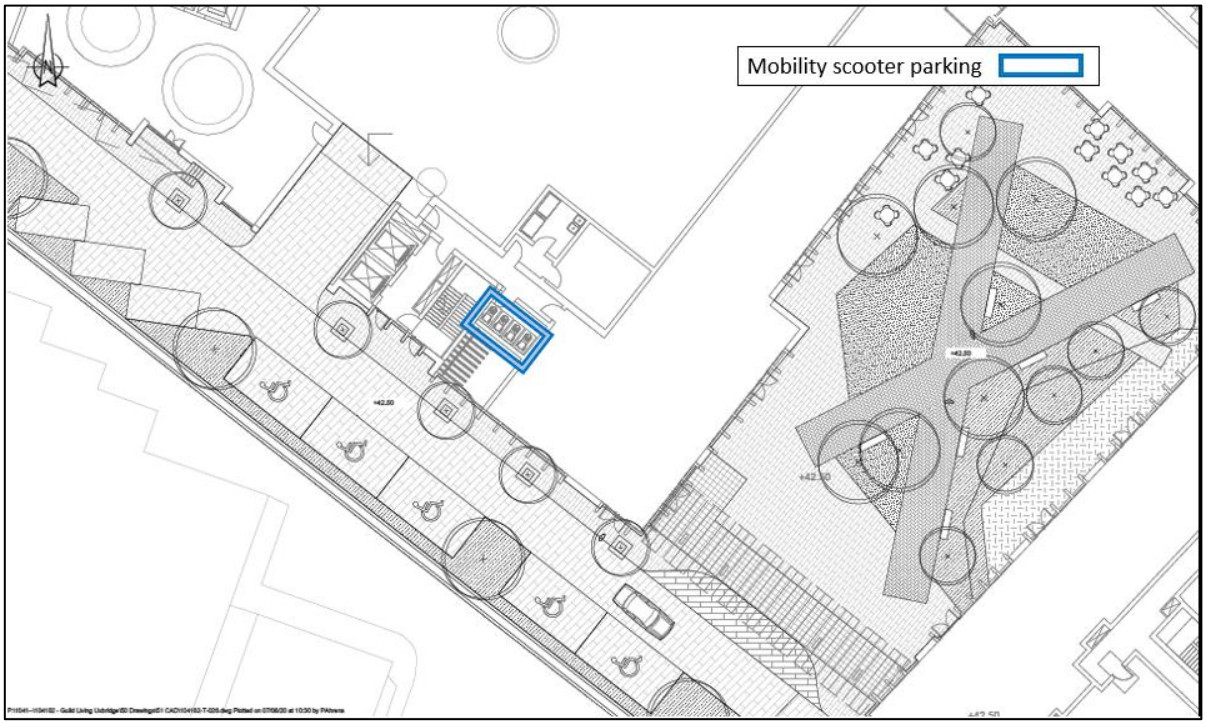
3.72 The Intend to Publish London Plan advises that for age-specific housing parking and charging spaces for mobility scooters are provided. In Policy H13 Specialist Older Persons Housing:

"B 4) suitable levels of safe storage and charging facilities for residents' mobility scooters"

3.73 It is proposed to provide 4 mobility scooter parking spaces including charging points for each. They have been designed to accommodate the needs of users in terms of charging and secure covering.

3.74 Mobility scooter parking has been located on **Figure 3.17**.

Figure 3.17: Mobility scooter parking



Source: Marchese & Partners with Pell Frischmann annotations

Car Parking

Later living community (C2) parking

3.75 The Hillingdon Local Plan Part 2: Development Management Policies states its "parking standards are based on those contained in the [2016] London Plan with some variance to address local circumstances in terms of employment sites and residential uses."

3.76 Policy DMP 6 on Vehicle parking that states

> "A) Development proposals must comply with the parking standards outlined in Appendix C Table 1 in order to facilitate sustainable development and address issues relating to congestion and amenity. The Council may agree to vary these requirements when:
>
> (a) the variance would not lead to a deleterious impact on street parking provision, congestion or local amenity; and/or
>
> (b) a transport appraisal and travel plan has been approved and parking provision is in accordance with its recommendations."

3.77 Appendix C Table 1's relevant sections are reproduced below.

Table 3-9: Reproduction of sections of Hillingdon Local Plan Part 2 Appendix C Table 1.

Car and other vehicle parking Maximum requirement
A1 Food [sic]
Parking space per sqm of gross floorspace: PTAL 6-5 Up to 550 sqm 75 With at least 1 space required for those food uses with a delivery service.
Residential Institutions (Including care homes)
Either using a transport assessment and travel plan, or 1 space per four dwelling units, minimum 2 spaces, plus 1 space for warden. Where relevant provision is also to be made for emergency vehicle parking, loading and unloading.
Day care centres, pre-school play and nurseries
On an individual basis using a transport assessment and travel plan and in addition to car parking requirements, provision for pick up and drop off facility to be provided.
Health Clubs Licensed Clubs and Sports Facilities Without a Licensed Club House, Swimming Pools
On an individual basis using a transport assessment and travel plan, and in addition provision for taxi and bus/coach access and parking

Source: Hillingdon Local Plan (2020)

3.78 From this table, one can see that the majority of the main land uses at the proposed development (later living community, nursery and wellbeing/leisure centre) have car parking standards set "using a transport assessment and travel plan".

3.79 The Intend to Publish London Plan Table 10.3 does not provide parking standard for C2 land use. However reference is made to the standards for C3 which states that for areas of PTAL 5, developments should be built as "car-free". See **Table 3-10**.

Table 3-10: Reproduction of section of Table 10.3: Maximum Residential Parking Standards

Location	Maximum parking provision*
Central Activities Zone [CAZ] Inner London Opportunity Areas Metropolitan and Major Town Centres All areas of PTAL 5 – 6 Inner London PTAL 4	Car free~
Inner London PTAL 3	Up to 0.25 spaces per dwelling
Inner London PTAL 2 Outer London PTAL 4 Outer London Opportunity Areas	Up to 0.5 spaces per dwelling
* Where Development Plans specify lower local maximum standards for general or operational parking, these should be followed ~ With the exception of disabled persons parking, see Part G Policy T6.1 Residential Parking	

Source: Intend to Publish London Plan (2019)

3.80 It is clear from **Table 3-10** that car-free status is intended for the densest areas of inner and central London, where transport networks are busiest. The proposed site is unlike the other area types (CAZ, Inner London PTAL 4) in the same box, due to its location on the edge of London, the proposed development is in reality closer in type to Outer London PTAL 4 (standard 1 space per 2 dwellings). Additionally, the residential standards are intended for standard flats and houses, and allow no flexibility for assisted living and later living community flats such as the proposed development.

3.81 In addition to the above, Hillingdon Local Plan also states that "*While the centre is accessible by both public and private transport, there are restricted parking ratios when compared with competing centres*

outside Greater London," indicating that Uxbridge's new developments are under competition from both central London locations with better public transport links, and non-London towns with more permitted parking.

3.82 Further, it was shown in 2017 that "86% of the population is situated within a PTAL of 2 or below."[1] People who live in areas of low PTAL are more likely to own a car, indicating that Hillingdon residents who move into the proposed development from the local area are already likely to own at least one car. The assisted living aspect of the development is intended for elderly people who are downsizing; who may give up one car but wish to retain some independence in their travel.

3.83 As Uxbridge is the terminus, its higher PTAL reflects predominantly the transport connections into London, rather than to towns to the west of Uxbridge. Bus connections to towns the west side of Colne Valley are infrequent (see **Table 3-2**) – new residents of the proposed development may still wish to access family or friends living outside of London, and require their car to do so. Even so, this is unlikely to be at peak hours and so will not add undue stress onto the local highway network.

3.84 Therefore, it is proposed to provide residents' car parking at a ratio of approximately 1 space per 2.01 dwellings, (or 1 per 2.43 dwellings when the care suites are included in the unit number).

3.85 The location of residents' parking is marked on **Figure 3.20** below. Residents will drive their cars into the porte cochère (or one of the flexible spaces associated with the valet if the porte cochère was in use) and give a valet the keys; the valet will then drive the car into the residents' car park via the one way road and Warwick Place. Cars will be parked in a covered storage unit on double-stackers, with the valet service allowing them to be double banked (meaning two layers of stackers against each wall).

3.86 This set-up has a number of benefits: the efficient covered storage allows cars to be kept protected from the elements whilst preventing noise pollution from the operation of the stackers; it allows all 80 spaces to be equipped with passive electric charging provision (of which 20% will be active); and the valet service in effect means that all residents' spaces are accessible for disabled people. The nature of the proposed development means a higher proportion of disabled parking spaces would be required, and this solution means that all 80 spaces are accessible for disabled residents.

3.87 As described above, the valet service requires drop off spaces to be provided to store cars for a short amount of time (approximately 5 minutes at peak time) whilst the valets are busy with other vehicles. Therefore, five (plus another two in peak times) of the parking spaces on the south-west side of the access road will be reserved for valets to store cars temporarily. This prevents the access road from being blocked by waiting vehicles. These are marked on **Figure 3.20** below.

3.88 There will also be five visitor parking spaces on the southwest side of the access road, all of which are accessible bays. These are marked on **Figure 3.20** below.

3.89 Indicative swept path drawings of a large car's internal movements are available in **Figure 3.18** and **Figure 3.19**, and at **Appendix B**.

[1] Hillingdon Parking Standards Justification: Assessment of Available Data, produced by Steer Davies Gleave on behalf of London Borough of Hillingdon. December 2017. Available at: https://www.london.gov.uk/sites/default/files/ad_25_lb_hillingdon_parking_standards_justification_december_2017.pdf

Figure 3.18: Large Car Tracking 1

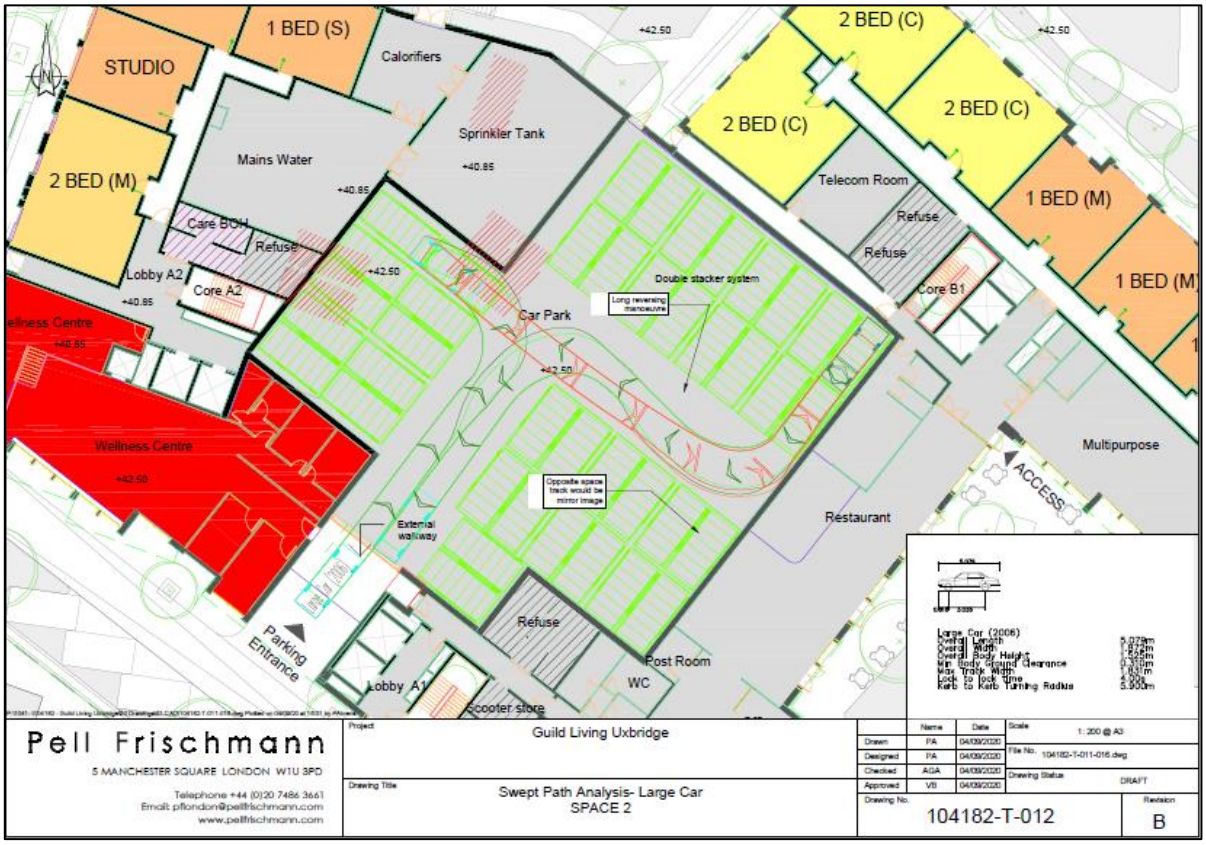
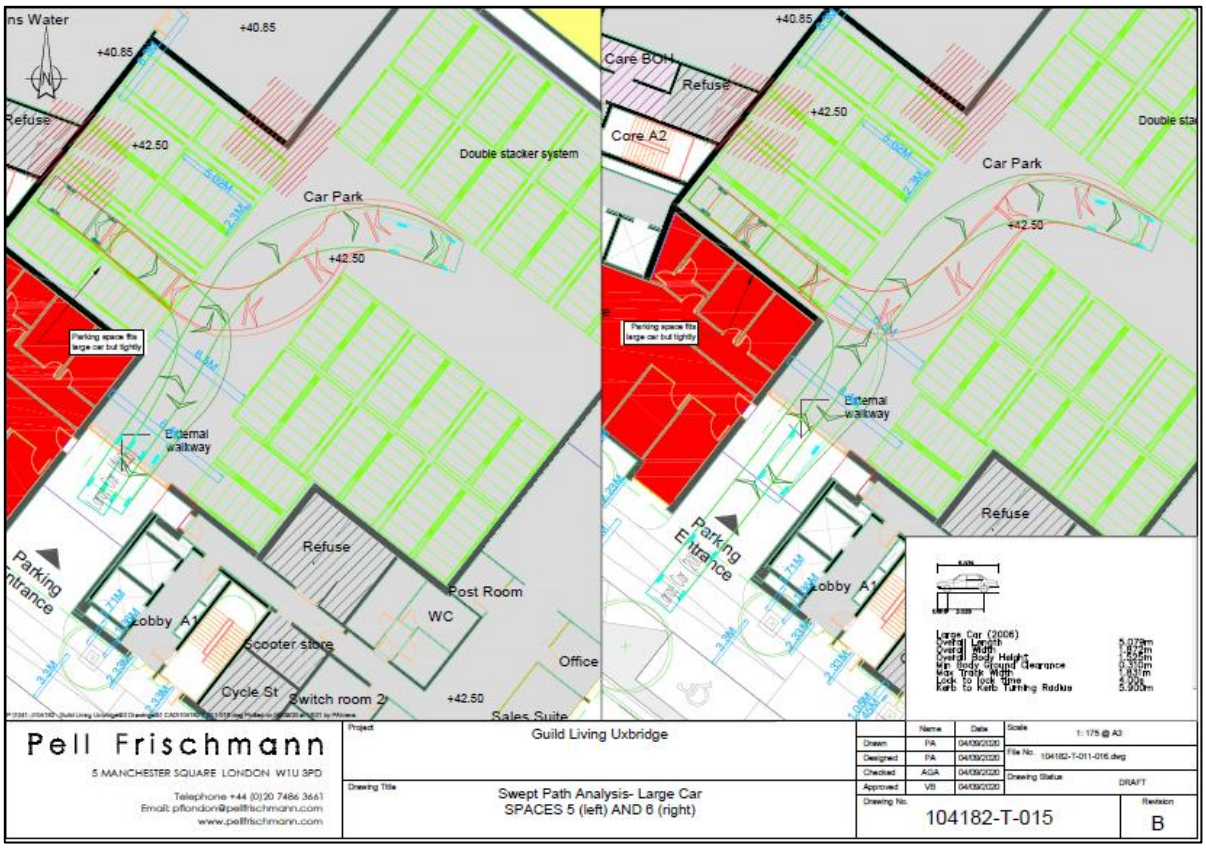


Figure 3.19: Large Car Tracking 2

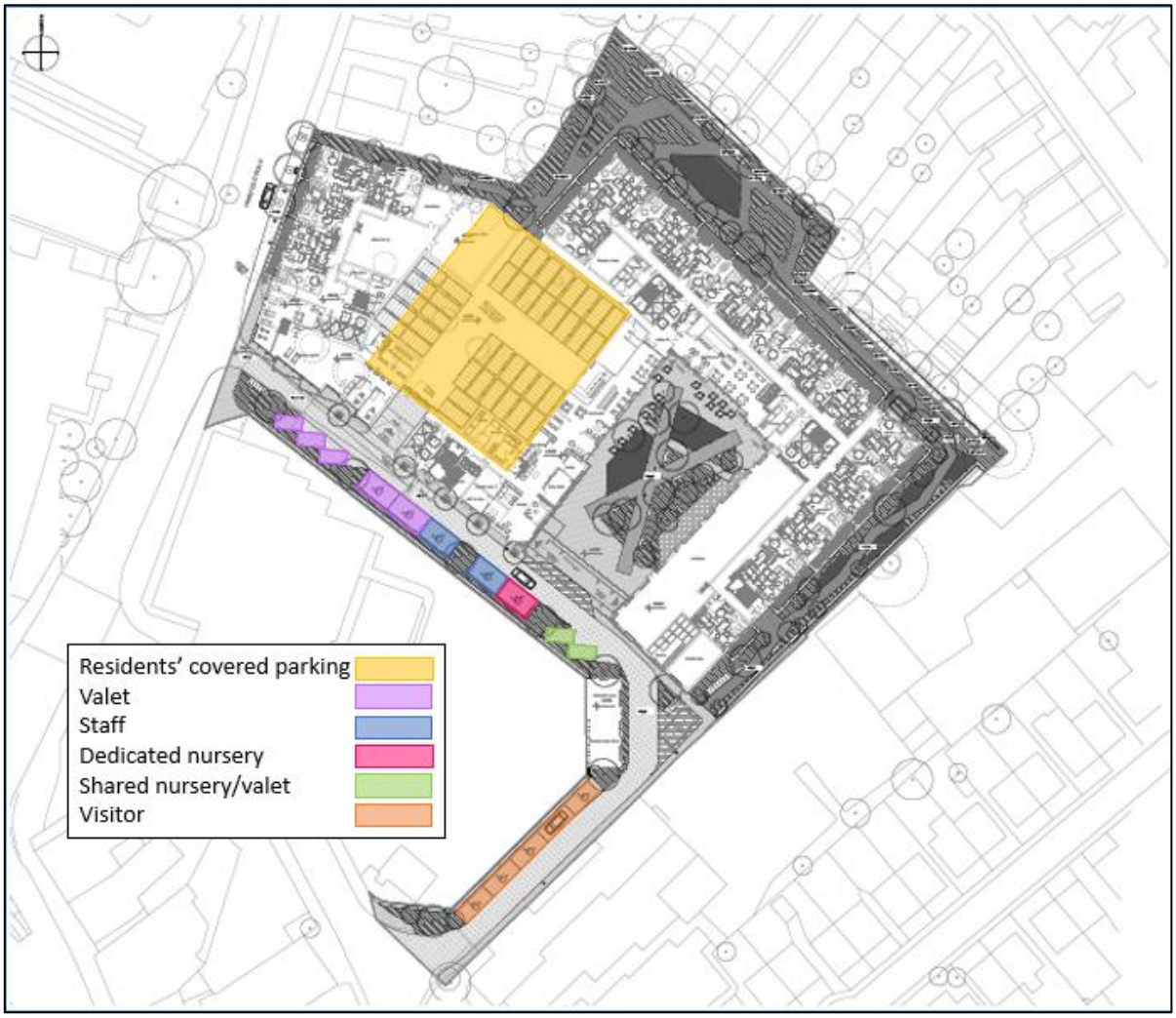


Nursery (D1) and other land uses' parking

3.90 For the nursery, three drop-off spaces will be provided for parents/carers to use whilst they are escorting their children inside the building. The trip generation has been used to estimate that three spaces will be needed any one time (at nursery peak times), and one at off-peak times (as a dedicated nursery bay). This is based on a 10 minutes drop off time for parents/carers. The bays are marked on **Figure 3.20** below.

3.91 Staff parking will be shared between all the land uses and there will be two disabled bays provided on the west side of the access road. These are marked on **Figure 3.20** below.

Figure 3.20: Locations of parking bays



Source: Marchese & Partners with Pell Frischmann annotations

Deliveries, Servicing and Refuse Collection

3.92 The Hillingdon Local Plan Part 2: Development Management Polices states that with regard to deliveries and servicing:

Table 3-11: Reproduction of sections of Hillingdon Local Plan Part 2 Appendix C Table 1.

No	Use	Requirements
5.	Servicing and loading Arrangements	(a) Sufficient space for the standing and manoeuvring of all goods and service vehicles likely to serve the development at any one time is essential.

		(b) The following minimum dimensions should be accommodated for service vehicles: • For smaller stores, town centre uses, hotels and residential institutions: 2.5m x 12m; and • For supermarkets and warehouses: 2.5m x 18m.
		(c) Development layouts should allow all vehicles to load/unload and enter and leave the site in a forward gear

Source: Hillingdon Local Plan (2020)

3.93 In line with this, the proposed development has developed a servicing strategy in which all servicing is conducted on-site and in forward gear, and up to two vehicles to service the site at one time.

3.94 Also resulting from this standard, vehicles large car, box van, ambulance, fire engine, and refuse vehicle have been tracked, of which more discussion follows below. All swept path drawings are available at **Appendix B**.

Deliveries

3.95 The development will require vehicles up to box vans in size to deliver to the service / drop off area, where the goods will then be trolleyed to the various uses around the site.

3.96 There are two options for delivery drop-offs: the porte cochère and the delivery bay shown above in **Figure 3.10**.

3.97 Two swept path drawings below (**Figure 3.21** and **Figure 3.22**) show the proposed functioning of the drop-off points with a box van.

Figure 3.21: Box Van using Porte Cochere

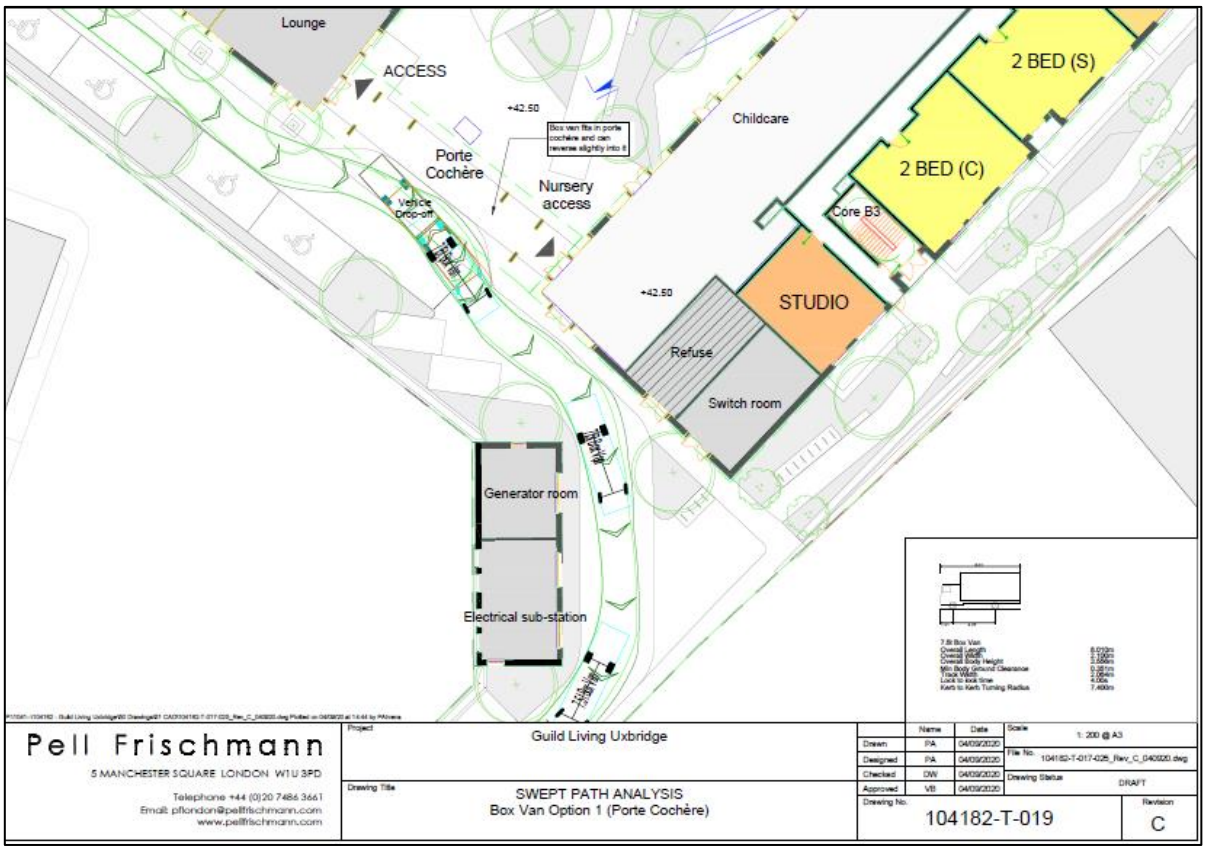
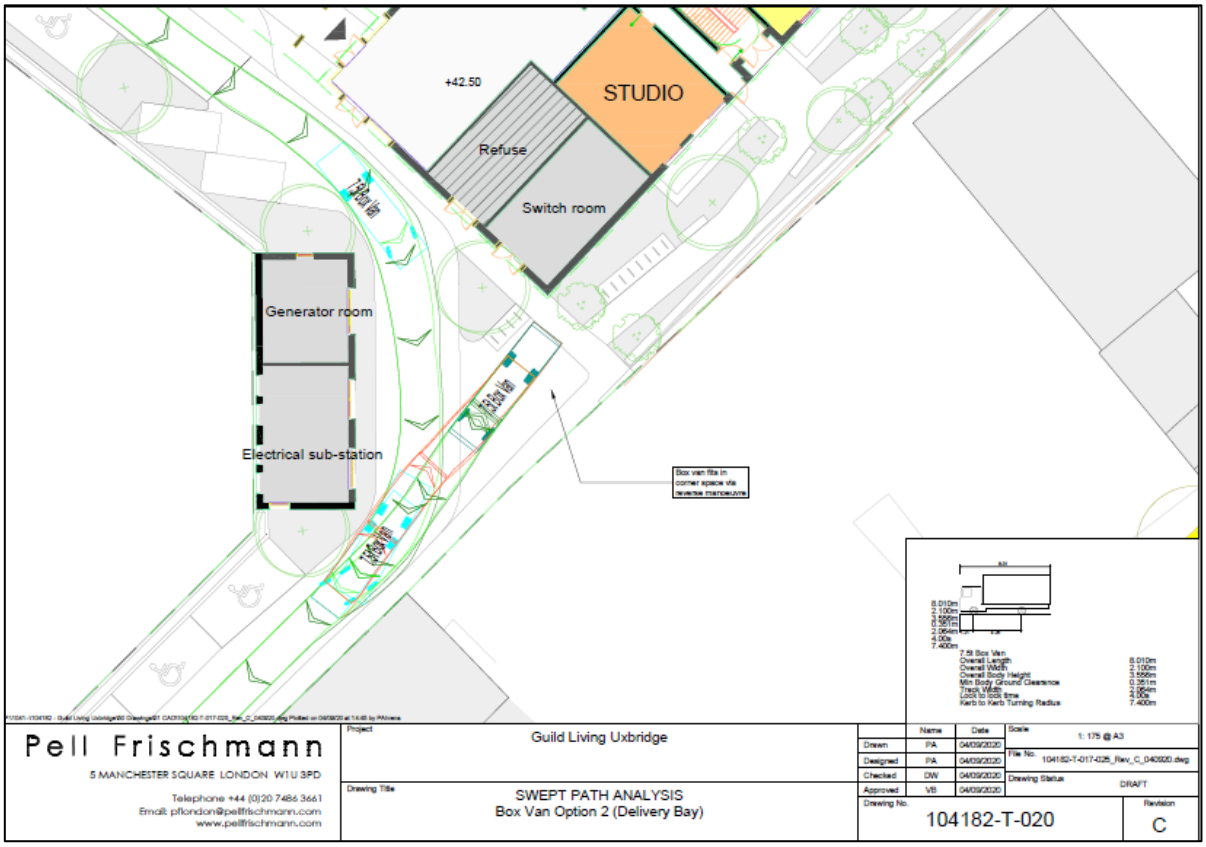


Figure 3.22: Box Van using Loading Bay



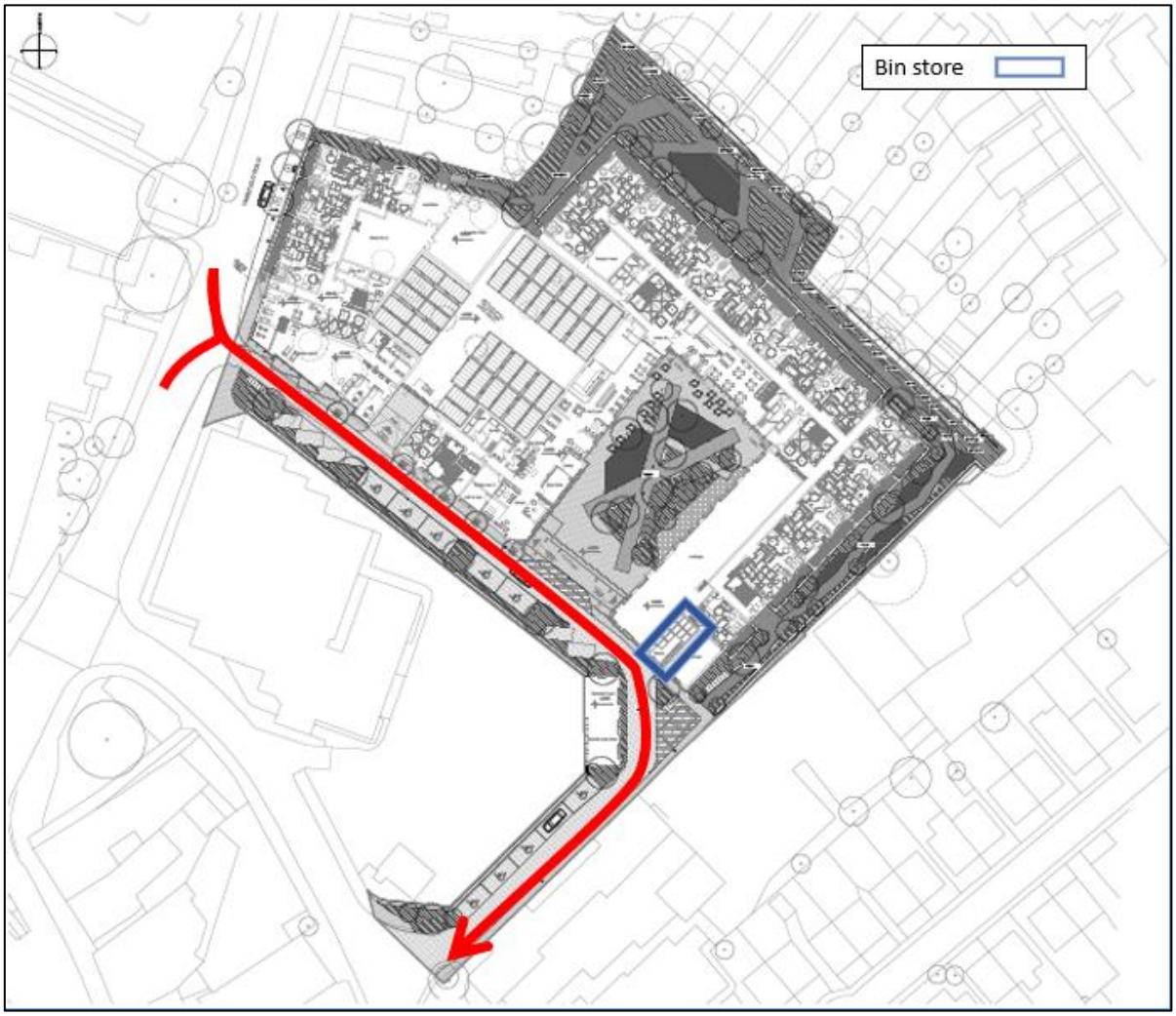
Refuse strategy

3.98 Eleven 1100 litre bins and nine 140 litre bins will be kept in a bin store which opens out onto the access road. The 1100 litre bins will be shared between all the land uses (five general wate and six recycling), as will the 140 litre (food waste) bins. Each of the land uses will transport their waste to the bins at the end of each day, and the collection will be by a private operator and will occur twice weekly.

3.99 The bins have been calculated to give enough storage for four days' worth of refuse within the bin store. This should suffice for a twice-weekly collection.

3.100 The bin store is marked on **Figure 3.23**. This is a location adjacent to the access road so the drag distance to the refuse vehicle will be well within the maximum permitted.

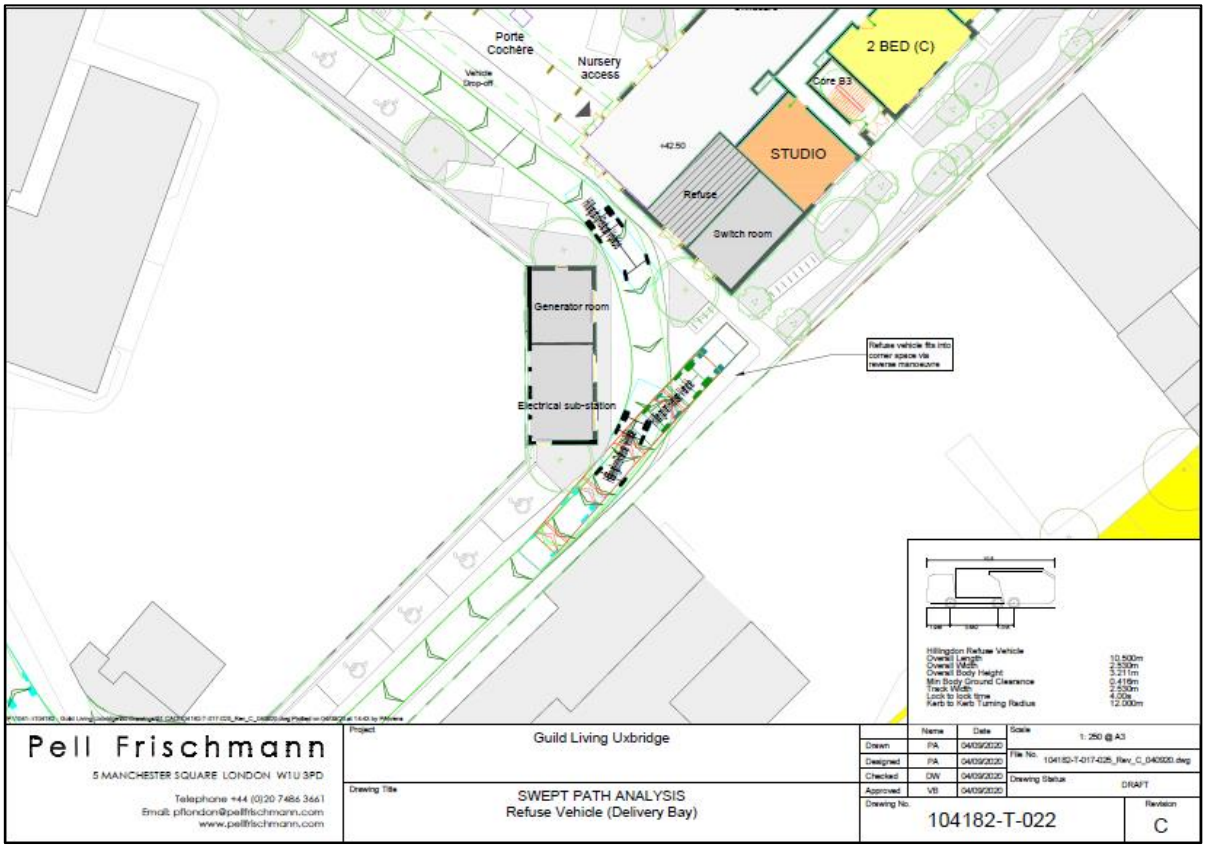
Figure 3.23: Location of bin store



Source: Marchese & Partners with Pell Frischmann annotations

3.101 The swept path drawing of the refuse vehicle is shown in **Figure 3.24**.

Figure 3.24: Refuse Vehicle



Emergency services

3.102 The scheme is designed so that all residencies will be able to access an ambulance directly from the service road running through the site. This is shown on **Figure 3.25** and **Figure 3.26**.

Figure 3.25: Ambulance using Porte Cochere

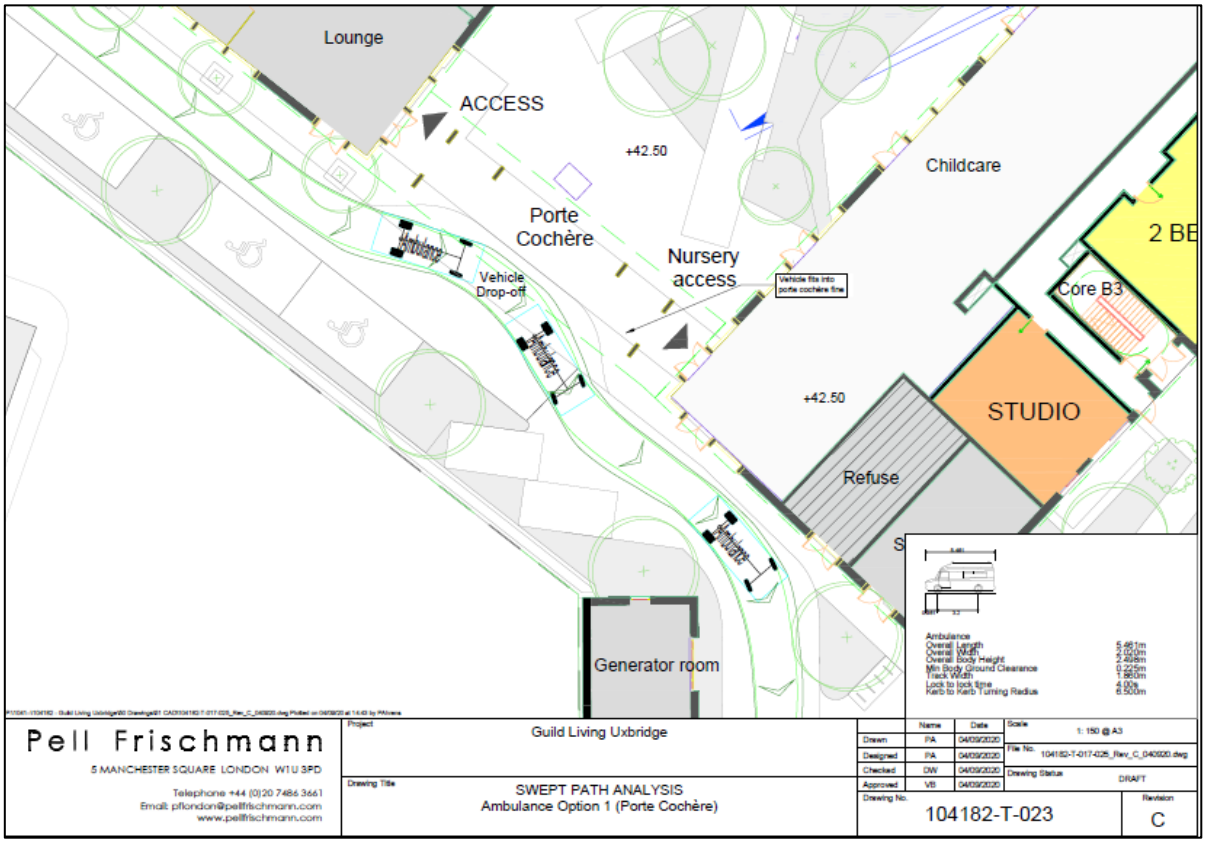
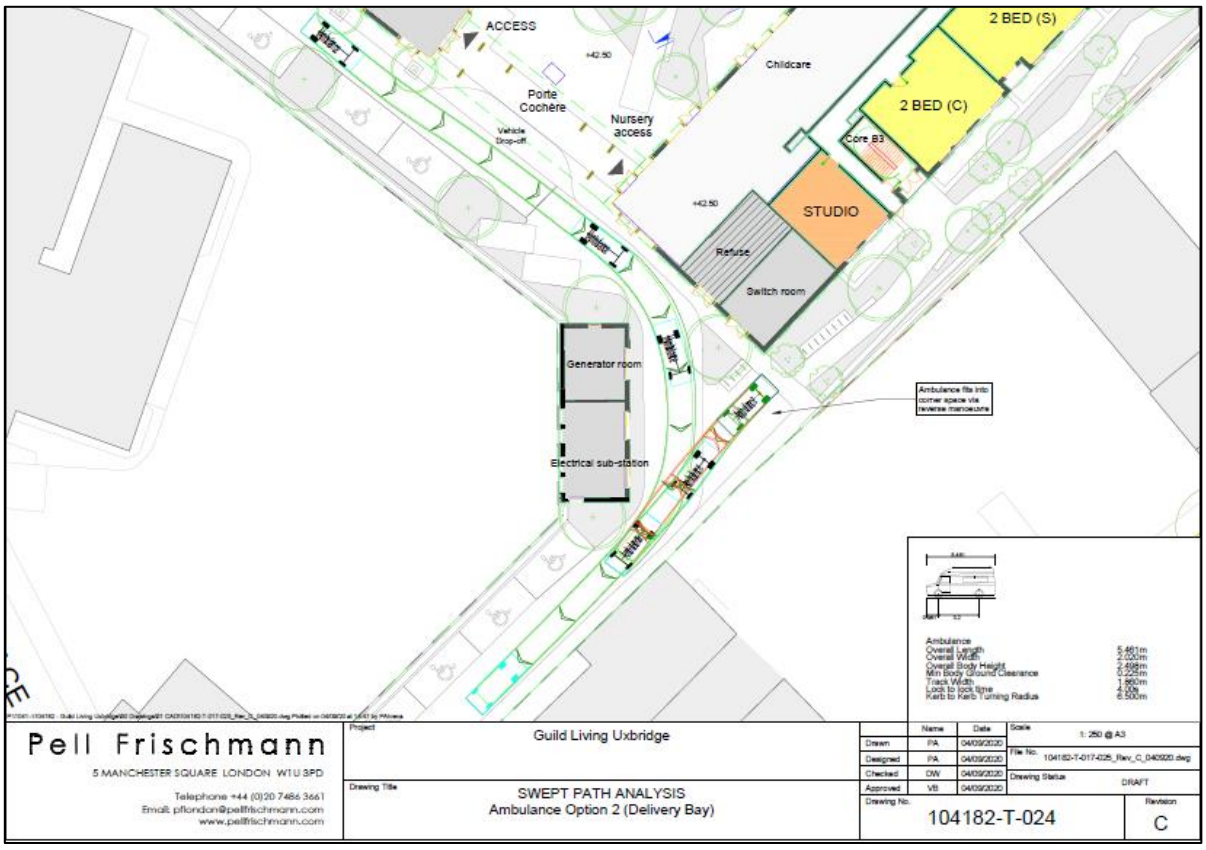


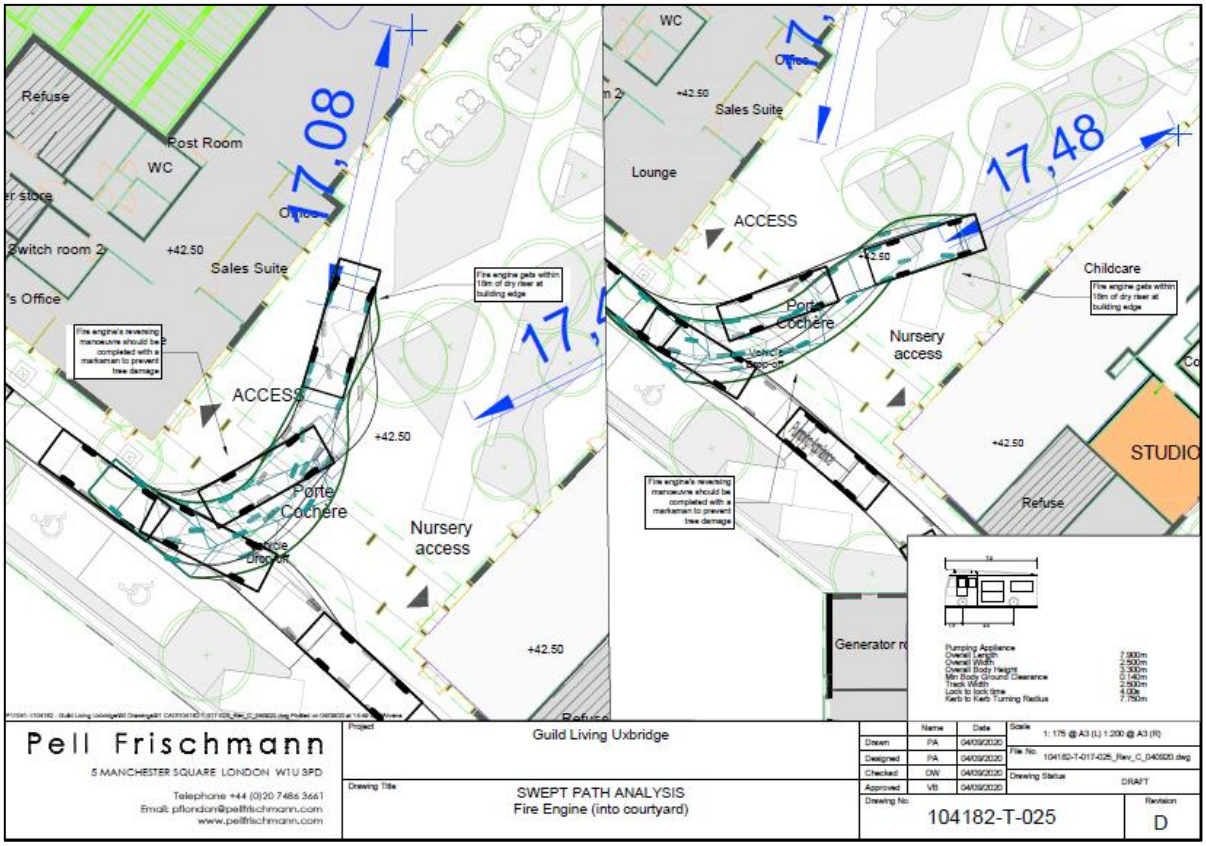
Figure 3.26: Ambulance using Loading Bay



3.103 The scheme is designed to allow a fire engine within 18 metres of the dry risers in the building wall. The grassed area of the courtyard is reinforced to be able to take occasional heavy vehicles.

3.104 A fire engine has been tracked through the site to within 18 metres of both dry risers at notional locations in the building walls (see **Figure 3.27** below). It is expected that the reverse manoeuvre will be completed with the aid of a marksman or additional persons directing the vehicle in order to avoid tree damage (or injury to passers-by).

Figure 3.27: Fire engine into courtyard



4 Active Travel Zones

4.1 The TfL Healthy Streets TA recommended Contents and Chapters (June 2019) mandates an Active Travel Zone (ATZ) assessment. This contains three steps.

1. Active Travel Zone mapping: Mapping all the potential key destinations within 10- and 20-minute walk and cycle boundaries ('active travel zones') of the site. Destination categories include public transport stops, the strategic cycle network, and town centres and parks.
2. Choosing Key Active Travel Routes: Choosing routes between the site and certain destinations. Destinations and routes should be chosen based on likelihood of use.
3. Healthy Streets Photographic Audit: Going to the site and taking photographs every 150m. At the desk, choosing the worst (most unsafe) section of the route and writing about it according to 8 of the 10 Healthy Streets criteria.

4.2 For reference to the Healthy Streets criteria, the TfL's Guide to the Healthy Streets Indicators were used. Each indicator is shown within **Figure 4.1** below.

Figure 4.1: Healthy Streets Indicators



Source: TfL: Guide to the Healthy Streets Indicators

4.3 Healthy Streets' emphasis on walking to local services is encouraged by the Hillingdon Local Plan Part 1, whose Chapter 9 on Transport and Infrastructure states the Strategic Objective 12:

> "*Reduce the reliance on the use of the car by promoting safe and sustainable forms of transport, such as improved walking and cycling routes and encouraging travel plans*."

4.4 And Strategic Objective 18:

> "*Improve access to local services and facilities, including health, education, employment and training, local shopping, community, cultural, sport and leisure facilities, especially for those without a car and for those in more remote parts of the borough through well planned routes and integrated public transport*."

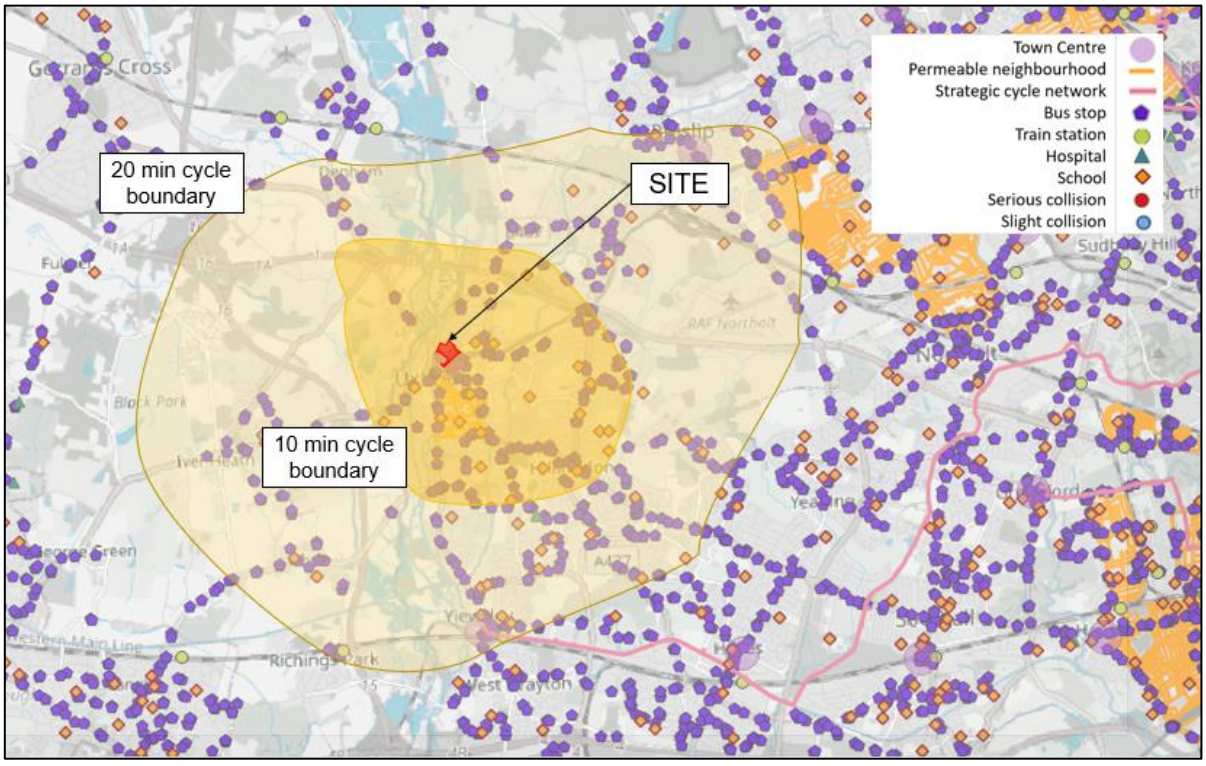
4.5 Copies of the route maps and accompanying notes are below, and the full ATZ report is included at **Appendix D**.

Active Travel Zone Mapping

4.6 Step 1, the ATZ mapping, was conducted in accordance with the TfL guidance, which produced a great many potential key destinations. This is shown in **Figure 4.2** and **Figure 4.3**.

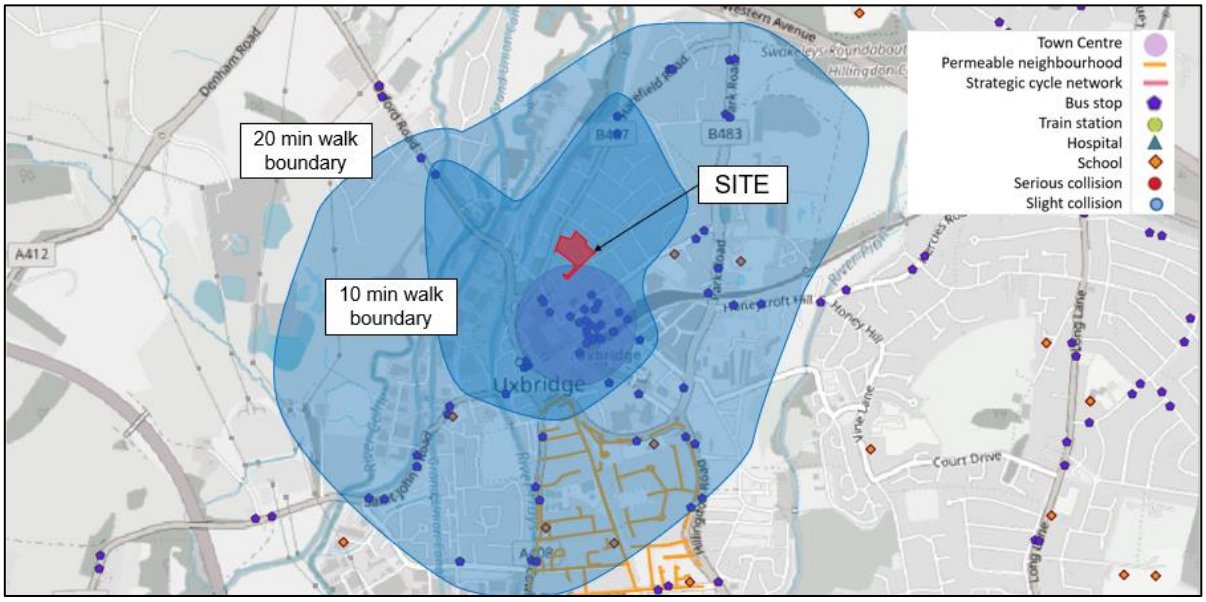
4.7 The Active Travel Zone boundaries and route selections have been produced according to the latest TfL Guidance documents (April 2019), and agreed by TfL and LBH. Photographs and accompanying notes are included at **Appendix D**.

Figure 4.2: Active Travel Zones (cycling)



Source: Open Street Maps (2020) with Pell Frischmann annotations

Figure 4.3: Active Travel Zones (walking)



Source: Open Street Maps (2020) with Pell Frischmann annotations

Key active travel routes

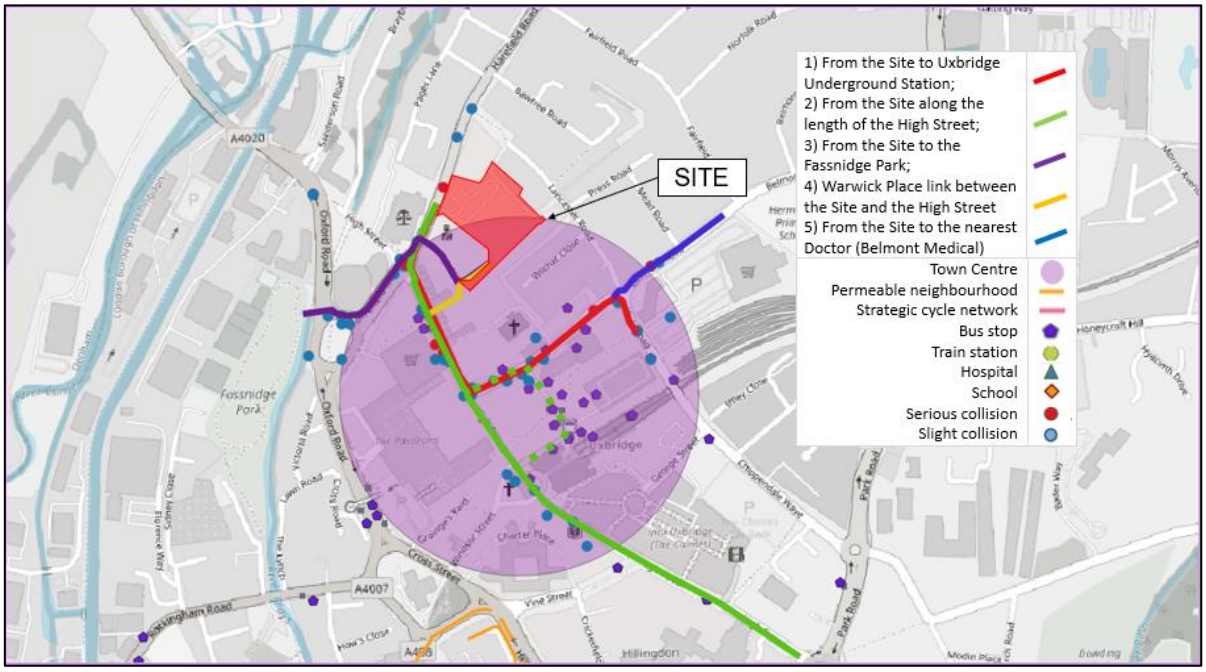
4.8 Step 2 results from the above mapping: in line with the TfL guidance stating access to the nearest bus stop, four routes from the site to nearest key destinations were chosen. During pre-application consultation, an additional 2 route variations were added to the set, subject to adjacent developments coming forward. This gave a total of 6 active travel routes.

4.9 These 6 routes were agreed with LBH on 22nd July 2020 and with TfL Spatial Planning on 3rd July 2020.

4.10 The 6 active travel routes are shown within **Figure 4.4**, and listed below:

1. From the Site to Uxbridge Underground Station;
2. From the Site along the length of the High Street (with a cycle diversion around the pedestrianised section);
3. From the Site to the Fassnidge Park;
4. Warwick Place link between the Site and the High Street
5. From the Site to the nearest Doctor (Belmont Medical)

Figure 4.4: Active Travel Routes and collisions, town centre, bus stops and permeable neighbourhood



Source: Open Street Maps (2020) with Pell Frischmann annotations

Healthy Streets Photographic Audit

4.11 Step 3 of the process is the Healthy Streets Photographic Audit, which was undertaken on 8th July 2020. The full output from this audit is included at **Appendix D**.

4.12 The Photographic Audit is the photographic log of the key active travel routes identified above, and review of the worst part of each journey against the healthy street indicators. The reviews against the Healthy Streets Indicators are included in the following tables.

4.13 The routes are addressed in number order below. Photographs of the worst section of the route as described follow immediately after each table.

Route 1: From the Site to Uxbridge Underground Station

4.14 This route scores very well against Healthy Streets criteria for the majority of the route. The footways are of good quality and there are pedestrian crossing points throughout. There is street lighting and the atmosphere us overall busy and safe.

4.15 The 'worst' section was chosen for its likely unpleasant qualities for cyclists, although for pedestrians it continues to score well.

Table 4-1: 'Worst' section of Route 1 Healthy Streets Indicators

Location (photos)	**Section: Bakers Road (for cyclists)**
Healthy street indicator	Healthy street statement
Easy to cross	For less confident or new cyclists, Belmont Road at the north end of this section may be less easy to cross, as it would involve a right turn into Bakers Road, although cyclists would be unlikely to cycle to the bus stops. For pedestrians, Bakers Road should be easy to cross, as it has a pedestrian refuge at its northern end and nevertheless it is likely pedestrians would have crossed further up on the High Street. Further south on Baker Street there are fewer formal crossing points, however pedestrians from the site would end up on the western side of the road so should not have to cross the road anyway.

Location (photos)	**Section: Bakers Road (for cyclists)**
Healthy street indicator	Healthy street statement
People feel safe	The street is lit by street lamps and has many other people on it. This should make both pedestrians and cyclists feel safe even at night, as there are other people around. For cyclists, the street being mainly bus-only would be reassuring as there is no general traffic, and the manoeuvres the buses make will be predictable. Partly due to the lack of cycle stands on the street, it is unlikely site users would be cycling the short distance to the bus/train station.
Things to see and do	There are few things to see and do on this street, in terms of shops and art, etc. However, as people on this route would likely be there for the purpose of getting the bus, it is not necessary to construct attractions for other visitors.
Places to stop and rest	There are plenty of places for pedestrians to stop and rest on this section of the route. This includes two different types of bus stop benches, although these can of course also be used by elderly or less able people to rest if needed. There are also benches with arm rests and backs set apart from the bus stops. Additionally, the footway is wide enough to accommodate benches and pedestrians passing beside them.
People feel relaxed	Due to the street's utility in providing bus stop waiting areas, the aesthetic of the street has not been prioritised. However, it is appropriately busy and lively for its purpose, which should make pedestrians feel relaxed whilst waiting for the bus. There are some crossovers on the western side of the road which would lead vehicles to cross the footway, and these are mainly marked by tactile paving and the slope on either side is gentle. For cyclists, the driving behaviour in general is not aggressive, although buses are pulling away from stops whilst cyclists are passing by them. Unfortunately, this is unavoidable in a street next to the bus station.
Not too noisy	It is not too noisy in this street, as it is a dead end so the traffic is only the buses and a few drop-offs for the hotel. This reduces the noise from other traffic and from the buses themselves, whose reduced interaction with other vehicles diminishes the need to sound their horns.
Clean air	Uxbridge Town Centre, including this route, is included in the Clean Air Focus Area 102 as defined in the Hillingdon Air Quality Action Plan, 2019-2024.
Shade and shelter	Many of the bus stops are under a shelter, which is constituted of Uxbridge Underground building on the southern side, and a cover, which together would protect from the prevailing wind and rain, and the sun. The benches are thereby sheltered, as are the benches in the bus stop shelters further north on the road.

Route 2: From the Site along the length of the High Street (with a cycle diversion around the pedestrianised section)

4.16 This route covers the length of Uxbridge High Street, which scores highly against all criteria. There is a small diversion (indicated by a dashed green line on the above image) due to cyclists not being able to legally cycle on the pedestrian section in front of the Uxbridge Underground front entrance.

4.17 This section of the route was chosen as the 'worst' mainly due to the width of the footway on the eastern side. The more southerly sections of the route are very pleasant (traffic-free), easily navigable (via map posts) and safe (well-lit) for pedestrians, meaning they score very highly against all criteria.

Table 4-2: 'Worst' section of Route 2 Healthy Streets Indicators

Location (photos)	**Section of High Street north of junction with Belmont Road**
Healthy street indicator	Healthy street statement
Easy to cross	There is a signalised pedestrian crossing at the 'junction' with Belmont Road (where the High Street curves to the east and becomes Belmont Road). This would lead pedestrians coming along this route from the site straight onto the pedestrianised section of the High Street just south of this junction. This crossing has a large footway width either side so that pedestrians waiting

Location (photos)	**Section of High Street north of junction with Belmont Road**
Healthy street indicator	Healthy street statement
	would not interrupt the paths of pedestrians passing by, and the crossing distance is short. North of this crossing, there are not many opportunities to cross over the High Street. The next one is at the northern end of the High Street where there is a pedestrian refuge and tactile paving. This would leave the western side of the road less easy to reach if pedestrians are not confident stepping out from between the parked cars or visibility lines are reduced. For cyclists, this section of the High Street is relatively easy to cross at junctions, as the northern junction with Harefield Road provides some protection from vehicles with a small cycle lane in the middle of the pedestrian refuge. Whilst this is unusual, it makes the junction easier to navigate if cyclists are continuing straight ahead or turning right from the High Street. At the junction with Belmont Road, it is assumed cyclists would turn onto Belmont Road and Baker Street, and this section is discussed further in Route 1.
People feel safe	This section of the High Street is very busy which would reduce feelings of isolation and fear of crime amongst pedestrians and cyclists. There is more traffic on this section but due to this does not appear to be travelling particularly fast. This means cars are more likely to be able to stop if a pedestrian walked into the street, for instance to attempt to cross it. However, the presence of parked cars and loading bays on both sides of the street reduces visibility for both pedestrians and drivers. There are some cycle stands at the southern end of this section, which is very beneficial for people using their bikes to carry shopping.
Things to see and do	There are lots of things to see and do on this section. This is the main street in Uxbridge and so has many different kinds of shops and window displays, shoppers to watch and flower displays. There are trees on the street and care has clearly been taken to present this street as a pleasant place to walk around in. Further south of this section, there is often a food market set up to sell street food and other offerings to passers-by. The benches mentioned below would provide places for people to stop whilst they ate their food, which is a pleasant addition to the street. Overall, this section scores very well against this indicator.
Places to stop and rest	There are many places to stop and rest on the western side of this section, including benches in bus stops and more benches unconnected to bus stops. There are various different kinds of benches to suit different needs. The footway is also much wider on the western side of the road, which allows people sitting to be more relaxed without getting in the way of passing pedestrians.
People feel relaxed	Overall people do feel relaxed on this street, due to the aforementioned lively footways and presence of other people and attractions. The width of the eastern footway, whilst narrow, would be possible for people to travel in groups or to pass others in wheelchairs or mobility scooters. It should be mentioned that the western footway scores very well: there is much less cluttering and wider overall width.
Not too noisy	This section of the road is relatively noisy, but as it is the main street in Uxbridge, this is to be expected. Furthermore, the noise mainly comes from the traffic which reduces as you travel further south on this route and the High Street becomes pedestrianised.
Clean air	Uxbridge Town Centre, including this route, is included in the Clean Air Focus Area 102 as defined in the Hillingdon Air Quality Action Plan, 2019-2024.
Shade and shelter	There is shade and shelter on this street provided by the shop overhangs on the western side of the road. There are also trees and some bus shelters on the western side of the road which could be used for shelter.

Route 3: From the Site to the Fassnidge Park

4.18 This route was chosen because it is the fastest route to the park, which is a likely destination for site users to want to visit.

4.19 There are alternative routes to the park, including one which turns north from Harefield Road up the High Street and then back down Oxford Road, which would have scored highly against the Healthy Streets criteria. However, in order to be robust, this route was chosen, and its 'worst' section is the footway / dual carriageway near to the park.

Table 4-3: 'Worst' section of Route 3 Healthy Streets Indicators

Location (photos)	**Section of the B467 Harefield Road west of the junction with High Street**
Healthy street indicator	Healthy street statement
Easy to cross	At the junction of Harefield Road and the High Street there are zebra crossings on the eastern arm of Harefield Road and unsignalised pedestrian crossings on the other three arms. The zebra crossing deserves praise, especially its pedestrian refuge in the centre which reduces the crossing distance for less mobile pedestrians. The unsignalised crossings may cause hesitation for less confident walkers, especially on the wider roads (northern arm of High Street and western arm of Harefield Road). As a cyclist, this junction does cater for easier crossing via the area of protected cycle lane in the central islands. This allows cyclists' crossing distances to be shorter when travelling north from the High Street, as they can pause in the centre of the junction without fearing a collision. This is positive. West of this junction, there is a pedestrian guard rail in the centre island of the road, to prevent pedestrians crossing the carriageway.
People feel safe	The B467 Harefield Road at this section is busy and traffic is moving faster as it is a dual carriageway. This would reduce feelings of pedestrian safety, as would the lack of other passing pedestrians – there is no active frontage and no houses on this section of the route. For cyclists, there is no specific provision on the road. It is not likely that cyclists would mix with traffic on the dual carriageway, as this would not engender feelings of safety. Therefore, less confident cyclists are likely to dismount and use the footway on this section, alternatively they would use an alternative route up High Street and down the Oxford Road, which has a mandatory cycle lane. It is unlikely that even confident cyclists would use the roundabout at the western end of this section, and would instead dismount and use the very good pedestrian crossings with pedestrians.
Things to see and do	There are few things to see and do on this section of the route. There is mainly office building frontage on either side.
Places to stop and rest	There are few places to stop and rest on this section of the route. However the park is at the end of the route so there are more pleasant places to stop and rest once that is reached.
People feel relaxed	The footway width is reasonable, and would allow two people to pass each other. It is unobstructed and has good visibility for other pedestrians. For cyclists, there are some cycle stands at the junction with High Street, which is a positive addition to the street. They would also be able to dismount and walk along the footway at its reasonable width without obstructing pedestrians.
Not too noisy	This section of the route is slightly more noisy due to the roundabout at the western end, and the fast speeds of traffic travelling on the dual carriageway roads.
Clean air	Uxbridge Town Centre, including this route, is included in the Clean Air Focus Area 102 as defined in the Hillingdon Air Quality Action Plan, 2019-2024.
Shade and shelter	There is no shade nor shelter on this section of the route. However, once one enters the park, there are many trees.

Route 4: Warwick Place link between the Site and the High Street

4.20 This route is the fastest way from the site to the High Street, and was chosen for this reason. However, it should not be relied upon as a consistent pedestrian route through due to its being private land belonging to the adjacent church.

4.21 The majority of the route scores highly against the Healthy Streets indicators. This section of the route was chosen as the 'worst' because, although there is no motor traffic, it is narrow and poorly lit at night.

Table 4-4: 'Worst' section of Route 4 Healthy Streets Indicators

Location (photos)	**Section of Beasley's Yard**
Healthy street indicator	Healthy street statement
Easy to cross	This is a pedestrianised alleyway so there is no vehicular traffic to navigate. This makes it exceptionally easy to cross. For cyclists, it is recommended they would dismount or slow down so as to account for pedestrians also using the space. The bollard at the western end of the section (as it meets the footway of the High Street) may prevent wider mobility scooters or wheelchairs from getting through. However, it also prevents motorcycles from entering the alleyway which is positive for pedestrians.
People feel safe	This indicator is split between avoiding feelings of fear of crime and avoiding danger from motor vehicles. On the former count, despite not being publicly maintained (it is private land) there is street lighting over the alleyway, and it is not covered which allows daylight in. The alleyway is very short so passing pedestrians at the western end would be able to see in, therefore increasing feelings of safety. On the latter count, this section scores very well due to the lack of motor vehicles.
Things to see and do	There are things to see and do on this section of the route, as Beasley's Yard is home to some small and old buildings which are pretty to look at. The street lighting is arranged in an interesting manner and there is foliage along the wall on the northern edge which is pleasant. There are also plenty of things to see and do on the High Street just at the end of this short section.
Places to stop and rest	There are no places to stop and rest on this section. However, at the eastern end of this section – at the southern end of Warwick Place – there is a small wall which may be used to rest on.
People feel relaxed	As mentioned above, this is a pedestrianised lane with no motor traffic, therefore it scores highly against this indicator. The pedestrianisation is enforced with bollards, which prevent large vehicles from entering the alleyway whilst allowing pedestrian traffic to flow around them. This is overall easy to navigate and does not feel cluttered, although as mentioned above may cause obstruction for some very wide mobility scooters or wheelchairs.
Not too noisy	This section of the route is not too noisy due to its separation from the High Street and the absence of motor traffic.
Clean air	Uxbridge Town Centre, including this route, is included in the Clean Air Focus Area 102 as defined in the Hillingdon Air Quality Action Plan, 2019-2024.
Shade and shelter	There is moderate shade and shelter on this section, as the buildings on both sides create a narrow width which would protect pedestrians from strong winds.

Route 5: From the Site to the nearest Doctor (Belmont Medical)

4.22 This route is very short, and much of it overlaps with other routes. It is of a similar high quality as the rest of the routes.

4.23 Due to the shortness of the route, the 'worst' section has been taken as the entire 150m length of the route.

Table 4-5: 'Worst' section of Route 5 Healthy Streets Indicators

Location (photos)	**Section of Belmont Road**
Healthy street indicator	Healthy street statement
Easy to cross	There is one side-road, Redford Way, which is very low-traffic and has dropped kerbs and tactile paving areas on each side. There are additional tactile paving areas on all crossovers on this route. This section of Belmont Road has no formal crossing points. However, pedestrian site users are expected to be accessing the Doctor's surgery on the north side of the road from the site, also on the north side of the road. Therefore it is not necessary to cross on this route. For cyclists, there is a cycle stand on the north side of the road just past the Doctor's surgery.
People feel safe	It is assumed that pedestrians generally do feel safe on this route, as it is near to the High Street which is well populated with people. For cyclists, the presence of parked cars would possibly reduce feelings of safety, especially as the parking bays are not consistent throughout the route.
Things to see and do	There are a few things to see and do on this route, but as it is so short it is likely that site users would just reach the Doctor's surgery.
Places to stop and rest	There are no places to stop and rest on this route, but this is not considered an issue as the route is very short.
People feel relaxed	The footway width is good, well enough for two pedestrians to pass each other. For cyclists, the road surface is smooth and does not present issues.
Not too noisy	This route is not too noisy.
Clean air	Uxbridge Town Centre, including this route, is included in the Clean Air Focus Area 102 as defined in the Hillingdon Air Quality Action Plan, 2019-2024.
Shade and shelter	There is no shade nor shelter on this route, however it is likely that site users would find shelter in the Doctor's surgery.

Summary

4.24 Overall, the Active Travel Zones Assessment concludes that there is a high level of accessibility to key destinations by active travel, and the streets around the development largely adhere to Healthy Streets criteria.

Road Safety Review

Collision data analysis

4.25 In light of Vision Zero policies adopted by the Mayor, an analysis has been conducted on the most recently available collision data. This includes year-by-year analysis of collisions and discussion focussing on non-motorised users. The analysis covers in-depth assessments of the groups of collisions at the nearest junctions, and those which involved pedestrians and cyclists.

Headline statistics

4.26 TfL data for road traffic collisions resulting in personal injury was collated for the five-year period to end December 2019. A total of 48 collisions were included in the dataset which covers an extensive area, including:

- All Active Travel Routes surrounding the site, including the entire length of the High Street;
- Site frontage onto Harefield Road and exit onto Warwick Place;

4.27 Active Travel Routes were determined in mind of collision hotspots. In this manner, Vision Zero was mainstreamed into the design and delivery process and care was taken as far as possible to avoid placing likely pedestrian and cycle routes in high collision rate areas.

Table 4-6: Collision severity frequency by year

Year	Severity			Total
	Fatal	Serious	Slight	
2015	0	2	7	9
2016	0	0	10	10
2017	0	1	8	9
2018	0	2	9	11
2019	0	2	7	9
Total	0	7	41	**48**

4.28 **Table 4-6** summarises the severity of collisions in the study area over the five studied years. Seven 'serious' severity collisions were recorded, with the remainder (41) rated as 'slight' severity. The proportion of serious collisions (14.5%) is within the normal range of 10%-15%.

Non-motorised users

4.29 26 of the 48 collisions involved non-motorised road users, either in combination with or exclusive of motorised users. In all of the collisions listed below, the non-motorised user suffered the injury, and on occasion so did the motorised user. **Table 4-7** summarises the collision frequencies and severities for pedestrians and cyclists within the study area.

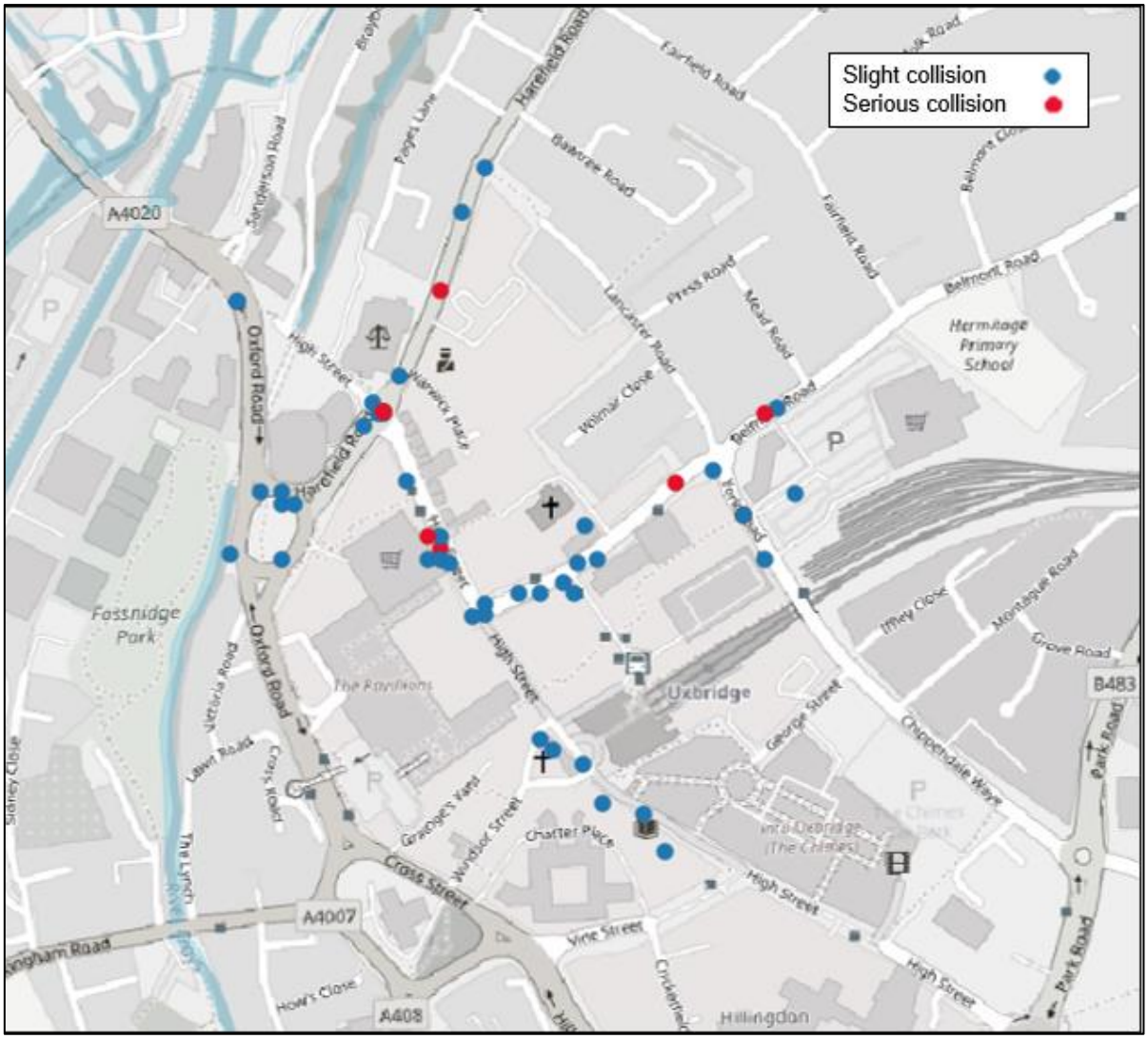
Table 4-7: Summary of non-motorised collisions by severity

Year	Pedestrians injured		Cyclists injured		Total collisions
	Serious	Slight	Serious	Slight	
2015	1	4	0	1	6
2016	0	4	0	2	6
2017	1	1	0	1	3
2018	1	2	0	1	4
2019	2	3	0	2	7
Total	5	14	0	7	**26**

4.30 Collisions involving non-motorised users represent 68.4% of collisions in the figures.

Spatial arrangement of collisions

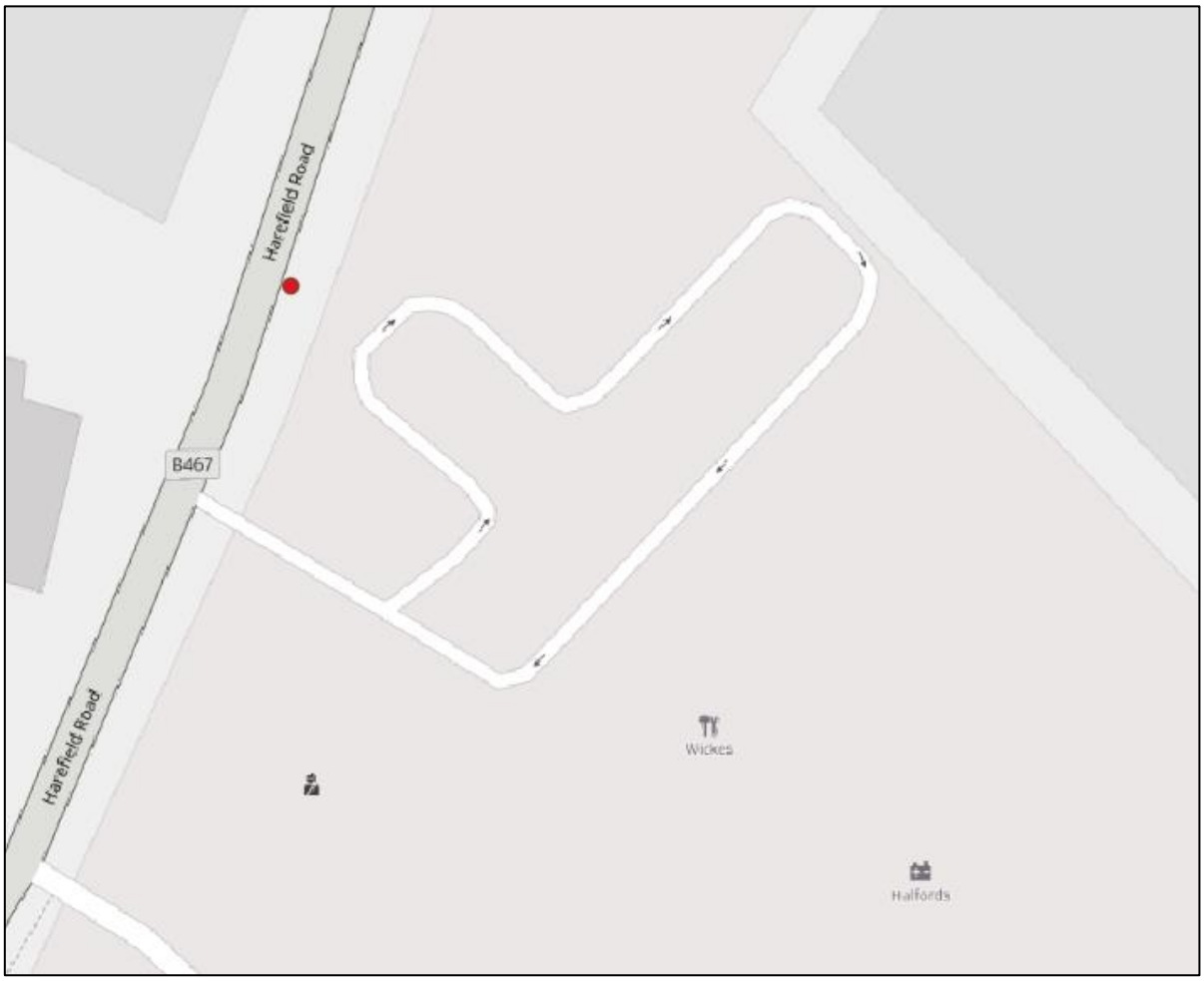
Figure 4.5: Spatial arrangements of recorded collisions in study area



Source: Open Street Maps (2020) with Pell Frischmann annotations

4.31 **Figure 4.5** details the spatial arrangements of the collated set of collisions. Some clustering appears along the High Street and at junctions, with some other collisions on smaller roads. These clusters have been assessed individually below.

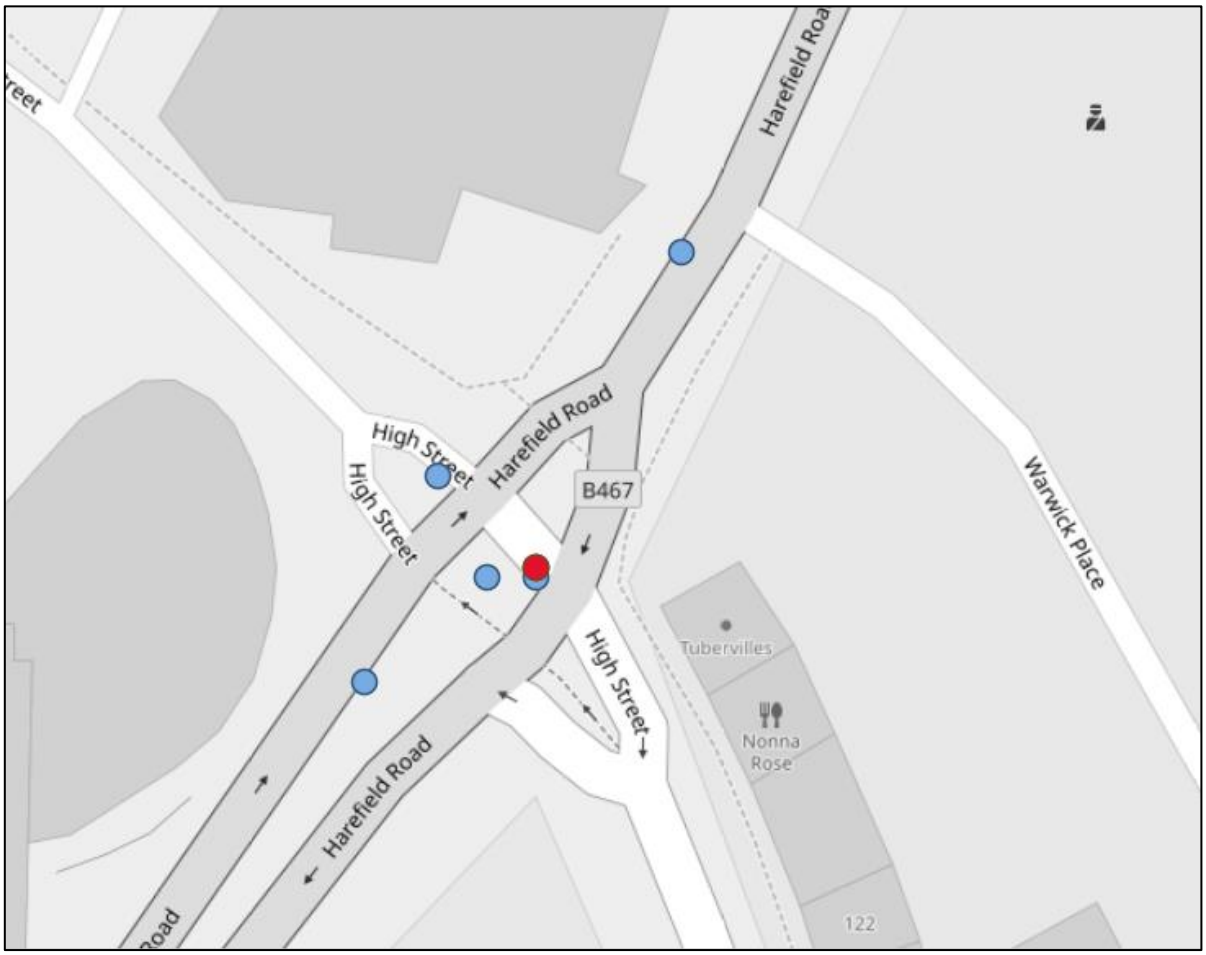
Figure 4.6: Collision locations – Harefield Road near site access



Source: Open Street Maps (2020) with Pell Frischmann annotations

4.32 A serious collision occurred on Harefield Road approximately 30m north of the site access, in which a pedestrian was involved in a collision with a car whilst crossing the road.

Figure 4.7: Collison locations – junction of High Street and Harefield Road



Source: Open Street Maps (2020) with Pell Frischmann annotations

4.33 This cluster was selected due to its proximity to the front entrance to the site. There are five slight and three/one serious collision in this cluster.

4.34 In the slight collision at the north end of Warwick Place, a pedestrian was hit by a car. In the slight collision at the north side of the junction, another pedestrian was hit by a car, the police report states that the car's brakes were faulty and the pedestrian's judgment was impaired by alcohol. In the slight collision on the west side of the junction, another pedestrian was hit by a car, and the police report states that there were poor weather conditions and the driver panicked.

4.35 Of the two slight collisions in the centre of the junction, a motorcycle rider was involved in a collision with a car whilst they were both turning left, and in the other, two cars and a van were all involved in a collision together.

4.36 The serious collision involved three cars and a bus, injuring a pedestrian seriously and two drivers/passengers slightly. It is not known how the collision occurred.

Figure 4.8: Collision locations – High Street



Source: Open Street Maps (2020) with Pell Frischmann annotations

4.37 This cluster was chosen due to its proximity to the rear entrance to the site, which may be used by pedestrians and cyclists. It is also in close proximity to bus stops. It contains two serious collisions and four slight collisions.

4.38 In the northernmost slight collision, a pedestrian has entered the road from between two parked cars and been hit by a moving car. For the other slight collisions, from left to right, a pedestrian on the pavement was struck by the wing mirror of a bus as it was pulling into the bus stop; an elderly bus passenger was injured whilst alighting from a bus; and a pedestrian was involved in a collision with a car.

4.39 For the northernmost serious collision, a pedestrian was hit by a car, and for the southernmost collision, a motorcycle rider started moving off at speed and lost control of his vehicle, injuring himself.

Figure 4.9: Collision locations – Oxford Road roundabout



Source: Open Street Maps (2020) with Pell Frischmann annotations

4.40 This cluster was chosen as the location was highlighted in the Active Travel Routes assessment as one of the worst sections. It contains six slight collisions.

4.41 In the northwesternmost of the collisions, the driver of a car was injured when it was rear-ended by another car. In each of another two collisions, a cyclist continuing on the roundabout was hit by a car attempting to turn left off the roundabout. In the next collision, a pedestrian was hit by a car.

4.42 For the southernmost two collisions, both were cyclists involved in collisions with cars resulting in slight injuries to the cyclist.

Summary

4.43 The amount and type of collisions is typical of the study area size and road types included. From the information available about the circumstances of collisions, there is no indication that the road layout and infrastructure around the site will have contributed to the accidents interrogated above.

5 London-wide Network

5.1 The chapter will cover the trip generation of the proposed development.

5.2 A multi-modal trip generation has been undertaken to assess and quantify the potential impact of the proposed development in terms of the number of vehicle, cycle, pedestrian and public transport trips that are expected to be generated by the proposed land use.

5.3 Trip generation calculations have been undertaken to cover the existing land use, the proposed care residencies and the nursery. It is considered that all other land uses are ancillary and will generate predominantly walking trips. Trips were then combined and the existing land use removed to give a net trip generation.

Existing site vehicle trip generation

5.4 At this time, due to COVID-19 it is not possible to undertake reliable surveys and therefore the existing site trip generation has been determined using trip rates derived from TRAVL.

5.5 A review of TRICS (Version 7.7.1) for DIY Superstores did not yield a comparable site or weekday survey. However, TRAVL does include a Retail Warehouse site which has a comparable PTAL and therefore this has been used.

5.6 It is noted that a Vectos TA for the proposed site in 2018 referenced four sites from the TRAVL database: B&Q Sutton on a Saturday and a Friday; Homebase Haringey; and Homebase Redbridge. In the below trip rates and generation table, Pell Frischmann have used only the 429 B&Q Sutton site from the Friday as the Saturday survey is not considered to be appropriate to use. This was agreed with LBH.

5.7 **Table 5-1** includes the trip rates and the trip generation and is based on a floor area of the Wickes and Halfords combined (3,196 sqm).

Table 5-1: Existing site use vehicle trip rates and generation

Time period	Trip rate (per 100 sqm)			Trip generation		
	In	Out	Total	In	Out	Total
08:00 – 09:00	0.0058	0.0033	0.0091	19	10	29
17:00 – 18:00	0.0082	0.0129	0.0210	26	41	67
Daily	**0.1466**	**0.1466**	**0.2933**	**469**	**469**	**937**

Source: TRAVL database with Pell Frischmann calculations
Note: Numbers may not sum due to rounding

Proposed development vehicle trip generation

Residential trip generation

5.8 The following TRICS site selection criteria have been used to identify survey sites with similar characteristics to the care residences element of the proposed development site, in accordance with best practice:

- 03 – Residential;
- O – Retirement and Care Community;
- Multi-modal surveys;
- Sites in South-East England only;
- Sites of between 36 – 149 dwellings;
- Surveys undertaken since 1st January 2012;
- Edge of Town Centre, Edge of Town and Free-standing only;

- Weekday surveys only

5.9 A total of three survey sites were identified using the aforementioned criteria. The resulting trip rates and trip generation by various modes is set out within this chapter for AM and PM peak hours and daily rates. The full TRICS output is included at **Appendix E** for information.

5.10 The total people trip rates and resulting trip generation that could be expected to be generated by a 194-dwelling later living community, are provided in **Table 5-2**.

Table 5-2: Later living community total people trip rates and trip generation

Time period	Trip rate (per 100 sqm)			Trip generation		
	In	Out	Total	In	Out	Total
08:00 – 09:00	0.231	0.114	0.345	45	22	67
17:00 – 18:00	0.169	0.118	0.287	33	23	56
Daily	**2.49**	**2.482**	**4.972**	**483**	**482**	**965**

Source: TRICS (v7.6.3) and Pell Frischmann calculations
Note: Numbers may not sum due to rounding

5.11 As shown in **Table 5-2**, the proposed development will be expected to generate 67 trips in the AM peak hour, comprising 45 arrivals and 22 departures, and 56 trips in the PM peak hour, comprising 33 arrivals and 23 departures.

5.12 The modal split of the trip rates has been calculated from the same TRICS data, resulting in the modal split presented in **Table 5-3**.

Table 5-3: Mode split as a % of total people trips

Mode of travel	Percentage split
Vehicle passengers	15.5%
Total vehicles	69.2%
Cyclists	0.6%
Pedestrians	9.9%
Bus passengers	4.7%
Rail passengers	0.1%
Total people	**100.0%**

Source: TRICS (v7.6.3) and Pell Frischmann calculations
Note: Numbers may not sum due to rounding

5.13 The modal split in **Table 5-3** has been applied consistently to the trip generation in **Table 5-2** and the results are presented in **Table 5-4**, alongside a detailed vehicle trip generation.

Table 5-4: Later living community trips generated per mode

Mode of Travel	Number of Trips								
	AM Peak Hour (08:00-09:00)			PM Peak Hour (17:00-18:00)			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
People									
Vehicle passengers	7	3	10	5	4	9	75	75	150
Total vehicles	31	15	46	23	16	39	334	333	667
Cyclists	0	0	0	0	0	0	3	3	6
Pedestrians	4	2	7	3	2	6	48	48	95

Bus passengers	2	1	3	2	1	3	23	23	45
Rail passengers	0	0	0	0	0	0	0	0	1
Total people	**45**	**22**	**67**	**33**	**23**	**56**	**483**	**482**	**965**

Source: TRICS (v7.6.3) and Pell Frischmann calculations
Note: Numbers may not sum due to rounding

5.14 As shown in **Table 5-4**, a maximum of 667 vehicle trips per day will be expected to be generated by the later living community element of the proposed development, including 46 trips at the AM peak hour and 39 trips at the PM peak hour. These trips will enter the proposed development via the northern end of the access road, and will exit in forward gear via the southern end.

Nursery trip generation

5.15 The following TRICS site selection criteria have been used to identify survey sites with similar characteristics to the nursery element of the proposed development site, in accordance with best practice:

- 04 – Education;
- D – Nursery;
- Multi-modal surveys;
- Sites in England only;
- Sites of between 500 – 750 sqm;
- Surveys undertaken since 1st January 2012;
- Edge of Town Centre only;
- Weekday surveys only

5.16 A total of two survey sites were identified using the aforementioned criteria. The resulting trip rates and trip generation by various modes is set out within this chapter for AM and PM peak hours and daily rates. The full TRICS output is included at **Appendix E** for information.

5.17 The total people trip rates and resulting trip generation that could be expected to be generated by a 320sqm nursery, are provided in **Table 5-5**.

Table 5-5: Nursery total people trip rates and trip generation

Time period	Trip rate (per 100 sqm)			Trip generation		
	In	Out	Total	In	Out	Total
08:00 – 09:00	6.48	3.04	9.52	21	10	30
17:00 – 18:00	3.2	5.44	8.64	10	17	28
Daily	**20.08**	**20.08**	**40.16**	**64**	**64**	**129**

Source: TRICS (v7.6.3) and Pell Frischmann calculations
Note: Numbers may not sum due to rounding

5.18 As shown in **Table 5-5**, the proposed development will be expected to generate 30 trips in the AM peak hour, comprising 21 arrivals and 10 departures, and 28 trips in the PM peak hour, comprising 10 arrivals and 17 departures.

5.19 The modal split of the trip rates has been calculated from the same TRICS data, resulting in the modal split presented in **Table 5-6**.

Table 5-6: Mode split as a % of total people trips

Mode of travel	Percentage split
Vehicle passengers	20.9%
Total vehicles	47.0%
Cyclists	0.8%

Pedestrians	29.7%
Bus passengers	1.6%
Rail passengers	0.0%
Total people	**100.0%**

Source: TRICS (v7.6.3) and Pell Frischmann calculations
Note: Numbers may not sum due to rounding

5.20 The modal split in **Table 5-6** has been applied consistently to the trip generation in **Table 5-5** and the results are presented in **Table 5-7**, alongside a detailed vehicle trip generation.

Table 5-7: Nursery trips generated per mode

Mode of Travel	Number of Trips								
	AM Peak Hour (08:00-09:00)			PM Peak Hour (17:00-18:00)			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
People									
Vehicle passengers	4	2	6	2	4	6	13	13	27
Total vehicles	10	5	14	5	8	13	30	30	60
Cyclists	0	0	0	0	0	0	1	1	1
Pedestrians	6	3	9	3	5	8	19	19	38
Bus passengers	0	0	0	0	0	0	1	1	2
Rail passengers	0	0	0	0	0	0	0	0	0
Total people	**21**	**10**	**30**	**10**	**17**	**28**	**64**	**64**	**129**

Source: TRICS (v7.6.3) and Pell Frischmann calculations
Note: Numbers may not sum due to rounding

5.21 As shown in **Table 5-7**, a maximum of 60 vehicle trips per day will be expected to be generated by the nursery element of the proposed development, including 14 car trips at the AM peak hour and 14 car trips at the PM peak hour. These trips will enter the proposed development via northern end of the access road, and will exit in forward gear via the southern end.

Combined trip generation

5.22 Numbers from **Table 5-4** and **Table 5-7** have been combined in the below table.

Table 5-8: Combined trips generated per mode

Mode of Travel	Number of Trips								
	AM Peak Hour (08:00-09:00)			PM Peak Hour (17:00-18:00)			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
People									
Vehicle passengers	11	5	16	7	8	15	88	88	177
Total vehicles	41	20	60	28	24	52	364	363	727
Cyclists	0	0	0	0	0	0	4	4	7
Pedestrians	10	5	16	6	7	14	67	67	133
Bus passengers	2	1	3	2	1	3	24	24	47

Rail passengers	0	0	0	0	0	0	0	0	1
Total people	**66**	**32**	**97**	**43**	**40**	**84**	**547**	**546**	**1094**

Source: TRICS (v7.6.3) and Pell Frischmann calculations
Note: the numbers include rounding

Net site vehicle trip generation

5.23 In **Table 5-9** below, the existing trips in **Table 5-1** were removed from the combined trips in **Table 5-8** to give a net vehicle trip generation for the proposed development.

Table 5-9: Net vehicle trip generation

Mode of Travel	Number of Trips								
	AM Peak Hour (08:00-09:00)			PM Peak Hour (17:00-18:00)			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
Vehicles									
Total vehicles	22	10	31	2	-17	-15	-105	-106	-209

Source: TRICS (v7.6.3) and TRAVL and Pell Frischmann calculations
Note: the numbers include rounding

5.24 The net trip generation of the proposed development shows that there is forecast to be a small increase in traffic generation in the AM peak, but this is not considered significant enough to warrant highway capacity assessments; and a reduction in trips and vehicles in both the PM peak and across the day as a whole.

Trip Distribution

5.25 In order to understand the likely impact of the proposed development on local bus and London underground services, the trip generation in **Table 5-8** has been distributed across the public transport network.

5.26 To do this, an assumed 25% split on each compass direction was used to allocate journeys throughout the day. The proposed development contains a residential aspect and workplaces, as well as a nursery, so it is likely that arrival trips and departure trips will occur in approximately equal measures throughout the day.

Bus Services

5.27 The three bus services with the highest frequency and largest range of destinations have been chosen for each compass direction.

5.28 **Table 5-10** summarises the potential increase in daily bus passengers by the service in which they have been estimated to choose.

Table 5-10: Daily bus trip distribution

Route	Direction	Number of services per hour	Arrivals (people per service)	Departures (people per service)
North				
105	To Hemel Hempstead	1		1
	To Uxbridge	1	1	
331	Ruislip Station	3		2
	To Uxbridge Station	3	2	

U1	To Ruislip Station	4		3
	From Ruislip Station	4	3	
East				
U4	To Prologis Park, West Drayton	4		3
	To Uxbridge	4	3	
427	King Street, Acton	5		4
	To York Road, Uxbridge	5	4	
U7	To Lombardy Retail Park	2		2
	To Uxbridge Station	2	2	
South				
U3	Wembley Park Station to	3		2
	To Uxbridge	3	2	
U4	To Prologis Park, West Drayton	4		3
	To Uxbridge Station	4	3	
U1	To West Drayton Station	4		3
	From West Drayton Station	4	3	
West				
3	To Slough via Iver Heath	1		1
	To Uxbridge Station	1	1	
101/2	To High Wycombe	1		1
	From High Wycombe	1	1	
580	To High Wycombe	1		-
	To Uxbridge Station	1	-	
Total trips			**24**	**24**

Source: TfL frequency information and Pell Frischmann calculations

5.29 **Table 5-10** indicates that on a weekday likely maximum increase in bus passengers will be 4 in each hour, equating – in the case of the 427 – to less than one on each service.

5.30 Given the outcome of the local bus service assessment and the consideration of the likely impact the proposed development will have on this, it is expected to have a negligible impact on bus operation and capacities within the local area.

London Underground Services

5.31 It was not deemed necessary to distribute the expected rail passengers at the development due to there being only one daily trip according to the trip generation. In reality, this will likely be slightly higher

due to this site's proximity to Uxbridge Underground Station, however even a three times increase will only be three trips, and therefore will not cause undue stress on the rail network.

Delivery and Servicing Trips

5.32 The information for this section comes from Guild Living's other later living communities, providing an estimation of the servicing requirements, and the above trip generation sections. The Deliveries, Servicing and Refuse Collection section in Chapter 3 gives more details on the swept path of the vehicles.

5.33 It is estimated that due to the size of the ancillary uses, their servicing requirements will be so small as to not warrant a full servicing trip generation. Although the tenants for the nursery use class is not known at this stage, delivery trips for each use class have been estimated and the total daily estimated delivery trips are shown below.

Table 5-11: Servicing trips

Servicing trips	Daily Deliveries		
	In	Out	Total
Later living community	30	31	61
Nursery	2	2	4
Total	**32**	**33**	**65**

Note: numbers include rounding

5.34 In total 65 two-way delivery and servicing trips have been estimated for the proposed development. It is anticipated that servicing will mainly be undertaken by small and medium sized vehicles such as 7.5t box vans. However, it is anticipated that larger vehicles such as fire engines and refuse vehicles will also be required on an ad hoc and regular basis respectively.

5.35 It should be noted that as a robust assessment, servicing vehicles account for 9% of all vehicles in the combined trip generation calculations in **Table 5-8**. Servicing trips were not counted in the TRAVL assessment of the existing land use so it has not been possible to compare servicing trip rates directly. However, it can be assumed that the type of vehicle servicing the site will reduce in size as a result of the proposed land use change, from HGVs to mainly box vans and small vans, which will positively contribute to the local area by decreasing the number of HGVs on the local highway network.

Summary

5.36 A multi-modal trip generation assessment has been undertaken to provide proposed trips generated by the proposed land uses. TRAVL and TRICS databases were consulted to provide the most representative trip generation possible for each land use.

5.37 All of the multi-modal trip generation assessments undertaken in this chapter have indicated that the proposed development is unlikely to generate significant parking pressures due to the residents' parking zones surrounding the site and the amount of on-site parking described in Chapter 3. It is anticipated that much of the proposed development's trip generation will be made by sustainable modes.

5.38 In addition, the net trip generation shows a reduction in vehicle and active travel trips, and therefore the proposed development is not anticipated to have a detrimental impact on the local highway network in terms of congestion or road safety.

5.39 Furthermore, a public transport distribution assessment has been conducted for the AM and PM peak periods. This exemplifies that the proposed development will have a minimal impact on local bus and underground services, with residents and visitors being distributed in small numbers across the network.

6 Construction

6.1 A detailed Construction and Logistics Plan has been developed alongside this TA using the TfL CLP Guidance. The CLP strives to ensure that there is minimal environmental impact through lower vehicle emissions and noise levels, a reduced road risk, a reduction in congestion and vehicle trips and cost efficiency by ensuring efficient working practices and reduced deliveries.

6.2 This is a detailed CLP and gives an overview of the expected logistics activity during the construction programme.

7 Conclusion

7.1 This Transport Assessment has been prepared by Pell Frischmann to accompany an application for full planning permission being submitted by the Applicant, Senior Living Urban (Uxbridge) Limited (Guild Living), to the London Borough of Hillingdon (LBH). The proposal is for a comprehensive redevelopment of the site comprising demolition of existing buildings to provide residential care accommodation (C2), café and nursery (E), car parking, landscaping and associated works.

7.2 The development of the site will provide later living community dwellings, as well as childcare and ancillary uses, in line with the Hillingdon Local Plan's Policy DMH 8 and Policy DMCI 2.

7.3 The site comprises two low density attached retail warehouse buildings (Use Class A1), currently occupied by Wickes (Unit 1) and Halfords (Unit 2). The buildings are set back within the site which includes a large car park situated in front of the buildings. The site benefits from existing landscaping which is generally limited to eastern and northern boundaries. The site is currently raised above Harefield Road which is fronted by a retaining wall to the car park. The site benefits from existing vehicular and pedestrian access from Harefield Road, with a separate access to a loading bay off Warwick Place.

7.4 The PTAL of the site is 5. The surrounding area is characterised by a mix of uses, services and facilities including residential, retail, civic and commercial uses.

7.5 The vehicle access strategy overall is a one-way private access road running through the site, with the access point on Harefield Road and the egress point onto Warwick Place. The changes to the public realm within the site include adding green space, trees, benches with opportunities for social integration between site users, alongside general improvements to the streetscape.

7.6 Cycle parking will increase as a result of the proposed development, to 14 long-stay spaces and 38 short stay spaces, totalling 52 cycle parking spaces. There are also four mobility scooter parking spaces.

7.7 Two junction improvements are proposed as part of the development: the junction of the site access road and Harefield Road, and the junction of Warwick Place and Harefield Road. The site access will be narrowed and improved dropped kerbs and tactile paving is proposed at the junction of Warwick Place and Harefield Road. Both of these schemes will improve the pedestrian experience along Harefield Road.

7.8 The net trip generation shows a reduction in vehicle and active travel trips, and therefore the proposed development is not anticipated to have a detrimental impact on the local highway network in terms of congestion or road safety.

7.9 The transport impacts, issues, and solutions/ mechanisms are summarised in **Table 7-1**.

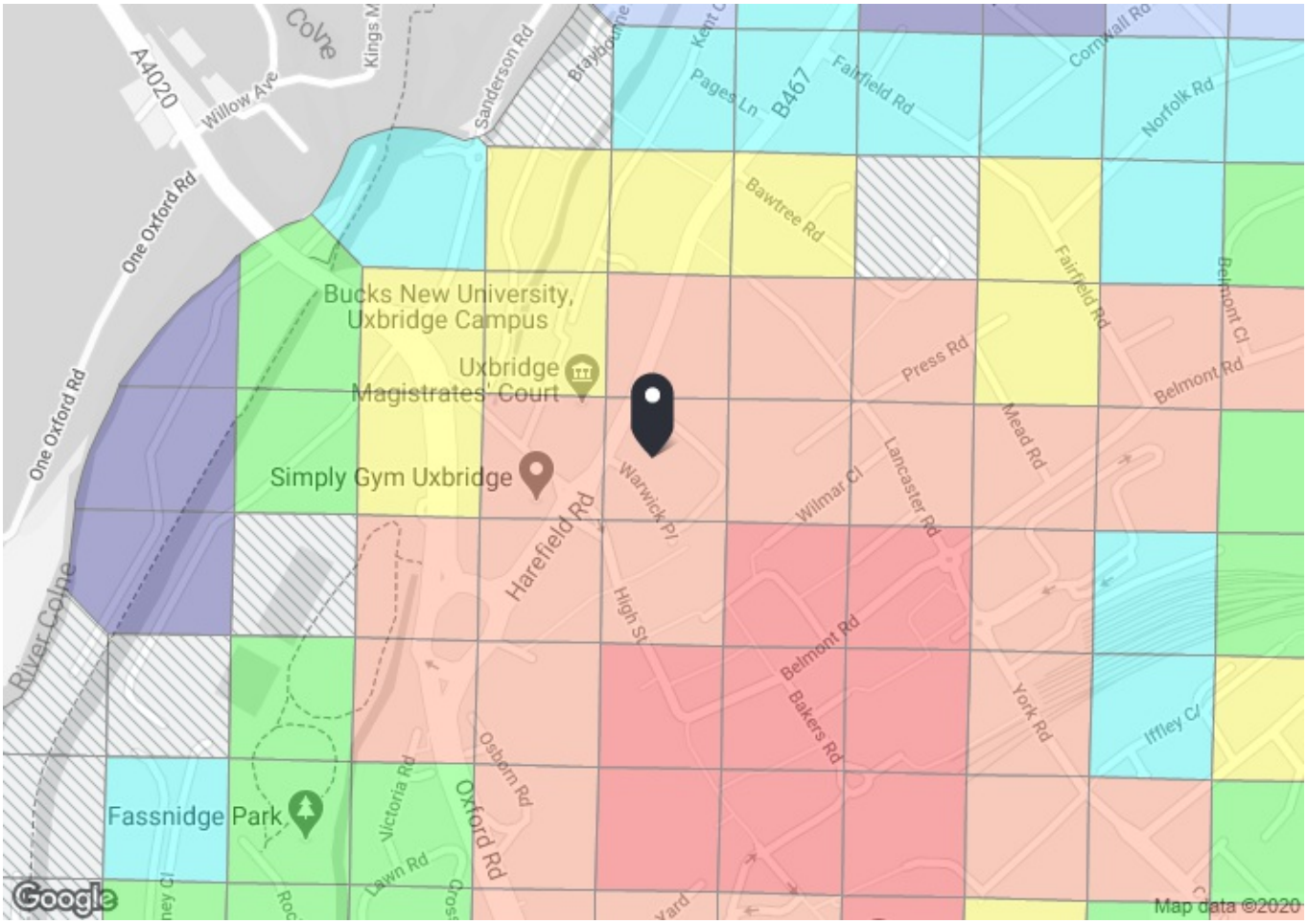
Table 7-1: Conclusions table

Mode of Travel	Key transport impacts/issues	Solutions/mechanisms
Introduction / Policy compliance	The site currently comprises two large DIY retail units which are in the centre of Uxbridge.	The proposed development comprises many land uses, all appropriate to a site adjacent to a bustling town centre. The Hillingdon Local Plan encourages later living facilities close to local amenities.
Transport Planning for People	N/A	The proposed development provides assisted living for the largest transport segment of Hillingdon's population: Detached Retirement.
Site and surroundings	The existing site's entrance is up a steep ramp and does not provide adequately for pedestrians.	The proposed development flattens the sharp gradient on the entrance to the site and provides pedestrian infrastructure throughout.

	The existing site's frontage consists of a large car park and therefore is not conducive to walking and cycling.	The proposed development centres open spaces and trees, and provides a new public courtyard which will encourage local trips on foot. The proposed development will see an increase in short-stay cycle parking of approximately ten times the current provision, which will encourage local trips by cycle.
Active Travel Zones	The active travel zone review identified that the key area for improvement the development frontage on Harefield Road.	Improvements are proposed to the site access and the junction of Warwick Place / Harefield Road.
London-wide network	The site currently receives many deliveries via HGVs near to the town centre location.	The proposed development will bring a reduction in vehicular traffic, including a reduction in heavy goods traffic to the site. This will increase the safety of pedestrians and cyclists in surrounding areas.
Construction	See CLP.	See CLP.

Appendix A
PTAL OUTPUT REPORT

TRANSPORT FOR LONDON



PTAL output for Base Year
5

1 Warwick Pl, Uxbridge UB8 1PG, UK
Easting: 505436, Northing: 184443

Grid Cell: 100680

Report generated: 15/07/2020

Map key - PTAL

0 (Worst)	1a
1b	2
3	4
5	6a
6b (Best)	

Map layers

PTAL (cell size: 100m)

Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

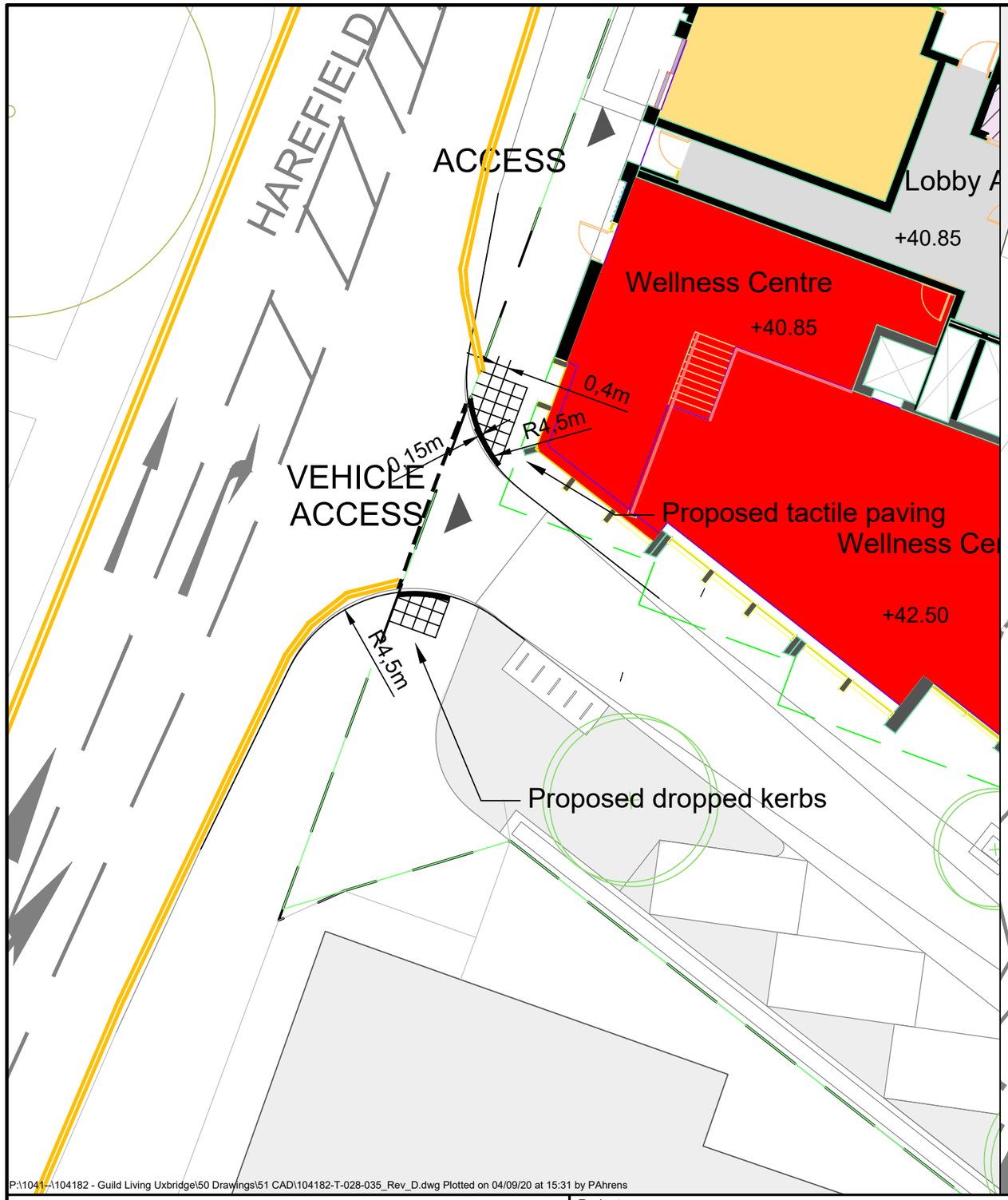
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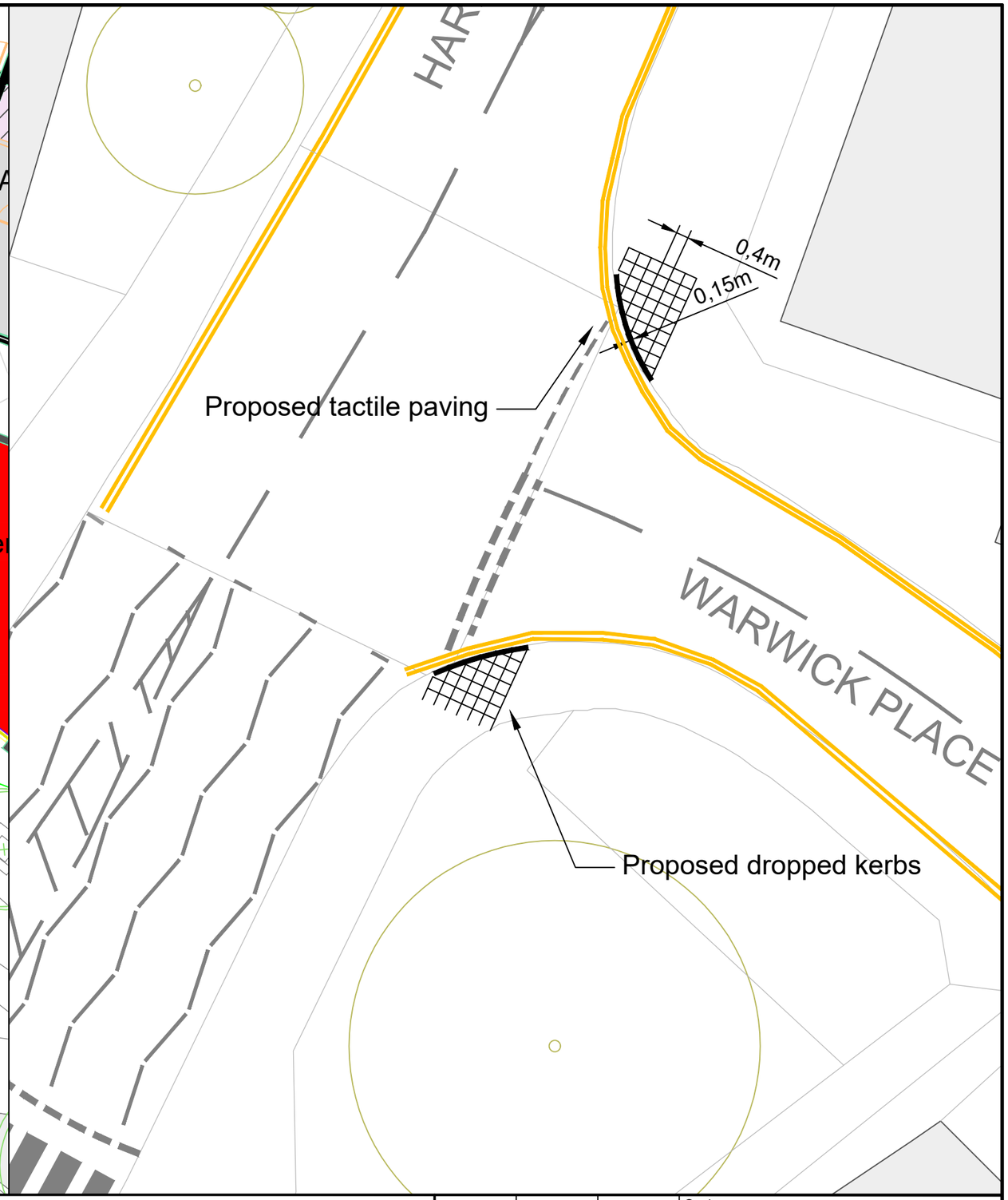
Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	UXBRIDGE CROWN & SCEPTRE	U7	374.22	2	4.68	17	21.68	1.38	0.5	0.69
Bus	UXBRIDGE CROWN & SCEPTRE	U2	374.22	6	4.68	7	11.68	2.57	0.5	1.28
Bus	UXBRIDGE CROWN & SCEPTRE	U5	374.22	5	4.68	8	12.68	2.37	0.5	1.18
Bus	UXBRIDGE CROWN & SCEPTRE	U10	374.22	1	4.68	32	36.68	0.82	0.5	0.41
Bus	UXBRIDGE CROWN & SCEPTRE	U9	374.22	2.5	4.68	14	18.68	1.61	0.5	0.8
Bus	UXBRIDGE CROWN & SCEPTRE	222	374.22	7.5	4.68	6	10.68	2.81	1	2.81
Bus	UXBRIDGE CROWN & SCEPTRE	U3	374.22	5	4.68	8	12.68	2.37	0.5	1.18
Bus	UXBRIDGE CROWN & SCEPTRE	U4	374.22	7.5	4.68	6	10.68	2.81	0.5	1.4
Bus	UXBRIDGE CROWN & SCEPTRE	331	374.22	3	4.68	12	16.68	1.8	0.5	0.9
Bus	UXBRIDGE CROWN & SCEPTRE	U1	374.22	4	4.68	9.5	14.18	2.12	0.5	1.06
Bus	UXBRIDGE CROWN & SCEPTRE	A10	374.22	4	4.68	9.5	14.18	2.12	0.5	1.06
Bus	UXBRIDGE CROWN & SCEPTRE	427	374.22	7.5	4.68	6	10.68	2.81	0.5	1.4
Bus	UXBRIDGE CROWN & SCEPTRE	607	374.22	6	4.68	7	11.68	2.57	0.5	1.28
LUL	Uxbridge	'Uxbridge-AldSlow'	508.92	5.33	6.36	6.38	12.74	2.35	1	2.35
LUL	Uxbridge	'BkStr-UxbridgeSFast'	508.92	2.33	6.36	13.63	19.99	1.5	0.5	0.75
LUL	Uxbridge	'Uxbridge-BStreetSl'	508.92	3.67	6.36	8.92	15.29	1.96	0.5	0.98
LUL	Uxbridge	'HarrowHill-Uxbridge'	508.92	0.67	6.36	45.53	51.89	0.58	0.5	0.29
LUL	Uxbridge	'Uxbridge-Cockfosters'	508.92	3.67	6.36	8.92	15.29	1.96	0.5	0.98
LUL	Uxbridge	'ArnosGrove-Uxbridge'	508.92	1	6.36	30.75	37.11	0.81	0.5	0.4
LUL	Uxbridge	'Oakwood-Uxbridge'	508.92	0.33	6.36	91.66	98.02	0.31	0.5	0.15
									Total Grid Cell AI:	**21.37**

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Appendix B
SWEPT PATH ASSESSMENTS





P:\1041--\104182 - Guild Living Uxbridge\50 Drawings\51 CAD\104182-T-028-035_Rev_D.dwg Plotted on 04/09/20 at 15:31 by PAhrens

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Project
Guild Living Uxbridge

Drawing Title
Proposed Layout
Dropped Kerbs and Tactile Paving

	Name	Date
Drawn	LM/PA	04/09/2020
Designed	LM/PA	04/09/2020
Checked	DW	04/09/2020
Approved	VB	04/09/2020

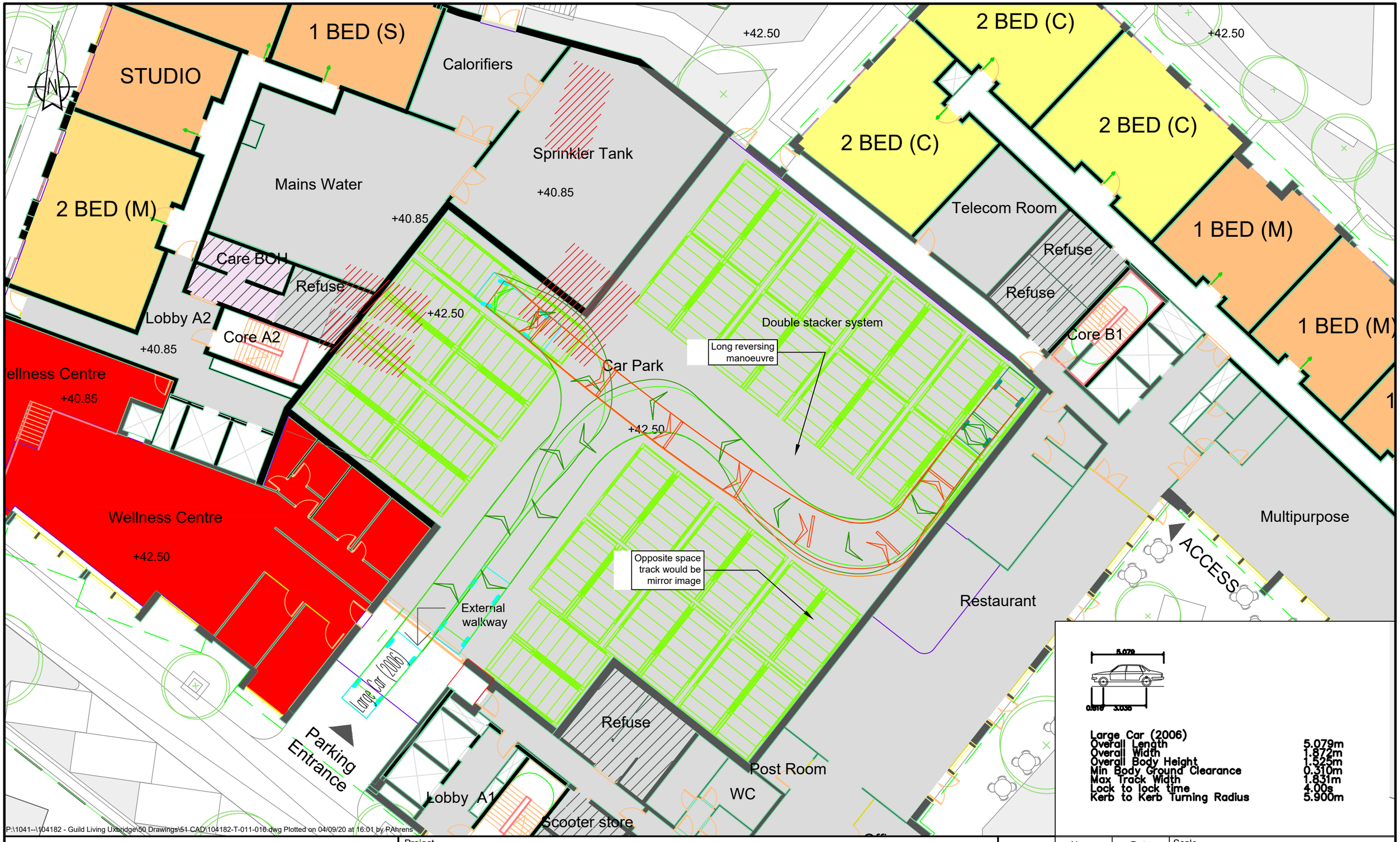
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Drawing Status: DRAFT

Drawing No.: 104182-T-035

Revision: D



P:\1041--\104182 - Guild Living Uxbridge\50 Drawings\51 CAD\104182-T-011-016.dwg Plotted on 04/09/20 at 16:01 by PAhrens

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Project: Guild Living Uxbridge

Drawing Title: Swept Path Analysis- Large Car
SPACE 2

	Name	Date
Drawn	PA	04/09/2020
Designed	PA	04/09/2020
Checked	AGA	04/09/2020
Approved	VB	04/09/2020

Scale: 1: 200 @ A3

File No.: 104182-T-011-016.dwg

Drawing Status: DRAFT

Drawing No.: 104182-T-012

Revision: B

ns Water

+40.85

+40.85

6.3M

Refuse

+42.50

5.02M

2.3M

Double stacker system

Car Park

+42.50

Parking space fits large car but tightly

6.3M

8.4M

External walkway

Large Car (2006)

Parking Entrance

Refuse

Post Room

WC

Lobby A1

1.71M

1.86M

3.3M

2.33M

Scooter store

Office

Cycle St

Switch room 2

+42.50

Sales Suite

P:\1041-\104182 - Guild Living Uxbridge\50 Drawings\51 CAD\104182-T-011-016.dwg Plotted on 04/09/20 at 16:01 by PAhrens

+40.85

6.3M

Care BCH

Refuse

Core A2

+42.50

5.02M

2.3M

Double sta

Car Park

+42.50

Parking space fits large car but tightly

6.5M

8.4M

External walkway

Refuse

Parking Entrance

Large Car (2006)

4.22M

1.71M

1.86M

3.3M

2.33M

2.33M

Lobby A1

1.05M

1.45M

5.079

0.810 3.035

Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m

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Project

Guild Living Uxbridge

Drawing Title

Swept Path Analysis- Large Car
SPACES 5 (left) AND 6 (right)

	Name	Date
Drawn	PA	04/09/2020
Designed	PA	04/09/2020
Checked	AGA	04/09/2020
Approved	VB	04/09/2020

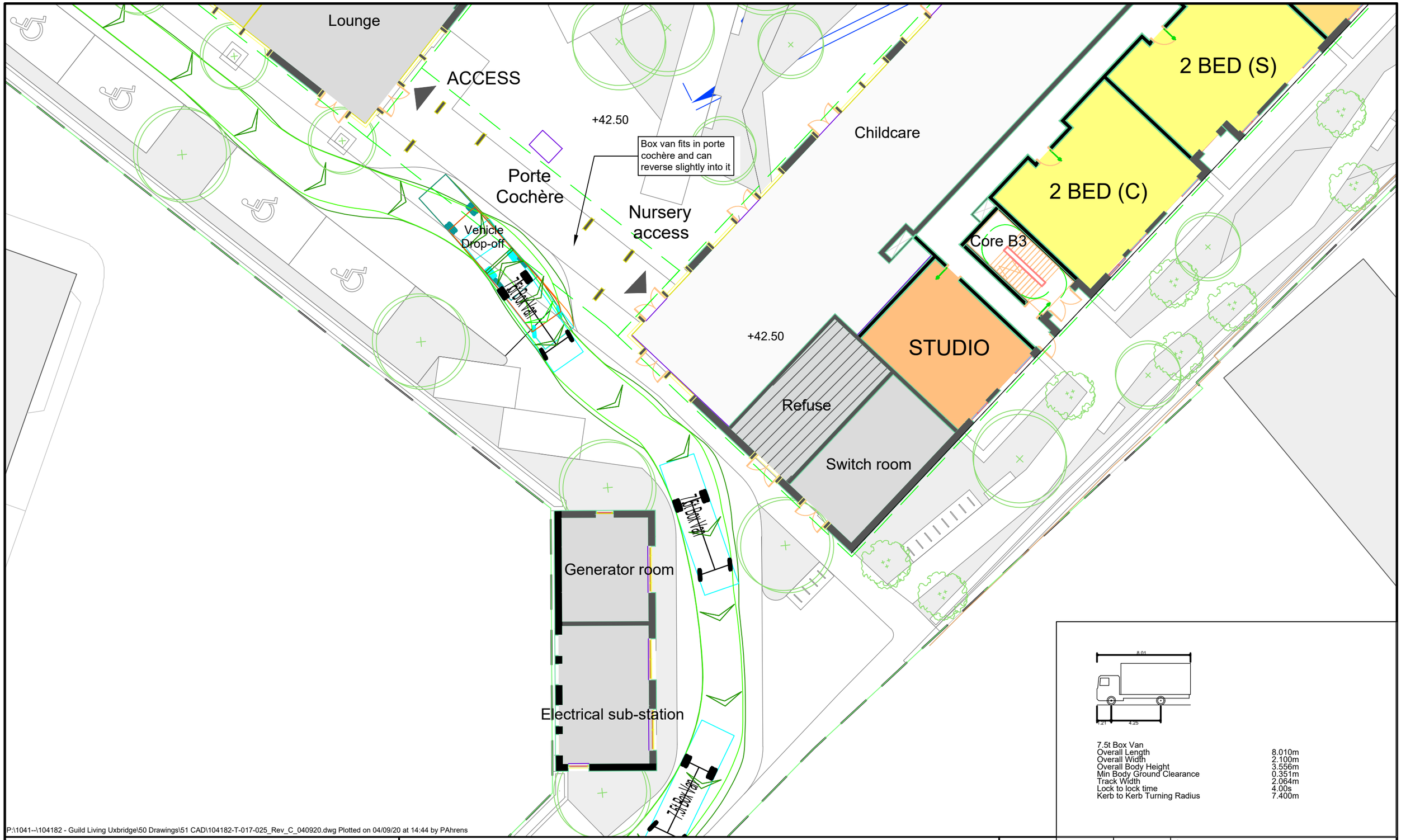
Scale: 1: 175 @ A3

File No.: 104182-T-011-016.dwg

Drawing Status: DRAFT

Drawing No.: 104182-T-015

Revision: B



7.5t Box Van	
Overall Length	8.010m
Overall Width	2.100m
Overall Body Height	3.556m
Min Body Ground Clearance	0.351m
Track Width	2.064m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

P:\1041--\104182 - Guild Living Uxbridge\50 Drawings\51 CAD\104182-T-017-025_Rev_C_040920.dwg Plotted on 04/09/20 at 14:44 by PAhrens

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Project: Guild Living Uxbridge

Drawing Title: SWEPT PATH ANALYSIS
Box Van Option 1 (Porte Cochère)

	Name	Date
Drawn	PA	04/09/2020
Designed	PA	04/09/2020
Checked	DW	04/09/2020
Approved	VB	04/09/2020

Scale: 1: 200 @ A3

File No.: 104182-T-017-025_Rev_C_040920.dwg

Drawing Status: DRAFT

Drawing No.: 104182-T-019

Revision: C

+42.50

STUDIO

Refuse

Switch room

Generator room

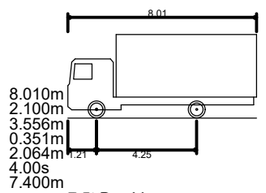
Electrical sub-station

7.5t Box Van

7.5t Box Van

7.5t Box Van

Box van fits in corner space via reverse manoeuvre



7.5t Box Van	
Overall Length	8.010m
Overall Width	2.100m
Overall Body Height	3.556m
Min Body Ground Clearance	0.351m
Track Width	2.064m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

P:\1041--\104182 - Guild Living Uxbridge\50 Drawings\51 CAD\104182-T-017-025_Rev_C_040920.dwg Plotted on 04/09/20 at 14:45 by PAhrens

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Project: Guild Living Uxbridge

Drawing Title: SWEPT PATH ANALYSIS
Box Van Option 2 (Delivery Bay)

	Name	Date
Drawn	PA	04/09/2020
Designed	PA	04/09/2020
Checked	DW	04/09/2020
Approved	VB	04/09/2020

Scale: 1: 175 @ A3

File No.: 104182-T-017-025_Rev_C_040920.dwg

Drawing Status: DRAFT

Drawing No.: 104182-T-020

Revision: C



Hillingdon Refuse Vehicle

Overall Length	10.500m
Overall Width	2.530m
Overall Body Height	3.211m
Min Body Ground Clearance	0.416m
Track Width	2.530m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	12.000m

P:\1041--\104182 - Guild Living Uxbridge\50 Drawings\51 CAD\104182-T-017-025_Rev_C_040920.dwg Plotted on 04/09/20 at 14:43 by PAhrens

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Project: Guild Living Uxbridge

Drawing Title: SWEPT PATH ANALYSIS
Refuse Vehicle (Delivery Bay)

	Name	Date
Drawn	PA	04/09/2020
Designed	PA	04/09/2020
Checked	DW	04/09/2020
Approved	VB	04/09/2020

Scale: 1: 250 @ A3

File No.: 104182-T-017-025_Rev_C_040920.dwg

Drawing Status: DRAFT

Drawing No.: 104182-T-022

Revision: C

Lounge

ACCESS

+42.50

Porte Cochère

Nursery access

Vehicle fits into porte cochère fine

Childcare

2 BE

Core B3

Vehicle Drop-off

Ambulance

Ambulance

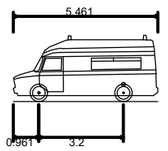
+42.50

STUDIO

Refuse

Ambulance

Generator room



Ambulance	
Overall Length	5.461m
Overall Width	2.020m
Overall Body Height	2.498m
Min Body Ground Clearance	0.225m
Track Width	1.860m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	6.500m

P:\1041--\104182 - Guild Living Uxbridge\50 Drawings\51 CAD\104182-T-017-025_Rev_C_040920.dwg Plotted on 04/09/20 at 14:43 by PAhrens

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Project: Guild Living Uxbridge

Drawing Title: SWEPT PATH ANALYSIS
Ambulance Option 1 (Porte Cochère)

	Name	Date
Drawn	PA	04/09/2020
Designed	PA	04/09/2020
Checked	DW	04/09/2020
Approved	VB	04/09/2020

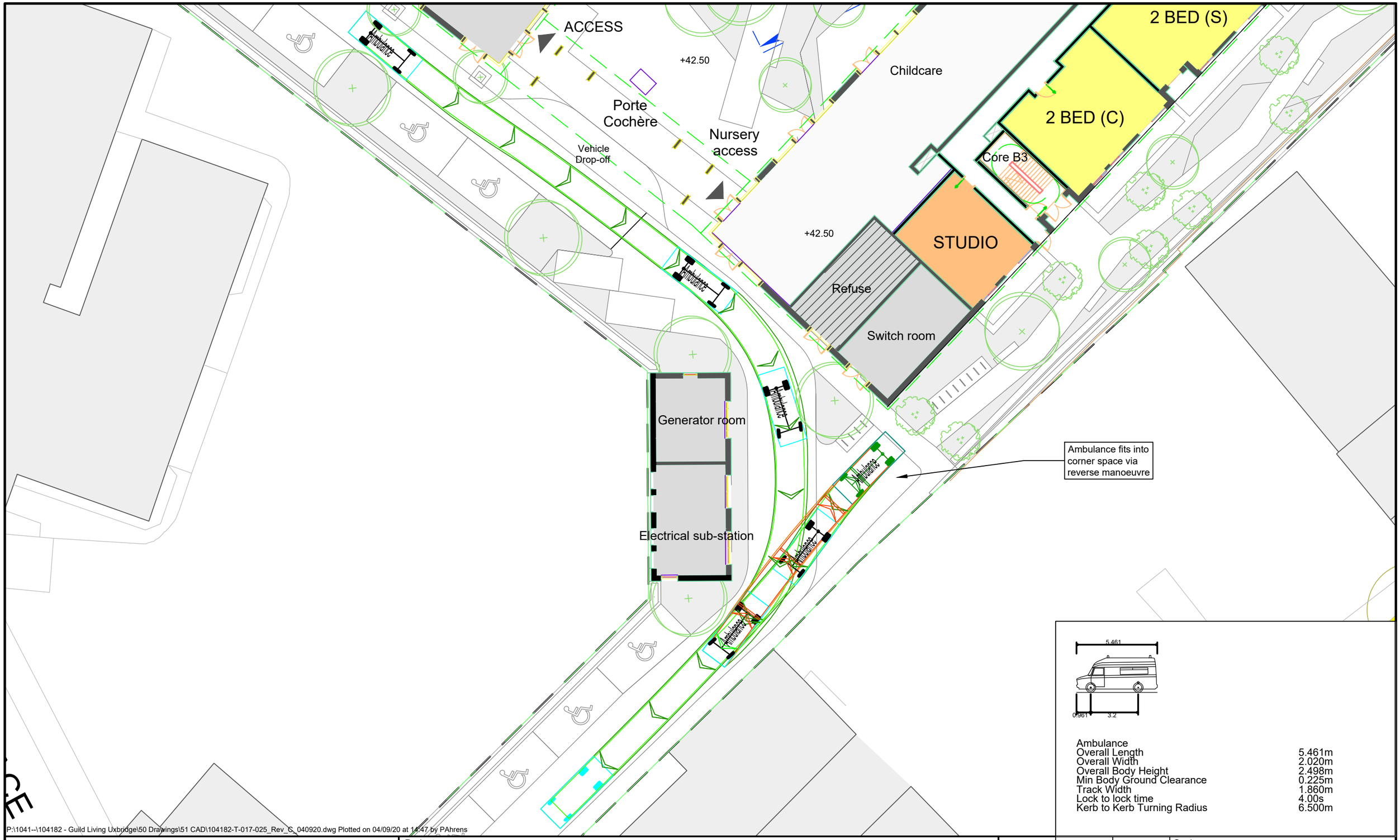
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File No.: 104182-T-017-025_Rev_C_040920.dwg

Drawing Status: DRAFT

Drawing No.: 104182-T-023

Revision: C



Ambulance

Overall Length	5.461m
Overall Width	2.020m
Overall Body Height	2.498m
Min Body Ground Clearance	0.225m
Track Width	1.860m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	6.500m

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Project

Guild Living Uxbridge

Drawing Title

SWEPT PATH ANALYSIS
Ambulance Option 2 (Delivery Bay)

	Name	Date
Drawn	PA	04/09/2020
Designed	PA	04/09/2020
Checked	DW	04/09/2020
Approved	VB	04/09/2020

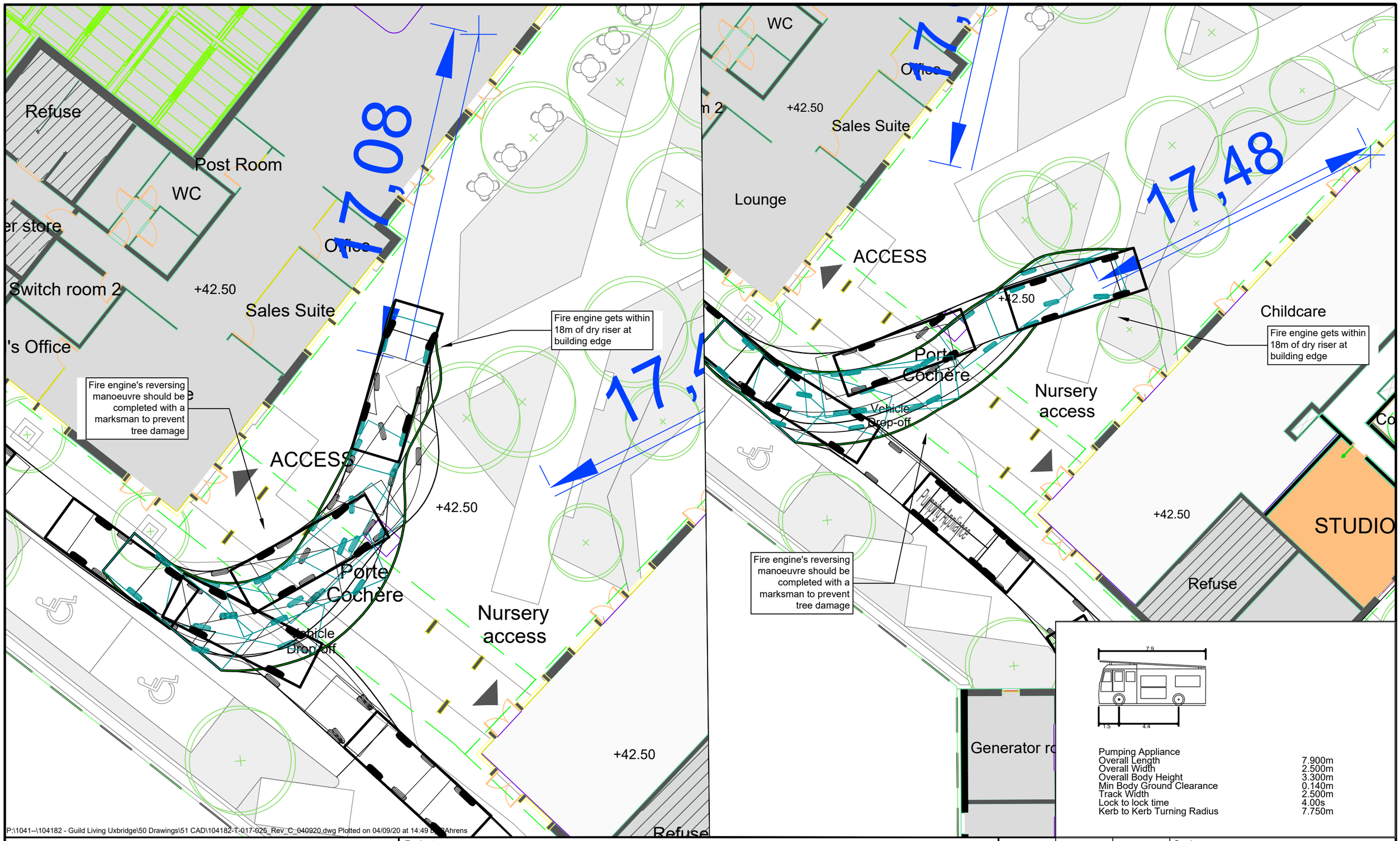
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File No.: 104182-T-017-025_Rev_C_040920.dwg

Drawing Status: DRAFT

Drawing No.: 104182-T-024

Revision: C



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Project: Guild Living Uxbridge

Drawing Title: SWEPT PATH ANALYSIS
Fire Engine (into courtyard)

	Name	Date
Drawn	PA	04/09/2020
Designed	PA	04/09/2020
Checked	DW	04/09/2020
Approved	VB	04/09/2020

Scale: 1: 175 @ A3 (L) 1:200 @ A3 (R)

File No.: 104182-T-017-025_Rev_C_040920.dwg

Drawing Status: DRAFT

Drawing No.: 104182-T-025

Revision: D

Appendix C
HEALTHY STREETS DESIGN CHECK

Key scoring rules ›

Healthy Streets Check

		Scoring System					Enter score here		Notes
		3	2	1	0	More info on each question	Existing layout	Proposed layout	Please supplement your answers with detailed notes where possible
1	**Total volume of two way motorised traffic**	There are fewer than 500 vehicles per hour at peak.	There are 500 to 1000 vehicles per hour at peak.	There are more than 1000 vehicles per hour at peak, where people cycling are separated from motorised traffic.	**There are more than 1000 vehicles per hour at peak, where people cycling are mixed with motorised traffic.**	ⓘ	3	3	From trip generations.
2	**Interaction between large vehicles and people cycling**	No large vehicles are using the street, or cycle traffic is separated from motorised traffic.	The proportion of large vehicles is less than 2% of motorised traffic, 7am to 7pm.	The proportion of large vehicles is 2% to 5% of motorised traffic, 7am to 7pm. **or** The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either: - in a nearside general traffic lane or bus lane at least 4.5m wide, or - in a cycle lane where the combined width of the cycle lane and the next general traffic lane is at least 4.5m.	**The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either:** **- in a nearside general traffic lane or bus lane less than 4.5m wide, or** **- in a cycle lane where the combined width of the cycle lane and the next general traffic lane is less than 4.5m.**	ⓘ	0	0	Assuming the proportion of large vehicles = the proportion of servicing vehicles which is 12% in the combined trip generation for the proposed development. The existing trip generation doesn't have a servicing trip generation.
3	**Speed of motorised traffic**	85th percentile speed is less than 20mph. **or** Existing 85th percentile speed is 20 to 25 mph, but there are some proposals to reduce speed further. **or** Existing 85th percentile speed is over 25 mph but a complete redesign of the street environment should reduce this to below 20mph.	85th percentile speed is 20 to 25mph. **or** Existing 85th percentile speed is 25 to 30 mph, but there are some proposals to reduce speed further.	85th percentile speed is 25 to 30mph. **or** Existing 85th percentile speed is greater than 30 mph, but there are some proposals to reduce speed further.	**85th percentile speed is greater than 30mph.** **or** **Existing 85th percentile speed is greater than 30 mph, and there are no proposals to reduce this speed.**	ⓘ	3	3	Existing site is not a through-route so speeds will not be high. Proposed site is a loop off Harefield Road so speeds will not be high.
4	**Traffic noise based on peak hour motorised traffic volumes**	There are fewer than 55 vehicles per hour (c. <58 DB).	There are 55 to 450 vehicles per hour (c. 58-70 DB).	There are more than 450 vehicles per hour (c. >70 DB).	_	ⓘ	2	2	60 per hour for proposed. 78 per hour for existing.
5	**Noise from large vehicles**	The proportion of large vehicles is less than 5% (c. +0 to +3DB).	The proportion of large vehicles is 5 to 10% (c. +3 to +5 DB).	The proportion of large vehicles is greater than 10% (c. +5 DB and over).	_	ⓘ	2	3	Not certain for existing site use.

6	**NO2 concentration** (from London Atmospheric Emission Inventory)	**If assessing existing:** The NO2 concentration is less than 32µg/m3. **If assessing proposal:** The existing NO2 concentration is less than 32µg/m3 **or** the existing concentration is 32 to 40µg/m3 with local traffic volume reduction measures proposed.	**If assessing existing:** The NO2 concentration is 32 to 40µg/m3. **If assessing proposal:** The existing NO2 concentration is 32 to 40µg/m3 with no proposal to reduce local traffic volume **or** the existing NO2 concentration is greater than 40µg/m3 with local traffic volume reduction measures proposed.	**If assessing existing:** The NO2 concentration is greater than 40µg/m3 (legal limit value). **If assessing proposal:** The existing NO2 concentration is greater than 40µg/m3 with no proposal to reduce local traffic volume.	–	ⓘ	**3**	**3**	According to the Hillingdon Air Quality Action Plan 2019-2024, the site location is in blue indicating 31 or less.
7	**Reducing private car use**	There is no through-movement for motorised traffic, with access limited to local residents, deliveries and public service vehicles.	There are some time or movement restrictions for motorised traffic.	There are no access restrictions for motorised traffic.	–	ⓘ	**3**	**2**	Existing site is not a through-route. Proposed site is a loop off Harefield Road but only leads back to Harefield Road.
8	**Ease of crossing side roads for people walking**	Side roads are closed to motor traffic. **or** Side roads are one-way out for motor vehicles and have features to encourage drivers to turn cautiously.	Side roads are two-way or one-way in for motor vehicles, and have features to encourage drivers to turn cautiously.	Side roads have dropped kerbs only.	**Side roads have no dropped kerbs.**	ⓘ	**3**	**3**	Does this mean side roads within the development? Or the side roads filled in on the front page to mark the boundaries of the check area?
9	**Mid-link crossings, to meet pedestrian desire lines**	All main pedestrian desire lines are provided for with crossings.	Only some of the main pedestrian desire lines are provided for with crossings.	No main pedestrian desire lines are provided for with pedestrian crossings.	–	ⓘ	**1**	**1**	There are no pedestrian crossings within the existing nor the proposed development.
10	**Type and suitability of pedestrian crossings away from junctions**	Crossing is uncontrolled, with conflicting traffic volume less than 200 vehicles per hour. **or** A Zebra or parallel crossing is provided. **or** Crossing is signalised so that people crossing the main carriageway have priority, while traffic on the main carriageway has on-demand green.	Crossing is uncontrolled, with conflicting traffic volume between 200 and 1000 vehicles per hour. **or** Crossing is signalised and straight-across where the distance to cross is less than 15m or greater than 15m in a 20mph speed limit. **or** Crossing is signalised and staggered where the distance to cross is greater than 15m in a 30mph+ speed limit.	Crossing is uncontrolled, with conflicting traffic volume greater than 1000 vehicles per hour. **or** Crossing is signalised and straight-across where the distance to cross is greater than 15m in a 30mph+ speed limit.	–	ⓘ	**3**	**3**	Traffic volume within the site is less than 200 vehicles per hour.
11	**Technology to optimise efficiency of movement** (pedestrians, cyclists, buses and general motor traffic)	All appropriate detection and optimisation technology has been applied to traffic signals.	Some detection and optimisation technology has been applied to traffic signals.	No detection and optimisation technology applied to traffic signals.	–	ⓘ	**2**	**2**	There is no pedestrian crossing facility.

12	**Additional features to support people using controlled crossings**	Controlled crossings have many additional features to enhance their quality (please see scoring guidance).	Controlled crossings have some additional features to enhance their quality (please see scoring guidance).	Controlled crossings have no additional features to enhance their quality (please see scoring guidance). **or** There is no step-free access at the crossing point and/or there is no physical delineation between the footway and carriageway away from crossing points.	–	ⓘ	**2**	**2**	There are no controlled crossings within the site.
13	**Width of clear continuous walking space**	There is 2m or more clear width for walking in quiet locations (flows of <600 pedestrians an hour). **or** There is 2.5m or more clear width for walking in moderately busy locations (flows of 600-1200 pedestrians an hour). **or** There is 3m or more in busy locations (flows of >1200 pedestrians an hour).	There is 2m to 2.5m clear width for walking in moderately busy locations (flows of 600-1200 pedestrians an hour). **or** There is 2.5m to 3m in busy locations (flows of >1200 pedestrians an hour).	There is 1.5m to 2m clear width for walking in quiet and moderate locations (flows of <1200 pedestrians an hour). **or** There is 2m to 2.5m clear width for walking in busy locations (flows of >1200 pedestrians an hour).	**There is less than 1.5m clear width for walking.**	ⓘ	**0**	**0**	The existing site does not have footways across all of the site and they are less than 1.5m wide where they do exist. The proposed development has a minimum 1.2m safety strip for pedestrians.
14	**Sharing of footway with people cycling**	No part of the footway is designated as shared use for walking and cycling.	Part or all of a footway wider than 3m with fewer than 200 pedestrians per hour is designated as shared use.	Part or all of a footway used by more than 200 pedestrians per hour is designated as shared use. **or** Part or all of a footway less than 3m wide is designated as shared use.	–	ⓘ	**3**	**3**	The existing site does not have footways across all of the site, but they are not shared with cyclists where they do exist. The proposed development has a minimum 1.2m safety strip for pedestrians, and this is not to be shared with cyclists.
15	**Collision risk between people cycling and turning motor vehicles**	Side roads are closed to motorised traffic, or turning movements by motor vehicles are minimised. **and** At signal-controlled junctions, all conflicting movements between cycle traffic and turning motor traffic are separated.	Some measures are in place to reduce turning movements by motor vehicles at priority junctions. **and** At signal-controlled junctions, cycle movements are not separated and fewer than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place.	There are no restrictions on turning movements by motor vehicles at side roads and other uncontrolled accesses. **and** At signal-controlled junctions, cycle movements are not separated and more than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place.	**At signal-controlled junctions, cycle movements are not separated, more than 5% of turning vehicle movements are made by larger vehicles and there are no mitigation measures in place.**	ⓘ	**1**	**1**	There are no signal-controlled junction within the site, and there are no safety features of cyclists at any of the junctions within the site.

16	**Effective width for cycling**	**Where cycles are separated from other traffic,** the width of the lane or track is 2.2m or more (one-way) or 3.5m or more (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is 4.5m or more.	**Where cycles are separated from other traffic,** the width of the lane or track is 1.5m to 2.2m (one-way) or 2.5m to 3.5m (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 4m and 4.5m.	**Where cycles are separated from other traffic,** the width of the lane or track is less than 1.5m (one-way) or less than 2.5m (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is less than 3.2m.	**Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 3.2m and 3.9m.**	ⓘ	**0**	**0**	In the existing site, cyclists mix with general traffic in the car park. In the proposed development, cycles mix with other traffic on a 3.7m wide single lane on the site access road.
17	**Impact of kerbside activity on cycling**	There is no kerbside activity. **or** People cycling are physically separated from parking or loading facilities.	There is occasional kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.	There is frequent or continuous kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.	**People cycling cannot maintain at least 1.0m clearance from vehicles parked or loading.**	ⓘ	**0**	**2**	The width of the access road at 3.7m wide allows cyclists to continue through the site whilst leaving at least 1.5m from parked cars on their right hand side and at least 1.5m from loading vehicles on their left hand side. In the existing site, cyclists can leave at least 1.5m between parked cars on either side of them whilst travelling through the car park.
18	**Quality of carriageway surface**	The carriageway surface is even and smooth, with sufficient skid resistance. **or** There are defects but resurfacing of the whole carriageway is proposed.	There are a few minor defects in the carriageway surface (please see scoring guidance).	There are many minor defects in the carriageway surface (please see scoring guidance).	**There are major defects in the carriageway surface (please see scoring guidance).**	ⓘ	**2**	**3**	The proposed development will resurface the entire road so any defects will be eliminated. The existing site suffers from minor defects such as potholes.
19	**Quality of footway surface**	There is an even and level surface for walking on footways. **or** There are defects but resurfacing of the whole footway is proposed.	There are a few minor defects in the footway surface (please see scoring guidance).	There are many minor defects in the footway surface (please see scoring guidance).	**There are major defects in the footway surface (please see scoring guidance).**	ⓘ	**0**	**3**	There are major defects in the existing footway surface. The proposed development's footway surface will be brand new so will not have any defects.
20	**Surveillance of public spaces**	There is constant surveillance – because mixed use buildings overlook the street or space, or because there are many people using the space or walking through.	There is intermittent surveillance – because surrounding buildings are single-use or do not completely overlook the street, or because there are few people using the space or walking through.	There is poor surveillance – because few buildings overlook the street or space, there is little activity.	–	ⓘ	**1**	**3**	The proposed development's land uses all overlook the footway and acrriageway and provide actice frontage. The existing site uses are located at the back of the site and so the car park is not overlooked.
21	**Lighting**	Street lighting meets the British Standard 5489:2003 and the European Standard CEN/TR 13201. **and** Lighting of off-carriageway facilities for walking or cycling exceeds the same standards.	Street lighting meets the British Standard 5489:2003 and the European Standard CEN/TR 13201 but lighting of off-carriageway spaces for walking or cycling does not.	Street lighting does not meet the British Standard 5489:2003 and the European Standard CEN/TR 13201.	–	ⓘ	**3**	**3**	

22	**Provision of cycle parking**	Cycle parking exceeds existing demand and is accessible by all.	Cycle parking meets existing demand and is accessible by all.	Cycle parking does not meet existing demand. **or** Cycle parking meets existing demand but is not accessible by all.	–	ⓘ	1	3	Cycle parking in existing was four front-wheel stands next to the store entrance. The proposed development will have long-stay in covered and secure area, and short stay sheffield stands which are more accessible for people who can't bend down and safer because they can lock frames to Sheffield stands.
23	**Street trees**	**If assessing existing:** There are multiple trees, with canopies spaced less than 15m apart on average. **If assessing proposal:** All existing trees are to be retained and the street is already tree-lined with less than 15m between tree canopies. **or** All existing trees are to be retained, with planting of new trees designed to reduce the average canopy spacing to less than 15m.	**If assessing existing:** There are multiple trees, with canopies spaced more than 15m apart on average. **If assessing proposal:** Not all existing trees are to be retained, however new planting will ensure the overall number of trees is maintained or increased. **or** All existing trees are to be retained, however the canopy spacing will remain more than 15m on average.	**If assessing existing:** There are no trees, or only one tree. **If assessing proposal:** There are no existing or proposed trees. **or** The number of trees has been reduced.	–	ⓘ	3	2	The existing site has trees spaced less than 15m apart. The proposed development's trees will be spaced less than 15m apart, but none will be retained from the existing development.
24	**Planting at footway-level** (excluding trees)	**If assessing existing:** There is substantial planting in good condition designed to create or improve social space and/or act as a connection between other green spaces (eg pocket park, rain garden, community garden area). **If assessing proposal:** Existing greenery is to be enhanced with integrated SuDS features or new planting or new areas of greenery are proposed.	**If assessing existing:** There is some planting, eg shrubs, verges, hedges, ornamental flower beds, or adaptation for some animal species. **If assessing proposal:** Existing standalone greenery is to be retained.	**If assessing existing:** There is no planting, or existing planting is in a poor condition. **If assessing proposal:** No green infrastructure is proposed, or the size of existing greenery is to be reduced.	–	ⓘ	1	3	
25	**Walking distance between resting points** (benches and other informal seating)	There is less than 50m between resting points.	There is between 50m and 150m between resting points.	There is more than 150m between resting points.	–	ⓘ	1	3	The existing development does not have any resting points. The proposed development has resting points at the centre of the site, which are less than 50m apart.
26	**Walking distance between sheltered areas protecting from rain.** Including fixed awning or other shelter provided by buildings/infrastructure	There is less than 50m between sheltered areas.	There is between 50m and 150m between sheltered areas.	There is more than 150m between sheltered areas.	–	ⓘ	1	3	The existing site has few sheltered areas. The proposed development has an awning and a porte cocheé which are less than 50m apart.
				Are there any bus services running on this street? (Y/N) **If not, do not complete metrics 27-28**			N	N	**An answer is required here in order to generate results**
27	**Factors influencing bus passenger journey time**	There are positive influences on bus journey time, e.g. bus lanes, and/or exemptions for buses from movement bans for general traffic.	Buses are mixed with traffic but not significantly delayed.	There are negative influences on bus journey time, e.g. unclear markings, narrow lane width, parking/loading issues, short cage length, mixing with congested traffic.	–	ⓘ			

28	**Bus stop accessibility**	Bus stop is wheelchair accessible, there is clear space for boarding and alighting and there is a clearway in place at the bus stop.	Bus stop is wheelchair accessible but either there is limited clear space around the bus stop for boarding and alighting or, for borough roads, there is no clearway in place.	Bus stop is not wheelchair accessible, ie the kerb height is less than 100mm.	–	ⓘ			
				Are there any rail/underground/bus stations accessible from this street? (Y/N) If not, do not complete metrics 29-31			**N**	**N**	**An answer is required here in order to generate results**
29	**Bus stop connectivity with other public transport services**	The bus stop is within sight of another service – less than 50m away.	The bus stop is between 50m and 150m away from another service.	The bus stop is more than 150m away from another service.	–	ⓘ			
30	**Street-to-station step-free access**	All entry points to the station are step-free.	The main entry point to the station is not step-free but step-free alternatives are provided.	There is no step-free access to the station.	–	ⓘ			
31	**Support for interchange between cycling and underground/rail**	Secure cycle parking is provided close to station access points, and exceeding existing demand.	Cycle parking is available close to station access points that meets existing demand.	There is insufficient cycle parking to meet demand, or cycle parking is poorly located for station access points.	–	ⓘ			
					If 'zero' scores (known road danger issues) remain, please explain why opposite:		**5**	**3**	***Insert design response for 'zero' scores here***

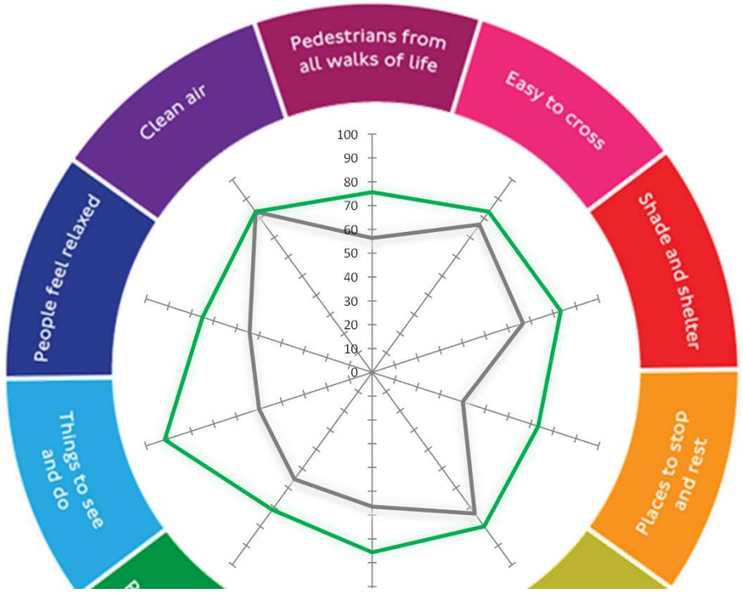
Healthy Streets Check Summary Results

Indicators explained ›

An overview of how each metric aligns with different Indicators

Interpreting results ›

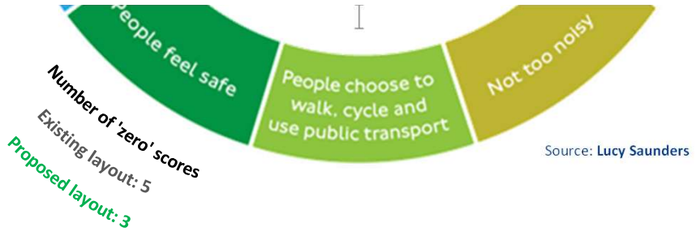
A summary of how to use and improve on your results



Healthy Streets Indicator scores (%)

(Results will only display once all metrics have been scored)

	Existing layout	Proposed layout
Pedestrians from all walks of life	56	76
Easy to cross	77	83
Shade and shelter	67	83
Places to stop and rest	40	73
Not too noisy	73	80
People choose to walk, cycle and use public transport	56	76
People feel safe	56	71
Things to see and do	50	92
People feel relaxed	54	75
Clean air	83	83



Overall Healthy Streets Check score	**58**	**76**
Number of 'zero' scores	**5**	**3**

Appendix D
ACTIVE TRAVEL ROUTES AUDIT

Pell Frischmann		Project No. 104182
		Version No. Draft
TECHNICAL NOTE	Project Guild Living Uxbridge	Date 14/08/2020
Subject Active Travel Zones Photographic Audit of five routes around Guild Living Uxbridge site		By Chkd P Ahrens D Watson

Introduction

1.1 Pell Frischmann (PF) is commissioned by Senior Living Urban (Uxbridge) Limited (the 'client') to provide transport planning and highways consultancy services in connection with redevelopment proposals of an existing retail park, Uxbridge (the 'site'), in the London Borough of Hillingdon (LBH).

1.2 The proposed development includes 161 Guild Living Residences (C2) designed for later living, alongside 33 extra care units, a nursey (D1), café (A3), restaurant/ bar (A3) and a wellness centre (D2). Whilst the nursery will serve as a standalone use, the café, restaurant/bar and wellness centre will be predominantly for the residents with access to the general public.

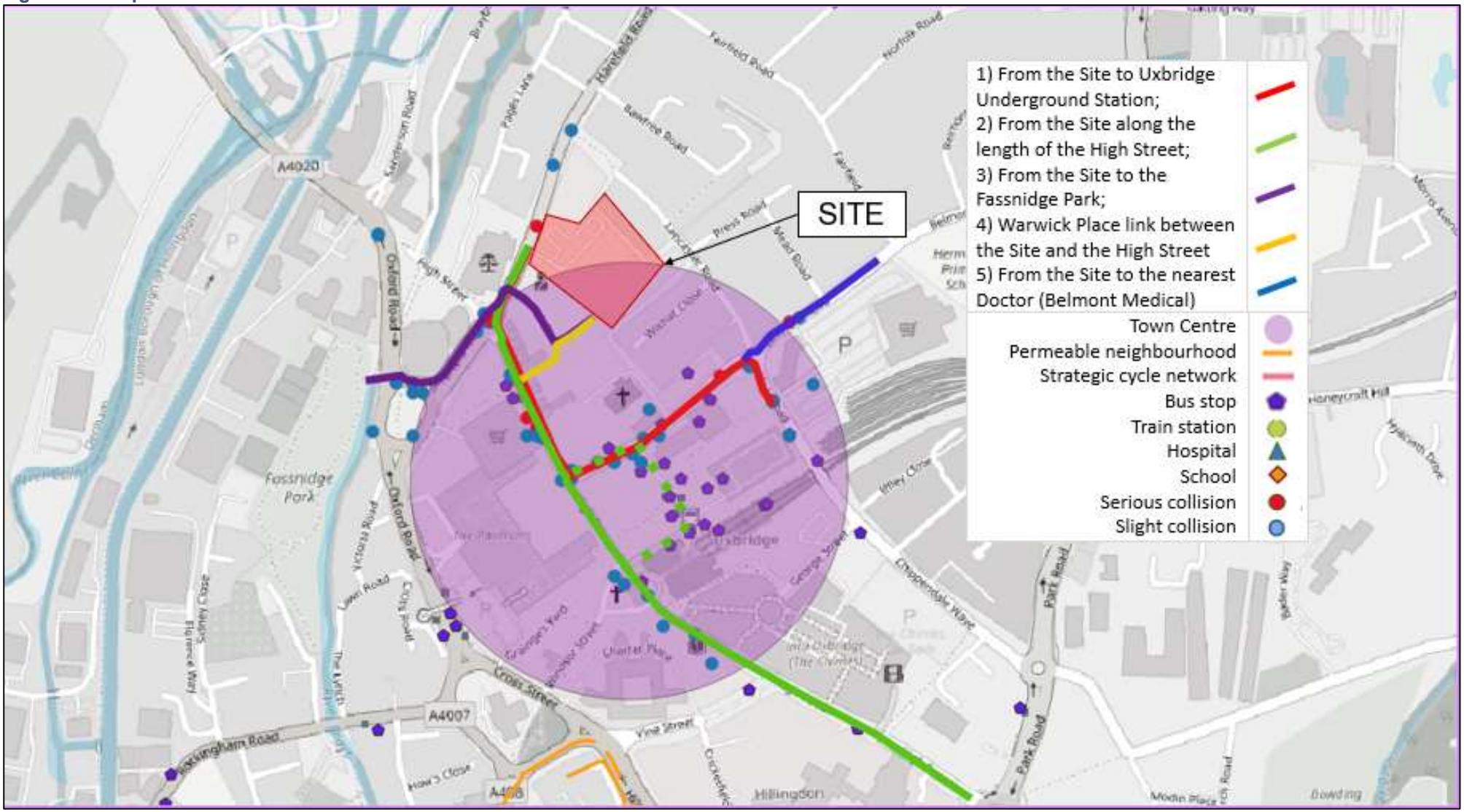
1.3 LBH act as the local planning and highways authority. The application is referable to the Mayor of London and therefore TfL have been consulted as regional highways authority.

1.4 The Photographic Audit is the photographic log of the Transport Assessment (TA), relating to the key active travel routes identified in the TA, and reviewing the worst part of each journey against the healthy street indicators. The reviews against the Healthy Streets Indicators are included in the following tables.

1.5 The routes are addressed in number order below. Photographs of the worst section of the route as described follow immediately after each table.

1.6 Figure 1 shows the routes as agreed in advance with LBH and TfL.

Figure 1.1: Map of routes



1 Routes

Route 1: From the Site to Uxbridge Underground Station

1.1 This route scores very well against Healthy Streets criteria for the majority of the route. The footways are of good quality and there are pedestrian crossing points throughout. There is street lighting and the atmosphere us overall busy and safe.

1.2 The 'worst' section was chosen for its likely unpleasant qualities for cyclists, although for pedestrians it continues to score well.

Location (photos)	**Section: Bakers Road (for cyclists)**
Healthy street indicator	Healthy street statement
Easy to cross	For less confident or new cyclists, Belmont Road at the north end of this section may be less easy to cross, as it would involve a right turn into Bakers Road, although cyclists would be unlikely to cycle to the bus stops. For pedestrians, Bakers Road should be easy to cross, as it has a pedestrian refuge at its northern end and nevertheless it is likely pedestrians would have crossed further up on the High Street. Further south on Baker Street there are fewer formal crossing points, however pedestrians from the site would end up on the western side of the road so should not have to cross the road anyway.
People feel safe	The street is lit by street lamps and has many other people on it. This should make both pedestrians and cyclists feel safe even at night, as there are other people around. For cyclists, the street being mainly bus-only would be reassuring as there is no general traffic, and the manoeuvres the buses make will be predictable. Partly due to the lack of cycle stands on the street, it is unlikely site users would be cycling the short distance to the bus/train station.
Things to see and do	There are few things to see and do on this street, in terms of shops and art, etc. However, as people on this route would likely be there for the purpose of getting the bus, it is not necessary to construct attractions for other visitors.
Places to stop and rest	There are plenty of places for pedestrians to stop and rest on this section of the route. This includes two different types of bus stop benches, although these can of course also be used by elderly or less able people to rest if needed. There are also benches with arm rests and backs set apart from the bus stops. Additionally, the footway is wide enough to accommodate benches and pedestrians passing beside them.
People feel relaxed	Due to the street's utility in providing bus stop waiting areas, the aesthetic of the street has not been prioritised. However, it is appropriately busy and lively for its purpose, which should make pedestrians feel relaxed whilst waiting for the bus. There are some crossovers on the western side of the road which would lead vehicles to cross the footway, and these are mainly marked by tactile paving and the slope on either side is gentle. For cyclists, the driving behaviour in general is not aggressive, although buses are pulling away from stops whilst cyclists are passing by them. Unfortunately, this is unavoidable in a street next to the bus station.
Not too noisy	It is not too noisy in this street, as it is a dead end so the traffic is only the buses and a few drop-offs for the hotel. This reduces the noise from other

Location (photos)	**Section: Bakers Road (for cyclists)**
Healthy street indicator	Healthy street statement
	traffic and from the buses themselves, whose reduced interaction with other vehicles diminishes the need to sound their horns.
Clean air	Uxbridge Town Centre, including this route, is included in the Clean Air Focus Area 102 as defined in the Hillingdon Air Quality Action Plan, 2019-2024.
Shade and shelter	Many of the bus stops are under a shelter, which is constituted of Uxbridge Underground building on the southern side, and a cover, which together would protect from the prevailing wind and rain, and the sun. The benches are thereby sheltered, as are the benches in the bus stop shelters further north on the road.




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