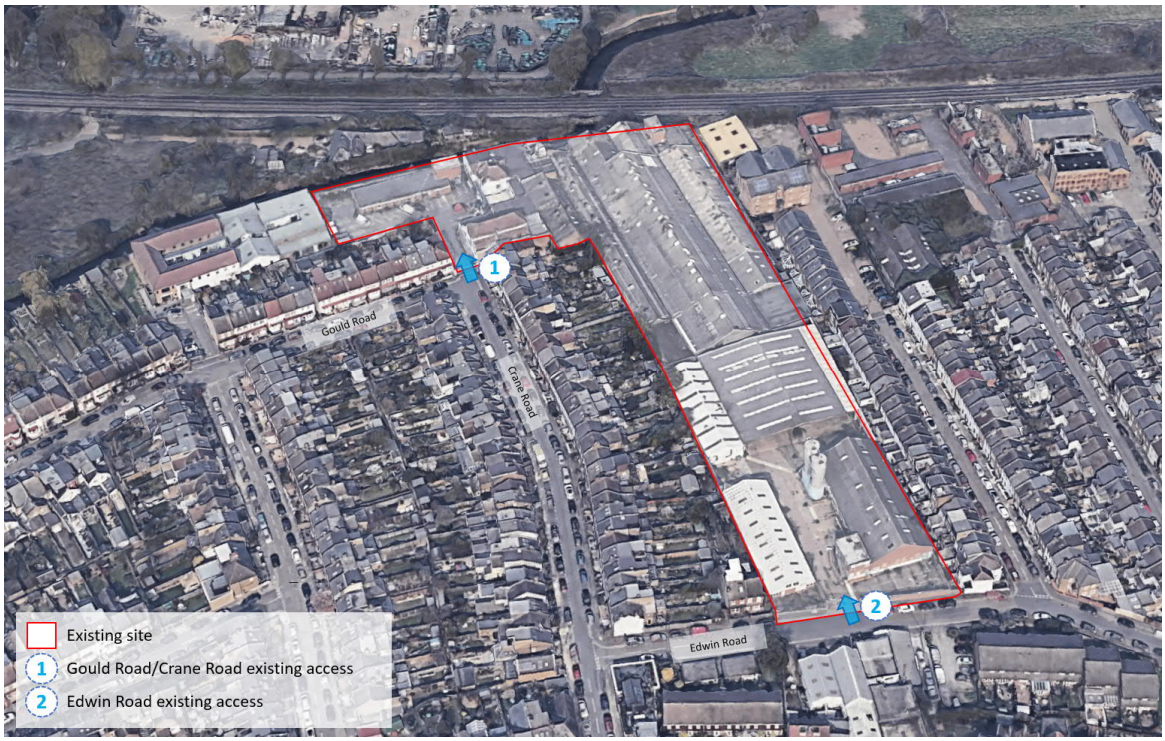
3.3 ACCESS – EXISTING

3.3.1 The site's immediate local highway network and existing vehicular accesses are shown in Figure 3-2.

Figure 3-2: Existing site access



3.3.2 There are currently two vehicular access points to the site: one from Edwin Road to the south (shown in Figure 3-11) and one to the north from the corner of Gould Road and Crane Road (shown in Figure 3-3). The former was primarily used to accommodate larger operational HGVs associated with the site's former industrial use, and the latter was generally used for employee and visitor parking.

Figure 3-3: Existing access on Crane Road/Gould Road

3.3.3 Whilst the site was operational as Greggs Bakery, the site generated several regular daily HGV movements, with instances of conflict where large vehicles were passing each other. On the A305 The Green, this is not an issue, but on the site's surrounding residential roads, this can and has led to:

- Damaged footways and kerbs;
- Concerns about safety for other road users and pedestrians;
- Local complaints of noise and poor air quality (particularly important as the site is not subject to any restrictions and can operate 24 hours a day); and
- Damage to parked cars.

3.3.4 Due to the site's residential setting, the adjoining network of roads does not lend themselves to moderate-volume HGV movements. Carriageways are in parts, narrow and often flanked by parked cars. There have been regular instances of vehicles mounting the kerb, as illustrated by the condition of the pavement and kerb along Marsh Farm Road (which is the route HGVs used to take between the site and the A305 and is indeed reinforced by signage identifying other routes as being unsuitable for HGVs). Evidence of damage is shown in Figure 3-4 and Figure 3-5.

Figure 3-4: Damage to Marsh Farm Road footway

Figure 3-5: Tyre marks on Marsh Farm Road footway

COLNE ROAD – SCHOOL STREET

3.3.5 In September 2021, The School Street scheme was approved and made permanent for Twickenham Primary Academy for part of Colne Road between the junction of March Farm Road and Albion Road.

3.3.6 School Streets do not operate during school holidays or at weekends, and the signs will be closed when not operational for holidays and half-term breaks.

3.3.7 Th operating hours for Colne Road are Monday to Friday 08:20 to 09:00, and 15:30 to 16:15.

3.3.8 People walking, scooting, using wheelchairs, mobility scooters, and cycles (including adapted cycles) are not restricted. All other motor vehicles are restricted during the operating times displayed on the signs, subject to exemptions.

3.3.9 The following motorised vehicles are automatically exempt:

- Emergency vehicles
- Council waste trucks serving properties within the School Street zone
- Postal service vehicles serving post boxes within the School Street zone
- Statutory undertakers (such as water and gas companies) attending emergency works within the School Street zone
- School buses serving the school or properties within the School Street zone
- Public transport and taxis (Hackney Carriage) serving properties within the School Street zone

3.3.10 The following vehicles are also exempt, but they must apply for exemption using the LBRuTs online exemption form or contact LBRuT:

- Residents and businesses within the School Street zone
- Blue badge holders (when their destination is within the School Street zone)
- Carers and healthcare workers serving properties within the School Street zone
- Private hire taxis serving properties within the School Street zone
- Tradespeople/service providers serving properties within the School Street
- Delivery vehicles serving properties within the School Street

3.3.11 The introduction of the School Street at Colne Road has led to more vehicles accessing Edwin Road during the closure times.

3.4 ACCESS – PROPOSED

3.4.1 The proposed development seeks to retain the two existing access points on Gould Road/Crane Road and Edwin Road, albeit with changes to entry treatment. One-way vehicle circulation is proposed through the site. Vehicles will access the development from Edwin Road at the southern end of the site and will egress the site onto Crane Road/Gould Road at the northwest corner of the proposed development.

3.4.2 Figure 3-6 shows the proposed access arrangement for the proposed development. A preliminary design of the proposed access points is shown in APPENDIX B.

Figure 3-6: Proposed access strategy

3.4.3 The one-way on-site access road will provide on-street parking, communal parking for the apartments and access to private residential driveways of the townhouses. Vehicles will egress the site onto Gould Road/Crane Road at the north-western end of the site.

3.4.4 A clear minimum on-site carriageway width of 4.0m will be provided to allow for access and egress to on-site residential garages and driveways.

3.4.5 A swept path analysis exercise has been undertaken to show cars accessing, manoeuvring, passing vehicles and egressing the site; the complete set of vehicle tracking drawings are included in APPENDIX C.

SHARED USE DESIGN

3.4.6 A shared use design approach is proposed on-site to encourage lower vehicular speeds, better driver attention and offer priority for non-motorised users (i.e., pedestrians and cyclists). The proposed access and shared-space design approach are intended to reflect the principles of a typical London mews street which is further reinforced by the housing typologies proposed.

STAGE 1 ROAD SAFETY AUDIT

3.4.7 A Stage 1 Road Safety Audit (RSA) has been undertaken to assess the new proposed access points on Edwin Road and Gould Road/Crane Road and to also assess the routing within the development.

3.4.8 A copy of the Stage 1 RSA along with the Designers Response is contained within APPENDIX D.

3.4.9 Given that the proposed alterations to the highway are done so with the overarching principles of improving road safety, the safety audit has not raised any fundamental concerns, and all the problems raised can be resolved.

3.4.10 The proposed entry treatments would reinstate the footway across each access, with the vehicular accesses being akin to crossovers rather than formal junctions. This approach would return priority to pedestrians. Structures within the site accesses, such as boundary walls, are designed to a maximum height of 0.6m in accordance with Manual for Streets (DfT, 2007) guidance on visibility.

3.4.11 The detailed design of the two access points would be the subject of discussions with LBRuT, the highway authority and be the subject of an s278 agreement.

ROAD SAFETY ASSESSMENT STUDY

3.4.12 In Addition to the above Stage 1 RSA, VTP commissioned the same independent Road Safety Auditor to carry out a wider Road Safety Assessment study. The purpose of the study was to assess and evaluate in operational road safety terms, the current situation and circumstances on the residentials roads near to the site which act as a link between it and the A305, and whether these roads are suitable to carry the type and number of vehicles associated with the proposed development.

3.4.13 The Road Safety Assessment Study contains a number of conclusions and a summary. A copy is contained within APPENDIX E.

3.5 CYCLE PARKING – EXISTING

3.5.1 The existing site (when previously operational) did not have any on-site cycle parking provision.

3.6 CYCLE PARKING – PROPOSED

RESIDENTIAL

LONG-STAY

3.6.1 The proposed long-stay residential cycle parking provision for the residential development is set out in Table 3-1.

Table 3-1: Proposed residential cycle parking provision

LAND USE	LONG-STAY	SHORT-STAY
London Plan minimum cycle parking requirement	216	4
Residential (C3) (33 1 bed, 2 person units and 83 2+ bedroom units)	216	4

3.6.2 Table 3-1 shows the proposed long-stay provision meets the minimum cycle parking provision for the residential use required to be compliant with the London Plan (March 2021).

3.6.3 Long-stay residential cycle parking will be provided within the boundary of each townhouse or within dedicated, secure cycle parking stores for the apartments.

3.6.4 Access to the dedicated communal cycle stores will be controlled by RFID cards/fobs and will be monitored by CCTV.

SHORT-STAY

3.6.5 The short-stay residential cycle spaces (Sheffield stands) will be provided within the on-site public realm.

COMMERCIAL

LONG-STAY

3.6.6 For the commercial unit, long-stay cycle parking for prospective employees will be provided within a secure and sheltered store next to the commercial building.

SHORT-STAY

3.6.7 The commercial short-stay cycle parking (Sheffield stands) will be provided on-site within proximity of the commercial unit.

3.6.8 Table 3-2 sets out the proposed long-stay and short-stay cycle parking provisions for the commercial unit.

Table 3-2: Proposed commercial cycle parking provision

LAND USE	LONG-STAY	SHORT-STAY
London Plan minimum cycle parking requirement	1	1
Proposed Commercial (Class E)	2	2

3.6.9 Table 3-2 shows that the proposed provision exceeds the minimum cycle parking provision for the commercial use required to comply with the London Plan (March 2021).

3.7 CAR PARKING – EXISTING

3.7.1 The existing site (when previously operational) had a small on-site car park providing provision for approximately 30 spaces. The on-site car park was used by employees and visitors and was accessed from the Crane Road/Gould Road access, shown in Figure 3-3.

Figure 3-7: Existing on-site car park

3.8 CAR PARKING – PROPOSED

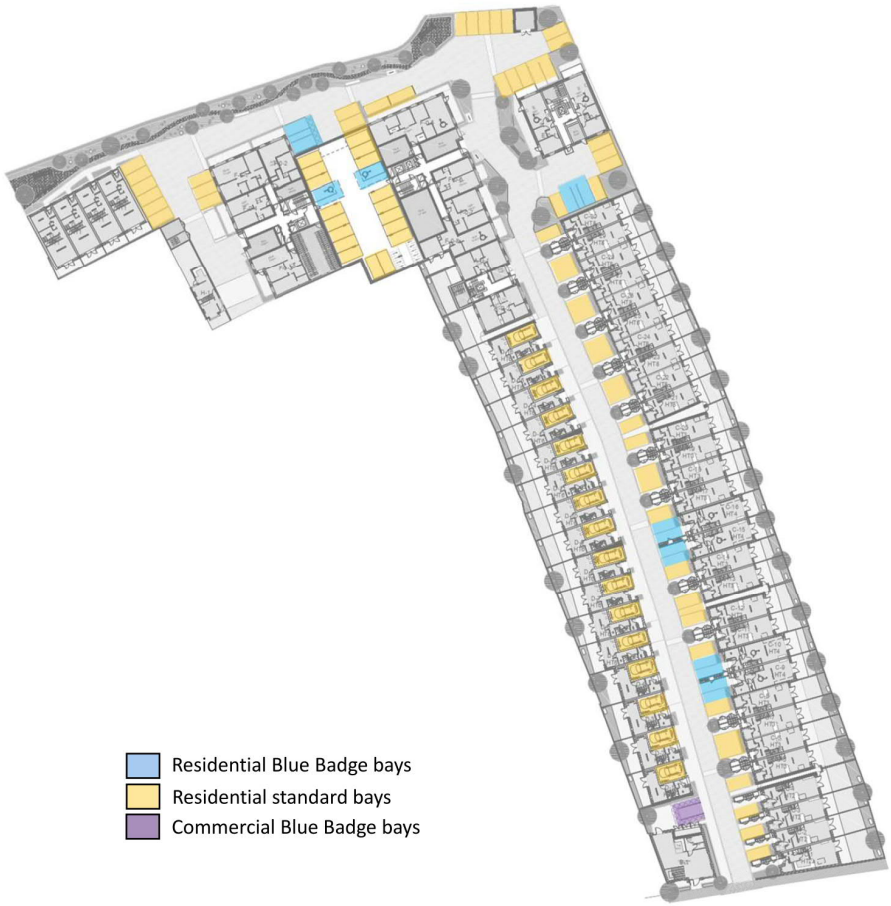
RESIDENTIAL

3.8.1 The proposed development will deliver 100 residential car parking spaces, equating to 0.86 spaces per dwelling. The proposed provision is compliant with the London Plan (March 2021)'s maximum car parking requirements for an Outer London site with a PTAL of 2, which requires between 0.75 – 1 space per dwelling (depending on the number of bedrooms proposed).

3.8.2 The London Plan sets out that the maximum parking provision for 1 and 2-bed units within PTAL 2 is 0.75 spaces per dwelling and up to 1 space per dwelling for 3+ bedrooms. The maximum provision based on the London Plan requirements is 100 car parking spaces.

3.8.3 Figure 3-8 shows the proposed parking provisions for residential and commercial uses throughout the site.

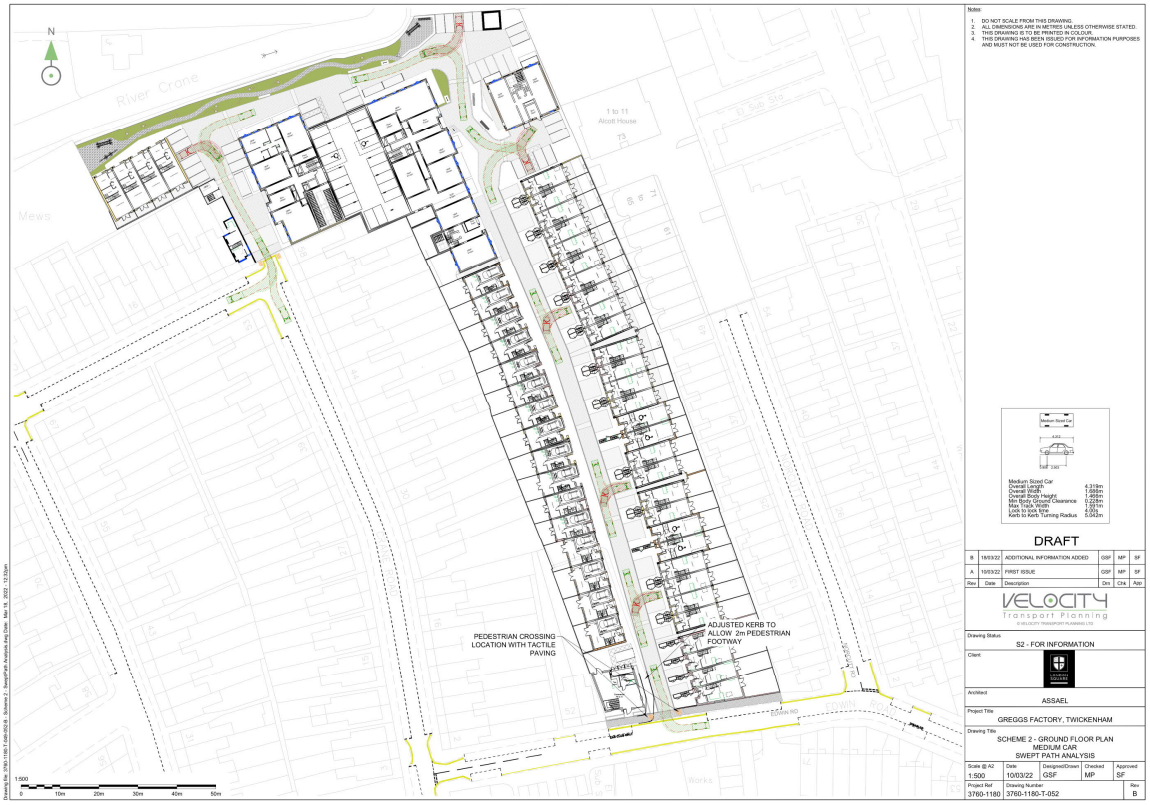
Figure 3-8: Proposed car parking provisions



3.8.4 All parking associated with the proposed development will be provided on-site and will be available to residents only. There will be no visitor parking provision for this development. Visitor cycle parking will be provided within the public realm, encouraging active sustainable travel to/from the site for visitors of the residential and commercial uses.

3.8.5 A swept path analysis exercise has been undertaken demonstrating that cars can safely access and egress the on-site parking bays. An extract is shown in Figure 3-7.

Figure 3-9: Swept path analysis - car parking spaces



3.8.6 A full set of vehicle tracking drawings is included in APPENDIX C.

BLUE BADGE PARKING

3.8.7 Ten Blue Badge parking bays are proposed for the residential dwellings from the outset, equating to a provision of 8% of all dwellings, which is compliant with the London Plan (March 2021).

3.8.8 Figure 3-8 shows the location of the Blue Badge parking associated with the proposed residential and commercial uses.

ELECTRIC CHARGING PROVISION

3.8.9 Electric vehicle charging points (EVCPs) will be provided in line with the London Plan (March 2021). It is proposed that 20 per cent of the parking bays will have active provision; this would equate to one electric vehicle charging point per space. The remaining bays (i.e., 80 per cent) will have passive charging provision installed.

CAR CLUB PROVISION

3.8.10 The applicant will look to promote active and sustainable travel. LB Richmond upon Thames advocates car clubs as an alternative to private cars. The following is outlined on the Council's website:

> "Car Clubs encourage people to forego private car ownership, and they are also attractive to people that make very limited use of a car. While not having the expense of buying, insuring and maintaining their own vehicle, members have access to a car. Research has shown that car club cars replace between 6 to 20 privately-owned vehicles."

3.8.11 CoMo UK has just released development guidance 'New developments and shared transport: cutting car dependency' February 2022. CoMo UK research indicated that each car club vehicle could replace an average of 24 private cars within Outer London.

3.8.12 Zipcar and Enterprise Car Club are the two car club providers affiliated with LB Richmond upon Thames and have been contacted to ascertain the possibility of providing a new car club bay near the site. Both providers expressed an interest in working alongside the developer to provide a car club bay and membership for the proposed development.

3.8.1 The location of the prospective bay is yet to be agreed upon; however, it is anticipated it could be situated along Edwin Road close to the access.

3.8.2 The new car club bay facilitated by the development would not be exclusively for the use of residents at the site and would thus provide a communal benefit for surrounding residential properties. The implementation of the car cub bay would be agreed upon with the developer, car club provider and Local Authority and secured by the s106 agreement.

COMMERCIAL

3.8.3 The commercial unit will be car-free with the exception of one Blue Badge parking. The location of the on-site Blue Badge parking space for the commercial unit is shown in Figure 3-8.

PARKING DESIGN MANAGEMENT PLAN

3.8.4 A Parking Design Management Plan (PDMP) has been prepared to describe the proposed car parking, Blue Badge parking provision, long-stay cycle parking and short-stay cycle parking that the proposed development will deliver. The PDMP will set out the access arrangements and enforcement measures to prevent vehicle and cycle parking misuse across the site.

3.8.5 Further information, including a review of local car ownership, is included in Section 6 of this TA and within the PDMP.

3.9 DELIVERY AND SERVICING

EXISTING

3.9.1 The existing Edwin Road access provides access to the on-site service yard. When fully operational as a factory, this service yard was utilised by large HGVs from very early in the morning and throughout the rest of a typical day. The hours within the service yard were not restricted, and vehicles used the service area 24 hours a day.

3.9.2 Figure 3-10 shows the location of the on-site servicing yard, and Figure 3-11 shows the existing servicing access looking into the site from Edwin Road.

Figure 3-10: Location of the existing service yard

Figure 3-11: Extant servicing access and yard from Edwin Road

PROPOSED

3.9.3 The proposed internal road will enable all refuse collection, residential deliveries and maintenance vehicles to deliver and collect on-site. The access route for servicing vehicles is shown in Figure 3-6.

3.9.4 The one-way access road ensures that all service vehicles will be able to access and egress the site in a forward gear and negates the need to provide turning heads. The one-way site road also negates the need for HGVs to undertake reverse manoeuvres, which the Health and Safety Executive discourages.

3.9.5 A swept path analysis exercise has been undertaken and shows the delivery and refuse collection vehicles accessing, manoeuvring and egressing the site. The complete set of vehicle tracking drawings is included in APPENDIX C.

3.10 EMERGENCY ACCESS

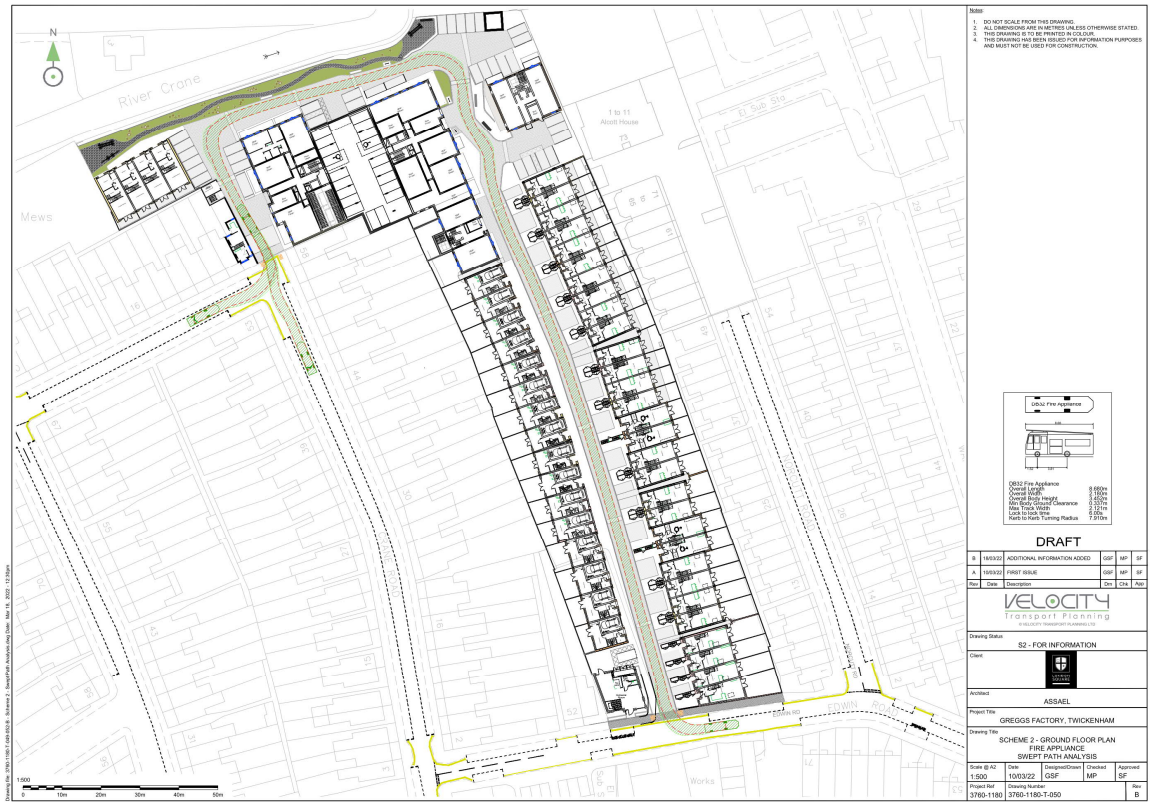
EXISTING

3.10.1 It is expected that fire tender/emergency vehicle access was previously achieved via the existing vehicular access points.

PROPOSED

3.10.2 Emergency vehicles will be able to access and egress the site in a forward gear and gain access to all parts of the site at all times. Figure 3-12 shows the proposed fire tender and emergency vehicle access strategy.

Figure 3-12: Proposed fire tender access strategy



4 ACTIVE TRAVEL

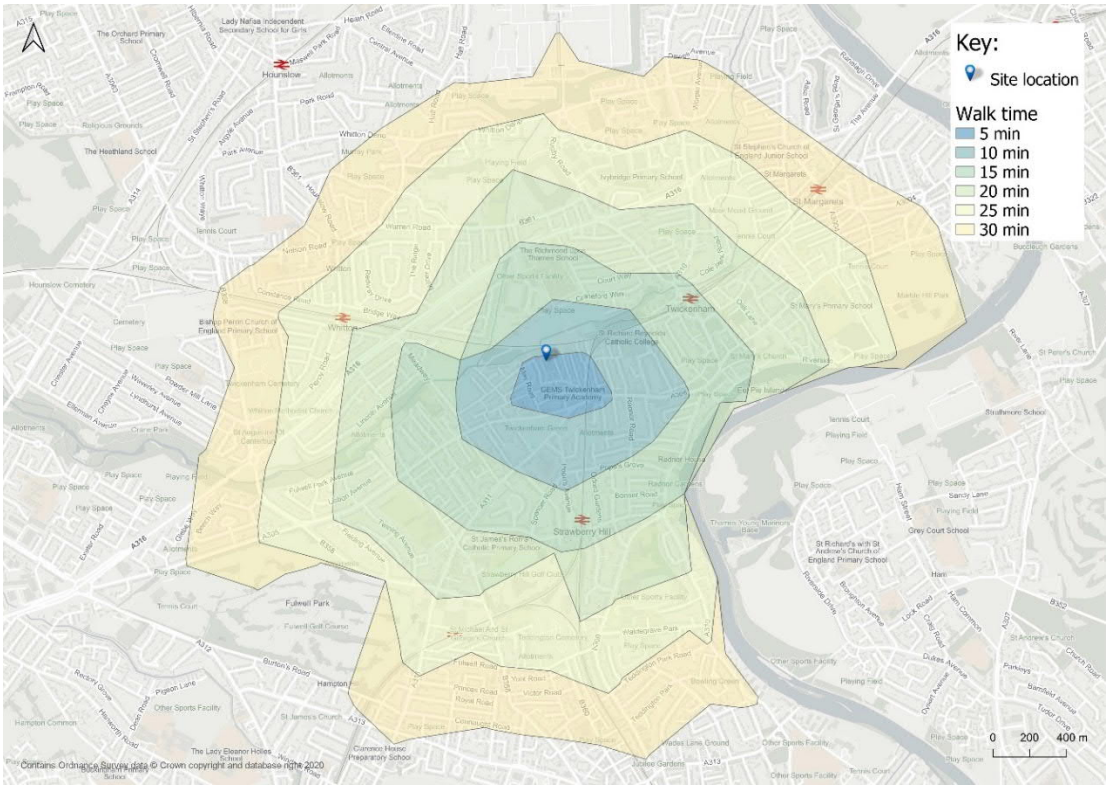
4.1 WALKING

4.1.1 The National Travel Survey identifies that walking is the most frequent travel mode for short-distance trips (within 1 mile/1.6 km). Therefore, infrastructure that supports travel on foot is essential to promote sustainable and active travel.

4.1.2 The footways in the proximity of the site are well-lit and well-connected. The site benefits from good footpath connectivity to the A305 The Green and Twickenham Railway Station. In addition to a range of public transport options, the site is also within walking distance of several local amenities and services, including London Road and King Street, reducing the need for prospective residents to travel by car in most instances.

4.1.3 A pedestrian isochrone map is shown in Figure 4-1, which shows the area/distance that can be walked from the site within a five-minute to 30 minutes walk, based on a walking speed of 4.8km/hr.

Figure 4-1: Walking accessibility



4.1.4 Several public transport stations and stops can be reached within a short walk of the site, including:

- Twickenham Station via Marsh Farm Road at 15 minutes (1.28 km);
- Twickenham Green bus stop (Stop GL) via Norcutt Rd and A305 at 7 minutes (640 m) and Twickenham Station bus stop via Marsh Farm Rd at 16 minutes (1.28 km); and

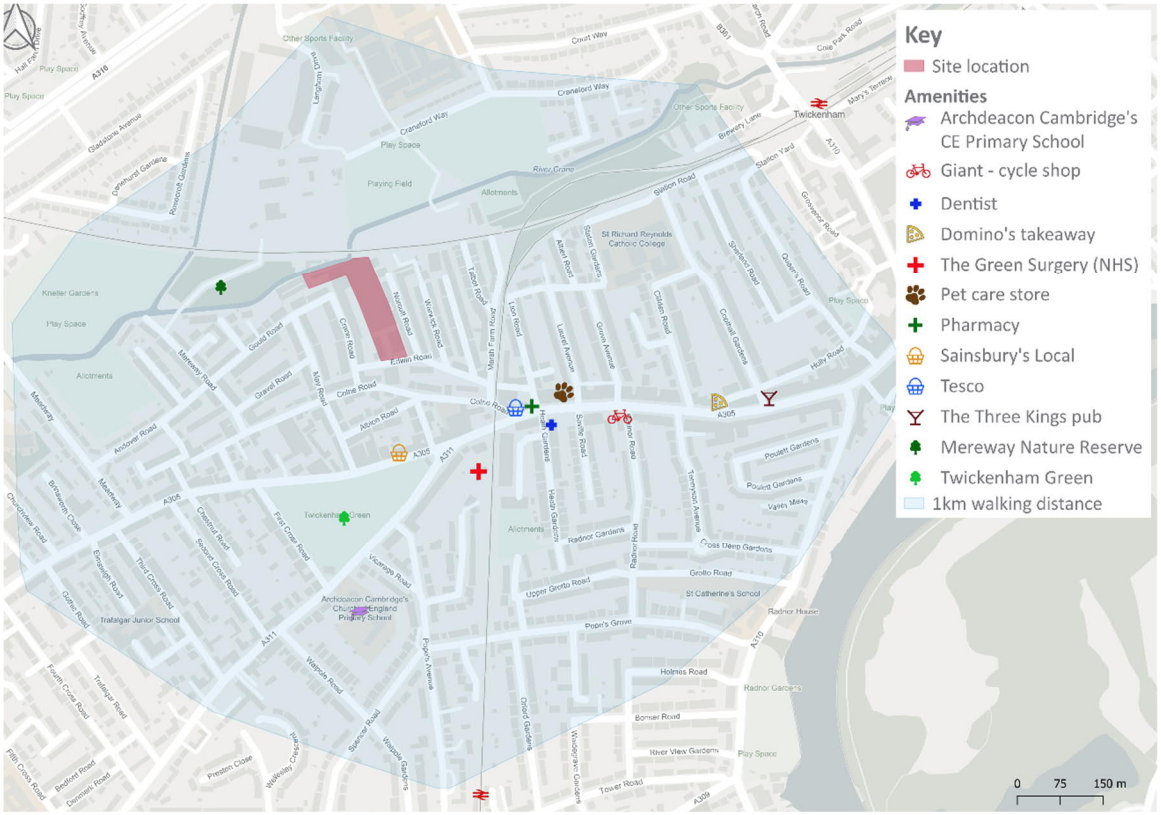
- Strawberry Hill Railway Station is around a 16-minute walk (1.28 km) from the site to the south of the site.

4.1.5 Table 4-1 sets out the local amenities and facilities within 1km of the site and can be reached within an 11-minute walk/four-minute cycle. Figure 4-2 illustrates the amenities listed in Table 4-1.

Table 4-1: Local facilities/amenities within proximity of the site

FACILITY / DESTINATION	TRIP PURPOSE	DISTANCE (METRES)	WALK TIME (MINUTES)	CYCLING TIME (MINUTES)
Twickenham Green	Leisure	400	5	3
Mereway Nature Reserve	Leisure	550	7	2
Sainsbury's Local	Food retail	400	5	1
Tesco Express	Food retail	500	6	1
Pet Care store	Retail	600	8	3
The Green Surgery (NHS)	Healthcare	400	5	2
Maple Leaf Pharmacy	Healthcare	400	5	2
Dentist	Healthcare	500	6	3
Archdeacon Cambridge's CoE Primary School	Primary education	600	7	4
Giant – cycle shop	Retail	650	8	3
Domino's	Food retail	800	10	3
The Three Kings	Leisure	900	11	3

Figure 4-2: Amenities within walking distance

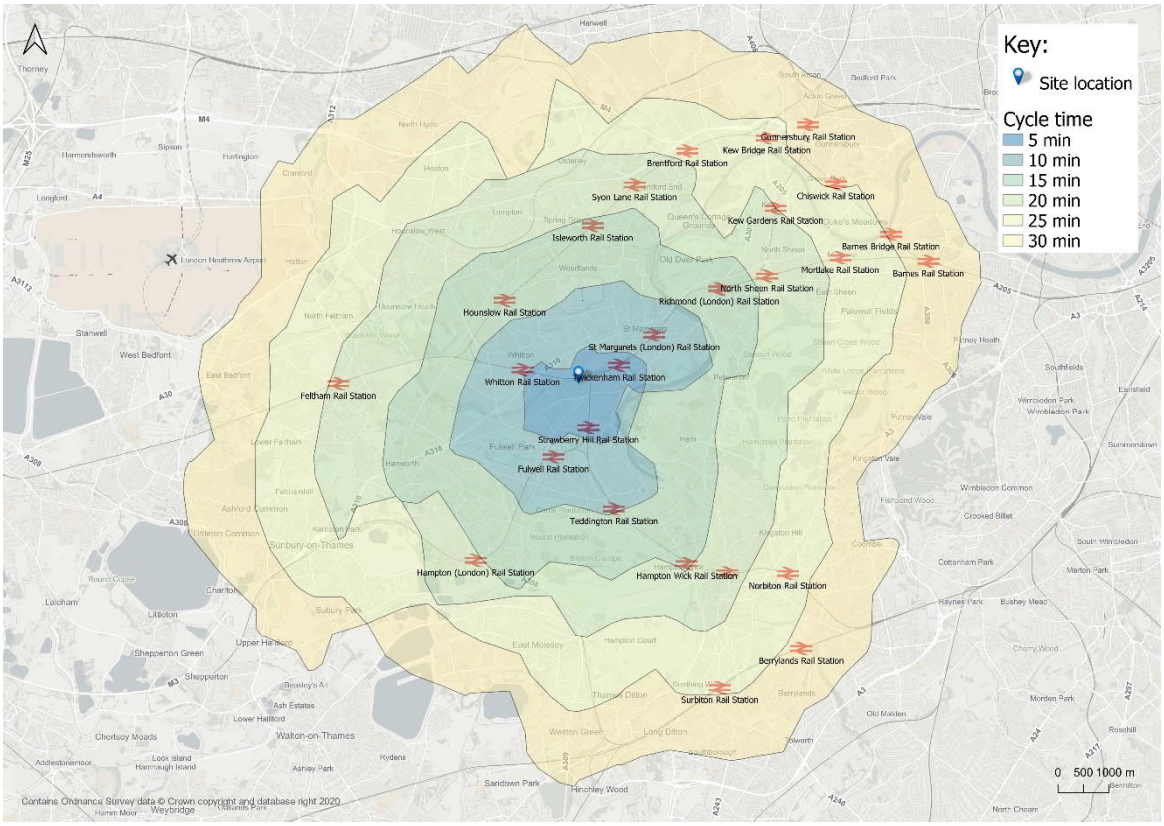


4.2 CYCLING

4.2.1 Cycling can substitute for short car trips, particularly those less than five kilometres in length; however, many people will cycle longer distances.

4.2.2 A cycling isochrone map is shown in Figure 4-3, which shows the area/distance that can be cycled from the site within a five-minute to 30 minutes cycle, based on a cycling speed of 16km/hr.

Figure 4-3: Cycling accessibility

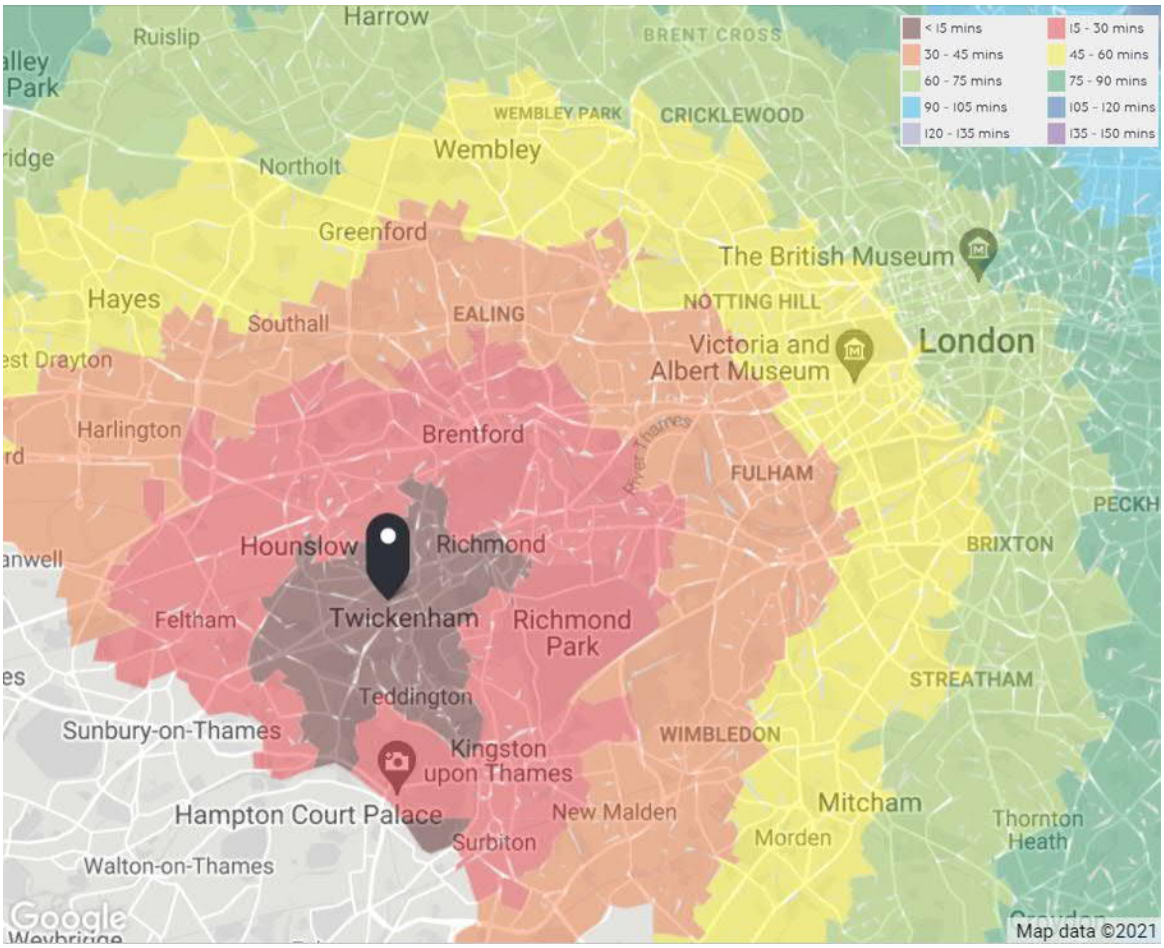


4.2.1 Figure 4-3 shows the site is within cycle distance of the Strawberry Hill, Twickenham Green and Heath Road areas, all of which provide access to a range of local amenities and services.

4.2.2 Although there is no dedicated cycling infrastructure (i.e., cycleways and cycle lanes) in the vicinity of the site, TfL Local Cycling Guide highlights Edwin Road, Lion Road, Crane Road, Gould Road, Grove Avenue and Radnor Road as marked or signed cycle routes which are located on a mix of quieter and busier roads. It is noted that a large number of roads in the surrounding area are marked as having this classification and provide strong links throughout the wider area to other town centres. Cycle parking stands are provided along the A305 Heath Road, and a further 30 cycle racks are provided at Twickenham Railway Station.

4.2.3 Time Mapping (TIM) is a tool developed by TfL within their WebCAT suite of tools to assess connectivity. Time Mapping for the site, travelling by bicycle during the AM peak, is presented in Figure 4-4.

Figure 4-4: TIM cyclist accessibility in proximity to the development site



Source: TfL

4.2.4 Figure 4-4 demonstrates that a number of areas, including Fulham, Wimbledon, Ealing and Harlington, can be accessed within a 45minutes cycle of the site.

4.3 KEY ACTIVE TRAVEL JOURNEYS

4.3.1 An Active Travel Zone (ATZ) assessment has been undertaken to assess the existing walking and cycling baseline conditions surrounding the Site.

4.3.2 This ATZ Assessment has been carried out in line with the new TfL Transport Assessment guidance, which came into effect on 5 March 2020 and aims to show how the Proposed Development supports Vision Zero and the Healthy Streets policies.

4.3.3 The ATZ assessment has been prepared using the 'ATZ assessment instructions'. There are four parts to the ATZ assessment process, which are as follows:

1. Map One: The ATZ and all potential key active travel destinations;

2. Map Two: Neighbourhood safety and the most important journeys with supporting text, including a vision zero analysis and safety improvement ideas;
3. Map Three: ATZ Neighbourhood healthy characteristics check, including text on severance, deficiency, local change, the development; and
4. Neighbourhood Photo Survey: ATZ neighbourhood key routes check based on the Healthy Streets Indicators.

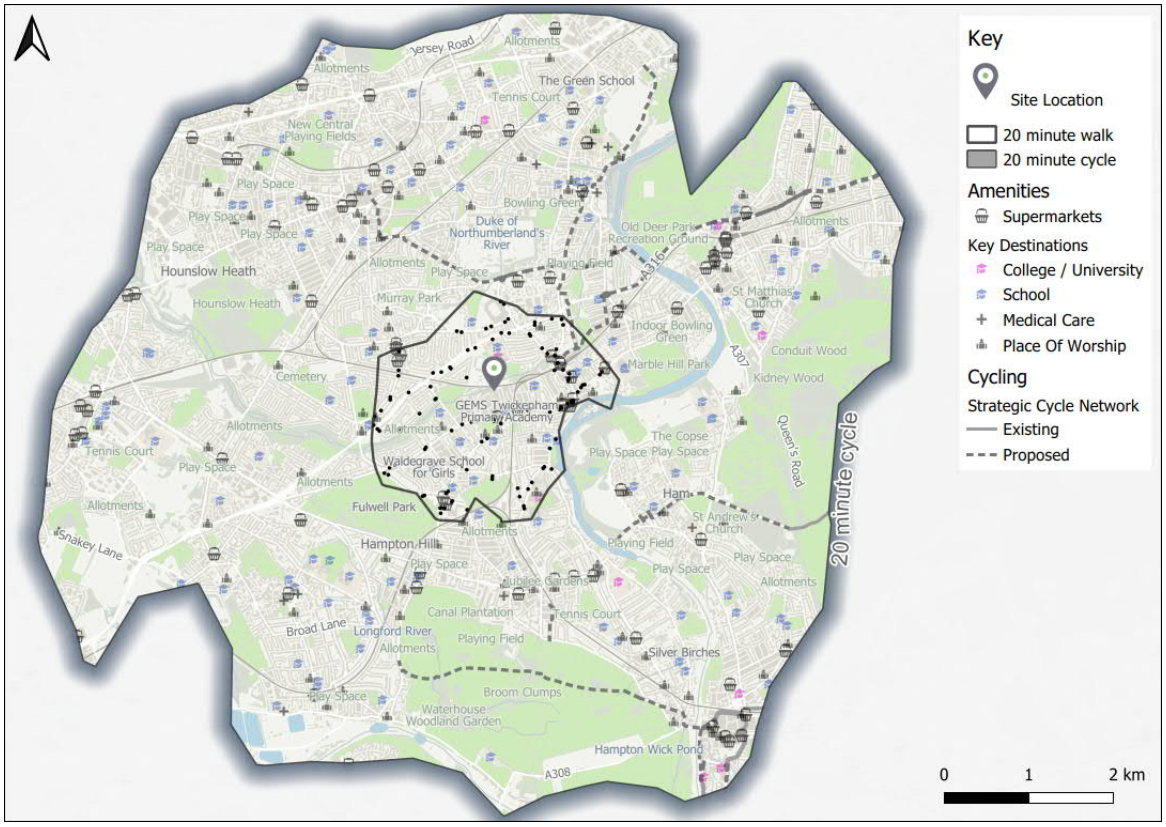
4.3.4 The neighbourhood photo survey site visit was carried out online (i.e., a desktop survey). Throughout the desktop survey, consideration was given to how people walking or cycling would experience the route after daylight hours.

ACTIVE TRAVEL ZONE ACCESSIBILITY

4.3.5 Map One, shown in Figure 4-5, displays all destinations within a 20-minute cycle of the Site, including:

- Town Centres;
- Public transport stations;
- Bus stops;
- Primary and secondary schools;
- Health centres/hospitals;
- Recreational parks / green spaces;
- Places of worship; and
- The strategic cycle network (existing and proposed routes).

Figure 4-5: Map 1 – Active Travel Zone Map



ACTIVE TRAVEL ZONE NEIGHBOURHOOD SCALE

4.3.6 Map Two (Figure 4-6) prioritises key destinations within the ATZ and shows the likely walking and cycling routes residents will take to reach them. The following key journeys have been identified:

- Key journey 1: Heath Road/King Street Town Centre;
- Key journey 2: Bus Stops along Twickenham Green; and
- Key journey 3: Twickenham Station.