RICHMOND UPON THAMES COLLEGE
RESIDENTIAL DEVELOPMENT ZONE

Proposed Residential Development

Transport Assessment

CLARION HOUSING GROUP

Prepared on behalf of
Clarion Housing Group

20/5453/TA01

May 2021

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DOCUMENT CONTROL

Project: Richmond Upon Thames College Residential Development Zone
Proposed Residential Development

Document: Transport Assessment

Client: Clarion Housing Group

Reference: 20/5453/TA01

DOCUMENT CHECKING

Author:	SAJ		Date:	24/05/2021
Checked by:	NDR		Date:	24/05/2021
Approved by:	NDR		Date:	24/05/2021

DOCUMENT STATUS

Issue	Date	Status	Issued by
1.	23/02/2021	1st Draft	SJ
2.	24/05/2021	Final	NR
3.			
4.			
5.			
6.			
7.			

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1 INTRODUCTION

1.1 Background

1.1.1 RGP is commissioned by Clarion Housing Group to provide highway and transport planning input to redevelopment of the 'Residential Development Zone' of the Richmond Upon Thames College site ("the site"). The site is located in Twickenham, within the London Borough of Richmond upon Thames.

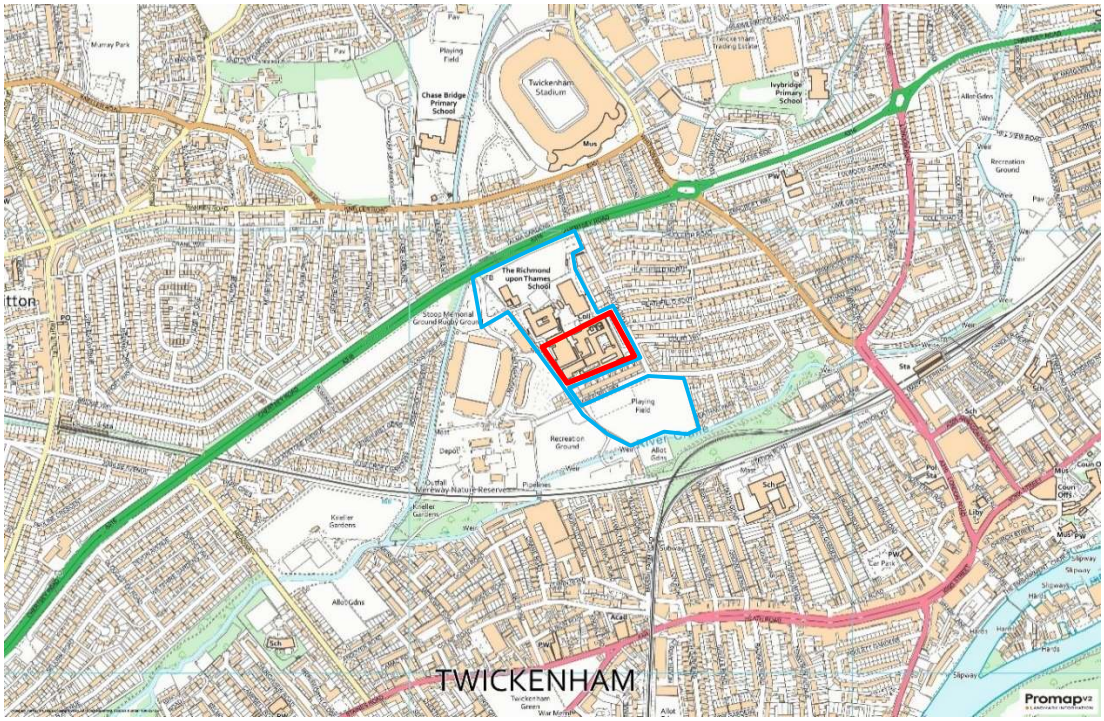


Figure 1.1 Extents of Residential Development Site in Relation to RuTC Site

1.1.2 The development site (shown in red in Figure 1.1) forms part of the wider Richmond upon Thames College (RuTC) redevelopment site (shown in blue) bound by the A316 Chertsey Road to the north and the Harlequins Stoop Stadium to the west. The Residential Development Zone itself is bordered by the new College buildings and a secondary school to the north, and residential neighbours to the east and south served from Craneford Way and Egerton Road.

1.1.3 The site comprises the Residential Development Zone of the wider mixed-use redevelopment of the RuTC site. In August 2016, Outline planning permission 15/3038/OUT was granted for the demolition of the RuTC to provide a new consolidated College campus in the north and west area of the site, enabling the remainder of the site to be redeveloped to provide a mixed-use scheme. The outline proposals including the following:

(i) Replacement College with new facilities for 3,000 day students and 500 people attending night classes (weeknights and Saturday mornings) and 300 FTE staff;

(ii) Secondary school for 750 students aged 11 to 16 with 80 FTE staff, based on 90 staff of which approximately 20% will be part-time;

(iii) A Special Educational Needs (SEN) school for 115 students, aged 11 to 16 with 60 FTE staff (based on 80 staff of which 30% will be part-time);

(iv) A Tech Hub to provide facilities such as digital labs for new technology and product development, photographic studios, digital editing suites;

(v) Residential development of a maximum of 180 units made up of a mix of terraced family housing together with flats/maisonettes within larger blocks;

(vi) Sports centre to replace the existing College sports facilities and serve the replacement college, secondary school and SEN school, and the wider community;

(vii) Upgrade of the Craneford Way Playing Field to provide improved facilities for the educational facilities and the local community.

1.1.4 The Outline planning application was supported by a Transport Assessment prepared by *Transport Planning Practice* to demonstrate the key transport related aspects of the overall scheme. The proposals also include the proposed access alterations to serve all proposed uses of the site and a full traffic assessment of the changes proposed to all roads surrounding the site. A Framework Travel Plan was also submitted for the 'School Development Zone', including all educational facilities to encourage non-car use.

1.1.5 An extract of the approved Masterplan layout drawing is shown below (Figure 1.2), indicating the approved 'Development Zones'. The Residential Zone is shown at the south end of the site to the rear of the College campus, with access gained via the main access off Langhorn Drive, in a shared arrangement with the College and Twickenham Stoop Rugby Stadium.

1.1.6 Following the outline planning permission, the reserved matters were approved for detailed aspects of the 'School Development Zone' and 'College Development Zone' under applications 16/3293/RES, 16/4747/RES and 17/2332/RES. The construction works to the main College Development Zone pursuant to 16/4747/RES commenced on 21st May 2018.

1.1.7 A further Reserved Matters planning application (18/4157/RES) was approved in 2019 for the redevelopment of the 'Residential Development Zone' for the delivery of 180 homes. No further transport planning submissions were required for that application.

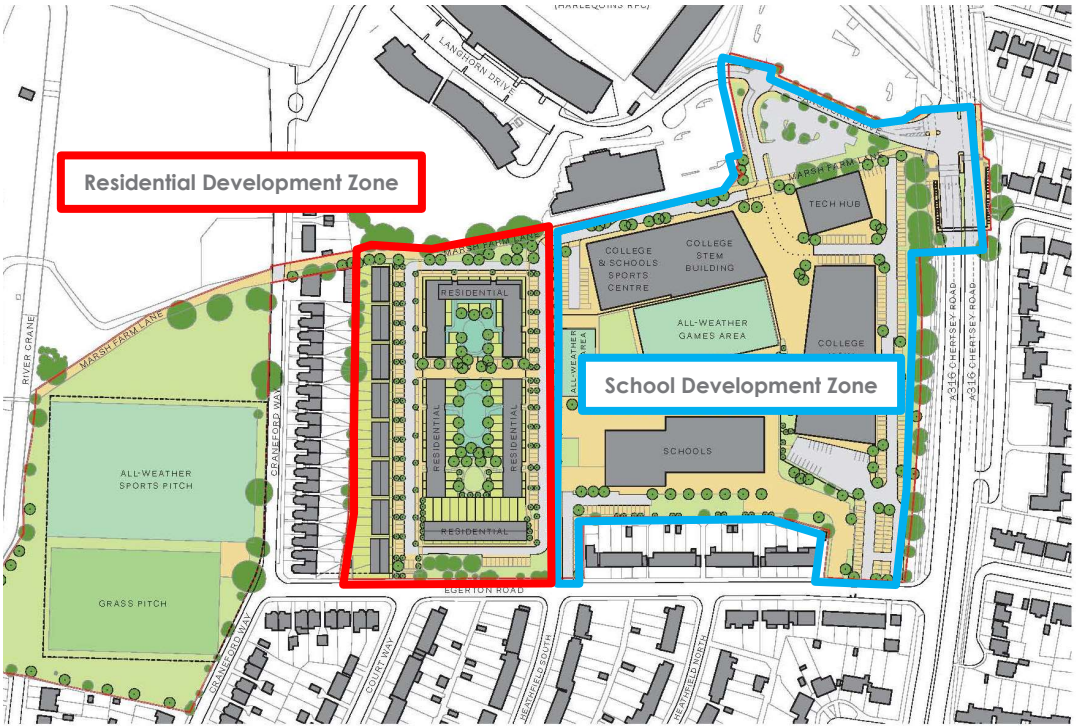


Figure 1.2 RuTC Site Development Zones

1.1.8 A copy of the Decision Notice for the approved Reserved Matters application 18/4157/RES is attached at **Appendix A**.

1.1.9 That Reserved Matters scheme is no longer considered to be a viable option for Clarion Housing Group, who is seeking to enhance the proposals for the Residential Development Zone through the submission of a new fully detailed planning application. The proposals would include a residential scheme of 212 new homes.

1.2 Development Proposal

1.2.1 The development proposals include the submission of a detailed planning application for the redesign of the Residential Development Zone. A copy of the proposed Masterplan Layout and Accommodation Schedule is attached at **Appendix B**.

1.2.2 The proposals include the demolition of existing college buildings, removal of hard surfacing, site clearance and groundworks together with the redevelopment of the site to provide 212 residential units across a collection of buildings up to 5-storeys in height; together with associated parking for 110 vehicles, cycle parking, open space and landscaping.

1.2.3 The proposals would include an increase in dwellings from the 180 units specified in the Outline planning consent. The following mix/size of dwellings proposed is outlined in **Table 1.3**.

UNIT TYPE	NO. BEDROOMS	NO. DWELLINGS PROPOSED	
		Private	Affordable
Flats/Apartments	1-bedroom	39	36
	2-bedroom	31	53
	3-bedroom	4	19
	4-bedroom	0	0
Total Flats/Apartments		**74**	**108**
Houses	2-bedroom	0	0
	3-bedroom	22	0
	4-bedroom	8	0
Total Houses		**30**	**0**

Table 1.3 Proposed Development Mix

1.2.4 The revised proposals would retain the previously approved access arrangements, with all traffic to be served by the new signalised junction via Langhorn Drive. It is considered, given that the proposed signalised junction has been designed to cater for significantly higher periods of traffic movement when the College and Rugby Stadium are in operation, that the relatively minor increases in traffic associated with the residential development could be safely accommodated.

1.2.5 It is noted that the proposals will require the use of the existing access off Egerton Road on a temporary basis during the construction process, to allow residents of the initial phases of the build to gain access to the site safely away from construction vehicles. Further details of these temporary measures are outlined in Section 7 of this report.

1.3 Scope of This Transport Assessment

1.3.1 As detailed above, the proposals would retain access as proposed through the College development and onto the highway network via Langhorn Drive. Access would continue to be provided via Egerton Road for pedestrians and cyclists only. This would be achieved through the closure of the existing vehicular access that previously served the College, also allowing the reinstatement of on-street parking provision.

1.3.2 To determine the likely impacts of the proposed development on the local highway network, an examination of the historic assessments through the previously approved planning consents has been undertaken. Whilst the proposed development would result in an increase in residential units, the previous assessments of traffic for the Outline planning consent were based on trip rates which provided robust assessments of traffic generation at that time. It is also noted that the Outline proposals included a greater proportion of housing which serves as a much higher traffic generator than flats/apartments. The previous assessments within the Outline TA therefore remain valid and continue to provide robust figures as a basis to assess traffic conditions.

1.3.3 It is noted that, during the current COVID-19 restrictions it is not possible to undertake further traffic surveys of the local highway network conditions, since surveys are not considered to be representative of 'normal' conditions on the local highway network at this time.

1.3.4 Notwithstanding the above, the College and new Schools within the 'School Development Zone' are currently in the process of being constructed and are therefore not operating at the full capacity. However, the previous assessments including the within the outline Transport Assessment provide recent and relevant traffic data that is readily available and appropriate for an assessment of the future impact of the revised development proposals.

1.3.5 To account for the proposed increase in units, the proposals would include the promotion of further mitigation measures to encourage sustainable travel, including the implementation of a car-club facility. The proposed development would continue to be supported by a Residential Travel Plan, to a similar scope to that approved through outline planning application 15/3038. A framework Travel Plan has been prepared by RGP as a separate document (Reference: *20/5453/TP02*) which should be read fully in conjunction with this document.

'Healthy Streets' Approach

1.3.6 Transport for London (TfL) seeks to adopt 'The Healthy Streets Approach' to all new major planning applications. The Healthy Streets Approach is a system of policies and strategies to help Londoners use cars less and increase walking, cycling and the use public transport. The Healthy Streets Approach assesses the users *"quality of experience of using London's streets"*.

1.3.7 The Healthy Streets Approach has been introduced by the Mayor of London as a clear approach to addressing congestion, focusing on a short-term effort to ensure streets are operating as efficiently as possible, and a long-term plan to achieve a shift away from car use towards more efficient means of travel.

1.3.8 The key aim of this approach is to:

…*"reduce freight traffic in Central London morning peak by 10 per cent on current levels by 2026, and to reduce total London traffic by 10-15 percent by 2041"*…

1.3.9 The Mayor's Transport Strategy confirms the aspiration to allocate more road space to the most effective travel choices – installing new cycle lanes, giving buses more priority and providing more space for pedestrians.

1.3.10 The consented development proposals included a comprehensive package of sustainable measures to complement this strategy, focused on improving local pedestrian and cycle connections to the nearby facilities within Twickenham, and connections to all local public transport nodes and principal cycle routes. These proposals were found to be an acceptable level of mitigation previously and would be wholly retained by the detailed proposals.

1.3.11 The development of these measures has historically been derived through detailed quality assessments of local routes on foot and by bicycle through the Outline planning consent.

1.3.12 In compliance with the new Heathy Streets Approach, a further assessment of all major routes between the site and the nearby local centres has been undertaken, using the new Healthy Streets checklist.

'Vision Zero' for London

1.3.13 The Mayor's Transport Strategy also introduces 'Vision Zero', with the aim for no one to be killed in or by a London bus by 2030, and for deaths and serious injuries from all road collisions to be eliminated from the streets by 2041.

1.3.14 This TA includes an assessment of all Personal Injury Accidents in the locality and introduces a scheme of measures to improve conditions of safety for all users.

2 TRANSPORT POLICY REVIEW

2.1 Overview

2.1.1 This section provides a review of the relevant transport planning related policies that underpin the outline planning consent.

2.2 The '2021' London Plan

2.2.1 Following its adoption in March 2021, the 2021 London Plan is the Spatial Development Strategy for Greater London, setting out a framework for how London will develop over the next 20-25 years and the Mayor's vision for Good Growth.

2.2.2 The overall policy objectives in terms of transport associated with the Publication London Plan do not significantly alter from existing defined transport policy. Of particular note, **Policy T2 '**Healthy Streets' states that new development should deliver patterns of land use that facilitate residents making short, regular trips by walking or cycling in order to reduce health inequalities, car dependency, car ownership and use, road danger, severance, emissions and noise. Development proposals should also identify opportunities to improve the balance of space given to utilise active modes of transport, public transport and essential vehicle trips.

2.2.3 Furthermore, **Policy T4** relates to the assessment and mitigation of transport impacts, stating the requirement for Transport Assessments to be submitted with development proposals to ensure that transport impacts are fully assessed at local, network-wide and strategic level.

2.2.4 With regard to cycling provision, **Policy T5** requires developments to provide parking facilities in line with the defined London Plan minimum cycle parking standards and provision should accord with guidance set out in the London Cycle Design Standards document. Further details regarding cycle parking standards are provided in Section 6 of this Transport Statement.

2.2.5 Car parking standards are also defined within the Publication London Plan which should be applied to new development following the Plan's formal adoption. Supporting guidance in **Policy T6** states that car-free development should be the starting point for all proposals in places that are well-connected by public transport.

2.2.6 The London plan identifies Twickenham as a District Centre and a 'night-time economy cluster of more than local importance'.

2.3 London Borough of Richmond upon Thames Local Plan

2.3.1 The Local Plan was adopted in July 2018 and replaced a number of planning policies in place during the granting of the Outline planning consents. The Local Plan is undergoing further consultation following a number of challenges, with further engagement expected in 2021, leading towards a targeted adoption in 2024.

2.3.2 The currently adopted Local Plan sets out a number of policies and guidance for the development of the Borough over the next 15 years.

2.3.3 In terms of location, the Local Plan describes Twickenham as "*highly accessible by public transport and thus suitable for new major commercial development, which attract both local people and people who live outside the Borough*".

2.3.4 Section 11 of the Local Plan outlines the key Transport policies within the Borough that must be considered. Policy LP44 confirmed confirms that sites should be located in accessible locations and promote sustainable travel choices. In this case, it is widely recognised that the site is positioned close to an important District Centre, with excellent access to public transport modes. The Outline planning consent included a comprehensive package of measure to enhance opportunities for sustainable travel from and to all parts of the College development.

2.3.5 Policy LP45 confirms the requirements for the parking and servicing of the site, confirming that …"*the Council will require new development to make provision for the accommodation of vehicles in order to provide for the needs of the development while minimising the impact of car-based travel including on the operation of the road network and the local environment, and ensuring making the best of use of land*"…

2.3.6 The development proposals have therefore considered car parking levels in relation to the ambitious strategies of the London Plan, seeking to implement a 'car-lite' scheme reflective of the highly accessible location of the site. The proposed residential development would include a high proportion of smaller flats/apartments that would attract the low car ownership requirements of single occupants and couples, typically utilising local amenities and public transport for most journeys, in particular commuting trips.

2.3.7 In addition, the proposals would include alternative means to car ownership, including the implementation of a car club with memberships provided to residents.

2.3.8 Richmond upon Thames College is identified as an allocated site (SA9) which sets out the redevelopment proposals of the College, subject to the Outline consent. It is also noted that The Stoop (Harlequins Rugby Football Club) is also an allocated site (SA10), with aspirations to revitalise the site for its continued use as a major sports arena. This would include the implementation of a new north stand, indoor leisure and hotel and or business uses. These allocations have been carefully considered in the development of the proposed infrastructure works, most notably the A316 Chertsey Road/Langhorn Drive signalised junction.

2.4 LBRT 'Transport' Supplementary Planning Document

2.4.1 LBRT'S 'Transport SPD' was published in June 2020 to assist in promoting "*best practice in transport provision and highway design*".

2.4.2 The SPD confirms that Transport Assessments and Travel Plans should be submitted in accordance with Transport for London guidance. A suggested by the SPD, the scope of this TA has been discussed with TfL through pre-application discussions.

2.4.3 In terms of scope of assessment, all development should demonstrate its sustainable credentials and provide high quality walking and cycling permeability, and connectivity within the surrounding highway and transport network. All development should be designed with a hierarchy of streets that ensures priority is given to non-car pedestrians, cyclists and those with disabilities.

2.4.4 The proposed development seeks to implement a scheme with pedestrian priority, with all streets providing shared surface home zones with no priority to car traffic. The proposals include a low level of parking provision to discourage car use, with excellent connections to be provided to existing pedestrian/cycle infrastructure in all directions.

2.4.5 The following additional key aspects should be considered as part of all development proposals:

(i) Cycle parking to be provided in accordance with the London Plan, with consideration on the London Cycle Design Standards in forming the layout and connectivity by bike. Cycle parking should include provisions for inclusive cycles, cargo bikes and tricycles;

(ii) The Council encourages the use of car clubs as an alternative to private car ownership and the provision of car club parking and/or enrolling new occupants of development into a car club will help reduce the site parking requirement;

(iii) Car parking should be provided in accordance with the London Plan standards. Development should make provision for a future of 100% 'active' electric vehicle charging provisions.

2.4.6 In addition to the above considerations, the internal layout of the site has been considered in line with the SPD's guidance on vehicle crossovers, parking layouts and front gardens and visibility and sightlines.

3 SITE LOCATION & ENVIRONS

3.1 Site Location

3.1.1 The site is located approximately 750 metres northwest of Twickenham Station and 500 metres south of Twickenham Stadium. **Plan 01**, attached hereto illustrates the location of the site in relation to these local facilities accessible within a convenient walking distance of the site.

3.1.2 The residential site is bound to the north by the main College and School campuses, to the east by Egerton Road and residential houses and to the south by Craneford Way and residential houses. To the west, the site is bound by the Harlequins Rugby Football Stadium (Twickenham Stoop), residential apartments and a Nuffield Health Centre.

3.1.3 Twickenham District Centre is located to the south of the site and offers a range of shops and amenities typically offered by a town centre. The surrounding area also benefits from good access to education (including the College), medical services and recreation that would cater for a larger portion of the travel needs of residents.

3.1.4 The site also benefits from good access to public transport nodes, including Twickenham Station, with local bus services nearby on major routes operated by Transport for London (TfL). These facilities contribute to the site's PTAL rating of 3, indicating a 'good' level of accessibility.

3.2 Local Highway Network

3.2.1 **Plan 01** illustrates the site in relation to the local highway network. The A316 Chertsey Road serves as the main access to the RuTC site and forms a major part of the Transport for London Road Network (TLRN).

3.2.2 The A316 Chertsey Road links the site with the M3 Motorway and strategic road network to the west and serves as a direct link into Central London to the east. A316 Chertsey Road is formed as a dual-carriageway subject to a 40mph post speed limit. The A316 benefits from high-quality pedestrian and cycle connections with shared footpaths provided on both sides and a pedestrian footbridge provided close to the Langhorn Drive junction. Further 'at-grade' signalised crossings are provided to the east of the site.

3.2.3 To the east of the site, Egerton Road, serves as a local collector road now principally serving residential development, having historically served as the main access to the College. Egerton Road does not benefit from direct connections to A316 Chertsey Road with a vehicle restriction/barrier positioned immediately to the south of the College car park. Therefore, all traffic accesses Egerton Road via adjoining residential streets to the east.

3.2.4 Egerton Road itself is subject to a 30mph speed limit and provides for two-way vehicle movements, with good levels of on-street parking provided on both sides (subject to CPZ restrictions). Good pedestrian connections are provided in all directions.

Existing Highway Conditions on Egerton Road

3.2.5 The site benefits from an existing access off Egerton Road that historically served as a secondary vehicle access to the College staff car park and provided an important pedestrian/cycle connection for students and staff travelling from the centre of Twickenham to the south-east. The photograph below shows the existing access.

Existing Site Access off Egerton Road

3.2.6 The adjoining streets of Court Way, Heathfield North and Heathfield South provide the main links between Egerton Road and Whitton Road to the east, which in turn serves as the main connection to the A316 Chertsey Road and Twickenham District Centre. These residential streets provide quiet routes subject to a 20mph, with Heathfield North and Heathfield South operating as one-way routes (westbound and eastbound respectively) and Court Way accommodating two-way traffic.

3.2.7 To the south, Egerton Road provides access to Craneford Way, which in turn serves as the main access to the Craneford Way Playing Fields and serves LBRT Council Depot. Craneford Way also provides access to the rear of the site, historically operating as a service vehicle access for the College, whilst also accommodating an important pedestrian link along Marsh Farm Lane. The photographs below illustrate the existing arrangement.

Existing Site Access from Craneford Way and Marsh Farm Lane

3.2.8 These residential streets all link back to B361 Whitton Road to the east, which in turn serves as the main connection between A316 Chertsey Road and the District Centre of Twickenham via A310 London Road to the south.

3.3 Road Safety Review

3.3.1 In accordance with the London Plans 'Vision Zero' approach, an assessment of Personal Injury Accidents (PIAs) has been undertaken from Transport for London for the latest available 5-year period. (60-months) up to August 2020.

3.3.2 A full copy of the PIA data is attached at **Appendix C**. The study area includes the following streets/junctions surrounding the site:

- A316 Chertsey Road (between Langhorn Drive and Whitton Road);
- Langhorn Drive;
- Whitton Road (between Chertsey Road and London Road);
- Egerton Road, Court Way, Heathfield North, Heathfield South, Craneford Way.

3.3.3 The results confirm a total of 39 PIA's have occurred within the study area during that time, with 29 collisions resulting in 'slight' injury and 10 collisions (26%) resulting in 'serious' injury. No fatalities have been recorded.

3.3.4 The data confirms that no accidents have occurred on Egerton Road and along its adjoining residential streets during this period. A single PIA has occurred at the existing College access on Egerton Road involving slight injury from a head on collision. This proposed access has since been closed and will be retained only as a pedestrian and cycle access/egress. The recorded PIAs have been identified at, or near, the surrounding junctions as follows:

Junction/Link	Slight	Serious	Fatal
A316 Chertsey Road	0	2	0
A316 Chertsey Road/Egerton Road	2	0	0
A316 Chertsey Road/Whitton Road	10	3	0
A316 Chertsey Road/Chudleigh Road	3	0	0
A316 Chertsey Road/Langhorn Drive	1	0	0
Whitton Road	1	0	0
Whitton Road/London Road	4	0	0
Whitton Road/Latham Road	1	0	0
Whitton Road/Erncroft Way	1	1	0
Whitton Road/Chudleigh Road	0	2	0
Whitton Road/Grimwood Road	0	1	0
Whitton Road/Court Way	2	0	0
Whitton Road/Heathfield South	1	0	0
London Road/Brewery Lane	1	1	0
London Road/March Road	1	0	0
Egerton Road/Court Way	1	0	0
TOTAL PIAS	**29**	**10**	**0**

Figure 3.1 Accident Location Summary

3.3.5 As detailed above, the recorded PIAs are generally spread across the network at various junctions, with junction generally operating with low levels of accidents recorded.

3.3.6 A single accident hotspot has been identified at the signal-controlled roundabout junction of A316 Chertsey Road and Whitton Road, which has recorded 13 accidents over the 5-year period. This level of accidents, equivalent to 2.6 PIAs per year is not considered to be a significant level of accidents given the nature of the junction and the flows it accommodates.

3.3.7 As detailed throughout this Chapter, the proposals would result in a reduction in vehicle movements from those historically assessed by the REEC development. Therefore, the proposed residential scheme is unlikely to increase the number and severity of PIAs in the locality.

3.4 Accessibility by Walking and Cycling

3.4.1 As detailed above, the local streets surrounding the site provide high-quality routes in all directions, with well-lit footway and crossing points. The A316 Chertsey Road provides shared pedestrian/cycle footpaths along much of its length, with regular crossing points facilitated by pedestrian footbridges and signalised junctions.

3.4.2 As illustrated on **Plan 01**, the site benefits from convenient access to Twickenham District Centre within a 600-metre walk distance (equivalent to around a 9-minute walk time) with facilities extending to around 1500m with safe and convenient pedestrian connections. The District Centre is generally accessed via local residential streets including Court Way, benefitting from footways on both sides of the carriageway.

3.4.3 The site also benefits from good access to public rights of way, including a shared pedestrian/cycle path referred to as Marsh Farm Lane, which runs along the western side of the College campus, linking A316 Chertsey Road/Langhorn Drive with Craneford Way to the south. This provides a convenient north-south route that would be further improved by the ongoing works to the College Campus.

3.4.4 Immediately to the south, Marsh Farm Lane links with Craneford Way Playing Fields, with further dedicated pedestrian and cycle routes continuing south across the railway line or through 'Twickenham Junction Rough' park land which provides an off-road route to Twickenham District Centre along the River Crane (typically open 07:30am to 04:30pm).

Existing Pedestrian Routes to the South

3.4.5 These existing residential streets and local off-road routes also offer safe and convenient links for cycling, with Chertsey Road also providing a direct cycle route for routes further afield, including into Central London.

3.4.6 The London Plan confirms the requirement for all sites to consider access to facilities within an 'Active Travel Zone', confirmed by TfL as a 20-minute cycle ride from the site. The map below (extract from TfL's WebCAT mapping) confirms the extent of the ATZ.

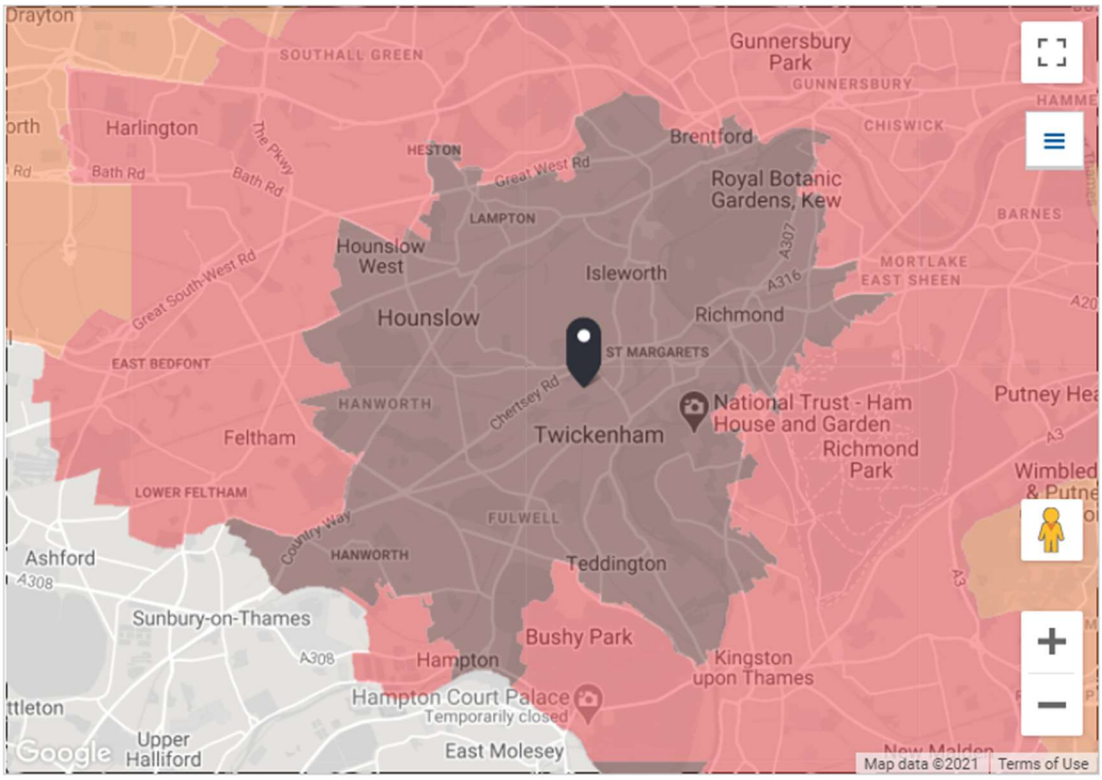


Figure 3.2 Active Travel Zone

3.4.7 In addition to Twickenham, the ATZ confirms that other Metropolitan and District Centres such as Richmond, Isleworth and Hounslow can be accessed all with their own individual employment centres, local facilities and public transport hubs that would benefit the site within this catchment.

3.5 Accessibility by Public Transport

3.5.1 In addition to walking and cycling, the development site benefits from good access to public transport connections within a convenient walk and cycle distance.

3.5.2 The site is characterised as being within a PTAL zone of between 2 and 3, as illustrated by the extract from TfL's WebCAT mapping in **Figure 3.3**. A full copy of the PTAL report is attached at **Appendix D**. It is noted that the western portion of the site is not currently included within the PTAL assessment (PTAL of 0) since there is currently no access/permeability through the site. The proposed introduction of routes through the site to access the residential dwellings would allow these areas to be included within the PTAL assessment and form part of the PTAL 3.

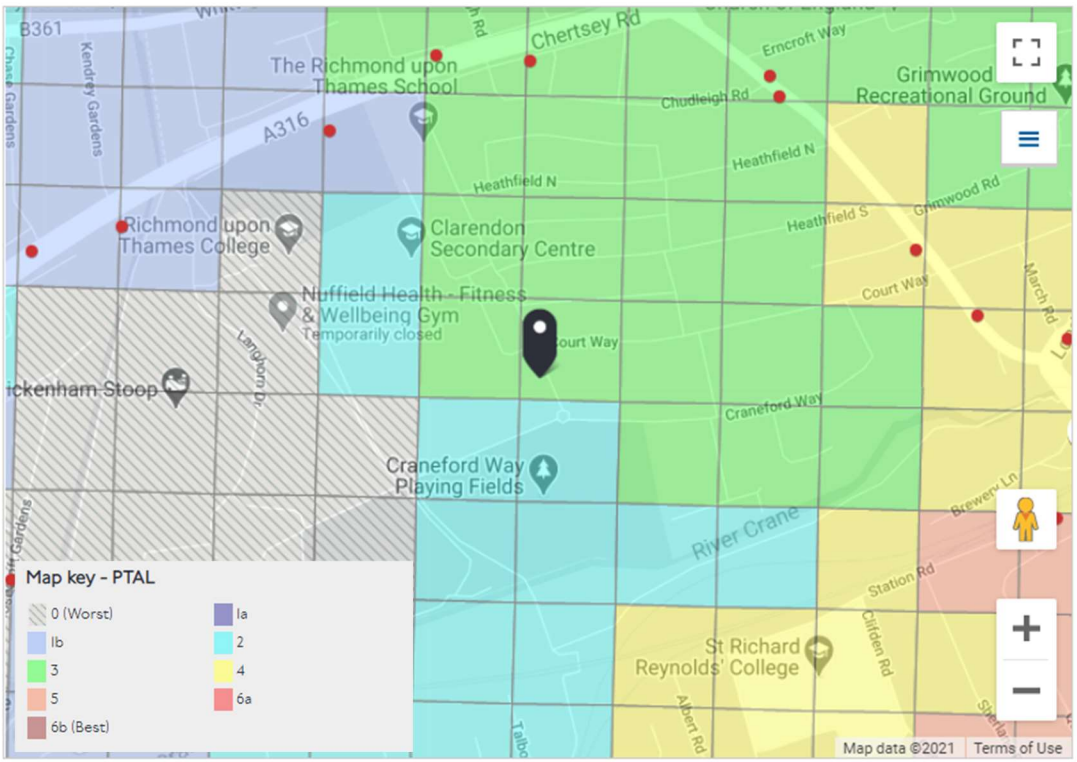


Figure 3.3 Extract from PTAL Report (WebCAT Mapping)

3.5.3 The site benefits from convenient access to local bus stops on Whitton Road both north and east of the site, as illustrated on **Figure 3.4** below.

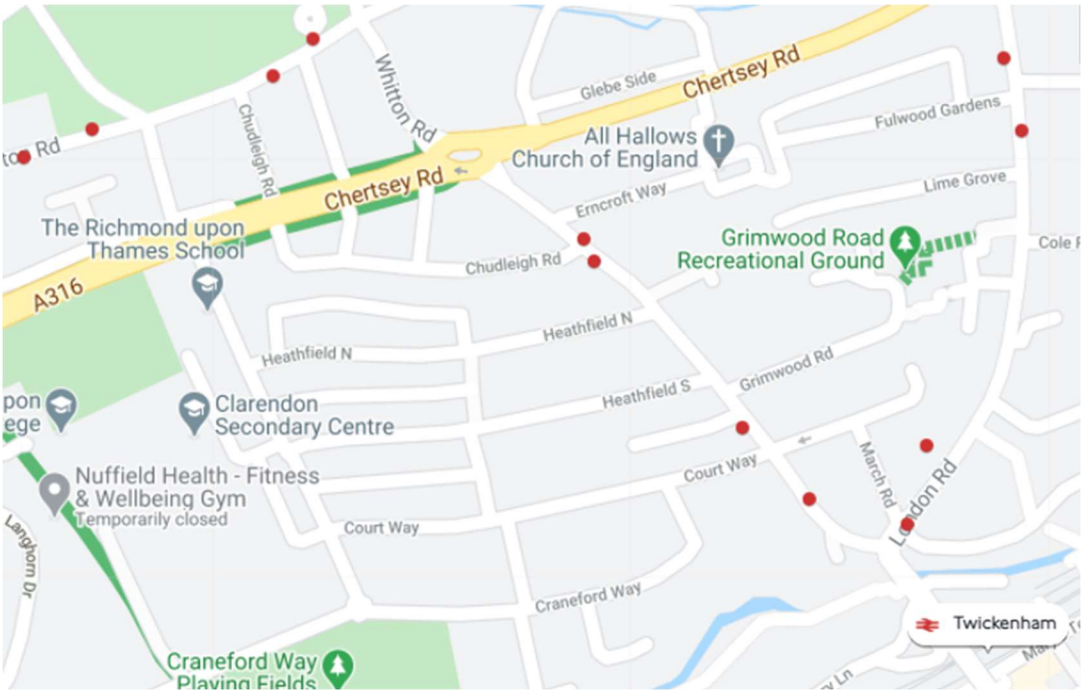


Figure 3.4 Local Bus Stops and Rail Station

3.5.4 To the east of the site, bus stops on Whitton Road (approximately 450 metres from the Egerton Road site access) provide access to routes 281 and 681.

3.5.5 In addition, routes 110 and 481 are accessible further north on Whitton Road (540 metre walk) via the A316 footbridge. Bus Routes 267 and H22 are also available from Twickenham Station. Whilst some of these stops fall outside the walking distances recognised by the PTAL assessment methodology, in practice all of these stops are located within a 6-8 minute walk time with safe and convenient connections.

3.5.6 **Figure 3.5** provides a summary of the key destinations accessible via these local bus services, along with typical frequencies and rail/underground connections. It is noted that the figures shown represent typical weekday frequencies, which may be higher during the peak hours.

Route	Key Destinations	Typical Weekday Frequency
110	Hampton Hill, Whitton Station, Twickenham Stadium, St Margaret's, Richmond, Kew Gardens, Kew Bridge, Gunnersbury , Ravenscourt, Hammersmith	15 minutes
267	Fullwell, Twickenham, Kew Bridge, Gunnersbury, Ravenscourt Park, Hammersmith	10-11 minutes
281	Tolworth Tower, Surbiton Station, Kingston Station, Hampston Wick Station, Fullwell Station, Twickenham Station, Hounslow Station, Hounslow Bus Station	9-13 minutes

481	Kingston ⇄, Teddington, Fulwell ⇄, Twickenham Stadium, West Middlesex Hospital	3 services per hour
681	Hounslow ⇄, Twickenham, Fulwell ⇄, Teddington	Morning and Afternoon Services
H22	Bell Corner/Hounslow Civic Centre, Whitton Station ⇄, Twickenham ⇄, West Middlesex Hospital	11-13 minutes

Figure 3.5 Summary of Local Bus Services

3.5.7 As detailed above, the site benefits from convenient access to bus services to a range of local destinations including Richmond Station, whereby further National Rail, London Underground and London Overground services can be accessed (journey time of approximately 26 minutes).

3.5.8 In terms of rail travel, Twickenham Rail Station is located approximately 650 metres to the south-east of the site (an 8-minute walk). The station is operated by South West Trains and is served by a number of routes providing regular services into Central London. The table below summarises the key routes and destinations available from the station.

Key Destinations	Typical Weekday Frequency
Wimbledon, Raynes Park, New Malden, Kingston, Teddington, **Twickenham**, Richmond, North Sheen, Barnes, Putney, Clapham Junction, Vauxhall, London Waterloo	30 minutes
Windsor & Eton Riverside, Sunnymeads, Staines, Feltham, Whitton, **Twickenham**, Richmond, Putney, Clapham Junction, Vauxhall, London Waterloo	30 minutes
Reading, Wokingham, Bracknell, Ascot, Sunningdale, Virginia Water, Egham, Staines, **Twickenham**, Richmond, Clapham Junction, London Waterloo	2 per hour
Shepperton, Sunbury, Hampton, Fulwell, Strawberry Hill, **Twickenham**, Richmond, Putney, Clapham Junction, Vauxhall, London Waterloo	1 per day

Figure 3.6 Summary of Rail Services

3.5.9 From Twickenham Rail Station, regular services are available to Central London including London Waterloo, with a typical journey time of 30 minutes.

3.5.10 It is also noted that these regular services offer a quick connection to Richmond station with a 4-5 minute train journey time, where London Underground and Overground services can be accessed.

3.6 Other Local Services

3.6.1 In addition to public transport, car clubs are an important consideration for encouraging reduced car ownership. The site would benefit from convenient access to local car clubs, including Enterprise and Zipcar, located within Twickenham District Centre. The proposals also include the provision of a further car club space on Egerton Road to provide a convenient facility for

3.6.2 As a further alternative to car ownership, the site benefits from good accessibility to taxis, with a large number of taxis operating from Twickenham Rail Station.

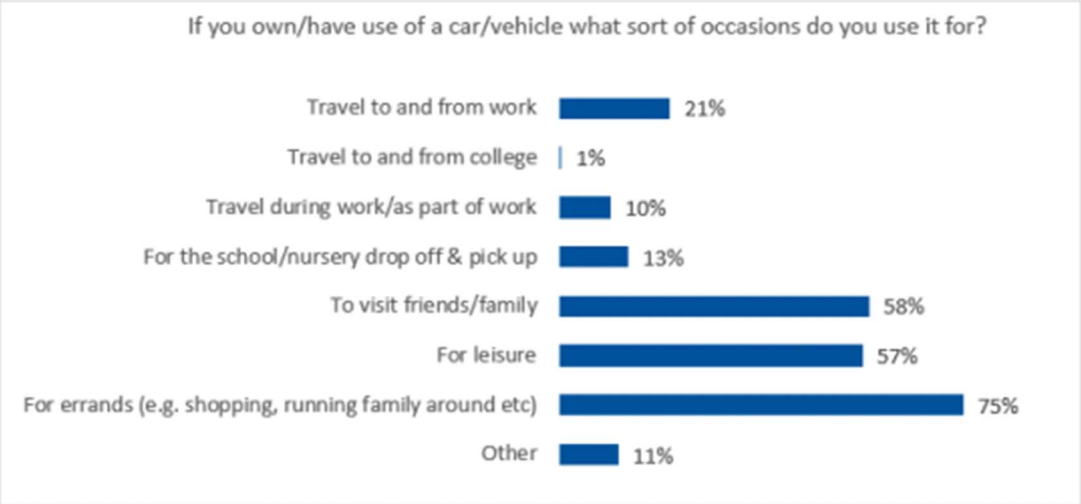
3.6.3 In addition to cycle parking, Twickenham Station offers Brompton cycle hire for local travel or to assist with cycling as part of a linked trip with rail or bus travel.

3.6.4 The proposed development would offer a series of on-site facilities to encourage sustainable travel from the outset. These are outlined in further detail within the accompanying Travel Plan.

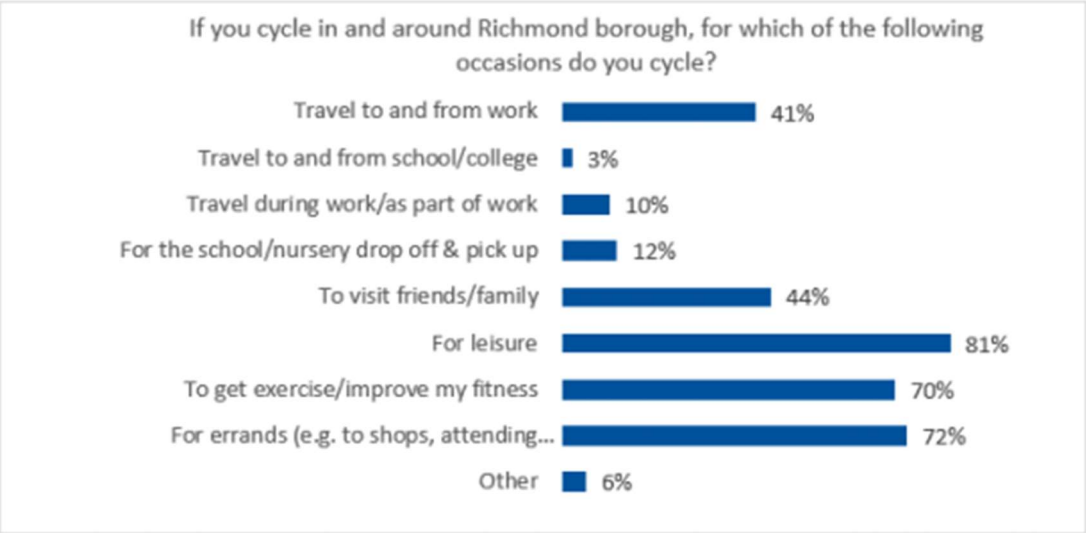
3.7 LBRT's Active Travel Strategy

3.7.1 LBRT has undertaken an 'Active Travel Strategy' to determine who active travel modes across the Borough might be improved. The ATS is an advisory document and provides useful information on the current travel trends of local residents by journey purpose, using online travel surveys/questionnaires.

3.7.2 The survey confirms that, whilst a high proportion of residents owned a car (88%), only 16% used it on a daily basis and only 21% regular commute using this method. The principal purpose of retaining a car is for leisure and running errands.



3.7.3 However, a high proportion also utilise a bicycle for these journeys, with 69% of residents regularly cycling in and around the Borough.



3.7.4 In terms of improvements, the ATS confirmed that pedestrian improvement should include better crossing facilities and improved lighting along paths and through parks. A further popular consensus was ensuring that pedestrian and cycle provisions are kept separate.

3.8 Healthy Streets Assessment

3.8.1 In line with discussions with TfL during the pre-application consultation process and with consideration of the ATS data in Section 3.7, a Healthy Streets Assessment of the main route between the site and Twickenham District Centre and Station has been undertaken. **Figure 3.7** below illustrates the route via Egerton Road, Court Way and Whitton Road/London Road

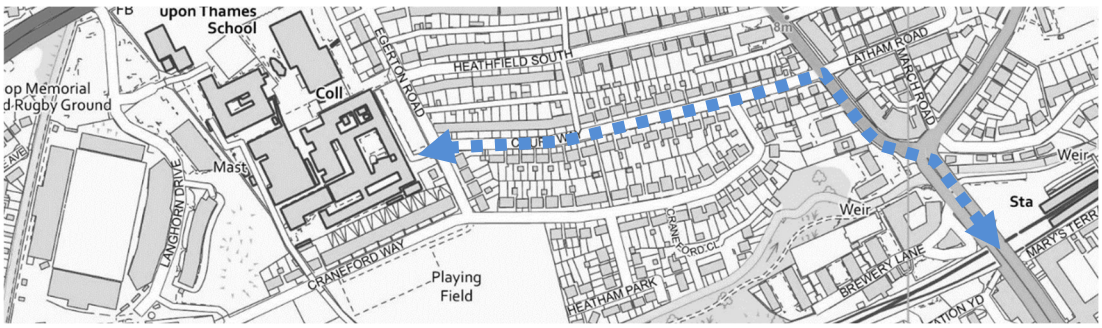


Figure 3.7 Healthy Streets Assessment – Site to Twickenham Station/District Centre

3.8.2 As discussed with TfL, due to the current COVID-19 lockdown restrictions the assessment has been undertaken based on a site visit (local streets) and a desktop assessment.

3.8.3 The key route has been determined as via Court Way, serving as the most direct route and providing as a two-way road allowing cycling in both directions. Connections between the site and Court Way by bicycle are appropriate, with dropped kerbs available. However, no crossing facilities for pedestrians are provided. In addition, footway surfacing is of a reasonable standard but could be improved locally.

3.8.4 The full Healthy Streets Assessment report (20/5453/TN03) is attached at **Appendix E**. The report confirms that existing local infrastructure is generally of a high standard with little scope for improvements. However, the need for pedestrian crossing facilities close to the site on Egerton Road have been identified and have been considered further in the development of the proposed site layout and off-site highway works.

4 ACCESS ARRANGEMENTS

4.1 Vehicular Access

4.1.1 The details of the proposed access arrangements are illustrated on the Masterplan layout at **Appendix B**. The proposals include the retention of the approved access arrangements through Richmond Upon Thames College to link with the Langhorn Drive mini-roundabout and on the new signalised junction with A316 Chertsey Road.

4.1.2 The Outline planning consent included a comprehensive scheme of highway infrastructure improvements to better local traffic conditions and provide a robust pedestrian and cycle network to cater for the increased demands of the RuTC site as a whole.

4.1.3 This included three main infrastructure improvements being brought forward as part of the overarching development, the upgrade of the A316 Chertsey Road/Langhorn Drive junction, the upgrade of the Marsh Farm Lane footpath to a widened shared cycle/footpath and the widening of the site access from the Langhorn Drive mini roundabout.

4.1.4 The A316 Chertsey Road/Langhorn Drive will be upgraded from a simple priority left-in/left-out junction, to provide a fully signal controlled junction permitting left-in/left-out and right-out movements. A dedicated pedestrian crossing phase will also be provided to allow pedestrians to cross Chertsey Road and Langhorn Drive 'at-grade'. The existing footbridge over the A316 will be retained and used as additional crossing.

4.1.5 The A316 Chertsey Road/Langhorn Drive signal-controlled junction has been provided to improve all-purpose vehicle access arrangements for the replacement College, Tech Hub and the residential site, plus delivery and servicing access for the Secondary School and the Special Educational Needs (SEN) School. The junction is not required as a mitigation measure to improve junction capacity as a result of the development but is principally being provided facilitate an appropriate means of access to the residential site.

4.1.6 Whilst not required for mitigation purposes, the proposed signal-controlled junction will have a considerable benefit to the efficiencies of the local highway network and in particular the operations of the College site. For instance, the junction will prevent vehicles having to complete a round trip (approximately 3.5 kilometres) to the same point on the A316 when wishing to travel eastbound. This improvement will also benefit the operations of Harlequins FC, Nuffield Health, the residential dwellings on Langhorn Drive and the Council depot, all of which utilise this junction.

4.1.7 The change in permitted movements will in turn will release capacity at the A316 Chertsey Road/B358 Hospital Bridge Road signal-controlled roundabout to the west.

4.1.8 In addition, the access road between the mini-roundabout and the site will be widened to 6 metres enable all purpose vehicle access, from which the residential development site would link. A copy of the approved improvements to the Langhorn Drive/Chertsey Road junction are attached at **Appendix F**. The proposed access arrangements have been designed with suitable capacity to ensure that all traffic movements for the outline scheme and the adjacent uses on Langhorn Drive can be accommodated, with suitable capacity.

4.1.9 It is anticipated that the implementation of these improvements to the junction will commence during Summer 2021 and be completed prior to construction and occupation of the residential development.

4.1.10 In terms of local access, the residential development would be served by the approved access road from Langhorn Drive, which will also serve the proposed Sports Centre and STEM centre. The proposed access was approved through Reserved Matters planning application 15/3038/DD03 and included the integration of Marsh Farm Lane as a segregated pedestrian/cycle route. A copy of the approved General Arrangement drawing is provided at **Appendix G**.

4.2 Pedestrian/Cycle Access

4.2.1 In addition to vehicular access, a number of pedestrian and cycle improvements were proposed to be implemented prior to the residential scheme. These are set out in the Outline TA and included:

(i) The shared cycle/footway along both sides of the A316 Chertsey Road will be upgraded by Transport for London before the proposed development is operational, with the proposed completion date being the Summer of 2016. Pedestrians and cyclists from the north and east will therefore benefit from this upgrade in infrastructure. The improvements form part of a larger cross borough segregated cycle route which will ultimately provide a 12-mile cycle route between Hanworth in Hounslow through to Hyde Park Corner, via Cycle Superhighway 9.

(ii) The Twickenham Rough shared cycle/footpath is to be brought forward by St James Group Limited as part of the former Post Office sorting office site redevelopment. The route will run from London Road through the former sorting office site to Marsh Farm Lane.

4.2.2 These improvements are in place and have been operational for some time.

4.2.3 As detailed above, as part of the School Development, improvements are proposed to Marsh Farm Lane including the closure of the existing site access off Craneford Way (to be retained for emergencies only. These works have been secured through Reserved Matters planning application 15/3038/DD03 and also include the formation of a new shared pedestrian cycle route, screened from vehicle traffic, along much of the access road (see General Arrangement drawing at **Appendix G**).

4.2.4 Drawing **2020/5453/001** attached hereto illustrates the extent of the proposed pedestrian routes to be provided through the residential development site. The proposal includes the provision of dedicate routes for pedestrians to all parts of the site, in addition to the design the main carriageways as a shared surface to ensure that pedestrian priority dominates the scheme. This is considered to be in line with the aspirations of LBRT's 'Transport' SPD in terms of priority measures.

4.2.5 The current development proposals would maintain the closure of the existing off Egerton Road to vehicles but retain access for pedestrians and cyclists only. As part of the Reserved Matters planning application 18/4157/RES, access via Egerton Road was proposed to be a pedestrian/cycle link, as illustrated below.

Existing Access Arrangement and Approved Alterations through 18/4157/RES

4.2.6 This arrangement would be retained by the current proposals to maintain a dedicated access route for pedestrian and cycle movements that is integrated with the local community and encourage movements to/from Twickenham District Centre by non-car modes.

4.3 Off-Site Highway Improvements

4.3.1 Drawing **2020/5453/002** attached hereto illustrates the further details of the proposed pedestrian access via Egerton Road. The proposed arrangement would include the provision of dedicated pedestrian crossing points to access the eastern side of Egerton Road and routes to/from the centre of Twickenham.

4.3.2 In addition to improvements to pedestrian and cycle infrastructure, the proposed closure of the access would also remove existing parking restrictions across the school access and allow for the provision of additional on-street parking on Egerton Road. As detailed on drawing **2020/5453/002** the proposed arrangement would include a net gain of four on-street parking spaces, one of which would be provided as a car club space with electric vehicle charging infrastructure.

4.4 Internal Layout & Servicing

4.4.1 A copy of the Masterplan layout drawing is provided at **Appendix B**. The proposed road layout has been designed in accordance with the design requirements of LBRT's Transport SPD to ensure that least priority is given to private cars, with the emphasis on the use of the site by pedestrians and cyclists.

4.4.2 This includes the formation of one-way loop road (clockwise) around the site, ensuring that carriageway widths can be reduced to a minimum. The proposed streets will likely remain in private ownership but allow for the daily servicing of the site including refuse collection and deliveries.

4.4.3 The proposed on-street parking would be provided in accordance with design standards, with spaces parallel to the carriageway edge provided with dimensions of 2.0 x 6.0 metres. All perpendicular car parking spaces would be 2.4 x 4.8 metres.

Refuse/Waste Collection

4.4.4 The proposed layout has been designed to accommodate refuse vehicles and larger vehicles across all areas. All apartment blocks would be provided with bin storage and collection points located within suitable distances of the carriageway edge. In some cases, a separate refuse collection point would be provided closer to the highway, with bins moved by the residents prior to the collection day.

4.4.5 The proposed arrangement ensures that suitable collection distances for operatives are provided, with a 25m minimum distance for the houses (household refuse bins) and a 12m distance for the apartments (larger communal bins).

4.4.6 As illustrated on Drawing **2020/5453/004**, suitable space would be provided to allow are refuse collection to travel through the site using the one-way route. This would represent the largest vehicle that would require access to the site, including emergency vehicles.

Deliveries & Servicing

4.4.7 The proposed residential dwellings are likely to generate daily deliveries movements including postal, supermarket and courier deliveries. More occasionally, there may also be the need for deliveries of larger bulky goods such as furniture and building materials.

4.4.8 These vehicles are difficult to manage/regulate since they are sporadic and utilised by residents on-demand. The majority of deliveries such as postal and supermarket deliveries would already be on the highway network and would deliver to the site in addition to an existing prescheduled journey.

4.4.9 These deliveries would be able to serve the site using the internal streets. The proposed streets provide suitable widths to accommodate these vehicles parking for a short period. The main core entrances to the proposed blocks are at ground floor level and easily accessible, with lift access to all floors.

4.4.10 An Estate Management Company would operate around the site and will likely employ gardeners/landscapers, and contractors (central heating, electrical, plumbing etc.) to service the communal spaces. These visitors would typically arrive and leave in smaller service vehicles (transit vans etc.) that would utilise the existing parking within private areas.

4.4.11 The development proposals include the implementation of a Delivery & Servicing Management Plan (DSMP) to be implemented on the site to management the daily operations of the site and ensure that all delivery and service vehicle movements are efficient. The DSMP will allow residents to communicate with the Estate Management Company with respect to servicing needs and any requirements for bulk deliveries. The DSMP (*20/5453/DSMP01*) forms a separate document and should be read fully in conjunction with this Transport Assessment.

5 TRIP GENERATION ASSESSMENT

5.1 Overview

5.1.1 The previous approvals for the Residential Development Zone included a scheme of 180 residential dwellings. However, it is noted that the Outline Transport Assessment (TA) included the assessment of up to 200 residential units, upon which the capacity of the Langhorn Drive/A316 Chertsey Road junction was designed and assessed, and the traffic impacts of which were considered to be acceptable to LBRT and TfL.

5.1.2 The considerations of the impacts of the junction from the residential use were considered at the time to be less critical, with the peak periods of activity at the junction more likely to coincide with the peak use of the College/Schools and Rugby Stadium events.

5.1.3 The Outline TA included an assessment of the likely trip rates of the proposed dwellings based on robust assumptions to ensure that the capacity of the junction was thoroughly considered. This included an assessment of traffic based on a scheme up to 200 residential units, with much higher trip rates used to model the impacts on the local highway network.

5.1.4 The current proposals seek to implement a residential scheme of 212 residential dwellings, at an increase of 32 dwellings from the previous approvals. However, the proposed development would include a revised mix of dwellings with less houses, which would result in no material change to the levels of traffic generated when compared against the Reserved Matters planning consent 18/4157/RES.

5.1.5 The proposed development would also introduce a reduction in car parking provision to further reduce traffic flows and encourage sustainable travel. The levels of multi-modal trips that would be generated by the proposals have also been assessed.

5.2 Outline Consented Traffic Generation

5.2.1 As detailed above, the outline planning consent 15/3038/OUT comprised a maximum of 180 residential dwellings, although the assessments of the Transport Assessment included an assessment of up to 200 residential units, for robustness. The residential trip generation was calculated through an interrogation of the TRICS database, using sites with a mix of houses and flats (as the proposed mix at the time was unknown). The TRICS assessment was based on highly robust assumptions, selecting sites within more suburban areas and including sites within the south-east of England, rather than just those within Central London.

5.2.2 A copy of the approved TRICS outputs is attached at **Appendix H**. **Figure 5.1** summarises the consented levels of traffic generated by the Outline scheme (extracted from Table 14.43 and Table 14.44 of the outline TA).

TIME PERIOD	ARRIVALS			DEPARTURES			TOTAL TWO-WAY		
	Cars	HGVs	Total	Cars	HGVs	Total	Cars	HGVs	Total
08:00-09:00	26	1	27	34	2	36	60	3	63
17:00-18:00	43	0	43	20	0	20	63	0	63

Figure 5.1 Consented Vehicle Trip Generation (peak hours) - 15/3038/OUT

5.2.3 Figure 5.1 confirms a total of 63 two-way vehicle movements generated during traditional highway peak hours. This would also amount to a total of 596 two-way vehicle movements during a typical weekday (based on the 200-unit assessment).

5.3 Reserved Matters Consented Traffic Generation

5.3.1 Following approval of the Outline scheme, the Reserved Matters planning application 18/4157/RES was approved for a total of 180 dwellings, with an approved mix of 136 flats/apartments and 44 houses. No formal traffic assessment was required to confirm the traffic levels associated with the proposed mix of dwellings.

5.3.2 Therefore, to provide a more detailed assessment of these consented levels of traffic a further TRICS assessment has been undertaken for houses and flats separately, using the same agreed locational parameters (Suburban sites in Greater London and the South East) from those agreed for the Outline assessment. A full copy of the TRICS outputs is attached at **Appendix I**. **Figure 5.2** below summarises the likely levels of traffic that would be generated by the consented Reserved Matters application.

TIME PERIOD	ARRIVALS			DEPARTURES			TOTAL TWO-WAY		
	CAR	OGV	TOTAL	CAR	OGV	TOTAL	CAR	OGV	TOTAL
136 FLATS/APARTMENTS									
08:00-09:00	4	0	4	16	0	16	20	0	20
17:00-18:00	14	0	14	9	0	9	23	0	23
Daily Total	128	2	130	119	2	121	247	4	251
44 HOUSES									
08:00-09:00	4	0	4	18	0	18	22	0	22
17:00-18:00	19	0	19	9	0	9	28	0	28
Daily Total	107	2	109	110	2	112	217	4	221
TOTAL 180 DWELLINGS									
08:00-09:00	8	0	8	34	0	34	42	0	42
17:00-18:00	33	0	33	18	0	18	51	0	51
Daily Total	235	4	239	229	4	233	464	8	472

Figure 5.2 Consented Vehicle Trip Generation - 18/4157/RES

5.3.3 It is noted that, in order to provide a further robust assessment, the TRICS outputs have been derived for all dwellings in private ownership. The defined levels of traffic have been separated as car traffic (including LGVs) or Ordinary Goods Vehicles (OGVs) which includes all larger rigid deliveries and heavy goods vehicle movements.

5.3.4 As detailed in **Figure 5.2**, the Reserved Matters consent is anticipated to generate much lower trips than the outline consented scheme, which assessed a scheme of up to 200 residential dwellings. The results of the assessment confirm that the consented scheme would generate around 42 and 51 two-way vehicle movements during the morning and evening peak hours respectively, with 472 daily two-way vehicle movements to be expected.

5.4 Proposed Residential Traffic Generation

5.4.1 The proposed residential development would include an increase to 212 residential dwellings. However, the proposals would result in a reduction in the number of houses provided on site, with only 30 houses proposed. It is therefore anticipated that the levels of traffic generated by the increased number of units would be similar.

5.4.2 The further **Figure 5.3** below summarises the likely levels of traffic to be generated by the proposed development using the same TRICS outputs at **Appendix I**.

TIME PERIOD	ARRIVALS			DEPARTURES			TOTAL TWO-WAY		
	CAR	OGV	TOTAL	CAR	OGV	TOTAL	CAR	OGV	TOTAL
182 FLATS/APARTMENTS									
08:00-09:00	5	0	5	21	0	21	26	0	26
17:00-18:00	19	0	19	12	0	12	31	0	31
Daily Total	171	3	174	159	3	162	331	6	337
30 HOUSES									
08:00-09:00	3	0	3	12	0	12	15	0	15
17:00-18:00	13	0	13	6	0	6	19	0	19
Daily Total	73	1	74	75	1	76	148	2	150
TOTAL 212 DWELLINGS									
08:00-09:00	8	0	8	33	0	33	41	0	41
17:00-18:00	32	0	32	18	0	18	50	0	50
Daily Total	244	4	248	234	4	238	479	8	487

Figure 5.3 Proposed Vehicle Trip Generation – 212 Residential Dwellings

5.4.3 As detailed above, the proposed development of 212 residential dwellings on the site would generate a comparable level of peak hour vehicle movements when compared to the consented Reserved Matters application due to the proposed change in mix resulting in fewer houses proposed.

5.4.4 **Figure 5.4** below illustrates the comparative profiles of vehicle traffic movements across a typical weekday from the various proposals.

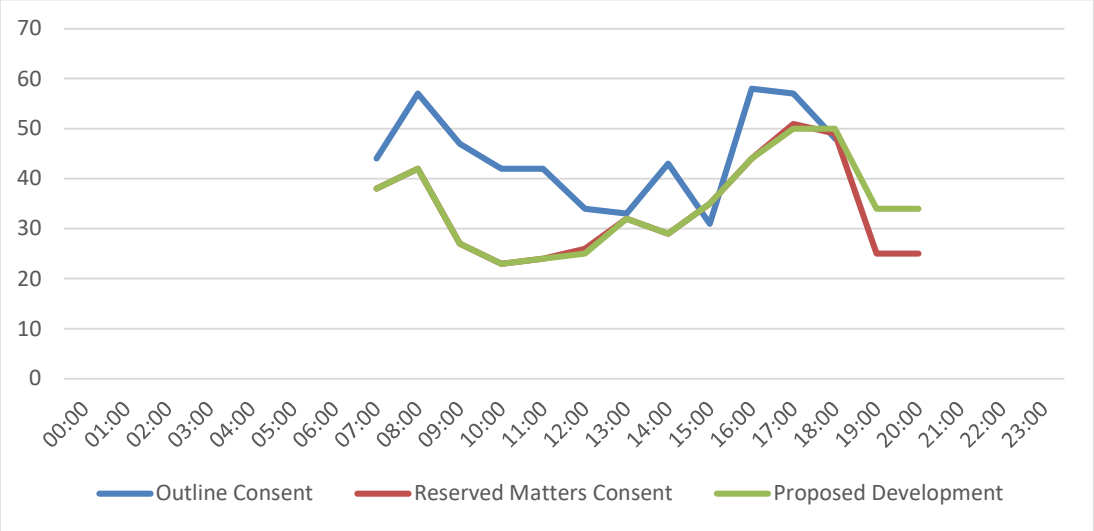


Figure 5.4 Net Change in Daily Profile of Residential Traffic (Two-Way)

5.4.5 As confirmed above, the proposed development would generate a very similar profile of arrivals and departures when compared to the Reserved Matters consent, with a variation of 1 vehicle movement during both of the peak hours.

5.4.6 Most importantly, the proposals would amount to less traffic than that assessed as part of the Outline planning application, which formed that basis of the assessments of the local highway network. This would amount to around 22 and 13 fewer vehicle movements during the AM and PM peak hours respectively.

5.4.7 It is therefore concluded that the proposed development would generate a level of vehicular traffic that has already been assessed in capacity terms, with the robust assessments of capacity undertaken as part of the outline application remaining valid. It is not therefore considered that any further capacity assessment would be required (as was the case for the Reserved Matters consent).

5.4.8 In terms of the adjacent local streets including Egerton Road to the east, no direct vehicle access would be provided (as per the previous consents) and therefore no increase in traffic levels would be generated. All vehicular traffic would enter and exit the site via Langhorn Drive in the same arrangement as both the Outline and Reserved Matters planning consents.

5.4.9 It is expected that there may be the occasional drop-off/pick-up trips generated on Egerton Road at the pedestrian entrance, but not of a significant level to quantify. This level of traffic would be no more than previously expected for the previously consented schemes.

5.5 Multi-Modal Trip Generation

5.5.1 The residential development would be supported by a comprehensive Travel Plan, aimed at encouraging sustainable and reducing car ownership and use. The assessments within this Traffic Assessment therefore represent a worst case, and a further reduction in trips could be expected through the implementation of a successful Travel Plan document and its mitigation measures.

5.5.2 An assessment of the likely levels of multi-modal trips has been undertaken using the TRICS data at **Appendix I**. The Figure below summarises the anticipated levels of trips by all modes.

TRAVEL MODE	182 FLATS/APARTMENTS			30 HOUSES		
	AM	PM	DAILY	AM	PM	DAILY
Private Car	*24*	*27*	*288*	*15*	*19*	*142*
LGV	*1*	*2*	*23*	*0*	*0*	*0*
Taxi	*1*	*1*	*13*	*0*	*0*	*2*
OGV	*0*	*0*	*5*	*0*	*0*	*2*
Motorcycle	*0*	*1*	*8*	*0*	*0*	*0*
Total Vehicles	**26**	**31**	**337**	**15**	**19**	**150**
Car Passenger	22	10	108	11	12	83
Pedestrian	24	19	225	3	3	27
Cyclist	3	2	22	0	0	2
Bus Passenger	11	7	105	1	0	9
Rail/Tube Passenger	18	11	147	1	1	5
Total Non-Car Trips	**68**	**49**	**607**	**16**	**16**	**126**
ALL PERSON TRIPS	**94**	**80**	**944**	**31**	**35**	**276**

Figure 5.5 Multi-Modal Trip Generation

5.5.3 The above table confirms that non-car trips are likely to amount to a good proportion of movements from and to the site given its accessible location to local amenities and public transport nodes. In total, around 1,220 two-way movements are predicted, with around 60% of all trips made by sustainable travel modes.

5.5.4 As detailed in Table 14.45 and Table14.46 of the Outline TA, the capacity of the network was based on an assessment of 155 and 100 total person trips during the AM and PM peak hours respectively. Therefore, the proposals would result in no material change to the capacities of the public transport network previously assessed.

5.5.5 As confirmed by TfL through pre-application discussion, the proposals would not result in any concerns with respect to the increased use of public transport modes.

5.6 Delivery & Service Vehicle Movements

5.6.1 In terms of service and delivery vehicle movements, as indicated in **Figure 5.5**, a total of around 30 daily two-way vehicle movements (15 vehicles) are likely to be generated by the site. These would typically be from smaller Light Goods Vehicles (LGV) consisting of postal deliveries, food deliveries and maintenance/service vehicles.

5.6.2 The proposed development would also require daily access from Ordinary Goods Vehicles, including refuse vehicles and larger rigid deliveries amounting to around 2 vehicle movements (1 vehicle) per day.

5.6.3 Further details of the expected levels of deliveries are set out in the accompanying Delivery & Servicing Management Plan (*2020/5453/DSMP01*).

5.7 Further Traffic Mitigation

5.7.1 As detailed in Section 4, the outline planning consent included a comprehensive package of infrastructure measures to suitably mitigation the impacts of the College redevelopment on the local highway network.

5.7.2 As confirmed by the assessments in this TA, the proposed residential development would not in itself lead to any additional impact on the local highway network that would require mitigation. However, the proposals would continue to be supported by the implementation of a Travel Plan (TP) to further encourage prospective residents to travel sustainably from the outset and reduce reliance on the use of a private car.

5.7.3 The framework Travel Plan forms a separate document (*Ref: 2020/5453/TP02*) and should be read in conjunction with this Transport Assessment. The TP follows a similar scope of initiatives to those proposed within the framework Travel Plan approved as part of the outline planning consent.

5.7.4 In particular, the TP identifies the role of the Travel Plan Co-ordinator (TPC), who will be responsible for implementing and managing the TP. It is envisaged that the TP for would operate in isolation from the School, Development Zones. However, the appointed TPC will eventually form part of a Working Group, led by an appointed Sustainable Travel Manager, to include all TPCs for all facilities on the site.

5.7.5 A summary of the key measures to be implemented by the TP in addition to the infrastructure measures across the site are as follows:

(i) Implementation of a car club space on the site (or on-street locally) with memberships and driving credit issued to prospective residents. Car club space to be available to the general public;

(ii) Provision of travel vouchers (per household) for use on public transport and for the purchase of bicycles;

(iii) Electric Vehicle Charging Points (for cars and e-bikes) provided on site in line with London Plan policy;

(iv) Provision of a car club space with discounted car club memberships for new residents to utilise (discussions ongoing with car club operators);

(v) Preparation of Standard Assessment Monitoring (SAM) Surveys to be carried out, in accordance with the TRICS guidelines for a period of 5 years following the occupation of 50% of the dwellings. The results are to be issued to LBRT by way of a monitoring report;

(vi) Negotiation of discounts for residents with local retailers (cycle shops etc.);

(vii) Travel Plan Coordinator to be appointed with the responsibility to implement all measures, including the issue of details of a car share database to residents, with links to any schemes run by LBRT/TfL;

(viii) Preparation of Welcome Packs, with all necessary travel information including the TfL 'cycle journey planning tool'.

(ix) Provision of foldable bicycles on the site, in addition to the cycle parking provisions for private bicycles.

6 PARKING ASSESSMENT

6.1 Car Parking Provision

6.1.1 The development proposals include suitable provisions for car parking in accordance with the requirements of the London Plan. The recently published 2021 London Plan sets out the requirements for residential car parking within Chapter 10.

6.1.2 The Outline Masterplan scheme included an allowance for up to 190 car parking spaces across the site as a maximum. However, the Reserved Matters planning application 18/4157/RES included a total of 135 car parking spaces for the proposed 180 residential units at an overall ratio of 0.75 spaces per unit.

6.1.3 As confirmed in Section 5, the proposed development mix would include a greater proportion of private flats/apartments, marketed at individuals and young couples that are commuters, with generally less of a requirement for ownership of a private car (than houses). In addition, the proposals would seek to introduce additional measures such as a car club space (with free memberships to prospective residents) to further encourage reduced car ownership from the outset.

6.1.4 The current proposals therefore seek provide 110 car parking spaces for the proposed 212 dwellings and provide a reduced parking ratio of 0.52 spaces per unit. These levels of car parking have been discussed and agreed with both LBRT during the pre-application consultation stage.

Review of Parking Policy

6.1.5 As detailed above, the 2021 London Plan is the key consideration of the requirements of parking on the site, superseding all prior documents. As confirmed by LBRT's '*Transport*' SPD published in June 2020, the Council has adopted the London Plan standards for car parking.

6.1.6 As above, the proposals seek to provide reduced levels of parking to conform to the aspirations of the 2021 London Plan. Table 10.3 of the London Plan confirms that sites in 'Outer London' should provide the following levels of parking:

Location	No. Beds	Maximum Parking Provision
Outer London PTAL 2-3	1-2	Up to 0.75 spaces per dwelling
	3+	Up to 1.0 spaces per dwelling
Outer London PTAL 4	All	Up to 0.5 spaces per dwelling

Figure 6.1 Publication London Plan Parking Requirements

6.1.7 The proposed parking provisions of the site would therefore conform with the maximum requirements of the 2021 London Plan for the current PTAL 2-3, with parking numbers closer to the requirements of a site with a PTAL 4, with the site located only 300 metres of the PTAL 4 zone commencing on Court Way.

6.2 Disabled (Blue Badge) Parking Provisions

6.2.1 Policy T6(e) of the London Plan confirms that …"*appropriate disabled persons parking for Blue Badge holders should be provided as set out in Policy T6.1 Residential parking to Policy T6.5 Non- residential disabled persons parking*"...

6.2.2 In accordance London Plan parking policies, 10% of all car parking spaces need to be wheelchair accessible, with increased dimensions. A minimum of 3% must be provided from the outset, with the infrastructure in place to increase this provision to 10% over time, when demand dictates.

6.2.3 As illustrated on the Masterplan layout at **Appendix B** the proposals include a total of 7 perpendicular disabled parking bays (6%) across the site. It is noted however, that the proposed parallel bays would be formed of the same dimensions as a parallel disabled bay and could be used if in a more convenient location on the site. It is also noted that all parking for the proposed houses provides suitable additional margins for disabled users. It is therefore considered that up to 76 spaces are designed to be capable of servicing disabled drivers.

6.3 Electric Vehicle Charging Provisions

6.3.1 In line with LBRT's Transport SPD and the London Plan, the proposed development would ensure that all parking spaces are equipped for electric vehicle charging.

6.3.2 In line with the requirements of the London Plan 20% of the parking spaces within the new car parking located clear of the public highway shall be equipped with 'active' charging points for electric vehicles, with the remaining 80% of spaces equipped with 'passive' charging provision.

6.3.3 This would amount to 22 spaces with active charging points across the site, to be implemented prior to the first occupation of the development. The remaining 86 spaces would be connected to a 'passive' provision, to be activated if/when future demand dictates. The plans at **Appendix B** confirm the locations of these spaces.

6.4 Car Club Provision

6.4.1 As a requirement of the Outline planning consent, the development proposals include the provision of a car club space, to be made available to all residents in the local area. The proposal would include free memberships and driving credit for all prospective residents of the site for a two-year period to encourage uptake.

6.4.2 Drawing **2020/5453/002** illustrates the location of this space, to be made accessible to all local residents on street on Egerton Road. This car club space would be installed and managed by the car club operator. The full details of the car club space would be provided through a suitably worded planning condition.

6.5 Controlled Parking Zones

6.5.1 The site borders a Controlled Parking Zone (CPZ) which controls all residential streets. The existing streets to the east of the site (including all streets between Egerton Road and Whitton Road) are located within the Heatham (HM) CPZ, which operates on Monday to Saturday between 09:00 and 18:30 hours. A plan illustrating the extents of the CPZ is attached at **Appendix J**. Further to the east of the site, Whitton Road is protected by Zone C, connecting with Zone D further south that covers the centre of Twickenham.

6.5.2 To the north of A316 Chertsey Road lies CPZ Zone R, which operates as an 'Event Zone' to restrict parking during events at Twickenham Stadium (there are no parking restrictions in Zone R outside of these times). The restrictions of the Event Zone R are dependent on the type and timing of event. However, on event days, the required event restrictions are applied to Zone R, Zone HM and Zone C to ensure traffic and parking is controlled through the locality.

6.5.3 The CPZ restrictions on Egerton Road and adjacent residential street are designed to permit parking for residents during the evening/night periods and at weekends. In addition, the on-street parking on Egerton Road includes pay and display parking, which would cater for the needs of short-stay visitors of the proposed development.

6.6 Parking Stress Surveys

6.6.1 In addition to capacity studies, the surveys in the outline TA included an assessment of on-street parking stress/capacity, with surveys recorded parking occupancy at regular intervals during a typical weekday. The results confirmed that Court Way (74%), Heathfield North (73%), Heathfield South (85%), Craneford Close (77%), Craneford Way (63%) and Egerton Road (40%) do not reach maximum capacity throughout the day or night. The parking stress level of Egerton Road was recorded at between 5% and 25% during the daytime period.

6.6.2 As detailed above, it is not considered that the proposed development would lead to any additional demands for on-street parking. However, the proposals would include improvements on Egerton Road to close the existing vehicle access and provide additional car parking spaces (including a car club space) that would further reduce parking stress on these local roads.

6.7 Car Parking Management

6.7.1 As a requirement of planning condition U08042 of the Outline planning consent, a '*Site wide Parking and Servicing Framework*' was prepared and approved through planning consent 15/3038/DD07. A copy of the document is attached hereto at **Appendix K**. The Framework sets out the overarching strategies with respect to the management of car parking and servicing across all parts of the site.

6.7.2 As detailed above, the proposals would provide 110 private spaces across the site. These would be allocated to the larger units, including the 30 houses and larger flats, all of which would benefit from 1 space per unit.

6.7.3 The private car parking spaces on site will be for the use of the residents only, with eligible residents issued parking permits, to be clearly displayed on windscreens. The site will be managed and enforced by the Estate Management Company.

6.7.4 As detailed above, the development proposals would include alterations to the public highway to provide further on-street parking spaces on Egerton Road. The proposed on-street parking spaces would be incorporated into the existing CPZ zones and comply with the respective restrictions (permit holders only). These spaces would be managed by LBRT in perpetuity.

6.7.5 To encourage low car ownership, the Applicant would enter into an agreement with LBRT to prohibit new and future residents from applying for a permit to park on-street.

6.8 Cycle Parking Provision

6.8.1 The consented outline Masterplan confirmed that cycle parking would be provided in accordance with the policies in place at the time of the submission. The cycle parking requirements have therefore been determined through consideration of Table 10.3 of the Publication London Plan.

6.8.2 Based on the proposed scheme mix, **Figure 6.2** confirms the levels of secure and sheltered long-stay cycle parking that would need to be provided to comply with the minimum requirements of the London Plan.

Unit Type	Long-Stay Provision (Minimum)	No. of Units Proposed	No. spaces required
Studio or 1-bed/1-person	1 per unit	0	0
1-bed/2-person	1.5 per unit	75	113
All other dwellings	2 per unit	137	274
TOTAL		**212**	**387**

Figure 6.2 Required Cycle Parking Provision (Long-Stay) – London Plan

6.8.3 At confirmed in **Figure 6.2** the proposed 212 residential units would require a total provision of 387 long-stay cycle parking spaces within secure and sheltered locations.

6.8.4 As detailed on the proposed site layout drawings at **Appendix B**, dedicated cycle parking would be provided for all apartments via secure communal cycle stores across the site, accessible from all blocks. The cycle parking layout and design has been considered in accordance with Chapter 8 of the London Cycling Design Standards.

6.8.5 In line with the requirements of the London Cycle Design Standards, the proposals would include a range of different parking methods to suit all abilities, including a mixture of two-tier stackers and 'Sheffield' type cycle stands.

6.8.6 The overall proposed provision of 388 cycle parking spaces is therefore in accordance with the minimum requirements of the Publication London Plan.

6.8.7 In addition to the above requirement for long-stay parking, the London Plan also confirms the requirement for short-stay parking at 1 space per 40 dwellings. As detailed on the drawings at **Appendix B**, the proposals would also include a number of visitor cycle parking spaces (short-stay Sheffield cycle stands) on street including a total of 6 visitor cycles (3 Sheffield cycle stands).

6.8.8 In addition to the cycle parking proposed, a further Brompton bike store would be provided within the site providing secure storage for foldable bikes and the provide the means to hire bikes for short journeys. Further details of the location and use of this facility is outlined in the Design & Access Statement prepared by BPTW.

7 TEMPORARY CONSTRUCTION ACCESS

7.1 Overview

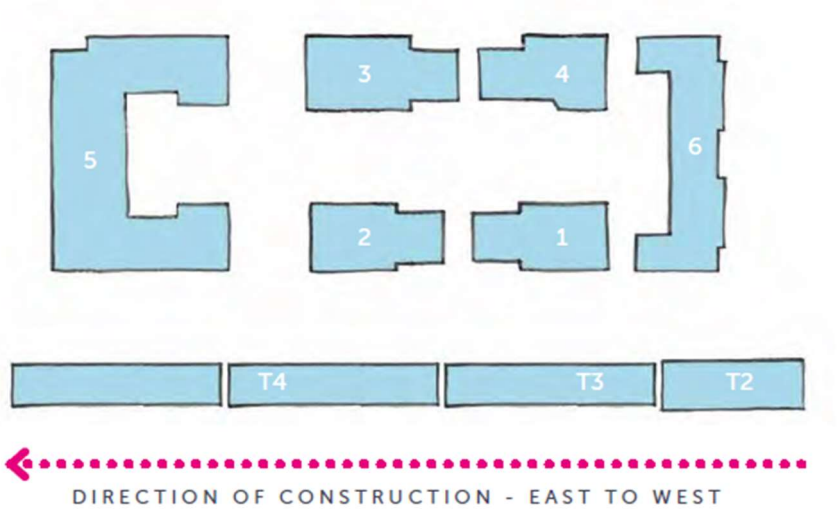
7.1.1 Whilst not a material planning consideration, the proposals for construction access have been carefully considered to ensure that the impacts of users of the College and the local residential community, as well as prospective residents of the site, are minimised throughout the build process.

7.1.2 The Outline planning consent was supplemented by a Construction Management Plan (CMP), Construction Logistics Plan (CLP) and Construction Environmental Management Plan (CEMP) for each of the phases of the School Development Zone. The residential development would be supported by a separate Construction Environmental Management Plan (CEMP) to confirm the key procedures for the implementation of the Residential Development Zone, with the same principles utilises from those previously approved.

7.1.3 A framework Construction Environmental Management Plan (*20/5453/CEMP03*) has been prepared as a separate document to outline the key principles of the construction works.

7.2 Temporary Access via Egerton Road

7.2.1 To facilitate the delivery of the development there will be a required for a temporary vehicular access to serve residents of the development from Egerton Road during the construction programme. The development would be constructed in one continual phase, with construction commencing at the eastern end of the site, closest to Egerton Road, and progressing to the western end of the site towards Marsh Farm Lane.



7.2.2 Construction is anticipated to take two years in total, with the first homes being completed at the end of the first year. A temporary access off Egerton Road would be used for a period of 12 months, where some homes are occupied and there is still significant ongoing construction on remainder site. This access would enable the early occupation of the development prior to the completion of the full development when all vehicular access would then be gained from Langhorn Drive and Chertsey Road.

7.2.3 All construction traffic would gain access via Langhorn Drive/A316 Chertsey Road only, as was agreed in the outline and reserved matters consents. This is considered important from a site management and safety perspective in order to avoid the potential conflict between construction traffic/activity and residential traffic. Full details of these arrangements would be detailed within the Construction Management Plan. In addition to the safety benefits in separating construction and residential traffic, the temporary access allows Clarion Housing to allow new residents to move in once homes are complete rather than have new homes completed but unoccupied. It also allows homes and Landscaping on Egerton Road to be completed first reducing the impact of construction on residential neighbours.

7.2.4 There would be no through route permitted across the site in either direction and all early residents of the development would use the temporary entrance to gain access.

7.2.5 All new residents occupying the development during the initial 12-month period would be made fully aware of the temporary nature of the vehicle access and kept up to date on the timescales for its permanent closure. As committed to under the Reserved Matters permission, a new and improved signalised junction is due to be constructed where Langhorn Drive meets the A316 Chertsey Road. Construction of these junction improvement works are currently due to commence in Summer 2021. The construction of these junction improvement works is the responsibility of Richmond College.

7.2.6 Drawing **2020/5453/004** attached hereto illustrates the proposed temporary access arrangement to be implemented during the construction phase. The proposed access would provide suitable geometry to allow two cars to pass at the bell-mouth.

7.2.7 The proposed access arrangement would also provide suitable space for a refuse vehicle to enter and exit the site, with space temporarily laid out for a refuse vehicle to turn on site. A temporary agreement would be arranged with LBRT's refuse collection department to add this arrangement to its existing route off Egerton Road.

7.2.8 The proposed temporary works will be secured through an appropriate planning condition, with a legal agreement (likely a Section 278 agreement) to undertake works within the public highway with the details to be agreed by the Council. This will include, amongst other details, the requirement for the temporary access to be closed off and the footway reinstated with full height kerbs.

7.2.9 Following the completion of the works the Egerton Road access will continue to provide pedestrian and cycle access as an important link towards Twickenham town centre and the railway station, for example (as proposed).

7.3 Traffic Generation

7.3.1 It is anticipated that the construction phase would require up to 59 residential units to be served by the temporary access off Egerton Road. This number of units would not be from the outset but would steadily increase during the construction phase as each of the blocks is constructed and occupied.

7.3.2 As detailed above, the proposed construction phase would require access to up to 59 residential dwellings, comprising 14 houses and 45 flats/apartments. The further **Figure 7.2** below summarises the likely levels of traffic to be generated by the proposed temporary access using the same TRICS data referenced in Section 4.

TIME PERIOD	14 HOUSES			45 APARTMENTS			TOTAL (59 UNITS)		
	ARR	DEP	TOTAL	ARR	DEP	TOTAL	ARR	DEP	TOTAL
08:00-09:00	1	6	7	1	5	6	2	11	13
17:00-18:00	6	3	9	5	3	8	11	6	17
Daily Total	34	36	70	43	40	83	77	76	153

Figure 7.2 Temporary Vehicle Trip Generation – 59 Residential Dwellings

7.3.3 As detailed in Figure 7.2, the proposed temporary measures for access would generate between 13 and 17 peak hour movements on Egerton Road and its connecting residential streets, amounting to an additional vehicle movements every 4 minutes or so.

7.3.4 As detailed above, this level of traffic would not be generated from the outset and would form a gradual increase as the constructed dwellings become occupied. However, the proposed levels of traffic identified above would not amount to a significant impact and could be readily accommodated on a temporary basis, particularly given the significant reduction in trips on Egerton Road following the removal of the historic levels of College traffic.

7.4 Temporary Refuse Collection/Servicing

7.4.1 As part of the proposals, the constructed dwellings would require temporary refuse collection off Egerton Road. This would be agreed with LBRT prior to occupation but would likely be arranged privately by Estate Management Company until the construction works is completed.

7.4.2 The full details of refuse collection procedures for the temporary arrangement would be agreed prior to occupation of the units, with the internal streets (including any temporary routes provided to ensure that all refuse collection and any other delivery activities can be accommodated.

8 SUMMARY AND CONCLUSIONS

8.1 Summary

8.1.1 This Transport Assessment has been prepared in support of the proposed redevelopment of the 'Residential Development Zone' associated with the approved redevelopment of the Richmond upon Thames College site.

8.1.2 The proposals include the redesign of the residential scheme to provide an increase from 180 (consented) to 212 residential dwellings. The proposals include the retention of use of the existing access arrangements off Langhorn Drive and Chertsey Road to serve all dwellings ad consented.

8.1.3 The previous approvals for the Residential Development Zone included a scheme of 180 residential dwellings. However, the outline Transport Assessment included an assessment of a scheme of up to 200 residential units, the traffic impacts of which were considered to be acceptable to LBRT and TfL. This Transport Assessment has been prepared to assess the impacts of the proposed increase in dwellings in traffic terms, utilising the previous assessments of traffic undertaken as part of the outline approval of the RuTC scheme.

8.1.4 Most importantly, the proposed scheme would generate a noticeable reduction in vehicular traffic on the local highway network from the outline scheme which was based upon highly robust traffic levels to ensure that all junctions were futureproof. The proposed mix of dwellings would include a significant reduction in the number of larger houses to be replaced by flats/apartments that would contribute to reduced demands for car use.

8.1.5 The proposals seek implement robust strategy for car parking in line with the recently published London Plan, introducing a 'car-lite' scheme to encourage reduced ownerships and increase travel by sustainable modes. The proposed levels of parking have been discussed and agreed with LBRT and TfL through pre-application discussions.

8.1.6 The National Planning Policy Framework (NPPF) stipulates that a refusal of planning permission can only be reasonably justified when the impacts of a development are found to be 'severe'. Given that the proposed development would continue to offer a betterment in traffic impact and capacity terms from the historic use of the site, it is not considered that the proposals could be considered to have a 'negative' impact at all, notwithstanding the requirement for a negative impact to be to a 'severe' level before an objection to a planning application could be substantiated.

8.1.7 In terms of the London Plan, Policy T4 confirms the Mayor's approach to assessing and mitigating transport impacts. Policy T4(b) confirms that:

…*"When required in accordance with national or local guidance, transport assessments/statements should be submitted within development proposals to ensure that impacts on the capacity of the transport network (including impacts on pedestrians and the cycle network), at the local, network-wide and strategic level, are fully assessed. Transport Assessments should focus on embedding the Healthy Streets Approach within, and in the vicinity of, new development. Travel Plans, Parking Design, and Management Plans, Construction Logistics Plans and Delivery and Servicing Plans will be having regard to Transport for London guidance"*…

8.1.8 This TA confirms the impacts of the proposed development purely in traffic terms, confirming that the proposed alterations to traffic would not have a material impact on local highway network in capacity terms, including the Strategic Road Network.

8.1.9 Policy T4(c) subsequently confirms that:

…*"Where appropriate, mitigation, either through direct provision of public transport, walking and cycling facilities and highway improvements or through financial contributions, will be required to address adverse transport impacts that are identified"*…

8.1.10 As confirmed by this assessment, the proposals would not lead to any impacts of the highway network could be considered "adverse" to warrant mitigation. However, as part of the proposals Clarion Housing Group is committed to providing further mitigation in the form of sustainable travel incentives for its residents, and localised pedestrian and cycle improvements determined through a full Healthy Streets Assessment. This also includes the implementation of a car club facility for use by all residents of the local area.

8.2 Conclusions

8.2.1 Based on the findings of this report, the key conclusions are as follows:

(i) The site access arrangements and the general internal road layout has been prepared in line with the approved design parameters and reflective of discussions with LBRT;

(ii) The latest proposals would result in a reduction in peak hour vehicle movements and daily vehicle movements when considered against the robust assessments in the Outline planning consent;

(iii) The proposed parking provisions across the site and the local highway network accord with the London Plan parking standards and are considered suitable to accommodate all projected parking demands associated with the scheme at all times, whilst not otherwise discouraging the use of non-car modes;

(iv) The proposed cycle parking provisions across the site accord with relevant standards and is reflective of the ratio of cycle parking that was incorporated as part of the consented scheme; and

(v) The implementation of a comprehensive package of sustainable travel measures would satisfy the requirements of TfL's Healthy Streets Approach.

8.2.2 In light of the findings of this TS, London Borough of Richmond upon Thames, as Local Planning Authority, is respectfully urged to approve the proposed development on highway grounds.

PLANS

BUS TIMETABLE			
Service	**Route Summary**	**Typical Weekday Frequency**	**Hours of Operation**
Heatham House Bus Stops			
281	Tolworth Tower – Hounslow Bus Station	Mon-Fri: 9-13 minutes Sat: 9-12 minutes Sun: 10-14 minutes	Mon-Sun: 24 hour
681 (School Bus)	Broom Road/Teddington School – Hounslow Bus Station	Mon-Fri: morning and afternoon services	Mon-Fri: 07:36, 15:34
Twickenham Stadium Bus Stops			
110	School Road – Hammersmith Bus Station	Mon-Sat: 15 minutes Sun: 20 minutes	Mon-Fri: 05:58-01:01 Sat: 05:57-01:05 Sun: 05:58-00:59
481	Isleworth – Kingston Upon Thames	Mon-Sat: 3 services per hour Sun: every hour	Mon-Fri: 06:52-20-11 Sat: 07:05-20:11 Sun: 10:11-20:11
Twickenham Station Bus Stops			
267	South Road/Fullwell – Hammersmith Bus Station	Mon-Fri: 10-11 minutes Sat: 9 minutes Sun: 20 minutes	Mon-Fri: 05:06-23:46 Sat: 05:05-23:47 Sun: 05:05-23:46
H22	Bell Corner/Hounslow Civic Centre – West Middlesex Hospital	Mon-Fri: 11-13 minutes Sat: 10-12 minutes Sun: 20 minutes	Mon-Fri: 05:27-00:48 Sat: 05:35-00:48 Sun: 06:48-00:46

NATIONAL RAIL TIMETABLE (Twickenham)		
Destination	**Frequency**	**Duration**
London Waterloo	10 trains per hour	23-45 minutes
Wimbledon	2 trains per hour	27 minutes
Windsor & Eton Riverside	2 trains per hour	35 minutes
Reading	2 trains per hour	1 hour 3 minutes

LEGEND

- SITE LOCATION
- NATIONAL RAILWAY STATION
- RAILWAY TRACKS
- LOCAL BUS STOPS
- CYCLE ROUTES
- LEISURE
- RETAIL
- HEALTH CARE
- ZIPCAR CLUB
- ENTERPRISE CAR CLUB
- 1KM (13-MIN) WALK ISOCHRONE

RGP

Transport Planning and Infrastructure Design Consultants
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Tel: 01483 861681 Fax: 01483 861682
www.rgp.co.uk

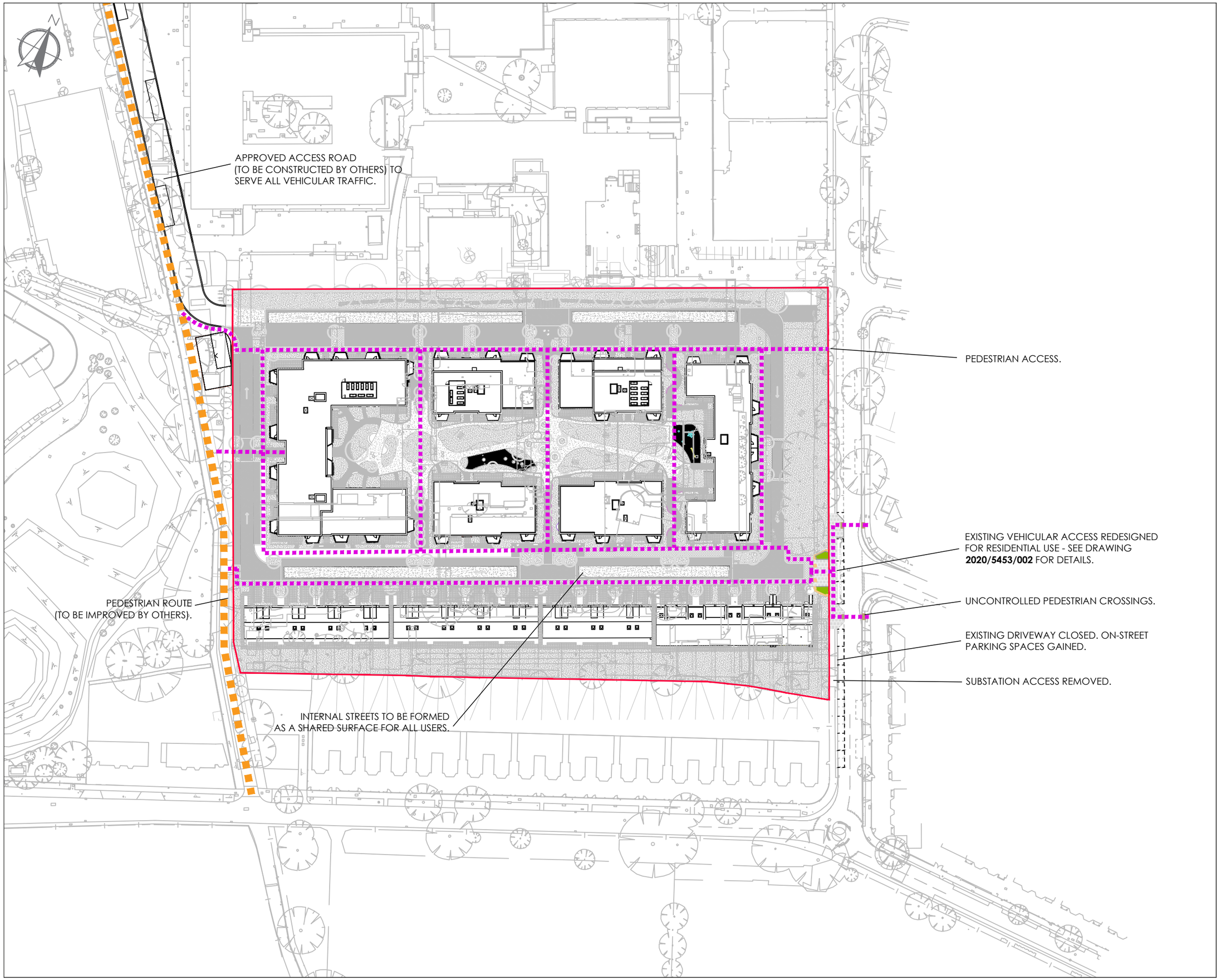
Client: Clarion Housing Group

Project: Richmond Upon Thames College Residential Development Zone

Title: Site Location and Accessibility Plan

Plan No:	Job No:	Date:	
Plan 01	5453	Feb 2021	
Drawn By:	**Checked By:**	**Rev:**	
JLM	RLR	-	A3

DRAWINGS



NOTES

This drawing has been prepared for the purpose of planning discussions and does not constitute a detailed design drawing, or construction drawing. A Design Hazard Inventory has been prepared by RGP setting out the hazards which have been designed out. This is available upon request.

- SITE BOUNDARY
- MAIN PEDESTRIAN ROUTES THROUGH THE SITE
- MARSH FARM LANE PEDESTRIAN/CYCLE ROUTE

RESIDUAL HAZARDS

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, please note the following residual hazards:

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved risk assessment and method statement.

Rev.	Drawn	Comments	Date
P3	SJ	UPDATED SITE LAYOUT	28/04/21
P2	SJ	AMENDMENTS TO ON-STREET PARKING	30/03/21
P1	SJ	FIRST ISSUE	06/01/21

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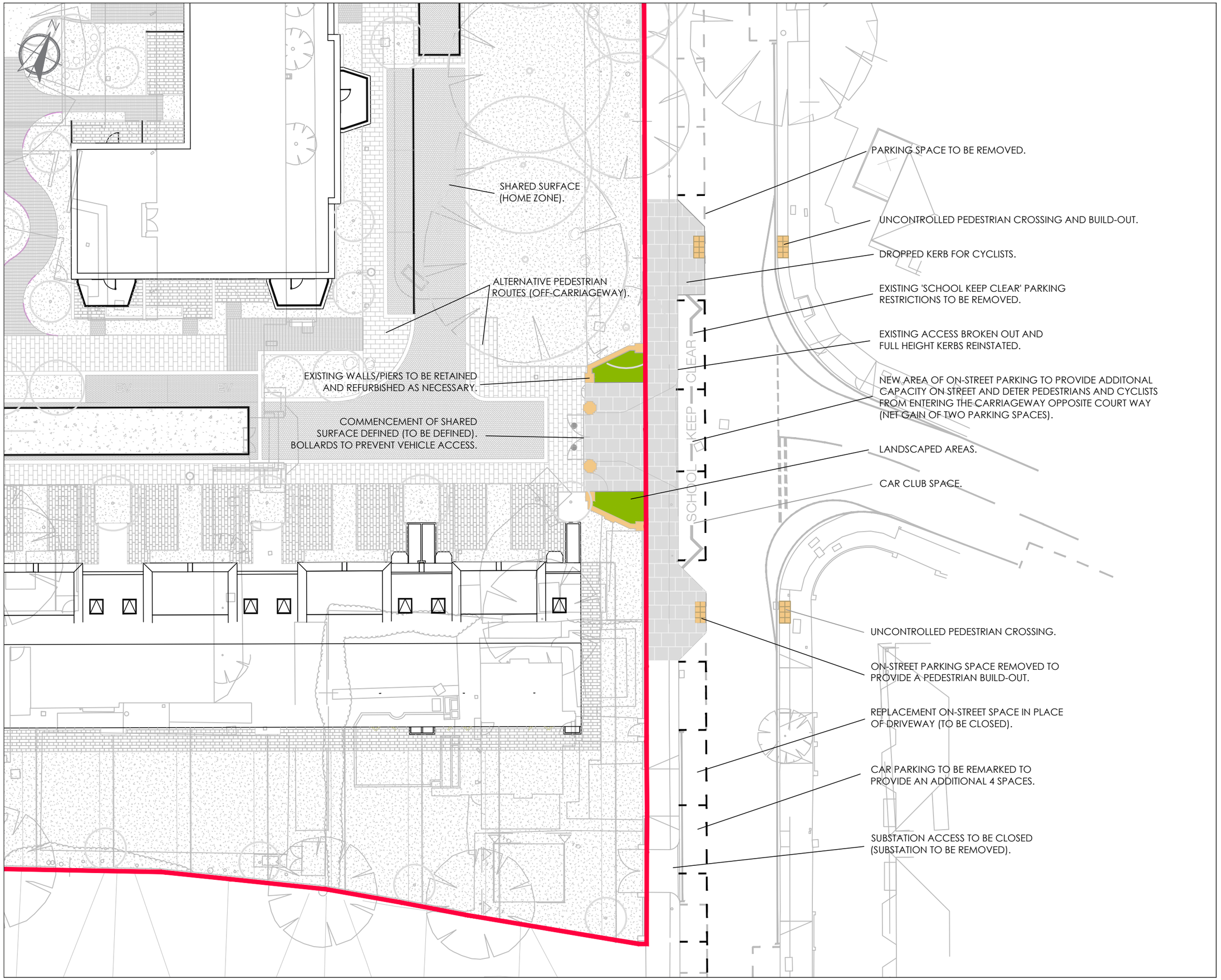
Client: Clarion Housing Group

Project: Richmond College Residential Development Zone

Drawing Title: Proposed Pedestrian Routes Overview

Drawing No.	Rev.
2020/5453/001	P3

Scale	Drawn By	Checked By	
1:1000	SJ	NR	A3



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SITE BOUNDARY

RESIDUAL HAZARDS

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Rev.	Drawn	Comments	Date
P4	SJ	UPDATED SITE LAYOUT	28/04/21
P3	SJ	AMENDMENTS TO ON-STREET PARKING	30/03/21
P2	SJ	REVISED ACCESS STRATEGY	08/02/21
P1	SJ	FIRST ISSUE	06/01/21

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Client: Clarion Housing Group

Project: Richmond College Residential Development Zone

Drawing Title: Proposed Pedestrian Access Egerton Road

Drawing No.	Rev.
2020/5453/002	P4

Scale	Drawn By	Checked By	
1:250	SJ	NR	A3