FUTURE HIGH STREET LIVING (STAINES) LTD

PROPOSED REDEVELOPMENT OF FORMER DEBENHAMS STORE, STAINES-UPON-THAMES

TRANSPORT STATEMENT

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project number: ADC2743			report reference: ADC2743-RP-A
version	date	author	comments
1	21/10/21	Jamie Cassie	Client issue
2	29/10/21	Jamie Cassie	Final issue

CONTENTS

APPENDICES

1.0 INTRODUCTION

1.1 ADC Infrastructure Ltd was commissioned by Future High Street Living (Staines) Ltd to provide highways advice in support of a planning application for the redevelopment of the former Debenhams store to the south-east of the junction of High Street with the A308 Thames Street in Staines-upon-Thames.

1.2 Spelthorne Borough Council (SBC) is the local highway planning authority for the area and Surrey County Council (SCC) is the local highway authority for the area.

1.3 The development proposals comprise demolition of the former Debenhams Store and redevelopment of site to provide 226 dwellings (Use Class C3) and commercial units (Use Class E) together with car and cycle parking, hard and soft landscaping, amenity space and other associated infrastructure and works. Vehicular access to the site is proposed through retention of the existing primary access on the A308 Thames Street and retention of an existing second point of access from Elmsleigh Road.

1.4 This report presents the Transport Statement and is structured as follows:

- Section 2 describes the existing highway and infrastructure conditions surrounding the site;
- Section 3 describes the development proposals;
- Section 4 calculates the potential trip generation, and;
- Section 5 presents the summary and conclusions.

1.5 This Transport Statement has been produced in accordance with *Travel plans, transport assessments and statements in decision taking*. It examines the transport implications of the proposed development taking into account the requirements of the National Planning Policy Framework[1] :

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:
a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location
b) safe and suitable access to the site can be achieved for all users;
c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and
d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

[1] NPPF Paragraphs 110 and 111, July 2021

2.0 EXISTING CONDITIONS

Site location and existing use

2.1 The site is located on the south-east corner of the High Street/A308 Thames Street junction in Staines town centre. The site is a former Debenhams department store that was closed in May 2021. There is an existing service vehicle access to the former store from the A308 Thames Street that connects through to Elmsleigh Road. The general site location is shown below in **Image 1**.

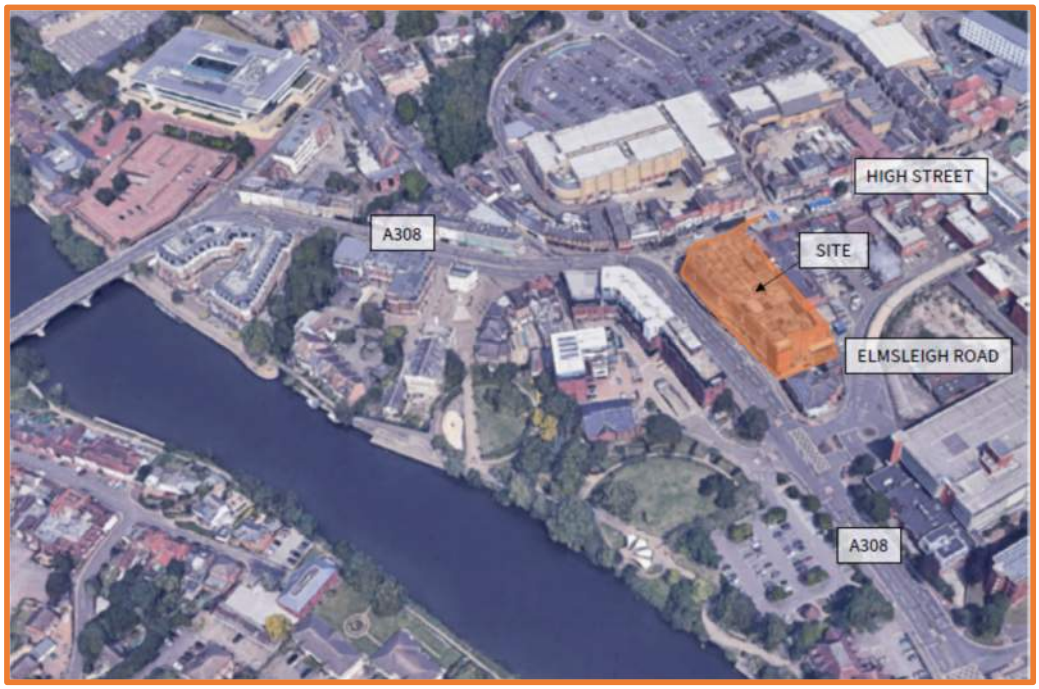


Image 1: General site location and aerial view

Highway network

2.2 Staines High Street runs from west to east along the northern boundary of the site and is a pedestrian zone, with vehicular access restricted to loading only for the predominantly retail uses served from it.

A308 Thames Street

2.3 The A308 Thames Street runs from north to south along the western boundary of the site and is a dual carriageway route that is subject to a 30mph speed limit and has parking restrictions in place along its length through the town centre. The A308 leads west from the site, over the River Thames, towards Windsor, and eastwards from Staines, through Ashford and Sunbury-on-Thames, to Hampton.

2.4 The A308 has footways on either side of the route, regular street lighting, and, immediately to the north of the site, there is a staggered signal controlled pedestrian crossing of the route to provide connectivity to the High Street.

Elmsleigh Road

2.5 To the south of the site, the A308 forms the north-south approaches to a signal controlled crossroads junction with Elmsleigh Road (eastern arm) and an access road to the Staines Riverside underground car park and surface level car park (western arm). This junction has signal controlled pedestrian crossings on all approaches.

2.6 Elmsleigh Road forms a small one-way (clockwise) loop road to the south-east of the site and provides vehicular access to Tothill multi-storey car park and Elmsleigh Road car park, as well as service access to several commercial units on the High Street.

2.7 Immediately to the east of the signal junction with the A308, there is a small roundabout junction on Elmsleigh Road that provides access to a ramp for service vehicles for the Elmsleigh shopping centre.

Collision Data

2.8 A review of collision data available on the Crashmap website (www.crashmap.co.uk) in the vicinity of the site for the five-year period between 2016-2020 revealed that there has been a single collision on the A308 just to the north-west of the site. The collision involved a single vehicle and resulted in a slight injury.

2.9 At the A308/Elmsleigh Road signal junction there were two collisions recorded during the five-year period; one of which resulted in a serious injury and one of which resulted in three slight casualties. The serious collision occurred between a van and a pedal cycle, both of which were turning left, and resulted in serious injury to the cyclist. The details of the slight injury collision are unknown.

2.10 In view of the number and severity of collisions recorded in the vicinity of the site during the most recent five-year period, it is not considered that there are any existing road safety issues in the vicinity of the site that would be exacerbated by the proposed development.

Opportunities for pedestrian travel

2.11 Guidelines for Providing for Journeys on Foot[2], describes walking distances for commuters and school pupils, where up to 500 metres is the desirable walking distance, up to 1,000 metres is an acceptable walking distance, and up to 2,000 metres is the preferred maximum walking distance. **Figure 1** therefore shows pedestrian catchments for these distances from the centre of the site. The catchment area covers Staines town centre and all its associated shopping, education, employment, health, and leisure facilities.

[2] Guidelines for Providing for Journeys on Foot, Institution of Highways and Transportation, 2000

Figure 1 – Pedestrian catchments

2.12 There is excellent pedestrian infrastructure in the vicinity of the site commensurate with the location. To the north, High Street is a pedestrianised route, and to the west there are wide footways on either side of the A308 Thames Street and signal-controlled crossing points on all four arms of the A308/Elmsleigh Road junction. There is also a staggered signal controlled pedestrian crossing of the A308 immediately to the north of the site.

2.13 There are no Public Rights of Way in the vicinity of the site which would affect the delivery of the proposed development.

2.14 The site is within a 5-minute walk time of Staines bus station and a 10-minute walk time of Staines rail station. The suitability of the available walk routes is discussed in further detail in the relevant public transport sections below.

Opportunities for cycle travel

2.15 As shown in **Figure 2**, National Cycle Network (NCN) Route 4 runs along the A308 Thames Road at the western site boundary. The route is predominantly an off-road route in the vicinity of the site and provides connectivity east to Chertsey, Weybridge, and London; and west to Egham Windsor and Slough. The NCN4 route is a longer distance route between London and Wales.

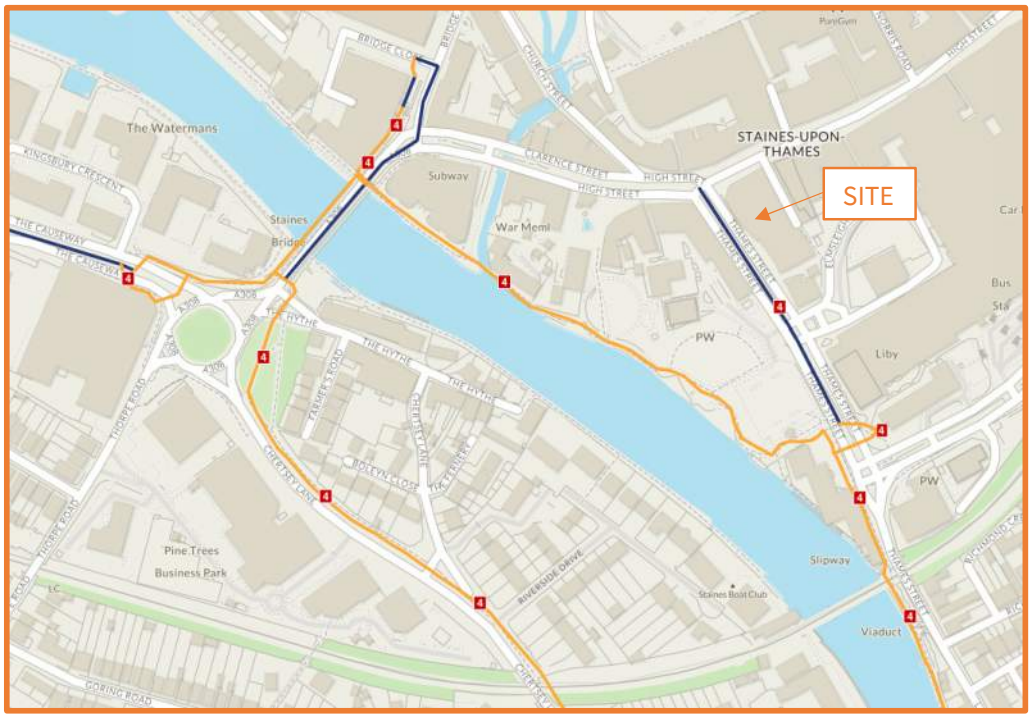


Figure 2: Map showing NCN 4 in the vicinity of the site

2.16 **Figure 3** is an extract from the SCC online cycle facility map. As shown, there are suitable cycle routes within the vicinity of the site, including routes which provide connectivity from central Staines to the wider area.

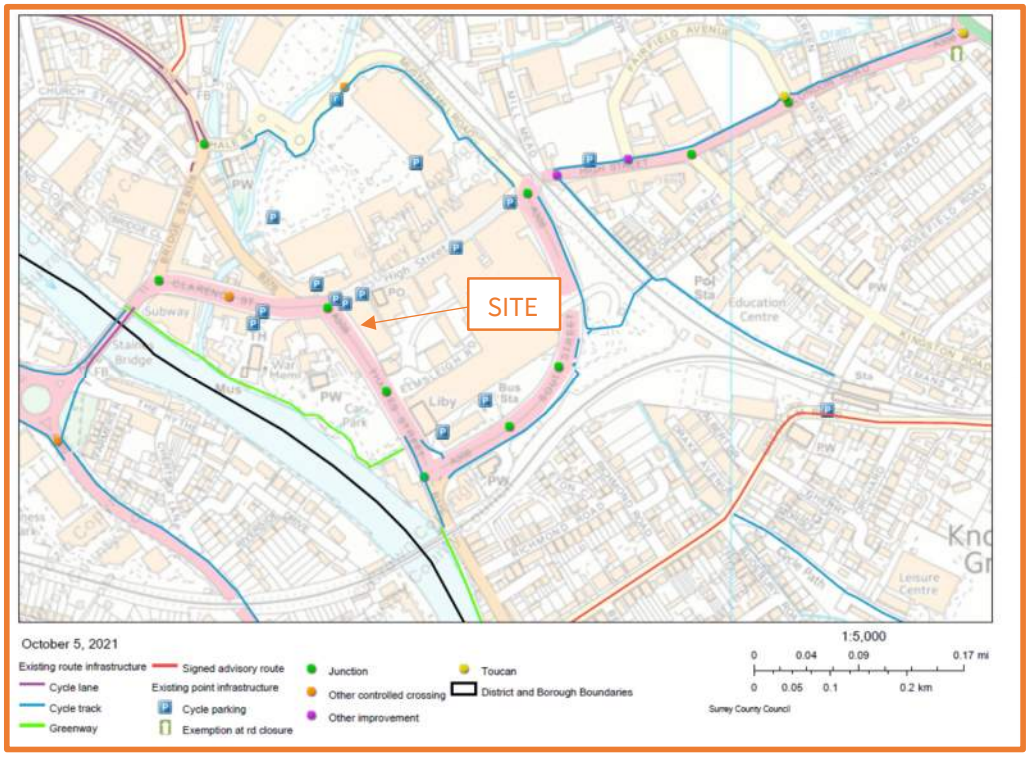


Figure 3: Extract from SCC cycle facility map

Opportunities for travel by bus

2.17 There is a bus stop for southbound services along the A308 immediately outside the proposed development. The stop is situated within a layby, has raised bus boarder kerbs, and is a simple flag on pole arrangement with a timetable display case. The stop is essentially for drop-off for bus users accessing the High Street and town centre.

2.18 Staines bus station is located approximately 350m walk distance to the south-east of the site. The quickest/most convenient walk route to the bus station from the site would be the existing footway on the east side of the A308 and then east along Friends Walk, a 120m length of footpath route to the south of Staines library and the Elmsleigh shopping centre, linking the A308 and the bus station. The route is surfaced, has street lighting, has natural surveillance, and is signposted by fingerpost signing on the footway adjacent to the A308.

2.19 The walk route between the site and the bus station would involve pedestrians having to cross only one road, Elmsleigh Road at its junction with the A308. This is a signal controlled crossroads junction, with signal controlled pedestrian crossings on all approaches. In view of the above, it is considered that the walk route between the site and the bus station is quick, attractive, and convenient.

2.20 There are over 20 bus services operating from the bus station, with regular frequency services to destinations such as Ashford, Hounslow, Sunbury, Egham, Chertsey, Woking, and Heathrow Airport operating throughout the day.

Opportunities for rail travel

2.21 Staines railway station is the nearest train station to the site, located approximately 800m to the east of the site. There are two potential walk routes between the site and the rail station, a northern route, and a southern route. These are discussed in greater detail below.

2.22 The northern walk route between the site and the rail station commences on High Street at the northern site boundary. The route leads eastwards along the pedestrianised High Street and then crosses the A308 at a staggered, signal controlled, pedestrian crossing of the A308 South Street. Fingerpost signing then directs pedestrians eastwards under 'The Iron Bridge' and onto Station Path, a 500m length of surfaced and street lit, traffic-free, pedestrian and cycle route that links directly to the rail station. The northern walk route has a total length of approximately 750m, with a walk time of approximately nine minutes.

2.23 The southern walk route to the rail station follows the A308 south from the site and then eastwards along the front of the bus station, where fingerpost signs direct pedestrians across the A308 at a staggered, signal-controlled, crossing and through the Elmsleigh surface car park (where walk route is defined by coloured surfacing and zebra crossings) to Station Path. The total walk route is approximately 850m and a walk time of approximately 11 minutes.

2.24 Staines railway station is served by South Western Railway and there are regular trains to London Waterloo, Reading and Windsor, among other destinations. During the week there are up to six trains to London Waterloo per hour, making rail travel a viable option for commuting.

2.25 In view of the above, it is considered that the proposed development is within an easy walk distance of Staines railway station and that travel by rail would be an attractive and viable mode of travel for residents and visitors to the proposed development.

Summary

2.26 There are excellent opportunities for sustainable travel. There is a high quality pedestrian and cycle network in the vicinity of the site, which serves a high density of facilities in Staines town centre and beyond. There are excellent opportunities for bus travel, as Staines bus station is a 400m walk from the site and is served by numerous services to local destinations, including London Heathrow Airport. Additionally, Staines railway station is within an easy walking distance of the site and is served by regular trains to key destinations including London Waterloo.

2.27 Overall, the site is accessible by all modes of travel and is therefore well located for residential development.

3.0 PROPOSED DEVELOPMENT

Development proposals

3.1 The development proposals comprise demolition of the former Debenhams store and construction of two 14-storey residential towers to house a total of 226 apartments, with two ground floor commercial units (circa 500sq.m gfa) and car parking for 151 vehicles. The basement, ground floor and mezzanine layout plans for the proposed development are shown in **Appendix A**.

Access

3.2 Primary vehicular access to the site is proposed via modifications to the existing vehicular access onto the A308 Thames Street. The existing access is a simple dropped kerb private access from the A308 to the south of the existing building. The A308 is a dual carriageway with central reservation in this location and so the access operates as a left-in/left-out only junction. The access has gates at the back of the footway and is located within the merge taper of an existing bus layby on the A308 (see **Image 2** below).

Image 2 – Existing access to A308 Thames Street

3.3 The proposed modified access will be retained in its current location and widened to accommodate two-way flows. It is proposed that the existing bus layby would be relocated approximately 20m to the north along the A308 to remove the existing conflict between the access and southbound buses pulling out of the layby. The relocated layby has been designed with reference to the IHT 'Planning for Public Transport in Developments' document and an overall layby length of 54m would be provided, comprising 15m long entry and exit tapers and a 24m length of bus stop (sufficient for two buses to stop clear of the main carriageway). New bus stop infrastructure (kerbs, pole, flag etc) would be provided as part of the relocation works.

3.4 A minimum footway width of 3m would be retained along the site frontage on the A308, with additional footway space being provided in the vicinity of the pedestrian access to tower B. Sufficient dropped kerbs would be provided to facilitate two-way traffic at the vehicle crossover point with the A308.

3.5 It is proposed that the existing simple dropped vehicle crossing arrangement with the A308 Thames Street is maintained so that pedestrians retain priority at the access point. It is proposed that the access would be defined by a change in materials and the details of this will be discussed in greater detail with SCC as the application progresses.

3.6 It is proposed that the existing access onto Elmsleigh Road is also retained, with service and refuse vehicles proposed to access the site via Elmsleigh Road and egress the site via the A308. Vehicle tracking drawings showing a large car entering/exiting the site via Thames Street and a refuse vehicle entering via Elmsleigh Road and exiting via Thames Street are included as **Appendix B**.

Car parking

3.7 Car parking for the residential use is proposed at basement, ground floor, and mezzanine level with a total of 151 car parking spaces proposed. The car parking spaces will be reserved for the use of residents of the apartments and access will be controlled through an access barrier at ground floor level.

3.8 The car parking spaces will be controlled by the building management company, with spaces being available for residents to purchase, or rent, and allocated at time of purchase (or rental). A maximum of 10 car parking spaces will be reserved for a residents' car club to be provided at the development (further details provided below).

3.9 Car parking standards for the area are set out in the SBC Parking Standards Supplementary Planning Guidance document (Sep 2011). The document recommends that the following minimum standards will be applied to new residential developments:

- One bedroom dwellings: 1.25 car parking spaces per dwelling
- Two bedroom dwellings: 1.5 car parking spaces per dwelling

3.10 The proposed development comprises 106 one-bedroom dwellings and 120 two-bedroom dwellings and therefore, in accordance with the above standards, a minimum car parking provision of 313 spaces is applicable. More recent (2018) car parking guidance produced by SCC recommends a minimum of one space per dwelling in town centre locations but recognises that *'reduced or even nil provision may be appropriate in support of demand management and the most efficient use of land'*.

3.11 Furthermore, the SBC parking standards document states that reduction of parking requirements will normally only be allowed in the following situations:

i. Within the Borough's 4 town centres defined in the Core Strategy and Policies DPD where public transport accessibility is generally high. Any reduction will be assessed against the following relevant factors:
    a. Distance from public transport node i.e. main railway station, bus station, main bus stop;
    b. Frequency and quality of train service;
    c. Frequency and quality of bus service;
    d. Availability and quality of pedestrian and cycle routes;

e. Range and quality of facilities supportive of residential development within a reasonable walking distance (or well served by public transport) e.g. retail, leisure, educational, and possibly employment

ii. Units specifically designed for single person occupation.

iii. Residential conversions where there are limited off-street parking opportunities e.g. floors of accommodation above shops.

iv. In Conservation Areas, where the character of appearance of the Conservation Area would be harmed by the impact of parked cars.

3.12 A reduction in residential car parking provision is clearly appropriate in this location. Staines is the principal town centre serving north Surrey, and as noted in Section 2, the site is within an easy walk distance of both the bus station and the rail station, with frequent daily services available from both stations to major destinations, including Heathrow Airport and London. Good quality pedestrian and cycle routes are available in the vicinity and provide attractive and convenient routes to both transport hubs and the rest of the town centre.

3.13 A range of facilities supportive of residential development are within a reasonable walking distance of the proposed development, with numerous retail facilities being available on the High Street and at the Elmsleigh and Two Rivers shopping centres. There are leisure facilities (gym, cinema, leisure centre) within a reasonable walking distance of the site, and local schools, plus local employment areas, are within a 20-minute walk distance of the site.

3.14 The proposed car parking provision represents a ratio of 0.67 spaces per dwelling. This accords with the ratio of car parking provided at the nearby Charter Square development. As a further parking restraint measure, it is proposed that the applicant would enter into a legal agreement with SBC which would prevent future residents of the development from obtaining a parking permit for any of the Controlled Parking Zones (CPZs) within the borough.

3.15 In accordance with SCC parking guidance, 20% of the car parking spaces (30 spaces) will be fast charge sockets (7.5kW) for electric vehicle charging. A further 20% of the spaces will be provided with power supply to provide additional fast charge socket.

3.16 No on-site car parking is proposed for the two proposed ground floor commercial units. This approach reflects the lack of car parking provided for the former department store and considers the excellent provision of public car parking available within the immediate vicinity of the site.

Car Club

3.17 It is proposed that, initially, four of the car parking spaces are reserved for a car club to be operated at the site. These spaces will be funded by the developers of the site and discussions have already taken place with Hiyacar (www.hiyacar.co.uk) for provision of a fully managed car club service for the site. The car club vehicles would be purchased by the site developer with Hiyacar (or other CoMoUK accredited operator) then listing the cars on their booking platform. Residents of the development would then be made aware of the car club scheme through the provision of resident travel packs (details of which are provided in the Travel Plan Statement document).

3.18 Each resident of the development would also be offered a ‘taster’ for the car club, with the first five car club trips being offered for free. This information would also be contained in the resident travel pack and the car club operator would manage the administration. Hiyacar also offer a peer to peer platform, so there is the potential for residents of the development who do own cars to lease them to other residents through the resident car share scheme. The additional benefits of

the peer to peer platform are that a wider range of cars can become available for residents and residents who are car owners can generate additional income. It is considered that the peer to peer platform offers an easy introduction to car clubs for residents who currently own cars, and that once residents experience the benefits of the car club, car ownership for the development would reduce.

3.19 Research by CoMoUK (CoMoUK-Great-Britain-Car-Club-Summary-Report-2020.pdf) indicates that 18.5 private cars are replaced by each car club vehicle in the UK. In London, this figure increases to 23.5 private cars per car club space. If the lower figure is adopted for Staines, then the four car club vehicles proposed could result in a reduction of 74 private cars for the proposed development.

3.20 Comparisons of case studies of car clubs within new developments[3] indicates that the most successful developments have been those with high population density, in areas well served by public transport, and where car parking has been restricted both within the development and its environs. It is therefore considered that the proposed development has considerable potential to operate a successful car club scheme.

3.21 The four car club spaces proposed are twice the recommended number of car club spaces for developments of between 200 and 400 dwellings, as set out in the SCC *'car clubs for new developments'* (2018) guidance document. This document also ranks Staines as 10th out of the 52 wards in Surrey in terms of its potential for car club uptake.

3.22 It is proposed that the car club scheme would be monitored for a minimum period of five years from commencement of the scheme and funds set aside by the site developer to increase the number of car club vehicles to a maximum of 10 vehicles. To ensure that six parking spaces are available in the future for potential use as car club spaces it is proposed that the four car club spaces are reserved upon completion of the development and retained for car club vehicles only, with a further six spaces being available to rent for a short-term period but gradually removed from the rental list and reallocated for car club vehicles.

Cycle parking

3.23 The SBC Parking Standards document recommends a minimum provision of one cycle parking space per dwelling for one and two bedroom dwellings, equating to a requirement of 226 cycle parking spaces for the proposed development. These spaces will be provided in a secure and sheltered location at the ground floor level, with access provided from the A308 frontage. The cycle parking area will also include sufficient space for a workshop to allow residents to carry out cycle repairs/maintenance and a kitchen area to allow cyclists to socialise.

[3] Car Clubs in New Developments (April 2016)

4.0 TRIP GENERATION AND MODAL SPLIT

Proposed vehicle trip rates

4.1 As there is no car parking provided for the proposed ground floor commercial units, it is not predicted that these units will result in any direct vehicular movements to/from the site. It is understood that there will be the occasional service/delivery vehicle using the site access associated with the commercial units, but this would not be a daily occurrence. No traffic generation has therefore been calculated for the commercial units.

4.2 For the proposed residential apartments, the forecast traffic generation has been calculated using the 'flats privately owned' category from version 7.8.2 of the TRICS database. Only sites located in Greater London and in town centre or edge of town centre locations were selected to be taken forward for analysis. Sites with 100 to 350 flats were selected, and surveys conducted on weekends were excluded. This gave an output of four sites. The TRICS outputs are contained in **Appendix C,** and the average vehicular trip rates, together with resulting vehicle trip generation for a development of 226 apartments, are shown in the table below.

Proposed vehicle trip rates and trip generation		arrive	depart	two way
vehicle trip rates (per dwelling)	AM peak hour	0.036	0.068	0.104
	PM peak hour	0.096	0.070	0.166
	Daily	0.703	0.719	1.422
vehicle trips (226 apartments)	AM peak hour	8	16	24
	PM peak hour	22	16	38
	Daily	159	163	322

Modal split and person trip generation

4.3 The proportion of trips by each mode was calculated using the 2011 National Census 'Method of Travel to Work' data (Dataset E02005917). The site is in the Spelthorne 004 MSOA, and it is appropriate to use this data given that new residents at the development are likely to display similar travel patterns to existing residents of the area. A copy of the dataset is included in **Appendix D.**

226 dwellings	Foot	Bicycle	Bus	Train	M/cycle	Driver	Car Passenger	Taxi	Total
Modal Split	14.6%	2.2%	6.0%	17.8%	1.3%	54.8%	3.2%	0.2%	100%
AM Peak	6	1	3	8	1	24	1	0	44
PM Peak	10	2	4	12	1	38	2	1	70

Impact of additional person and vehicle trips on the local infrastructure

4.4 It can be seen from the above that the proposed redevelopment would generate between 24 and 38 vehicle trips during the typical weekday peak hour and approximately 322 vehicle trips during the average weekday. It should be noted that this trip generation exercise is robust, as it takes no account of any traffic generation associated with the former use of the site, or the reduction in car parking ratio proposed for this development.

4.5 The proposed redevelopment would generate up to 10 pedestrian trips, two cycle trips, four bus trips and 12 train trips during a typical peak hour. The sustainable transport infrastructure in the vicinity of the site is examined in Section 2, and the existing infrastructure has the capacity to accommodate these trips. Therefore, no specific mitigation is proposed.

4.6 In view of the low level of peak hour traffic generation predicted (less than one vehicle trip per minute), it is not considered that detailed analysis of the traffic impact of the proposed development on the local highway network is required.

5.0 SUMMARY

5.1 Future High Street Living (Staines) Ltd has appointed ADC Infrastructure Ltd to provide highways advice on a planning application for the redevelopment of the former Debenhams store on High Street, Staines-upon-Thames.

5.2 The development proposals are for two 14-storey towers accommodating 226 residential apartments, two ground floor commercial units (circa 500sqm gfa) and 151 car parking spaces. Vehicular access to the proposed development would be provided through revisions to an existing vehicular access point onto the A308 Thames Street and retention of an existing service vehicle access onto Elmsleigh Road. The access proposals for the A308 Thames Street would involve minor revisions to an existing bus layby.

5.3 There are excellent opportunities for sustainable travel for residents of the proposed development, commensurate with the town centre location. There is good pedestrian infrastructure at the site, and the National Cycle Network Route 4 runs along the western site boundary. Staines bus and railway stations are located within an easy walk distance of the site and provide excellent connectivity to key locations including central London.

5.4 The proposed development would provide 151 car parking spaces, which is fewer than the recommended minimum provision in accordance with the local planning authority supplementary planning guidance. However, the planning guidance states that reductions in parking requirements can be allowed in town centre locations where public transport accessibility is high. It is therefore considered that a reduction in parking requirements is appropriate in this instance. In addition, a car club is proposed for residents of the site to reduce the demand for car parking spaces at the site. Typical figures indicate that a car club of between 4 and 10 vehicles could reduce car parking demand at the development by between 74 and 185 vehicles.

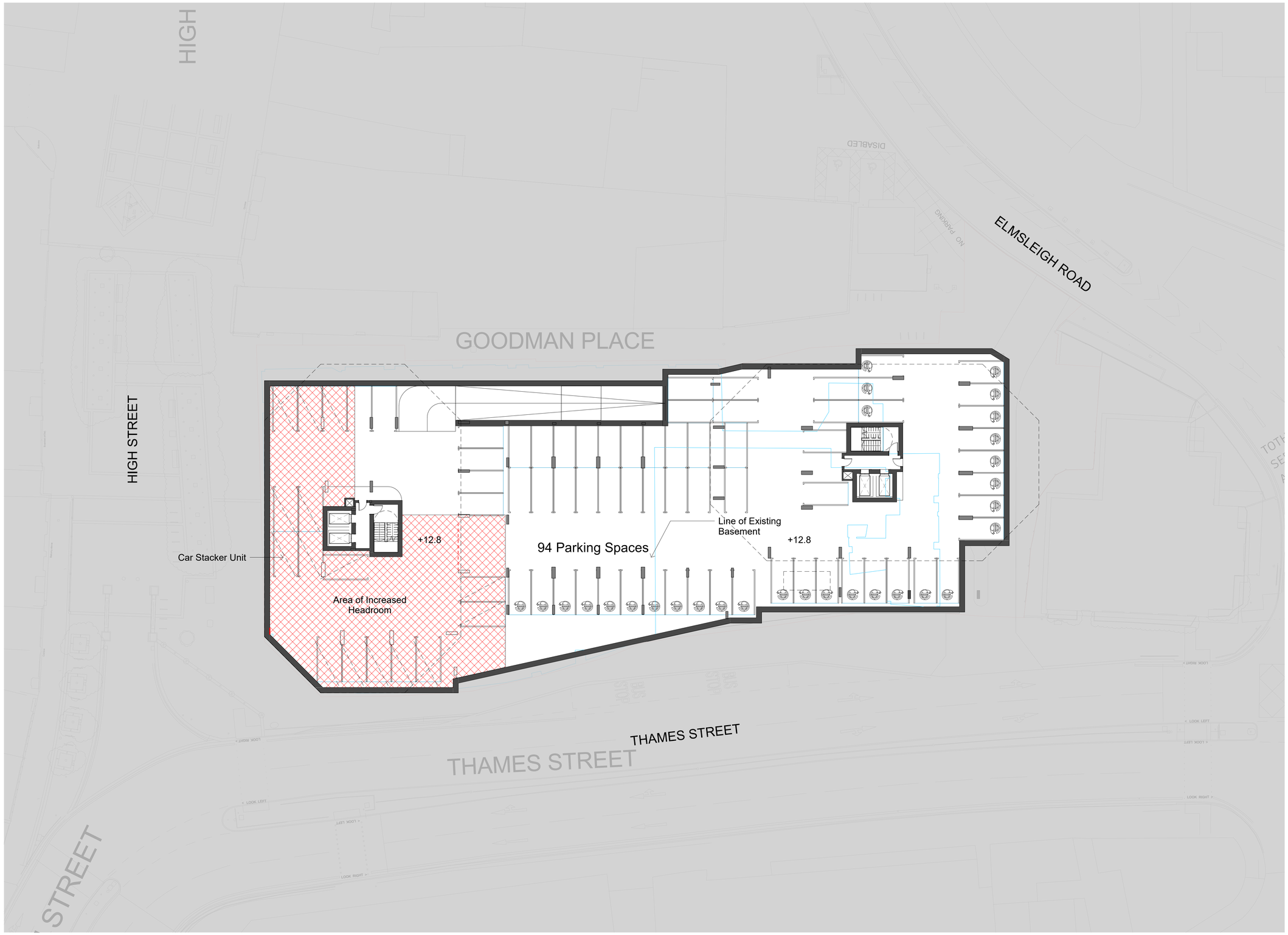
5.5 A traffic generation exercise has been undertaken for the proposed development which indicates that the proposals would generate 24 to 38 vehicle trips (two-way) during the typical weekday peak hour. This level of traffic generation would have a negligible impact on the local highway network and therefore detailed analysis of any off-site junctions is not required.

5.6 A Travel Plan Statement has been prepared to accompany this Transport Statement which will provide information on the accessibility of the site by sustainable travel modes and the measures that will be implemented by the site developers to ensure that residents and visitors to the development are provided with relevant information on sustainable travel options to reduce the number of vehicle trips to/from the site.

5.7 In view of the above, it is considered that the proposed development would not have an unacceptable impact on highway safety, and that the residual cumulative impacts on the road network would not be severe. There is therefore no reason for refusal of the proposals on highway grounds.

APPENDIX A

SITE LAYOUT PLANS



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SCALE 1: 200

Rev.	Description	Date	Drawn	Chk.
SK-2	For Client Approval	211028	AL	RK
SK-1	General amendments	211026	AL	RK
SK-0	First Issue	211020	AL	RK

SITE BOUNDARY

EXISTING BASEMENT OUTLINE (INTERNAL WALL LINE SHOWN)

HIGH SPEED EV CHARGING POINTS

Client:
Future High Street Living (Staines)

Project:
Debenhams,
Staines-Upon-Thames

Drawing Title
Proposed Basement Level

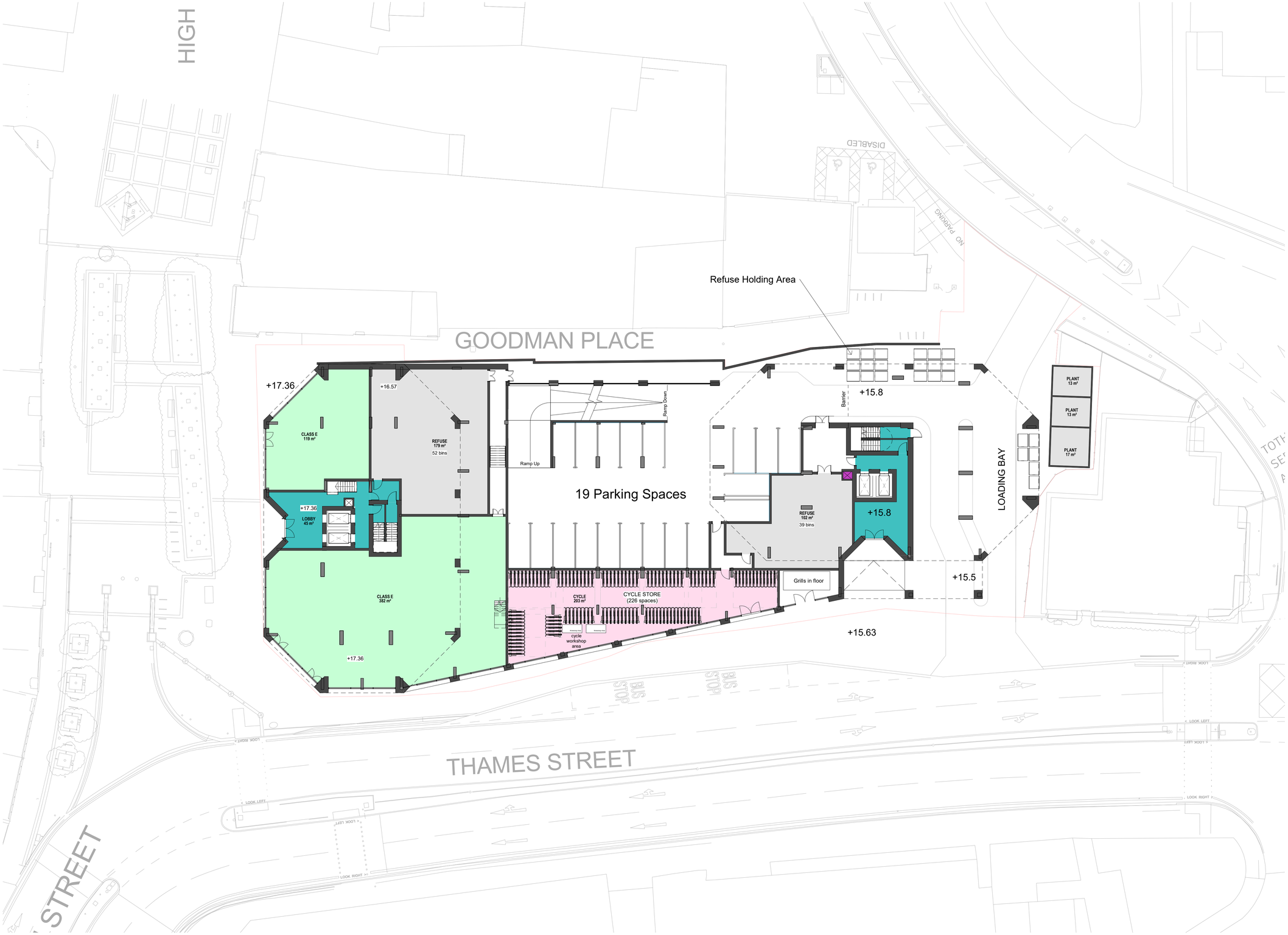
Drawing Status
WIP

Corstorphine & Wright

Birmingham Studio
Alpha Building, Suffolk Street Queensway, Birmingham, B1 1TT
0121 737 8350
corstorphine-wright.com

Drawing No.	Revision
21115-CW-XX-B1-A-0305	SK-2

Drawn	Checked	Paper Size	Scale	Date
AL	RK	A1	As indicated	13/10/21



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SCALE 1: 200

Rev.	Description	Date	Drawn	Chk.
SK-3	For Client Approval	211028	AL	RK
SK-2	General amendments	211026	AL	RK
SK-1	Cycle store revised	211021	AL	RK
SK-0	First Issue	211020	AL	RK

- CLASS E
- CYCLE
- LOBBY
- PLANT
- REFUSE
- SS
- SITE BOUNDARY

Client:
Future High Street Living (Staines)

Project:
Debenhams,
Staines-Upon-Thames

Drawing Title
Proposed Ground Floor Plan

Drawing Status
WIP

Corstorphine & Wright

Birmingham Studio
Alpha Building, Suffolk Street Queensway, Birmingham, B1 1TT
0121 737 8350
corstorphine-wright.com

Drawing No.	Revision
21115-CW-XX-00-A-0306	SK-3

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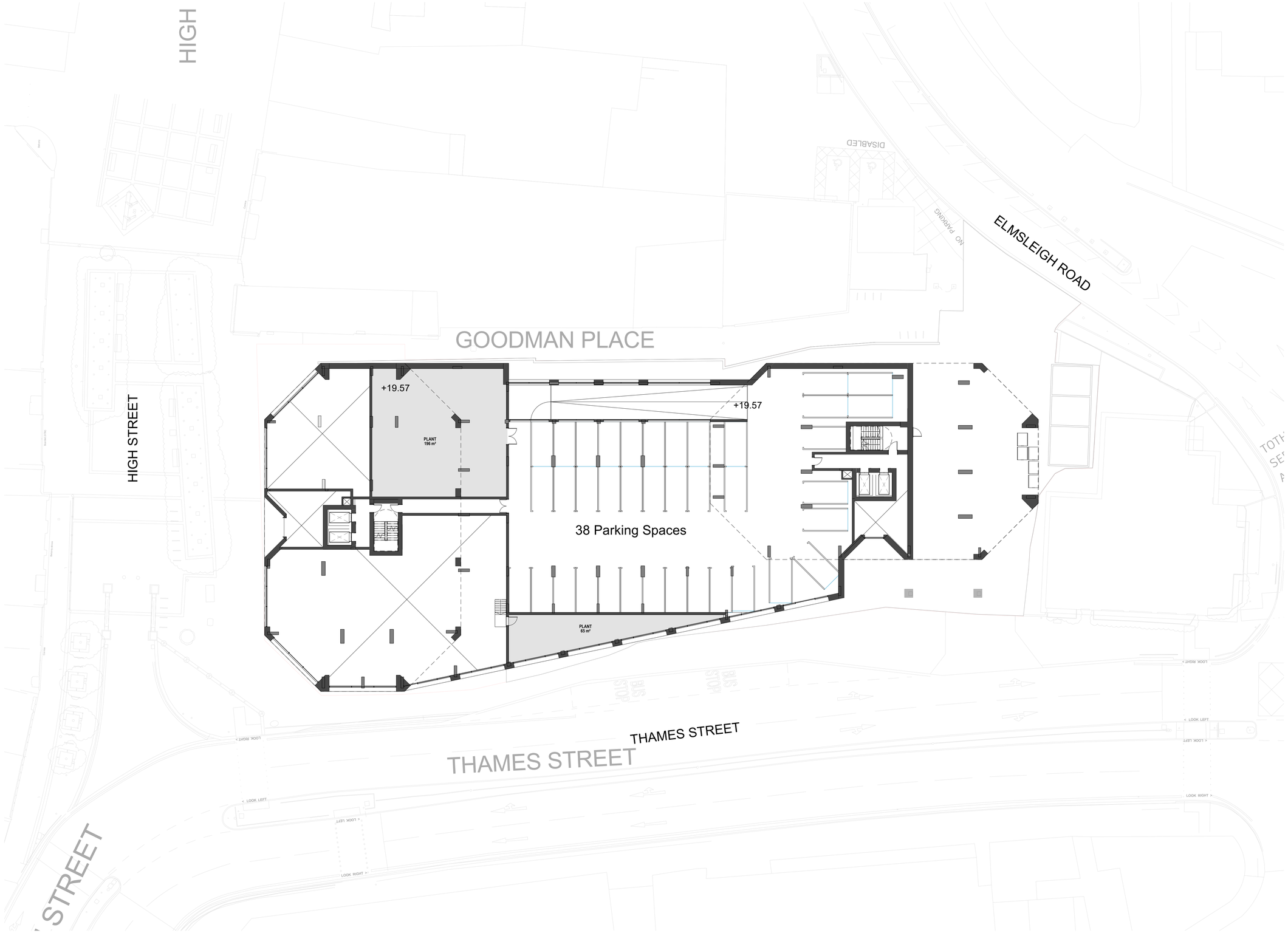


N

0 10 m 20 m

SCALE 1: 200

Rev.	Description	Date	Drawn	Chk.
SK-2	For Client Approval	211028	AL	RK
SK-1	General amendments	211026	AL	RK
SK-0	First Issue	211020	AL	RK

PLANT

SITE BOUNDARY

Client:
Future High Street Living (Staines)

Project:
Debenhams,
Staines-Upon-Thames

Drawing Title
Proposed Mezzanine Level

Drawing Status
WIP

Corstorphine & Wright

Birmingham Studio
Alpha Building, Suffolk Street Queensway, Birmingham, B1 1TT
0121 737 8350
corstorphine-wright.com

Drawing No. 21115-CW-XX-G1-A-0307

Revision SK-2

Drawn	Checked	Paper Size	Scale	Date
AL	RK	A1	1 : 200	13/10/21

APPENDIX B

VEHICLE TRACKING DRAWINGS

Large Car (2006)

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

Rev	Description	Date
P2	Updated Layout	29/10/21

Project:
Former Debenhams Store,
High Street, Staines

Title:
Swept Path Analysis - Large Car

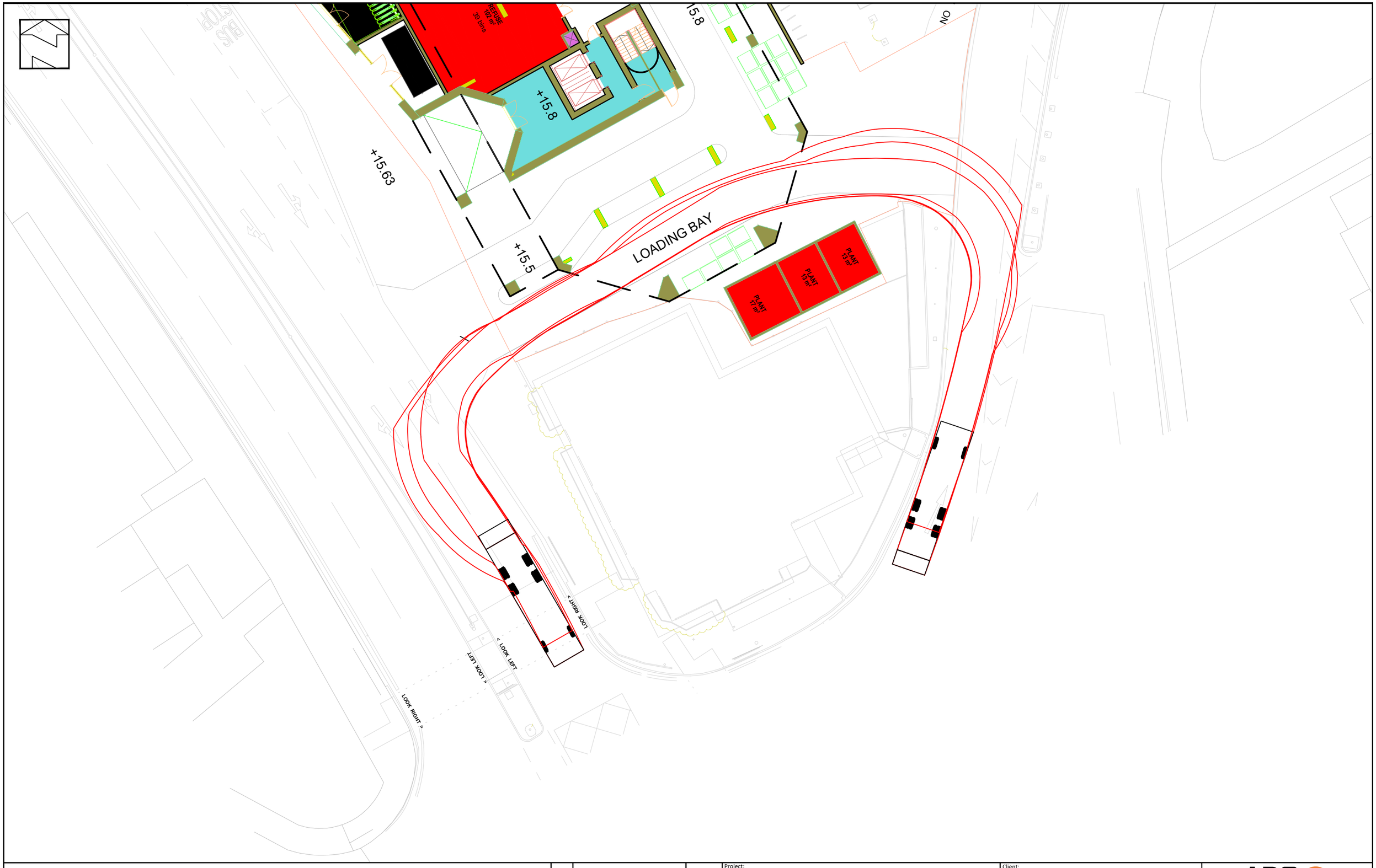
Client:
Future High Street Living
(Staines) Limited

ADC INFRASTRUCTURE

Drg Size:	Scale:	Date:
A3	1:250	22/10/2021

Drg No: ADC2743-DR-006

Rev: P2



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

Rev	Description	Date
P6	Updated Layout	29/10/21
P5	Updated Layout	22/10/21

Project:
Former Debenhams Store Site, High Street, Staines

Title:
Refuse Vehicle Tracking Assessment

Client:
Future High Street Living (Staines) Limited

ADC INFRASTRUCTURE

Drg Size:	Scale:	Date:
A3	1:250	11/10/2021

Drg No: ADC2743-DR-005

Rev: P6

APPENDIX C

TRICS OUTPUTS

Calculation Reference: AUDIT-855401-210625-0600

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	BM	BROMLEY	1 days
	HM	HAMMERSMITH AND FULHAM	1 days
	HO	HOUNSLOW	1 days
	IS	ISLINGTON	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 150 to 194 (units:)
Range Selected by User: 100 to 350 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 14/11/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	1 days
Thursday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	2
Edge of Town Centre	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Development Zone	2
Built-Up Zone	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

25,001 to 50,000	2 days
50,001 to 100,000	1 days
100,001 or More	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

500,001 or More	4 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	2 days
0.6 to 1.0	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	3 days
No	1 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

2 Poor	1 days
5 Very Good	1 days
6a Excellent	1 days
6b (High) Excellent	1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	BM-03-C-01 RINGER'S ROAD BROMLEY	BLOCKS OF FLATS		BROMLEY
	Town Centre Built-Up Zone			
	Total No of Dwellings:		160	
	Survey date: MONDAY		*12/11/18*	*Survey Type: MANUAL*
2	HM-03-C-02 GLENTHORNE ROAD HAMMERSMITH	BLOCKS OF FLATS		HAMMERSMITH AND FULHAM
	Town Centre Built-Up Zone			
	Total No of Dwellings:		194	
	Survey date: TUESDAY		*30/04/19*	*Survey Type: MANUAL*
3	HO-03-C-03 COMMERCE ROAD BRENTFORD	BLOCKS OF FLATS		HOUNSLOW
	Edge of Town Centre Development Zone			
	Total No of Dwellings:		150	
	Survey date: FRIDAY		*18/11/16*	*Survey Type: MANUAL*
4	IS-03-C-07 CITY ROAD ISLINGTON	BLOCK OF FLATS		ISLINGTON
	Edge of Town Centre Development Zone			
	Total No of Dwellings:		185	
	Survey date: THURSDAY		*06/06/19*	*Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	172	0.026	4	172	0.062	4	172	0.088
08:00 - 09:00	4	172	0.036	4	172	0.068	4	172	0.104
09:00 - 10:00	4	172	0.049	4	172	0.054	4	172	0.103
10:00 - 11:00	4	172	0.049	4	172	0.049	4	172	0.098
11:00 - 12:00	4	172	0.036	4	172	0.057	4	172	0.093
12:00 - 13:00	4	172	0.049	4	172	0.057	4	172	0.106
13:00 - 14:00	4	172	0.039	4	172	0.049	4	172	0.088
14:00 - 15:00	4	172	0.017	4	172	0.017	4	172	0.034
15:00 - 16:00	4	172	0.061	4	172	0.051	4	172	0.112
16:00 - 17:00	4	172	0.074	4	172	0.049	4	172	0.123
17:00 - 18:00	4	172	0.078	4	172	0.046	4	172	0.124
18:00 - 19:00	4	172	0.096	4	172	0.070	4	172	0.166
19:00 - 20:00	4	172	0.061	4	172	0.058	4	172	0.119
20:00 - 21:00	4	172	0.032	4	172	0.032	4	172	0.064
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.703			0.719			1.422

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	150 - 194 (units:)
Survey date date range:	01/01/13 - 14/11/19
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	172	0.000	4	172	0.000	4	172	0.000
08:00 - 09:00	4	172	0.001	4	172	0.001	4	172	0.002
09:00 - 10:00	4	172	0.006	4	172	0.004	4	172	0.010
10:00 - 11:00	4	172	0.000	4	172	0.000	4	172	0.000
11:00 - 12:00	4	172	0.003	4	172	0.001	4	172	0.004
12:00 - 13:00	4	172	0.000	4	172	0.000	4	172	0.000
13:00 - 14:00	4	172	0.004	4	172	0.006	4	172	0.010
14:00 - 15:00	4	172	0.000	4	172	0.000	4	172	0.000
15:00 - 16:00	4	172	0.000	4	172	0.001	4	172	0.001
16:00 - 17:00	4	172	0.000	4	172	0.000	4	172	0.000
17:00 - 18:00	4	172	0.000	4	172	0.000	4	172	0.000
18:00 - 19:00	4	172	0.000	4	172	0.000	4	172	0.000
19:00 - 20:00	4	172	0.000	4	172	0.000	4	172	0.000
20:00 - 21:00	4	172	0.000	4	172	0.000	4	172	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.014			0.013			0.027

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

APPENDIX D

LOCAL CENSUS METHOD OF TRAVEL TO WORK DATA

QS701EW - Method of travel to work

population	All usual residents aged 16 to 74
units	Persons
area type	2011 super output areas - middle layer
area name	E02006406 : Spelthorne 004
rural urban	Total

Method of Travel to Work	2011	Percentage
Underground, metro, light rail, tram	70	1.6%
Train	700	16.1%
Bus, minibus or coach	259	6.0%
Taxi	8	0.2%
Motorcycle, scooter or moped	55	1.3%
Driving a car or van	2,378	54.8%
Passenger in a car or van	137	3.2%
Bicycle	97	2.2%
On foot	634	14.6%
	4,338	