



**TRANSPORT STATEMENT
PROPOSED RESIDENTIAL DEVELOPMENT
Soane Point, 3-10 Market Place, Reading, RG1
2EG**

September 2022

Tene Living UK (Reading) Ltd

TPS Transport Consultants Ltd | TPS Business Hub | Stonebridge Court | 151-153 Wakefield Road | Wakefield | WF4 5HQ



tpsconsultants.co.uk



info@tpsconsultants.co.uk



+44 1924 664638

Registered number: 05973261



Document Record

Project Name	P1633_20210730_ 3-10 Market Place, Reading – Transport Statement			
Date:	26/08/2022	07/09/2022	08/09/2022	20/09/2022
Prepared by:	JA	JA	JA	JA
Checked by:	JT	JT	JT	JT
Authorised by:	GS	GS	GS	GS

Copyright Statement

This report is the copyright of TPS Transport Consultants Ltd.

The information, ideas and other intellectual property set out in this report and supporting technical appendices are the property of TPS Transport Consultants Ltd and are for the sole benefit of Tene Living (Reading) Ltd in respect of a permitted development application at 3-10 Market Place, Reading.

TPS Transport Consultants Ltd. requires that the information, ideas and other intellectual property set out in this report are:

- Not shared with third parties and particularly with direct or indirect competitors of TPS Transport Consultants Ltd;
 - Not conveyed to other consultants or personnel without the prior approval of TPS Transport Consultants Ltd; and
 - Not copied in part or in whole.
-



Contents

Chapter	Title	Page
1	INTRODUCTION	1
	Introduction	2
	Report Structure	3
2	POLICY REVIEW	4
	Introduction	4
	National Policy Context	4
	Local Policy	5
3	ACCESSIBILITY	8
	Introduction	8
	Active Travel Options	8
	Public Transport	13
	Car Club	16
	Local Amenities	17
	Summary	19
4	LOCAL HIGHWAY NETWORK	20
	Introduction	20
	Highway Network	20
	Road Safety	21
5	TRIP GENERATION	24
	Introduction	24
	Trip Generation	24
	MODAL SPLIT	24
	Trips by Mode	25
6	PARKING AND SERVICING	26
	Introduction	26
	Parking	26
	Servicing	27
7	SUMMARY & CONCLUSIONS	28
	Summary	28
	Conclusion	28



EXECUTIVE SUMMARY

This Transport Statement has been prepared in support of a planning application for development proposals at Soane Point, 3 – 10 Market Place, Reading, RG1 2EG.

The proposals are for external works to the existing building, including partial replacement of the existing façades fronting Market Place and Abbey Square alongside other external works to the building; set back single-storey extension above part of block fronting Market Place, part two, part three-storey extensions above other blocks; and conversion and alterations to ground floor reception and car parking area. Together, the works will deliver 38 new homes and (internal and external) residential amenity areas, with associated car parking.

The report clearly demonstrates that the proposals will not have a material impact on highway safety or capacity and are in accordance with the adopted Development Plan and relevant guidance/legislation (as applicable) transport planning policy / guidance; the site is in a highly accessible location, with plentiful opportunities to access local facilities by sustainable modes of transport.

Car parking is to be provided in accordance with standards and it has been demonstrated that servicing and emergency vehicle access can be satisfactorily achieved.

1. INTRODUCTION

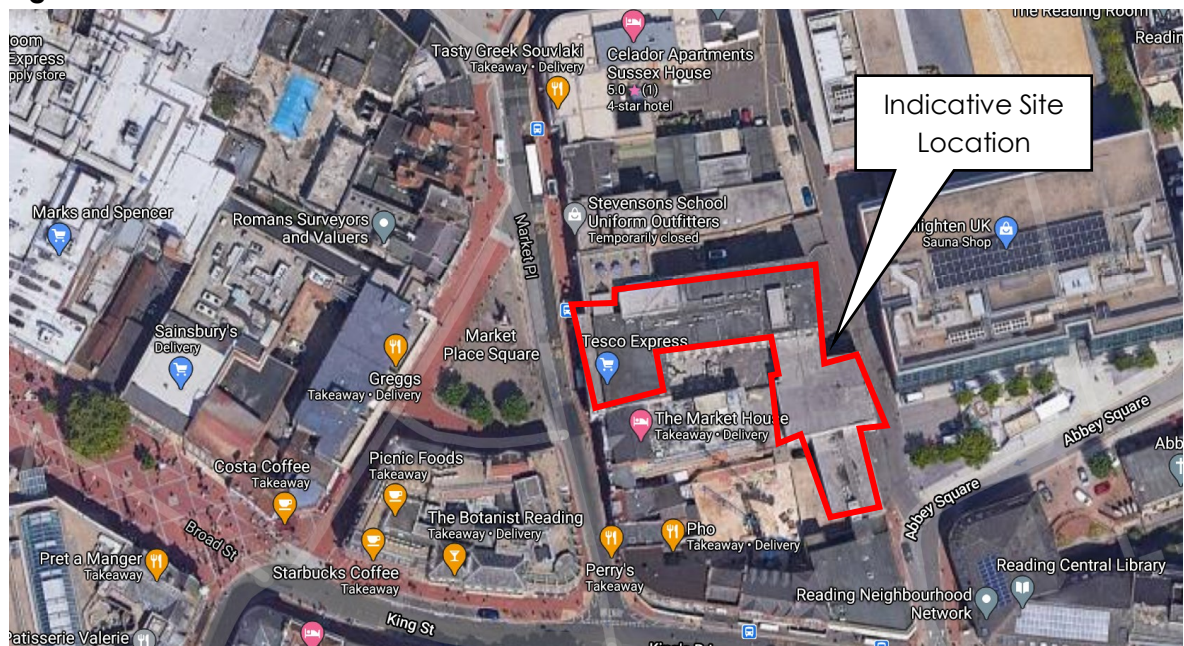
INTRODUCTION

- 1.1 TPS Transport Consultants Ltd. (TPS) has been appointed by Tene Living (Reading) Ltd to prepare a Transport Statement to accompany a planning application for 38 apartments in an upward extension and ground floor conversion at 3 - 10 Market Place, Reading. The existing building varies between 3 and 4 storey offices, benefiting from prior approval to convert the existing office space to 144 residential units.

Site Location and Development Proposals

- 1.2 Reflecting the location of the site within Reading town centre, the site is bound to the north, east and south by retail and commercial uses, whilst to the west is Market Place Square. The site location is shown in **Figure 1.1** below, whilst the proposed site layout is provided at **Appendix A**.

Figure 1.1: Indicative Site Location



(Source: Google Maps)

- 1.3 The proposed development is to be made up of 38 apartments; a mix of 1, 2 and 3 bedroom dwellings. Twenty car parking spaces will be provided in the existing basement car park and the ground floor retail units will be retained.
- 1.4 The proposed development will have pedestrian access from both Market Place and Abbey Square.



REPORT STRUCTURE

1.5 Following this introductory section:

Section 2 describes the transport planning policy context within which the proposals will be assessed;

Section 3 details the accessibility of the development site by non-car modes and the amenities accessible within walking and cycling distance of the site;

Section 4 describes the existing highway network in the vicinity of the development and key routes to the site, with reference to historic road safety records;

Section 5 summarises the anticipated person trip generation associated with the development proposals;

Section 6 considers the cycle parking and servicing arrangements; and

Section 7 offers a summary and conclusion.



2. POLICY REVIEW

INTRODUCTION

- 2.1 This section of the Transport Statement identifies the policy context within which the development proposals have been assessed; it clearly demonstrates how the proposed development would contribute to the overarching principles of national and local transport policy.

NATIONAL POLICY CONTEXT

National Planning Policy Framework (NPPF – DCLG, July 2021)

- 2.2 The revised National Planning Policy Framework was published in July 2021 and sets out the government's planning policies for England and how these are expected to be applied. It continues to encourage development through the planning system, with a presumption in favour of sustainable development.
- 2.3 The NPPF states that *“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”* (Paragraph 111). Paragraph 112 sets out that development proposals should seek to:
- *“Give priority first to pedestrian and cycle movements, both within the scheme and connecting with neighbouring areas; and second – so far as possible – to facilitate access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
 - *Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
 - *Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
 - *Allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
 - *Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.”*



- 2.4 This Transport Statement will demonstrate that the development proposals take full advantage of existing facilities for sustainable travel, locally, and will not result in a significant traffic impact on the local road network, therefore, satisfying the requirements of NPPF.

LOCAL POLICY

Reading Borough Local Plan, Adopted November 2019

- 2.5 The Local Plan is the document which guides development in Reading to 2036 and will be used to play a decisive role in how Reading evolves over the next two decades. It identifies the amount of development that will take place, the areas and sites where development is expected to be accommodated, and where it will be restricted, and sets out policies for how planning applications will be decided.
- 2.6 The overall vision for the Local Plan not only seeks to provide a vision for 2036 (the end of the Plan period), but to include a 2050 vision. The Reading 2050 Vision will help in establishing Reading as an internationally recognised and economically successful city region. It envisages a place where low carbon living will be the norm, and the built environment, technology and innovation have combined to create a smart, dynamic, and sustainable city, with a high quality of life and equal opportunity for all.
- 2.7 This 2050 vision also envisages that Reading will be a smart or sustainable city that:
- Shares success to support and enable thriving communities;
 - Delivers a real sense of place and identity;
 - Thrives on cultural and cross-generational diversity;
 - Is recognised for its heritage and natural assets;
 - Embeds technology to deliver innovation and low carbon living for all; and
 - Welcomes ethical and sustainable businesses who support Reading.
- 2.8 In addition to the vision for the Local Plan, a number of spatial objectives are outlined. The most relevant spatial objectives to the development proposals can be summarised as:
- “Ensure new development and existing areas are accessible and sustainable, in accordance with the sustainability appraisal objectives, including reducing its effects on, and adapting to, climate change.”*
- 2.9 The following policies have been identified as relevant to the development proposals and this Transport Statement:



- **Policy CC6 – Accessibility and the Intensity of Development:** *“The scale and density of development will be related to its level of accessibility by walking, cycling and public transport to a range of services and facilities, with the densest and largest scale development taking place in the most accessible locations.”*
- **Policy TR1 - Achieving the Transport Strategy:**
 - *“Proposed development should contribute appropriately to meeting the objectives of the most up-to-date Local Transport Plan or any successor document, including sub-strategies, specific projects identified and the local action plans;*
 - *Planning permission will not be granted for major development proposals unless there is a commitment to implement measures to promote and improve sustainable transport facilities, such as through provision to encourage walking, cycling and the use of public transport; and through agreed travel plans, safe routes to local facilities and services, including schools and parks, and similar measures; and*
 - *Development proposals should make appropriate provision for works and contributions to ensure an adequate level of accessibility and safety by all modes of transport from all parts of a development, particularly by public transport, walking and cycling, in accordance with any agreed transport assessment submitted as part of the application.”*
- **Policy TR4 - Cycle Routes and Facilities:** *“Developments will be expected to make full use of opportunities to improve access for cyclists to, from and within the development and to integrate cycling through the provision of new facilities. Development of new facilities for cycling, such as cycle hire points and cycle parking, will be acceptable.”*
- **Policy TR5 – Car and Cycle Parking and Electric Vehicle Charging:** *“Development should provide car parking and cycle parking that is appropriate to the accessibility of locations within the Borough to sustainable transport facilities, particularly public transport.”*

2.10 It is considered that the development proposals will comply with the policy objectives and aspirations outlined within the Reading Borough Local Plan. **Section 3** outlines the existing opportunities for travel by non-car modes to the site, which will be utilised by residents.

Reading Transport Strategy 2036, Consultation Draft – May 2020



- 2.11 The Reading Transport Strategy 2036 is a statutory document that sets the plan for developing the town's transport network to 2036 and beyond. It includes the guiding policies and principles, alongside schemes and initiatives to be delivered, to facilitate the vision for a step-change in sustainable travel choices in Reading.
- 2.12 The Council notes *"Our vision is to deliver a sustainable transport system in Reading that creates an attractive, green and vibrant town with neighbourhoods that promote healthy choices and wellbeing. Future mobility options will enable everyone in Reading to thrive, enjoy an exceptional quality of life and adapt to meet future challenges and opportunities."*
- 2.13 The following objectives are also outlined, the most relevant of these to this Transport Statement and the development proposals can be summarised as:
- **Supporting Healthy Lifestyles** – *"Create healthy streets to encourage active travel and lifestyles, improve accessibility to key destinations and increase personal safety"; and*
 - **Connecting People and Places** – *"Promote the use of sustainable modes of transport by providing attractive alternatives to the private car, helping to provide a transport network that is fast, affordable, connected and resilient".*
- 2.14 The following policies have been identified as relevant to this Transport Statement and the development proposals:
- **Policy RTS1 - Sustainable Transport:** *"We will prioritise sustainable travel modes to offer an attractive and realistic alternative to the private car".*
 - **Policy RTS4 – Development Control:** *"We will work with developers to design development that supports delivery of our transport strategy. New developments will be required to demonstrate how they will deliver healthy streets and make a positive contribution to the walking, cycling and public transport network and support sustainable travel, such as initially subsidising bus services, through the development and implementation of travel plans."*
- 2.15 It is considered that the development proposals will complement the aspirations of the Transport Strategy by providing a residential development in a highly accessible location in Reading town centre, which are highly accessible by non-car modes. The high level of accessibility to the site, particularly by walking and cycling, would contribute towards the delivery of 'healthy streets'; the opportunities for travel by non-car modes are outlined in **Section 3**.

3. ACCESSIBILITY

INTRODUCTION

- 3.1 This section of the Transport Statement describes the existing opportunities for travel by non-car modes which could be utilised by residents at the site.

ACTIVE TRAVEL OPTIONS

Pedestrian Access

- 3.2 Guidance provided by the Institute for Highways and Transportation (IHT) on the preferred maximum walking distance by journey type is provided in **Table 3.1**, below; for commuting to work, this is two kilometres.

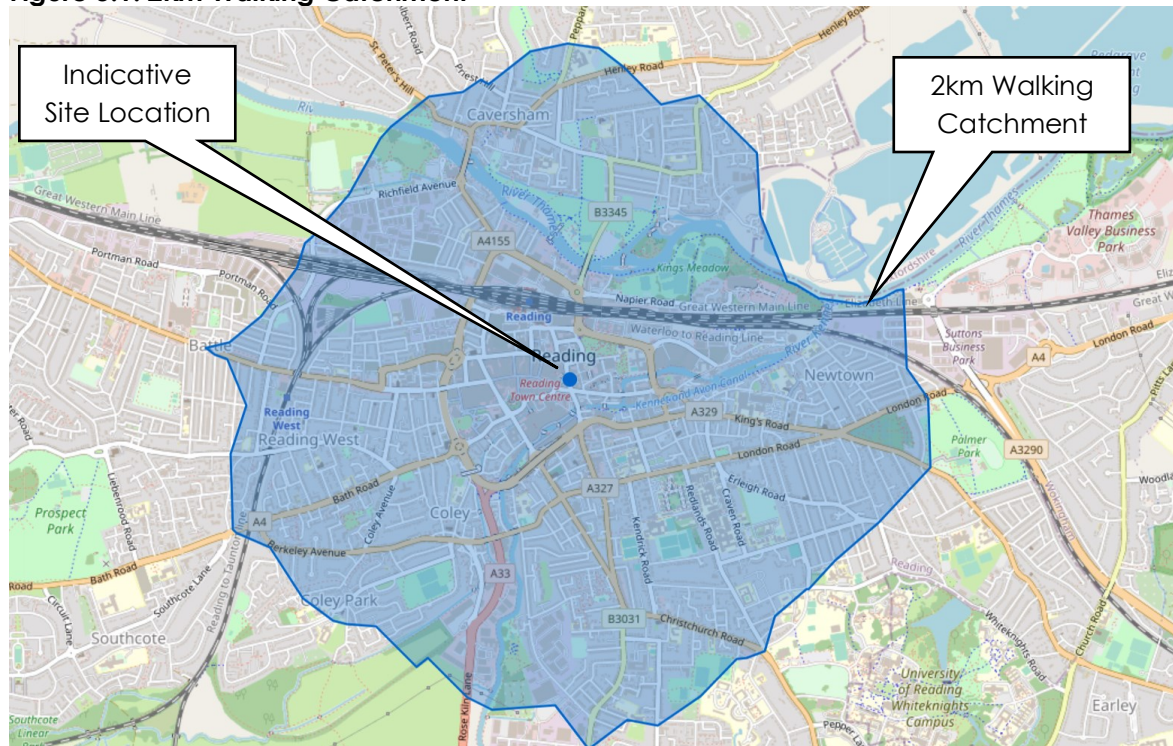
Table 3.1: Walking Distances by Journey Type

Criteria	Town Centres	Commuting / School
Desirable	200m	500m
Acceptable	400m	1000m
Preferred Maximum	800m	2000m

(Source: IHT)

- 3.3 A 2km walking catchment from the site includes the entirety of Reading town centre and the surrounding areas of Newtown, Coley, Caversham, and Reading West. This 2km walking catchment is illustrated in **Figure 3.1** overleaf.

Figure 3.1: 2km Walking Catchment



(Source: Open Street Map)

- 3.4 Given the location of the site within Reading town centre, there are a range of pedestrian routes available to the site. Market Place benefits from footways on both sides of the carriageway, which are lit, whilst Market Square Place is a pedestrianised area to the west of the site.
- 3.5 To the north of Market Place (and Market Place Square), there is a pedestrian route north towards Friar Street / Blagrove Street via another pedestrianised area (Town Hall Square). This route can be used to access amenities to the north of the site and towards Reading train station. A further pedestrian route continues northeast from Market Place, via footways along The Forbury; this route can be used to access amenities to the northeast of the site.
- 3.6 The pedestrian route eastward from the site is via the footways along King's Road, which can be accessed to the south of the site on Market Place, from the dedicated pedestrian access from Abbey Square. These footways are located on both sides of the carriageway, and are lit. To facilitate safe pedestrian movement across King's Road, there are uncontrolled pedestrian crossing points with dropped kerbs and tactile paving at the junctions of High Street and London Street, as well as across King's Road.
- 3.7 To the south of the site, the principal pedestrian route would be taken via London Street. There are footways on both sides of London Street, which are lit and facilitate a route to



amenities to the south of the site and the Riverside Shopping Centre. The aforementioned pedestrian crossing points on King's Road can also be used to safely access these footways.

3.8 The westward pedestrian route from the site would be taken via King Street and Butter Market, which join onto Broad Street. It should be noted that Butter Market forms part of the pedestrianised Market Place Square. Broad Street is the main pedestrianised route within Reading town centre and one of the principal retail areas within Reading. It is considered that this route would be an extremely attractive route to access many of the retail / leisure and employment amenities within the town centre.

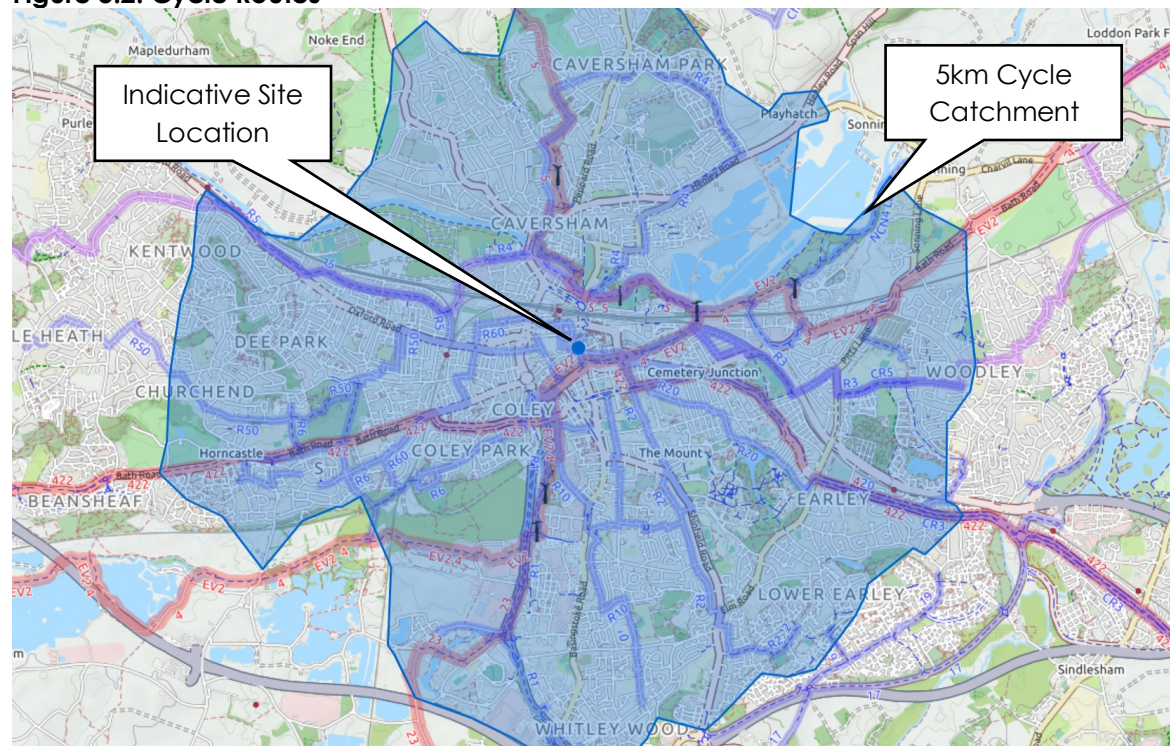
3.9 Given the location of the site within Reading town centre, there are a range of amenities accessible within walking distance of the site which would be utilised by residents. Details of the amenities accessible within walking distance of the site are provided in the latter part of this section.

Cycle Access

3.10 Cycling can be a substitute for car trips, particularly those of up to 5km, as well as forming part of a longer journey by public transport. Cycling, therefore, plays an important role in reducing the need to travel by car. A 5km catchment of the site includes Reading town centre, Caversham, Coley, Coley Park, Earley, Dee Park, Lower Earley and Whitley Wood.

Figure 3.2 illustrates a 5km cycle isochrone from the site.

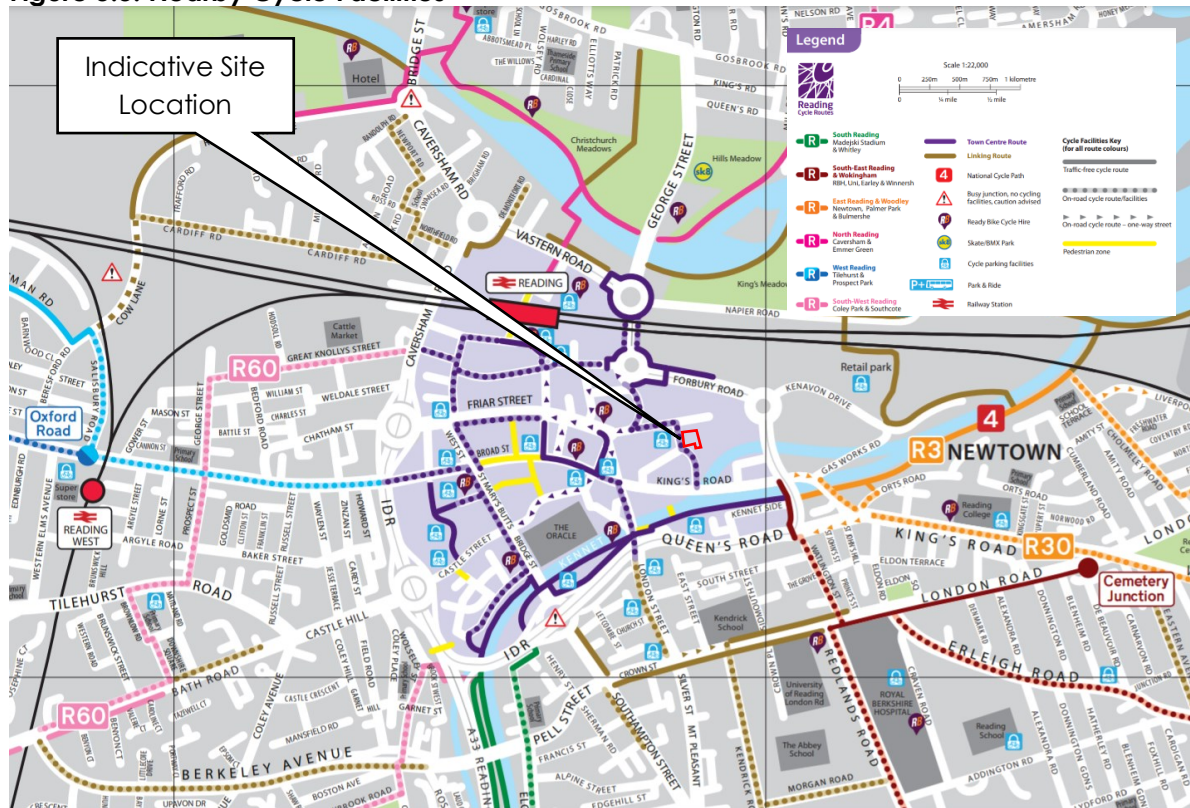
Figure 3.2: Cycle Routes



(Source: Open Street Map)

- 3.11 As can be seen in **Figure 3.2**, the site is well located to access a number of nearby cycle routes. **Figure 3.3**, illustrates, in more detail, those located within close proximity of the site.

Figure 3.3: Nearby Cycle Facilities



(Source: Reading Cycle Map)

- 3.12 As can be seen in **Figure 3.3** above, given the location of the site in Reading town centre, there are a wide range of cycle routes and facilities in the immediate vicinity of the site.
- 3.13 The closest cycle routes to the site are located to the immediate northeast, west and south of the site along Forbury Road, Market Place and Kings Road; these form the town centre route of the Reading cycle network. This town centre route runs along a number of streets within the town centre and can be utilised to access a range of amenities, including The Oracle shopping centre and the train station.
- 3.14 In addition to facilitating a cycle route across Reading town centre, the town centre cycle route facilitates connections to a number of cycle routes across Reading. To the north of the site, the town centre can be used to access the North Reading route this can be used to access the areas of Caversham and Emmer Green. West of the site, the East Reading and Woodley Route can be accessed; this route can be reached via on-road cycling along Kings Road or via the town centre route to the south of the site.
- 3.15 More broadly, further cycle routes within the Reading cycle network can be reached to the west and south east of the site. The West Reading cycle route can be reached via the town centre route and is located to the west of Broad Street; this route can be used to access



Tilehurst and Prospect Park. The South East Reading route can also be accessed to the southeast of the site, this route can be accessed via a linking route from the main town centre route. Destinations including Reading University and Earley can be reached via this route.

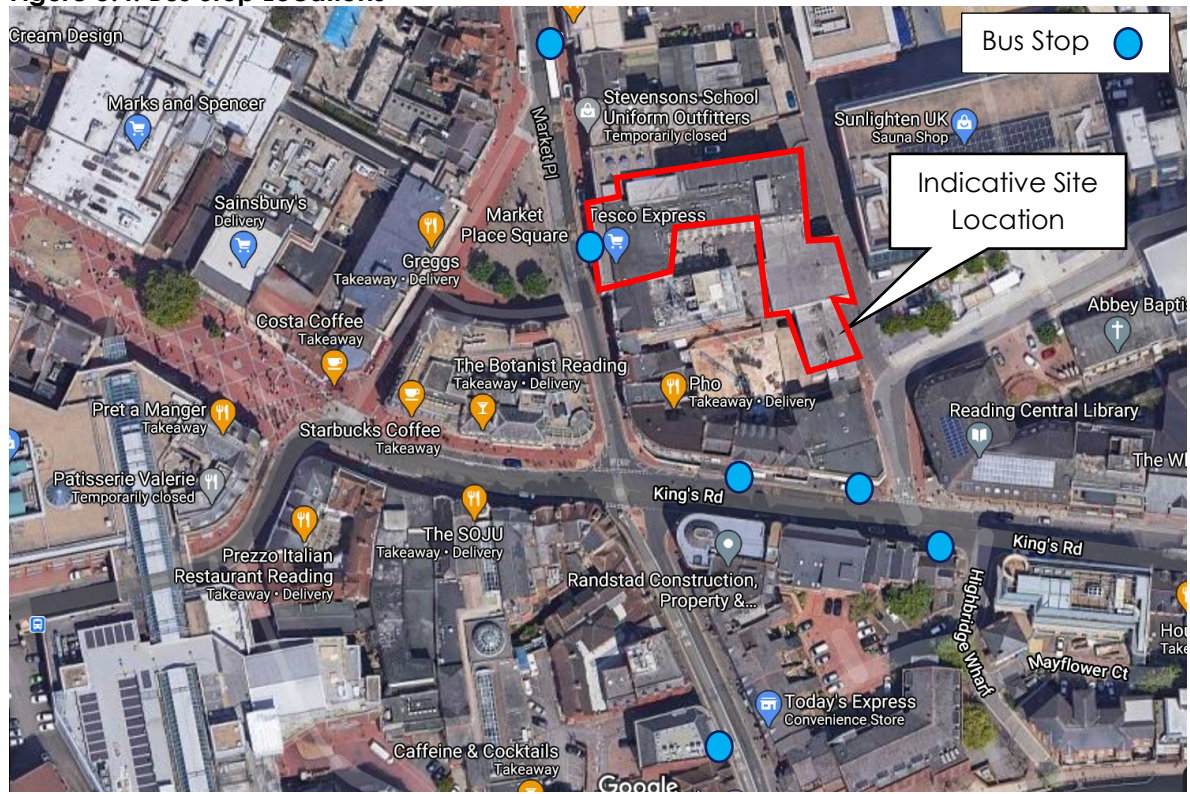
- 3.16 Given the proximity of the site to nearby cycle facilities and routes which facilitate cycle routes across the local area, it is considered that cycling would represent an attractive travel option for future residents at the site.

PUBLIC TRANSPORT

Bus Services

- 3.17 Given the location of the site within Reading town centre, the site is extremely well located for bus travel.
- 3.18 The closest bus stops to the site are on Market Place, to the immediate west of the site, where 3 bus stops are located. These bus stops all benefit from waiting shelters, bus cages and timetable information and are served by southbound services only. The corresponding northbound bus services for many of the bus services stopping at Market Place stop at bus stops on London Street, approximately 120m south of the site (1-minute walk); this stop benefits from a flag and timetable information.
- 3.19 Further bus services can also be accessed from King's Road to the southeast of the site. On King's Road, there are two eastbound stops and a corresponding westbound stop. The eastbound stops benefit from waiting shelters, raised kerbs, bus cages and timetable information; whilst the westbound stop benefits from a flag, pole, bus cage, raised kerbs and timetable information.
- 3.20 **Figure 3.4** illustrates the locations of the bus stops on Market Place, London Street and King's Road, whilst **Table 3.2** summarises which bus services stop at these bus stops.

Figure 3.4: Bus Stop Locations



(Source: Google Maps)

Table 3.2: Bus Services Frequency Summary

Service		Frequency (per hour)		
		Weekday	Saturday	Sunday
Market Place / London Street				
3	Reading – Wokingham	3 services	3 services	1 service
5	Reading Station – Northumberland Avenue Terminus	6 services	6 services	6 services
6 / 6A	Reading Station – Whitley Wood	6 services	6 services	3 services
7	Reading Station – Fleet	1 service	1 service	-
8	Central Reading – Spencer's Wood via Royal Berkshire Hospital	2 services	2 services	1 service
9	Central Reading – Spencer's Wood via Royal Berkshire Hospital	1 service	1 service	-
10	Central Reading – Kennet Island	2 services	2 services	2 services
11	Central Reading – Coley Park	3 services	3 services	2 services
19A	Central Reading – Loddon Bridge	1 service	1 service	-
19B	Central Reading – Lower Earley	1 service	1 service	-
19C	Loddon Bridge – Central Reading	1 service	1 service	-
21	Reading Station – Lower Earley via University	3 services	3 services	3 services
50	Central Reading – Green Park	3 services	3 services	-
244	Shinfield – Wokingham	1 service daily	-	-
600	Central Reading – Mearoak Park and Ride	3 services	3 services	-
TVP	Reading Station – Thames Valley Park	2 services	-	-
H1	NH1 Staff Only Shuttle	3 services	-	-
King's Road				
4	Reading – Bracknell via Wokingham	3 services	3 services	2 services
13 / 14	Reading Station – Woodley (Circular)	2 services	2 services	1 service
17	Wokingham Road – Tilehurst via Central Reading	8 services	6 services	6 services
42 / 42A	Rivermead – Kenavon Drive via Central Reading	3 services	2 services	-
127	Reading – Maidenhead	-	1 service	-
128 / 129	Wokingham – Reading	-	1 service	-
850	High Wycombe Bus Station - Reading Town Centre	1 service	1 service	-

(Source: Public Transport Operator Websites)

- 3.21 As can be seen in **Table 3.2**, there are a large number of frequent bus services available within a short walk from the site which could easily be utilised by residents of the site.



National Rail Services

Reading Train Station

- 3.22 The closest national rail services to the site can be accessed from Reading train station, which is located around 400m north of the site; it is accessible in around a 5-minute walk or a 2-minute cycle.
- 3.23 Reading train station is a major national rail hub, which is located on the Great Western Main Line and benefits from a number of regular services to destinations including: London Paddington, Bristol Temple Meads, Bath, Chippenham, Swindon, Birmingham New Street, Southampton, Manchester Piccadilly, Exeter and Newcastle; as well as many other local, regional and national destinations. It should also be noted that Reading station forms the terminus of Crossrail, which offers frequent services into London Paddington.
- 3.24 Facilities at the station include a ticket office, ticket machines, shops / cafes, public toilets, 344 cycle parking spaces and there are customer help points. Step-free access is available throughout the entire station.

CAR CLUB

- 3.25 Car clubs provide those who do not have access to a private car with the ability to use a vehicle over short rental periods, and at short notice. They are ideal for those who do not need to use a car on a regular basis, but who wish to have access to a car for occasional trips. This, for many people, can avoid the need to own and pay for a car. They also have the potential to bring about wider benefits to the environment and result in less congestion, by reducing the number of private cars on the road.
- 3.26 The closest Car Club vehicle to the site is operated by Co-wheels Car Club and is located 800m east of the site at Filbert Street, Bakers Yard North. **Figure 3.5** illustrates the location of the Car Club vehicle in relation to the site.

3.5: Car Club Vehicle Location



(Source: Co-Wheels Car Club)

LOCAL AMENITIES

3.27 Given the site location within Reading town centre, there are a range of facilities located within walking and cycling distance which could be easily accessed by future residents.

Table 3.3 details these local facilities, along with their corresponding distance and journey time, by mode.

Table 3.3: Local Facilities

Amenity	Distance	Walk Time	Cycle Time
Health Amenities			
Dentist (on-site)	-	-	-
Atos Health Centre	90m	1 min	1 min
Friar Street Dental Practice	240m	3 mins	2 mins
Reading Walk-in Health Centre	270m	3 mins	2 mins
Superdrug Pharmacy	300m	4 mins	2 mins
Boots Pharmacy	600m	7 mins	2 mins
Vesta Dental Care	650m	8 mins	2 mins
Kendrick View Dental Practice	750m	10 mins	2 mins
Saood Pharmacy	800m	10 mins	2 mins
Reading Health Centre	850m	11 mins	2 mins
Chatham Street Surgery	1km	12 mins	4 mins
Reading Dental	1km	13 mins	4 mins



Abbey Medical Centre	1.1km	14 mins	4 mins
Whitley Villa Surgery	1.3km	18 mins	7 mins
Royal Berkshire Hospital	1.4km	18 mins	7 mins
Bupa Health and Dental Centre Reading	1.4km	18 mins	7 mins
Milman Road Health Centre	1.5km	21 mins	9 mins
Castle Hill Dental & Health Care	1.5km	21 mins	9 mins
Tesco Pharmacy	1.5km	21 mins	9 mins
Orange Pharmacy	1.8km	22 mins	9 mins
Ereleigh Rd Pharmacy	1.9km	25 mins	9 mins
Parkside Family Practice	2.8km	36 mins	11 mins
Whitley Health Centre	2.9km	38 mins	12 mins
Education Amenities			
Kendrick School	600m	8 mins	2 mins
The University of Reading – London Road Campus	800m	10 mins	3 mins
Katesgrove Primary School	950m	12 mins	3 mins
The Abbey School	1km	13 mins	4 mins
Civitas Academy	1.2km	15 mins	5 mins
Reading College	1.2km	15 mins	5 mins
EP Collier Primary School	1.2km	15 mins	5 mins
St John's C of E Primary School	1.3km	16 mins	5 mins
Reading School	1.6km	20 mins	8 mins
New Town Primary School	1.6km	20 mins	8 mins
The Abbey Junior School	1.6km	21 mins	10 mins
The Palmer Academy	2.1km	27 mins	11 mins
The University of Reading	2.1km	28 mins	11 mins
St Joseph's College	2.3km	29 mins	12 mins
Retail / Leisure			
Market Place Square (Tesco Express / Shops / Bars)	10m	1 min	1 min
King Street (Restaurants / Shops / Cafes)	90m	1 min	1 min
The Oracle Shopping Centre (Shops / Cinema / Restaurants)	95m	1 min	1 min
John Lewis	220m	3 mins	1 min
Reading Central Library	220m	3 mins	1 min
Broad Street (Shops / Post Office / Cafes)	300m	4 mins	1 min
The Hexagon Theatre	650m	8 mins	2 mins
Forbury Retail Park	650m	8 mins	2 mins



Broad Street Mall (Shopping Centre)	750m	9 mins	2 mins
The Station Shopping Park	1km	13 mins	5 mins
Tesco Extra Reading	1.5km	19 mins	6 mins
Lidl / McDonald's	1.6km	20 mins	7 mins
Reading Link Retail Park	1.9km	24 mins	9 mins
Tesco Extra – Portman Road	2.7km	33 mins	10 mins
Brunel Retail Park	2.7km	34 mins	11 mins
Morrison's / Aldi / Gym	2.7km	34 mins	11 mins
Aldi / Costa Coffee	2.9km	37 mins	14 mins
Reading Retail Park	3.4km	42 mins	14 mins
Employment			
Apex Plaza (Offices)	400m	5 mins	1 min
Thames Tower (Offices)	400m	5 mins	1 min
Forbury Place Office Blocks	450m	6 mins	2 mins
Tessa Road Industrial Estate	1.8km	23 mins	7 mins
Loverock Road Industrial Units	2.6km	32 mins	10 mins
Suttons Business Park	2.9km	37 mins	11 mins
Thames Valley Park	3.2km	40 mins	11 mins

(Source: Google Maps)

- 3.28 As can be seen above, there are a wide range of amenities available within walking and cycling distances from the site. It is considered the close proximity of amenities and employment opportunities within Reading town centre would encourage residents to live at the site.

SUMMARY

- 3.29 Overall, it is considered that the site is located within an excellent location for access by non-car modes. There are excellent opportunities for walking and cycling locally, with a wide range of amenities accessible within Reading town centre. Furthermore, residents and users of the site can benefit from regular public transport services with frequent bus services available within a short walk of the site to destinations across Reading and the surrounding region. Reading train station is also accessible within a 5-minute walk, which is a major national rail hub that can be utilised for more long distance journeys.

4. LOCAL HIGHWAY NETWORK

INTRODUCTION

- 4.1 This section of the Transport Statement considers the nature of the existing highway network, and summarises the historic accident data for the area surrounding the site.

HIGHWAY NETWORK

- 4.2 A description is provided below of the local highway network in the immediate vicinity of the site; for ease, it is also shown in **Figure 4.1**.

Figure 4.1: Existing Highway Network



(Source: Google Maps)

Market Place

- 4.3 Market Place is located on the western boundary of the site. It runs broadly northwest – southeast between The Forbury and King's Road via High Street, although it is subject to a one-way restriction south-eastbound. There is a restriction, prohibiting vehicles except buses, wheelchair accessible taxis and permit holders 07:00 – 11:00 and 16:00 – 19:00; this restriction begins on The Forbury to the north of Market Place and continues to the junction with King's Road. The carriageway width is approximately 3.4m wide and subject to a 20mph speed limit. There are double yellow lines in place along both sides of the carriageway to prohibit stopping or waiting at all times.



- 4.4 As discussed previously, Market Place Square is a pedestrianised area, which is located to the west of Market Place; this area includes Butter Market. The pedestrian zone prohibits vehicles at all times, except for loading which is permitted 03:00 – 07:00 and 14:00 – 16:00. There is also a no waiting restriction in place at any time.

King's Road / King Street

- 4.5 High Street, which continues south-eastward from Market Place forms the northern approach to the crossroads junction of King Street / High Street / King's Road / London Street junction which is located south of the site. At the junction, King Street forms the eastern approach, whilst King's Road forms the western approach; both form a route east – west between Cemetery junction and Broad Street.
- 4.6 In the vicinity of the aforementioned junction, King's Road is subject to a 20mph speed limit (which is enforced with speed cameras) and is approximately 9m wide. It is a red route which means that stopping and waiting is not permitted at any time (with a double red line restriction). There are a number of marked pay and display on-street parking bays in the vicinity of the junction which permit 2 hours parking with no return within 2 hours, although this is extended to 4 hours for the marked disabled bays. King Street, to the east of the junction is also a red route, with the same restrictions as King's Road including the same on-street parking restrictions. Additionally, there is a no-stopping restriction in place 22:00 – 05:00 except for taxis and there is a restriction prohibiting vehicles (except bicycles, taxis and authorised vehicles) continuing onto Minster Street 16:00 – 23:00.

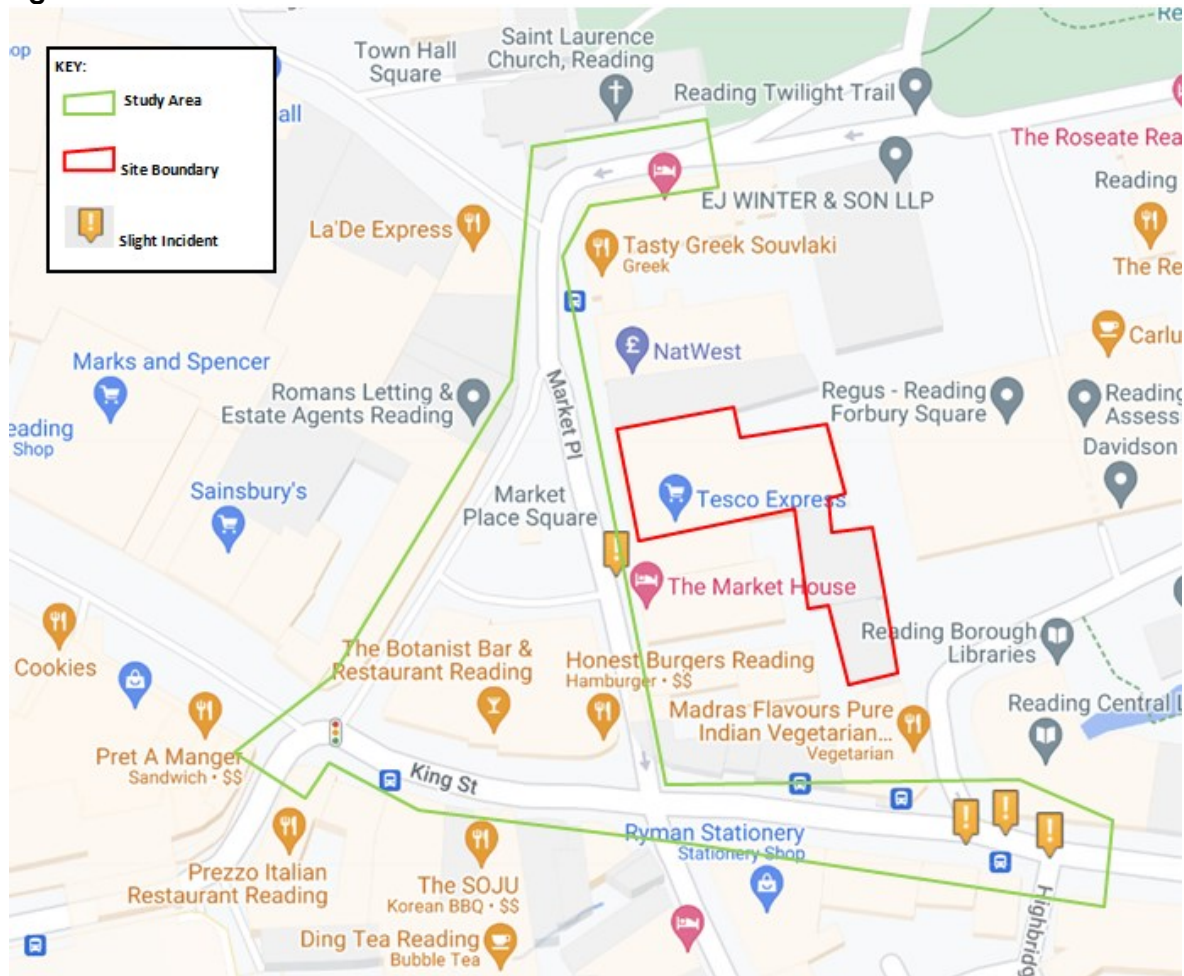
Abbey Square

- 4.7 Abbey Square is located to the southeast of the site and forms the southern terminus of the access road, which runs to the rear of the site. It forms part of a one-way loop system alongside Abbey Street with King's Road; the one-way restriction permits westbound travel only. The carriageway width is approximately 5.5m wide and is subject to a 30mph speed limit. Double yellow lines, which prohibit stopping or waiting at all times, are in place on both sides of the carriageway, there are also speed humps to reduce vehicle speeds.

ROAD SAFETY

- 4.8 Accident data for the most recent 5-year period (2017 - 2021) has been sought from www.crashmap.co.uk for the highway network surrounding the site. Crashmap offers a definitive map of the official road collision statistics. The locations of accidents recorded within the vicinity of the site are shown in **Figure 4.2**, overleaf.

Figure 4.2: Locations of Recorded Accidents



(Source: Crash Map)

- 4.9 As can be seen in **Figure 4.2** above, only 4 accidents have been recorded within the accident study area over the most recent 5-year period, which equates to an average of 0.8 accidents per year. All of the accidents recorded were slight in nature, with no serious or fatal accidents recorded.
- 4.10 One accident was recorded outside the site, on Market Place which was slight in nature and did not involve any vulnerable road users.
- 4.11 Three further accidents were recorded at the staggered T-junction of King's Road / Abbey Square / Highbridge Wharf, which offers access vehicular access to the rear of the site. All the accidents recorded at the junction were slight in nature. One of these accidents involved a pedestrian and was recorded in August 2017 on King's Road, whilst another accident involved a motorcyclist and occurred on the Highbridge Wharf approach to this junction.



- 4.12 Based on the level of accidents recorded and the locations they were recorded, it is not considered that there is any existing road safety issue within the area surrounding the site. As discussed previously, the highly accessible nature of the development means vehicle trips associated with the site will be minimal and will, therefore, not impact on road safety.

5. TRIP GENERATION

INTRODUCTION

- 5.1 This section of the Transport Statement sets out the likely person trip generation associated with the proposed development. The trip generation rates used within this report have been taken from the trip generation undertaken for the previously approved residential scheme on this site, given that this has previously been accepted by the local highway authority.

TRIP GENERATION

Proposed Apartments

- 5.2 As discussed previously, the application proposes to accommodate 38 apartments. The following parameters of the TRICS database have been selected:
- Land Use: Residential, Flats Privately Owned;
 - Number of Residents: 75 – 300;
 - Date Range: 01/01/2012 – 18/11/2019; and
 - Location: Town Centre, Edge of Town Centre.
- 5.3 **Table 5.1** summarises the person trip generation and resultant trip generation associated with the proposed apartments. The full TRICS output is provided at **Appendix B**.

Table 5.1: Proposed Apartments, Person Trip Generation

	AM			PM		
	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
Trip Rates	0.095	0.463	0.558	0.443	0.196	0.639
Trip Generation	4	18	22	17	7	24

(Source: TRICS)

- 5.4 As can be seen in **Table 5.1**, the proposed apartments are anticipated to generate 22 two-way person trips in the AM peak hour and 24 two-way person trips in the PM peak hour.

MODAL SPLIT

- 5.5 The likely modal split for the development proposals has been derived from Method of Travel to Work data, taken from the 2011 Census. Method of Travel to Work data for the MSOA Reading 011 has been obtained and is set out in **Table 5.2**, below, and is considered to represent a realistic estimate of the modal split of residents of the development.

Table 5.2: Proposed Modal Split

Mode of Transport	Journey to Work – Reading 011 MSOA
Train	21%
Bus	12%
Driving a car or van	31%
Passenger in a car or van	3%
Bicycle	4%
Walk	30%
TOTAL	100%

Trips by Mode

- 5.6 **Table 5.3** illustrates the anticipated trips by mode, based on the total person trip generation (**Table 5.1**) and the modal split (**Table 5.2**).

Table 5.3: Proposed Modal Split

Mode of Transport	AM Peak Hour (08:00 - 09:00)			PM Peak Hour (17:00 - 18:00)		
	Arr	Dep	Total	Arr	Dep	Total
Train	1	4	5	4	1	5
Bus	0	2	3	2	1	3
Driving a car or van	1	6	7	5	2	7
Passenger in a car or van	0	1	1	1	0	1
Bicycle	0	1	1	1	0	1
Walk	1	5	7	5	2	7
TOTAL	4	18	22	17	7	24

- 5.7 As can be seen in **Table 5.3**, it is anticipated that 30% of trips will be undertaken on foot, 7 two-way trips in the AM and PM peak hours. It is estimated that there will be 7 two-way trips in the AM and PM peak associated with residents driving a car or van.
- 5.8 Given that the vehicle trip generation associated with the development proposals is low, no further assessment has been undertaken.



6. PARKING AND SERVICING

INTRODUCTION

- 6.1 This section of the Transport Statement considers the proposed parking and servicing arrangements for the site.

PARKING

- 6.2 It is proposed to provide 20 car parking spaces as part of the proposed scheme. Three of the spaces will be disabled spaces and 10% of the spaces will be equipped with electric vehicle charging infrastructure.
- 6.3 Car parking standards for Reading are contained within the 'Revised Parking Standards and Design SPD' (October 2011). This sets out that sites laying within the central core area, zone 1, should provide the following level of parking:
- 1-2 bedroom flats – 0.5 spaces per dwelling
 - 3+ bedroom flats – 1 space per dwelling
- 6.4 Given the proposed development is to be made up of 34no. 1 or 2 bedroom properties, and 4no. 3+ bed properties, and 20 parking spaces are to be provided, the proposed provision is therefore, broadly, in line with the parking standards (taking account of the highly accessible development location).
- 6.5 Visitor parking could also be accommodated in the private car parks located across Reading town centre. There are multi-storey car parks on Queen's Road and at The Oracle Shopping Centre. The Queen's Road multi-storey car park has 700 spaces and is located approximately 350m southeast of the site and is around a 4-minute walk. A further 1,611 spaces are also located within the multi-storey car park for The Oracle shopping centre which is around a 5-minute walk from the site (400m).

Cycle Parking

- 6.6 Minimum cycle parking standards are provided in the 'Revised Parking Standards and Design Supplementary Planning Document' provided by Reading Borough Council; for ease, these standards are summarised in **Table 6.1**.



Table 6.1: Minimum Cycle Parking Standards

Land Use	Minimum Cycle Parking Standard
1 / 2 Bed Flat	0.5 spaces
3+ Bed Flat	1 space

(Source: Reading Borough Council)

- 6.7 Based on the development proposals, a minimum of 21 cycle parking spaces would be required based on the proposed quantum of apartments at the site. Cycle parking will be provided within a secure cycle store accessible to residents at the site.

SERVICING

General Servicing and Refuse Collection

- 6.8 It is assumed that refuse collection will be undertaken by a private contractor, with general servicing and refuse collection undertaken from the roadside to the rear of the site, in line with the servicing associated with the former office use and the existing ground floor retail units.

Fire Appliance Access

- 6.9 Manual for Streets (MfS) indicates that the access requirements for emergency vehicles are generally stipulated by the Fire Service. Table 13.1 of the *The Building Regulations 2010 'Fire Safety' Approved Document B (2019 edition, incorporating the 2020 amendments)* Section 13 'Vehicle Access', sets out that a minimum road width of 3.7m be provided and turning facilities should be provided in any cul-de-sac that is more than 20m long. Fire tenders and emergency vehicles will access the site from Abbey Square; a drawing showing the swept path of a fire tender is provided at **Appendix C**.



7. SUMMARY & CONCLUSIONS

SUMMARY

7.1 TPS has prepared this Transport Statement to accompany an application for 38 apartments in an upward extension and ground floor conversion of the building at 3-10 Market Place, Reading. The following summarises the key points:

- The proposals are compliant with both the local and national transport and land use planning policy agenda.
- The site is located within a highly sustainable location, within walking distance of amenities in Reading town centre. There are also numerous opportunities for travel by bicycle and public transport locally.
- An analysis of historic accident data suggests that there are no accident trends that might be exacerbated by the addition of development-related traffic.
- It is anticipated that the person trip generation associated with the development will equate to 22 two-way person trips in the AM peak hour and 24 two-way trips in the PM peak hour. Only a small proportion of trips will be made by car, given the highly accessible location of the site.
- Vehicle and cycle parking will be provided in line with local parking standards.
- The servicing arrangements for the site have been considered, with refuse storage provided near the existing vehicle entrance.

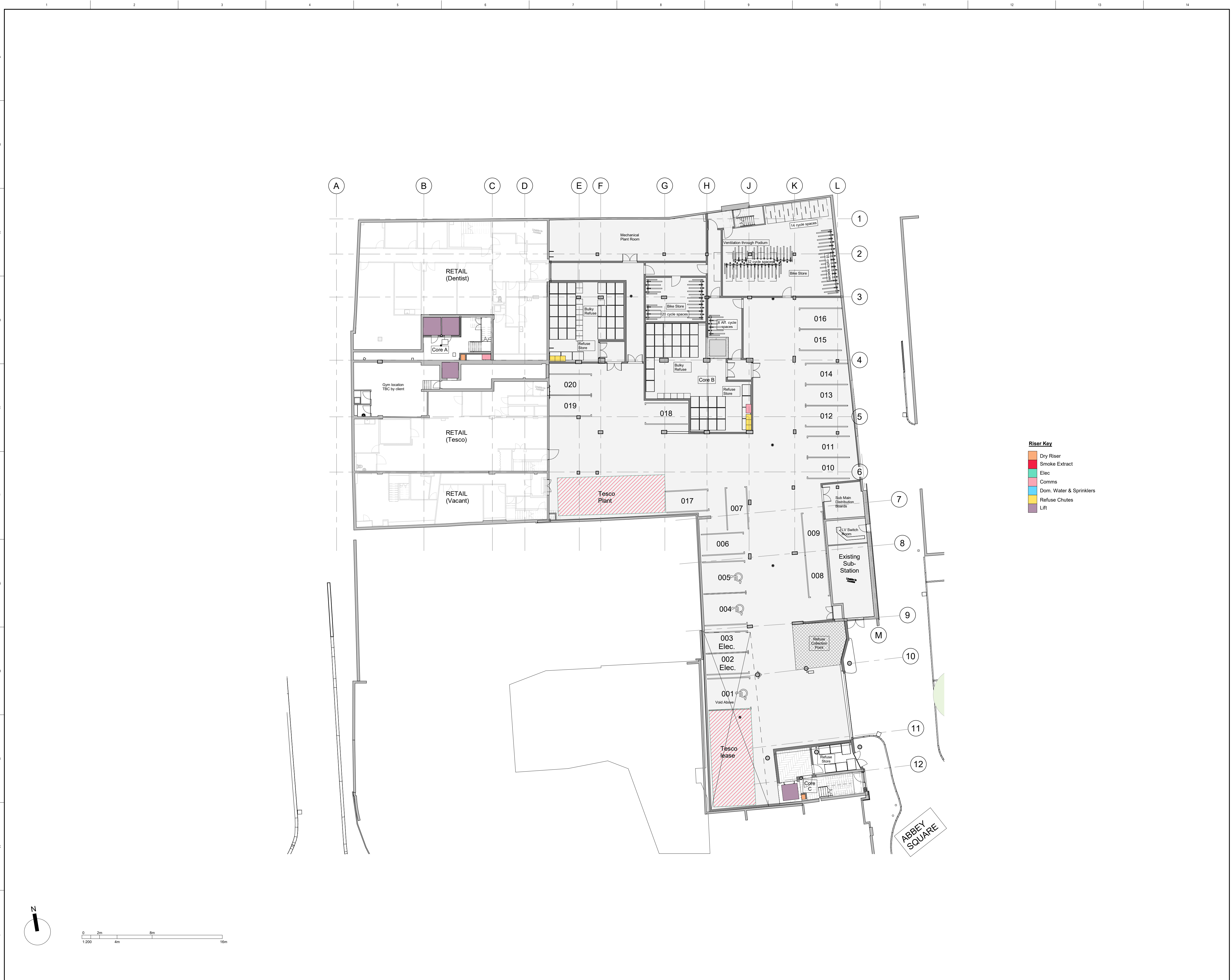
CONCLUSION

7.2 Given the above, it is considered that the proposals will not result in a 'severe residual cumulative impact' (the test set out in NPPF); indeed, they will be complementary to the prevailing policy agenda. As such, there are no substantive highway grounds on which the development should not be granted permission.



Appendix A

Indicative Site Layout



CLIENT

Tene Living

STRUCTURAL ENGINEER

SERVICES ENGINEER

CONSULTANT

KEY PLAN

NOTES:

DO NOT SCALE. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING. CHECK DIMENSIONS ON SITE AND REPORT DISCREPANCIES TO THE ARCHITECT. THIS DRAWING IS PROTECTED BY COPYRIGHT.

ALL AREAS HAVE BEEN MEASURED IN ACCORDANCE WITH THE RICS CODE OF MEASURING PRACTICE 6TH EDITION AUGUST 2007) FROM CURRENT DRAWINGS AND ARE APPROXIMATE. THEY RELATE TO AREAS OF THE BUILDING AT THE CURRENT STATE OF DESIGN AND ARE RELIANT UPON THE INFORMATION AVAILABLE. THEY MAY VARY BECAUSE OF SURVEY DATA INACCURACIES, DESIGN DEVELOPMENT, CONSTRUCTION TOLERANCES, STATUTORY REQUIREMENTS OR RE-DEFINITION OF THE AREAS TO BE MEASURED ETC. ANY DECISIONS TO BE MADE ON THE BASIS OF THESE PREDICTIONS SHOULD INCLUDE DUE ALLOWANCE FOR VARIATION INHERENT IN THE DESIGN'S DEVELOPMENT, THE BUILDING SURVEY, ANY RIGHTS TO LIGHT SURVEY AND THE BUILDING PROCESS.

THE FOLLOWING FACTORS SHOULD BE CONSIDERED BEFORE USING THESE FIGURES IN ANY FINANCIAL OR OTHER EXERCISE:

- THERE IS DESIGN DEVELOPMENT YET TO TAKE PLACE THAT MAY AFFECT THE AREAS

- THE BUILDING MAY PRESENT ANOMALIES IN RELATION TO SURVEYED / DRAWN PLANS

- THE CONTRACTOR IS REQUIRED TO WORK TO SPECIFIED TOLERANCES DURING CONSTRUCTION.

Note:

1. Separate smoke clearance system to be developed by Fire Consultant & MEP Consultant for ground & basement levels. Upper level risers shown as hatched for reference.

2. Coordination between PD scheme and existing building required due to existing columns necessitating offset corridors

3. All riser locations indicative. To be reviewed by MEP consultant and coordinated with developed PD scheme

WORK IN PROGRESS
INFORMATION ONLY

25/08/2022 15:49:15

These work in progress pre-planning drawings have been generated using the Revit Survey model created by Spatial Dimensions Ltd in April 2020. The PD scheme has not been designed by tp bennett and is shown here for illustrative purposes only. The PD plans produced by Head Office 3 have been taken from PDFs created in March 2021 provided to tp bennett by the Client and await full detailed design for compliance with Building Regulations, fire strategy development, coordination with services and the additional massing being added to the building.

P7	25-08-2022	Waste Management Update	RP	AC
P6	17-08-2022	Design Update	RP	AC
P5	22-07-2022	Design Update	RP	AC
P4	15-07-2022	Design Feedback	RP	AC
P3	13-07-2022	Design Updates	RP	AC
P2	28-06-2022	WIP Issue for Fire Consultant	MGB	AC
P1	24-05-2022	First Issue	MC	AC

No.	Date	Comments	Drawn	Checked
Revisions				

Issue Status
Preliminary

tp bennett
architecture
interiors
planning

One America Street | London SE1 ONE UK +44 (0) 20 7208 2000 www.tpbenett.com

Project
Market Place Residential
6-9 Sloane Point
Reading

Drawing Title
Basement GA Massing Option 1

Drawn	Date	Scale @ A1	Alt Ref.
Author	1 : 200		

Project	Originator	Volume	Level	Type	Role Number	Stability	Revision
A12113	TPB	ZZ	XX	DR	A 1599	S0	P7



CLIENT

Tene Living

STRUCTURAL ENGINEER

SERVICES ENGINEER

CONSULTANT

KEY PLAN

NOTES:

DO NOT SCALE. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING. CHECK DIMENSIONS ON SITE AND REPORT DISCREPANCIES TO THE ARCHITECT.

THIS DRAWING IS PROTECTED BY COPYRIGHT.

ALL AREAS HAVE BEEN MEASURED FROM CURRENT DRAWINGS. THEY MAY VARY BECAUSE OF (EG) SURVEY, DESIGN DEVELOPMENT, CONSTRUCTION TOLERANCES, STATUTORY REQUIREMENTS OR RE-DEFINITION OF THE AREAS TO BE MEASURED.

These work in progress pre-planning drawings have been generated using the Revit Survey model created by Spatial Dimensions Ltd in April 2020. The PD scheme has not been designed by tp bennett and is shown here for illustrative purposes only. The PD plans produced by Head Office 3 have been taken from PDFs created in March 2021 provided to tp bennett by the Client and await full detailed design for compliance with Building Regulations, fire strategy development, coordination with services and the additional massing being added to the building.

Note:

1. Separate smoke clearance system to be developed by Fire Consultant & MEP Consultant for ground & basement levels. Upper level risers shown as hatched for reference.

2. Coordination between PD scheme and existing building required due to existing columns necessitating offset corridors

3. All riser locations indicative. To be reviewed by MEP consultant and coordinated with developed PD scheme

WORK IN PROGRESS INFORMATION ONLY

22/07/2022 21:46:12

P922-07-2022Design UpdateRPAC

P9821-07-2022Flat plan layout addedZCAC

P915-07-2022Design FeedbackRPAC

P913-07-2022Design UpdatesRPAC

P528-06-2022WIP Issue for Fire ConsultantMGBAC

P424-05-2022DRP Team PlansMCAC

P320-01-202238 Unit Scheme Reduced MassingRPAC

P219-01-2022Issue for Daylight StudyRPAC

P104-11-2021Draft IssueRPAC

NoDateCommentsDrawnChecked

Revisions

Issue Status

Preliminary

tp bennett

architectureinteriorsplanning

One America Street | London SE1 0NE UK +44 (0) 20 7208 2000 www.tpbenett.com

Project

Market Place Residential6-9 Sloane PointReading

Drawing Title

Car Park Podium Floor GA Massing Option 1

DrawnDateScale @ A1Alt Ref.

Author1 : 200

ProjectOriginatorVolumeLevelTypeRole NumberSuitability Revision

A12113 TPB ZZ 00 DR A 1500 S0 P9

22/07/2022 21:46:12

978137902227463A0002-50-P01



Appendix B

TRICS Output

Calculation Reference: AUDIT-640801-210312-0352

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	HF HERTFORDSHIRE	1 days
	SO SLOUGH	1 days
03	SOUTH WEST	
	BR BRISTOL CITY	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
09	NORTH	
	TV TEES VALLEY	1 days
10	WALES	
	MT MERTHYR TYDFIL	1 days
	PS POWYS	1 days
	SW SWANSEA	1 days
11	SCOTLAND	
	DU DUNDEE CITY	1 days
	EB CITY OF EDINBURGH	1 days
12	CONNAUGHT	
	CS SLIGO	1 days
	RO ROSCOMMON	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: Gross floor area
Actual Range: 2750 to 8793 (units: sqm)
Range Selected by User: 2660 to 10639 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 19/10/18

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	5 days
Wednesday	1 days
Thursday	5 days
Friday	4 days

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

Selected survey types:

Manual count	16 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 undertaken using machines.

Selected Locations:

Town Centre	6
Edge of Town Centre	10

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:

Commercial Zone	3
-----------------	---

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:

A1	1 days
B1	15 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®.

Filter by Use Class Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	1 days
15,001 to 20,000	5 days
25,001 to 50,000	6 days
50,001 to 100,000	1 days

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

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	1 days
75,001 to 100,000	2 days
125,001 to 250,000	6 days
250,001 to 500,000	3 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	9 days
1.6 to 2.0	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	6 days
No	10 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:

No PTAL Present	16 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	BR-02-A-02 ST THOMAS STREET BRISTOL	PLANNING & ENGINEERING	BRISTOL CITY
	Town Centre Built-Up Zone Total Gross floor area:	5736 sqm	
	Survey date: FRIDAY	29/11/13	Survey Type: MANUAL
2	CA-02-A-05 NEW ROAD PETERBOROUGH	OFFICES	CAMBRIDGESHIRE
	Town Centre Built-Up Zone Total Gross floor area:	8793 sqm	
	Survey date: TUESDAY	16/12/14	Survey Type: MANUAL
3	CS-02-A-02 QUAY STREET SLIGO	COUNCIL OFFICE	SLIGO
	Town Centre Built-Up Zone Total Gross floor area:	2750 sqm	
	Survey date: FRIDAY	01/11/13	Survey Type: MANUAL
4	DU-02-A-01 GREENMARKET DUNDEE	OFFICES	DUNDEE CITY
	Edge of Town Centre Development Zone Total Gross floor area:	3200 sqm	
	Survey date: THURSDAY	27/04/17	Survey Type: MANUAL
5	EB-02-A-06 ST ANDREW SQUARE EDINBURGH	REGUS OFFICES	CITY OF EDINBURGH
	Town Centre Built-Up Zone Total Gross floor area:	4500 sqm	
	Survey date: WEDNESDAY	16/03/16	Survey Type: MANUAL
6	ES-02-A-12 VICARAGE LANE HAILSHAM	COUNCIL OFFICES	EAST SUSSEX
	Edge of Town Centre Built-Up Zone Total Gross floor area:	3640 sqm	
	Survey date: THURSDAY	26/11/15	Survey Type: MANUAL
7	GM-02-A-08 FOUNTAIN STREET MANCHESTER	REGUS	GREATER MANCHESTER
	Town Centre Built-Up Zone Total Gross floor area:	3960 sqm	
	Survey date: MONDAY	26/09/16	Survey Type: MANUAL
8	HF-02-A-04 STATION WAY ST ALBANS	OFFICES	HERTFORDSHIRE
	Edge of Town Centre Residential Zone Total Gross floor area:	5000 sqm	
	Survey date: THURSDAY	02/10/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	MT-02-A-02 CASTLE STREET MERTHYR TYDFIL	COUNCIL OFFICES	MERTHYR TYDFIL
	Edge of Town Centre Built-Up Zone Total Gross floor area:	5250 sqm	
	Survey date: THURSDAY	17/10/13	Survey Type: MANUAL
10	NF-02-A-03 NORTH QUAY GREAT YARMOUTH	OFFICES	NORFOLK
	Edge of Town Centre Commercial Zone Total Gross floor area:	5500 sqm	
	Survey date: TUESDAY	12/09/17	Survey Type: MANUAL
11	PS-02-A-01 SEVERN ROAD WELSHPOOL	COUNCIL OFFICES	POWYS
	Edge of Town Centre No Sub Category Total Gross floor area:	3920 sqm	
	Survey date: TUESDAY	12/05/15	Survey Type: MANUAL
12	RO-02-A-02 GOLF LINKS ROAD ROSCOMMON ARDSALLAGH BEG	GOVERNMENT OFFICES	ROSCOMMON
	Edge of Town Centre Residential Zone Total Gross floor area:	7200 sqm	
	Survey date: TUESDAY	23/09/14	Survey Type: MANUAL
13	SF-02-A-02 BATH STREET IPSWICH	OFFICES	SUFFOLK
	Edge of Town Centre Commercial Zone Total Gross floor area:	6505 sqm	
	Survey date: FRIDAY	19/07/13	Survey Type: MANUAL
14	SO-02-A-02 BATH ROAD SLOUGH	COUNCIL OFFICES	SLOUGH
	Edge of Town Centre Built-Up Zone Total Gross floor area:	5050 sqm	
	Survey date: THURSDAY	27/02/14	Survey Type: MANUAL
15	SW-02-A-01 LANGDON ROAD SWANSEA	OFFICES	SWANSEA
	Edge of Town Centre Development Zone Total Gross floor area:	6630 sqm	
	Survey date: FRIDAY	25/10/13	Survey Type: MANUAL
16	TV-02-A-04 CORPORATION ROAD MIDDLESBROUGH	COUNCIL OFFICES	TEES VALLEY
	Town Centre Commercial Zone Total Gross floor area:	3950 sqm	
	Survey date: TUESDAY	08/10/13	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 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	16	5099	0.911	16	5099	0.070	16	5099	0.981
08:00 - 09:00	16	5099	2.290	16	5099	0.186	16	5099	2.476
09:00 - 10:00	16	5099	1.490	16	5099	0.402	16	5099	1.892
10:00 - 11:00	16	5099	0.723	16	5099	0.553	16	5099	1.276
11:00 - 12:00	16	5099	0.631	16	5099	0.618	16	5099	1.249
12:00 - 13:00	16	5099	1.058	16	5099	1.498	16	5099	2.556
13:00 - 14:00	16	5099	1.433	16	5099	1.178	16	5099	2.611
14:00 - 15:00	16	5099	0.870	16	5099	0.770	16	5099	1.640
15:00 - 16:00	16	5099	0.451	16	5099	0.670	16	5099	1.121
16:00 - 17:00	16	5099	0.282	16	5099	1.245	16	5099	1.527
17:00 - 18:00	16	5099	0.137	16	5099	2.036	16	5099	2.173
18:00 - 19:00	16	5099	0.044	16	5099	0.792	16	5099	0.836
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:	10.320			10.018			20.338		

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.*

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	2750 - 8793 (units: sqm)
Survey date date range:	01/01/12 - 19/10/18
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
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.

Calculation Reference: AUDIT-640801-210310-0324

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	BD BEDFORDSHIRE	2 days
	EX ESSEX	1 days
	HC HAMPSHIRE	1 days
	HF HERTFORDSHIRE	1 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
11	SCOTLAND	
	SR STIRLING	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: 80 to 175 (units:)
Range Selected by User: 75 to 300 (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: 01/01/12 to 18/11/19

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:

Tuesday	4 days
Wednesday	1 days
Thursday	2 days

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

Selected survey types:

Manual count	7 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 undertaken using machines.

Selected Locations:

Edge of Town Centre	7
---------------------	---

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:

Residential Zone	2
Built-Up Zone	3
No Sub Category	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	7 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:

10,001 to 15,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	5 days

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

Population within 5 miles:

50,001 to 75,000	2 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	5 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	2 days
No	5 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:

No PTAL Present	7 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	BD-03-C-01	BLOCKS OF FLATS	BEDFORDSHIRE
	WING ROAD		
	LEIGHTON BUZZARD		
	LINSLADE		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	175	
	Survey date: TUESDAY	15/05/18	Survey Type: MANUAL
2	BD-03-C-03	BLOCKS OF FLATS	BEDFORDSHIRE
	COURT DRIVE		
	DUNSTABLE		
	Edge of Town Centre		
	No Sub Category		
	Total No of Dwellings:	146	
	Survey date: TUESDAY	15/05/18	Survey Type: MANUAL
3	EX-03-C-02	BLOCK OF FLATS	ESSEX
	WESTCLIFF PARADE		
	SOUTHEND-ON-SEA		
	WESTCLIFF		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	94	
	Survey date: TUESDAY	22/10/13	Survey Type: MANUAL
4	HC-03-C-01	BLOCKS OF FLATS	HAMPSHIRE
	CROSS STREET		
	PORTSMOUTH		
	Edge of Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	90	
	Survey date: TUESDAY	05/06/18	Survey Type: MANUAL
5	HF-03-C-03	BLOCK OF FLATS	HERTFORDSHIRE
	SHENLEY ROAD		
	BOREHAMWOOD		
	Edge of Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	91	
	Survey date: THURSDAY	14/11/19	Survey Type: MANUAL
6	SF-03-C-01	BLOCKS OF FLATS	SUFFOLK
	STATION HILL		
	BURY ST EDMUNDS		
	Edge of Town Centre		
	Built-Up Zone		
	Total No of Dwellings:	85	
	Survey date: THURSDAY	18/12/14	Survey Type: MANUAL
7	SR-03-C-01	FLATS	STIRLING
	FORTHIDE WAY		
	STIRLING		
	Edge of Town Centre		
	No Sub Category		
	Total No of Dwellings:	80	
	Survey date: WEDNESDAY	18/06/14	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
MULTI-MODAL TOTAL VEHICLES
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	7	109	0.034	7	109	0.145	7	109	0.179
08:00 - 09:00	7	109	0.057	7	109	0.166	7	109	0.223
09:00 - 10:00	7	109	0.059	7	109	0.074	7	109	0.133
10:00 - 11:00	7	109	0.062	7	109	0.085	7	109	0.147
11:00 - 12:00	7	109	0.063	7	109	0.092	7	109	0.155
12:00 - 13:00	7	109	0.114	7	109	0.092	7	109	0.206
13:00 - 14:00	7	109	0.079	7	109	0.088	7	109	0.167
14:00 - 15:00	7	109	0.075	7	109	0.080	7	109	0.155
15:00 - 16:00	7	109	0.081	7	109	0.058	7	109	0.139
16:00 - 17:00	7	109	0.110	7	109	0.068	7	109	0.178
17:00 - 18:00	7	109	0.180	7	109	0.092	7	109	0.272
18:00 - 19:00	7	109	0.166	7	109	0.091	7	109	0.257
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.080			1.131			2.211

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	80 - 175 (units:)
Survey date range:	01/01/12 - 18/11/19
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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 shown. 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
MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 1 DWELLS
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	7	109	0.063	7	109	0.359	7	109	0.422
08:00 - 09:00	7	109	0.095	7	109	0.463	7	109	0.558
09:00 - 10:00	7	109	0.105	7	109	0.185	7	109	0.290
10:00 - 11:00	7	109	0.148	7	109	0.166	7	109	0.314
11:00 - 12:00	7	109	0.124	7	109	0.163	7	109	0.287
12:00 - 13:00	7	109	0.216	7	109	0.201	7	109	0.417
13:00 - 14:00	7	109	0.171	7	109	0.180	7	109	0.351
14:00 - 15:00	7	109	0.158	7	109	0.163	7	109	0.321
15:00 - 16:00	7	109	0.246	7	109	0.134	7	109	0.380
16:00 - 17:00	7	109	0.280	7	109	0.167	7	109	0.447
17:00 - 18:00	7	109	0.443	7	109	0.196	7	109	0.639
18:00 - 19:00	7	109	0.411	7	109	0.208	7	109	0.619
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.460			2.585			5.045

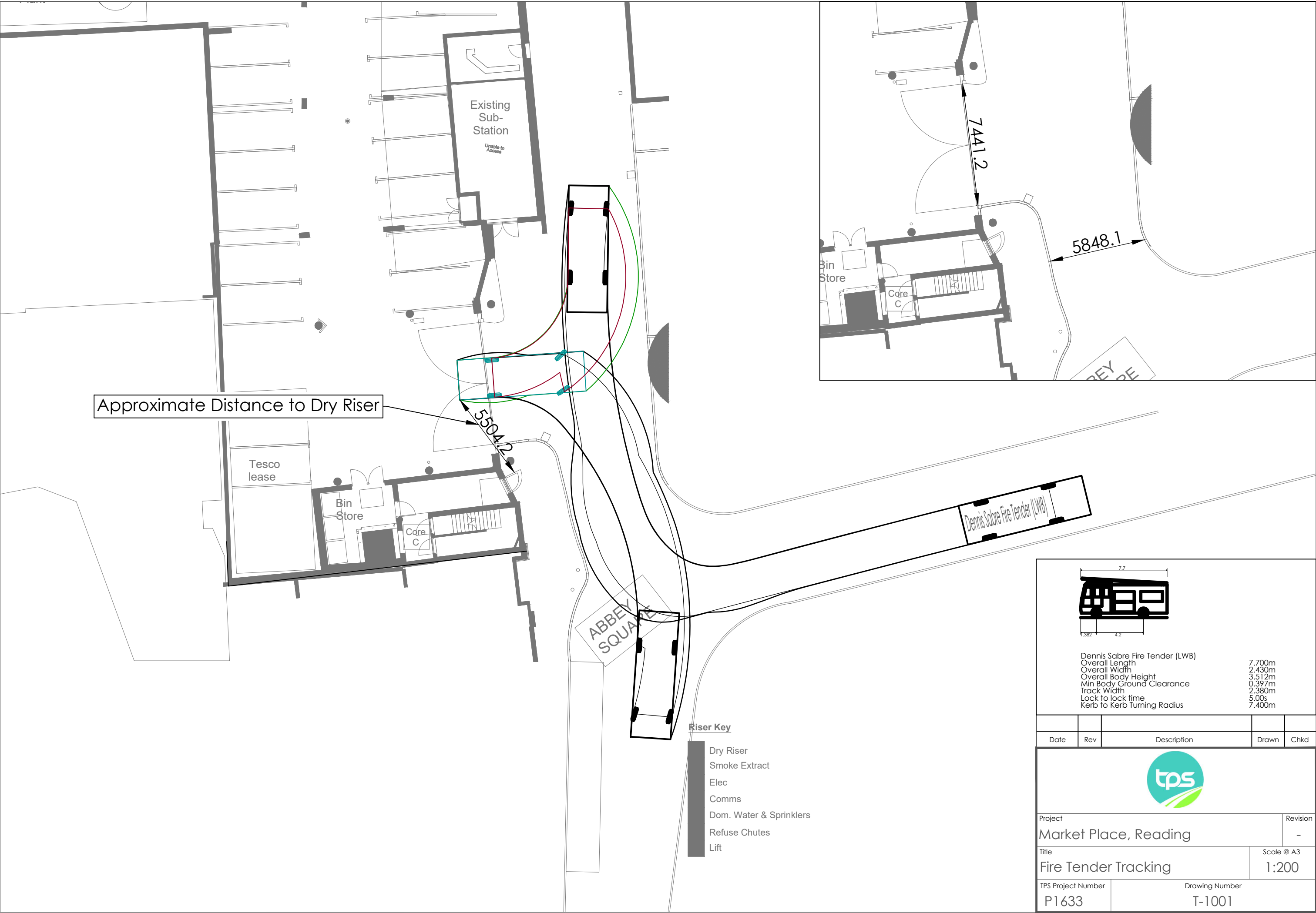
This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are 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 C

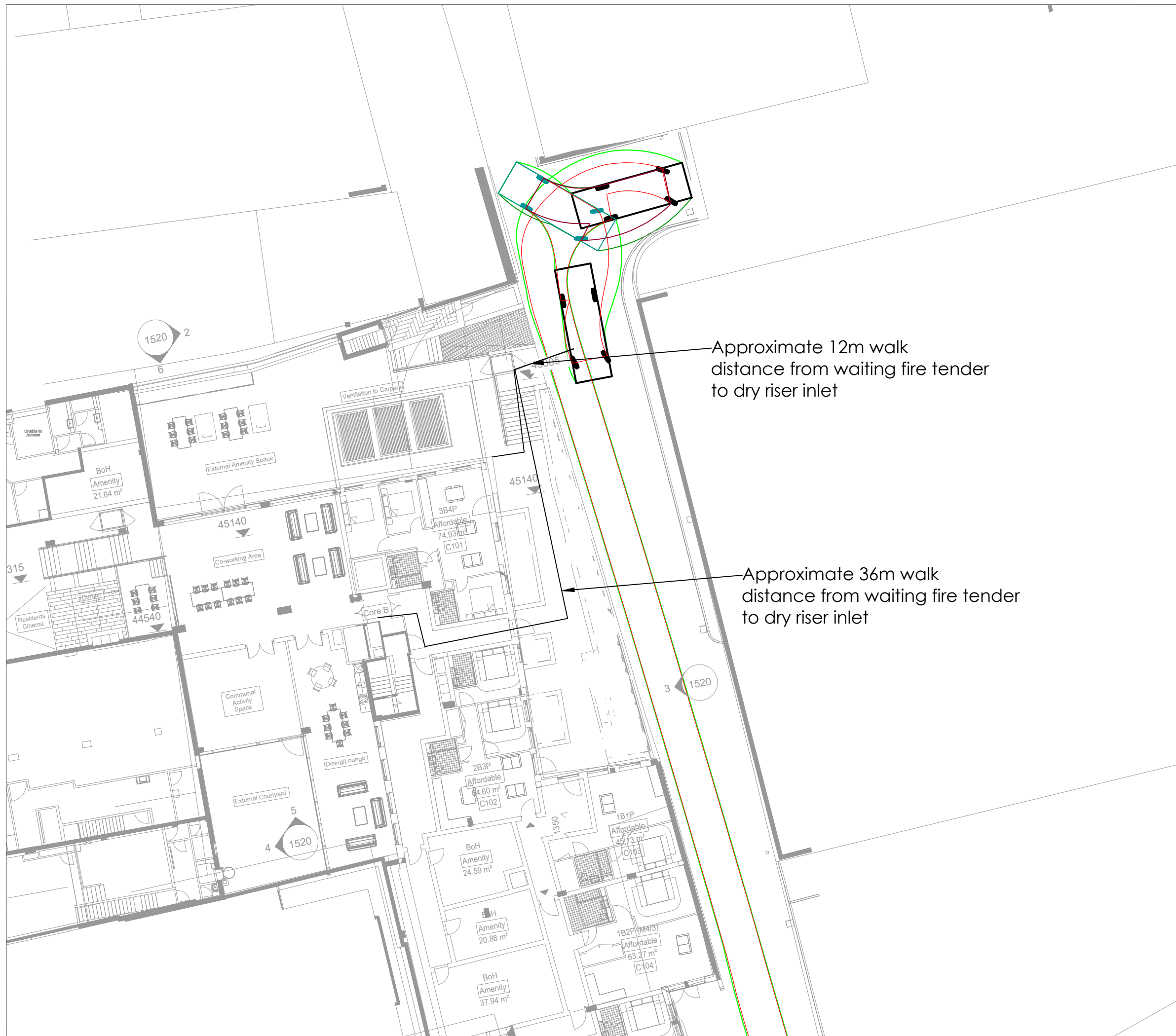
Swept Path Analysis – Fire Tender



Dennis Sabre Fire Tender (LWB)

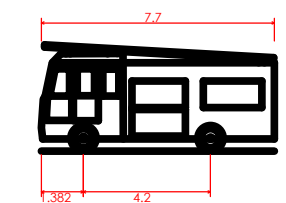
Overall Length	7.700m
Overall Width	2.430m
Overall Body Height	3.512m
Min Body Ground Clearance	0.397m
Track Width	2.380m
Lock to lock time	5.00s
Kerb to Kerb Turning Radius	7.400m

Date	Rev	Description	Drawn	Chkd
Project Market Place, Reading			Revision -	
Title Fire Tender Tracking		Scale @ A3 1:200		
TPS Project Number P1633		Drawing Number T-1001		



Approximate 12m walk
distance from waiting fire tender
to dry riser inlet

Approximate 36m walk
distance from waiting fire tender
to dry riser inlet



Dennis Sabre Fire Tender (LWB)
Overall Length 7.700m
Overall Width 2.430m
Overall Body Height 3.512m
Min Body Ground Clearance 0.397m
Track Width 2.380m
Lock to lock time 5.00s
Kerb to Kerb Turning Radius 7.400m

23.09.22	A	Tracking updated	JT	GS
Date	Rev	Description	Drawn	Chkd



Project		Revision	
Market Place, Reading		A	
Title		Scale @ A3	
Vehicle Tracking - Fire Tender		1:250	
TPS Project Number		Drawing Number	
P1633		T - 1003	

