



Rivermead Leisure Complex, Reading Transport Assessment

For Reading Borough Council

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CONTENTS

1.	INTRODUCTION.....	1
1.1	Overview.....	1
1.2	Document structure.....	1
1.3	Scoping/Pre-Application Consultation	2
2.	SITE DESCRIPTION AND EXISTING CONDITIONS.....	3
2.1	Site Location	3
2.2	Local Highway Network	3
2.3	Strategic Road Network (SRN)	5
2.4	Existing Site Use	5
2.5	Highway Safety	7
3.	SITE ACCESSIBILITY AND CONNECTIVITY BY NON-CAR MODES.....	9
3.1	Introduction	9
3.2	Existing Local Amenities.....	9
3.3	Walking and Cycling Distances.....	10
3.4	Pedestrian Accessibility.....	10
3.5	Cycle Accessibility	11
3.6	Public Transport Accessibility.....	12
3.7	Accessibility Summary.....	13
4.	PROPOSED DEVELOPMENT.....	15
4.1	Overview.....	15
4.2	Access Strategy	15
4.3	Pedestrian Access and Cycle Access	16
4.4	Parking Provision.....	17
4.5	Servicing.....	19
5.	TRIP GENERATION, PARKING DEMAND AND TRAFFIC IMPACT	20
5.1	Introduction	20
5.2	Existing Trip Generation.....	20
5.3	Proposed Development Trip Generation	22
5.4	Parking Accumulation	22
6.	SUMMARY AND CONCLUSIONS	26
6.1	Summary.....	26
6.2	Conclusions.....	26

Tables

Table 2.1: Existing Sports Centre Facilities	5
Table 3.1: Local Amenities relevant to BREEAM assessment within 500m	10
Table 3.2: Bus Services from Rivermead Leisure Complex	12
Table 3.3: Bus Services from 'The Moderation'	13
Table 4.1: Rivermead Leisure Complex Existing and Proposed Facilities	15
Table 4.2: RBC Parking Standards	17
Table 5.1: Existing Trip Generation – Pre Demountable Swimming Pool	20
Table 5.2: Existing Demountable Swimming Pool Vehicle Trip Generation	21
Table 5.3: Total Existing Site Baseline Trip Generation	22
Table 5.4: Forecast Monday Parking Accumulation	23
Table 5.5: Forecast Saturday Parking Accumulation	24

Figures

Figure 2.1: Indicative Site Location	3
Figure 2.2: Rivermead Leisure Complex Existing Parking Provision	6
Figure 2.3: PIA Study Area	7
Figure 3.1: Amenities Applicable for BREEAM Credit	9
Figure 3.2: Extract from RBC's Cycle Map	12
Figure 4.1: Annotated site access plan	16

Appendices

Appendix A	CrashMap PIA Reports
Appendix B	Reading Borough Council Cycle Map
Appendix C	Proposed Site Layout
Appendix D	Swept Path Analysis
Appendix E	ATC Results
Appendix F	TRICS Outputs
Appendix G	Existing Trip Generation Profile

1. INTRODUCTION

1.1 Overview

- 1.1.1 Hydrock Consultants Ltd has prepared this Transport Assessment (TA) on behalf of Reading Borough Council (RBC) in support of a planning application for the redevelopment of the existing Rivermead Leisure Complex on Richfield Avenue, Reading.
- 1.1.2 The proposals are to redevelop the existing Rivermead Leisure Complex site to provide a new leisure complex with a new 25 lane competition swimming pool, café, soft play room, six court sports hall and gym.
- 1.1.3 This TA demonstrates that the proposed development is acceptable in terms of transportation, highway safety and access matters.
- 1.1.4 The TA has been prepared in accordance with industry standards and best practice. It sets out the transport conditions relating to the development site (existing conditions) and provides details of the development proposals; including associated transport accessibility and connectivity, an assessment of the traffic predicated to be generated by the proposed development and the corresponding traffic impact on the surrounding local highway network.
- 1.1.5 This TA puts forward an informed argument as to why it is considered that there would be no material highways or transportation matters that would preclude the local planning authority from approving this application. Compliancy of the development proposals with BREEAM standards is also assessed.
- 1.1.6 A Travel Plan (TP) has been prepared in support of the development of the site. The TP identifies measures and initiatives to encourage travel to and from the site by sustainable modes of travel, and is submitted as a separate document. The TP has been prepared with the involvement of the client and end occupier.

1.2 Document structure

- 1.2.1 This TA has been compiled to reflect guidance set out in the National Planning Policy Framework (NPPF) and accompanying National Planning Policy Guidance (NPPG). It also considers advice set out in various local and national guidance documents including; Transport Evidence in Plan Making (DfT), Manual for Streets (DfT), Providing for Journeys on Foot (CIHT), Local Transport Note 2/08: Cycle Infrastructure Design (DfT) and guidance set out in the RBC Local Plan and Supplementary Planning Guidance.
- 1.2.2 An overview of the contents of this TA is set out below.
 - Description of the location of the site as well as a review of the existing conditions of the surrounding local highway network including access, parking and highway safety
 - Review of the planning history of the site and local area, and a description of committed infrastructure proposed as part of surrounding consented developments
 - Review of the accessibility of the site with reference to the surrounding area. This includes proximity of the site to both existing and proposed local facilities as well as walking, cycling and public transport routes
 - Description of the development proposals, in particular demonstrating access by all modes, site design principals, car parking and servicing and delivery arrangements

- Trip generation and analysis of the impact of the proposed development on the local highway network.

1.3 Scoping/Pre-Application Consultation

- 1.3.1 A TA Scoping Report (document reference: 15058-HYD-XX-XX-RP-TP-3001) was submitted to RBC as the local highway authority on the 9th October 2020.
- 1.3.2 Pre-application scoping discussions have also been held with RBC. The highway officer at RBC accepted the scope and methodology outlined within the Scoping Report in principle.
- 1.3.3 The scope and methodologies discussed have therefore been used to prepare this TA.

2. SITE DESCRIPTION AND EXISTING CONDITIONS

2.1 Site Location

- 2.1.1 The existing Rivermead Leisure Complex is located north of Richfield Avenue, approximately 2km north of central Reading. The site occupies a plot directly north of the Richfield Trading Estate and south of the River Thames.
- 2.1.2 The site is located within Rivermead Park, with Cow Lane running to the west and the River Thames to the north and east.
- 2.1.3 The existing site comprises the Rivermead Leisure Complex, an external artificial grass (AG) sports pitch and associated parking. The location of the site in its local context is shown in Figure 2.1 below:

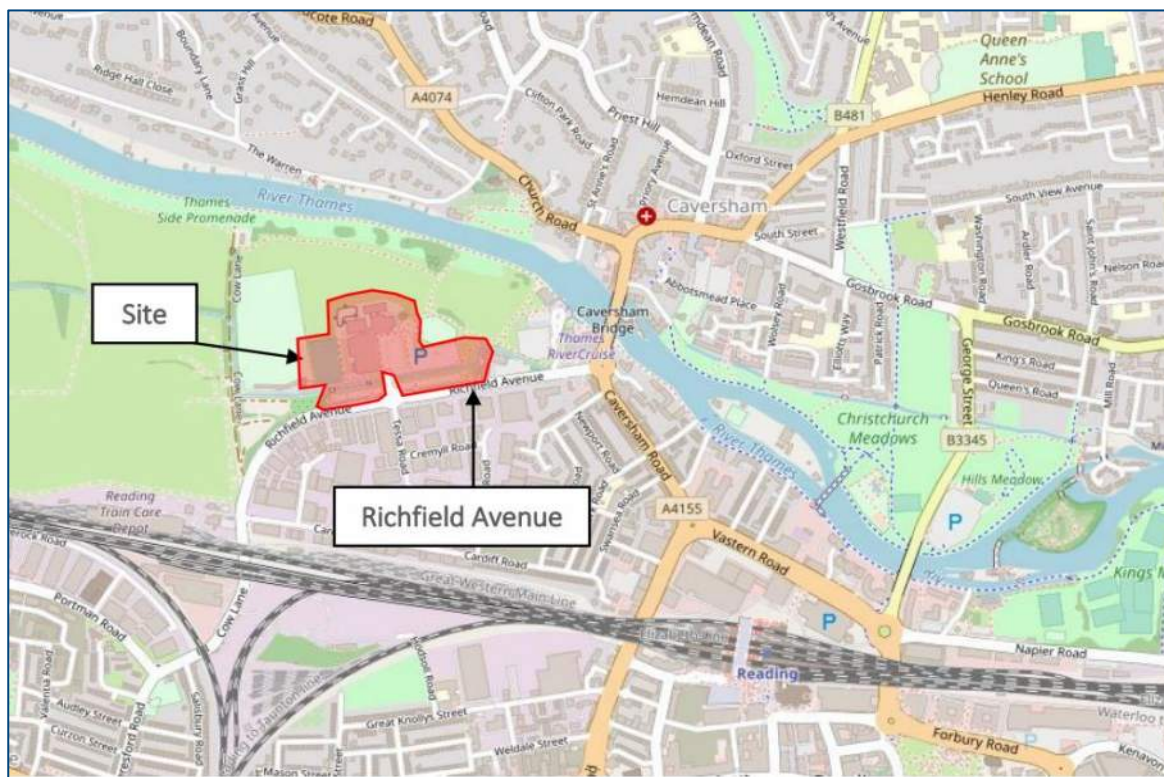


Figure 2.1: Indicative Site Location

2.2 Local Highway Network

Overview

- 2.2.1 The development site is located adjacent to Richfield Avenue, the A4155 Caversham Road and Oxford Road. Access to the site is served by the local road network with local connection to the Strategic Road Network (SRN). Details and descriptions of the local access roads are set out below.

Richfield Avenue

- 2.2.2 Richfield Avenue lies directly to the south of the development site and provides the primary point of vehicular access into the existing Rivermead Leisure Complex, with entry gained via a roundabout.

- 2.2.3 A secondary access runs between Cow Lane and the Thames Path, some 335m west of the Leisure Centre access. This access is only accessible to maintenance and other authorised vehicles and is cordoned by a gate. This access is however, available for use by pedestrians and cyclists.
- 2.2.4 Richfield Avenue primarily serves industrial and employment uses and, together with Cow Lane, forms a local distributor road providing a vehicular route between the A4155 to the east of the site and the A329 to the southwest.
- 2.2.5 The Richfield Avenue Industrial Estate lies to the south and is accessed via Tessa Road, which meets Richfield Avenue at the site access roundabout.
- 2.2.6 Richfield Avenue is a two-way, single carriageway Road with a speed limit of 40mph within the vicinity of the site. The road benefits from footways on both sides of the carriageway as well as street lighting.
- 2.2.7 Multiple informal crossing points are provided along Richfield Avenue with central refuge islands. A two-stage pelican crossing is provided around 400m east of the site, just before the roundabout with the A4155 and Waterman Place. The northern footway is signed as a shared cycle/footway.

A4155 Caversham Road

- 2.2.8 The A4155 Caversham Road runs from Henley-on-Thames and Caversham in a broadly south westerly direction towards Reading town centre, intersecting with Richfield Avenue some 450m to the east of the site via a roundabout.
- 2.2.9 The route passes through suburban residential areas and crosses the River Thames via the Caversham Bridge 540m from the site.
- 2.2.10 The road is lit and subject to a 30mph limit. Footways exist on both sides with dropped kerbs at crossing points.
- 2.2.11 Parking and loading restrictions apply north of the Richfield Avenue roundabout on both sides during peak times and the route is classified as an Urban Clearway on weekdays.
- 2.2.12 South of the Richfield Avenue roundabout, the road is a four-lane single carriageway with puffin crossings provided. Some on-street parking is provided on the northbound side.
- 2.2.13 The A4155 terminates at the A329 Oxford Road 750m south east of the development.

Oxford Road

- 2.2.14 Oxford Road runs in an east to west alignment approximately 1.2km to the south of the site.
- 2.2.15 To the west of the site Oxford Road provides a vehicular link to the western residential suburbs of Reading whilst to the east the road provides a route into central Reading.
- 2.2.16 The street serves as a local centre, with many typical high street uses. The road is subject to a 30mph speed limit and footways run along both sides. Puffin crossings are provided.
- 2.2.17 The road is classed as a Red Route, with parking only permitted in marked bays. The eastern end of the route approaching Reading town centre features an access restriction in the form of a bus gate.

2.3 Strategic Road Network (SRN)

- 2.3.1 The M4 follows an east to west alignment adjacent to the southern boundary of Reading and can be accessed approximately 6km to the south of the Rivermead Leisure Complex using the A33 and M4 junction 11. The M4 provides a strategic route between London and Wales via Swindon and Bristol.

2.4 Existing Site Use

- 2.4.1 The existing site is occupied by the Rivermead Leisure Complex. The site lies within the wider Rivermead Park which is a publicly accessible park with a number of walking routes and leisure facilities.

Facilities and Leisure Uses

- 2.4.2 Rivermead Leisure Complex is a multifunctional sport and fitness hub which encompasses the facilities outlined in Table 2.1.

Table 2.1: Existing Sports Centre Facilities

Facility	Location
Demountable swimming pool	Demountable pool building to north of main leisure centre building
Lagoon swimming pool	Main leisure building
Sports Hall	Main leisure building
Event space (capacity of 1,800 seated)	Main leisure building
Squash courts	Main leisure building
Indoor bowls hall	Main leisure building
Creche	Main leisure building
Multi-purpose artificial pitch	West of main leisure building
Gym	Main leisure building
Cafe	Main leisure building

Access Arrangements and Layout

- 2.4.3 The Rivermead Leisure Complex site is accessed via the northern arm of the Richfield Avenue/Tessa Road roundabout which is provided along the southern boundary of the site.
- 2.4.4 An access road continues north from the Richfield Avenue/Tessa Road roundabout for 45m to a point where access is provided to the various car parking areas.
- 2.4.5 To the east of the main access road is an entry/exit route for vehicles to access both the main car park and area of overflow parking to the south east of the site. To the west of the main access road is a spur road which provides access to the second overflow parking area to the south of the leisure centre building. Access is also provided to the adjacent outdoor activity centre from here.
- 2.4.6 To the north of the main access road is an exit only route from the main Rivermead Leisure Complex car park.

Car and Cycle Parking Provision

2.4.7 The facility is served by three separate parking areas which are shown at Figure 2.2.



Figure 2.2: Rivermead Leisure Complex Existing Parking Provision

2.4.8 The main car park for the leisure centre is provided to the east of the existing leisure centre building and labelled A within Figure 2.2. The car parking areas labelled B and C in Figure 2.2 are overflow car parks situated to the south of the existing leisure centre building.

2.4.9 The overall parking provision at the site is summarised in

Car Park	Standard Parking Provision	Disabled Parking Provision
A	369	25
B	114	0
C	88	0
Total	571	

2.4.10 There are currently 12 Sheffield stands able to accommodate 24 cycles provided adjacent to the site frontage.

Servicing Arrangements

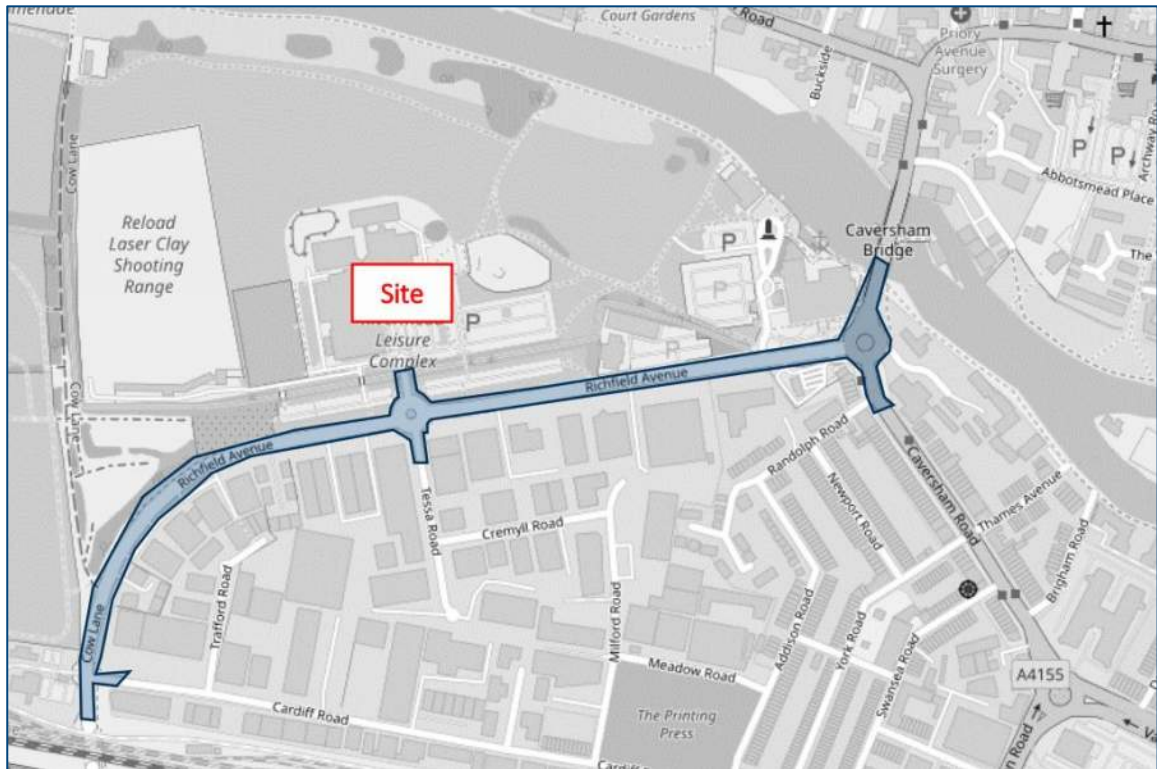
2.4.11 The existing Rivermead Leisure Complex Site is serviced internally from the rear of the existing leisure centre building adjacent to the artificial 3G pitch.

2.4.12 Service vehicles access the site via the northern arm of the Richfield Avenue/Tessa Road roundabout and continue north into the site along the main access road. Service and refuse vehicles then continue west along the spur road servicing the outdoor activity centre and overflow parking before continuing north adjacent to the 3G pitch to access the bin stores for the site.

2.5 Highway Safety

2.5.1 The most recent five-year accident data has been from CrashMap with the study area, shown in Figure 2.3 below:

Figure 2.3: PIA Study Area



2.5.2 A review of the most recent five-year accident data within the immediate vicinity of the development site indicates that a total of 11 collisions have occurred on the local road network with ten recorded as slight and one as serious. Details of the collisions are set out below based on location:

Richfield Avenue Roundabout

2.5.3 One slight accident was recorded at the site access roundabout with Richfield Avenue. The accident was recorded as slight in severity and involved two cars colliding at the roundabout. This singular accident occurring at this junction within the latest five-year period does not indicate a deficiency with the design of the existing road network.

Richfield Avenue East of Site

2.5.4 A total of four accidents were recorded on Richfield Avenue between the Richfield Avenue roundabout and the Caversham Road roundabout to the east. Three of these accidents were recorded as being slight in severity whilst one was recorded as serious.

2.5.5 The one serious accident recorded involved a car turning across the path of a pedal cyclist.

2.5.6 The remaining three slight accidents were resultant of driver error with cars colliding whilst performing turning manoeuvres into a private drive or access east of the site.

Caversham Road Roundabout

- 2.5.7 A total of three slight accidents were recorded at the Caversham Road roundabout. One of these slight accidents involved a bus colliding with a pedestrian whilst the two remaining slight accidents were resultant of collisions between two cars at the roundabout.

Cow Lane/Cardiff Road Junction

- 2.5.8 A total of three slight accidents were recorded at the Cow Lane/Cardiff Road priority junction.
- 2.5.9 Two of these slight accidents were resultant of rear end shunts at the junction whilst once involved a car overtaking another on its offside whilst the vehicle was trying to perform a right-hand turn.

Road Safety Summary

- 2.5.10 In summary a total of 11 accidents have occurred within the vicinity of the site within the five-year period reviewed. It should be noted that only one accident occurred at the development site access with the Richfield Avenue within the search period.
- 2.5.11 Based on the characteristics/criteria and occurrence of the accidents recorded it is not considered that these collisions represent a repeat pattern. As a result, these incidents are not indicative of an inherent highway deficiency that is contributing to a rise in accidents on the local road network.
- 2.5.12 The road safety records are shown at Appendix A.

3. SITE ACCESSIBILITY AND CONNECTIVITY BY NON-CAR MODES

3.1 Introduction

3.1.1 This section sets out the connectivity of the site to the surrounding area by sustainable modes of travel and demonstrates the accessible location of the site.

3.2 Existing Local Amenities

3.2.1 Chapter 7 of the BREEAM 'Technical Manual SD5078: UK New Construction 2018 3.0' document contains assessment criteria associated with transport. TRA 02 outlines credits and assessment criteria associated with the proximity of the development site to local amenities. To achieve the 1 point available the site must be within 500m walking distance of at least 3 of the local amenities as outlined in Table 7.6 of the BREEAM manual and included as Figure 3.1 of this report.

Criteria	BG 1	BG 2	BG 3	BG 4	BG 5	BG 6
Proximity (metres)	500	500	500	500	500	500
Appropriate food outlet	✓	✓	✓	✓	✓	✓
Access to cash	✓	✓	✓	✓	✓	✓
Access to an outdoor open space (public or private, provided suitably sized and accessible to building users)	✓	✓	✓	✓	✓	✓
Access to a recreation or leisure facility for fitness or sports	✓	✓	✓	✓	✓	✓
Publicly available postal facility	✓	✓	✓	✓	✓	✓
Community facility	✓	✓	✓		✓	✓
Over the counter services associated with a pharmacy	✓	✓	✓	✓	✓	✓
Public sector GP surgery or general medical centre			✓		✓	✓
Child care facility or school	✓		✓		✓	✓

Key:

✓ - Amenity relevant to building type.

Figure 3.1: Amenities Applicable for BREEAM Credit

3.2.2 The relevant building type for the proposed development is 'BG 6' defined as 'other' building types as none of the other building types as defined by the BREEAM manual are considered applicable to the development proposals.

3.2.3 Table 3.1 summarises a number of local facilities and amenities which are within 500m walking distance of the site and therefore contribute to the attainment of the BREEAM credit available under TRA 02.

Table 3.1: Local Amenities relevant to BREEAM assessment within 500m

Facility / Amenity	Walking and Cycling Distance from Site Access (metres)	Travel Time (minutes) From Centre of Site	
		Walking	Cycling
Café within Leisure Centre	0	N/A	N/A
Gym within Leisure Centre	0	N/A	N/A
ATM within Genting Casino	200	3	1
Toby Carvery Restaurant	350	5	2

**Based on walking speeds of 80 metres per minute and cycling speeds of 320 metres per minute*

3.3 Walking and Cycling Distances

- 3.3.1 There are a number of publications which provide guidance for appropriate walking and cycling distances to facilities. For reference, these have been summarised as follows.
- 3.3.2 Paragraph 2.3 of TA91/05 Provision for Non-Motorised Users states that ‘Walking is used to access a wide variety of destinations including educational facilities, shops, and places of work, normally within a range of up to 2 miles’ (3.2km). Paragraph 2.2 of TA91/05 states that 2 miles is ‘a distance that could easily be walked by the majority of people’ and (at paragraph 2.3) that ‘Walking and rambling can also be undertaken as a leisure activity, often over longer distances’. In relation to shorter trips in particular, the CIHT publication Planning for Walking (section 2.1) states that across Britain about ‘80% of journeys shorter than 1 mile are made wholly on foot’.
- 3.3.3 With regard to cycling, TA91/05 goes on to state (in paragraph 2.11) that ‘Cycling is used for accessing a variety of different destinations, including educational facilities shops and places of work, up to a range of around 5 miles. Cycling is also undertaken as a leisure activity, often over much longer distances.’ At paragraph 2.9, TA91/05 states that 5 miles (8km) is a distance ‘that could easily be cycled by the majority of people’.
- 3.3.4 This is consistent with the statement in LTN1/20 Cycle Infrastructure Design (in paragraph 2.2.2) that ‘Two out of every three personal trips are less than five miles in length – an achievable distance to cycle for most people’.
- 3.3.5 Manual for Streets (paragraph 4.4.1) states that ‘walkable neighbourhoods’ are typically characterised by having a range of facilities within 10 minutes (up to 800m) walking distance of residential areas which residents may access comfortably on foot, but that this is ‘not an upper limit’.

3.4 Pedestrian Accessibility

- 3.4.1 The site is located within Rivermead Park and benefits from the existing network of footways and footpaths that permeate the area within the immediate vicinity of the site. These paths typically provide a connection between Richfield Avenue and the Thames Path.
- 3.4.2 The Thames Path runs along the river north of the site. Whilst signed as a long-distance route, the path also functions as a link for local journeys west to Tilehurst or east as an attractive route to Reading town centre.

- 3.4.3 Richfield Avenue is lit and served with footways approximately 1.5-2.0m wide on both sides of the carriageway. Pedestrian refuges are provided along the route and a pelican crossing is present 395m east of the site access, near the roundabout with the A4155.
- 3.4.4 The footways continue onto the A4155 Caversham Road north across the Caversham Bridge and south towards Reading town centre. This route is similarly lit and subject to a 30mph limit. The footways are paved and around 2.0-2.5m wide. Caversham Road is served with two puffin crossings; one at the northern end near the Richfield Avenue roundabout, another near the roundabout with the A329.

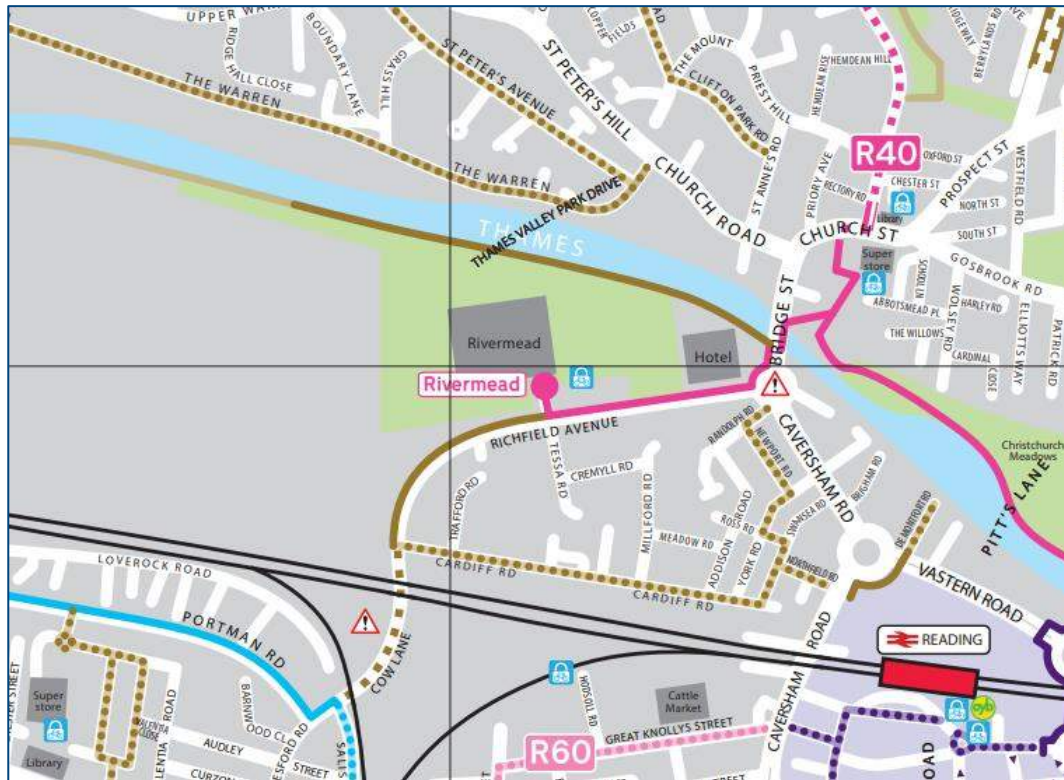
Accessibility for All Users

- 3.4.5 The footway/footpath network surrounding the site is designed to facilitate pedestrian movements by disabled users and those of all ages with the relatively flat topography and well-maintained nature of the surrounding pedestrian infrastructure meaning the site is accessible for both the elderly and parents with buggies.
- 3.4.6 All local signal-controlled pedestrian crossings have an audible signal for those with a visual impairment whilst tactile paving and dropped kerbs are provided at all local junctions and pedestrian crossing points.

3.5 Cycle Accessibility

- 3.5.1 The proposed development site is surrounded by a network of local on and off-road cycle routes which provide a link to local residential areas.
- 3.5.2 The R40 route is a locally signed cycle route connecting Emmer Green and Caversham Heights to the Rivermead Leisure Complex. It runs from the north across Caversham Bridge and along the shared pedestrian/cycle footway on Richfield Avenue. Other local cycleways include the R4, from Caversham Park Village to Reading Station, and the R41, from Emmer Green to Reading Station via Hills Meadow.
- 3.5.3 Continuous cycle connections are provided from the site to the various surrounding residential areas.
- 3.5.4 NCN Route 5 is provided adjacent to the River Thames approximately 660m east of the site and is directly linked to the site by the R40 local cycle route. NCN Route 4 is a long-distance cycle route linking Reading to Holyhead in north Wales via Oxford, Birmingham and Chester. Locally NCN Route 5, when used in conjunction with NCN Route 4, provide a traffic free route southeast into central Reading and to the northern and western suburbs.
- 3.5.5 An abstract of the RBC cycling map is shown below in Figure 3.2. The full map can be found in Appendix B.

Figure 3.2: Extract from RBC's Cycle Map



3.6 Public Transport Accessibility

Bus Services

- 3.6.1 There is a single bus stop immediately outside the site and consisting of a flag sign and timetable. It is served by the 42 and the 60a.

Table 3.2: Bus Services from Rivermead Leisure Complex

Service	Route	First/Last	Service Frequency (minutes)			
			Mon – Fri		Sat	Sun
			AM	PM		
42	Rivermead to Kenavon Drive via Central Reading	08:47/ 16:30	40	40	40	N/A
60a	Central Reading to Mereok P&R	11:02/ 15:10	N/A	N/A	N/A	120

- 3.6.2 The closest set of bus stops are by The Moderation pub, located on Caversham Road around 550m from the site access. A flag sign and timetable are provided at both stops, with the addition of a seat/shelter at the southbound stop.
- 3.6.3 A summary of local bus services from The Moderation bus stops is provided in Table 3.3.

Table 3.3: Bus Services from 'The Moderation'

Service	Route	First/Last	Service Frequency (minutes)			
			Mon – Fri		Sat	Sun
			AM	PM		
22	Central Reading to Caversham Heights via Caversham Bridge	05:33/ 21:03	30	30	60	N/A
23	Central Reading to Caversham Park/Emmer Green/Reading	05:53/ 23:53	30	30	30	60
24	Central Reading to Emmer Green via Caversham Bridge	05:14/ 23:16	30	30	30	60
42	Rivermead to Kenavon Drive via Central Reading	08:43/ 16:27	40	40	40	N/A
80	Caversham Heights to Reading School	07:51/ 15:58	N/A	60	N/A	N/A

Rail Services

- 3.6.4 Reading Railway Station is located approximately 1.5km walking / cycling distance to the south east of the site and is easily accessible on foot or by bicycle from the site. The station provides 344 cycle storage spaces which facilitates access to and from the site via rail and cycle and the station also benefits from CCTV to improve security.
- 3.6.5 Reading station is a major rail hub and interchange station within central Reading and therefore provides a wide offering of national, regional and local services. To the west there are 4 train services per hour to Swindon and Bristol to the west whilst to the east there are 19 services towards London per hour.

BREEAM Public Transport Accessibility Index

- 3.6.6 The BREEAM 'Technical Manual SD5078: UK New Construction 2018 3.0' document contains the information for calculating the public transport 'Accessibility Index' (AI) of the site. The public transport AI is a measure that provides an indicator of the accessibility and density of the public transport network at a point of interest (development site). The index achievable by a site is influenced by the proximity and diversity of the public transport network and the frequency of service at accessible nodes.
- 3.6.7 A compliant transport node includes any bus service with a stop within 650m of the site and any railway station within 1000m of the assessed sites main entrance. The College Road bus are therefore considered as accessible transport nodes.
- 3.6.8 The BREEAM 2018 Tra01/02 Accessibility Index calculator has been used to calculate the public transport AI of the development site.
- 3.6.9 The existing site has been calculated to have a public transport AI score of 3.41 with both the bus stop adjacent to the site and the Caversham Road stops representing a compliant transport node.

3.7 Accessibility Summary

- 3.7.1 The site is within a 500m walking distance of a number of local facilities and amenities as defined within TRA 02 of the BREEAM 'Technical Manual SD5078: UK New Construction 2018 3.0' document.

- 3.7.2 The site is situated in an edge of town centre location and benefits from existing good quality connections with established walking, cycling and public transport routes through the surrounding residential areas.
- 3.7.3 A number and range of local residential areas are within acceptable walking and cycling distances. A review of the key walking routes demonstrates that pedestrians benefit from a good standard of infrastructure provision which offers a realistic and attractive option for travel to and from the local area.
- 3.7.4 There are bus services within the vicinity of the site which provides access to key destinations including Reading town centre and the surrounding residential areas. This offers a realistic potential for multi-modal journeys to local and regional destinations.
- 3.7.5 The BREEAM public transport AI has been calculated to be 3.41 for the site.
- 3.7.6 The choice of travel options within the vicinity of the site offers a realistic potential for trips to and from the site to be made via non-car modes. The accessible location will, therefore, encourage and promote sustainable travel behaviour.
- 3.7.7 The site is accessible by those with disabilities with local footways and crossing point incorporating facilities for those with mobility and visual impairments.

4. PROPOSED DEVELOPMENT

4.1 Overview

- 4.1.1 The proposals comprise the re-development and re-configuration of the existing Rivermead Leisure Complex site in order to provide a new leisure centre building and associated parking. The proposed site layout is shown at Appendix C.
- 4.1.2 The majority of the facilities provided at the existing Rivermead Leisure Complex will be retained with some of the facilities such as the sports hall being reduced in both size and capacity and some elements of the existing offering being lost as a result of the proposals. Table 4.1 outlines the existing and proposed facilities at Rivermead Leisure Complex.

Table 4.1: Rivermead Leisure Complex Existing and Proposed Facilities

Facility	Existing	Proposed
Demountable swimming pool	✓	✓
Lagoon swimming pool	✓	✗
Sports hall	✓ x10 badminton courts	✓ x6 badminton courts
Event space (standing 1,650/seated 1,800)	✓	✗
Squash courts	✓ x3	✗
Indoor bowls hall	✓	✗
Creche	✓	✗
Multi-purpose artificial pitch	✓	✓
Gym	✓ 120 stations	✓ 125 stations
Cafe	✓	✓
Competition swimming pool	✗	✓
Teaching/diving pool	✗	✓
Parking	596 total provision	390 total provision

- 4.1.3 As can be seen from Table 4.1 the number and type of the existing facilities offered by Rivermead Leisure Complex are to change, reflecting the changed sporting and activity requirements for Reading. Whilst there is a change to the 'dry' facilities including the removal of the large event space provision, there is an increase in the provision of 'wet' facilities with a splash pad, an 8-lane competition pool with spectator seating, and a teaching/diving pool.
- 4.1.4 A number of swimming classes and clubs currently use the existing demountable pool for training and lessons and it is proposed that the same programme of training sessions and lessons is provided at the new leisure centre facility. The programme of swimming sessions and events will however be split across the retained demountable pool and the new competition pool so the use of each will be less intensive than the current usage of the demountable swimming pool due to the number of patrons being split across both pools.
- 4.1.5 The proposals therefore represent an overall net reduction in the facilities provided with a reduction in the 'dry' facility offering and slight increase in 'wet' facilities proposed.

4.2 Access Strategy

Vehicular Access

- 4.2.1 Vehicular access to the site from the local highway network will continue to be served via the Richfield Avenue/Tessa Road roundabout to the south the site.

- 4.2.2 An annotated plan showing the proposed layout and access arrangements of the development proposals is included at Figure 4.1.

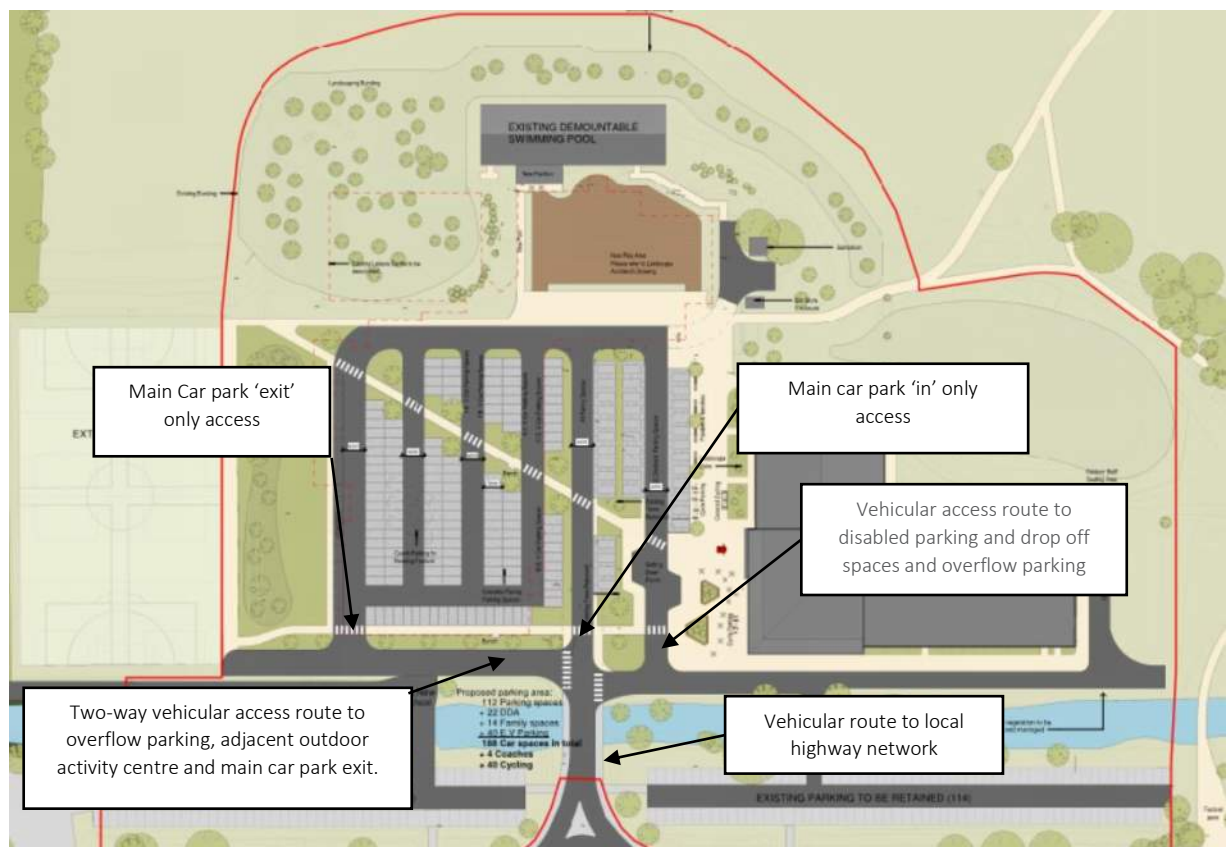


Figure 4.1: Annotated site access plan

- 4.2.3 All internal access roads are to measure 6m in width whilst standard parking spaces are to be provided at 2.5m x 5m.

4.3 Pedestrian Access and Cycle Access

- 4.3.1 Pedestrian access to the site will remain as existing with the local footpaths and connections to footways adjacent to the local highway network retained.
- 4.3.2 Improvements are proposed to the existing pedestrian connectivity within the site. The footways extending north from Richfield Avenue are to now connect with the internal footway within the site with a continuous pedestrian link provided the building entrance via pedestrian crossing point across internal road.
- 4.3.3 Internally, footways and footpaths are to be provided around the proposed main car park with zebra crossing facilities provided throughout, linking the car park to the new building access. A landscaped area of public realm is also proposed directly adjacent to the building frontage. This area of public realm will link to the existing footpaths permeating Rivermead Park and providing connections to the Thames Path.
- 4.3.4 Once on the site, there will be safe, well-lit and waymarked routes suitable for all abilities between footpaths, car and cycle parking and the building entrance. Level access will be provided for staff and visitors using mobility assistance such as wheelchairs, electric scooters and for carers with buggies. The

site will be dementia friendly in terms of wayfinding and natural points of entry, and tactile signs and surfaces will be provided for users with visual impairment.

- 4.3.5 Cyclists would continue to access the site via the northern arm of the Richfield Avenue/Tessa Road roundabout with the connection to the local cycle route on Richfield Avenue retained.

4.4 Parking Provision

Car Parking Standards

- 4.4.1 Local parking standards are set out in the RBC, Revised Parking Standards and Design Supplementary Planning Document (SPD). The Revised Parking Standards and Design SPD splits Reading into a number of different zones with the proposed development site considered to be in Zone 2.
- 4.4.2 There are no specific parking standards for leisure complexes such as that provided at Rivermead however maximum parking standards are provided for some of the individual elements within Rivermead Leisure Complex. These are set out in Table 4.2.

Table 4.2: RBC Parking Standards

Facility	Parking Standard (Zone 2)
Playing Fields	12 spaces per hectare of pitch area
Swimming Pools	1 space per 7.5 fixed seats & 1 space per 15 m2 pool area
Health Clubs/Gymnasiums	1 space per 35 m2

- 4.4.3 The RBC Revised Parking Standards and Design SPD also outlines the suggested level of accessible and family/toddler spaces for developments in all zones as follows:
- Over 200 spaces provided – 4 disabled spaces plus 5% of total capacity; and
 - Over 200 spaces provided – 3 spaces plus 3% of total capacity.
- 4.4.4 In addition to the above the RBC Local Plan Policy states that 10% of car parking spaces provided should provide an active charging point for Electric Vehicles (EV).
- 4.4.5 As there are no specific parking standards for sports complexes such as that provided at Rivermead and the parking standards for individual uses do not cover all of the facilities provided, parking levels for the proposed development have been calculated using historical data including both an ATC and parking beat survey that were conducted at the site in October 2016 as part of the consented planning application for the demountable pool. This data along with timetable and usage data for the demountable pool has been used to undertake a parking accumulation exercise for the existing and forecast demand. This is described in greater detail in Section 5 of this TA.

Car Parking

- 4.4.6 A new main car park is proposed adjacent to the west of the new leisure centre building in the location of the existing Rivermead Leisure Complex building as shown at the plan included at Figure 4.1. This car park is intended to accommodate the average day to day parking demand of the development.
- 4.4.7 A total of 112 standard car parking spaces are to be provided within the new main car park with an additional 22 dedicated disabled bays, 14 family/toddler spaces and 40 Electric Vehicle charging spaces. A total of 188 car parking spaces are therefore provided within the proposed main car park.

- 4.4.8 A coach setting down area is also proposed at the far western extent of the new main car park with setting down space for a total of four coaches.
- 4.4.9 In addition to the new main car park it is proposed that the existing overflow car parks to the south of the Rivermead Leisure Complex site are retained as part of the proposals. These overflow car parks provide an additional 114 and 88 standard car parking spaces respectively.
- 4.4.10 Overall a total of 390 parking spaces will be provided on site, with 314 standard parking spaces, 22 disabled bays, 14 family parking spaces and 40 EV charging bays.
- 4.4.11 All standard car parking spaces are designed to be 2.5m x 5m whilst all disabled and family parking bays are designed to be 2.4m x 4.8m with a 1.2m buffer to the side and to the rear in line with guidance set out in the RBC Revised Parking Standards and Design SPD.
- 4.4.12 The level of disabled, family and electric vehicle parking is in line with RBC Policy.

Cycle Parking

- 4.4.13 The standards for cycle parking are also contained within the Revised Parking Standards and Design SPD. Again, there are no specific standards applicable to the site as a whole with only standards for individual facilities provided, however these do not cover all of the facilities offered at the site.
- 4.4.14 A total of 40 cycle parking spaces in the form of 20 Sheffield stands are proposed for the redevelopment of the Rivermead Leisure Complex. The Sheffield stands are to be provided adjacent to the western frontage of the proposed leisure building within the proposed area of public realm. This level of cycle parking is considered suitable to serve the development.
- 4.4.15 This level of provision has been informed by both BREEAM requirements as discussed in more detail below as well as operational requirements which are discussed further in Section 5.

BREEAM Cycle Parking Compliance

- 4.4.16 TRA 02 of the BREEAM 'Technical Manual SD5078: UK New Construction 2018 3.0' document concerns provision for cyclists.
- 4.4.17 The site is considered as 'Other building transport type B' as defined in the BREEAM Technical Manual. The BREEAM cycle storage requirements for this building type are based on the number of staff employed within the leisure centre with a minimum cycle parking requirement of 1 space per 10 staff members and 1 space per 10 visitors.
- 4.4.18 A total of 34 Full Time Equivalent (FTE) staff are to be employed at the proposed leisure development. The maximum visitor occupancy of the leisure centre has been calculated as 562 using the default occupancy rates given in Table 7.7 of the BREEAM Manual. As the visitor occupancy is above 200 the sliding scale of compliance ratio calculation as detailed within TRA 02 of the BREEAM Technical Manual has been applied.
- 4.4.19 The BREEAM compliant level of cycle parking provision has therefore been calculated at 35 cycle parking spaces. The 40 spaces provided therefore meets the requirements of BREEAM and achieves one point whilst allowing for a level of flexibility.

4.5 Servicing

- 4.5.1 The bin store and substation is to be provided adjacent to a turning head north of the new car parking areas. Service vehicles would enter the site from the Richfield Avenue/Tessa Road roundabout and continue north along the main access road towards the north of the car parking before turning right up a ramped access road which provides access to the turning head adjacent to the bin store and substation.
- 4.5.2 A secondary servicing area is also provided directly adjacent to the eastern frontage of the leisure centre building. A turning head is provided to allow a service vehicle to enter and exit the site in a forward gear.
- 4.5.3 Swept path analysis demonstrating an 11.3m refuse vehicle entering and exiting the service areas in a forward gear is provided at Appendix D.

5. TRIP GENERATION, PARKING DEMAND AND TRAFFIC IMPACT

5.1 Introduction

- 5.1.1 This section identifies the likely impact of the development proposals on the local highway network, considering the change in trips between the existing uses, and the proposed redevelopment scheme.
- 5.1.2 Information provided by the management team at Rivermead Leisure Complex has indicated that the busiest day at the Rivermead Leisure Complex in terms of patronage is a Monday due to a number of classes and activities timetabled. In order to present a robust assessment of the likely highways impact of the proposals the typical peak AM and PM network hours of 08:00-09:00 and 17:00-18:00 have been assessed for a Monday alongside the Saturday operational peak of 09:00-10:00.

5.2 Existing Trip Generation

Prior to construction of the demountable pool

- 5.2.1 The existing Rivermead Leisure Complex which currently occupies the site generates a number of staff, visitor, delivery and servicing vehicle trips associated with the daily operation of the site.
- 5.2.2 Due to the ongoing COVID-19 pandemic the Rivermead Leisure Complex site is not fully operational and therefore conducting traffic surveys during this time would not capture the trip generating potential of the site when functioning at pre-COVID levels of operation.
- 5.2.3 Instead, the existing trip generation of the site has been calculated through the use of the 2016 Automatic Traffic Count Survey (ATC) data used as part of the planning application for the demountable swimming pool on the site (App ref: 162323). As part of the planning application ATC's were undertaken over a full 7-day period at the existing leisure centre site access in order to record traffic volumes entering and exiting the site. These surveys were undertaken whilst the site was fully operational in October 2016 with the full results provided at Appendix E.
- 5.2.4 As mentioned in Para. 5.1.2 the Rivermead Leisure Complex management team have identified that Monday is the busiest day at the existing leisure centre and therefore an existing trip generation profile has been produced for both a Monday and Saturday scenario.
- 5.2.5 The existing vehicular trip generation derived from the October 2016 ATC's is summarised in Table 5.1.

Table 5.1: Existing Trip Generation – Pre Demountable Swimming Pool

Scenario	Peak Period(s)	Vehicle Trip Generation		
		Arrivals	Departures	Two-way
Monday	AM Peak (08:00-09:00)	64	12	76
	PM Peak (17:00-18:00)	122	102	224
	Daily	1335	1335	2670
Saturday	Sat Peak (09:00-10:00)	146	123	269
	Daily	880	880	1760

Existing Demountable Swimming Pool Trips

- 5.2.6 As the vehicular trips associated with the now operational demountable pool were not occurring at the time of the October 2016 ATC survey, a first principles approach has been taken to forecasting the likely vehicle trips generated by the existing demountable swimming pool based on operational information from the Rivermead Leisure Complex management team.

- 5.2.7 In order to calculate the existing number of vehicular trips generated by the demountable swimming pool facility, operational information has been supplied which includes monthly swimming pool patronage information from the pool during the period between April 2019 and March 2020.
- 5.2.8 In order to obtain an average weekday and weekend trip generation profile from a years' worth of monthly data the patronage data was first averaged to provide a patronage figure for an average month. The months of December 2019 and March 2020 were removed from this calculation as these months were assessed to have considerably lower patronage than the other months provided. This average monthly figure was then divided by four (the average number of weeks in a month) to give an average weekly usage figure.
- 5.2.9 A weekday/weekend proportional split was then established via a review of the October 2016 ATC data outlined in Section 5.2. The analysis of the historical ATC data established that 15% of weekly trips occur on any given weekday whilst 12% of trips to Rivermead Leisure Complex tend to occur on a weekend day. These proportions were then applied to the average weekly patronage information to provide an average weekday and Saturday daily person trips figure for the existing demountable swimming pool.
- 5.2.10 A modal share split was then established via a review of weekday and weekend surveys of similar leisure centre sites contained within the TRICS National Database v.7.7.3 2020. Analysis of the multi-modal trip rates obtained from the TRICS review indicates that a total of 41% of patrons arrive by car during the week with a proportion of 47% at a weekend. This proportion has been applied to the total people trips to give a daily vehicle arrivals and departures profile to and from the demountable pool.
- 5.2.11 The full TRICS outputs of the sites used to establish the forecasted trip generation of the proposed swimming pool are included at Appendix F.
- 5.2.12 The existing vehicular trip generation of the demountable swimming pool, derived from the historical operational data is summarised in Table 5.2.

Table 5.2: Existing Demountable Swimming Pool Vehicle Trip Generation

Scenario	Period(s)	Vehicle Trip Generation		
		Arrivals	Departures	Two-way
Monday	AM Peak (08:00-09:00)	8	5	13
	PM Peak (17:00-18:00)	23	15	38
	Daily	195	198	393
Saturday	Sat Peak (11:00-12:00)	15	17	32
	Daily	176	176	352

Total Existing Site Trip Generation

- 5.2.13 The combination of the historical ATC data and historical operation data from the demountable pool has been used in order to provide an existing development baseline trip generation profile. The full daily existing vehicular trip generation profile is provided at Appendix G with a summary provided at Table 5.3.

Table 5.3: Total Existing Site Baseline Trip Generation

Scenario	Period(s)	Vehicle Trip Generation		
		Arrivals	Departures	Two-way
Monday	AM Peak (08:00-09:00)	72	17	89
	PM Peak (17:00-18:00)	145	117	262
	Daily	1530	1533	3063
Saturday	Sat Peak (11:00-12:00)	161	140	301
	Daily	1056	1056	2112

5.3 Proposed Development Trip Generation

- 5.3.1 The development proposals encompass the redevelopment of the existing leisure centre site to provide a new leisure centre building with updated and improved facilities and amenities.
- 5.3.2 The proposed leisure centre is to serve generally the same purpose as the existing Rivermead Leisure Complex with the provision of a gym, swimming pool and sports hall along with ancillary café facilities. In addition, it can be seen from Table 4.1 there is a change in the size and capacity of provision with some facilities such as large events provision, bowls, squash courts and lagoon pool being removed as part of the redevelopment proposals.
- 5.3.3 There is therefore a change in the 'dry' offering at the new leisure centre whilst the 'wet' offering (i.e the swimming facilities) are increased with the provision of a new competition and teaching/diving pool. Operational and forecast timetabling information for the new 25m pool provided by the leisure centre suggests that the existing classes/events timetable currently accommodated by the demountable pool would be split across the two pools once the works are complete with no notable intensification of swimming events proposed. The diving/teaching swimming pool is also considered to be ancillary to the new 25m swimming pool and therefore it is not considered that this element of the development would generate any additional trips to the site.
- 5.3.4 Therefore, it is not considered that the introduction of the 25m pool or diving/teaching pool would lead to an increase in trips to the site despite offering a new facility, rather there would be a spreading of existing users over the pools provided.
- 5.3.5 The proposed redevelopment of the Rivermead Leisure Complex facility is therefore not forecast to generate any additional vehicular trips onto the local highway network due to a changed emphasis of 'dry' provision and no intensification in the programming and use of the 'wet' facilities provided.

5.4 Parking Accumulation

- 5.4.1 A car parking accumulation exercise has been undertaken in order to determine the forecast peak parking demand at the development site as a result of the proposed redevelopment of the Rivermead Leisure Complex.
- 5.4.2 A car parking beat survey was undertaken in October 2016 over the same weekend as the ATC survey was undertaken. This data therefore captures the peak parking demand generated by the Rivermead Leisure Complex before the development of the demountable pool. The maximum parking demand recorded by the parking beat survey occurred between 10:00-11:00 on a Saturday morning and saw a total demand of 111 car parking spaces at the existing Rivermead Leisure site.
- 5.4.3 A car parking accumulation exercise has also been undertaken using the historical ATC data in order to corroborate the findings of the parking beat surveys. These ATC surveys do not account for the

operation of the demountable pool so the total existing baseline trip generation profile as included at Appendix G have been used to conduct the parking accumulation exercise.

- 5.4.4 As there is no forecast increase in the number of trips generated by the proposals due to an almost like for like replacement of facilities the accumulation exercise has been used to forecast future demand and inform the number of car parking spaces provided as part of the proposals.
- 5.4.5 The resulting Monday parking accumulation is presented in Table 5.4.
- 5.4.6 The below car parking accumulation exercise, conducted using the October 2016 ATC survey highlights a discrepancy in the level of peak parking demand recorded by the parking beats and ATC data despite both surveys being conducted over the same time period in October 2016. The below section outlines the peak parking demand figure from both sets of data and demonstrates that the parking demand presented by both datasets can be accommodated within the proposed development in any event.

Table 5.4: Forecast Monday Parking Accumulation

Time	Arrivals (Cars)	Departures (Cars)	Parking Accumulation (Cars)
00:00	1	0	4
01:00	0	0	4
02:00	0	2	2
03:00	0	0	2
04:00	0	0	2
05:00	2	0	4
06:00	18	1	21
07:00	50	12	59
08:00	72	17	114
09:00	244	34	324
10:00	102	57	369
11:00	81	156	294
12:00	79	217	156
13:00	90	66	180
14:00	57	76	161
15:00	69	93	137
16:00	124	102	159
17:00	145	117	187
18:00	196	131	252
19:00	124	129	247
20:00	50	208	89
21:00	21	70	40
22:00	5	43	2
23:00	0	2	0

- 5.4.7 The above parking accumulation indicates that there is likely to be a maximum parking demand of 369 parking spaces by the proposed redevelopment at any one time during an average Monday.
- 5.4.8 The Saturday parking accumulation is presented overleaf in Table 5.5.

Table 5.5: Forecast Saturday Parking Accumulation

Time	Arrivals (Cars)	Departures (Cars)	Parking Accumulation (Cars)
00:00	2	12	4
01:00	0	4	0
02:00	0	0	0
03:00	0	0	0
04:00	0	0	0
05:00	0	0	0
06:00	5	0	5
07:00	91	0	96
08:00	189	48	237
09:00	161	140	258
10:00	110	98	270
11:00	79	114	235
12:00	65	93	207
13:00	98	105	200
14:00	88	74	214
15:00	62	80	196
16:00	37	61	172
17:00	20	50	142
18:00	7	111	38
19:00	6	8	36
20:00	8	10	34
21:00	12	18	28
22:00	10	8	30
23:00	6	22	14

- 5.4.9 The above parking accumulation indicates that there is likely to be a maximum demand of 270 car parking spaces during an average Saturday at the redeveloped Rivermead Leisure Complex site.

Car Parking Demand Summary

- 5.4.10 The above parking accumulation tables demonstrate a peak parking demand of 369 parking spaces at the proposed Rivermead Leisure Complex whilst the historical parking beat survey data indicates a peak parking demand of 111 car parking spaces at any one time. There is therefore a discrepancy between both sets of historical data despite being conducted over the weekly period In October 2016.
- 5.4.11 It is therefore concluded that the higher parking demand figures indicated by the historical ATC data represents a very worst-case scenario for forecast parking demand at the site.
- 5.4.12 In any event the proposed overall parking provision of 390 parking spaces is sufficient to accommodate both the anticipated average peak parking demand (111 spaces recorded by parking beats) as well as the forecast worst-case peak (369 spaces recorded by ATC and demountable pool data).
- 5.4.13 The provision of 390 car parking spaces across the site is therefore considered appropriate to serve the proposed development.

Cycle Parking Demand

- 5.4.14 A review of the multi-modal trip rates obtained from TRICS and included at Appendix F indicates that a forecast 3% of patrons travelling to the proposed redeveloped leisure complex would do so by cycle whilst 41% would do so by car.
- 5.4.15 The modal split data derived from TRICs and the peak car parking accumulation outlined in Table 5.4 have been used to undertake a pro-rata calculation and obtain a maximum person accumulation figure for the site.

- 5.4.16 Based on 3% of visitors to the site cycling a total of 27 cycle parking spaces could be required during the peak accumulation time at the site.
- 5.4.17 The provision of 40 cycle parking bays is therefore sufficient to meet the forecast demand for cycle parking spaces whilst providing additional capacity for any increase in demand.

6. SUMMARY AND CONCLUSIONS

6.1 Summary

- 6.1.1 Hydrock Consultants has been appointed on behalf of Reading Borough Council to prepare this Transport Assessment in support of a planning application for the proposed redevelopment of the existing Rivermead Leisure Complex on Richfield Avenue, Reading.
- 6.1.2 The TA provides the necessary information for the local planning authority to consider the merits of the development in terms of accessibility, sustainability, highway safety, and the impact of the new facility on the local road network.

6.2 Conclusions

- 6.2.1 The site already operates as an existing sports and leisure complex and therefore the principle for the development proposal is already established and not in question.
- 6.2.2 The site is considered to be situated in a highly sustainable location benefiting from bus and rail services within walking/cycling distance. The site is also within walking and cycling distance to large residential areas. The site is well connected by a network of existing pedestrian and cycle infrastructure, and consequently offers a wide range of non-car transport opportunities for both patrons and staff. A new area of public realm and a new footpath connection are also proposed as part of the development, further enhancing the sustainable transport connections.
- 6.2.3 A review of Personal Injury Accident data covering the latest available five-year period has been undertaken which has not identified any overriding highway safety issues which would be exacerbated by the proposed development.
- 6.2.4 The development proposals are to provide a site wide total of 390 car parking spaces which is sufficient to accommodate the predicted worst-case peak parking demand of circa.369 spaces. The 22 disabled bays and 14 family/toddler bays provided are in line with RBC guidance whilst the 40 EV charging bays provided are in line with Policy TR5 of the RBC Local Plan.
- 6.2.5 The redevelopment proposals are not forecast to generate any additional vehicle movements to and from the site and therefore the site operation of the access junction and local highway network would not be impacted by the development proposals.
- 6.2.6 A total of 40 cycle parking spaces are to be provided which is sufficient to accommodate forecast demand whilst allowing for an increase in the proportion of patrons cycling to the site.
- 6.2.7 Swept path analysis confirms that the development site can be serviced appropriately by a refuse vehicle and leave the site in a forward gear.
- 6.2.8 Consequently, in light of the assessment undertaken and presented within this report, it is considered that there are no significant highways or transportation matters that should preclude the Local Planning Authority from approving this planning application.

Appendix A CrashMap PIA Reports

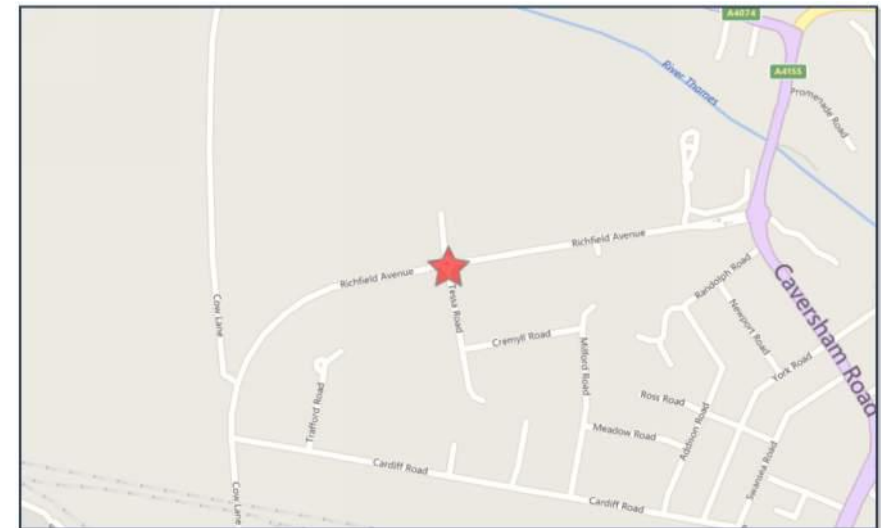


crashmap.co.uk

No

Crash Date: Tuesday, July 07, 2015 **Time of Crash:** 4:00:00 PM **Crash Reference:** 201543W047075

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Reading	Number of Vehicles:	2	OS Grid Reference:	470670 174401
Local Authority:	Reading Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services

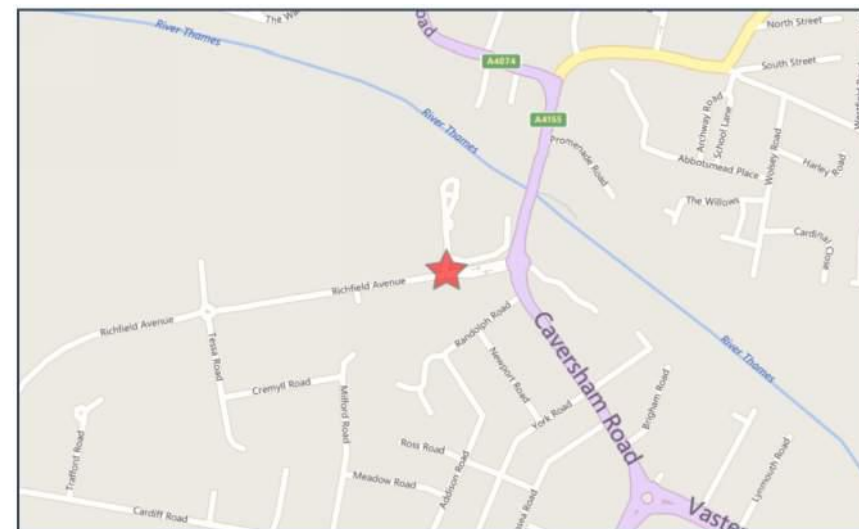


crashmap.co.uk

No

Crash Date: Tuesday, May 19, 2015 **Time of Crash:** 6:34:00 AM **Crash Reference:** 201543W157055

Highest Injury Severity:	Serious	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Reading	Number of Vehicles:	2	OS Grid Reference:	471023 174471
Local Authority:	Reading Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	40				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	10	Female	46 - 55	Vehicle is in the act of turning right	Nearside	Other	None	None
2	Pedal cycle	-1	Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Serious	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

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No

Crash Date: Saturday, October 24, 2015 **Time of Crash:** 7:03:00 PM **Crash Reference:** 201543W204105

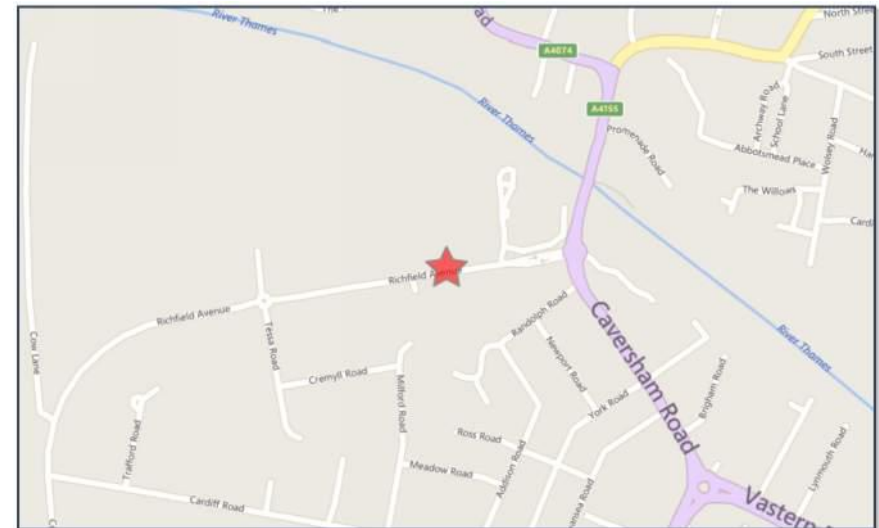
Highest Injury Severity: Slight
Highway Authority: Reading
Local Authority: Reading Borough
Weather Description: Raining without high winds
Road Surface Description: Wet or Damp
Speed Limit: 40
Light Conditions: Darkness: street lights present and lit
Carriageway Hazards: None
Junction Detail: Using private drive or entrance
Junction Pedestrian Crossing: Central refuge - no other controls
Road Type: Single carriageway
Junction Control: Give way or uncontrolled

Road Number: U0

Number of Casualties: 1

Number of Vehicles: 2

OS Grid Reference: 470939 174459



For more information about the data please visit: www.crashmap.co.uk/home/Faq

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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	13	Male	26 - 35	Vehicle is in the act of turning right	Offside	Other	None	None
2	Motorcycle over 50cc and up to 125cc	1	Male	16 - 20	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	16 - 20	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

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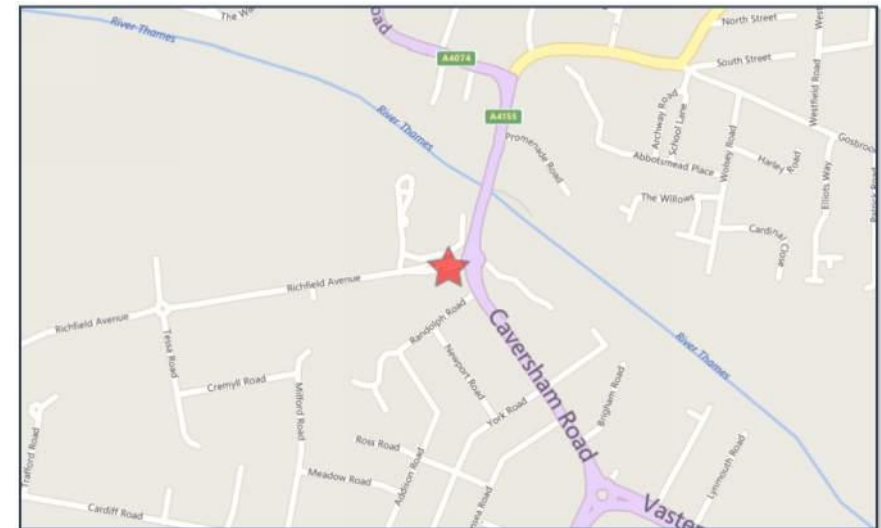


crashmap.co.uk

No

Crash Date: Friday, August 28, 2015 **Time of Crash:** 5:45:00 PM **Crash Reference:** 201543W237085

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Reading	Number of Vehicles:	2	OS Grid Reference:	471093 174473
Local Authority:	Reading Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	40				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Using private drive or entrance				
Junction Pedestrian Crossing:	Pedestrian phase at traffic signal junction				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Pedal cycle	-1	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Journey as part of work	None	None
2	Car (excluding private hire)	-1	Male	46 - 55	Vehicle is in the act of turning left	Nearside	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

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No

Crash Date: Friday, January 13, 2017 **Time of Crash:** 1:14:00 PM **Crash Reference:** 2017430022753

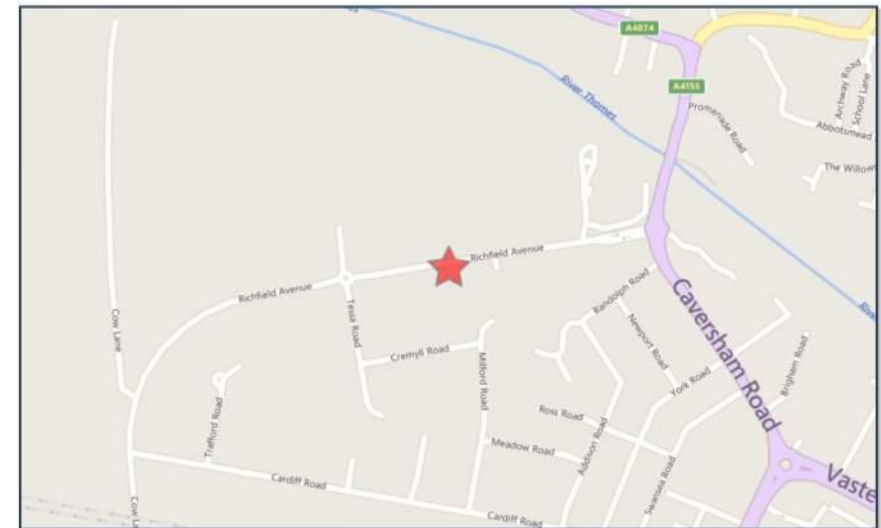
Highest Injury Severity: Slight
Highway Authority: Reading
Local Authority: Reading Borough
Weather Description: Fine without high winds
Road Surface Description: Dry
Speed Limit: 30
Light Conditions: Daylight: regardless of presence of streetlights
Carriageway Hazards: None
Junction Detail: Using private drive or entrance
Junction Pedestrian Crossing: No physical crossing facility within 50 metres
Road Type: Single carriageway
Junction Control: Give way or uncontrolled

Road Number: U0

Number of Casualties: 1

Number of Vehicles: 2

OS Grid Reference: 470820 174432



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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	21 - 25	Vehicle is moving off	Front	Journey as part of work	None	None
2	Car (excluding private hire)	5	Female	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	66 - 75	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services

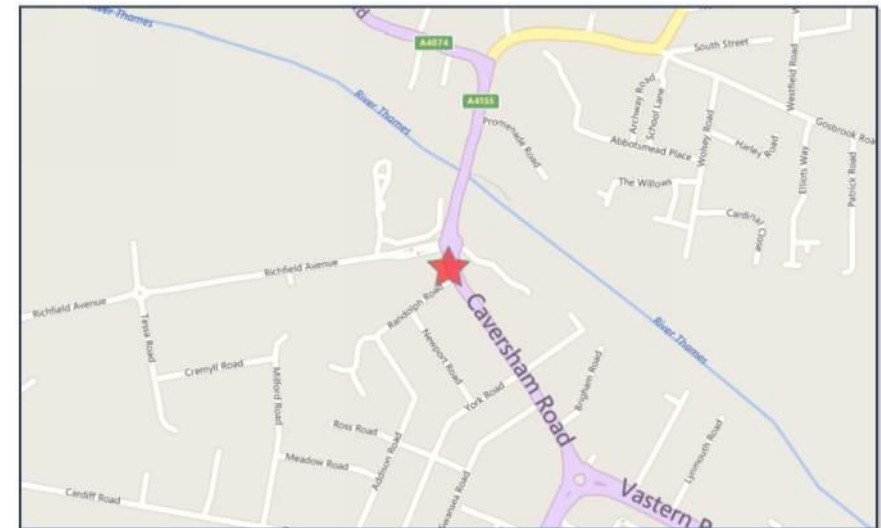


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No

Crash Date: Saturday, September 23, 2017 **Time of Crash:** 12:15:00 AM **Crash Reference:** 2017430299145

Highest Injury Severity:	Slight	Road Number:	A4155	Number of Casualties:	1
Highway Authority:	Reading	Number of Vehicles:	1	OS Grid Reference:	471126 174455
Local Authority:	Reading Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	40				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	Central refuge - no other controls				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Bus or coach (17+ passenger seats)	-1	Unknown	Unknown	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Pedestrian	Female	26 - 35	On refuge, central island or central reservation	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

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No

Crash Date: Friday, October 06, 2017 **Time of Crash:** 12:15:00 AM **Crash Reference:** 2017430301597

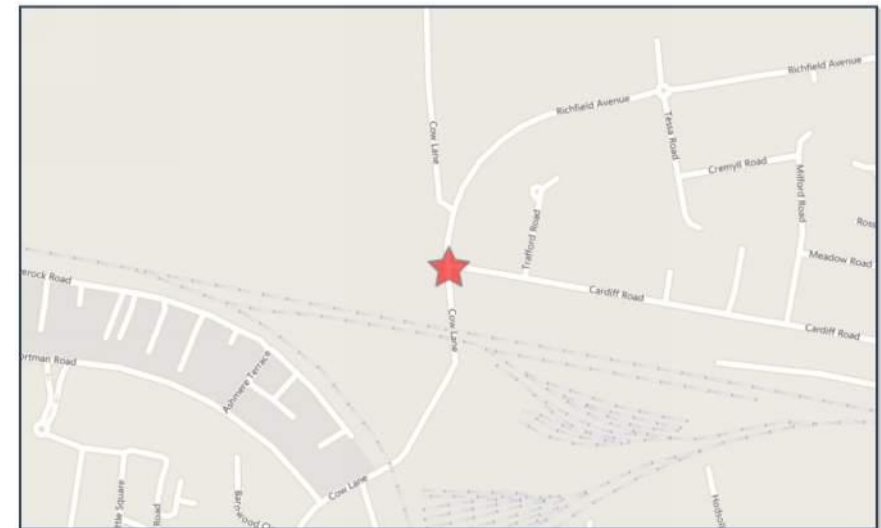
Highest Injury Severity: Slight
Highway Authority: Reading
Local Authority: Reading Borough
Weather Description: Fine without high winds
Road Surface Description: Dry
Speed Limit: 30
Light Conditions: Darkness: street lights present and lit
Carriageway Hazards: None
Junction Detail: Crossroads
Junction Pedestrian Crossing: No physical crossing facility within 50 metres
Road Type: Single carriageway
Junction Control: Give way or uncontrolled

Road Number: U0

Number of Casualties: 1

Number of Vehicles: 2

OS Grid Reference: 470352 174138



For more information about the data please visit: www.crashmap.co.uk/home/Faq

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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	Unknown	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
2	Car (excluding private hire)	15	Male	36 - 45	Vehicle is waiting to proceed normally but is held up	Back	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Vehicle or pillion passenger	Female	26 - 35	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

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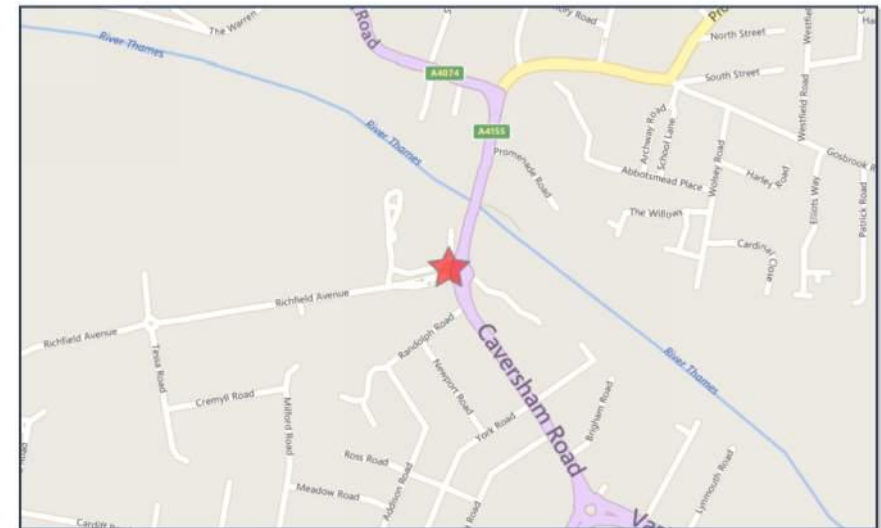


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No

Crash Date: Tuesday, October 31, 2017 **Time of Crash:** 7:10:00 AM **Crash Reference:** 2017430326818

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Reading	Number of Vehicles:	2	OS Grid Reference:	471109 174493
Local Authority:	Reading Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Female	36 - 45	Vehicle is waiting to proceed normally but is held up	Front	Other	None	None
2	Car (excluding private hire)	8	Male	26 - 35	Vehicle is waiting to proceed normally but is held up	Back	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

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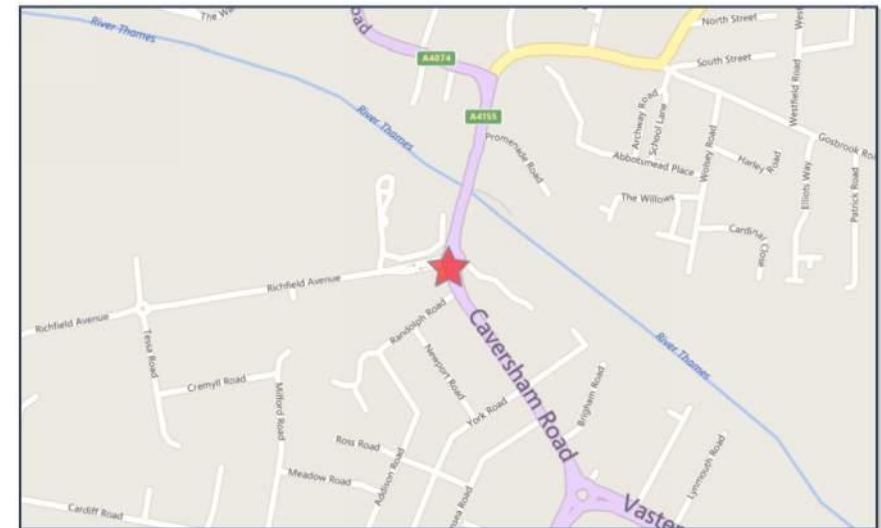


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No

Crash Date: Saturday, November 25, 2017 **Time of Crash:** 5:40:00 PM **Crash Reference:** 2017430356461

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Reading	Number of Vehicles:	2	OS Grid Reference:	471121 174476
Local Authority:	Reading Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	7	Male	36 - 45	Vehicle is moving off	Front	Other	None	None
2	Car (excluding private hire)	15	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

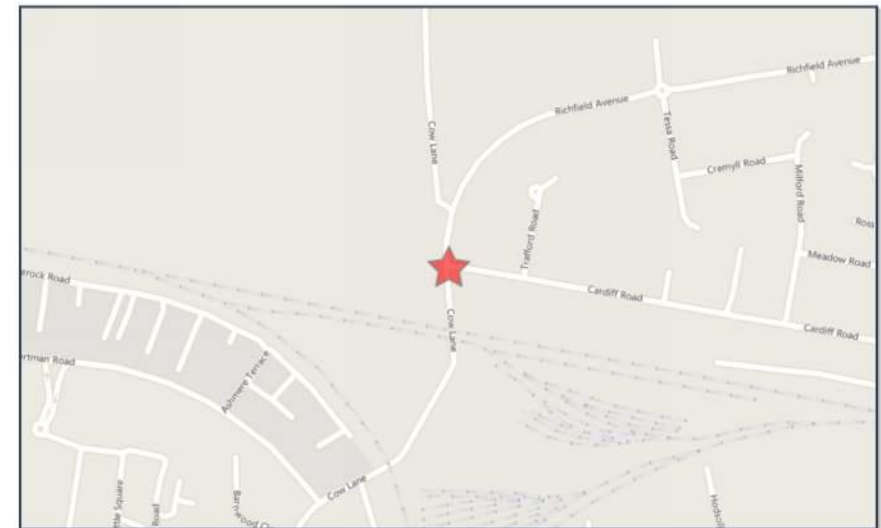
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No

Crash Date:	Wednesday, September 05, 2018	Time of Crash:	12:37:00 PM	Crash Reference:	2018430271595
Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Reading			Number of Vehicles:	2
Local Authority:	Reading Borough			OS Grid Reference:	470353 174145
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Using private drive or entrance				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Motorcycle 50cc and under	-1	Male	46 - 55	Vehicle is passing another moving vehicle on its offside	Front	Journey as part of work	None	None
2	Goods vehicle 7.5 tonnes mgw and over	-1	Male	56 - 65	Vehicle is in the act of turning right	Offside	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

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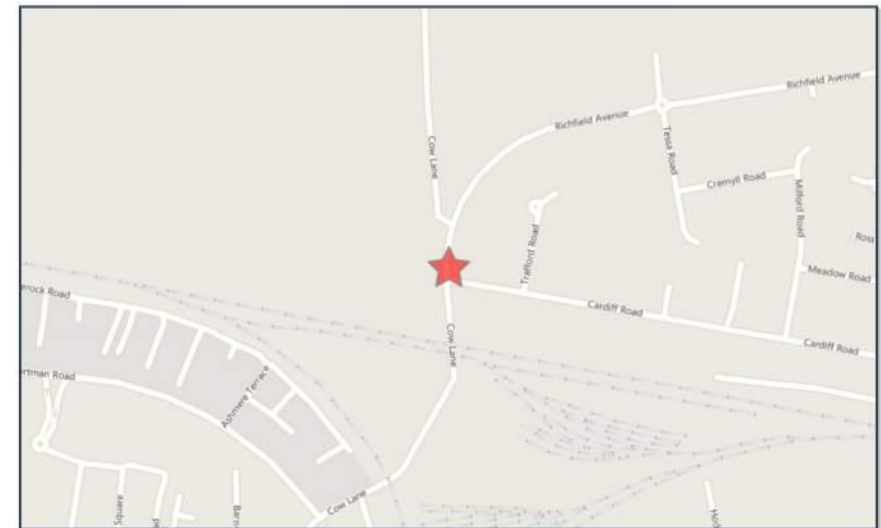


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No

Crash Date: Friday, September 07, 2018 **Time of Crash:** 9:10:00 AM **Crash Reference:** 2018430277776

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Reading	Number of Vehicles:	3	OS Grid Reference:	470353 174167
Local Authority:	Reading Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	Central refuge - no other controls				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes mgw and under		7 Male	26 - 35	Vehicle is moving off	Front	Other	None	None
2	Car (excluding private hire)		3 Male	36 - 45	Vehicle is waiting to proceed normally but is held up	Back	Taking pupil to/from school	None	None
3	Car (excluding private hire)		6 Female	Unknown	Vehicle is waiting to proceed normally but is held up	Back	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

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No

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Unknown	Unknown	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
2	Car (excluding private hire)	-1	Female	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Other	None	None

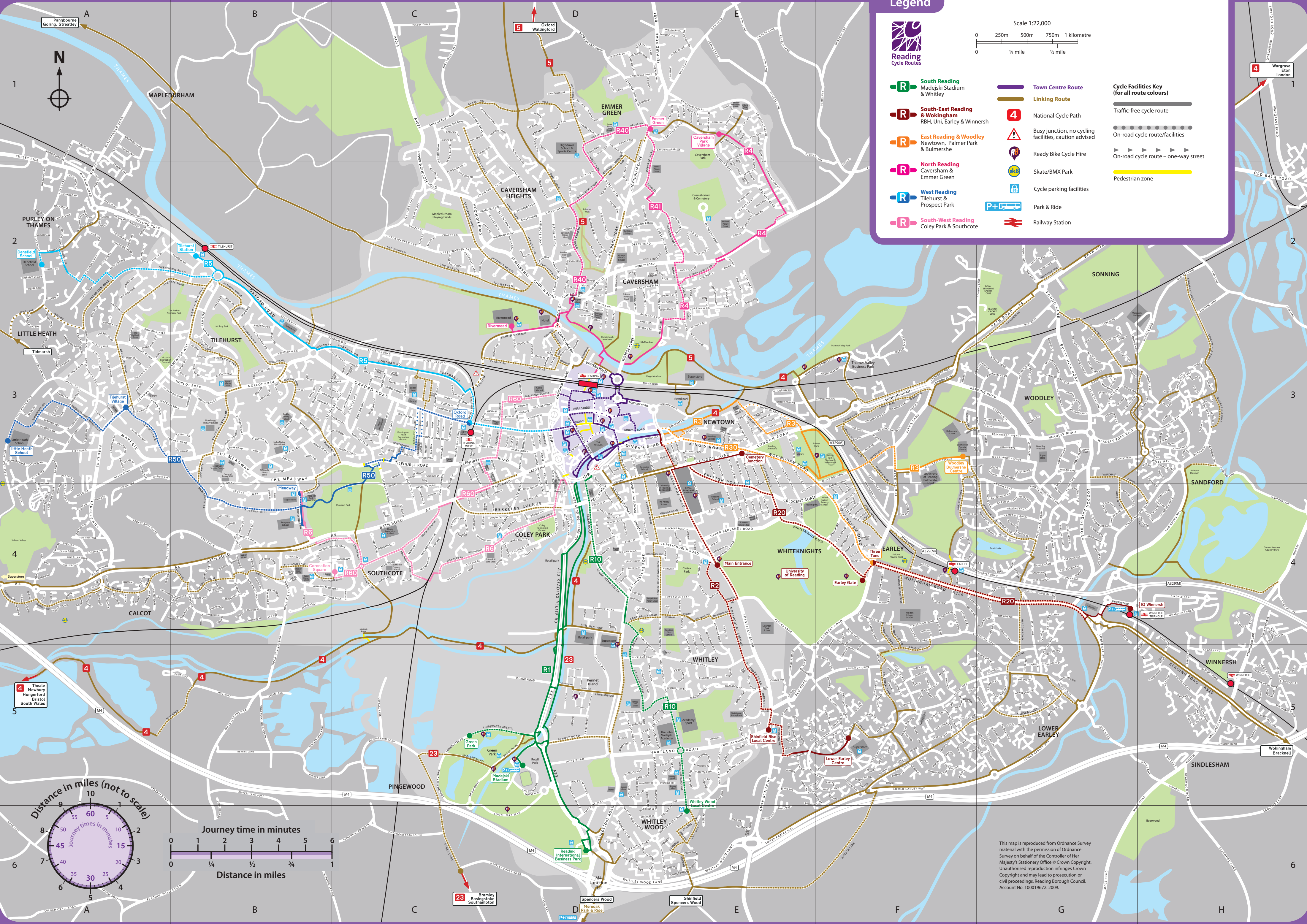
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	46 - 55	Unknown or other	Unknown or other

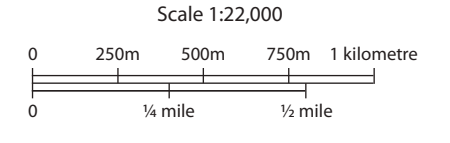
For more information about the data please visit: www.crashmap.co.uk/home/Faq

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Appendix B Reading Borough Council Cycle Map



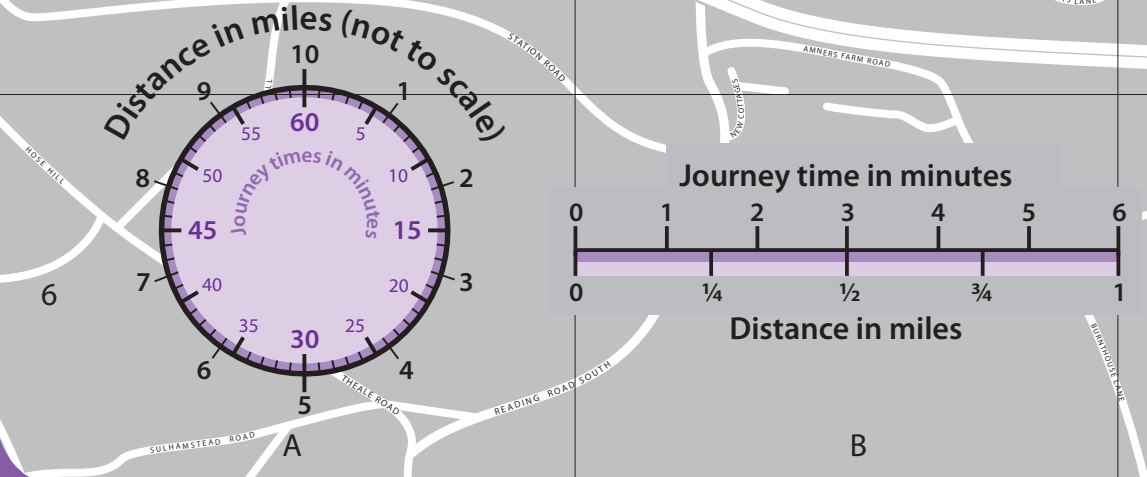
Legend



- R** South Reading
Madejski Stadium & Whitley
- R** South-East Reading & Wokingham
RBH, Uni, Earley & Winnersh
- R** East Reading & Woodley
Newtown, Palmer Park & Bulmershe
- R** North Reading
Caversham & Emmer Green
- R** West Reading
Tilehurst & Prospect Park
- R** South-West Reading
Coley Park & Southcote

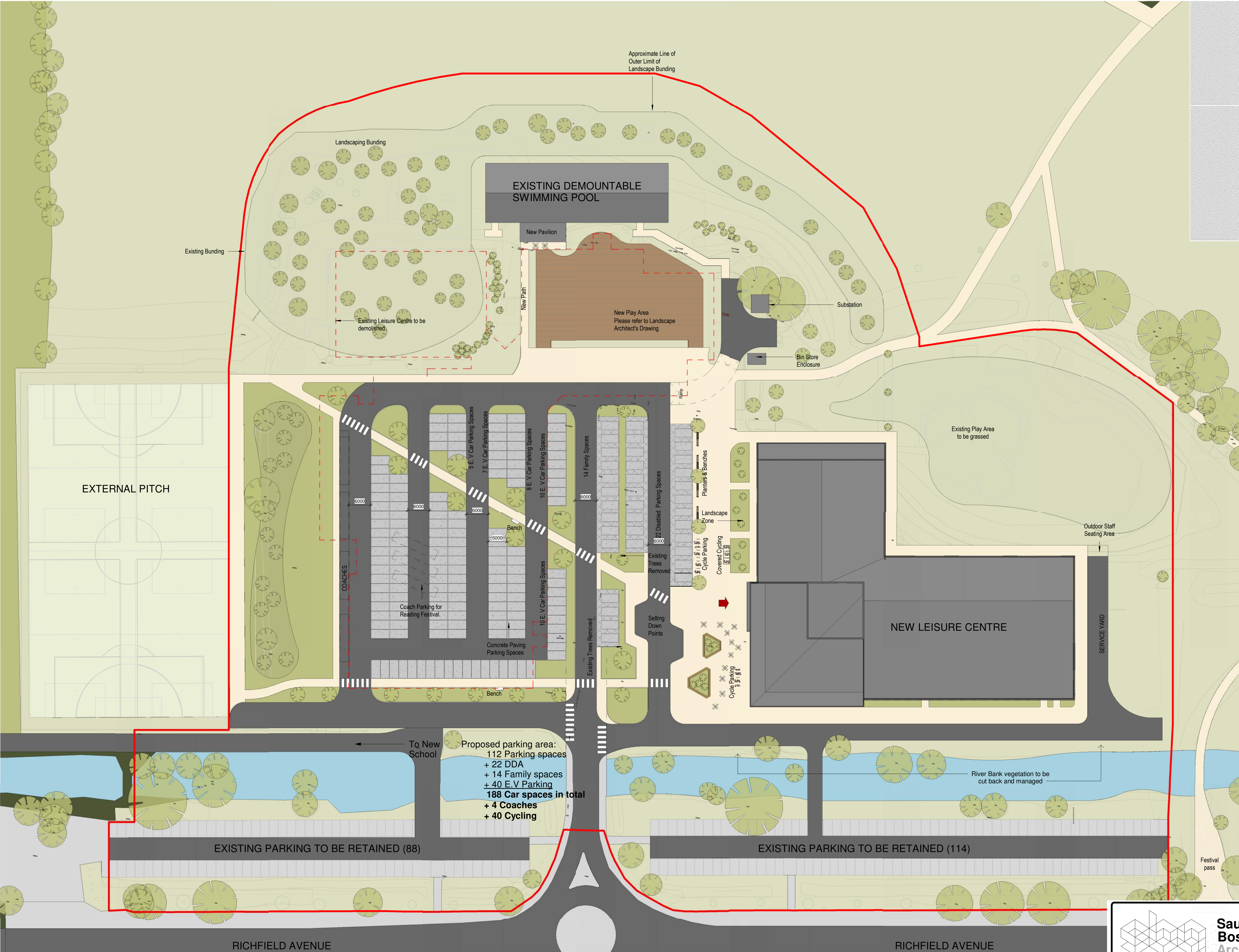
- Town Centre Route**
- Linking Route**
- 4** National Cycle Path
- Busy junction, no cycling facilities, caution advised
- Ready Bike Cycle Hire
- Skate/BMX Park
- Cycle parking facilities
- Park & Ride
- Railway Station

- Cycle Facilities Key (for all route colours)**
- Traffic-free cycle route
 - On-road cycle route/facilities
 - On-road cycle route – one-way street
 - Pedestrian zone



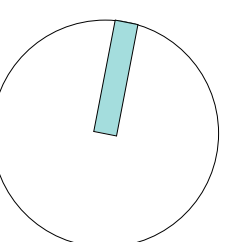
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Appendix C Proposed Site Layout



- No. Note
- 1 All dimensions to be verified on site by GENERAL CONTRACTOR prior to any work, setting out or shop drawings being prepared.
 - 2 Drawings not to be scaled. Work to figured dimensions only.
 - 3 © copyright SAUNDERS BOSTON LIMITED. All rights reserved.
This drawing remains the property of SAUNDERS BOSTON LIMITED at all times and may not be reproduced or copied in whole or in part without their prior written consent.
 - 4 This drawing and related specifications are for use only in the stated location.
 - 5 This drawing is to be read in conjunction with all other Consultants drawings and specifications.
 - 6 Drainage has not been surveyed and any/all pipe locations and below ground drainage runs are indicative.
 - 7 It is assumed that all works will be carried out by a competent contractor who will be working, where appropriate, to an approved method statement.

NORTH



Scale 1:500
0 5 10 15 25m

Total car parking spaces = 390

- Retained Existing parking spaces= 202
- New car parking spaces = 188

Proposed Parking

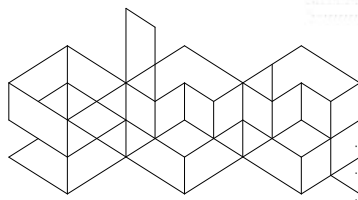
- 112 Parking spaces
- 22 DDA
- 14 Family spaces
- 40 E.V Parking/ Charging Points
- 188 Car spaces in total

+ 4 Coaches

+ 40 (20 Hoops) Cycling Spaces,
10 of those Covered

S	EV Parking and Landscaping Updated	19/11/20	CW	TZ
R	Cycle Parking Numbers Revised	18/11/20	CW	TZ
Q	Revised to Current	12/11/20	CW	TZ
P	Red Line Boundary and Landscaping Revised	04/11/20	CW	TZ
O	Bin Store Relocated, Landscaping Revised	03/11/20	CW	TZ
N	Pavilion Revised	30/10/20	CW	TZ
M	Revised to current	29/10/20	CW	TZ
L	Issued for Information	26/10/20	CW	TZ
K	Text Revised	23/10/20	MNL	TZ
J	Revised Red Line Boundary	23/10/20	CW	TZ
I	Revised Red Line Boundary	21/10/20	CW	TZ
H	Parking numbers adjusted and indicative bunding shown	20/10/20	CW	TZ
G	Issued for Coordination	08/10/20	CW	TZ
F	Issued for Information	02/10/20	CW	TZ
E	Drawing updated	17.09.20	CW	ES
D	Drawing updated	24.03.20	CW	ES
C	Landscaping principles amended	25.02.20	CW	ES
No.	Revision	Date	Chk.	Auth.

Client: GLL
Job: Reading DBOM Rivermead Leisure Centre
Drawing: Proposed Site Plan



**Saunders
Boston
Architects**

Eastern Gate House, 119 Newmarket Road,
Cambridge CB5 8HA
T:01223 367133
office@saundersboston.co.uk

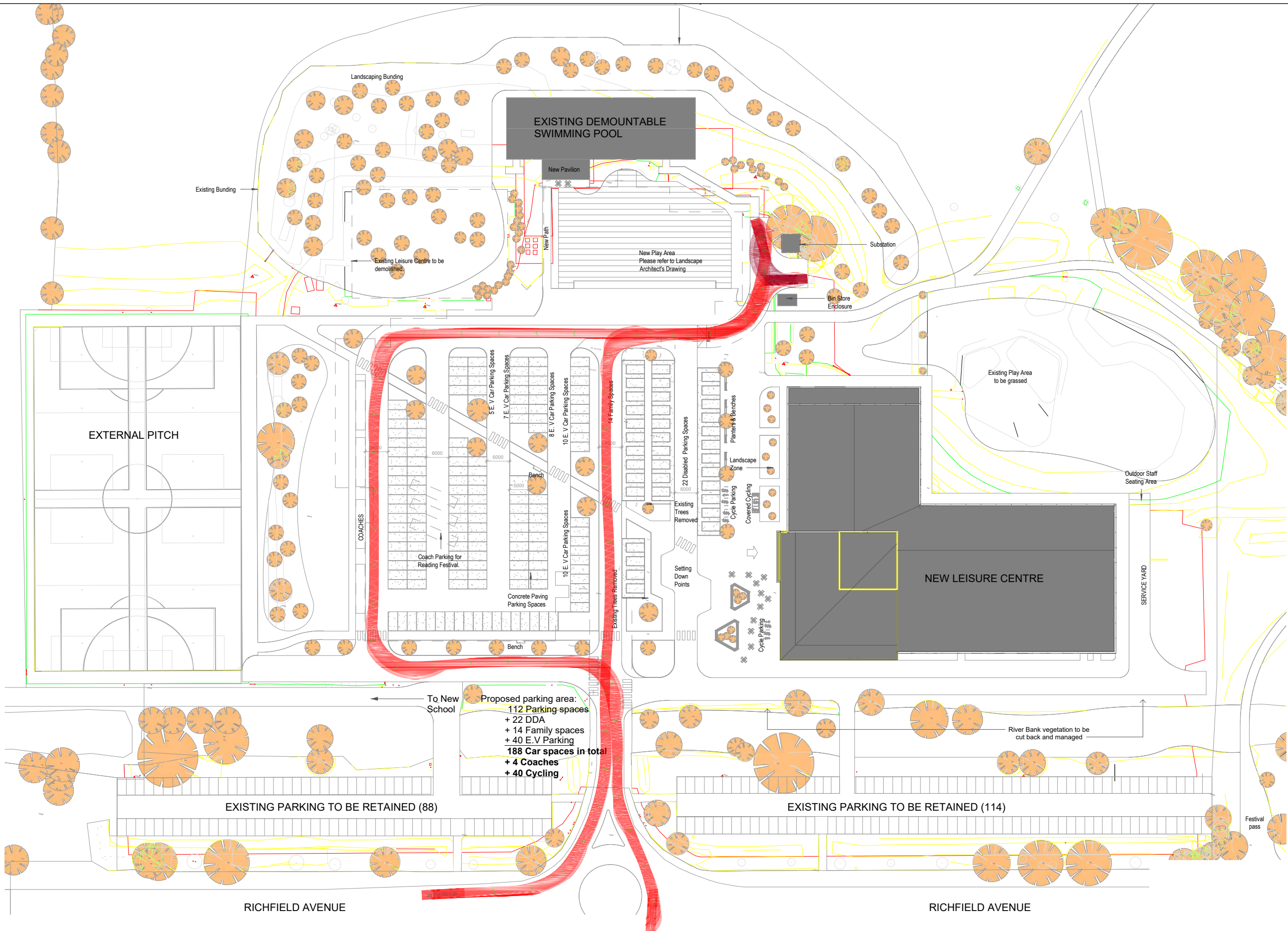
The Generator, The Gallery, King's Wharf
The Quay, Exeter EX2 4AN
T:01392 346627
www.saundersboston.co.uk

FOR INFORMATION

SBA Project Code	Drawn TZ	Date 02/26/19	Scale 1 : 500 @A1	Revision S
1790	Checked CW	Suitability Code S2	project 1790	originator zone level type role number -SBA-RM-XX-DR-A-5003

Proposed Site Plan
1 : 500

Appendix D Swept Path Analysis



KEY PLAN

Large Refuse Vehicle (4 axle)

Overall Length 11.347m
Overall Width 2.500m
Overall Body Height 3.500m
Min Body Ground Clearance 1.182m
Track Width 1.75m
Lock to lock time 1.352m
Wall to Wall Turning Radius 11.350m

NOTES

NOTES (CONTINUED)

REVISIONS (CONTINUED)

REVISIONS			
P04	24/11/2020	Fourth Issue.	AC DH DH
P03	04/11/2020	Third Issue.	AC DH DH
P02	29/10/2020	Second Issue.	AC DH DH
P01	26/10/2020	First Issue.	AC DH DH
Rev	Date	Description	By Ckd App

Hydrock

FIRST FLOOR, CASTLEBRIDGE 5
5-19 COWBRIDGE ROAD EAST
CARDIFF
CF11 9AB
t: +44 (0) 2920 023665
e: cardiff@hydrock.com

CLIENT
GREENWICH LEISURE
LIMITED (GLL)

PROJECT
RIVERMEAD LEISURE CENTRE,
READING

TITLE SWEEP PATH ANALYSIS - LARE REFUSE USED		
HYDROCK PROJECT NO. C-15058		SCALE @ A3 1:1000
STATUS DESCRIPTION FOR STAGE APPROVAL		STATUS S4
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 15058-HYD-XX-XX-DR-TP-0101		REVISION P04

TITLE	
SWEEP PATH ANALYSIS - LARE REFUSE USED	
HYDROCK PROJECT NO. C-15058	SCALE @ A3 1:250
STATUS DESCRIPTION	STATUS
FOR STAGE APPROVAL	S4
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)	REVISION
15058-HYD-XX-XX-DR-TP-0102	P04

P:\15000-15999\C-15058 - Rivermead Leisure Centre\01_WIP\M2_Model_2d\TP15058-HYD-XX-XX-M2-TP-0003.dwg, 24/11/2020 08:14:48, DWG To PDF.pc3



KEY PLAN Large Refuse Vehicle (4 axle) Overall Length11.347m Overall Width2.500m Overall Body Height3.751m Min Body Ground Clearance0.404m Track Width2.500m Lock to lock time6.00s Wall to Wall Turning Radius11.330m										NOTES										NOTES (CONTINUED)										REVISIONS (CONTINUED)										REVISIONS										FIRST FLOOR, CASTLEBRIDGE S 5-19 COWBRIDGE ROAD EAST CARDIFF CF11 9AB t: +44 (0) 2920 023665 e: cardiff@hydrock.com Hydrock CLIENT GREENWICH LEISURE LIMITED (GLL) PROJECT RIVERMEAD LEISURE CENTRE, READING										TITLE SWEPT PATH ANALYSIS - LARE REFUSE USED									
P01 24/11/2020 First Issue. ACDH DH																																								HYDROCK PROJECT NO. C-15058										SCALE @ A3 1:1000																			
RevDateDescriptionByCkdApp																																																		STATUS DESCRIPTION FOR STAGE APPROVAL										STATUS S4									
																																																		DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER) 15058-HYD-XX-XX-DR-TP-0103										REVISION P01									

Appendix E ATC Results

2016 ATC Results - Entry and Exit

Time	Vehicle Count (all vehicles)																			
	14/10/2016		15/10/2016		16/10/2016		17/10/2016		18/10/2016		19/10/2016		20/10/2016		21/10/2016		22/10/2016		23/10/2016	
	Friday		Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
0000	***	***	0	9	4	41	1	0	0	2	0	7	0	0	4	4	2	12	6	24
0100	***	***	2	7	5	9	0	0	0	0	2	3	0	0	2	9	0	4	2	24
0200	***	***	5	9	2	5	0	2	0	0	0	0	0	0	0	0	0	0	2	29
0300	***	***	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	***	***	1	7	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5
0500	***	***	0	2	0	7	2	0	4	0	2	3	2	0	2	0	0	0	0	10
0600	***	***	4	0	3	0	10	0	3	0	4	0	9	2	8	0	5	0	4	5
0700	***	***	90	4	16	3	44	8	33	13	33	2	37	8	27	13	91	0	25	10
0800	***	***	154	36	96	9	64	12	67	11	34	17	55	6	74	9	161	36	49	10
0900	***	***	109	151	75	41	227	27	227	20	105	7	105	23	171	20	146	123	58	29
1000	***	***	79	77	120	78	86	44	92	97	93	29	101	44	79	25	89	77	***	***
1100	***	***	73	98	74	106	70	144	70	163	48	81	38	77	48	120	55	87	***	***
1200	***	***	56	62	55	92	68	203	82	115	53	110	45	77	50	142	47	69	***	***
1300	***	***	51	68	51	51	80	54	53	58	33	55	65	40	40	51	79	87	***	***
1400	***	***	49	25	51	53	47	65	42	82	37	52	41	27	41	64	69	55	***	***
1500	***	***	65	55	49	63	56	82	77	46	75	14	85	33	44	44	37	61	***	***
1600	75	147	69	37	54	56	109	88	107	99	82	84	65	138	61	58	30	45	***	***
1700	80	56	62	27	51	60	122	102	157	121	114	70	89	104	73	64	20	47	***	***
1800	65	27	54	86	23	39	173	109	151	126	131	79	128	44	61	82	7	111	***	***
1900	47	10	42	21	13	14	110	109	136	161	70	122	87	129	41	38	6	8	***	***
2000	14	47	14	12	5	3	42	190	42	152	41	86	99	58	18	74	8	10	***	***
2100	10	19	18	34	4	0	19	58	26	71	11	119	18	226	2	20	12	18	***	***
2200	2	2	14	107	1	15	5	36	7	42	1	24	0	36	6	9	10	8	***	***
2300	3	1	8	86	2	3	0	2	1	0	0	5	2	0	0	7	6	22	***	***
Total	296	309	1019	1020	754	754	1335	1335	1377	1379	969	969	1071	1072	852	853	880	880	146	146

Appendix F TRICS Outputs

Calculation Reference: AUDIT-540501-201007-1032

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
 Category : C - LEISURE CENTRE
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	CF CARDIFF	1 days
11	SCOTLAND	
	AG ANGUS	1 days
	EL EAST LOTHIAN	1 days

Primary Filtering selection:

Parameter: Gross floor area
 Actual Range: 2150 to 12188 (units: sqm)
 Range Selected by User: 360 to 17000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 28/11/19

Selected survey days:

Wednesday 5 days
 Thursday 1 days

Selected survey types:

Manual count 6 days
 Directional ATC Count 0 days

Selected Locations:

Edge of Town Centre 3
 Suburban Area (PPS6 Out of Centre) 3

Selected Location Sub Categories:

Residential Zone 3
 Built-Up Zone 2
 No Sub Category 1

Secondary Filtering selection:

Use Class:

D2 6 days

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
 20,001 to 25,000 1 days
 25,001 to 50,000 3 days

Population within 5 miles:

25,001 to 50,000 1 days
 125,001 to 250,000 2 days
 250,001 to 500,000 3 days

Car ownership within 5 miles:

0.6 to 1.0 3 days
 1.1 to 1.5 3 days

Secondary Filtering selection (Cont.):

Travel Plan:

No	6 days
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PTAL Rating:

No PTAL Present	6 days
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LIST OF SITES relevant to selection parameters

1	AG-07-C-01	LEISURE CENTRE	ANGUS
	A92 MONTROSE ROAD		
	ARBROATH		
	WARD DYKES		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	4738 sqm	
	Survey date: WEDNESDAY	23/05/12	Survey Type: MANUAL
2	CF-07-C-01	LEISURE CENTRE	CARDIFF
	JIM DRISCOLL WAY		
	CARDIFF		
	WINDSOR QUAY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	2150 sqm	
	Survey date: WEDNESDAY	18/07/12	Survey Type: MANUAL
3	EL-07-C-01	LEISURE CENTRE	EAST Lothian
	NEwBIGGING		
	MUSSELBURGH		
	Edge of Town Centre		
	No Sub Category		
	Total Gross floor area:	4125 sqm	
	Survey date: WEDNESDAY	25/04/18	Survey Type: MANUAL
4	NF-07-C-04	LEISURE CENTRE	NORFOLK
	WHERRY ROAD		
	NORWICH		
	Edge of Town Centre		
	Built-Up Zone		
	Total Gross floor area:	2910 sqm	
	Survey date: THURSDAY	28/11/19	Survey Type: MANUAL
5	TW-07-C-03	LEISURE CENTRE	TYNE & WEAR
	ALEXANDRA ROAD		
	GATESHEAD		
	MOUNT PLEASANT		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	12188 sqm	
	Survey date: WEDNESDAY	01/05/19	Survey Type: MANUAL
6	WL-07-C-01	LEISURE CENTRE	WILTSHIRE
	NORTH STAR AVENUE		
	SWINDON		
	Edge of Town Centre		
	Built-Up Zone		
	Total Gross floor area:	9600 sqm	
	Survey date: WEDNESDAY	21/09/16	Survey Type: MANUAL

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CB-07-C-03	No parking
DV-07-C-02	No parking
NT-07-C-04	No parking

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

MULTI-MODAL TOTAL VEHICLES

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	4	7206	0.222	4	7206	0.028	4	7206	0.250
07:00 - 08:00	5	6712	0.158	5	6712	0.101	5	6712	0.259
08:00 - 09:00	6	5952	0.224	6	5952	0.151	6	5952	0.375
09:00 - 10:00	6	5952	0.462	6	5952	0.190	6	5952	0.652
10:00 - 11:00	6	5952	0.459	6	5952	0.358	6	5952	0.817
11:00 - 12:00	6	5952	0.319	6	5952	0.339	6	5952	0.658
12:00 - 13:00	6	5952	0.316	6	5952	0.386	6	5952	0.702
13:00 - 14:00	6	5952	0.274	6	5952	0.330	6	5952	0.604
14:00 - 15:00	6	5952	0.266	6	5952	0.294	6	5952	0.560
15:00 - 16:00	6	5952	0.356	6	5952	0.297	6	5952	0.653
16:00 - 17:00	6	5952	0.414	6	5952	0.378	6	5952	0.792
17:00 - 18:00	6	5952	0.636	6	5952	0.406	6	5952	1.042
18:00 - 19:00	6	5952	0.647	6	5952	0.602	6	5952	1.249
19:00 - 20:00	6	5952	0.381	6	5952	0.552	6	5952	0.933
20:00 - 21:00	6	5952	0.227	6	5952	0.490	6	5952	0.717
21:00 - 22:00	6	5952	0.062	6	5952	0.322	6	5952	0.384
22:00 - 23:00	3	6612	0.000	3	6612	0.207	3	6612	0.207
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			5.423				5.431	10.854	

Parameter summary

Trip rate parameter range selected: 2150 - 12188 (units: sqm)
 Survey date range: 01/01/12 - 28/11/19
 Number of weekdays (Monday-Friday): 6
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 3

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne

Licence No: 540501

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

MULTI-MODAL TAXIS

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	4	7206	0.000	4	7206	0.000	4	7206	0.000
07:00 - 08:00	5	6712	0.000	5	6712	0.000	5	6712	0.000
08:00 - 09:00	6	5952	0.003	6	5952	0.003	6	5952	0.006
09:00 - 10:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
10:00 - 11:00	6	5952	0.006	6	5952	0.003	6	5952	0.009
11:00 - 12:00	6	5952	0.003	6	5952	0.006	6	5952	0.009
12:00 - 13:00	6	5952	0.006	6	5952	0.003	6	5952	0.009
13:00 - 14:00	6	5952	0.006	6	5952	0.008	6	5952	0.014
14:00 - 15:00	6	5952	0.006	6	5952	0.006	6	5952	0.012
15:00 - 16:00	6	5952	0.011	6	5952	0.008	6	5952	0.019
16:00 - 17:00	6	5952	0.003	6	5952	0.000	6	5952	0.003
17:00 - 18:00	6	5952	0.003	6	5952	0.008	6	5952	0.011
18:00 - 19:00	6	5952	0.003	6	5952	0.003	6	5952	0.006
19:00 - 20:00	6	5952	0.003	6	5952	0.003	6	5952	0.006
20:00 - 21:00	6	5952	0.003	6	5952	0.003	6	5952	0.006
21:00 - 22:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
22:00 - 23:00	3	6612	0.000	3	6612	0.000	3	6612	0.000
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			0.056			0.054			0.110

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
MULTI-MODAL OGVS
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	4	7206	0.000	4	7206	0.000	4	7206	0.000
07:00 - 08:00	5	6712	0.003	5	6712	0.000	5	6712	0.003
08:00 - 09:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
09:00 - 10:00	6	5952	0.006	6	5952	0.003	6	5952	0.009
10:00 - 11:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
11:00 - 12:00	6	5952	0.003	6	5952	0.006	6	5952	0.009
12:00 - 13:00	6	5952	0.003	6	5952	0.000	6	5952	0.003
13:00 - 14:00	6	5952	0.003	6	5952	0.003	6	5952	0.006
14:00 - 15:00	6	5952	0.003	6	5952	0.006	6	5952	0.009
15:00 - 16:00	6	5952	0.000	6	5952	0.003	6	5952	0.003
16:00 - 17:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
17:00 - 18:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
18:00 - 19:00	6	5952	0.003	6	5952	0.000	6	5952	0.003
19:00 - 20:00	6	5952	0.000	6	5952	0.003	6	5952	0.003
20:00 - 21:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
21:00 - 22:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
22:00 - 23:00	3	6612	0.000	3	6612	0.000	3	6612	0.000
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			0.024			0.024			0.048

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
MULTI-MODAL PSVS
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	4	7206	0.000	4	7206	0.000	4	7206	0.000
07:00 - 08:00	5	6712	0.000	5	6712	0.000	5	6712	0.000
08:00 - 09:00	6	5952	0.003	6	5952	0.000	6	5952	0.003
09:00 - 10:00	6	5952	0.006	6	5952	0.003	6	5952	0.009
10:00 - 11:00	6	5952	0.006	6	5952	0.006	6	5952	0.012
11:00 - 12:00	6	5952	0.003	6	5952	0.003	6	5952	0.006
12:00 - 13:00	6	5952	0.000	6	5952	0.006	6	5952	0.006
13:00 - 14:00	6	5952	0.006	6	5952	0.006	6	5952	0.012
14:00 - 15:00	6	5952	0.006	6	5952	0.000	6	5952	0.006
15:00 - 16:00	6	5952	0.000	6	5952	0.006	6	5952	0.006
16:00 - 17:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
17:00 - 18:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
18:00 - 19:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
19:00 - 20:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
20:00 - 21:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
21:00 - 22:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
22:00 - 23:00	3	6612	0.000	3	6612	0.000	3	6612	0.000
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			0.030			0.030			0.060

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
 MULTI-MODAL CYCLISTS
 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	4	7206	0.031	4	7206	0.000	4	7206	0.031
07:00 - 08:00	5	6712	0.012	5	6712	0.015	5	6712	0.027
08:00 - 09:00	6	5952	0.011	6	5952	0.008	6	5952	0.019
09:00 - 10:00	6	5952	0.028	6	5952	0.011	6	5952	0.039
10:00 - 11:00	6	5952	0.008	6	5952	0.025	6	5952	0.033
11:00 - 12:00	6	5952	0.006	6	5952	0.006	6	5952	0.012
12:00 - 13:00	6	5952	0.036	6	5952	0.014	6	5952	0.050
13:00 - 14:00	6	5952	0.011	6	5952	0.039	6	5952	0.050
14:00 - 15:00	6	5952	0.014	6	5952	0.006	6	5952	0.020
15:00 - 16:00	6	5952	0.031	6	5952	0.017	6	5952	0.048
16:00 - 17:00	6	5952	0.048	6	5952	0.034	6	5952	0.082
17:00 - 18:00	6	5952	0.042	6	5952	0.028	6	5952	0.070
18:00 - 19:00	6	5952	0.036	6	5952	0.045	6	5952	0.081
19:00 - 20:00	6	5952	0.008	6	5952	0.050	6	5952	0.058
20:00 - 21:00	6	5952	0.022	6	5952	0.020	6	5952	0.042
21:00 - 22:00	6	5952	0.000	6	5952	0.017	6	5952	0.017
22:00 - 23:00	3	6612	0.000	3	6612	0.000	3	6612	0.000
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			0.344			0.335			0.679

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
 MULTI-MODAL VEHICLE OCCUPANTS
 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	4	7206	0.243	4	7206	0.017	4	7206	0.260
07:00 - 08:00	5	6712	0.194	5	6712	0.107	5	6712	0.301
08:00 - 09:00	6	5952	0.266	6	5952	0.185	6	5952	0.451
09:00 - 10:00	6	5952	0.669	6	5952	0.232	6	5952	0.901
10:00 - 11:00	6	5952	0.596	6	5952	0.445	6	5952	1.041
11:00 - 12:00	6	5952	0.473	6	5952	0.482	6	5952	0.955
12:00 - 13:00	6	5952	0.462	6	5952	0.529	6	5952	0.991
13:00 - 14:00	6	5952	0.372	6	5952	0.470	6	5952	0.842
14:00 - 15:00	6	5952	0.412	6	5952	0.451	6	5952	0.863
15:00 - 16:00	6	5952	0.568	6	5952	0.437	6	5952	1.005
16:00 - 17:00	6	5952	0.722	6	5952	0.566	6	5952	1.288
17:00 - 18:00	6	5952	0.927	6	5952	0.714	6	5952	1.641
18:00 - 19:00	6	5952	0.932	6	5952	0.890	6	5952	1.822
19:00 - 20:00	6	5952	0.487	6	5952	0.790	6	5952	1.277
20:00 - 21:00	6	5952	0.311	6	5952	0.736	6	5952	1.047
21:00 - 22:00	6	5952	0.059	6	5952	0.448	6	5952	0.507
22:00 - 23:00	3	6612	0.000	3	6612	0.217	3	6612	0.217
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			7.693			7.716			15.409

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
MULTI-MODAL PEDESTRIANS
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	4	7206	0.059	4	7206	0.007	4	7206	0.066
07:00 - 08:00	5	6712	0.089	5	6712	0.051	5	6712	0.140
08:00 - 09:00	6	5952	0.081	6	5952	0.073	6	5952	0.154
09:00 - 10:00	6	5952	0.134	6	5952	0.070	6	5952	0.204
10:00 - 11:00	6	5952	0.171	6	5952	0.143	6	5952	0.314
11:00 - 12:00	6	5952	0.235	6	5952	0.146	6	5952	0.381
12:00 - 13:00	6	5952	0.260	6	5952	0.252	6	5952	0.512
13:00 - 14:00	6	5952	0.406	6	5952	0.216	6	5952	0.622
14:00 - 15:00	6	5952	0.179	6	5952	0.420	6	5952	0.599
15:00 - 16:00	6	5952	0.241	6	5952	0.140	6	5952	0.381
16:00 - 17:00	6	5952	0.263	6	5952	0.213	6	5952	0.476
17:00 - 18:00	6	5952	0.395	6	5952	0.302	6	5952	0.697
18:00 - 19:00	6	5952	0.336	6	5952	0.302	6	5952	0.638
19:00 - 20:00	6	5952	0.241	6	5952	0.356	6	5952	0.597
20:00 - 21:00	6	5952	0.160	6	5952	0.300	6	5952	0.460
21:00 - 22:00	6	5952	0.028	6	5952	0.140	6	5952	0.168
22:00 - 23:00	3	6612	0.005	3	6612	0.055	3	6612	0.060
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			3.283			3.186			6.469

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

MULTI-MODAL BUS/TRAM PASSENGERS

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	4	7206	0.021	4	7206	0.000	4	7206	0.021
07:00 - 08:00	5	6712	0.039	5	6712	0.012	5	6712	0.051
08:00 - 09:00	6	5952	0.039	6	5952	0.020	6	5952	0.059
09:00 - 10:00	6	5952	0.059	6	5952	0.031	6	5952	0.090
10:00 - 11:00	6	5952	0.073	6	5952	0.031	6	5952	0.104
11:00 - 12:00	6	5952	0.053	6	5952	0.050	6	5952	0.103
12:00 - 13:00	6	5952	0.062	6	5952	0.064	6	5952	0.126
13:00 - 14:00	6	5952	0.036	6	5952	0.064	6	5952	0.100
14:00 - 15:00	6	5952	0.048	6	5952	0.081	6	5952	0.129
15:00 - 16:00	6	5952	0.081	6	5952	0.064	6	5952	0.145
16:00 - 17:00	6	5952	0.101	6	5952	0.078	6	5952	0.179
17:00 - 18:00	6	5952	0.123	6	5952	0.078	6	5952	0.201
18:00 - 19:00	6	5952	0.084	6	5952	0.098	6	5952	0.182
19:00 - 20:00	6	5952	0.098	6	5952	0.106	6	5952	0.204
20:00 - 21:00	6	5952	0.034	6	5952	0.092	6	5952	0.126
21:00 - 22:00	6	5952	0.006	6	5952	0.064	6	5952	0.070
22:00 - 23:00	3	6612	0.000	3	6612	0.035	3	6612	0.035
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			0.957			0.968			1.925

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

MULTI-MODAL TOTAL RAIL PASSENGERS

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	4	7206	0.010	4	7206	0.000	4	7206	0.010
07:00 - 08:00	5	6712	0.027	5	6712	0.006	5	6712	0.033
08:00 - 09:00	6	5952	0.017	6	5952	0.011	6	5952	0.028
09:00 - 10:00	6	5952	0.025	6	5952	0.020	6	5952	0.045
10:00 - 11:00	6	5952	0.017	6	5952	0.025	6	5952	0.042
11:00 - 12:00	6	5952	0.025	6	5952	0.020	6	5952	0.045
12:00 - 13:00	6	5952	0.031	6	5952	0.031	6	5952	0.062
13:00 - 14:00	6	5952	0.028	6	5952	0.022	6	5952	0.050
14:00 - 15:00	6	5952	0.020	6	5952	0.036	6	5952	0.056
15:00 - 16:00	6	5952	0.028	6	5952	0.039	6	5952	0.067
16:00 - 17:00	6	5952	0.045	6	5952	0.031	6	5952	0.076
17:00 - 18:00	6	5952	0.045	6	5952	0.036	6	5952	0.081
18:00 - 19:00	6	5952	0.059	6	5952	0.048	6	5952	0.107
19:00 - 20:00	6	5952	0.042	6	5952	0.050	6	5952	0.092
20:00 - 21:00	6	5952	0.025	6	5952	0.039	6	5952	0.064
21:00 - 22:00	6	5952	0.003	6	5952	0.025	6	5952	0.028
22:00 - 23:00	3	6612	0.000	3	6612	0.010	3	6612	0.010
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			0.447			0.449			0.896

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
 MULTI-MODAL COACH PASSENGERS
 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	4	7206	0.000	4	7206	0.000	4	7206	0.000
07:00 - 08:00	5	6712	0.000	5	6712	0.000	5	6712	0.000
08:00 - 09:00	6	5952	0.045	6	5952	0.000	6	5952	0.045
09:00 - 10:00	6	5952	0.199	6	5952	0.000	6	5952	0.199
10:00 - 11:00	6	5952	0.168	6	5952	0.151	6	5952	0.319
11:00 - 12:00	6	5952	0.000	6	5952	0.168	6	5952	0.168
12:00 - 13:00	6	5952	0.000	6	5952	0.092	6	5952	0.092
13:00 - 14:00	6	5952	0.092	6	5952	0.006	6	5952	0.098
14:00 - 15:00	6	5952	0.008	6	5952	0.000	6	5952	0.008
15:00 - 16:00	6	5952	0.000	6	5952	0.095	6	5952	0.095
16:00 - 17:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
17:00 - 18:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
18:00 - 19:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
19:00 - 20:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
20:00 - 21:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
21:00 - 22:00	6	5952	0.000	6	5952	0.000	6	5952	0.000
22:00 - 23:00	3	6612	0.000	3	6612	0.000	3	6612	0.000
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			0.512			0.512			1.024

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
 MULTI-MODAL PUBLIC TRANSPORT USERS
 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	4	7206	0.031	4	7206	0.000	4	7206	0.031
07:00 - 08:00	5	6712	0.066	5	6712	0.018	5	6712	0.084
08:00 - 09:00	6	5952	0.101	6	5952	0.031	6	5952	0.132
09:00 - 10:00	6	5952	0.283	6	5952	0.050	6	5952	0.333
10:00 - 11:00	6	5952	0.258	6	5952	0.207	6	5952	0.465
11:00 - 12:00	6	5952	0.078	6	5952	0.238	6	5952	0.316
12:00 - 13:00	6	5952	0.092	6	5952	0.188	6	5952	0.280
13:00 - 14:00	6	5952	0.157	6	5952	0.092	6	5952	0.249
14:00 - 15:00	6	5952	0.076	6	5952	0.118	6	5952	0.194
15:00 - 16:00	6	5952	0.109	6	5952	0.199	6	5952	0.308
16:00 - 17:00	6	5952	0.146	6	5952	0.109	6	5952	0.255
17:00 - 18:00	6	5952	0.168	6	5952	0.115	6	5952	0.283
18:00 - 19:00	6	5952	0.143	6	5952	0.146	6	5952	0.289
19:00 - 20:00	6	5952	0.140	6	5952	0.157	6	5952	0.297
20:00 - 21:00	6	5952	0.059	6	5952	0.132	6	5952	0.191
21:00 - 22:00	6	5952	0.008	6	5952	0.090	6	5952	0.098
22:00 - 23:00	3	6612	0.000	3	6612	0.045	3	6612	0.045
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			1.915			1.935			3.850

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

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	4	7206	0.364	4	7206	0.024	4	7206	0.388
07:00 - 08:00	5	6712	0.361	5	6712	0.191	5	6712	0.552
08:00 - 09:00	6	5952	0.459	6	5952	0.297	6	5952	0.756
09:00 - 10:00	6	5952	1.115	6	5952	0.364	6	5952	1.479
10:00 - 11:00	6	5952	1.033	6	5952	0.820	6	5952	1.853
11:00 - 12:00	6	5952	0.792	6	5952	0.871	6	5952	1.663
12:00 - 13:00	6	5952	0.851	6	5952	0.983	6	5952	1.834
13:00 - 14:00	6	5952	0.946	6	5952	0.818	6	5952	1.764
14:00 - 15:00	6	5952	0.680	6	5952	0.994	6	5952	1.674
15:00 - 16:00	6	5952	0.949	6	5952	0.792	6	5952	1.741
16:00 - 17:00	6	5952	1.179	6	5952	0.921	6	5952	2.100
17:00 - 18:00	6	5952	1.532	6	5952	1.159	6	5952	2.691
18:00 - 19:00	6	5952	1.448	6	5952	1.383	6	5952	2.831
19:00 - 20:00	6	5952	0.876	6	5952	1.353	6	5952	2.229
20:00 - 21:00	6	5952	0.552	6	5952	1.187	6	5952	1.739
21:00 - 22:00	6	5952	0.095	6	5952	0.694	6	5952	0.789
22:00 - 23:00	3	6612	0.005	3	6612	0.318	3	6612	0.323
23:00 - 24:00	1	4738	0.000	1	4738	0.000	1	4738	0.000
Total Rates:			13.237			13.169			26.406

Calculation Reference: AUDIT-540501-201007-1042

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
 Category : C - LEISURE CENTRE
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
11	SCOTLAND	
	EB CITY OF EDINBURGH	1 days

Primary Filtering selection:

Parameter: Gross floor area
 Actual Range: 2530 to 3300 (units: sqm)
 Range Selected by User: 360 to 17000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/00 to 28/11/19

Selected survey days:

Saturday 2 days

Selected survey types:

Manual count 2 days
 Directional ATC Count 0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre) 1
 Edge of Town 1

Selected Location Sub Categories:

Built-Up Zone 1
 Out of Town 1

Secondary Filtering selection:

Use Class:

D2 2 days

Population within 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000 1 days
 50,001 to 100,000 1 days

Population within 5 miles:

25,001 to 50,000 1 days
 250,001 to 500,000 1 days

Car ownership within 5 miles:

0.6 to 1.0 1 days
 1.1 to 1.5 1 days

Travel Plan:

No 2 days

PTAL Rating:

No PTAL Present 2 days

LIST OF SITES relevant to selection parameters

1	EB-07-C-02	SWIMMING POOL	CITY OF EDINBURGH
	LEITH WALK		
	EDINBURGH		
	LEITH		
	Suburban Area (PPS6 Out of Centre)		
	Built-Up Zone		
	Total Gross floor area:	3300 sqm	
	Survey date: SATURDAY	30/10/10	Survey Type: MANUAL
2	NY-07-C-02	LEISURE CENTRE	NORTH YORKSHIRE
	GARGRAVE ROAD		
	SKIPTON		
	Edge of Town		
	Out of Town		
	Total Gross floor area:	2530 sqm	
	Survey date: SATURDAY	09/03/19	Survey Type: MANUAL

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE

MULTI-MODAL TOTAL VEHICLES

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									
08:00 - 09:00	1	2530	2.411	1	2530	0.988	1	2530	3.399
09:00 - 10:00	2	2915	1.304	2	2915	1.321	2	2915	2.625
10:00 - 11:00	2	2915	1.784	2	2915	1.664	2	2915	3.448
11:00 - 12:00	2	2915	2.075	2	2915	2.161	2	2915	4.236
12:00 - 13:00	2	2915	1.561	2	2915	1.938	2	2915	3.499
13:00 - 14:00	2	2915	1.664	2	2915	1.424	2	2915	3.088
14:00 - 15:00	2	2915	1.630	2	2915	1.475	2	2915	3.105
15:00 - 16:00	2	2915	2.196	2	2915	1.475	2	2915	3.671
16:00 - 17:00	2	2915	0.583	2	2915	1.304	2	2915	1.887
17:00 - 18:00	1	3300	0.000	1	3300	0.273	1	3300	0.273
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			15.208			14.023			29.231

Parameter summary

Trip rate parameter range selected: 2530 - 3300 (units: sqm)
 Survey date range: 01/01/00 - 28/11/19
 Number of weekdays (Monday-Friday): 0
 Number of Saturdays: 2
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
MULTI-MODAL CYCLISTS
 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									
08:00 - 09:00	1	2530	0.198	1	2530	0.079	1	2530	0.277
09:00 - 10:00	2	2915	0.000	2	2915	0.034	2	2915	0.034
10:00 - 11:00	2	2915	0.017	2	2915	0.034	2	2915	0.051
11:00 - 12:00	2	2915	0.000	2	2915	0.000	2	2915	0.000
12:00 - 13:00	2	2915	0.000	2	2915	0.000	2	2915	0.000
13:00 - 14:00	2	2915	0.034	2	2915	0.000	2	2915	0.034
14:00 - 15:00	2	2915	0.086	2	2915	0.017	2	2915	0.103
15:00 - 16:00	2	2915	0.000	2	2915	0.034	2	2915	0.034
16:00 - 17:00	2	2915	0.017	2	2915	0.069	2	2915	0.086
17:00 - 18:00	1	3300	0.000	1	3300	0.030	1	3300	0.030
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.352			0.297			0.649

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
 MULTI-MODAL VEHICLE OCCUPANTS
 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									
08:00 - 09:00	1	2530	3.636	1	2530	1.186	1	2530	4.822
09:00 - 10:00	2	2915	2.281	2	2915	2.144	2	2915	4.425
10:00 - 11:00	2	2915	3.722	2	2915	2.556	2	2915	6.278
11:00 - 12:00	2	2915	3.774	2	2915	3.654	2	2915	7.428
12:00 - 13:00	2	2915	3.328	2	2915	3.962	2	2915	7.290
13:00 - 14:00	2	2915	3.276	2	2915	2.796	2	2915	6.072
14:00 - 15:00	2	2915	3.328	2	2915	3.105	2	2915	6.433
15:00 - 16:00	2	2915	4.322	2	2915	3.122	2	2915	7.444
16:00 - 17:00	2	2915	0.892	2	2915	3.002	2	2915	3.894
17:00 - 18:00	1	3300	0.000	1	3300	0.758	1	3300	0.758
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			28.559			26.285			54.844

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
MULTI-MODAL PEDESTRIANS
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									
08:00 - 09:00	1	2530	0.119	1	2530	0.000	1	2530	0.119
09:00 - 10:00	2	2915	0.154	2	2915	0.017	2	2915	0.171
10:00 - 11:00	2	2915	0.240	2	2915	0.223	2	2915	0.463
11:00 - 12:00	2	2915	0.532	2	2915	0.292	2	2915	0.824
12:00 - 13:00	2	2915	0.617	2	2915	0.206	2	2915	0.823
13:00 - 14:00	2	2915	0.360	2	2915	0.206	2	2915	0.566
14:00 - 15:00	2	2915	0.292	2	2915	0.549	2	2915	0.841
15:00 - 16:00	2	2915	0.223	2	2915	0.600	2	2915	0.823
16:00 - 17:00	2	2915	0.137	2	2915	0.051	2	2915	0.188
17:00 - 18:00	1	3300	0.000	1	3300	0.000	1	3300	0.000
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.674			2.144			4.818

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
 MULTI-MODAL BUS/TRAM PASSENGERS
 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									
08:00 - 09:00	1	2530	0.000	1	2530	0.000	1	2530	0.000
09:00 - 10:00	2	2915	0.051	2	2915	0.000	2	2915	0.051
10:00 - 11:00	2	2915	0.086	2	2915	0.000	2	2915	0.086
11:00 - 12:00	2	2915	0.051	2	2915	0.051	2	2915	0.102
12:00 - 13:00	2	2915	0.086	2	2915	0.137	2	2915	0.223
13:00 - 14:00	2	2915	0.103	2	2915	0.086	2	2915	0.189
14:00 - 15:00	2	2915	0.120	2	2915	0.034	2	2915	0.154
15:00 - 16:00	2	2915	0.034	2	2915	0.120	2	2915	0.154
16:00 - 17:00	2	2915	0.000	2	2915	0.103	2	2915	0.103
17:00 - 18:00	1	3300	0.000	1	3300	0.000	1	3300	0.000
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.531			0.531			1.062

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
MULTI-MODAL TOTAL RAIL PASSENGERS
 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									
08:00 - 09:00	1	2530	0.000	1	2530	0.000	1	2530	0.000
09:00 - 10:00	2	2915	0.034	2	2915	0.000	2	2915	0.034
10:00 - 11:00	2	2915	0.000	2	2915	0.000	2	2915	0.000
11:00 - 12:00	2	2915	0.000	2	2915	0.000	2	2915	0.000
12:00 - 13:00	2	2915	0.000	2	2915	0.000	2	2915	0.000
13:00 - 14:00	2	2915	0.000	2	2915	0.034	2	2915	0.034
14:00 - 15:00	2	2915	0.000	2	2915	0.000	2	2915	0.000
15:00 - 16:00	2	2915	0.086	2	2915	0.000	2	2915	0.086
16:00 - 17:00	2	2915	0.000	2	2915	0.086	2	2915	0.086
17:00 - 18:00	1	3300	0.000	1	3300	0.000	1	3300	0.000
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.120			0.120			0.240

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
MULTI-MODAL PUBLIC TRANSPORT USERS
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									
08:00 - 09:00	1	2530	0.000	1	2530	0.000	1	2530	0.000
09:00 - 10:00	2	2915	0.086	2	2915	0.000	2	2915	0.086
10:00 - 11:00	2	2915	0.086	2	2915	0.000	2	2915	0.086
11:00 - 12:00	2	2915	0.051	2	2915	0.051	2	2915	0.102
12:00 - 13:00	2	2915	0.086	2	2915	0.137	2	2915	0.223
13:00 - 14:00	2	2915	0.103	2	2915	0.120	2	2915	0.223
14:00 - 15:00	2	2915	0.120	2	2915	0.034	2	2915	0.154
15:00 - 16:00	2	2915	0.120	2	2915	0.120	2	2915	0.240
16:00 - 17:00	2	2915	0.000	2	2915	0.189	2	2915	0.189
17:00 - 18:00	1	3300	0.000	1	3300	0.000	1	3300	0.000
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.652			0.651			1.303

TRIP RATE for Land Use 07 - LEISURE/C - LEISURE CENTRE
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									
08:00 - 09:00	1	2530	3.953	1	2530	1.265	1	2530	5.218
09:00 - 10:00	2	2915	2.521	2	2915	2.196	2	2915	4.717
10:00 - 11:00	2	2915	4.065	2	2915	2.813	2	2915	6.878
11:00 - 12:00	2	2915	4.357	2	2915	3.997	2	2915	8.354
12:00 - 13:00	2	2915	4.031	2	2915	4.305	2	2915	8.336
13:00 - 14:00	2	2915	3.774	2	2915	3.122	2	2915	6.896
14:00 - 15:00	2	2915	3.825	2	2915	3.705	2	2915	7.530
15:00 - 16:00	2	2915	4.666	2	2915	3.877	2	2915	8.543
16:00 - 17:00	2	2915	1.046	2	2915	3.310	2	2915	4.356
17:00 - 18:00	1	3300	0.000	1	3300	0.788	1	3300	0.788
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			32.238			29.378			61.616

Appendix G Existing Trip Generation Profile

Existing Leisure Centre Trip Generation

Average Weekday Trips

Time	Leisure Centre Vehicle Trips			Time	Demountable Pool Vehicle Trips			Time	Total Site Vehicle Trips		
	Arrivals	Departures	Two-way		Arrivals	Departures	Two-way		Arrivals	Departures	Two-way
	Trips	Trips	Trips		Trips	Trips	Trips		Trips	Trips	Trips
0000	1	0	1	0000	0	0	0	0000	1	0	1
0100	0	0	0	0100	0	0	0	0100	0	0	0
0200	0	2	2	0200	0	0	0	0200	0	2	2
0300	0	0	0	0300	0	0	0	0300	0	0	0
0400	0	0	0	0400	0	0	0	0400	0	0	0
0500	2	0	2	0500	0	0	0	0500	2	0	2
0600	10	0	10	0600	8	1	9	0600	18	1	19
0700	44	8	52	0700	6	4	10	0700	50	12	62
0800	64	12	76	0800	8	5	13	0800	72	17	89
0900	227	27	254	0900	17	7	24	0900	244	34	278
1000	86	44	130	1000	16	13	29	1000	102	57	159
1100	70	144	214	1100	11	12	23	1100	81	156	237
1200	68	203	271	1200	11	14	25	1200	79	217	296
1300	80	54	134	1300	10	12	22	1300	90	66	156
1400	47	65	112	1400	10	11	21	1400	57	76	133
1500	56	82	138	1500	13	11	24	1500	69	93	162
1600	109	88	197	1600	15	14	29	1600	124	102	226
1700	122	102	224	1700	23	15	38	1700	145	117	262
1800	173	109	282	1800	23	22	45	1800	196	131	327
1900	110	109	219	1900	14	20	34	1900	124	129	253
2000	42	190	232	2000	8	18	26	2000	50	208	258
2100	19	58	77	2100	2	12	14	2100	21	70	91
2200	5	36	41	2200	0	7	7	2200	5	43	48
2300	0	2	2	2300	0	0	0	2300	0	2	2
Total	1335	1335	2670	Total	195	198	393	Total	1530	1533	3063

Average Weekend Trips

Time	Leisure Centre Vehicle Trips			Time	Demountable Pool Vehicle Trips			Time	Total Site Vehicle Trips		
	Arrivals	Departures	Two-way		Arrivals	Departures	Two-way		Arrivals	Departures	Two-way
	Trips	Trips	Trips		Trips	Trips	Trips		Trips	Trips	Trips
0000	2	12	14	0000	0	0	0	0000	2	12	14
0100	0	4	4	0100	0	0	0	0100	0	4	4
0200	0	0	0	0200	0	0	0	0200	0	0	0
0300	0	0	0	0300	0	0	0	0300	0	0	0
0400	0	0	0	0400	0	0	0	0400	0	0	0
0500	0	0	0	0500	0	0	0	0500	0	0	0
0600	5	0	5	0600	0	0	0	0600	5	0	5
0700	91	0	91	0700	0	0	0	0700	91	0	91
0800	161	36	197	0800	28	12	40	0800	189	48	237
0900	146	123	269	0900	15	17	32	0900	161	140	301
1000	89	77	166	1000	21	21	42	1000	110	98	208
1100	55	87	142	1100	24	27	51	1100	79	114	193
1200	47	69	116	1200	18	24	42	1200	65	93	158
1300	79	87	166	1300	19	18	37	1300	98	105	203
1400	69	55	124	1400	19	19	38	1400	88	74	162
1500	37	61	98	1500	25	19	44	1500	62	80	142
1600	30	45	75	1600	7	16	23	1600	37	61	98
1700	20	47	67	1700	0	3	3	1700	20	50	70
1800	7	111	118	1800	0	0	0	1800	7	111	118
1900	6	8	14	1900	0	0	0	1900	6	8	14
2000	8	10	18	2000	0	0	0	2000	8	10	18
2100	12	18	30	2100	0	0	0	2100	12	18	30
2200	10	8	18	2200	0	0	0	2200	10	8	18
2300	6	22	28	2300	0	0	0	2300	6	22	28
Total	880	880	1760	Total	176	176	352	Total	1056	1056	2112