



Greyfriars Church, Reading

Transport Statement

October 2019

Doc. No. 1715REP02

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Contents Amendment Record

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1 Introduction

- 1.1.1 Helix Transport Consultants Ltd are appointed by Greyfriars Church to prepare a Transport Statement examining the transport implications of their redevelopment proposals.
- 1.1.2 The redevelopment proposals will involve the:
- demolition of the existing bookshop, coffee shop, foyer(s) / circulatory areas and the rebuilding of more generously proportioned areas, which fulfil the same function;
 - removal of the existing temporary (portacabin) offices, in order to accommodate a new covered walkway;
 - creation of new floor space to better accommodate the existing admin function and the hosting of religion-based community groups / teaching; and,
- 1.1.3 The purpose of this report is to provide the planning and highway authorities with an assessment of the relevant traffic and transportation issues.
- 1.1.4 The following sections report on the: policy context (Chapter 2); the transport network (Chapter 3); the proposed development (Chapter 4); and the likely trip generation and impact of the proposals (Chapter 5).

2 Policy Context

2.1 National Planning Policy

2.1.1 The revised National Planning Policy Framework (NPPF) was published by the Department for Housing, Communities and Local Government in February 2019. Section 9 of NPPF, Promoting Sustainable Transport, states the following:

Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

- a) the potential impacts of development on transport networks can be addressed;*
- b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
- c) opportunities to promote walking, cycling and public transport use are identified and pursued;*
- d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*
- e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high-quality places.*

[NPPF Paragraph 102]

The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

[NPPF Paragraph 103]

If setting local parking standards for residential and non-residential development, policies should take into account:

- a) the accessibility of the development;*
- b) the type, mix and use of development;*
- c) the availability of and opportunities for public transport;*
- d) local car ownership levels; and*
- e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.*

[NPPF Paragraph 105]

In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- b) safe and suitable access to the site can be achieved for all users; and*
- c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost-effectively mitigated to an acceptable degree.*

[NPPF Paragraph 108]

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

[NPPF Paragraph 109]

Within this context, applications for development should:

- a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.*

[NPPF Paragraph 110]

2.2 **Local Planning Policy**

2.2.1 Adopted local policy can be found in the Reading Borough Local Development Framework; Sites and Detailed Policies Document October 2012. The following policy is relevant to transportation.

DM12: ACCESS, TRAFFIC AND HIGHWAY-RELATED MATTERS

In determining proposals involving a new or altered access onto the transport network, improvement works to the transport network, the creation of new transport infrastructure or the generation of additional trips on the transport network, consideration will be given to the effect on safety, congestion and the environment.

- *Development will only be permitted where:-*

- *Accesses and works to the highway comply with the adopted standards of the Transport Authority;*
- *The development would not have a material detrimental impact on the functioning of the transport network;*
- *The proposals would not be detrimental to the safety of users of the transport network, including pedestrians and cyclists;*
- *The proposal would not generate regular movement of heavy goods vehicles (HGVs) on unsuitable roads, or on roads without easy access to the Classified Highway Network; and*
- *For non-residential uses, or new dwellings on classified roads, off-street servicing would be provided.*

Proposals involving either the construction of a new site access, or a material increase in the use of an existing site access, directly onto the Classified Highway Network will not be acceptable if they would be likely to result in the encouragement of the use of the network for short local trips or compromise the safe movement and free flow of traffic on the network or the safe use of the road.

2.2.2

The emerging local plan is at an advanced stage. It appears likely that the following will become the adopted transportation policies during the determination of this planning application.

TR1: ACHIEVING THE TRANSPORT STRATEGY

Proposed development should contribute appropriately to meeting the objectives of the most up-to-date Local Transport Plan or any successor document, including sub-strategies, specific projects identified and the local action plans.

Planning permission will not be granted for major development proposals unless there is a commitment to implement measures to promote and improve sustainable transport facilities, such as through provision to encourage walking, cycling and the use of public transport; and through agreed travel plans, safe routes to local facilities and services, including schools and parks, and similar measures.

All development proposals should make appropriate provision for works and contributions to ensure an adequate level of accessibility and safety by all modes of transport from all parts of a development, particularly by public transport, walking and cycling, in accordance with any agreed transport assessment submitted as part of the application.

CC6: ACCESSIBILITY AND THE INTENSITY OF DEVELOPMENT

The scale and density of development will be related to its level of accessibility by walking, cycling and public transport to a range of services and facilities, with the densest and largest scale development taking place in the most accessible locations. Unless it can be demonstrated that the accessibility of a site is to be significantly upgraded, for example, by

providing high quality pedestrian routes or providing access to good public transport services, any new development must be at a scale, density and intensity appropriate to that level of accessibility.

TR4: CYCLE ROUTES AND FACILITIES

Developments will be expected to make full use of opportunities to improve access for cyclists to, from and within the development and to integrate cycling through the provision of new facilities. Development of new facilities for cycling, such as cycle hire points and cycle parking, will be acceptable.

The cycle routes identified in the most up-to-date Cycling Strategy will be maintained, enhanced and added to or extended. Development will not detrimentally affect an identified cycle route. Where opportunities exist, improvements to that route, including the provision of connecting routes, and/or cycling facilities will be sought within developments or through planning contributions.#

TR5: CAR AND CYCLE PARKING AND ELECTRIC VEHICLE CHARGING

Development should provide car parking and cycle parking that is appropriate to the accessibility of locations within the Borough to sustainable transport facilities, particularly public transport.

Development should make the following provision for electric vehicle charging points:

- *All new houses with dedicated off-street parking should provide charging points;*
- *Within communal car parks for residential or non-residential developments of at least 10 spaces, 10% of spaces should provide an active charging point.*

2.3 Policy Summary & Conclusion

2.3.1 Transport planning policy seeks to ensure that development will not create road safety problems, or cause significant congestion on the transport network.

2.3.2 When a proposed development is likely to result in a significant number of new trips, the policies require that these are located where the need to travel will be minimised, and the use of sustainable transport modes can be maximised.

2.3.3 This report concludes that: by being located in a highly accessible location; with measures put in place to encourage sustainable travel choices; and, without creating likely road safety or congestion issues, the proposed development conforms to the policy requirement.

3 Description of Site and the Surrounding Transport Network

3.1 Site Description

3.1.1 The site is located on the eastern side of central Reading, around 300m southwest of the Reading Train Station. The location of the site is shown on the attached drawing 1715DWG01A.

3.1.2 The site comprises of the existing Church Hall, known as the Greyfriars Centre, which occupies a Gross Floor Area (GFA) of 482sqm and portacabin offices of 44sqm GFA. These existing buildings sit within the grounds of the wider Greyfriars Church complex.

3.1.3 The Greyfriars Church and Centre complex is bound by: residential dwellings off Sackville St. to the north; commercial development off Greyfriars Road and Friars St. to the east and south; and, the A329 dual carriageway to the west.

3.1.4 Access to the site is achieved via a dropped kerb arrangement off a short (unnamed) access road. The access road forms a simple priority T-junction off Friar St. located approximately 25m to the east of the A329 junction.

3.2 Local Pedestrian Network

3.2.1 The site benefits from its position within central Reading, and with that comes a comprehensive network of lit footways with both controlled and un-controlled crossing opportunities.

3.2.2 Local footways generally meet or exceed the recommended minimum width and are considered to be in a very good state of repair.

3.3 Local Cycle Network

3.3.1 The Reading Borough Council publications, Cycle Routes in Central Reading and Reading Cycle Routes Network, show how the site is well-positioned to access the network of radial routes emanating from central Reading. This is illustrated on the enclosed drawing 1715DWG02A.

3.3.2 Provision for cyclists near the site include cycle advance stop lines, Bus & Cycle Only lanes, traffic-free lanes and secure cycle parking facilities.

3.4 Local Bus Network

3.4.1 With bus stops situated just 80m from the main pedestrian access, the site is very well placed to access the local bus network.

- 3.4.2 The drawing 1715DWG03A attached to this report provides an extract of the central Reading bus stop map, showing the site in relation to the comprehensive network of bus services available to site users.

3.5 **Local Rail Network**

- 3.5.1 The southern entrance to the Reading Train Station lies around a 600m walk from the site. Pedestrians can access the station via the existing network of footways.

- 3.5.2 Alternatively, train service users may choose to travel between the station and the site by cycle, following the recommended route via Greyfriars Road and station Hill, or by bus, via the various pink routes which offer the site a 5-minute shuttle service.

- 3.5.3 The Reading Train Station acts as a gateway to the national network, with direct access to numerous local and inter-city train services. A recent investment of around £900M has substantially improved the station.

- 3.5.4 In addition to the above, the current Reading Central Area Action Plan identifies a potential future Mass Rapid Transit scheme passing very near to the site. When realised, this scheme will further enhance the site's non-car accessibility.

3.6 **Local Highway Network**

- 3.6.1 The site's vehicular access is taken from a short access road, which is accessed via a simple priority T-junction off Friar Street. The junction with Friar St. is relatively wide, with an entry radius of around 6m and an exit radius of around 12m. The geometry allows for a vehicle to exit the main carriageway while another exits the site; however, the road quickly narrows to a single lane of approximately 3.0m wide.

- 3.6.2 Beyond the single-lane section, the access road widens to provide a turning area, before travelling into the gated car park area. This gated entrance is around 3.5m wide.

- 3.6.3 At the point where access to the site is taken, Friar St. is a two-way road measuring approximately 9.5m wide. Zig-zag markings, associated with the nearby zebra crossings, and double yellow lines prevent on-street parking anywhere near the site.

- 3.6.4 Immediately west of the site, Friar St. forms an arm of the grade-separated A329 roundabout junction.

- 3.6.5 The A329 forms part of the principal north-south link through Reading and provides access to the M4 junction 11, which lies around 6Km to the south of the site.

- 3.6.6 To the west, beyond the A329 grade-separated roundabout junction, Chatham St. and Oxford Rd provides the main route westward towards Didcot.

3.6.7 Immediately east of the site Friar St. forms part of central Reading's one-way system, which incorporates contra-flow bus & Cycle Only lanes and on-street waiting and loading restrictions.

3.7 Highway Safety

3.7.1 Best practice recommends a review of recorded Road Traffic Accident (RTA) data over the most recent 3 year period, or 5 year period if an area is thought to have a poor accident record. This is in order to determine whether there are any clusters or patterns indicative of a specific problem with the existing highway layout.

3.7.2 A review of the road traffic accident data available on the *crashmap.co.uk* website, reveals that there have been no recorded accidents at the site accesses during the most recent 5 year period.

3.7.3 There have, however, been a number of accidents reported near to the site access. Three occurred on Friar St, to the immediate west of the site access, on the entrance to the A329 roundabout junction. One further incident occurred on Friar Street, to the immediate east of the site access. All four accidents were recorded as 'slight'.

3.7.4 The RTA locations are shown on the attached drawing 1715DWG04A.

3.7.5 As indicated, three accidents occurred on the roundabout approach. In this location inter-viability is very good, the junction is lit and has the appropriate warning apparatus. Under the circumstances, it appears that driver error was the most likely cause.

3.7.6 Apart from the above, there is no obvious clustering or causation pattern of accidents near to the site. Given this, it is concluded that there are no existing road safety issues that development on the site might exacerbate.

4 Proposed Development

4.1 Proposed Development

4.1.1 The proposed development constitutes Phase 2 of a wider redevelopment proposal to improve the existing church facilities. The overall scheme involves the:

- demolition of the existing Greyfriars Centre (bookshop, coffee shop) and replace this with new floor space to better accommodate the existing admin function and the hosting of religion-based community groups / teaching;
- removal of the existing temporary (portacabin) offices, in order to accommodate a new covered walkway;
- reconfiguration of the parking area;
- create a new atrium-style extension to the main church building to improve foyer(s) / circulatory areas.
- reconfiguration of 2-4 Sackville St. to create better office / meeting spaces

4.1.2 A principal purpose of the proposed redevelopment is to address the current cramped conditions for the church's activities occurring outside of the main church services.

4.1.3 The redevelopment proposals were split, following negative feedback from the planning authority, into two phases. The consented Phase 1 proposals covered the car park reconfiguration, the atrium extension to the main church building and the improvements to 2-4 Sackville St.

4.1.4 The proposed Phase 2 involves the removal of the existing temporary portacabin offices and relocating these functions to new office space within a new building on the site of the Greyfriars Centre. A proposed covered walkway will link the proposed building with the main church site, in the place of the portacabin units.

4.1.5 In addition to the church's administration functions, the areas outside of the historic building are home to a number of activities, centred around the Anglican community, ranging from religious teaching to hosting community groups and selling beverages and books.

4.1.6 The following table summarises the proposed and existing gross floor areas, for the various site activities. Drawing 1715DWG05A and 1715DWG06A, attached to this report, illustrate the existing and proposed division of space on the site.

Table 4.1 – Comparison of development Quantity Before and After Proposed Redevelopment

Description	Existing (Gross Floor Area)
Existing – Greyfriars Centre + Portacabins	526 sqm
Proposed – New Greyfriars Centre + covered walkway (102 sqm)	1,589 sqm
Difference	1,063 sqm

4.2 Access Arrangement

4.2.1 Access to the wider transport networks will remain unchanged as a result of the proposed development.

4.3 Parking

4.3.1 For this town centre (Zone 1) location the currently adopted parking standards, set out in the Revised Parking Standards and Design, Supplementary Planning Document (2011), recommend:

- 0 car parking spaces for a Place of Worship

4.3.2 According to the above, the proposed additional development requires no additional parking on the site.

4.3.3 In terms of cycle / moped parking, the adopted guidance recommends:

- 1 cycle parking space per 50sqm for a Place of Worship

4.3.4 This report considers that the covered walkway will not generate travel demand. It is, therefore, concluded that the proposed cycle parking ratio should only apply to the operative 961sqm of proposed Gross Floor Area. On this basis 10 Sheffield style cycle stands (20 spaces) are indicated along the southern elevation of the church.

4.3.5 In addition, the adopted guidance recommends that parking courts with up to 200 spaces, should assign 2 spaces for disabled drivers. The approved Phase 1 proposals allow for the adopted guidance by providing 2 designated spaces for blue-badge holders.

4.3.6 In addition, the emerging local plan guidance recommends that new parking courts should be provided with electric charging points for 10% of the total number of

spaces. These Phase 2 proposals anticipate the adoption of this guidance by providing electric car charging points for 2 car parking spaces.

4.4 **Servicing**

4.4.1 There are no proposed changes to the current servicing arrangements.

4.5 **Construction Traffic**

4.5.1 The hours of operation during site construction and the routing of construction traffic will be discussed at the appropriate time. It is expected that a construction management plan will be secured by a planning condition.

5 Trip Generation & Impact Assessment

5.1 Description

5.1.1 The proposed floor space falls into the lands-use category of D1 – Non-residential institution (Place of Worship). The additional floorspace is best described as ancillary to the main church function, and can be disseminated into the following categories:

5.1.2 Additional covered foyer / circulatory space: - This is to be provided in order to connect the two main buildings on the site. This element of the overall scheme is not expected to generate more traffic, in its own right, but will instead create a more pleasant environment for people who would choose to go to the site in any event.

5.1.3 Additional office space:- The purpose of this element of the proposal is to create a less cramped environment for the administration functions of the church. While the ancillary office space is due to grow, the tasks and, therefore, personnel and, therefore, travel demand is expected to remain unchanged.

5.1.4 Additional meeting and prayer space:- This will address both the existing cramped conditions and difficulties with organising and sharing the current space between the various groups who meet on the site, during the week. While there are no expectations that the current number of groups, or frequency of meetings, or number of attendees will significantly grow as a result of the redevelopment proposals, this is a possibility.

5.1.5 By far the busiest time on the site occurs on a Sunday. This is attributable to the main Sunday service. The church does not now, and has no intention to in the future, host groups or carry out administrative functions on a Sunday.

5.1.6 Given that the proposed redevelopment will not increase the capacity of the main church building, there is no expectation that it will cause an increase in activity during the site's busy Sunday period.

5.2 Trip Generation

5.2.1 In order to quantify the potential additional trips onto the network, resulting from the proposed redevelopment, an assessment has been carried out using survey information contained in the TRICS database.

5.2.2 Multi-modal survey information has been obtained for comparable land-uses, in town centre locations, within England. It should be noted that there is very little survey information for Places of Worship within the TRICS database. Just one survey is considered to be comparable. The following tables summarise the TRICS derived trip rates.

Table 5.1 – Proposed Development Trip Generation Rates

Period / Mode		Total People		Vehicles		Cyclist		Pedestrians		PT Users		Other	
		Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
Place of Worship													
AM Peak (08:00-09:00)	Trip Rate / 100sqm	0.222	0.000	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000
	% Mode Share			100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PM Peak (17:00-18:00)	Trip Rate / 100sqm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	% Mode Share			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- 5.2.3 Applying the above trip generation rates to the proposed development quantity of 1,063sqm additional 'D1 - Place of Worship' space, produces the following estimate of weekday peak hour trips.

Table 5.2 – Proposed Development Trips

Period	Total People		Vehicles		Cyclist		Pedestrians		PT Users		Other	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
Place of Worship												
AM Peak (08:00-09:00)	2	0	2	0	0	0	0	0	0	0	0	0
PM Peak (17:00-18:00)	0	0	0	0	0	0	0	0	0	0	0	0

5.3 Impact Assessment

- 5.3.1 According to the above, there may be an increase in weekday peak hour trips of 2 people movements in the AM peak and 0 people movements in the PM peak.

- 5.3.2 Given the above, the estimated impact on Reading's Transport Networks is considered to be negligible.

- 5.3.3 For the reasons given in section 5.1, the proposed redevelopment is not expected to have any significant effect on a Sunday, the site's busiest period.

6 Travel Plan

6.1 Context

6.1.1 The proposed development falls below the transport impact threshold where a Travel Plan is required as part of the planning application process. Nevertheless, the applicant intends to instigate and manage a Travel Plan unilaterally, outside of the planning process, in pursuance of the BREEAM requirements.

6.1.2 Accordingly, this chapter also includes an assessment of the site's Accessibility Index (AI) using Transport for London's (TfL's) Public Transport Assessment Level (PTAL) method, as adopted and requested under BREEAM.

6.1.3 This Travel Plan should be read in conjunction with the rest of this Transport Statement document, which provides details of: the site's proximity to local service / amenities; the local walk, cycle and public transport infrastructure; the likely trip generation to / from the site; and, measures designed to encourage the use of non-car travel.

6.2 The Travel Plan

Introduction

6.2.1 A Travel Plan is a package of measures, aimed at promoting sustainable travel, with the emphasis on reducing the reliance on single-car occupancy car travel, car parking and car use in general. It is tailored to the specific circumstances of the site and its users, taking into account factors such as current modal split, the size and location of the site, the different types of users, facilities and services. The Plan is an ongoing process of monitoring, a dynamic process that will grow and develop with time to reflect changes in user characteristics and the requirements of the organisation implementing the plan.

Aims

6.2.2 The purpose of the Travel Plan is to increase awareness of more sustainable travel options available to the development and to encourage their use, to ultimately reduce the reliance on car use. The predominant indicator of the success of the Travel Plan is the modal split.

6.2.3 Accordingly, the Travel Plan's ultimate aim is to limit the proportion of car-based trips to and from the proposed development, particularly single occupancy car trips. This would be achieved by:

- improving access to the proposed development by various modes of travel as opposed to the private car;

- reducing any reliance on the private car as the preferred mode of travel to access the development; and
- reducing the proportion of development-related car traffic on the highway network, during the day, and in particular during peak periods of travel.

6.2.4 It is anticipated that improving the attractiveness and accessibility of alternative modes of transport to the private vehicle would encourage users, which would have otherwise travelled by car, to use more sustainable and alternative means of transport.

Objectives

6.2.5 The broad objectives of the Travel Plan will be:

- to limit the potential proportion of private car travel, especially single occupancy journeys and short journeys;
- to maximise the proportion of journeys undertaken by other modes (public transport, cycling, walking), in particular local trips;
- to reduce the need to travel;
- to promote physical fitness through the promotion of non-car travel for regular journeys;
- to provide travel guidance and raise awareness and use of sustainable travel; and
- to minimise CO2 emissions from vehicular travel.

6.2.6 The travel plan recommends a set of measures, setting out the types of process to be adopted to reduce the dependence on the private car and presents a series of actions to be taken.

The Plan

6.2.7 To enable the travel plan to be implemented and meet its aims of reducing the dependence of the private car, a package of measures is identified below, which is considered to be a minimum requisite for the travel plan to work.

6.2.8 A number of travel initiatives can be promoted without needing to gauge travel behaviour and it is possible to undertake a number of measures early on in the development timescale.

- 6.2.9 Upon completion, travel patterns can be determined by way of a standard travel questionnaire, which can identify other measures for which further actions may be necessary.

Travel Plan Co-ordinator

- 6.2.10 A travel plan co-ordinator role will be assigned to a suitable member of the Greyfriars Church staff.

- 6.2.11 The principal task of the coordinator will be to engage with future site users and:

- Explain the travel choices available to them;
- Promoting the Travel Plan; and
- Distributing publicity and disseminating information on local car clubs, bicycle user groups, public transport and other non-car modes.

Walking / Cycling

- 6.2.12 The off-site walking opportunities are described in the Transport Statement. This mode of travel is encouraged by the proposed design by means of step-free access and level / covered walkways and circulatory space.

- 6.2.13 The following provides details of amenities within a 500m safe walking distance of the site, within each of the BREEAM categories. Up to three examples are provided, although in some cases many more opportunities exist.

Table 6.1 – Amenities within 500m Walk Distance from the site. Up to 3 examples within the BREEAM Categories

Amenity	Distance (m)
Appropriate food outlet	
Food Retail	
• Sainsbury's	110
• Tesco Express	200
• Cmart	210
Restaurant	
• Thai Corner	20
• The Hope Tap	70
• Rooster Piri Piri	90
Access to cash	

• Sainsbury's Bank	110
• TSB Bank	180
• Metro Bank	220
Access to an outdoor open space (public or private, suitably sized and accessible to building users)	
• St Mary's Church Gardens	300
• Town Hall Square	500
Access to a recreation or leisure facility for fitness or sports	
• Ping Pong Parlour	210
• The Gym	240
• Anytime Fitness	350
Publicly available postal facility	
• nearest post box	80
• Broad St mall Post Office	220
• Market Place Post Office	500
Community facility	
• Greyfriars Church	0
• Shirdi Sai Baba Temple & Community Centre	90
• Launchpad	280
Over the counter services associated with a pharmacy	
• Superdrug, Broad St	180
• Superdrug, Broad St Mall	220
• Boots, Broad St	300
Public sector GP surgery or general medical centre	
• Chiltern Medical Centre	180
• Reading walk-in health centre	220
• Chatham Street Surgery	400
Childcare facility or school	
• Greyfriars Day Nursery	0
• St Paul's Primary School	300

6.2.14

The off-site cycling opportunities are described in the Transport Statement. This mode of travel is encouraged by the proposed design by the provision of secure cycle parking facilities.

Bus / Public Transport

6.2.15 The site is very well placed to attract trips by public transport. Section 6.3 demonstrates that the accessibility to public transport is excellent. This mode of travel is encouraged by its proximity to service access points and the high-quality pedestrian links between the two.

6.2.16 The public transport opportunities will be advertised by the Travel Plan Co-ordinator on a public notice board.

Private Car

6.2.17 To discourage the use of single-occupancy fossil-fuelled car use, the scheme will include:

- electric recharging stations of a minimum of 3kW for at least 10% of the total car parking capacity
- a parking priority space for car sharers.

Travel Information Pack

6.2.18 The Travel Plan Coordinator will oversee the compilation of a comprehensive travel information pack, which will provide details of all transportation services available. The information pack will include details (including timetables) about bus and railway services in the vicinity.

6.2.19 In addition to the information relating to Public Transport services, the pack will also include cycle and walking route maps, details and contacts relating to local car clubs, and any other information or website addresses deemed relevant.

Communication of the Travel Plan

6.2.20 All site users will be made aware of the Plan and the co-ordinator's role through:

- on-site notice board(s); and,
- on-website notice

Promotion and Publicity

6.2.21 The Travel Plan Co-ordinator will ensure that a Sustainable Transport Information Board will be installed on-site and regularly updated.

6.2.22 This information board is to be located in a public area.

Internet Access

6.2.23 The development infrastructure will afford broadband internet access, facilitating home working and access to real-time travel information.

6.2.24 The travel plan co-ordinator will instigate the inclusion of ‘how to get here’ information on the Greyfriars Church website.

Disabled/ Mobility Impaired Users

6.2.25 Off-site facilities for those with disabilities / mobility impairments are very good. To the east and south of the site, (towards the local bus stops) footways are wide and pedestrian crossings take the form of signal-controlled crossings. These crossings features dropped kerbs, tactile paving, and the standard audible and physical indicators required by the disabled user.

6.2.26 Reading Buses normally operate low-floor, wheelchair-accessible buses. All buses have an entrance ramp and many can be lowered to the kerb to allow easier access to the bus. Wheelchair users have priority over all other passengers in using the dedicated space.

6.2.27 To facilitate disabled individuals on the site there are to be no threshold steps and the internal circulatory space will be level.

6.2.28 Elevators will be included in the scheme to access levels other than the ground floor.

6.2.29 Two parking spaces on the site are to be allocated for the exclusive use of blue-badge holders.

Travel Plan Targets and Monitoring

6.2.30 The predominant indicator of the success of the plan is mode split and, more specifically, the proportion of single-occupancy car trips.

6.2.31 It is proposed that a travel patterns questionnaire survey would be distributed by the Travel Plan Co-ordinator to indicate how travel is undertaken by site users.

6.2.32 Travel Plan targets could take a number of formats:

- vehicle trip reduction;
- observed level of car parking;
- modal split;
- modal shift;
- uptake of measures; or
- single occupancy vehicle (SOV) travel

- 6.2.33 The questionnaire surveys will assist in identifying a number of these parameters, such as modal split and uptake of measures, whilst records can be maintained by the Travel Plan Co-ordinator such as the use of on-site parking.

Existing Travel Patterns

- 6.2.34 In determining targets for mode shift it will be essential to understand the baseline travel patterns.
- 6.2.35 Anecdotal evidence is that the vast majority of people walk to the site. It is believed that most visitors to the current site arrive in central Reading using local bus services.
- 6.2.36 Applying detail to this baseline information will be achieved by means of a travel survey / questionnaire at the outset of the development.

6.3 Accessibility Index

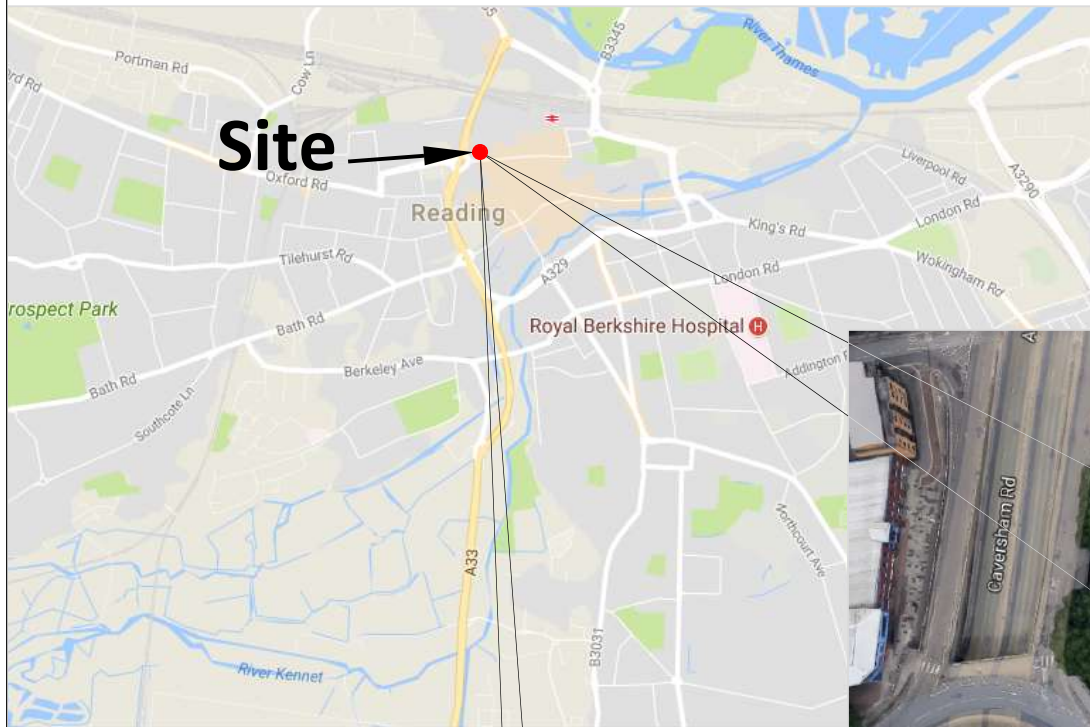
- 6.3.1 The following spreadsheet provides the Accessibility Index (AI) calculations for the site. This adopts the Transport for London's (TfL's) Public Transport Accessibility Level (PTAL) methodology.
- 6.3.2 As can be seen, the site is very well placed to attract non-car travel. The equivalent PTAL score for the calculated AI is 6a - Excellent. The maximum BREEAM credit for the proposed development is 3. This could be achieved with an AI score around 5 times smaller (equivalent PTAL score of 2 – Poor).

Existing Public Transport Accessibility Index (TfL PTAL Method): off-peak period									
Greyfriars Church									
POI	Mode	Bus Route (Stop) or Rail Line (Station)	Congestion Factor	Walk Distance (metres)	Walk Time (minutes)	Scheduled Frequency (per hour)	Average Waiting Time (minutes)	Access Time (minutes)	Equivalent Doorstep Frequency
			k	D	a = D / 80	f	b = k+(0.5* 60) / f	t = a + b	EDF = 30 / t
Greyfriars Church	Bus*	17	2.00	250	3.13	8	5.75	8.88	3.38
		Jet Black	2.00	300	3.75	2	17.00	20.75	1.45
		2,2a	2.00	60	0.75	2	17.00	17.75	1.69
		3,3b,10	2.00	200	2.50	5	8.00	10.50	2.86
		4,X4	2.00	210	2.63	4	9.50	12.13	2.47
		5	2.00	80	1.00	7	6.29	7.29	4.12
		6,6a	2.00	80	1.00	6	7.00	8.00	3.75
		7	2.00	80	1.00	1	32.00	33.00	0.91
		9	2.00	200	2.50	1	32.00	34.50	0.87
		11	2.00	200	2.50	3	12.00	14.50	2.07
		13	2.00	450	5.63	2	17.00	22.63	1.33
		14	2.00	450	5.63	2	17.00	22.63	1.33
		15,15a	2.00	220	2.75	4	9.50	12.25	2.45
		16	2.00	200	2.50	4	9.50	12.00	2.50
		19a	2.00	200	2.50	1	32.00	34.50	0.87
		19b	2.00	200	2.50	1	32.00	34.50	0.87
		21,21a	2.00	80	1.00	8	5.75	6.75	4.44
		22	2.00	120	1.50	2	17.00	18.50	1.62
		23	2.00	120	1.50	2	17.00	18.50	1.62
		24	2.00	120	1.50	2	17.00	18.50	1.62
		25	2.00	120	1.50	1	32.00	33.50	0.90
		26	2.00	270	3.38	5	8.00	11.38	2.64
		27,29	2.00	50	0.63	1	32.00	32.63	0.92
		33,33S	2.00	200	2.50	4	9.50	12.00	2.50
		42,42a	2.00	50	0.63	2	17.00	17.63	1.70
		50a	2.00	200	2.50	3	12.00	14.50	2.07
		53,53a,53b,53x	2.00	200	2.50	6	7.00	9.50	3.16
		60,60a,60b,60c,60e,60h,60m,60x	2.00	200	2.50	4	9.50	12.00	2.50
		500	2.00	200	2.50	4	9.50	12.00	2.50
		702,703	2.00	450	5.63	1	32.00	37.63	0.80
	Rail	GWR Thames Valley/Cotswolds (1)	0.75	500	6	6	5.75	12.00	2.50
		GWR Mainline (2a)	0.75	500	6	2	15.75	22.00	1.36
		GWR Mainline (2b)	0.75	500	6	2	15.75	22.00	1.36
		GWR Mainline (2c)	0.75	500	6	2	15.75	22.00	1.36
		GWR Cheltenham Direct (3)	0.75	500	6	0.5	60.75	67.00	0.45
		Cross Country Inter-city (4)	0.75	500	6	2	15.75	22.00	1.36
	SWR London Metro and Suburban (5)								
Accessibility Index (the EDF of all but the most accessible route for both bus and train would be halved in arriving at the Accessibility Index)									38.8
PTAL									6
BREEAM Category: Business: Offices/Industrial, Multi-residential, Other building type 1									
BREEAM: TRA01 credits achieved									3
Bus									
* - Excludes a number of services operating restricted hours									
Rail									
(1) London Paddington to Oxford (direct)	2	Slough, Reading (8tpd Monday - Friday, 10tpd Saturday and 16tpd Sunday) and Oxford. (For extension services see Peak / Limited services below)							
(1) London Paddington to Didcot Parkway	2	Ealing Broadway, Southall (London Bound Only), Hayes and Harlington, West Drayton, Ner, Langley, Slough, Maidenhead, Twyford, Reading, Tilehurst, Pangbourne, Goring and Streatley, Cholsey and Didcot Parkway							
(1) London Paddington to Reading	2	Ealing Broadway, Southall (Reading Bound Only), Hayes and Harlington, West Drayton, Slough, Burnham, Taplow, Maidenhead, Twyford and Reading							
(2a) London Paddington to Cardiff Central and	2	GWR Mainline (South Wales): Reading, Didcot Parkway (1tph), Swindon, Bristol Parkway, Newport and Cardiff Central. 1tph extends to Swansea calling at Bridgend, Port Talbot Parkway, Neath and Swansea. Didcot Parkway is served by the trains to Cardiff Central							
(2b) London Paddington to Bristol Temple	2	GWR Mainline (West of England / Bristol): Reading, Didcot Parkway (1tph off-peak), Swindon, Chippenham, Bath Spa and Bristol Temple Meads. Some services are extended to Weston-super-Mare and Taunton during peak periods, limited services are extended to Exeter St Davids, Paignton, Plymouth and Penzance.							
(2c) London Paddington to Plymouth/Penzance	1	GWR Mainline (Westcoast): Reading, Newbury, Pewsey, Westbury, Castle Cary, Taunton, Tiverton Parkway, Exeter St Davids, Newton Abbot, Totnes, Plymouth, Liskeard, Bodmin Parkway, Lostwithiel, Par, St Austell, Truro, Redruth, Camborne, Hayle, St Erth and Penzance.							
(3) London Paddington to Cheltenham Spa	0.5	Reading, Didcot Parkway, Swindon, Kemble, Stroud, Stonehouse, Gloucester and Cheltenham Spa							
(4) Reading to Newcastle	1	Oxford, Banbury, Leamington Spa, Birmingham New Street, Derby, Sheffield, Doncaster, York, Darlington and Durham; 1tp2h runs from Southampton Central calling at Southampton Airport Parkway, Winchester, Basingstoke, Reading, then as above.							
(4) Bournemouth to	1	Brockenhurst, Southampton Central, Southampton Airport Parkway, Winchester, Basingstoke, Reading, Oxford, Banbury, Leamington Spa,							
(5) London Waterloo to	2	Clapham Junction, Richmond, Twickenham, Feltham, Staines, Egham, Virginia Water, Longcross (limited service), Sunningdale, Ascot, Martins Heron, Bracknell, Wokingham, Winnersh, Winnersh Triangle, Earley							

7 Summary and Conclusion

- 7.1.1 This Transport Statement (TS) has been prepared in order to examine the traffic and transportation issues associated with the proposed redevelopment at Greyfriars Church, Reading.
- 7.1.2 The proposals will create an additional 1,063sqm of D1 Land Use Class – ‘Place of Worship’ Gross Floor Area. The intended purpose of this additional space is to create a covered walkway linking the application site with the main church building (+102 sqm) and to address the existing cramped conditions under which general administration and group hosting occurs (+961sqm).
- 7.1.3 This report provides a robust assessment of the potential increase in travel demand during the busiest periods on the transport network. It is concluded that the impact of the proposed development is insignificant.
- 7.1.4 The site is in a highly sustainable location which offers visitors a range of non-car travel options.
- 7.1.5 It is concluded that there are no valid highways or transportation reasons to prevent this proposed development.

Drawings



Notes

Attribution: Map data (c) 2017 Google
Image data (c) 2017 Google

Key



Rev	By	Chkd	Apprv	Date	Description
A	JH	JH	JH	15/10/17	Control file closed

Client

Greyfriars Church

Project

Greyfriars Church
Reading

Drawing

Site Location Plan

Drawn by: JH	Date: 03/11/2017
Checked by: JH	Date: 03/11/2017
Approved by: JH	Date: 03/11/2017

Drawing No.	Revision
1715DWG01	A

Drawing Scale: NTS

For Information

Notes

Based on Reading Borough Councils Cycling in Reading pamphlet.

Mapping showing wider cycle network can be found by following links at <http://www.reading.gov.uk/cycling>
This map cannot be included for reasons of copyright.

Key

● Site

Legend

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

R →
Reading Cycle Route

Town Centre Route

Linking Route

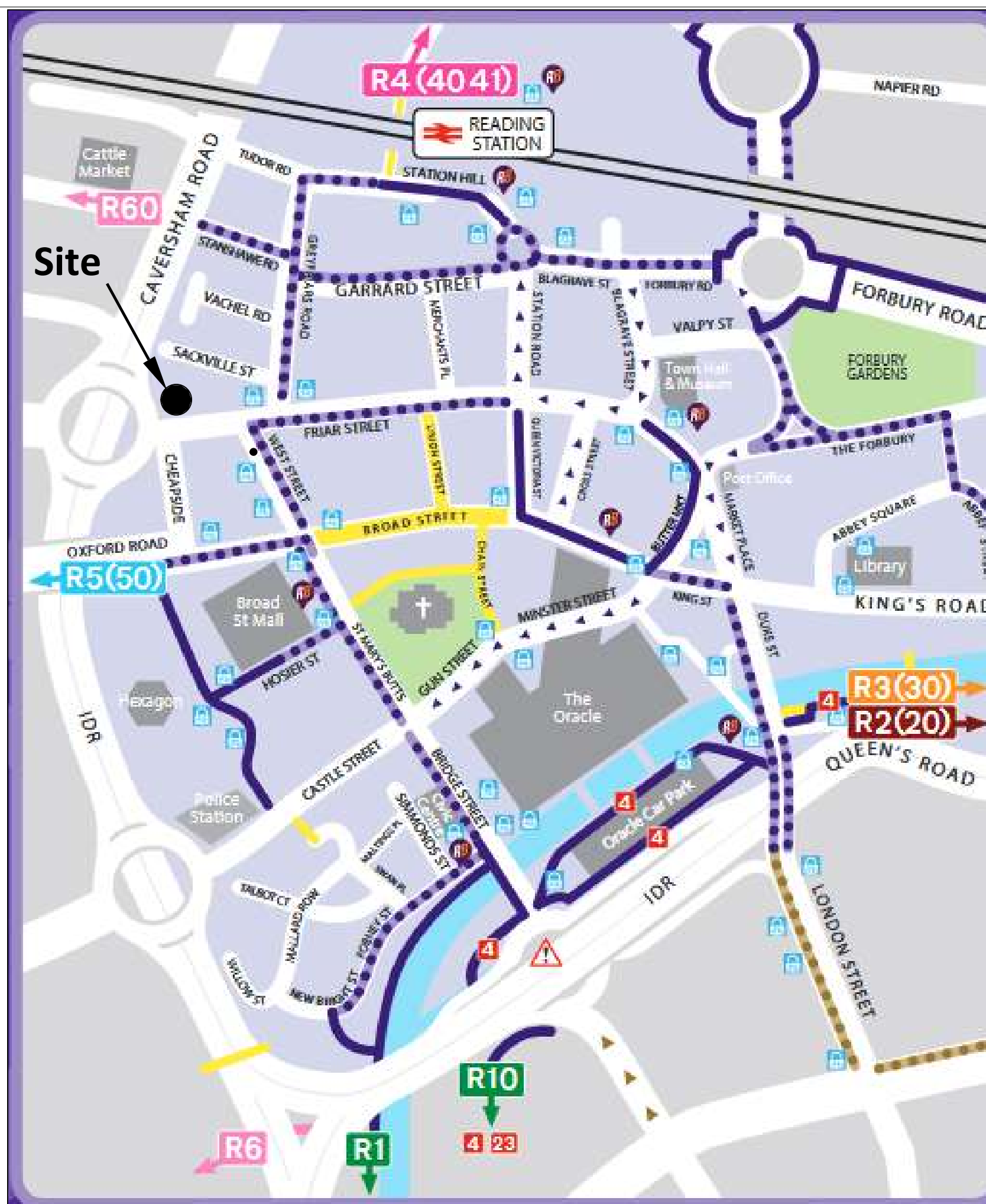
RB
Ready Bike
Cycle Hire

4
National
Cycle Path

!
Busy junction, no
cycling facilities,
caution advised

🚲
Cycle parking
facilities

🚆
Railway
Station



For Information

Rev	By	Chkd	Apprvd	Date	Description
A				14.10.19	Events amended

Client

Greyfriars Church

Project

Greyfriars Church
Reading

Drawing

Extract from the
Reading Cycle Map

Drawn by: JH Date: 03/11/2017

Checked by: JH Date: 03/11/2017

Approved by: JH Date: 03/11/2017

Drawing No. Revision

1715DWG02

A

Drawing Scale: NTS



route	towards	stops at
jet black 1	Theale/Thatcham/Newbury	EP FP CA CQ
lime 2 2a	Burghfield/Mortimer/Tadley	EP FP CA CQ
leopard 3	Royal Berkshire Hospital/Arborfield/Wokingham	CL FM SA MA MF
leopard 3b	Royal Berkshire Hospital/Arborfield/Bracknell	CL FM SA MA MF
leopard X3	Shinfield Park (direct)	EP FP
lion 4 X4	Reading College/Wokingham/Bracknell	CT FN EO ME
emerald 5	Northumberland Avenue	MI CL CU SC MC
emerald 6 6a	Whitley Wood/Tesco depot	MI CL CU SC MC
tiger 7	Riseley/Hartley Wintney/Fleet	SC MC LB
9	Royal Berkshire Hospital/UoR/Whitley Wood/Mereok	CR FM SA MA MF
leopard 10	Royal Berkshire Hospital/Thames Valley Science Park/Spencers Wood	CR FM SA MA MF
bronze 11	Coley Park	MI CR FM EO MC
little oranges 19a 19c	Royal Berkshire Hospital/UoR/Earley (Silverdale Road)/Woodley	CR FM SA MA MF
little oranges 19b	Royal Berkshire Hospital/UoR/Beech Lane/Lower Earley	CR FM SA MA MF
orange 13 14	Reading College/Woodley Centre/Woodley	EM MF
sky blue 15 15a	Tilehurst/Royal Avenue/Dee Park/Oxford Road/IKEA	FE CX
sky blue 16	Oxford Road/Purley	FE CX
purple 17	Reading College/Wokingham Road (Three Tuns)	CY FN EO ME
	Oxford Road/Tilehurst (Water Tower)	MG MM CN CW
claret 21 21a	University of Reading/Lower Earley	CR CU EK MA
pink 22	Caversham Centre/ Caversham Heights	FL EL NA
berry 23 24	Caversham Centre/Caversham Park/Emmer Green	FL EL NA
pink 25	Caversham Centre/Sonning Common/Peppard Common	FL EL NA
yellow 26	Southcote/Calcot (IKEA)	EK FP CA CQ
27	Caversham Centre via Lower Caversham	FJ EL
29	Lower Caversham via Caversham Centre	EO FP FG
royal blue 33	Turnhams Farm/Tilehurst	FE CB CQ
	Kenavon Drive	FN EO MF
buzz 42	Rivermead Leisure Centre	EN MP CS FG
greenwave	Kennet Island/Green Park/Madejski Stadium/RIBP	CS SD MC
park & ride 60	Mereok park & ride	CS SD MC
park&ride 500	Winnersh Triangle park & ride	MQ CS FM EO MC
stadium buses F1 R1	Madejski Stadium (football and rugby matchdays only)	WS
	Heathrow Airport	Reading Station

Rev	By	Chkd	Apprvd	Date	Description
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Client

Greyfriars Church

Project

Greyfriars Church
Reading

Drawing

Extract from the
Reading Bus Maps

Drawn by: JH Date: 03/11/2017

Checked by: JH Date: 03/11/2017

Approved by: JH Date: 03/11/2017

Drawing No. Revision

1715DWG03

A

Drawing Scale: NTS

For Information

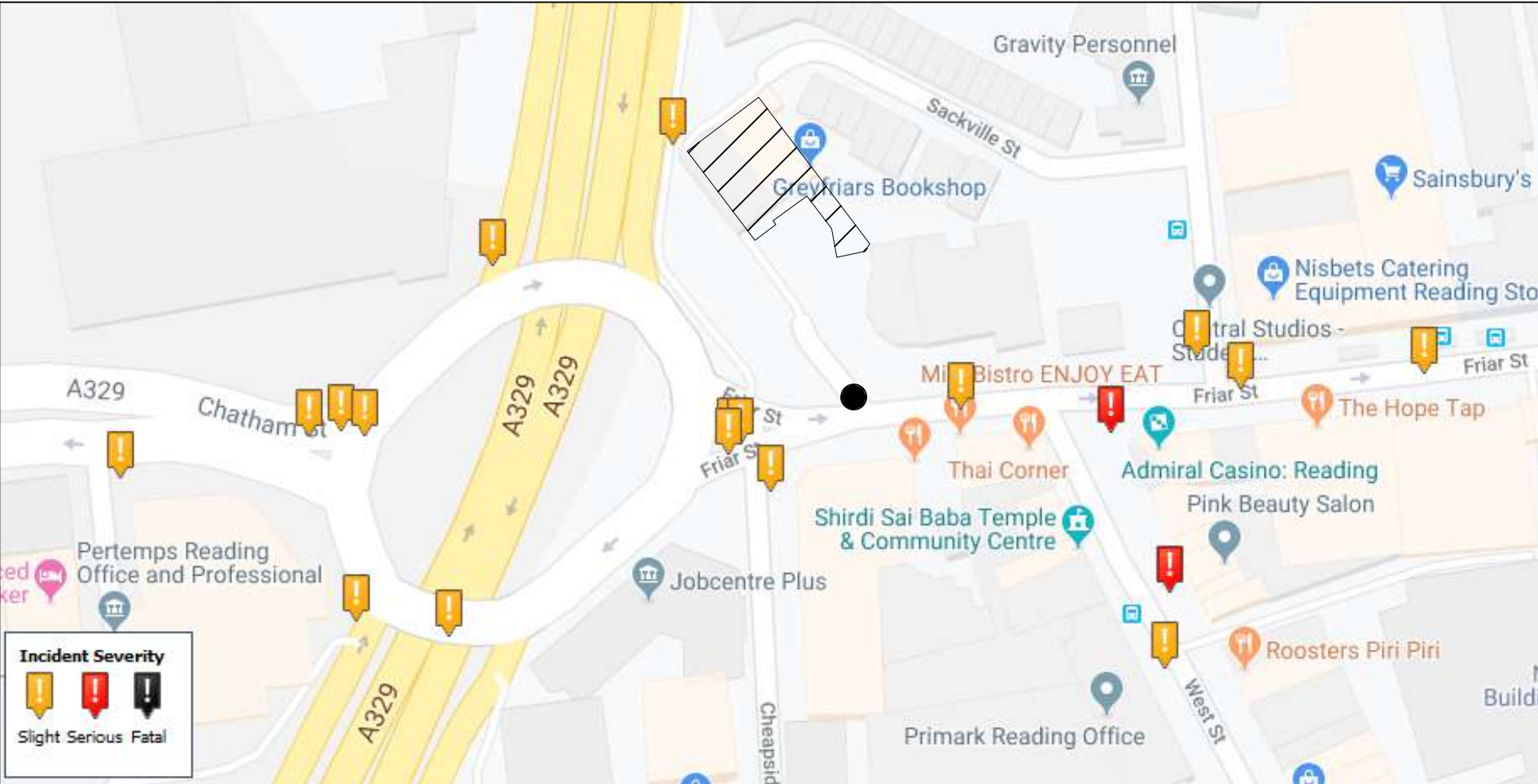
Notes

Based on information provided by CrashMap. See Appendix A of the main report 1715REP01 for further details.

Attributions: DTF - accident records
Google - base mapping

Key

-  Site
-  Site access points



Incident Severity

-  Slight
-  Serious
-  Fatal

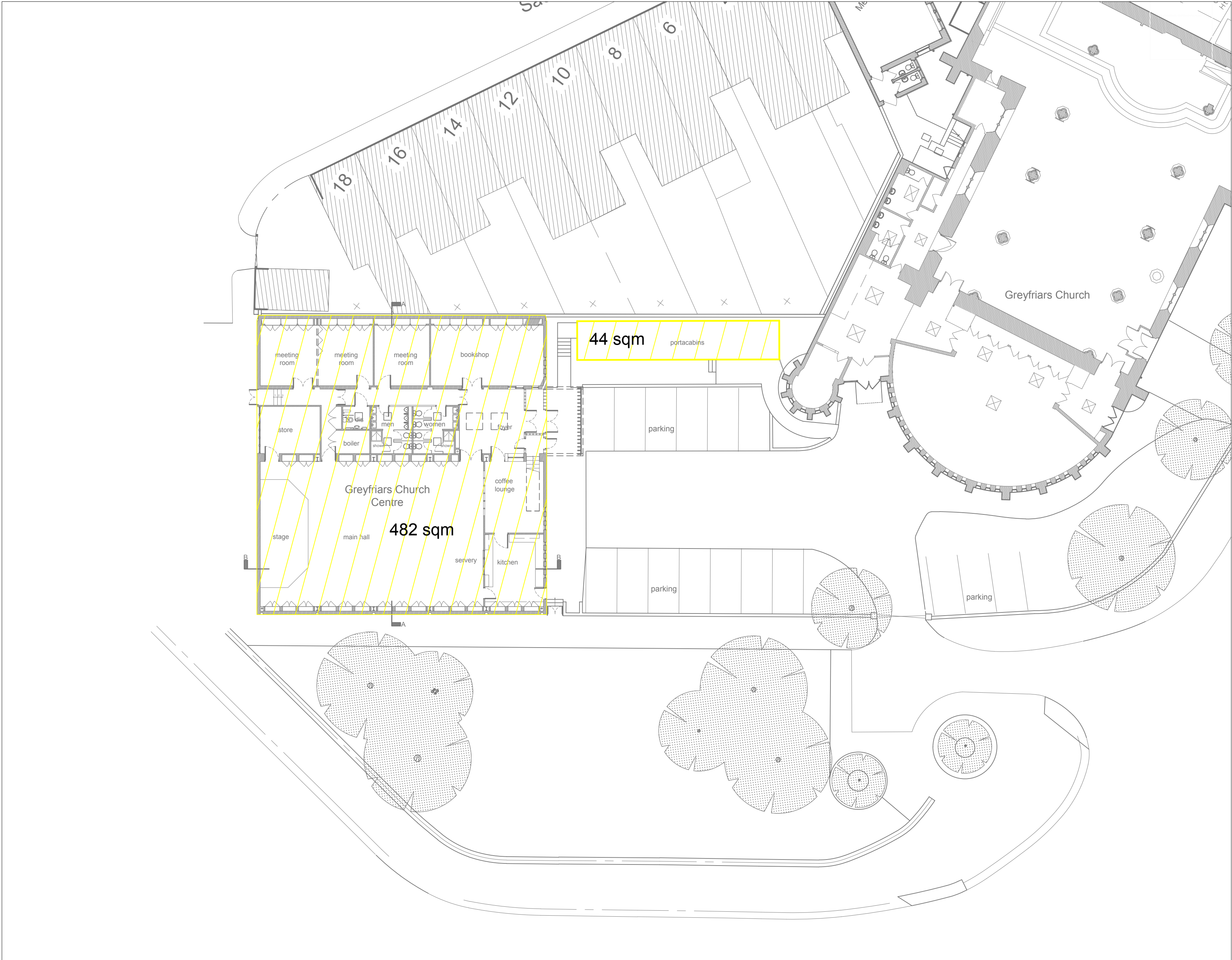
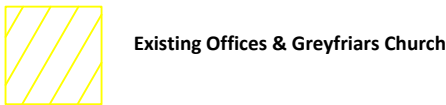
Rev	By	Chkd	Approved	Date	Description
A					

Client	Greysfriars Church				
Project	Greysfriars Church Reading				
Drawing	Recorded Road Traffic Accidents				
Drawn by: JH				Date: 03/11/2017	
Checked by: JH				Date: 03/11/2017	
Approved by: JH				Date: 03/11/2017	
Drawing No.	1715DWG04				Revision
					A
Drawing Scale: NTS					

For Information

Notes:
Mapping information provided by JBKS Architects

Key



Rev	By	Chkd	Apprvd	Date	Description
A	JH	JH	JH	14/10/19	revised development proposals

Client

Greyfriars Church

Project

Greyfriars Church
Reading

Drawing

Exisiting Site Layout

Drawn by: JH	Date: 03/11/2017
Checked by: JH	Date: 03/11/2017
Approved by: JH	Date: 03/11/2017

Drawing No.	Revision
1715DWG05	A

Drawing Scale: 1:200 @ A2

For Information



2 Middle floor



④ Second floor

A	JH	JH	JH	15.10.19	Amended development proposals
Rev	By	Chkd	Apprvd	Date	Description

Client

Greyfriars Church

Project

Greyfriars Church
Reading

Drawing

Proposed Site Layout

Drawn by: JH

ate: 03/11/2017

Checked by: JH

Date: 03/11/2017

Approved by: JH

Date: 03/11/2017

Drawing No.

vision

1715DWG06

A

Drawing Scale: 1:200 @ A1

For Information

Appendix A

Trip Generation Data

TRICS 7.4.3

Trip Rate Parameter: Gross floor area

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use 07 - LEISURE
 Category T - PLACE OF WORSHIP
 MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

1	GREATER LONDON	
	BM	BROMLEY
3	SOUTH WEST	
	DC	DORSET

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

Secondary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 450 to 1000 (units: sqm)
 Range Selected by User: 240 to 2355 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 09/04/17

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

Selected survey days:

Wednesday 1 days
 Friday 1 days

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

Selected survey types:

Manual count 2 days
 Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall

Selected Locations:

Town Centre	2
Edge of Town Centre	0
Suburban Area (PPS6 Out of Cen	0
Edge of Town	0
Neighbourhood Centre (PPS6 Lo	0
Free Standing (PPS6 Out of Tow	0
Not Known	0

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free

Selected Location Sub Categories:

Industrial Zone	0
Commercial Zone	0
Development Zone	0
Residential Zone	0
Retail Zone	0
Built-Up Zone	1
Village	0
Out of Town	0
High Street	1
No Sub Category	0

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial

Secondary Filtering selection:

Use Class:

D1 2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this

Population within 1 mile:

5,001 to 10,000 1 days

15,001 to 20,000 1 days

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

Population within 5 miles:

25,001 to 50,000 1 days

500,001 or More 1 days

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

Car ownership within 5 miles:

1.1 to 1.5 2 days

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

Travel Plan:

No 2 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of

PTAL Rating:

No PTAL Present 1 days

3 Moderate 1 days

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

LIST OF SITES relevant to selection parameters

1	BM-07-T-01 PUMP LANE	MOSQUE	BROMLEY
	HAYES Town Centre Built-Up Zone		
	Total Gross floor area:		1000 sqm
	Survey date:	FRIDAY	15/07/2016 Survey Type: MANUAL
2	DC-07-T-02 HIGH WEST STREET	CHURCH	DORSET
	DORCHESTER Town Centre High Street		
	Total Gross floor area:		450 sqm
	Survey date:	WEDNESDAY	26/03/2014 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: VEHICLES

Time Range	No. Days	Ave. GFA	ARRIVALS		Ave. GFA	DEPARTURES		Ave. GFA	TOTALS	
			Trip Rate	No. Days		Trip Rate	No. Days		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		1	450	0.222	1	450	0.222	1	450	0.444
08:00-09:00		1	450	0.222	1	450	0	1	450	0.222
09:00-10:00		1	450	0.222	1	450	0.444	1	450	0.666
10:00-11:00		1	450	0.667	1	450	0.444	1	450	1.111
11:00-12:00		2	725	1.172	2	725	0.069	2	725	1.241
12:00-13:00		2	725	11.172	2	725	0.414	2	725	11.586
13:00-14:00		2	725	7.724	2	725	14.483	2	725	22.207
14:00-15:00		2	725	7.931	2	725	12.897	2	725	20.828
15:00-16:00		2	725	0.138	2	725	0.345	2	725	0.483
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			29.47			29.318			58.788	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: TAXIS

Time Range	No. Days	Ave. GFA	ARRIVALS		Ave. GFA	DEPARTURES		Ave. GFA	TOTALS	
			Trip Rate	No. Days		Trip Rate	No. Days		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		1	450	0	1	450	0	1	450	0
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	0.222	1	450	0.222	1	450	0.444
10:00-11:00		1	450	0	1	450	0	1	450	0
11:00-12:00		2	725	0	2	725	0	2	725	0
12:00-13:00		2	725	0.207	2	725	0.207	2	725	0.414
13:00-14:00		2	725	0.207	2	725	0.207	2	725	0.414
14:00-15:00		2	725	0	2	725	0	2	725	0
15:00-16:00		2	725	0.138	2	725	0.138	2	725	0.276
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			0.774			0.774			1.548	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: OGVS

Time Range	No. Days	Ave. GFA	ARRIVALS		Ave. GFA	DEPARTURES		Ave. GFA	TOTALS	
			Trip Rate	No. Days		Trip Rate	No. Days		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		1	450	0	1	450	0	1	450	0
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	0	1	450	0	1	450	0
10:00-11:00		1	450	0	1	450	0	1	450	0
11:00-12:00		2	725	0	2	725	0	2	725	0
12:00-13:00		2	725	0	2	725	0	2	725	0
13:00-14:00		2	725	0	2	725	0	2	725	0
14:00-15:00		2	725	0	2	725	0	2	725	0
15:00-16:00		2	725	0	2	725	0	2	725	0
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:				0			0			0

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: PSVS

Time Range	No. Days	Ave. GFA	ARRIVALS		Ave. GFA	DEPARTURES		Ave. GFA	TOTALS	
			Trip Rate	No. Days		Trip Rate	No. Days		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		1	450	0	1	450	0	1	450	0
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	0	1	450	0	1	450	0
10:00-11:00		1	450	0.222	1	450	0.222	1	450	0.444
11:00-12:00		2	725	0	2	725	0	2	725	0
12:00-13:00		2	725	0	2	725	0	2	725	0
13:00-14:00		2	725	0	2	725	0	2	725	0
14:00-15:00		2	725	0.069	2	725	0.069	2	725	0.138
15:00-16:00		2	725	0	2	725	0	2	725	0
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:				0.291			0.291			0.582

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: CYCLISTS

Time Range	No. Days	Ave. GFA	ARRIVALS		Ave. GFA	DEPARTURES		Ave. GFA	TOTALS	
			Trip Rate	No. Days		Trip Rate	No. Days		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		1	450	0	1	450	0	1	450	0
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	0	1	450	0	1	450	0
10:00-11:00		1	450	0	1	450	0	1	450	0
11:00-12:00		2	725	0.207	2	725	0	2	725	0.207
12:00-13:00		2	725	0.276	2	725	0	2	725	0.276
13:00-14:00		2	725	0.138	2	725	0.414	2	725	0.552
14:00-15:00		2	725	0.138	2	725	0.414	2	725	0.552
15:00-16:00		2	725	0	2	725	0	2	725	0
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			0.759			0.828			1.587	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: VEHICLE OCCUPANTS

Time Range	No. Days	Ave. GFA	ARRIVALS		Ave. GFA	DEPARTURES		Ave. GFA	TOTALS	
			Trip Rate	No. Days		Trip Rate	No. Days		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		1	450	0.444	1	450	0.444	1	450	0.888
08:00-09:00		1	450	0.222	1	450	0	1	450	0.222
09:00-10:00		1	450	0.444	1	450	0.222	1	450	0.666
10:00-11:00		1	450	0.444	1	450	0.222	1	450	0.666
11:00-12:00		2	725	1.448	2	725	0.069	2	725	1.517
12:00-13:00		2	725	13.448	2	725	0.069	2	725	13.517
13:00-14:00		2	725	8.966	2	725	16.414	2	725	25.38
14:00-15:00		2	725	9.034	2	725	14.966	2	725	24
15:00-16:00		2	725	0	2	725	0.414	2	725	0.414
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			34.45			32.82			67.27	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: PEDESTRIANS

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		1	450	0	1	450	0	1	450	0
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	1.556	1	450	0.444	1	450	2
10:00-11:00		1	450	0.889	1	450	0.444	1	450	1.333
11:00-12:00		2	725	2.138	2	725	0.345	2	725	2.483
12:00-13:00		2	725	16.897	2	725	0.552	2	725	17.449
13:00-14:00		2	725	7.103	2	725	22.138	2	725	29.241
14:00-15:00		2	725	12.138	2	725	16.414	2	725	28.552
15:00-16:00		2	725	0.345	2	725	0.621	2	725	0.966
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			41.066			40.958			82.024	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: BUS/TRAM PASSENGERS

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		1	450	0	1	450	0	1	450	0
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	0	1	450	0	1	450	0
10:00-11:00		1	450	0	1	450	0	1	450	0
11:00-12:00		2	725	1.586	2	725	0.207	2	725	1.793
12:00-13:00		2	725	11.172	2	725	0.345	2	725	11.517
13:00-14:00		2	725	8	2	725	16.414	2	725	24.414
14:00-15:00		2	725	4.207	2	725	8.138	2	725	12.345
15:00-16:00		2	725	0	2	725	0.483	2	725	0.483
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			24.965			25.587			50.552	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: TOTAL RAIL PASSENGERS

Time Range	No. Days	Ave. GFA	ARRIVALS		Ave. GFA	DEPARTURES		Ave. GFA	TOTALS	
			Trip Rate	No. Days		Trip Rate	No. Days		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		1	450	0	1	450	0	1	450	0
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	0	1	450	0	1	450	0
10:00-11:00		1	450	0	1	450	0	1	450	0
11:00-12:00		2	725	0	2	725	0	2	725	0
12:00-13:00		2	725	0.069	2	725	0	2	725	0.069
13:00-14:00		2	725	0.345	2	725	0.069	2	725	0.414
14:00-15:00		2	725	0	2	725	0.069	2	725	0.069
15:00-16:00		2	725	0	2	725	0	2	725	0
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			0.414			0.138			0.552	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: COACH PASSENGERS

Time Range	No. Days	Ave. GFA	ARRIVALS		Ave. GFA	DEPARTURES		Ave. GFA	TOTALS	
			Trip Rate	No. Days		Trip Rate	No. Days		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		1	450	0	1	450	0	1	450	0
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	0	1	450	0	1	450	0
10:00-11:00		1	450	0	1	450	1.778	1	450	1.778
11:00-12:00		2	725	0	2	725	0	2	725	0
12:00-13:00		2	725	0	2	725	0	2	725	0
13:00-14:00		2	725	0	2	725	0	2	725	0
14:00-15:00		2	725	0.552	2	725	0	2	725	0.552
15:00-16:00		2	725	0	2	725	0	2	725	0
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			0.552			1.778			2.33	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: PUBLIC TRANSPORT USERS

Time Range	No. Days	Ave. GFA	ARRIVALS		Ave. GFA	DEPARTURES		Ave. GFA	TOTALS	
			Trip Rate	No. Days		Trip Rate	No. Days		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		1	450	0	1	450	0	1	450	0
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	0	1	450	0	1	450	0
10:00-11:00		1	450	0	1	450	1.778	1	450	1.778
11:00-12:00		2	725	1.586	2	725	0.207	2	725	1.793
12:00-13:00		2	725	11.241	2	725	0.345	2	725	11.586
13:00-14:00		2	725	8.345	2	725	16.483	2	725	24.828
14:00-15:00		2	725	4.759	2	725	8.207	2	725	12.966
15:00-16:00		2	725	0	2	725	0.483	2	725	0.483
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			25.931			27.503			53.434	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: TOTAL PEOPLE

Time Range	No. Days	Ave. GFA	ARRIVALS		Ave. GFA	DEPARTURES		Ave. GFA	TOTALS	
			Trip Rate	No. Days		Trip Rate	No. Days		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		1	450	0.444	1	450	0.444	1	450	0.888
08:00-09:00		1	450	0.222	1	450	0	1	450	0.222
09:00-10:00		1	450	2	1	450	0.667	1	450	2.667
10:00-11:00		1	450	1.333	1	450	2.444	1	450	3.777
11:00-12:00		2	725	5.379	2	725	0.621	2	725	6
12:00-13:00		2	725	41.862	2	725	0.966	2	725	42.828
13:00-14:00		2	725	24.552	2	725	55.448	2	725	80
14:00-15:00		2	725	26.069	2	725	40	2	725	66.069
15:00-16:00		2	725	0.345	2	725	1.517	2	725	1.862
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			102.206			102.107			204.313	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: CARS

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		1	450	0	1	450	0	1	450	0
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	0	1	450	0	1	450	0
10:00-11:00		1	450	0	1	450	0	1	450	0
11:00-12:00		2	725	1.034	2	725	0	2	725	1.034
12:00-13:00		2	725	10.897	2	725	0.138	2	725	11.035
13:00-14:00		2	725	7.379	2	725	14.345	2	725	21.724
14:00-15:00		2	725	7.793	2	725	12.69	2	725	20.483
15:00-16:00		2	725	0	2	725	0	2	725	0
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			27.103			27.173			54.276	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: LGVS

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		1	450	0.222	1	450	0.222	1	450	0.444
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	0	1	450	0	1	450	0
10:00-11:00		1	450	0	1	450	0	1	450	0
11:00-12:00		2	725	0	2	725	0	2	725	0
12:00-13:00		2	725	0	2	725	0	2	725	0
13:00-14:00		2	725	0	2	725	0	2	725	0
14:00-15:00		2	725	0	2	725	0	2	725	0
15:00-16:00		2	725	0	2	725	0	2	725	0
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			0.222			0.222			0.444	

TRIP RATE for Land Use 07 - LEISURE/T - PLACE OF WORSHIP

Calculation Factor: 100 sqm

Count Type: MOTOR CYCLES

Time Range	No. Days	ARRIVALS			DEPARTURES			TOTALS		
		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		1	450	0	1	450	0	1	450	0
08:00-09:00		1	450	0	1	450	0	1	450	0
09:00-10:00		1	450	0	1	450	0	1	450	0
10:00-11:00		1	450	0	1	450	0	1	450	0
11:00-12:00		2	725	0	2	725	0	2	725	0
12:00-13:00		2	725	0	2	725	0	2	725	0
13:00-14:00		2	725	0.069	2	725	0	2	725	0.069
14:00-15:00		2	725	0.069	2	725	0.138	2	725	0.207
15:00-16:00		2	725	0	2	725	0	2	725	0
16:00-17:00		1	450	0	1	450	0	1	450	0
17:00-18:00		1	450	0	1	450	0	1	450	0
18:00-19:00										
19:00-20:00										
20:00-21:00										
21:00-22:00										
22:00-23:00										
23:00-24:00										
Daily Trip Rates:			0.138			0.138			0.276	

Parameter summary

Trip rate parameter range selected: 450 - 1000 (units: sqm)

Survey date range: 01/01/09 - 09/04/17

Number of weekdays (Monday-Friday): 2

Number of Saturdays: 0

Number of Sundays: 0

Surveys automatically removed from selection: 0

Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range