

The way the world moves. By design.



TWICKENHAM STADIUM

Major Event Day Spectator Travel Plan

25/09/2018







DOCUMENT CONTROL ISSUE SHEET

Project & Document Details

Project Name	Twickenham Stadium – East Stand Extension
Project Number	M000168
Document Title	Major Event Day Spectator Travel Plan

Issue Control

Issue	Date	Author	Contributors	Authorisation	
				Name	Signature
V1.0	23/02/17	SR	MR	Roy McGowan	
V2.0	20/07/18	MR		Roy McGowan	
V3.0	12/09/18	MR		Roy McGowan	
V3.1	25/09/18	MR		Roy McGowan	

Distribution of Most Recent Issue

Name	Organisation	Format
Nigel Cox	RFU	Word
James Wickham	Gerald Eve	Word
Doug Beasley	Gerald Eve	Word
Richard Arnold	Wrenbridge	Word

TABLE OF CONTENTS

1.	INTRODUCTION	1
2.	POLICY	4
2.1	National Policy	4
	National Planning Policy Framework, 2012	4
	Good Practice Guidelines: Delivering Travel Plans through the Planning Process, 2009	4
2.2	Regional Policy	4
	London Plan 2016	4
	TfL Travel Plan Best Practice Guidance, 2013	5
	The Mayor's Transport Strategy	5
2.3	Local Policy	6
	London Borough of Richmond upon Thames Core Strategy (2009)	6
3.	EXISTING ARRANGEMENTS	7
3.1	Background Information	7
3.2	Existing Facilities	7
	Public Transport Accessibility	7
	Public Transport Facilities	7
	Walking and Cycling	8
	Car Parking	10
	Taxi	12
	Coach Travel	12
	Disabled Access	12
3.3	Spectator Travel Patterns	12
4.	TARGETS AND MEASURES	15
4.2	Targets	15
4.3	Spectator Target Travel Patterns	15
4.4	Action Plan	17
5.	TRAVEL PLAN MANAGEMENT	23
5.1	Roles and Responsibilities	23
5.2	Travel Plan Awareness	23
5.3	Implementation and Funding	23
5.4	Monitoring	24
6.	SUMMARY	26

Tables

Table 1 – Spectator Car Parks	10
Table 2 – Major Event Spectator Main Mode Share	13
Table 3 – Comparison of Travel Patterns	14
Table 4 – Existing Mode Share and Future Mode Share Targets	16
Table 5 – Existing Station Usage and Future Station Usage Targets	17
Table 6 – Actions, Measures and Timescale	18
Table 7 – Travel Plan Timescales	25

Figures

Figure 1 – Location of Twickenham Stadium	3
Figure 2 – South East Cycle Parking	9
Figure 3 – Car Park Locations	11

Appendices

Appendix A – Electric Vehicle Charging Points

Appendix B – Example Event Operations Plan

1. INTRODUCTION

1.1.1 This Major Event Day Spectator Travel Plan (TP) has been prepared by Momentum Transport Consultancy on behalf on the Rugby Football Union (RFU) to discharge the Section 106 obligation Sch 1; 2.1, which states:

Before first Occupation to submit for approval by the Council updated versions of the Major Event Day Travel Plan and initial versions of the Large Non-Major Event Day Travel Plan and the Small Non-Major Event Day Travel Plan (“the Travel Plans”).

1.1.2 A Major Event Day is defined as:

Days when there are activities at the Stadium with more than 30,000 spectators anticipated to be in attendance.

1.1.3 The full address of the development is:

Twickenham Stadium
Whitton Road
Twickenham
Greater London
TW2 7BA

1.1.4 Figure 1 shows the location of Twickenham Stadium.

1.1.5 This Travel Plan (TP) has been prepared by:

Michael Rivers, Momentum Transport Consultancy
23 Hatton Wall
London
EC1N 8JJ

1.1.6 A TP is a long-term management strategy for an occupier or site that seeks to deliver sustainable transport objectives through positive action. The sustainable transport objectives are articulated in a document that is regularly reviewed.

1.1.7 A TP can bring a number of benefits to organisations and their staff. Organisations can benefit from reduced parking demand, better access and less congestion at their sites as well as cost savings and a healthier workforce. TPs enhance the environmental credentials of organisations.

1.1.8 A TP involves identifying an appropriate package of measures aimed at promoting sustainable travel, with an emphasis on reducing reliance on single occupancy car journeys. Other benefits could include:

- Improving site access and travel choice
- Meeting an organisation’s environmental standards
- Increasing business efficiency and equality
- Reducing congestion and demand for parking spaces
- Delivering local environmental improvements from reduced congestion, pollution and noise
- Providing opportunities for active, healthy travel

- 1.1.9 A TP should establish a structured strategy with clear objectives and targets, supported by suitable policies and quality measures for implementation. It is a continuous process for improvement, requiring monitoring, review and revision to ensure it remains relevant to the organisation and those using the site.
- 1.1.10 This TP is produced in accordance with the latest TfL guidance, Travel Planning Guidance (November 2013) and includes objectives aimed at promoting sustainable travel to and from the development.
- 1.1.11 This chapter of the TP forms the introduction. The remaining chapters cover the following:
- Chapter 2 provides the relevant national, regional and local planning policy
 - Chapter 3 summarises the existing staff travel patterns and facilities at Twickenham Stadium
 - Chapter 4 provides the targets and measures of the TP
 - Chapter 5 summarises the TP management
 - Chapter 6 concludes the TP

Figure 1 – Location of Twickenham Stadium



2. POLICY

2.1 National Policy

NATIONAL PLANNING POLICY FRAMEWORK, 2012

- 2.1.1 The National Planning Policy Framework (NPPF), produced by the Department for Communities and Local Government (March 2012), sets out the Government's planning policies. The document was formally published in March 2012 and the policies were applied with immediate effect.
- 2.1.2 Transport policy is dealt with in the 'Promoting Sustainable Transport' section. This section emphasises the need for "the transport system to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel".
- 2.1.3 The NPPF suggests that a key tool for achieving their aims is that all developments likely to generate a significant amount of movement should be "supported by a Transport Statement or Assessment", as well as a Travel Plan.
- 2.1.4 In addition, Section 4 of the NPPF provides guidance on transport and requests plans and decisions to take account of whether:
- The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure
 - Safe and suitable access to the site can be achieved for all people
 - Improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe

GOOD PRACTICE GUIDELINES: DELIVERING TRAVEL PLANS THROUGH THE PLANNING PROCESS, 2009

- 2.1.5 The Good Practice Guidelines: Delivering Travel Plans through the Planning Process (Department for Transport & Communities and Local Government, 2009) outlines the "need to integrate sustainable travel and transport when planning new development" by presenting the role and benefits of using travel plans in the planning process. It also discusses the requirements and elements of an effective travel plan. For developments in London, these Guidelines are complimented by TfL's Travel Planning Guidance (November 2013).

2.2 Regional Policy

LONDON PLAN 2016

- 2.2.1 The London Plan 2016 is current adopted policy, covering transport in Chapter 6. The plan's objectives of greatest relevance to Travel Planning are:

"To ensure that London is a world leader in improving the environment locally and globally, at the forefront of policies to tackle climate change, reduce pollution, develop a low carbon economy and consume fewer resources and use them more effectively"; and

"To ensure that London is a city where everyone can access jobs, opportunities and facilities with an efficient and effective transport system that actively encourages walking and cycling and makes better use of the Thames".

2.2.2 The integration of transport and development to reduce the need to travel is a strategic focus of the plan as set out in Policy 6.1. The plan also addresses the need:

- To reduce emissions from transport;
- To provide for pedestrians and cyclists;
- To consider development proposals in light of existing transport capacity and proximity to major freight routes (as relevant); and
- To promote actions to achieve wider environmental sustainability in London.

2.2.3 Policy 6.3 of the plan asserts that:

- Construction logistics plans and delivery and servicing plans should be secured in line with the London Freight Plan and should be coordinated with TPs;
- Local Development Frameworks (LDFs) should include policy requiring transport assessments, TPs, construction logistics and delivery/servicing plans as set out above; and
- Boroughs are required to ensure developments do not exceed maximum car parking standards and provide minimum cycle parking standards as set out in the replacement plan.

TFL TRAVEL PLAN BEST PRACTICE GUIDANCE, 2013

2.2.4 In November 2013, TfL released new guidance on the requirements for TPs for new developments in London, which supersedes the previous 2012 TfL guidance. The guidance includes an explanation of the process, when a TP is required, what it should contain, and how to monitor, secure and enforce TPs.

2.2.5 TfL has also produced iTRACE, an online tool that supports the development and monitoring of TPs in London.

THE MAYOR'S TRANSPORT STRATEGY

2.2.6 The Mayor's transport Strategy (MTS), published in March 2018, is a long-term management strategy that encourages active, efficient and sustainable travel for new and existing developments. It sets out transport impacts, establishes targets and identifies the package of measures needed for improvement. The Strategy compliments the London Plan by providing a targeted approach to transport improvements for London.

2.2.7 The provision of transport assessments for major new trip generating development proposals should include information about how travel behaviour will be influenced by the proposed development, and how public transport, walking and cycling is encouraged. Workplace TPs should be produced where appropriate.

2.2.8 The Vision of the Strategy is "Changing the transport mix". The success of London's future transport system relies upon reducing Londoners' dependency on cars in favour of increased walking, cycling, and public transport use.

2.2.9 The MTS aims to encourage modal shift away from private vehicle use, with an increase in active transport to improve air quality, health, safety, and the vitality of the built environment.

2.2.10 Proposal 99 of the MTS also states it intends to: "Update TfL's Travel Plan guidance to ensure developments encourage active, efficient and sustainable travel, apply the Healthy Streets approach and help deliver carbon-free transport" (page 269).

2.3 Local Policy

LONDON BOROUGH OF RICHMOND UPON THAMES CORE STRATEGY (2009)

- 2.3.1 London Borough of Richmond upon Thames encourages the adoption of TPs for all types of development and the production of Travel Plans remains a key action to achieve shifts to more sustainable transport modes. Emphasis is placed on major employers to develop Green Travel Plans, with a full travel plan necessary for developments with equal or more than 750sqm A3 land use.
- 2.3.2 LBRuT aims to improve traffic conditions, enhance the quality of the local environment, provide choices in transport and improve safety for all. They also want to reduce the levels of commuting by car as a proportion of all travel to assist in improving air quality, reducing traffic noise nuisance and improving health.

3. EXISTING ARRANGEMENTS

3.1 Background Information

- 3.1.1 Twickenham Stadium is bounded by Rugby Road to the east and Whitton Road to the south. To the west is the access road that circulates the stadium and connects Rugby Road and Whitton Road. The A316 Chertsey Road runs parallel to Whitton Road to the south of the site.
- 3.1.2 On a Major Event Day, up to 82,000 spectators visit Twickenham Stadium.

3.2 Existing Facilities

PUBLIC TRANSPORT ACCESSIBILITY

- 3.2.1 The Public Transport Accessibility Level (PTAL) is a measure of the accessibility of a point of interest to the public transport network, taking into account walk access time and service availability.
- 3.2.2 PTAL is categorised into 6 levels, 1 to 6, where 6b represents a high level of public transport accessibility and 1 a low level of public transport accessibility. The PTAL estimate applies a walking speed of 80m per minute with a maximum walking distance of 60m to bus stops and 960m to rail and Underground stations.
- 3.2.3 Twickenham Stadium has a PTAL of 1b, however it should be noted that the south east corner of the stadium has a PTAL of 3 due to it entering the 960m catchment to Twickenham Station.
- 3.2.4 However, the use of PTAL as a measure of the site's accessibility is not necessarily applicable in this case because for most staff it is still more convenient to travel by public transport than other modes. This is reflected in the high public transport mode share.

PUBLIC TRANSPORT FACILITIES

- 3.2.5 Twickenham station is approximately a 13-minute walk from the stadium.
- 3.2.6 Twickenham station is served by South Western Railways. South Western Railways offers services via Twickenham between London Waterloo and destinations including Reading and Windsor. South Western Railways provide a Major Event Day operation, which uplifts the provision of train services from eight trains per hour to 10 trains per hour.
- 3.2.7 Free shuttle buses are available for spectators using Richmond station. Typically, 27 double decker buses will be used, with a capacity of 70 passengers per bus with each vehicle doing up to 4 trips during both the ingress and egress period.
- 3.2.8 Typically, three shuttle buses will also operate between the stadium and Hounslow station, with flexibility over the number of vehicles used depending on expected demand for this station.
- 3.2.9 It should be noted that as new shuttle buses are introduced, only electric powered vehicles will be considered.
- 3.2.10 There are two bus stops to the east of the stadium and four to the south of the stadium.
- 3.2.11 Twickenham Stadium is served by several bus routes; service 281, 267, 481, 681 and H22. These services travel to destinations such as Isleworth, Whitton, Fulwell and Hounslow.

WALKING AND CYCLING

- 3.2.12 Twickenham Stadium currently provides 56 cycle parking spaces in the south east corner of the stadium next to the ticket office. These are in the form of two-tiered racks (see Figure 2).
- 3.2.13 Rugby Road has a footway on both sides of the carriageway. The eastern footway is approximately 4.5m in width. The western footway is approximately 5.5m in width. A Zebra Crossing is located on this road that allows pedestrians to cross from Web Ellis House to the stadium. A signalised crossing is located at the junction of Rugby Road and Whitton Road.
- 3.2.14 Whitton Road has a footway on both sides of the carriageway. The northern footway caters for stadium pedestrian movement and so is particularly wide, providing at least 10m of width at its narrowest point, while the southern footway is approximately 3.5m wide. There is a pedestrian refuge located directly to the south of the stadium.
- 3.2.15 On a Major Event Day, the following roads are pedestrianised through the use of road closures:
- Whitton Road / London Road from the junction of York Street / London Road past Twickenham station to the stadium
 - Whitton Road from Rugby Road to the West Village entrance
 - Rugby Road from Mogden Lane to Whitton Road
- 3.2.16 A combination of permanent and temporary directional wayfinding signs are used along the key pedestrian routes between the stadium and the transport hubs of Twickenham, Richmond and Hounslow stations.

Figure 2 – South East Cycle Parking



CAR PARKING

3.2.17 There are up to five spectator car parks that are used by Twickenham Stadium on a Major Event Day. These are shown below.

Table 1 – Spectator Car Parks

Car Park	Space
North Car Park	550 cars + shuttle bus staging
Cardinal Vaughan	900 cars
Rosebine	1,000 cars
Bulls Field	200 cars
Tesco	350 Blue Badge

3.2.18 These five spectator car parks are presented in Figure 3.

3.2.19 The site is located within LBRuT Controlled Parking Zone (CPZ) R, which is active on any Twickenham Stadium Major Event Day with an expected crowd over 35,000 people. The standard time of restricted parking is between 10am – 6pm, although signs are displayed if this is altered.

3.2.20 Electric charging car parking spaces have recently been installed. This consists of 14 active charging spaces in the North Car Park and a further 42 passive charging spaces in the West Car Park. The location of these are shown in Appendix A.

Figure 3 – Car Park Locations



TAXI

- 3.2.21 A taxi rank is provided towards the southern end of London Road, close to Twickenham Station.

COACH TRAVEL

- 3.2.22 Specific parking within North Car Park is allocated to National Express coaches, which transport spectators from key regional hubs across the country. This parking area is suitable to serve up to 5,000 spectators per event.

DISABLED ACCESS

- 3.2.23 On Major Event Days, an accessible shuttle bus will run before and after the match between the stadium and Richmond and Twickenham stations.
- 3.2.24 Lift access is available to disabled spectators throughout the stadium and accessible toilets, accessed via RADAR key are available.
- 3.2.25 Twickenham Station is fully accessible to wheelchair users. Access to all platforms is possible either via the car park or staff-operated stair lift. Staff are present between 06:15 and 22:45 Monday to Saturday and between 08:00 and 20:00 on a Sunday. Ramps are available for train access.
- 3.2.26 South Western Railways offers an Assisted Travel booking system. It is recommended that spectators use this facility when planning their journey.
- 3.2.27 London bus routes 281, 267 and H22 all serve Twickenham stadium and use low-floor vehicles. This allows access to wheelchair users. Spectators are advised to travel early if using the bus due to road closures that are enforced on a Major Event Day.
- 3.2.28 350 Blue Badge parking spaces are available to spectators within Tesco Car Park, approximately a five-minute walk from the north east corner of the stadium. There is a hard-standing surface for the entire route from Tesco Car Park to the stadium.
- 3.2.29 Spectators who will be using Blue Badge bays on a Major Event Day are advised to arrive at the venue at least 90 minutes prior to the start of the event to avoid any delays from road closures and spectator ingress.

3.3 Spectator Travel Patterns

- 3.3.1 On a Major Event Day, a limited amount of parking is available on site. Most spectators therefore travel to the stadium by modes other than car. The majority of spectator's travel using a sustainable mode of transport, as shown in **Error! Reference source not found.**
- 3.3.2 Turnstile data from the England vs Wales Six Nations match in 2016 suggests that hospitality spectators enter the stadium approximately three hours and 30 minutes before kick-off. General Admission spectators mainly enter the stadium in the 15 minutes before kick-off, however these spectators will arrive across a long ingress period and make use of the West Village before the event begins.
- 3.3.3 Spectators then depart their seats immediately after the event and either return home or return to their hospitality area.
- 3.3.4 A spectator travel survey was undertaken on 4th February 2017 for the England vs. France Six Nations match at Twickenham Stadium. 1,918 spectators were surveyed across all turnstile gates, providing a sample of 2.3% of all spectators at this 81,902 attendance event.

3.3.5 Table 2 presents the survey results from this match for the main mode (by distance) that spectators used to travel to the stadium.

Table 2 – Major Event Spectator Main Mode Share

Method of Travel to Stadium	Mode Share	Spectator Trips
Car (Driver)	14.8%	12,085
Car (Passenger)	13.2%	10,804
Car (Dropped Off)	1.8%	1,495
Motorcycle	0.0%	0
London Bus	2.7%	2,178
Shuttle Bus	1.4%	1,153
Underground	3.0%	2,434
Rail	45.8%	37,535
Air*	2.6%	2,092
Taxi	7.9%	6,491
Foot	3.5%	2,861
Bicycle	0.1%	43
Coach	2.8%	2,306
Minibus	0.2%	128
Other	0.4%	299
Total	100%	81,902

*To be discounted in following surveys

- 3.3.6 Table 2 shows that 45.8% of spectators travelled by train to the stadium. The main station used was Twickenham, accounting for 80% of rail trips, followed by Richmond which accounted for 13% of trips. Whitton station and Hounslow East station accounted for 3.6% and 0.7% respectively.
- 3.3.7 Car usage (private vehicles, passengers and taxis) as a mode to travel to the stadium was high, accounting for 37.7%. However, 40% of this is attributable to car passengers and passengers dropped off by car.
- 3.3.8 Approximately 75% of spectators completed their journey by walking to the stadium from their respective car parking location or rail station. The remainder of spectators arrived at the stadium via taxi, shuttle bus or London bus.
- 3.3.9 Table 3 presents the above travel patterns in comparison to those recorded at a previous Six Nations match that has been surveyed; England vs Wales 2014.

Table 3 – Comparison of Travel Patterns

Method of Travel to Stadium	Eng vs Wal 2014	Eng vs Fra 2017
Car (Driver)	27.2%	14.8%
Car (Passenger)		13.2%
Car (Dropped Off)	7.8%	1.8%
Motorcycle	0.4%	0.0%
London Bus	4.7%	2.7%
Shuttle Bus	1.5%	1.4%
Underground	2.1%	3.0%
Rail	41.8%	45.8%
Air*	0.0%	2.6%
Taxi	7.3%	7.9%
Foot	4.3%	3.5%
Bicycle	0.3%	0.1%
Coach	2.6%	2.8%
Minibus		0.2%
Other	0.0%	0.4%
Total	100%	100%

*To be discounted in following surveys

- 3.3.10 Table 3 shows that private car usage is 5% less than it was at the 2014 match. It also shows that rail, underground and coach usage have all increased since 2014 (4%, 0.9% and 0.4% respectively).
- 3.3.11 These changes are likely to be due to a reduction in the amount of car parking Twickenham Stadium have made available on a Major Event Day, as well an increase in rail capacity and accessibility.
- 3.3.12 It is acknowledged that travel patterns for a midweek evening event are likely to differ to that of a weekend event. This will be addressed within the next Travel Plan including data collected during a midweek event.

4. TARGETS AND MEASURES

4.1.1 This section of the report sets out the objectives and targets of the TP based on the review of the existing facilities and initiatives carried out at Twickenham Stadium.

4.1.2 The targets proposed as part of the TP relate to information provided by the RFU. The targets are specific, measurable, attainable, realistic and time-bound, and link directly to the objectives of this TP.

4.2 Targets

4.2.1 The TP provides site-specific targets including:

- Use of sustainable transport modes (walking, cycling, public transport and coach travel);
- Influence the travel behaviour of spectators; and
- Minimise the impact of Twickenham Stadium events on the environment and local highway network.

4.3 Spectator Target Travel Patterns

4.3.1 Table 4 compares the spectator travel patterns at Twickenham Stadium from the surveys undertaken in February 2017 with the future mode share targets after three and five years.

Table 4 – Existing Mode Share and Future Mode Share Targets

Method of Travel to Stadium	Spectator Mode Share	Future Spectator Mode Share after 3 years	Future Spectator Mode Share after 5 years
Car (Driver)	14.8%	12.8%	10.8%
Car (Passenger)	13.2%	12.2%	11.2%
Car (Dropped Off)	1.8%	1.8%	1.8%
Motorcycle	0.0%	0.0%	0.0%
London Bus	2.7%	2.8%	3.0%
Shuttle Bus	1.4%	2.0%	2.5%
Underground	3.0%	4.0%	5.5%
Rail	45.8%	47.0%	48.1%
Air*	2.6%	2.6%	2.6%
Taxi	7.9%	6.9%	5.9%
Foot	3.5%	3.5%	3.5%
Bicycle	0.1%	0.2%	0.2%
Coach	2.8%	3.5%	4.0%
Minibus	0.2%	0.3%	0.5%
Other	0.4%	0.4%	0.4%
Total	100%	100.0%	100.0%

*To be discounted in following surveys

- 4.3.2 Table 4 shows mode share reductions are targeted across private car and taxi modes, while mode share increases are targeted across rail, underground, coach and cycle mode shares. The following section explains the measures that are proposed to reach these targets.
- 4.3.3 As noted above, Richmond Station accounts for 13% of rail trips and Hounslow East station accounts for 3.6%. To reduce the reliance on Twickenham Station, targets associated actions have been set to increase usage of these two stations. These are shown in Table 5.

Table 5 – Existing Station Usage and Future Station Usage Targets

Method of Travel to Stadium	Spectator Mode Share	Future Spectator Mode Share after 3 years	Future Spectator Mode Share after 5 years
Twickenham	80%	78.6%	77.5%
Richmond	13%	14%	14.5%
Hounslow East	3.6%	4%	4.6%
Other	3.4%	3.4%	3.4%
Total	100%	100.0%	100.0%

4.4 Action Plan

- 4.4.1 Table 6 sets out the action plan, the benefits of the various potential measures and the timescale for their implementation. Implementation of some items listed in the action plan below will be dependent on the anticipated demand for each measure at each event.

Table 6 – Actions, Measures and Timescale

Actions	Description	Measures	Benefits	Timescale	Responsibility
Managing the on-going development and delivery of the Travel Plan					
Adoption of the Travel Plan	Acceptance and approval from the RFU	Twickenham Stadium to adopt the TP in agreement with LBRuT	This will ensure that the TP is taken forward as an active, living document and results are delivered	Immediate	RFU
Spectator Travel Surveys	Undertake a spectator travel survey for an England match, major club match and concert event, considering both weekday and weekend events	Identify the modes of travel made by spectators to track improvements in sustainability	This will help the RFU and identify areas for improvements	One for each event type every three years	TPC
Increasing awareness of the Travel Plan					
Site Information	Provide site information to all spectators	Ensure site and travel information is available to all spectators through the England Rugby website, as well as distributing this information alongside online ticket sales.	This will provide spectators with the information to be aware of and able to choose their travel options	Prior to events	TPC
Encouraging greater use of sustainable transport modes					
Major Event Transport Plans (see App. B)	Continue to produce transport plans for the Major Events that are scheduled in the upcoming year	Describe planned Major Event Day transport operations	This will encourage Twickenham Stadium to continually review and improve the Major Event Day transport operations	Annually	RFU

Actions	Description	Measures	Benefits	Timescale	Responsibility
Spectator Travel Information	Continue to provide spectators with up to date public transport information	Continue to provide travel information to ticket holders prior to events and use the PA system to communicate any unexpected / important travel information to spectators before the egress period	This will ensure that spectators are aware of travel options available to them and of any changes they may need to make to their journey	Prior to, during and after events	TPC
Involvement of Transport Stakeholders	Maintain relationship with all relevant transport stakeholders through regular meetings and communication	Continue to develop and agree operation plans with all relevant transport stakeholders prior to, during and post event days	Ensure spectator satisfaction with service and identify opportunities for improvements following events to increase the likelihood of spectators returning to Twickenham Stadium to choose public transport	Prior to, during and after events	RFU
Promotion of Richmond Station	Encourage more use of this station	Undertake surveys of shuttle bus usage and increase this service if demand is meeting supply Use surveys to understand whether spectators are aware of this service and why they do/do not use it	Reduces the reliance on Twickenham Station and South Western Railways	Within six months of adoption	TPC

Actions	Description	Measures	Benefits	Timescale	Responsibility
Promotion of Hounslow East Station	Encourage more use of this station	<p>Promote the use of Hounslow East station as an alternative to Twickenham station both online and during the ticket sales process. Also provide an online map of the walking route to this station</p> <p>Undertake surveys of shuttle bus usage and increase this service if demand is meeting supply</p> <p>Use surveys to understand whether spectators are aware of this service and why they do/do not use it</p>	Ensures spectators are aware of the stadium's proximity to the Piccadilly line and the straightforward walk/shuttle bus option between this station and the stadium. This will also reduce the reliance on Twickenham station	Within six months of adoption	TPC
Promotion of Whitton station	Encourage more use of this station by spectators as recent improvements to the station have made this viable	Promote the use of Whitton station as an alternative to Twickenham station both online and during the ticket sales process	Reduces the reliance on Twickenham station	Ongoing	TPC

Actions	Description	Measures	Benefits	Timescale	Responsibility
Park and Ride	Continue to offer park and ride service to Hounslow Civic Centre for events where demand suggests it is required	Continue to offer this service and review usage to ensure adequate provision	Reduces the number of vehicles on the highway network surrounding the stadium	Ongoing	TPC
Taxis/Private Hire	Manage the impact of taxis and Private Hire Vehicles	Review the location of the event day minicab rank to minimise disruption to locals Introduce a geofencing system with Uber to control where Uber's are permitted to pick up and drop off spectators	Reduces the vehicle impact on the highway network and to local residents	Within one year of adoption	TPC
Car Parking	Review car park usage	Monitor car park usage by spectators through Major Event travel surveys and consider reducing available parking provided that this does not displace vehicles to other locations e.g. on-street in residential areas outside of the Event Day CPZ	Reduces the number of spectators travelling by car to the stadium	After each travel survey	TPC/RFU
Promote Cycling	Encourage spectators to travel by bike	Ensure maintenance of cycle parking spaces, monitor usage through the future travel surveys and commit to increasing the number of spaces if demand exceeds supply	Quality provision of cycle parking will encourage spectators to cycle to Twickenham Station	Ongoing	RFU

Actions	Description	Measures	Benefits	Timescale	Responsibility
Pedestrian Facilities	Good pedestrian access and permeability	Ensure good pedestrian access, permeability and signage to the site from key transport hubs	This will encourage spectators to complete their journey by foot	Ongoing	RFU
Maintain usage of 'soft finish' Events	Soft finishes are a retention measure implemented at the end of an event to reduce the peak of the egress period	Maintain opportunities to run a 'soft finish' event, e.g. trophy presentations or post-event hospitality packages	This will reduce the pressure on public transport services and the local highway network	Prior to and during events	RFU
Contingency Plans	Contingency planning in case of transport issues	Develop contingency plans that provide solutions in case of transport issues e.g. cancellation of services from Twickenham Station	Will provide that there are alternative transport solutions to ensure that spectators can make it home safely	Within six months of adoption	TPC

5. TRAVEL PLAN MANAGEMENT

5.1 Roles and Responsibilities

5.1.1 The RFU will be responsible for the implementation, management and further development of this TP through:

Nigel Cox, Rugby Football Union

Rugby House

Twickenham Stadium

200 Whitton Road

Twickenham

Middlesex

TW2 7BA

nigelcox@rfu.com

5.1.2 The TPC will be responsible for the implementation and further development of the TP.

5.1.3 The TPC's responsibilities will include:

- Achieving commitment and support from Twickenham Stadium
- Create awareness of the TP and its specific measures
- Provide advice on transport-related subjects to spectators
- Preparing literature and materials to provide transport advice to visitors and spectators;
- Liaising with stakeholders, boroughs, TfL, public transport operators whenever necessary
- Coordinating the data collection and monitoring the TP programme
- Presenting a business case to secure a budget for further developing the TP and ensuring its efficient use

5.2 Travel Plan Awareness

5.2.1 The success of the TP is dependent upon spectator awareness through promotion and advertisement which will be developed by the TPC and the RFU. Various forms of suitable communication will be used to advise and inform visitors about the travel options and other facilities.

5.2.2 The Action Plan set out in Table 5 provides details of the specific measures that are to be pursued in relation to encouraging more sustainable travel patterns such as greater use of cycling, walking and public transport.

5.2.3 Spectators at Twickenham Stadium will continue to be provided with information on how to reach the site by all modes so that they can make an informed decision. This guidance will highlight the commitment to sustainable transport modes.

5.3 Implementation and Funding

5.3.1 The provision, implementation and funding of the Travel Plan will be undertaken by the RFU.

5.4 Monitoring

- 5.4.1 The TP is intended to be a living document and therefore will require on-going monitoring and review to ensure that the TP remains up to date.
- 5.4.2 The monitoring and reviewing will be the responsibility of the TPC.
- 5.4.3 Table 7 gives the plans and timescales for the monitoring and review of the TP.

Table 7 – Travel Plan Timescales

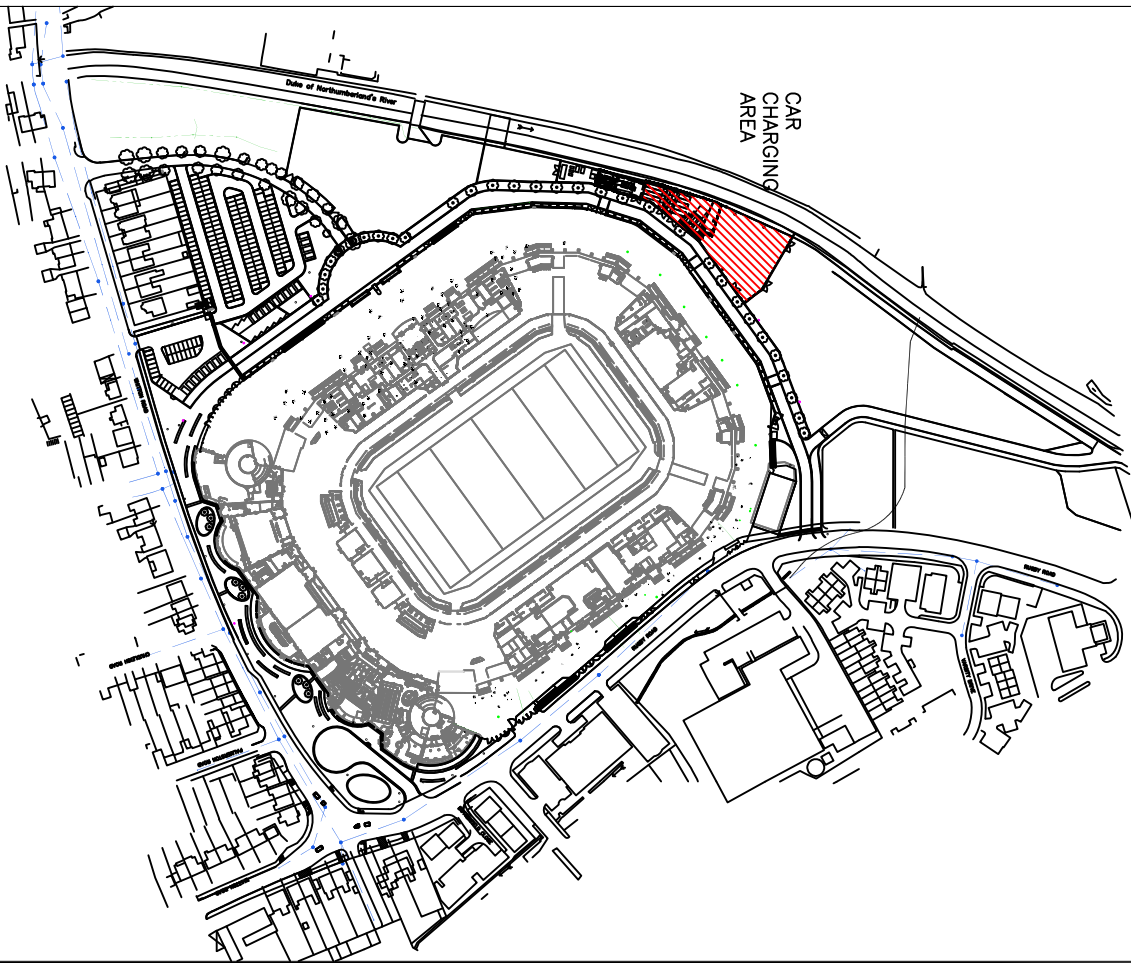
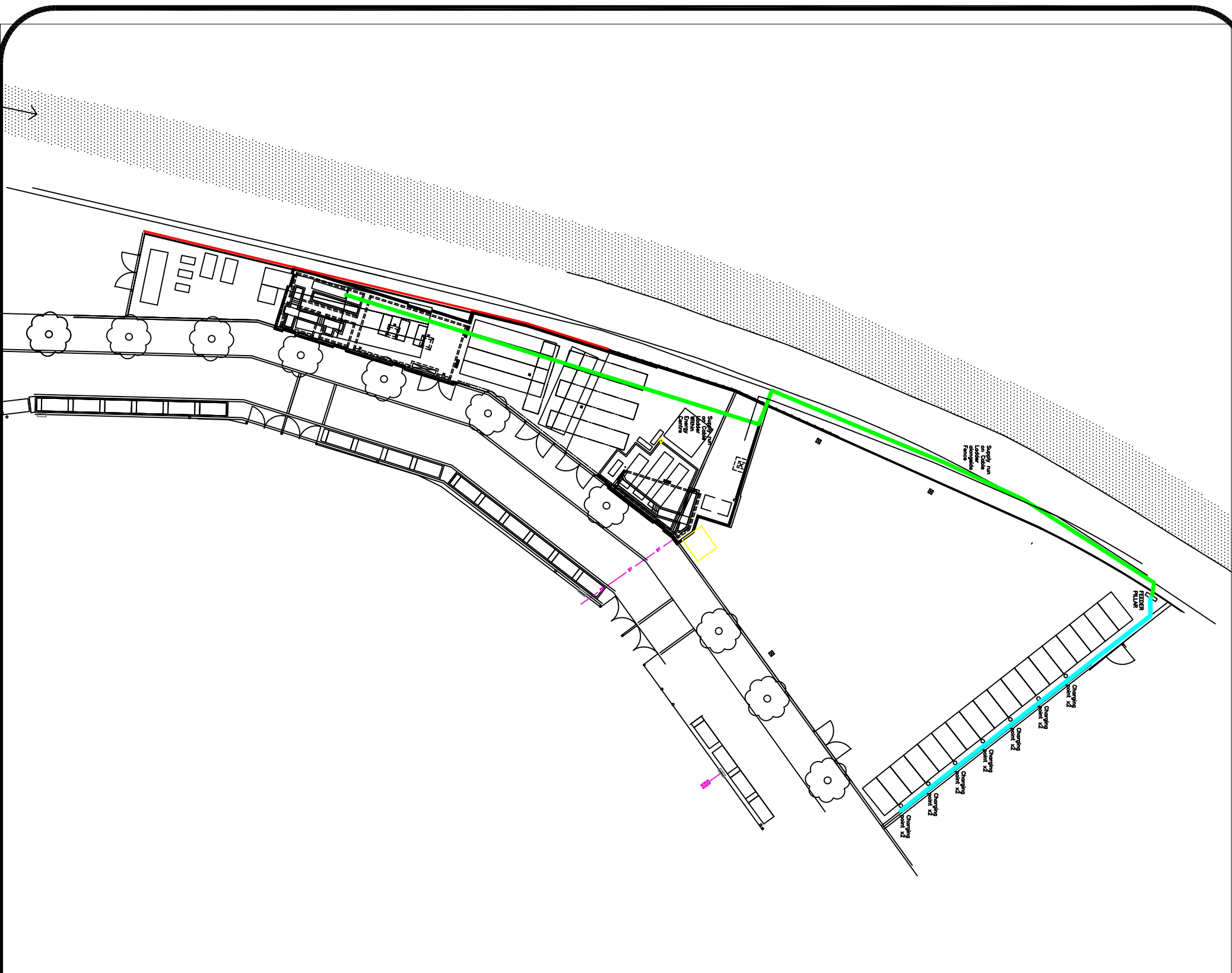
Action	Timescale
Future travel surveys	One spectator survey for an England rugby match, club rugby match and concert event every three years
Feedback to RFU management	Annually
Undertaken comprehensive strategic review of all aspects of the Travel Plan, including staff mode share surveys	3 rd and 5 th year, then every three years

- 5.4.4 If the TP is shown to be regularly underachieving targets through the monitoring process, remedial actions may need to be implemented. These remedial actions would typically consist of measures which could help to get the TP on target. Costs associated with the extension of the life of the TP would be covered by the RFU.

6. SUMMARY

- 6.1.1 This Major Event Day Spectator Travel Plan has been prepared by Momentum Transport Consultancy on behalf of the RFU to satisfy the Section 106 obligations of the East Stand Extension planning permission.
- 6.1.2 The TP is a long-term management strategy for Twickenham Stadium that seeks to increase the use of sustainable modes of transport by staff on event days.
- 6.1.3 Interim mode share targets for spectator travel have been provided for the third and fifth year following adoption of this TP. These targets reflect the aspirations of the RFU to encourage more sustainable modes of travel to and from Twickenham Stadium.
- 6.1.4 The TP is a live document that is intended to be regularly monitored and reviewed through the TPC and regular meetings with the RFU. It is anticipated that appropriate measures will be taken to secure and enforce the TP in order to ensure regular monitoring and review of the proposed targets and measures.


APPENDIX A – ELECTRIC VEHICLE CHARGING POINTS



General Notes

No.	Revision/Issue	Date

Firm Name and Address



Project Name and Address
 Twickenham EV Charging
 Charging Layouts

Project	S1159	Sheet	01
Date	20.03.2018		
Scale	NTS		



Typical 2 car charging pole



Block paving



Grass

Passive provision for an additional 42 spaces (remaining 14 in the north car park)



- Parking space
- Potential power supply
- Dual plug charging pole

West Car Park - Twickenham Stadium
Proposed Car Charging Passive Provision Locations
 Sketch 180518-001-PY - KSS

**APPENDIX B – EXAMPLE EVENT
OPERATIONS PLAN**

TWICKENHAM
Twickenham Stadium
Transport Operations Plan (TTOP)

Version
3NMC

Report
August 2018



Prepared by:

Thomas Legg on behalf of the RFU

Updated by:

Nigel Cox, Head of Events, RFU

Contents

1	Introduction and History	4
2	Venue Details	5
3	Transport Operations	12
4	Spectator Transport Operations	16
5	Parking Permits	25
6	Traffic Management and on street parking controls	26
7	Crowd Management	29
8	Resources and Monitoring	33
9	Communications	36

1 Introduction and History

History

- 1.1 The management of the crowds to and from the stadium used to involve many members of staff and police officers undertaking the closure of roads and marshalling pedestrian crossing points. With the introduction of a Controlled Parking Zone (CPZ) in 1999 the numbers of police officers reduced, leaving officers to concentrate on road closures and the traffic plan.
- 1.2 In September 2012 the Police began a phased reduction in their staff numbers who were engaged in traffic and crowd management. This culminated in August 2014 with no Police resources routinely deployed to deal with traffic and crowd movements.
- 1.3 A change in legislation allowed private traffic management companies to regulate and direct traffic on public roads and subsequently the RFU employed a traffic management company, The Combined Services Provider (CSP) to execute the traffic management plan, complied by the RFU Head of Stadium Events in association with the Metropolitan Police, CSP and the London Boroughs of Richmond Upon Thames and Hounslow.

Aims and Objectives

- 1.4 The overarching aim of the Twickenham Stadium transport operation is to ensure that all client groups and spectators can travel to and from the venue safely and efficiently whilst minimising the impact on local residents and businesses.
- 1.5 The key transport objectives are to ensure that:
 - All client groups can get to the right place, at the right time, every time, safely and efficiently;
 - Spectators and workforce can travel to and from the venue safely, in adequate time and comfort; and
 - The local community is not unduly disrupted and any potential impacts on local residents and businesses are minimised.

The Twickenham Transport Operations Plan (TTOP)

- 1.6 The TTOP covers the generic transport operations for all users including Team arrivals, Match Officials, Hospitality Guests, Spectators and workforce.
- 1.7 An Event Transport Plan exists for each event at the venue and sets out how the different transport services will be delivered.
- 1.8 It is important to note that the Event Transport Plans are 'live' documents and will be edited numerous times prior to the start of each stadium event.

2 Venue Details

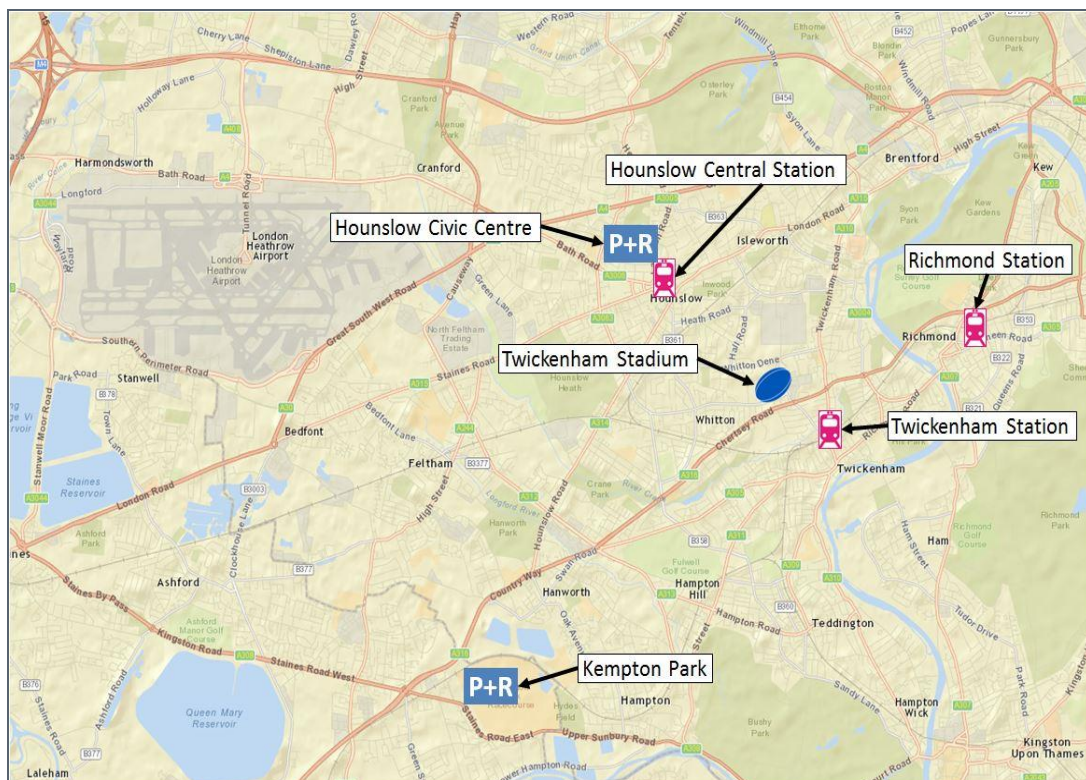
Venue Information

- 2.1 Twickenham Stadium is the home of English rugby with a capacity of 82,500 seats, which makes it one of the largest rugby stadiums in the world.
- 2.2 The stadium hosts England rugby matches, Premiership rugby club matches, an international sevens tournament as well as annual Varsity and Army/Navy games.
- 2.3 Twickenham was also used to host the final of the Rugby World Cup in 1991 and 10 Rugby World Cup Games including the final during the 2015 Tournament.
- 2.4 Twickenham is the world's largest dedicated rugby venue and in addition to the host Union fixtures, is also used for Club matches and other special events. The stadium has hosted various concerts, the most recent being the Rolling Stones and Eminem concerts over the summer of 2018..
- 2.5 Twickenham has also hosted its first non-rugby sporting event in 2016 when it held the NFL match between the New York Giants and Los Angeles Rams. The NFL returned in 2017 with a further two matches held at the stadium.

Venue Location

- 2.6 Figure 2.1 shows the location of the venue within southwest London. The venue is situated approximately 12 miles from central London and 5 miles from the M25 orbital motorway. The venue lies within the London Borough of Richmond upon Thames and borders the London Borough of Hounslow.

Figure 2.1



Key Dates

- 2.7 Table 2.1 outlines the key dates for operations at Twickenham during 2016. Further Specific information detailing dates for operations and bump in, can be found in Appendix A.

Table 2.1: Key Dates at Twickenham 2018

DATE	DAY	FIXTURE	KICK OFF TIME	ATTENDANCE
2018				
06-Oct	Sat	Premiership match	15.00hrs	50,000
03-Nov	Sat	Eng v South Africa	15.00hrs	82,000
10-Nov	Sat	Eng v New Zealand	15.00hrs	82,000
17-Nov	Sat	Eng v Japan	15.00hrs	82,000
24-Nov	Sat	Eng v Australia	15.00hrs	82,000
		Eng v Ireland Women	17.40hrs	
01-Dec	Sat	Barbarians v Argentina	Awaits	65,000
06-Dec	Thurs	Varsity match	11.30 & 15.00hrs	30,000
29-Dec	Sat	Big Game 11	Awaits	82,000

Key Clashes

- 2.8 A number of other events taking place across London may impact upon the transport operations at Twickenham. These are always taken into account when planning for an event.

Spectator Numbers

- 2.9 The maximum capacity of Twickenham stadium is 82,445. That said a seat kill figure should be considered due to a number of factors including broadcast positions or enhanced security measures.

West Fan Village

- 2.10 The West Car Park is used for the West Fan Village for major matches at Twickenham. Depending on the content the village can take between 7 and 12,000 spectators and provides entertainment and food and beverages. There is also usually some sponsor activations.

The operation and strategy

- 2.11 At an early stage of an event day the management company (CSP) will be deployed to assist with traffic movement and keeping pedestrians on the footpaths. The longer they can achieve this the less time the roads will need to be closed to traffic.

However, at some stage the pavements will become too crowded with pedestrians and the road will need to be closed to vehicles. Once the decision to close the roads is made (see 'decision makers' below) the traffic marshals will close the roads as shown on their briefing sheets, using the signs provided.

The roads will remain closed until the event commences and the Control authorises that they re-opened.

Approximately 15 minutes prior to the finish of the event, the road closures will be re-introduced to prepare the streets for the spectators leaving the stadium.

Again, the roads will remain closed until Control authorises that they be removed.

At this time the stewards will need to be proactive in ensuring that people stay of the footpaths and do not stray into the roads which are now open to traffic. This part of the operation will remain until the staff are stood down by the control room.

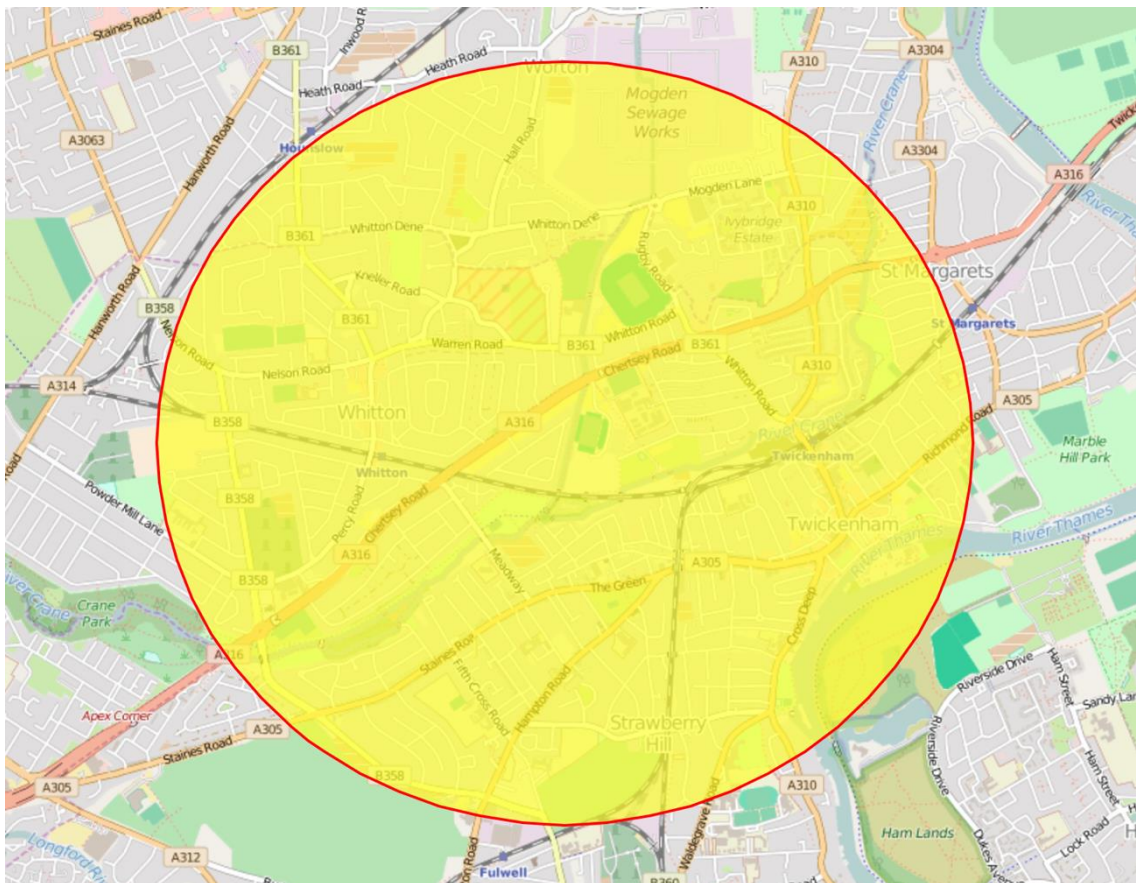
Once it is deemed that the roads are safe enough for pedestrians and traffic to run side by side the operation will be closed down.

2.12 The key principle of the transport plan is to ensure access to the venue is efficient for both spectator and RFU client groups, and that both spectators and clients can leave the stadium as quickly as possible following the end of the event.

In achieving this aim, consideration must be given to reducing the inconvenience and disruption to local residents.

The Footprint or area of influence for match day transport operations is illustrated in the in the map below (Figure 2.2) and has been agreed by the London Borough of Richmond Upon Thames and the London Borough of Hounslow as well as Transport for London, British Transport Police, Highways England and the Metropolitan Police

Figure 2.2



2.13 The RFU has employed a traffic management company, the combined service provider (CSP) to execute the traffic management plan which has been compiled by the RFU Head of Transport in association with the Metropolitan Police, London Borough of Richmond upon Thames, London Borough of Hounslow, Transport for London, British Transport Police, Network Rail South West Trains, Highways England and CSP.

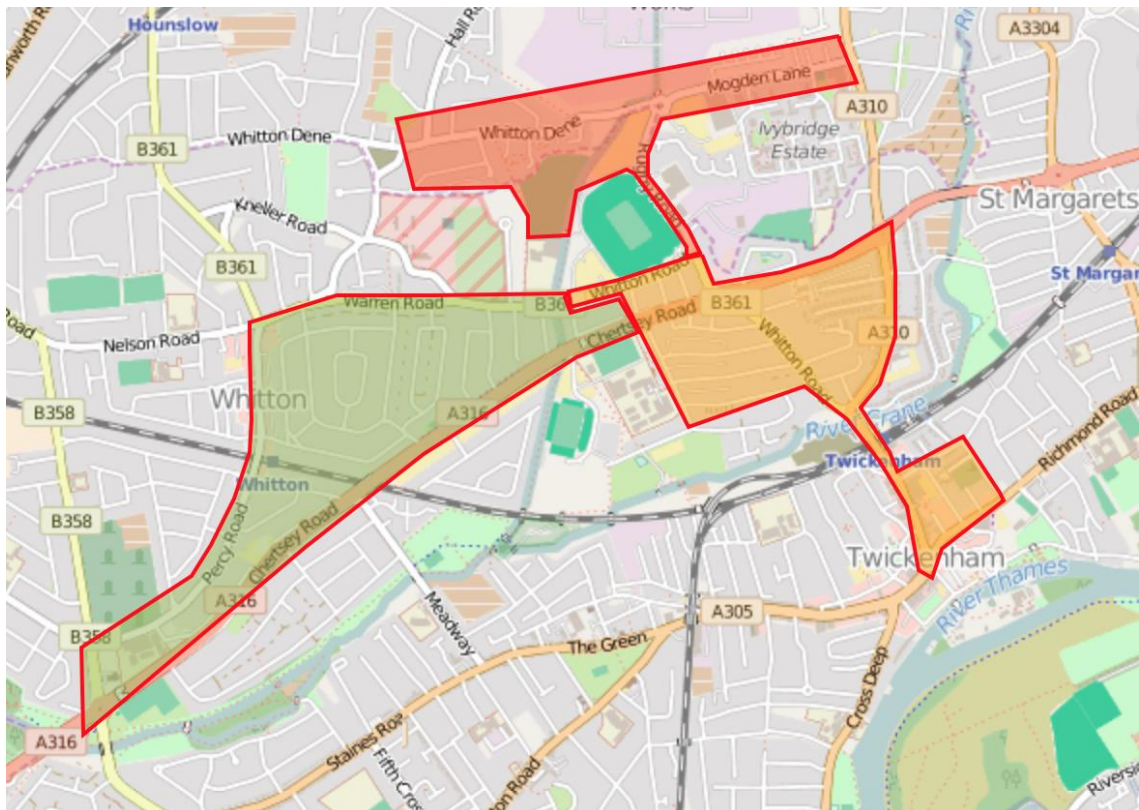
The plan consists of a series of locations of which traffic and pedestrians are managed. The management consists of:

- (a) Providing directions for vehicles
- (b) Providing directions for pedestrians
- (c) Keeping pedestrians on the pavements
- (d) Taking control of junctions to keep the traffic moving
- (e) Enforcing traffic lights to ensure the safety of pedestrians
- (f) Closing roads which become too congested

2.14 To enable these operations to be delivered The London Borough of Richmond upon Thames have produced a Traffic Management Order which allows authorised CSAS personnel to direct traffic and close roads throughout a designated area. Traffic signs and cones are provided by CSP and the LBRuT to assist in enforcing the TMO

CSP provide trained personnel to cover the duties outlined above. CSAS Staff personnel are provided to direct traffic on the public roads and implement road closures with designated signs. The footprint is divided into sections as illustrated in the map below (Figure 2.3). Each section is allocated the agreed number of personnel. Operations are supervised by sector supervisor who report to the CSP site manager.

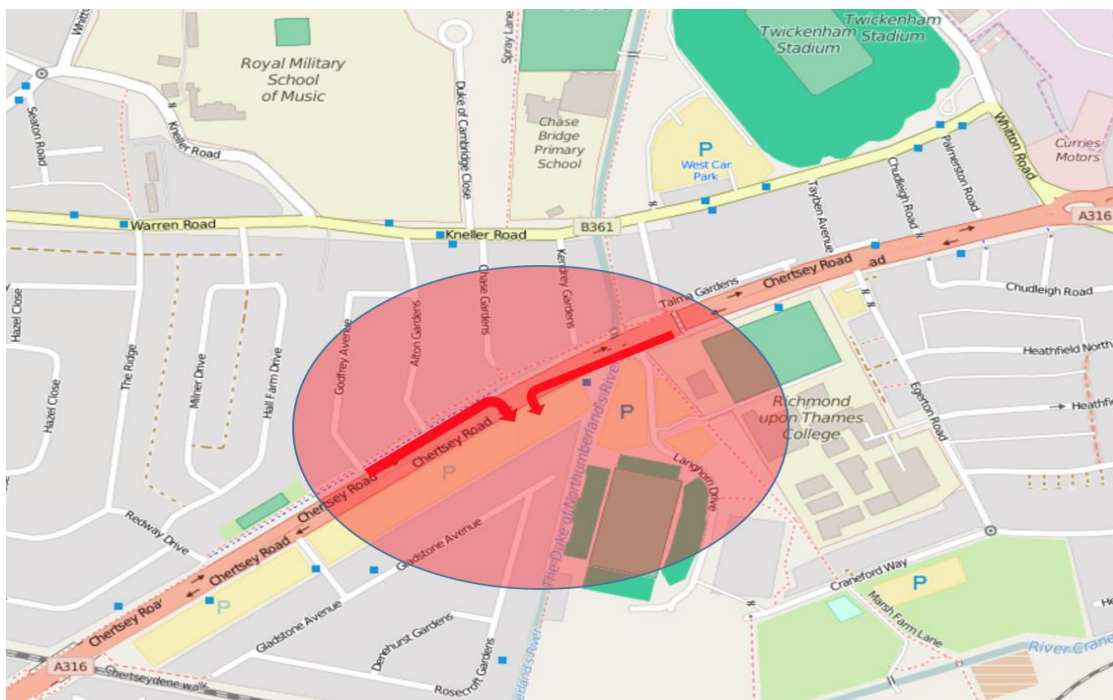
Figure 2.3



2.15 Each member of the CSP team receives a briefing sheet with instructions particular to that location.

- 2.16 Each supervisor is in the possession of a radio which is linked back to the RFU control room where a dedicated operator supervises the channel. This operator has a deputy and they are both seated alongside the police who retain some aspects of the operational delivery.
- 2.17 To achieve a reliable and safe operation both TFL and Highways England will support temporary messaging using both fixed and temporary variable message signage (VMS) to restrict the amount of through traffic using the A316 road space during the critical periods of ingress and egress. There will be no formal restrictions other than the pedestrian crossing operation on Whitton roundabout which will limit vehicle flow rates due to the pedestrian volumes.
- 2.18 Spectator transport operations will primarily operate from the south of the venue. Twickenham station will serve as the primary spectator rail station whilst spectator shuttle buses will stage and load on Rugby Road / North Car Park. The A316 will be open to all users.
- 2.19 Furthermore, vehicles entering the Rosebine car park will be authorised to turn right over the A316 central reservation opposite the Rosebine 1 car park entrance. This reduces the number of vehicles crossing the Whitton roundabout and reduces the journey time for eastbound traffic. Map illustrating turning location below (Figure 2.4)

2.20 Figure 2.4



Car Parking

2.21

There are a number of car parks being utilised on a match day. Table 2.2 below sets out the different car parks and their capacities. Figure 2. summarises the car park locations.

Table 2.2: Car Parks and Capacities

Cardinal Vaughan	900 – Cars Only – Max vehicle height 1.9m
Rosebine 1	600
Rosebine 2	400
West Car Park	Team coaches, no public parking
Outside Spirit of Rugby Entrance	6
North Car Park	300 cars + Shuttle Bus Staging – (currently restricted due to East stand contractor compound)
Bulls Field	200
Tesco (blue badge parking)	400
Twickenham Stoop	250 available at certain times

Figure 2.5: Car Park Locations



2.22 A description of each car park can be found below.

All Hallows Church Car Park

2.23 The private non RFU operated car park of All Hallows Church is used on match days. There are 90 parking spaces available and the surface consists of tarmac. All Hallows Church is south of the A316, accessible from Erncroft Way and Chertsey Road. The site is managed by the friends of All Hallows church and parking charges vary by game

Bulls Field

- 2.24 Bull Field car park is located west of the stadium and accessed from Whitton Dene. The area is owned by the London Borough of Hounslow and is leased to the RFU on a long term basis. The site can be used for 28 days in every 12 month period and has a capacity of 200 cars. The site is grass but does benefit from good drainage conditions. The RFU provide temporary surfacing in the form of trackway inside the vehicle entrance to assist with vehicle access.

Cardinal Vaughan

- 2.25 Cardinal Vaughan car park is located west of the stadium and accessed from Whitton Dene. The area is owned by Cardinal Vaughan school and is leased to the RFU on a long term basis and has a capacity of approx 900 vehicles. The site is grass but does benefit from good drainage conditions. The RFU provide temporary surfacing in the form of trackway inside the vehicle entrance and along the central car park spine to assist with vehicle access. Pedestrian access is enabled over the pedestrian bridge directly into the west car park. The distance between the pedestrian bridge and the Lion Gates is 90m

Chase Bridge Car Park

The Private non RFU operated car park of Chase Bridge Primary School car park is located west of the stadium and accessed from Kneller Road. The area has the parking capacity for approximately 157 cars. This is split over two car park areas within the school grounds – Chase Bridge (128 cars) and Chase Bridge Top (29 cars). The surface is a mixture of grass and hard standing.

Kneller Hall

The Private non RFU operated car park of Kneller Hall is located west of the stadium and accessed from Kneller Road. The site is typically hired by third party hospitality providers and has not been used for parking arrangements since the Rugby World Cup 2015.

Richmond College

Richmond College car park is located south of the stadium on the A316. This site is normally used by third party hospitality providers but does have a capacity of around 250 vehicles. That said development works have now commenced and it is likely that the site will not be suitable for any on the day parking arrangements until the end of 2017

Rosebine Car Park 1 and 2

Rosebine car parks are located on the south side of the A316 west of Whitton Roundabout. The car park has a gravel surface and space for approximately 1000 cars with 600 in Rosebine 1 and 400 in Rosebine 2. The area is also suitable during the summer months for coach parking and can hold over 200 coaches if required. Eastbound access is now permitted following approval from TFL to facilitate right turn access from the westbound carriage way of the A316

Tesco Car Park

Tesco is located north east of the stadium and is accessed from Mogden Lane. The Tesco car park will provide 350 parking spaces and meets most of the DDA guidelines for accessible parking. The site also employs a contractor – Euro Car Parks who sells spaces not contracted by the RFU to members of the public. Approx. 50 – 100 spaces.

Twickenham Trading Centre

- 2.26 The Private non RFU operated car park on Twickenham Trading Centre is located east of the stadium and accessed from Rugby Road. This site is typically used by contractors with TEL employees taking most of the capacity. The site is operated by Personal Parking Services Ltd on behalf of the land owner Derick Murray. It is important to note that egress from this area is not permitted until Rugby Road has been reopened. A CSP Traffic Management Vehicle is positioned across the Industrial Estate Entrance to provide a physical barrier to any vehicles trying to leave that area before the closures are lifted. The driver of the vehicle remains with the vehicle at all times in the event of emergency access being required.
- 2.27 **Webb Ellis House**
- Webb Ellis House is located directly east of the stadium on Rugby Road. There are 50 parking spaces here that are taken up by the owner Derek Murray on event days.
- 2.28 **West Car Park**
- The West Car Park is located directly west of the stadium and is accessed from Whitton Road. This will be used for teams and match officials vehicles only.
- 2.29 **North Car Park**
- The North Car Park has a parking capacity of approx. 300 vehicles and has a hard standing surface. The area also accommodates coach staging / parking for approx. 50 vehicles and provides post match the staging facility for busses operating the Richmond Shuttle. The construction compound has now reduced the overall capacity of this area and the exact available figure needs to be agreed on an event by event basis.

3 Transport Operations

- 3.1 This chapter describes the transport operations for the different client groups attending Twickenham stadium, focussing on access routes into the stadium.
- 3.2 This chapter excludes spectator transport operations, which are discussed in Chapter 4. All car parks referred to in this chapter are shown in Figure 2.4.

Parking Spaces at Twickenham

- 3.3 Table 3.1 outlines the different client groups and transport information for a match day at Twickenham. Typically, there will be limited on site spectator parking available at Twickenham. The majority of available spaces are allocated to operational vehicles and Teams.

Table 3.1: Team and Official Spaces at Twickenham

Internationally Protected Persons and Unprotected Dignitaries	Cars	Spirit of Rugby Cardinal Vaughan
Teams and Team Officials	coaches	West car park
Match Officials	Cars	Cardinal Vaughan
Press & Broadcast	Cars	Rosebine / North & Cardinal Vaughan
Workforce	Cars	Bull Field & Rosebibe

Internationally Protected Persons (IPPs) and Unprotected Dignitaries

Transport Service Provided

- 3.4 The following plans are put into place when IPP clients are in attendance.
- 3.5 Transport services for IPPs and Unprotected Dignitaries are controlled by security and therefore sit outside transport's area of responsibility. However, the transport team will need to be aware of visits by dignitaries and make appropriate arrangements for vehicle access and parking.
- 3.6 Timings will be subject to security, however this client group are likely to arrive close to the start of the event and depart slightly before the end.

Load Zone and Parking

- 3.7 If required, the IPP load zone is located in the Spirit of Rugby. Access will be from Whitton Road. IPP routes to the stadium are likely to change dependant on the IPP, security and local traffic congestion.
- 3.8 IPP support vehicles will approach the Spirit of Rugby with the main IPP vehicle, and will then park on Whitton Road for the duration of the match. The support vehicles will then return to the Spirit of Rugby at the end of the match to collect the main IPP vehicle before leaving.
- 3.9 Unprotected Dignitaries will park in Cardinal Vaughan.

3.10 The access routes and load zones are shown in Figure 3.1

Figure 3.1: Map of IPP Access Route and Load Zone



Teams and Match Officials

Load Zone and Parking

- 3.11 Team coach parking is located in West car park. Teams will unload from the coach and walk through the gathered fans into the team entrance. The coaches will then park as directed.
- 3.12 The access routes and load zones are shown in Figure 3.2,

Figure 3.2: Map of Team Access Route and Load Zone



Transport Service Provided

- 3.13 Match Officials typically either self-drive or are provided with a coach service. Match Officials are expected to arrive at the stadium up to two hours before kick-off and depart two hours after final whistle on match days.

Load Zone and Parking

- 3.14 Match officials will have a parking permit and will park in the Cardinal Vaughan car park or if a coach is used, this will park in the West car park alongside the team coaches.

Workforce

- 3.15 For a capacity match at the stadium there potentially could be 4,000 members of staff on site. All workforce are encouraged to use public transport to and from the event.
- 3.16 Where staff are arriving extremely early or leaving particularly late there are a limited number of parking spaces available. Twickenham Experience purchase a small number of staff parking spaces and the RFU provide Bull Field for staff, which has a capacity of 200. There are also some spaces reserved in Rosebine for the Honorary stewards, who are volunteers and often travel long distances to work matches.
- 3.17 The RFU actively recruit workforce from the local community, which reduces any additional pressure on the transport network.

- 3.18 The RFU also provides the free shuttle service to spectators and should the need arise, pre-determined number of these buses can be made available earlier and retained later, to accommodate staff.
- 3.19 In extreme cases where staff have been unavoidably detained at work the RFU will fund taxi's or Private Hire Vehicles to ensure staff are safely taken home.

4 Spectator Transport Operations

Trip Generation

4.1 The maximum capacity of Twickenham stadium is 82,500.

Trip Distribution

4.2 The geographic distribution of people attending Twickenham events varies according to which teams are playing.

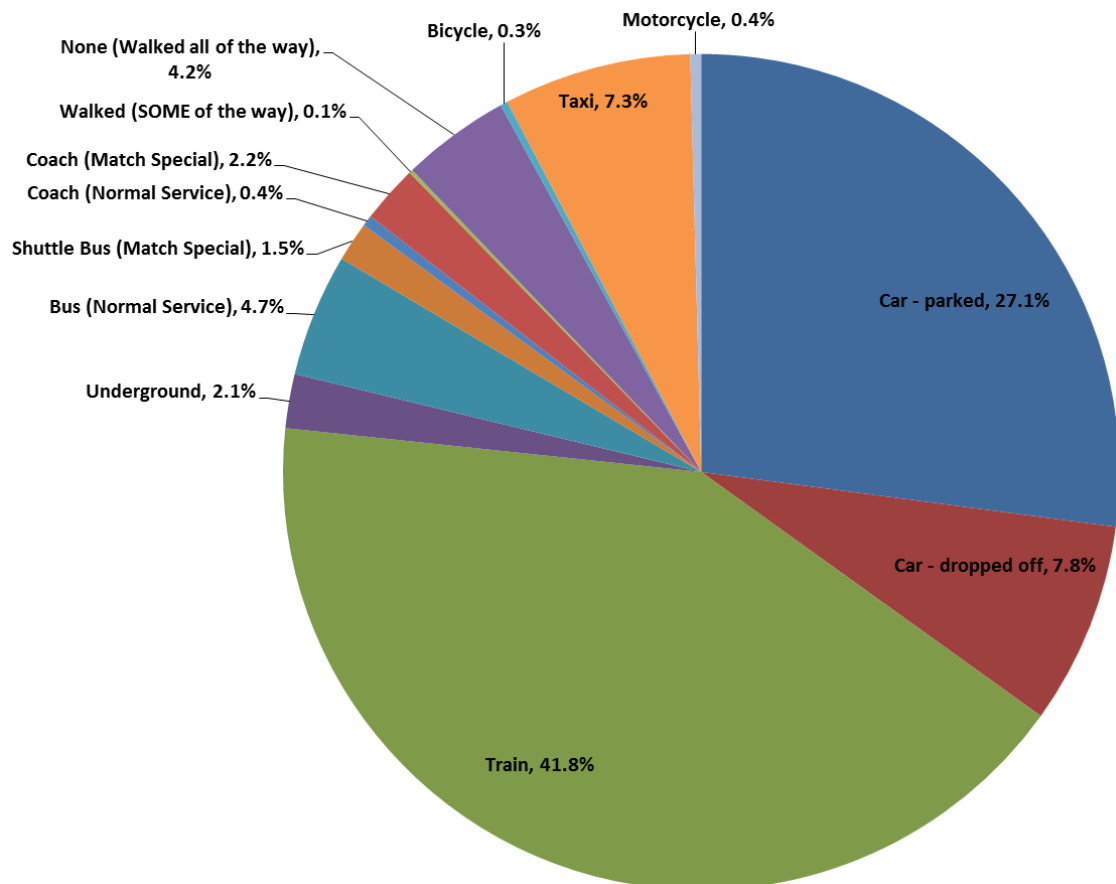
4.3 Ticket sales data is available for each event and will show where in the UK tickets have been purchased from. This of course does not necessarily mean this is where people are travelling from on the day of the event but it is an indication

4.4 Figure 4.1: Typical Spectator Origin Distribution for an England 6 Nations match

Mode Split

Existing Mode Split

4.5 Various surveys have been undertaken in the last five years of the proportion of spectators travelling to and from Twickenham stadium by different modes of transport. Below is an example of the modal split for an England 6 Nations international match.



Constraining Factors Impacting Upon Mode Choice

- 4.6 For regular events at Twickenham there is considerable parking available both locally and within the stadium to help accommodate the demand for private car usage. The existing event day Controlled Parking Zone (CPZ) around the stadium will prevent spectators from parking on surrounding streets.
- 4.7 Messaging given out to spectators will discourage parking on-street around the stadium. This is in order to reduce the potential impact upon stadium access for all client groups, as a result of increased vehicle activity around the stadium.

Arrival and Departure Profiles

- 4.8 The arrival and departure profiles is expected to vary event by event but generally the transport operations is fully operational from four hours before kick off until approximately 4 hours after the final whistle.
- 4.9 The arrival and departure profiles is expected to vary for different events at the stadium with survey data demonstrating a significant difference between Rugby Internationals and concerts as a result of a number of different factors, including the following;
- Type of event (e.g. concert, rugby international, club game);
 - Day of the week;
 - Kick off time and therefore time of final whistle;
 - Influence of other televised matches on the same day.

Transport Enhancements

- 4.10 Following the successful delivery of transport operations during the 2015 Rugby World Cup a range of transport enhancements are currently being considered depending on the specific event requirements. The purpose of these enhancements is to mitigate transport issues due to different audience profiles, different operating times including evening bump outs and varying audience requirements. The objective is to minimise queuing at Transport Hubs including Twickenham station and to ensure that spectators can get away as quickly as possible after each event.
- **Increased rail service provision on egress:** a normal rugby match at Twickenham requires South West Trains to provide a 'match day' operation, which uplifts the provision of train services from 8 trains per hour to 10 trains per hour. To reduce congestion we are currently working with South West Trains and DFT to provide an enhanced uplift to 14 trains per hour (Peak) and the running of ten car trains, up from the existing eight car trains.
 - **Park and Ride shuttle operation:** This service is currently not in use due to the parking site at Hounslow being unavailable. Alternative areas for parking are being reviewed.
 - **Shuttle operation to Hounslow Piccadilly Line:** This service is currently being provided, demand and capacity is carefully being monitored with the view to providing more capacity for Cat A games. The Piccadilly line will be part of TFL's night tube network and will enable outbound movement post 00:30

- **Promotion and accommodation of National Express coaches:** a series of coach operations from regional hubs around the country will provide dedicated coach travel to and from the venue. Specific parking will be allocated to all National Express services. The capacity of this service potentially serves up to 5,000 spectators per match and ensures that they can move away from the venue as quickly as possible. The service is ideally suited for movements back to the Midlands and East Anglia where cross country rail services are limited particularly on evening kick offs where onward transfer from the capital's rail station is difficult to achieve due to limited late night services. This operation is scalable and the number of coaches is driven by the number of bookings. The service is delivered at NX's commercial risk.
- **Additional Parking Restrictions:** The event day controlled parking zone to the north of the stadium has been extended for each match day and the match day control of these areas is supported by both LBRuT's and Hounslow's parking enforcement teams.
- **New Taxi and Private Hire Vehicle pick up and drop off points:** depending on the event profile dedicated black cab and private hire set-down and pick-up points can be located in London Road to improve the management for spectators and local residents. The Management of this area is currently being agreed between TFL and LBRuT
- **Travel Demand Management:** a marketing and communications action plan will be implemented to ensure that the background demand is forewarned about the impact of each match at Twickenham, and given alternatives to ensure their journey can continue unaffected. Furthermore a spectator journey planner is being considered to provide stadium audiences with accurate real time travel information.

Transport Service Start and End Times

4.11 Spectator transport services will commence operations prior to the start of a match and continue to run after the match ends. Table 4.2 outlines the operating hours of transport services with reference to competition times. It is important to ensure these services are achievable with each individual operator as evening timetabled services differ depending on day of the week.

Table 4.2: Transport Service Start and End Times

Richmond Shuttle	-3/+3 hours
Hounslow Shuttle / Park and Ride	-5/+3 hours
South West Trains	-5/+3 hours
London Underground	District line (Richmond): -5/+3 hours Piccadilly line (Hounslow Central) -5/+3 hours

Rail Strategy

- 4.12 The primary rail station used by spectators will be Twickenham station, which provides National Rail services east to Clapham Junction, Richmond and central London and west to Reading, Windsor, Hounslow and Kingston. Other stations are used but not heavily promoted as available. Stations such as Whitton are on the same line as Twickenham & Richmond and a full train of passenger boarding at Whitton, arriving at Twickenham post match would compromise the operation at Twickenham station. Using Whitton for west bound passengers (Windsor & Reading) is already forms part of the strategy.

Rail Operations at Twickenham Stadium

- 4.13 Whitton Road will be closed to traffic before and after each match to enable spectator access to / from Twickenham station. CSP will operate a crowd management operation to ensure safe crossing for pedestrians by pulsing the movements as dictated by demand.
- 4.14 Shuttle buses will operate to / from Richmond for the District line and overground services, and to Hounslow Central for the Piccadilly line. The Richmond shuttle bus load zone will be located on Rugby Road between Gate 4 and the Mogden lane roundabout. The Hounslow shuttle bus load zone will be located on Whitton Dene adjacent to the Bulls field car park.

Rail Demand

- 4.15 Of those spectators forecast to use rail modes, 93% are expected to use Twickenham station. This is based on survey data from previous events, with the remaining 7% using Richmond station (Overground and Underground services).
- 4.16 For the majority of rugby events, of those using Twickenham station, 85% are expected to travel to / from central London in the Waterloo direction with 15% heading to / from the west in the Reading direction. However as an example, when Wales are playing at Twickenham during Rugby Internationals, a higher proportion of spectators are expected to travel to / from the west (Reading direction).

Twickenham Station Rail Services

- 4.17 We are working with South Western Railways to provide additional services on major event days to provide additional capacity. The additional trains will run between Twickenham and Waterloo or Clapham Junction providing a total of 12 trains per hour to / from central London for a three hour period before and after each match.

Twickenham Station

- 4.18 Currently Twickenham Station is undergoing major refurbishment and building works which has closed the main ticket office in London Roads.

All entry to and from the station is now via a side entrance and extensive plans have been developed by SWR to ensure that the station can cope with the expected number of passengers on event days.

A plan to present the spectators to the station has also been developed by CSP with the co-operation of SWR.

Other stations such as Whitton and Hounslow are becoming more popular with customers and talks are taking place with SWR to explore using Whitton station more, particularly for passengers wishing to head west towards Reading.

Coach & Bus Operations

4.19 Spectator bus operations will consist of the following services:

- Spectator coaches
- National Express coaches
- Richmond station shuttle buses
- Hounslow Central shuttle buses

4.20 A summary of the operation for each bus system is provided below.

Spectator Coaches

4.21 Spectator coach vehicles will access the venue by coach and will park in either North Car Park or the Rosebine Car Park. Around 40 coaches are forecasted to arrive for a typical Rugby international. The number will increase for club matches.

National Express Coaches

4.22 Typically, there will be between 10 and 20 National Express coaches operating at Twickenham on match days. These will stage in the North Car Park this operation can be easily enhanced if the demand increases.

Richmond and Hounslow Shuttle Buses

4.23 The free shuttle service operated by London United will offer transport for up to 2,500 spectators from Richmond station to the stadium. Typically, 27 Double decker buses will be used, with a capacity of 80 passengers per bus with each vehicle doing up to 4 trips.

4.24 On Ingress shuttle buses will stage at the Richmond end of the A316. The load zone will be situated adjacent to Old Deer Park, directly before the footbridge. Ingress can operate with up to three buses loading at a time; this will be managed operationally and in correspondence with the demand. Any buses deemed surplus to requirements when demand is lower will drive between the Kew Road junction and St Margaret's roundabout until required for service.

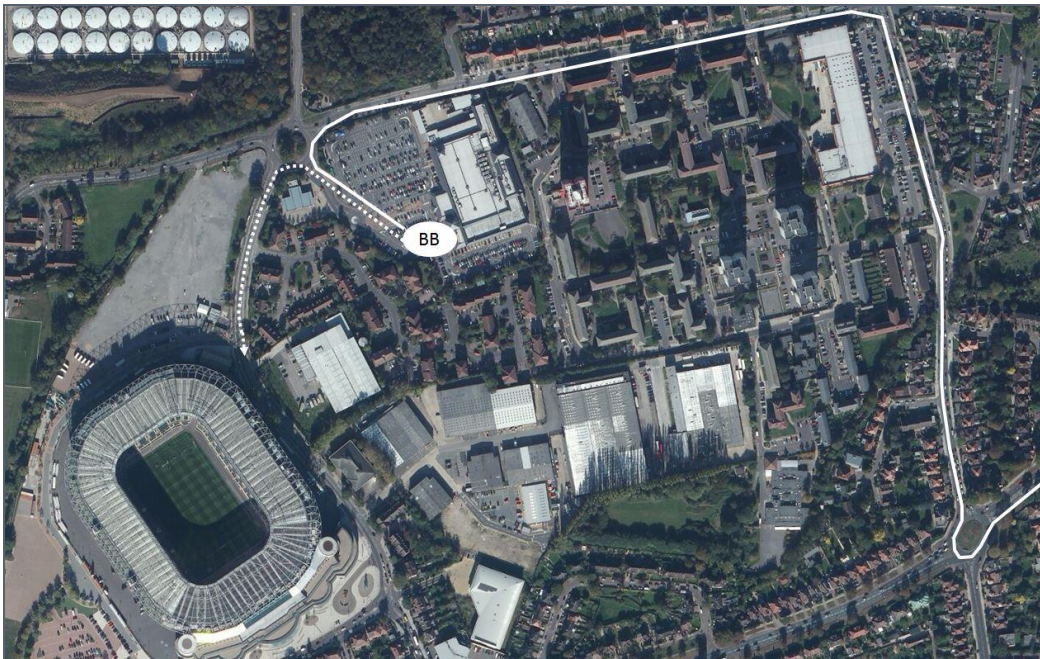
4.25 On egress the system will load from Rugby Road between Gate 4 and the Mogden lane roundabout. Buses will stage on the central spine of North Coach Car Park and vehicles will be managed between North Car Park and Rugby Road then through the audience flow on egress. Rugby Road has the capacity for 14 busses between Mogden Lane roundabout and Gate 4. These vehicles will be positioned before the end of the concert and vehicles from the staging area in north car park will only be moved into position on Rugby Road when the initial crowd flow has subsided and pedestrian flows have decreased. Approval for these vehicles to move between the staging area and Rugby Road will be issued by the control room.

4.26 The Hounslow Shuttle buses will operate from Whitton Dene providing a dedicated link between the stadium and the Piccadilly line of the London Underground network. This system will also support the Hounslow Park and Ride operation once agreement has been reached with the London Borough of Hounslow. The number of vehicles will be dependent on the demand forecast and will be adjusted as required.

Accessible Transport (Blue Badge Parking)

- 4.27 Blue badge parking will be located in the Tesco car park. 350 standard size spaces are available and will be allocated on a first-come first-served basis. Ticket holding spectators will be required to pre-book a blue badge parking space via the RFU Ticket Office. Once a Blue Badge parking permit has been ordered, spectators will be posted the car park permit to bring along on the specific match day. Each parking permit will be specific to the registered vehicle, with vehicle registration numbers being checked by car park staff.
- 4.28 The blue badge car park is located approximately a 250m walk from the stadium, as detailed in Figure 4.1. Spectators walking to the stadium will do so via the entrance / exit of Tesco car park at Mogden Lane Roundabout.

Figure 4.1: Blue Badge Parking Access and Route Map



Accessible Transport Operations

- 4.29 Accessible transport operations will consist of the following services:
- Accessibility Shuttles
 - Twickenham station shuttle bus 1
 - Richmond station shuttle bus 1
 - Whitton station shuttle bus 1 (optional)

Figure 4.2: Twickenham Accessible Shuttle Bus



Twickenham and Richmond Accessible Shuttles

- 4.30 An accessible shuttle will operate between Twickenham Station and the stadium. The load zones for the shuttle is located on Cole Park Road, just to the north of Twickenham Station, and Gate D at the stadium on Rugby Road.
- 4.31 An accessible shuttle will operate between Richmond Station and the stadium. The load zone for the shuttle is located immediately outside Richmond station on the bus stop and Gate D at the stadium on Rugby Road.
- 4.32 The service will operate from three hours before kick-off until three hours after the final whistle.

Taxi and Private Hire Vehicles

- 4.33 Taxi pick-up and set-down locations located around the stadium are currently being agreed between TFL and LBRuT.

Black Cabs

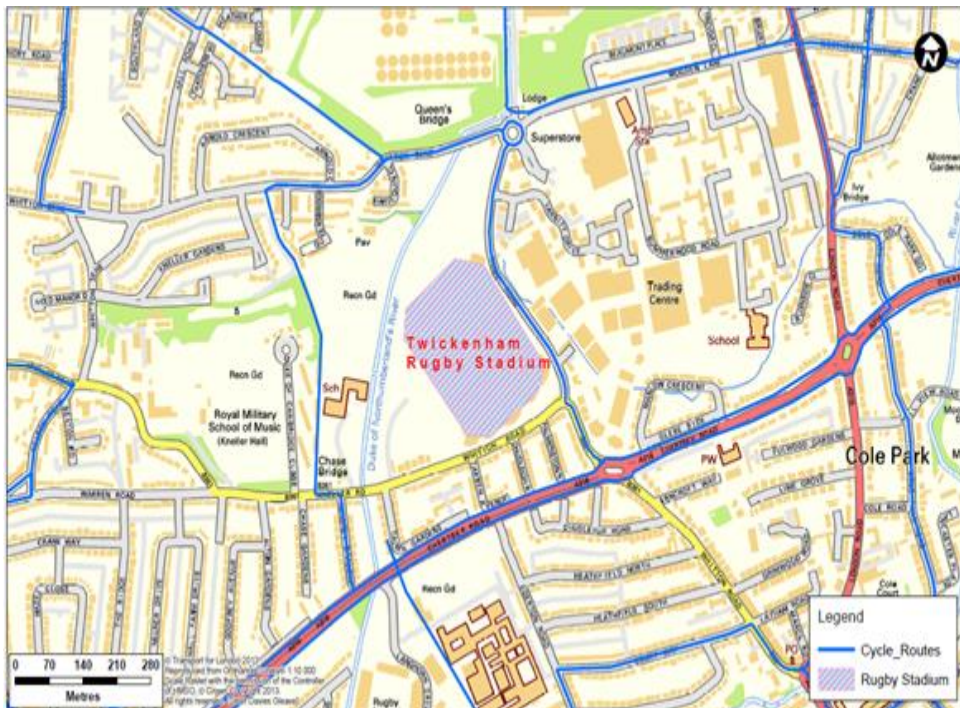
- 4.34 The first black cab pick-up and drop-off location is on London Road south of the A316. Access will be via the London Road roundabout on Chertsey Road. Taxi staging after each match will also take place on London Road with the pick-up area located at the Whitton Road end of London Road.

Private Hire Vehicles

- 4.35 Private hire vehicles are currently an issue and various options are being considered between the RFU, LBRuT, Hounslow and TFL. This is a critical issue particularly for concert events where high numbers of pick up and drop off operations are expected.
- 4.36 An area trialled for this operation was London Road junction with Hill View Road, however this met with considerable opposition from local residents so the current area being trialled is The Twickenham Stoop (Harlequins) car park. Data from the 2017 Six Nations showed that up to 300 vehicles were passing through the PHV location after a match. Therefore an area of approximate 40 vehicle spaces needs to be available to meet demand.

Cycling

- 4.37 Twickenham Stadium is well served by existing cycle routes and cycle parking will be provided at the Stadium.
- 4.38 Figure 4.3 provides a map of the cycle network located in the vicinity of the stadium.
- 4.39 The location of cycle facilities will be by the main Twickenham ticket hall. A double tier cycle rack has been installed to increase capacity for spectator cycles.



Pedestrians

- 4.40 Pedestrian access to the stadium will be encouraged and road closures will be in place to ensure pedestrians have pleasant and safe access to the stadium.
- 4.41 The following roads will be pedestrianised through the use of road closures:
- Whitton Road / London road from the Junction of York Street / London road past Twickenham station to the stadium;
 - Whitton Road from Rugby Road to the West car park entrance; and
 - Rugby Road from Mogden Lane to Whitton Road.
- 4.42 These road closures mean that the route between Twickenham Station and the stadium is fully pedestrianised, a pedestrian management operation is delivered by CSP to pulse spectators across the Whitton Roundabout. A map showing the location of the road closures is shown in Figure 6.2: Road Closures Traffic and spectator stewards are key to the safe and efficient movement of spectators whilst all major routes from train / tube stations will be fully signed for pedestrians. Traffic stewards will be managed through CSP and spectator stewards

4.43 Stewards will welcome and direct spectators to the stadium from both Twickenham and Richmond Stations, and will be positioned along the walking routes to the stadium. They will have Spectator Guides which they will be handing out and will be able to provide both event and venue specific information. Following the match, directional staff will direct spectators accordingly to the transport links away from the venue and provide a final farewell.

Pedestrian Wayfinding

4.44 Directional wayfinding signs will be used throughout the designated routes in the form of temporary and current permanent signage. Key routes to the stadium will be signposted with pedestrian signage from the transport hubs to the venue.

As well as being located at the transport hubs and along walking routes, stewards will be stationed around the stadium at the entry gates, the venue boundary and within the internal concourses of the stadium. Accessibility Team Members will also provide assistance to those with accessible needs from the Blue Badge car park to the stadium gates.

5 Parking Permits

Introduction

5.1 To address and control access and to parking locations at Twickenham a Parking Permits will be implemented, consisting of physical permits that will identify a vehicle's parking rights when displayed correctly.

Permits

5.2 Permits to park within the RFU's car parks on event days will be issued through the ticket office. A copy of a typical pass is shown below. Passes will be issued to the following sections of users:

- Vehicles for customers (cars, mini buses, coaches)
- Members of the press and broadcast
- Trade vehicles who require their vehicles on site to perform their duties
- Staff members will access parking by showing their match day accreditation or RFU ID.

5.3 Parking will only be provided to vehicles displaying the appropriate Permit. On each Parking Permit, a parking location will be displayed, which will relate to the parking category of the client and the parking area they have been allocated.

5.4



Displaying the Permit

5.5 Permits must be correctly displayed in the inside of the lower passenger side of the front windscreen and be visible from the outside of the vehicle at all times.

5.6 For security reasons, vehicles not displaying a permit at concert venues may be subject to removal or re-positioning.

6 Traffic Management and On-Street Parking Controls

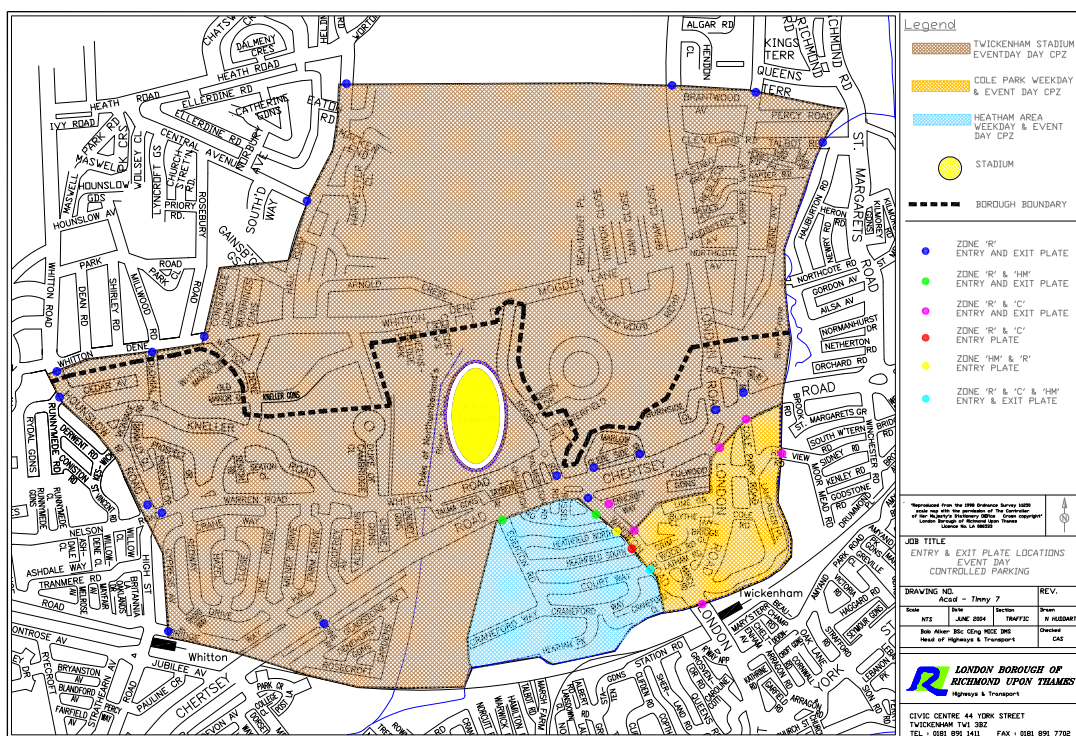
Introduction

- 6.1 This section summarises local traffic management measures which will be in place to help manage traffic on the local and strategic highway network.
- 6.2 The measures are designed to facilitate the safe and convenient passage of spectators to the event whilst at the same time causing the least possible inconvenience to local residents, businesses and other road users / visitors to the area.

Event Day Parking Restrictions

- 6.3 On event days residents of the existing Community Parking Zone (CPZ) around the stadium (R Zone) have parking permits provided by the London Borough of Richmond upon Thames. Details of the zone and permit arrangements can be found at: http://www.richmond.gov.uk/home/services/parking/controlled_parking_zones.htm
- 6.4 Vehicles parking in contravention of the CPZ may be issued with a fixed penalty notice from local authority parking enforcement officers. In exceptional cases vehicles may be moved from street to street by local authority removal trucks. This service is contracted to the RFU by Richmond and Hounslow local authorities.

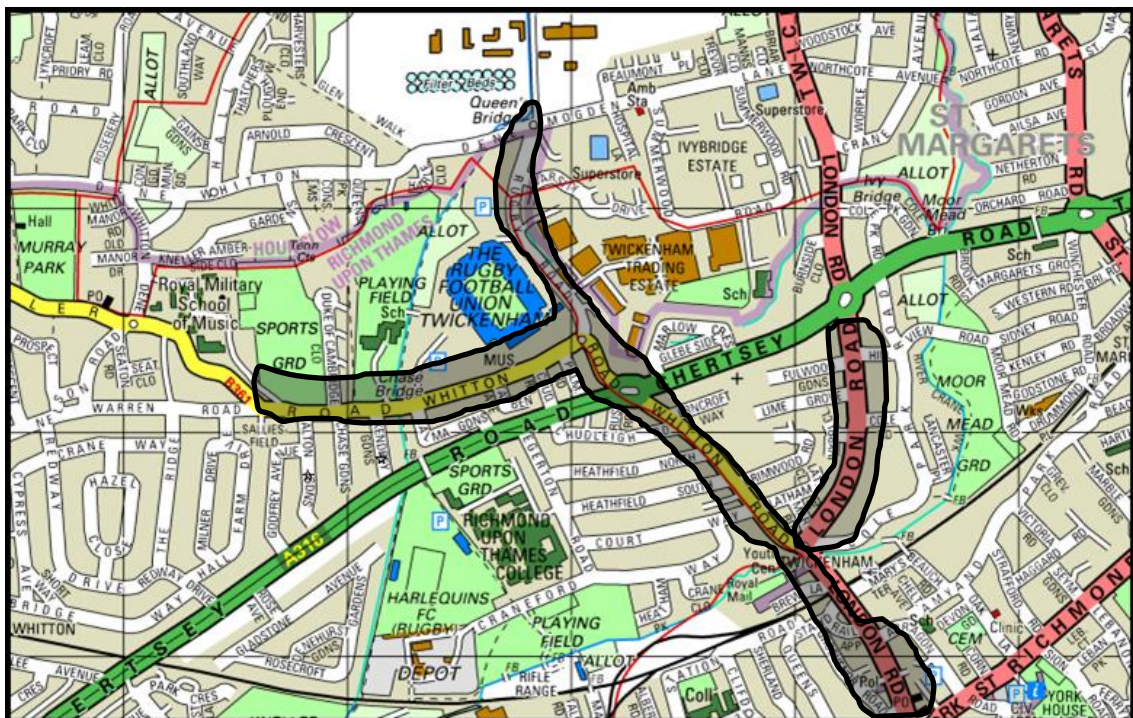
Figure 6.1 Local authority CPZ



Road Closures

- 6.5 Road closures will be implemented to enable pedestrians to have a pleasant and safe access to the stadium and to manage traffic congestion.
- 6.6 The following roads will be pedestrianised through the use of road closures:
- Whitton Road / London road from the Junction of York Street / London road past Twickenham station to the stadium;
 - Whitton Road from Rugby Road to the West car park entrance; and
 - Rugby Road from Mogden Lane to Whitton Road.

Figure 6.2: Road Closures



Local Residents and Businesses

- 6.7 These closures are implemented once the pavements can no longer cope with the amount of pedestrians using them. When the pedestrians start to spill out onto the roads and cannot be controlled by stewards a decision will be made by the Event Control to close the roads to vehicles.
- 6.8 Once these closures are in place the ability for vehicles to travel down the roads will be restricted by CSP who will only allow vehicle movement in exceptional circumstances, when authorised by the event control room. In many cases, once the road is closed the density of the crowds make it unsafe to allow any vehicles to travel, however in some quieter roads, it may be possible to accommodate local residents and businesses and every effort is made to do this.

Timings

- 6.9 The road closures are usually implemented approximately 2hours prior to kick off, they are removed once the event starts and are reinstated 15minutes prior to the end of the event. They generally remain in place until 2.5 – 3hrs after the event has finished.
- 6.10 The times remain flexible and depend on the density of the crowds attending the event.

Information sharing

- 6.11 The road closures cause some difficulties for the local residents and businesses so every effort is made to ensure people are aware of matches taking place, together with the start time and expected time that closures will be implemented. There is a 'hot line' to the event control room which contained a recorded message explaining these times. Real time messages are displayed on social media and a member of the RFU community team staffs a mobile phone to answer any questions from the local community.

The information is also made available via a quarterly publications, Rugby Post, which is distributed to over 30,000 local addresses.

7 Crowd Management

Event Profile

- 7.1 The crowd management plan refers to the ways in which crowds are accommodated to and from the stadium on event days. The main plan refers to a capacity crowd of 82,000 but there will be variations of the plan according to the capacity and type of event.

The plan will be closely linked to the Traffic Management Plan and will be varied according to demands and circumstances dictated by Twickenham Stadium transport stakeholders.

The basic plan should fit most events but there may be variations for such matches as the Army v Navy, IRB Sevens, Concerts, NFL matches and some events involving the local Harlequins team.

Crowd profile

- 7.2 A profile of the crowd will be provided for each event, taking into consideration where the supporters are travelling from, modes of transport and any previous issues with the event.

Event Schedule

- 7.3 A schedule of the day's events will be published to provide some guide to the arrival and departure times of the crowds.

Briefings

- 7.4 An event briefing document will be issued for each event, or verbally delivered at a briefing by the RFU to which all the transport and crowd management partners will be invited.

Specific areas of the plan

- 7.5 The plan will look specifically at how the crowds are managed in the following areas pre and post event:
- The A316 crossing point at Whitton roundabout
 - Twickenham town centre and train station

A separate plan for the crowd management outside Twickenham train station has been completed by CSP. Additional plans are held for the crowd operation within the station by South Western Railways.

Preparations

- 7.6 Following receipt of the Event and Crowd profile the RFU will arrange with CSP and the Local Authority the numbers of staff required to manage the traffic and crowd movements. This will include the provision of CPZ timings, barriers, variable message signs, wayfinding signs and specific pedestrian crossing facilities.

A time will be agreed whereby various resources are deployed onto the highways and pathways. The staff will arrive at Twickenham stadium where they will receive a briefing before being deployed and given further briefings on their particular roles if required, including emergency evacuation procedures.

Each member of staff will have a General Information booklet and a lanyard containing relevant information regarding their task.

Barriers

- 7.7 Barriers will be placed at various locations around the footprint of Twickenham stadium to protect pedestrians from traffic. In London Road over the railway bridge towards Whitton Road, the barriers will be located in the inside lane of the highway to give more room for pedestrians.
- 7.8 The barriers will be reconfigured by the barrier company during the event outside the railway station in preparation for the departing crowds, specifically into the train station and Twickenham town centre.

The footprint

- 7.9 The extent of the plan has progressed over the years and is constantly reviewed by the RFU in conjunction with CSP and presented to the Local Authority ASAG for approval annually. The current extent of the operation has been discussed previously.

Deployments

- 7.10 CSP staff will be on duty on specific roads within the footprint either directing traffic or marshalling pedestrians across pre-defined crossing points, ensuring the pavements are being fully utilised and unhindered for crowd movements.
- 7.11 CSP will continue to cover these positions until the crowds build up to such an extent that the pavements cannot cope with the numbers as pedestrians begin to overflow onto the highways. At this time a decision will be made by RFU control for CSP to implement various road closures to provide safe areas for pedestrians to walk. Full details of the roads closed are contained in the traffic management plan but this paper will address two crucial points in the plan; Twickenham train station and Whitton roundabout on the A316.

A 316 Whitton roundabout pre and post event

- 7.12 Once Whitton Road has been closed to traffic the crowds quickly spread out over the entire road network towards the stadium.

When the crowds reach the junction with Whitton road south and the A316 they need to be managed across the roundabout in a methodical manner. This is achieved by using CSP (CSAS) staff in high visibility jackets. The crowds will be directed around to the east and west crossing points of the roundabout until the numbers are too great and the pavements are beginning to reach saturation.

At this time, other CSP accredited staff will stop the traffic on the A316 at the east and west crossing points and allow the crowds to cross directly over the roundabout. To remove any confusion to motorists regarding the traffic lights at this junction, the lights will be turned off by an approved contractor, currently Transport for London. This will continue for approximately five minutes before the crowds are stopped from crossing the road and traffic is released. The staff here may use a crowd safety rope which will assist to keep crowds stationary.

This will continue in phases until the crowds subside and the pavements can cope with the numbers. Once this has happened the barriers will be cleared from the roads and the roads re-opened to traffic.

The same procedure will be implemented post match for crowds leaving the stadium.

A point to note between the arrival and departure is that on the arrival the crowd density tends to relate to trains arriving at the station and Whitton road (south of the A316) is a long road which can accommodate a lot of people. On departure there are large numbers of people who can quickly fill up Whitton road (north of the A316) as everyone leaves generally all together.

Twickenham railway station pre and post event

- 7.13 CSP staff will be deployed to assist the crowds coming out of the railway station to cross London and Whitton roads at the crossing points provided. The longer people can be kept on the pavements the later the road closures will need to be implemented.

However, particularly when a train arrives at the station delivering 1000 people, the pavements will become saturated very quickly with the numbers of pedestrians and the roads will need to be closed to traffic to accommodate these crowd movements.

When the road closures have been implemented pedestrians will be able to flow unimpeded out of the station onto the roads to make their way towards the stadium.

During the match the barriers outside the railway station will be reconfigured as shown in the diagram below to prepare the area for the departing spectators.

Post event, signs and staff in Whitton road will direct pedestrians where to queue for trains to central London, west towards Reading or continue over the London Road bridge into Twickenham town centre.

The barriers will provide a long queuing pen for people to queue in an orderly fashion for trains to London and signage will direct people into the front of the station for trains to the west. CSP may also use a crowd safety rope at this location to assist with controlling the crowds.

The queue for trains to central London will be directed into the car park entrance of the station via the barriers and the variable message system (VMS), where South West Trains and British Transport Police will take over the marshalling of the crowds from CSP.

To ensure the station queuing system does not become overloaded, SWT will liaise closely with CSP to implement safety procedures as shown on the figure below.

It is vital the SWR and CSP have communications with each other to regulate the flow of spectators queuing to enter the station.

When the pedestrian queue has become significantly smaller into the station, RFU control will inform CSP that pedestrians will need to be managed back onto the pavements in order that the barriers can be collected and the road closures removed.

Close down

- 7.14 Once all the barriers are collected and Control are satisfied that the pavements are able to cope with the remaining numbers of pedestrians the operation will be closed down and staff released from duty. The time of this depends on the particular event, however in general it is approximately three hours after the final whistle of the match.

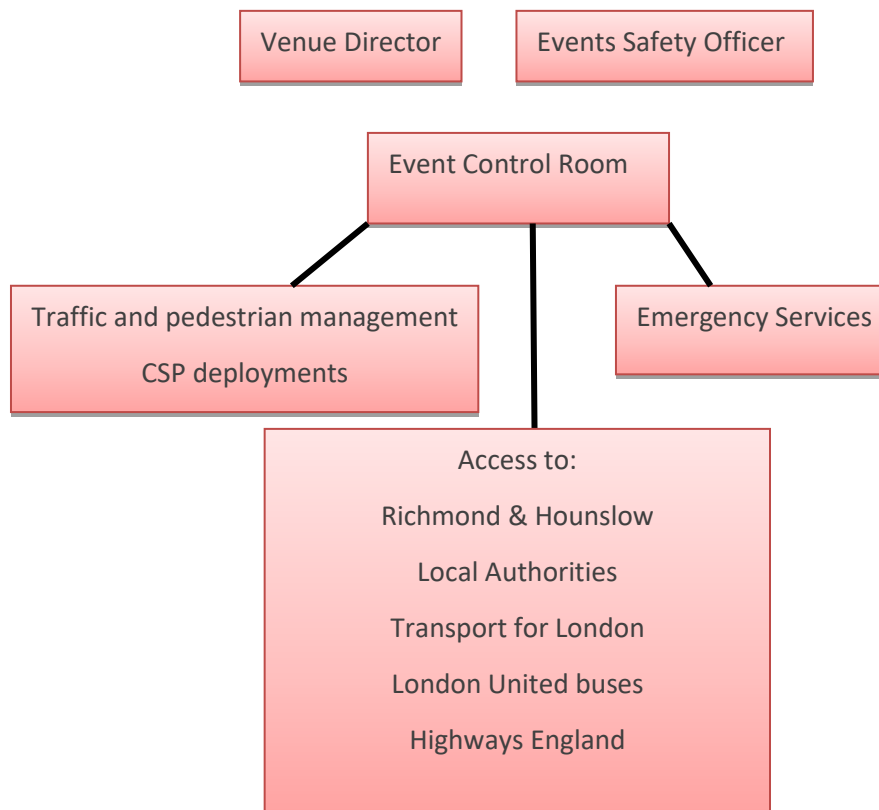
Future Station Development

- 7.15 Twickenham Station is due to be developed over the next two years and the work will affect the movement of the crowds inside and outside the station. Plans have been discussed on the management of the crowds outside of the station with CSP and once a detailed schedule is provided by Solum, the site developers, finalised plans will be agreed

8 Resources and Monitoring

Traffic & Pedestrian management

Figure 7.1 below shows the Traffic management structure on event days



CSP

- 8.1 The Combined Services Provider (CSP) are managed on event days by staff in the Event Day control room, working to the Event Safety officer and Venue Director. Their deployments are shown as an appendix to this document and widely cover the road closure map previously shown in figure 6.2.

Additional resources

- 8.2 There is a substantial plan associated with Twickenham event days of all the signs, cones and barriers which are placed onto the highway to assist controlling traffic and pedestrians.
- 8.3 The Local Authority (Richmond) will continue to deploy signs relating to the Controlled parking Operation (CPZ). CSP will deploy all the other signs and cones required for way finding and enforcement of the Traffic management Order.
- 8.4 The RFU are responsible for employing a barrier company to deploy the barriers throughout the traffic management area.

8.5 The RFU are also responsible for deploying mobile dot matrix signs for certain events at key locations to provide advances warning to other road users of potential congestion on event days.

8.6 Other areas of the plan supply their own staff to assist with their operation, in particular:

South Western Railways employ stewards and SWR staff to marshal the crowds inside Twickenham Station.

London United buses operate the shuttle buses and supply staff to marshal the crowds onto the buses.

Metropolitan Police

8.7 The Metropolitan Police no longer deploy officers to deal with traffic or crowd control as a matter of course. They are still attached to major events at Twickenham to ensure their core duties of maintaining law and order and preventing crime.

Monitoring

8.8 The Traffic management Plan is monitored in numerous ways:

Transport Group Meetings

8.9 The RFU transport group holds regular meetings to discuss the transport arrangements for events at the stadium.

The transport plan incorporates recommendations from this group which has participants from then following key partners and meets quarterly:

Network Rail, South Western Railways, London Underground, London Overground, London United, London Buses, Transport for London, Highways Agency, London Borough of Richmond, London Borough of Hounslow, CSP, Metropolitan Police, British Transport Police.

These meetings review the transport arrangements and any problems/complaints generated from each match and look forward to forthcoming events and any transport issues that may arise. The RFU will provide regular updates of the fixture list to all these agencies with as much advanced notice of fixtures as possible.

In addition there are separate strategic meeting with the train providers (Network Rail & South Western Railways) to discuss longer term planning.

Safety Advisory Group

The SAG is a meeting which sits quarterly and is hosted by the Local Authority with representatives from the emergency services. The transport plan may be discussed at these meetings as the plan will now form part of the Operations Manual introduced as a requirement of a new style safety certificate.

De-Brief meetings

8.10 A de-brief meeting is held after every event at the stadium which includes a review of the transport strategy for that particular event. Feedback is also encouraged from the transport agencies and the police which specific meetings arranged if required.

Surveys

- 8.11 Regular surveys are commissioned by the RFU and their partners to assist in understanding current trends and modes of transport to ensure that all the relevant measures are implemented to meet specific demands.

9 Communications

TDM

- 9.1 There are two elements to the Travel Demand Management activity. The first is spectator travel advice and information. The second is travel advice and information for those not going to the tournament (Background Demand).

Spectator Travel Advice and Information

- 9.2 RFU / venue promoter is responsible for getting spectators to matches on time utilizing all modes of transport available to ease congestion and make use of available capacity.
- 9.3 The RFU website contain 'getting to venue' information and mapping. In addition to the website consideration should be given for some events to incorporate a bespoke spectator journey planner which will provide real time journey information on all the event specific services in operation such as shuttle buses. The purpose of this is to encourage spectators to plan their travel early and to book travel tickets as soon as they can whilst enabling travel demand to be spread across the different modes.
- 9.4 Spectators will be kept updated through the RFU website and targeted emails via the ticketing database. A matchday Twitter feed is also now in operation to support local residents and business and provide update real time information on road closure times and other important information / updates.

Travel Advice and Information to Background Demand

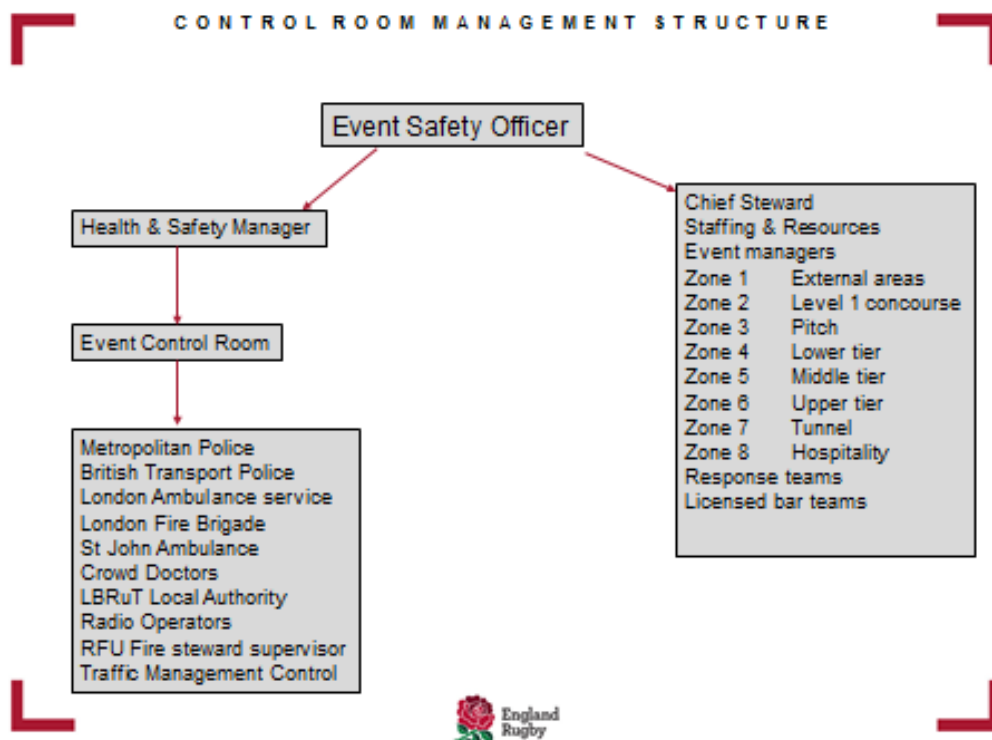
- 9.5 Partners such as Highways England will be using the VMS on strategic roads to help displace general traffic who don't need to use the A316.
- 9.6 TFL and South Western Railways will utilise their communication channels such as customer emails, station announcements and information posters to inform their customers of busy days and times.
- 9.7 Business and resident engagement – RFU are working with the local councils of Richmond and Hounslow to inform residents and business about the impacts of event days including times, dates and how vehicle access will work.

Event Day TDM

- 9.8 A transport communications/travel demand management hub will be in operation during event days for CAT A games and will be based at the venue control room The RFU Comms Team will assist in delivering planned and real time information and advice to spectators as well as answer any travel queries spectators may have.
- 9.9 A virtual group of communication officers from all partner agencies will be stood up to ensure any messages around incidents can be coordinated and communicated consistently and quickly across numerous channels.

Command, Control and Communications (C3)

- 9.10 The event control room is situated in the Stadium (Level 6, north stand).
- 9.11 The transport operation is managed from a pod in this control room with full radio access to all personnel and comprehensive CCTV coverage of the stadium and the environs. CCTV cameras belonging to the Local Authority and Transport for London are also available to the traffic controller.
- 9.12 The Traffic Management controller has access to all the emergency services, all CSP staff and other transport providers such as TFL, Local Authorities (Hounslow & Richmond) and Highways England. Through the British transport Police there is also a direct link to the train providers.



Document Control

Document Reference:	Twickenham Stadium Transport Plan
Owner:	Stadium
Issue Date:	01/10/16
Status:	Active
Issue Number:	V3

Revision	Date	Editor	Comment
NFL1	01/10/16	NC	Produced by Tom Legg (Every Journey Matters)
NFL2	01/09/17	NC	Reviewed for this year's events
V1	01/02/18	NC	Reviewed for Six nations
V3	23/08/18	NC	Annual review

Approvals			
Role	Name	Signature	Date
Head of Stadium Events	NC		01/10/16