

TECHNICAL NOTE

Project	Twickenham Stadium – East Stand Extension		
Report Title	High Level Summary of Non Major Event Day Trip Generation		
Date	15/06/2016		
Prepared by	Momentum Transport Planning		
Prepared for	London Borough of Richmond upon Thames		

Executive Summary

- Twickenham Stadium currently hosts 379 events over 196 days on Non Major Event Days. Of these events 60% are attended by 100 people or less and 90% are attended by 300 people or less
- In the AM Peak (08:00 09:00) a 300 guest event generates between 38 vehicles and 52 vehicles (if all car passengers are additional trips) and a 100 guest event generates between 13 vehicles and 17 vehicles (if all car passengers are additional trips). This is in line with existing Non Major Event Day activities at Twickenham Stadium and will therefore have no impact on the wider transport network.
- A review of 2015 Non Major Event Days shows that the majority of events for 300 guest do not finish during the PM Peak (17:00 – 18:00). This is in line with existing activities held at Twickenham Stadium on Non Major Event Days, which do not have any impact on the wider transport network.
- Twickenham Stadium has 1,250 car parking spaces available in the Stadium grounds and a further 1,000 car parking spaces within walking distance of the Stadium.
- A Non Major Event Day with 300 guests requires 360 car parking spaces to accommodate car parking demand for visitors and Stadium staff.
- A Non Major Event Day with 900 guests in the South Stand requires 621 car parking spaces to accommodate car parking demand for visitors and Stadium staff.



• A Sensitivity Scenario of a Non Major Event Day with 300 and 900 guests (1,200 guests in total) requires a total of 765 car parking spaces to accommodate visitor and Stadium staff. This can be accommodated in the Northern Car Park and the Western Car Park.



1.1 Introduction

- 1.1.1 The proposal for the East Stand Extension is for a lateral extension of levels 1, 2, 3, 4, 4A and 5 on the east stand of the stadium to provide an additional 10,750m² of hospitality floor space for Major Event Days. On a Major Event Day, the additional ticketed hospitality area will accommodate spectators who currently use the RFU franchised off-site ticketed hospitality facilities. No additional tickets will be sold for a match and the capacity of the stadium will remain the same.
- 1.1.2 On a Non-Major Event Day, the additional hospitality area will be marketed as conferencing and banqueting space, in line with existing activities currently offered by Twickenham Stadium.

1.2 Major Event Day

1.2.1 There will be no additional tickets sold for Major Event Days. The provision of additional hospitality space is forecast to result in the early arrival of hospitality guests and the later departure of hospitality guests. No additional parking will be made available to hospitality guests.

1.3 Non Major Event Day Activities

- 1.3.1 Twickenham Stadium currently hosts 379 events over 196 days on Non Major Event Days. Of these events:
 - 60% are attended by 100 people or less
 - 90% are attended by 300 people or less
- 1.3.2 The East Stand Extension is primarily a Major Event Day scheme. On Non Major Event Day, it may provide a conferencing and banqueting offer in line with the existing opportunities currently offered by the Stadium.

1.4 Non Major Event Daily Trip Generation

1.4.1 A travel survey was undertaken of visitors arriving at a Non Major Event Day activity at the Stadium. Table 1 summarises the total mode share for a Non Major Event Day, together with the **total** person trip generation for a 300 guest and a 100 guest event.

Mode	Mode Share	300 Guest Event	100 Guest Event
Car (Driver Alone)	28%	84	28
Car (with pax.)	11%	33	11
Car (pax.)	14%	42	14
Bus/Coach	16%	48	16
Underground	2%	6	2
Rail	26%	78	26
Foot	1%	3	1
Other	2%	6	2
Total	100%	300	100

Table -1 Non Major Event Day Total Trip Generation

1.4.2 From Table 1 it can be seen that:



- For a 300 guest event 117 guests will require car parking space over a day
- For a 100 guest event 39 guests will require a car parking space over a day
- 1.4.3 It should be noted that these are overall car parking spaces required over the day.

1.5 Non Major Event Day AM Peak Trip Generation

1.5.1 A survey was undertaken of visitors arriving within the Stadium building line for a Non Major Event Day activity with doors opening between 08:00 and 09:00. Table 2 summarises the guest arrival profile together with the total trips by time of day for a 300 guest event and a 100 guest event.

Time	% Arrivals	300 Guest Event	100 Guest Event
08:30	3.4%	10	3
08:40	3.5%	10	4
08:50	2.2%	6	2
09:00	4.0%	12	4
09:10	11.5%	35	12
09:20	8.2%	25	8
09:30	16.9%	51	17
09:40	10.6%	32	11
09:50	14.6%	44	15
10:00	12.4%	37	12
10:10	10.3%	31	10
10:20	2.4%	7	2
TOTALS	100%	300	100

Table -2 Non Major Event Day Arrival by Time of Day

1.5.2 In order to determine the trip generation in the AM peak (08:00 to 09:00), the mode share information in (Table 1) has been applied to the arrival profiles surveyed at the Stadium. For the purpose of this assessment, the surveyed arrival at the Stadium period between 08:30 and 09:30 has been used to determine the equivalent AM peak (08:00 to 09:00) on the wider transport network. Table 3 presents the trips on the wider transport network for a 300 guest and a 100 guest event between 08:00 and 09:00.

Mode	300 Guest Event	100 Guest Event
Car (Driver Alone)	28	9
Car (with pax.)	11	4
Car (pax.)	14	5
Bus/Coach	16	5
Underground	2	1
Rail	26	9
Foot	1	0
Other	2	1
Total	99	33

Table -3 Non Major Event Day AM Peak (08:00 - 09:00)



- 1.5.3 A review of Table 3 shows that in the AM Peak (08:00 09:00):
 - A 300 guest event generates between 38 vehicles and 52 vehicles (if all car passengers are additional trips)
 - A 100 guest event generates between 13 vehicles and 17 vehicles (if all car passengers are additional trips)
- 1.5.4 It should be noted that this is in line with existing Non Major Event Day activities at Twickenham Stadium and will therefore have a negligible on the wider transport network.

1.6 Non Major Event Day PM Peak Trip Generation

- 1.6.1 A review of 2015 events held on Non Major Event Days at Twickenham Stadium, shows that the majority of events for 300 guest would not finish during the PM Peak (17:00 18:00). Only 4% of events were shown to be finish during the PM Peak.
- 1.6.2 90% of events are show to finish before 16:00 or after 19:00. Given the nature of the events taking place on Non Major Event Days (conferences and banqueting) spectator departures will be spread over a period of time.
- 1.6.3 This is in line with existing activities held at Twickenham Stadium on Non Major Event Days, which have a negligible impact on the wider transport network.

1.7 Non Major Event Day Parking

1.7.1 Twickenham Stadium offers a number of car parking opportunities. Table 4 summarises car parking available to guests attending Twickenham Stadium on Non Major Event Day.

Car Park	Car Parking Spaces	Cumulative Spaces
Northern Car Park	700 (200)*	700 (200)*
Western Car Park	550	1,250 (750)*
Rosebine	1,000	2,250 (1,750)*
Total	2,250	-

Table -4 Twickenham Stadium Non Major Event Day Car Parking

*() denotes car parking capacity during the construction phase

- 1.7.2 Twickenham Stadium has 1,250 car parking spaces available in the immediate vicinity of the Stadium (Northern Car Park and Western Car Park) and a further 1,000 car parking spaces within walking distance of the Stadium (Rosebine).
- 1.7.3 During the construction phase, part of the Northern Car Park will be used for contractor parking on a Non-Major Event Day. Because of this, the number of parking spaces available for delegates and staff within this car park will be reduced to approximately 200 spaces.

Car Parking Requirement for a 300 guest Non Major Event Day Event.

1.7.4 In order to determine the car parking requirements on Non Major Event Days for a 300 person event, the following factors have been considered:



- The RFU currently has approximately 300 employees present at the Stadium. For the purpose of this assessment it has been assumed that 400 employees are present.
- Twickenham Experience typically apply a factor of 1 employee per 10 guests for a sit down meal (1 employee per 25 guests for a buffet meal). For a 300 guest sit down meal event approximately 30 staff would be required. It has been assumed that 50 staff are present.
- It has been assumed that 300 visitors are present at an event at Twickenham Stadium on a Non Major Event Day.
- 1.7.5 Table 5 summarises the number of persons at the Stadium together with the car mode share as obtained from the Non Major Event Day travel survey and the 2016 Staff Travel Survey.

Client Group	Persons	% Car Mode	Car Spaces	Cumulative
RFU	400	54%	216	216
Activity Staff	50	54%	27	243
Visitors	300	39%	117	360
TOTALS	750	-	360	-

Table -5 Non Major Event Day Car Parking Demand

1.7.6 From Table 5 it can be seen that on a Non Major Event Day with 300 guests, at total of 360 car parking spaces are required to accommodate car parking demand. This can be accommodated in the Northern Car Park or the Western Car Park. There would be an additional 890 spare car parking spaces available in the immediate vicinity of the Stadium (Northern and Western Car Park) and 1,890 spare car parking spaces overall (including Rosebine).

Car Parking Requirement for Non Major Event Day Event – Sensitivity Scenario.

- 1.7.7 A sensitivity scenario has been undertaken in order to ascertain the impact on car parking of hosting a 300 person event and a 900 person event simultaneously at Twickenham Stadium. This is not a likely occurrence at the Stadium but is considered a robust, worst case scenario.
- 1.7.8 In order to determine the car parking requirements on Non Major Event Days for this sensitivity scenario, the following factors have been considered:
 - The RFU currently has approximately 300 employees present at the Stadium. For the purpose of this assessment it has been assumed that 400 employees are present.
 - Twickenham Experience typically apply a factor of 1 employee per 10 guests for a sit down meal (1 employee per 25 guests for a buffet meal). For a 300 guest sit down meal event approximately 30 staff would be required. It has been assumed that 50 staff are present. For a 900 guest sit down meal event



approximately 90 staff would be required. It has been assumed 100 staff would be present.

- It has been assumed that 300 and 900 visitors (1,200 visitors in total) are
 present simultaneously at two events at Twickenham Stadium on a Non
 Major Event Day.
- 1.7.9 Table 6 summarises the number of persons at the stadium together with the car mode share as obtained from the Non Major Event Day survey and the 2016 Staff Travel Survey.

Client Group	Persons	% Car Mode	Car Spaces	Cumulative
RFU	400	54%	216	216
Activity Staff	150	54%	81	297
Visitors	1,200	39%	468	765
TOTALS	1,750	-	765	-

Table -6 Non Major Event Day Car Parking Demand (Sensitivity Scenario)

- 1.7.10 From Table 6 it can be seen that on a Non Major Event Day with 300 and 900 guests (1,200 guests in total), at total of 765 car parking spaces are required to accommodate car parking demand. This can be accommodated in the Northern Car Park and the Western Car Park. There would be an additional 485 spare car parking spaces available in the immediate vicinity of the Stadium (Northern and Western Car Park) and 1,485 spare car parking spaces overall (including Rosebine).
- 1.7.11 Should the Northern Car Park and/or the Western Car Park not be available, prior to the Non Major Event Day persons driving to the Stadium would be informed of their relocation to the Rosebine Car Park. In first instance, the appropriate proportion of staff parking would be relocated to the Rosebine Car Park. This was the procedure implemented during the 2015 Rugby World Cup.

1.8 Summary

- 1.8.1 Twickenham Stadium currently hosts 379 events over 196 days on Non Major Event Days. Of these events 60% are attended by 100 people or less and 90% are attended by 300 people or less
- 1.8.2 The East Stand Extension is primarily a Major Event Day scheme. On Non Major Event Day, it may provide a conferencing and banqueting offer in line with the existing opportunities currently offered by the Stadium.
- 1.8.3 In the AM Peak (08:00 09:00) a 300 guest event generates between 38 vehicles and 52 vehicles (if all car passengers are additional trips) and a 100 guest event generates between 13 vehicles and 17 vehicles (if all car passengers are additional trips). This is in line with existing Non Major Event Day activities at Twickenham Stadium and which have a negligible impact on the wider transport network.
- 1.8.4 A review of 2015 Non Major Event Days at Twickenham Stadium, shows that the majority of events for 300 guest do not finish during the PM Peak (17:00 18:00). This



is in line with existing activities held at Twickenham Stadium on Non Major Event Days, which have a negligible impact on the wider transport network.

- 1.8.5 Twickenham Stadium has 1,250 car parking spaces available in the immediate vicinity of the Stadium (Northern Car Park and Western Car Park) and a further 1,000 car parking spaces within walking distance of the Stadium (Rosebine).
- 1.8.6 A Non Major Event Day with 300 guests requires 360 car parking spaces to accommodate car parking demand for visitors and stadium staff. This can be accommodated in the Northern Car Park or the Western Car Park.
- 1.8.7 A Sensitivity Scenario of a Non Major Event Day with 300 and 900 guests (1,200 guests in total) requires a total of 765 car parking spaces to accommodate visitor and Stadium staff car parking demand. This can be accommodated in the Northern Car Park and the Western Car Park. Should the Northern Car Park and/or the Western Car Park not be available, prior to the Non Major Event Day persons driving to the Stadium would be informed of their relocation to the Rosebine Car Park.