11-13 St Pancras Way

TRANSPORT STATEMENT - ADDENDUM

UNITE Group Plc and Travis Perkins Plc

May 2011

QM

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1 Introduction

1.1 BACKGROUND

1.1.1 WSP has been appointed by UNITE Group Plc and Travis Perkins Plc to prepare a Transport Statement Addendum to supplement the Transport Statement (TS) dated 28 March 2011. The TS was produced in support of a planning application for the redevelopment of the existing Travis Perkins Site on the A5202 St Pancras Way, Camden.

1.1.2 The redevelopment proposals incorporate accommodation for 564 student bed places and the retention and enhancement of the existing Travis Perkins operations currently on site.

1.2 REPORT PURPOSE

1.2.1 The purpose of this addendum is to encapsulate further survey and analysis work that has been undertaken to address comments from TfL in a letter to Amanda Peck, London Borough of Camden, dated 28 April 2011.

1.3 REPORT STRUCTURE

1.3.1 The structure of the report is as follows:

- Trip Generation
- London Buses;
- London Underground; and
- Walking and Cycling.

2 Trip Generation

2.1 INTRODUCTION

2.1.1 The Transport Statement provided a robust basis for the forecast of future trips that will be generated by the proposed student accommodation. This was based on a peak hour survey of Beaumont Court which is another 230 bedroom student accommodation site that is operated by the applicant. The Transport Statement covered the transport network and student movement peak hours in line with Transport Assessment good practice.

2.1.2 TfL has requested an assessment of the non-peak daytime between the hours of 1000 to 1600 hours such that the daytime impact on the local transport network can be understood.

2.1.3 Accordingly, a further movement survey between the hours of 0800 and 1800 hours was undertaken on the 12 May 2011. The survey was conducted in a similar manner to the previous with an additional supplementary travel interview being conducted. The purpose of the interview was to establish mode split and study location to provide mode split and distribution information.

2.1.4 As stated in the Transport Statement the mode split and distribution will change year on year due to the transient nature of the students and their place of study. Nevertheless, Beaumont Court is used to provide a snapshot indication of possible future journey patterns for an empirical basis of an assessment. This is in comparison with the Transport Statement which broadly reviewed the impact on the local transport network on the basis that the impact will alter year on year.

2.2 MOVEMENT SURVEY

2.2.1 The May 2011 (May) 1200 hour movement survey has been analysed with the results of the peak hour movements summarised by Table 2.1 below. For reference the information from the original 7 December 2010 (Dec) survey is also included.

Table 2.1: Summary of Beaumont House person trip generation and trip rate

Survey	AM Peak (0800 to 0900)			PM Peak (1700 to 1800)		
	Trips (230 student beds)			Trips (230 student beds)		
	In	Out	Two Way	In	Out	Two Way
Dec	2	20	22	32	24	56
May	2	33	35	37	25	62
Survey	**Trip Rate (Per Bedroom)**			**Trips (Per Bedroom)**		
	In	Out	Two Way	In	Out	Two Way
Dec	0.01	0.09	0.10	0.14	0.10	0.24
May	0.01	0.14	0.15	0.16	0.11	0.27

2.2.2 The two surveys show similar peak levels of movements during the peak hour which occurs between 1700 and 1800 hours for both surveys. However, it is noted that the AM peak hour movements was higher in the AM peak in the May survey and therefore the May survey has been applied for the analysis presented in this report.

2.2.3 In addition to establishing and supporting the conclusions regarding the student accommodation peak hour, the May survey also captured the daytime movement between the hours of 0900 and 1700 hours. The hourly movements during these hours is summarised by Table 2.2 below.

Table 2.2: 10 Hour Movement Survey – Beaumont Court

	Trips (230 student beds)		
	In	Out	Two Way
0800-0900	2	33	35
0900-1000	4	19	23
1000-1100	3	10	13
1100-1200	4	18	22
1200-1300	17	24	41
1300-1400	3	15	18
1400-1500	7	21	28
1500-1600	12	28	40
1600-1700	29	14	43
1700-1800	37	25	62

2.2.4 The daily movement pattern of the analogue site shows that the PM peak hour is around one third higher than the lunchtime peak and twice as high as the AM peak hour. The two-way movement during intervening hours is fairly consistent, with a general trend of increasing movement throughout the afternoon.

2.2.5 As per the peak hours trip rates per bedroom established and summarised in Table 2.1, the daytime movement from Beaumont Court has also been used to derive hourly trip rates and forecast hourly movement for the application site.

2.3 MODE SPLIT

2.3.1 The interview survey collected data on 'main mode of travel' and yielded a high response rate with 116 respondents. For the purposes of establishing a mode split the survey information has been interrogated to derive an AM, daytime and PM mode split. Aggregating daytime hours provides a wider basis for the mode split as some hours would be based on a small sample size and may not be representative.

2.3.2 The mode split for each of the periods is summarised by Table 2.3 below.

Table 2.3: Main Mode Split per Period

	AM Peak	Daytime	PM Peak
Walk	29%	31%	27%
Cycle	0%	3%	0%
Bus	18%	45%	45%
Tube	53%	22%	27%
Total	100%	100%	100%

2.3.3 The survey has shown that the bus is the most common mode of travel for both the daytime and PM peak hour period, with the level of walking remaining broadly consistent throughout each of the periods.

2.4 TRIP FORECAST

2.4.1 The hourly trip rates have been applied to the 564 bedroom application site to forecast the future trips by hour, as contained in Table 2.4. The subsequent sections summarise the forecasted trips by each of the modes.

Table 2.4: Application Site Forecast Trip Generation

	In	Out	Two Way
0800-0900	5	81	86
0900-1000	10	47	56
1000-1100	7	25	32
1100-1200	10	44	54
1200-1300	42	59	101
1300-1400	7	37	44
1400-1500	17	51	69
1500-1600	29	69	99
1600-1700	71	35	106
1700-1800	91	61	152

2.5 DISTRIBUTION

2.5.1 A distribution analysis has been based on the location of study of the survey respondents. The distribution analysis has enabled a forecast of the bus services and London Underground (LU) stations that will be utilised based on the analogue site.

2.5.2 Tables 2.5 summarises the bus and LU public transport services that are forecast to be used based on the established pattern of trip distribution. The distribution analysis has been based on the 0800 to 1800 survey base.

Table 2.5: Application Site Mode Split Distribution

	Bus	LU
Route 88	96%	-
Route 168	4%	-
Kings Cross Station	-	69%
Mornington Crescent Station	-	31%

3 London Buses

3.1.1 Table 3.1 summarises the hourly forecast bus movement of the proposed student accommodation site.

Table 3.1 – Hourly Bus Trip Forecast Summary

	In	Out	Two Way
0800-0900	1	14	15
0900-1000	4	21	25
1000-1100	3	11	14
1100-1200	4	20	24
1200-1300	19	26	45
1300-1400	3	16	20
1400-1500	8	23	31
1500-1600	13	31	44
1600-1700	32	16	47
1700-1800	41	28	69

3.1.2 Based the distribution analysis Table 3.2 contains the number of additional two-way passenger movements per bus service.

Table 3.2 – Bus Forecast Per Service

	Service 88 Two Way	Service 168 Two Way
0800-0900	14	1
0900-1000	24	1
1000-1100	14	1
1100-1200	23	1
1200-1300	43	2
1300-1400	19	1
1400-1500	29	1
1500-1600	42	2
1600-1700	45	2
1700-1800	66	3

3.1.3 In order to establish the number of additional passengers per hour per bus, the two-way bus movement frequency from the Transport Statement has been considered. On average, both services 88 and 168 have an hourly bus movement of 18 vehicles an hour. The average number of additional passengers per bus for each of the peak hours is summarised by Table 3.3.

Table 3.3 – Forecast Per Bus

	Service 88 Passengers Per Bus	Service 168 Passengers Per Bus
0800-0900	0.80	0.04
0900-1000	1.34	0.06
1000-1100	0.76	0.03
1100-1200	1.28	0.06
1200-1300	2.38	0.11
1300-1400	1.05	0.05
1400-1500	1.63	0.07
1500-1600	2.36	0.11
1600-1700	2.51	0.11
1700-1800	3.67	0.17

3.1.4 In line with TfL Transport Assessment Best Practice Guidance, it is understood that TfL will undertake an assessment to establish the level of impact that these additional bus passengers will have on the bus network. However, across the course of the day the impact that will result from the proposed development is considered to be negligible.

4 London Underground (LU)

4.1.1 Table 4.1 summarises the hourly forecast LU movement of the proposed student accommodation site.

Table 4.1 – Hourly LU Trip Forecast Summary

	In	Out	Two Way
0800-0900	3	43	45
0900-1000	2	10	12
1000-1100	2	5	7
1100-1200	2	10	12
1200-1300	9	13	22
1300-1400	2	8	10
1400-1500	4	11	15
1500-1600	6	15	21
1600-1700	15	7	23
1700-1800	25	17	41

4.1.2 Based the distribution analysis Table 4.2 contains the number of additional two-way passenger movements per LU station.

Table 4.2 – LU Forecast Per Station

	Mornington Crescent Two Way	Kings Cross Two Way
0800-0900	14	31
0900-1700	37	84
1700-1800	13	29

4.1.3 The peak hour and daytime LU movement forecast has been assessed against 2008 RODS data for both Mornington Crescent and Kings Cross LU stations. The RODS data (Table 4.3) shows the gateline demand by time period against which the application site LU can be reviewed.

Table 4.3 – 2008 RODS Data – Two Way Gateline Movement

	Mornington Crescent Two Way	Kings Cross Two Way
0800-0900	1,624	20,714
0900-1700	5,357	90,641
1700-1800	1,782	21,720

4.1.4 Table 4.4 summarises the proposed additional gateline demand for each of the stations for each time period and the percentage increase in movement.

Table 4.4 – LU Gateline Demand and Percentage Increase

	Mornington Crescent Two Way	Percentage Increase	Kings Cross Two Way	Percentage Increase
0800-0900	14	0.86%	31	0.15%
0900-1700	13	0.24%	29	0.03%
1700-1800	37	2.09%	84	0.39%

4.1.5 It is considered that the impact of the proposed student accommodation will lead to imperceptible increases in LU demand and therefore easily able to be accommodated by the existing services.

5 Walking and Cycling

5.1.1 Table 5.1 and 5.2 summarises the hourly forecast walk and total walk (walk with access to public transport) respectively forecast to be generated by the proposed student accommodation site.

Table 5.1 – Hourly Walk Only Trip Forecast Summary

	Walk Only		
	In	Out	Two Way
0800-0900	1	24	1
0900-1000	3	14	3
1000-1100	2	8	2
1100-1200	3	14	3
1200-1300	13	18	13
1300-1400	2	11	2
1400-1500	5	16	5
1500-1600	9	21	9
1600-1700	22	11	22
1700-1800	25	17	25

Table 5.2 – Hourly Walk + Public Transport Trip Forecast Summary

	Walk Only		
	In	Out	Two Way
0800-0900	5	81	86
0900-1000	10	45	55
1000-1100	7	24	31
1100-1200	10	43	52
1200-1300	41	57	98
1300-1400	7	36	43
1400-1500	17	50	67
1500-1600	29	67	96
1600-1700	69	34	103
1700-1800	91	61	152

5.1.2 The greatest concentration of walk trips will be on the St Pancras Way immediately adjacent to the building entrances. The footway capacity of the footway adjacent to the site entrance to achieve a Fruin level of A has been established in relation to the peak two-way movement.

5.1.3 The footway adjacent to the building entrance is 3.8m wide and has a resultant footway capacity of 8,484 pedestrians per hour to achieve the best level of service. The proposed application site will require a negligible 1.7% of this overall capacity and also as you move away from the site these pedestrian demands will rapidly become more and more diluted with more routes and footways being used. Therefore the impact of the development on the surrounding footways would be imperceptible.

6 Conclusions

6.1.1 In conclusion, the additional assessment work undertaken within this Addendum Transport Statement Report further confirms and supports the conclusions set out in the original Transport Statement that the development proposals will not have any significant adverse impact on the surrounding transport infrastructure.