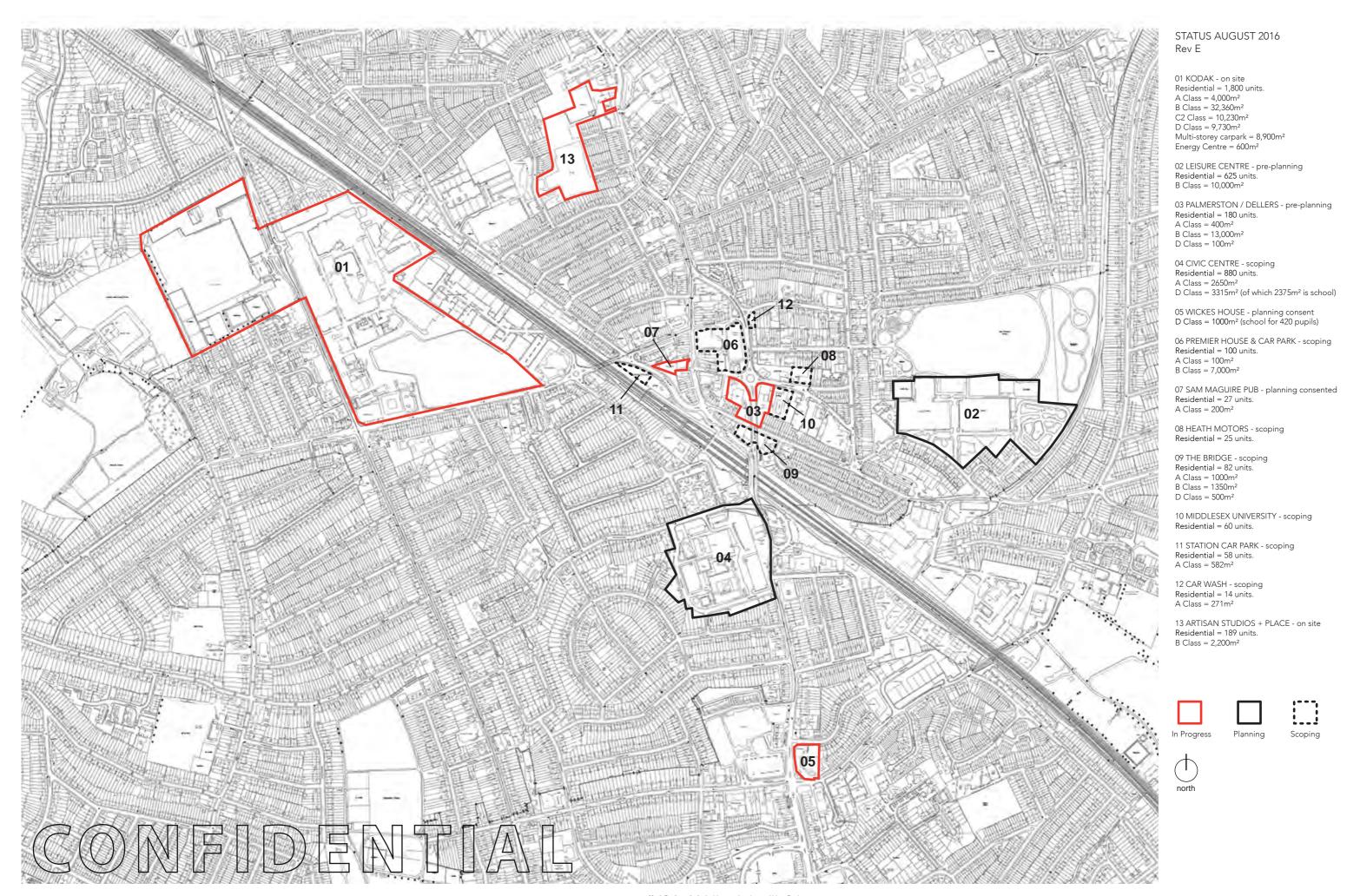
Appendices



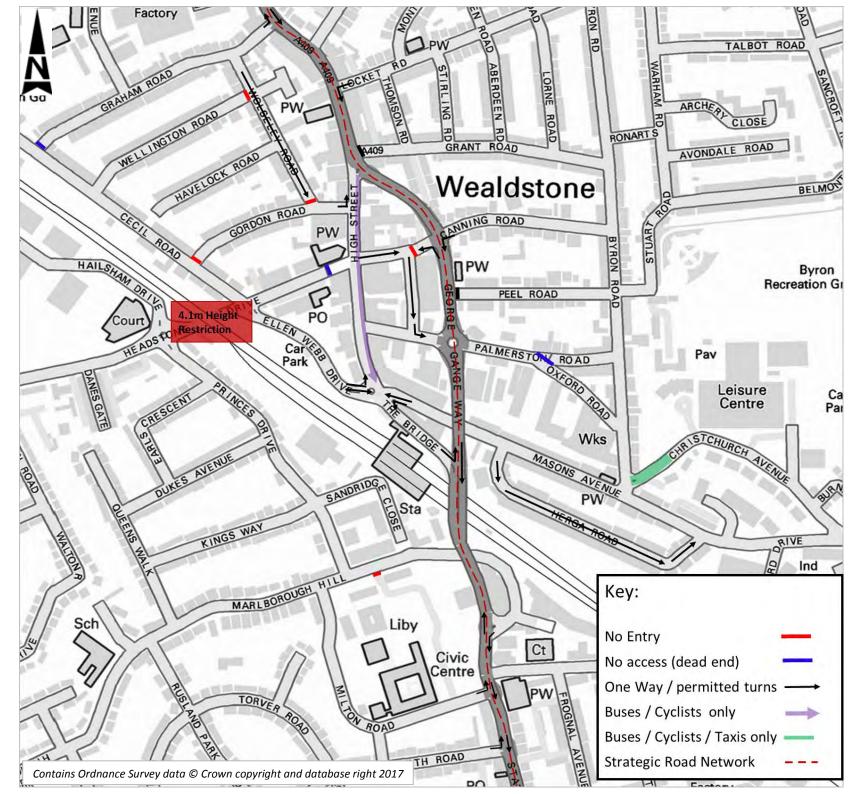
Appendix A. Wealdstone Town Centre Development Sites

Wealdstone Town Centre Study Development Sites

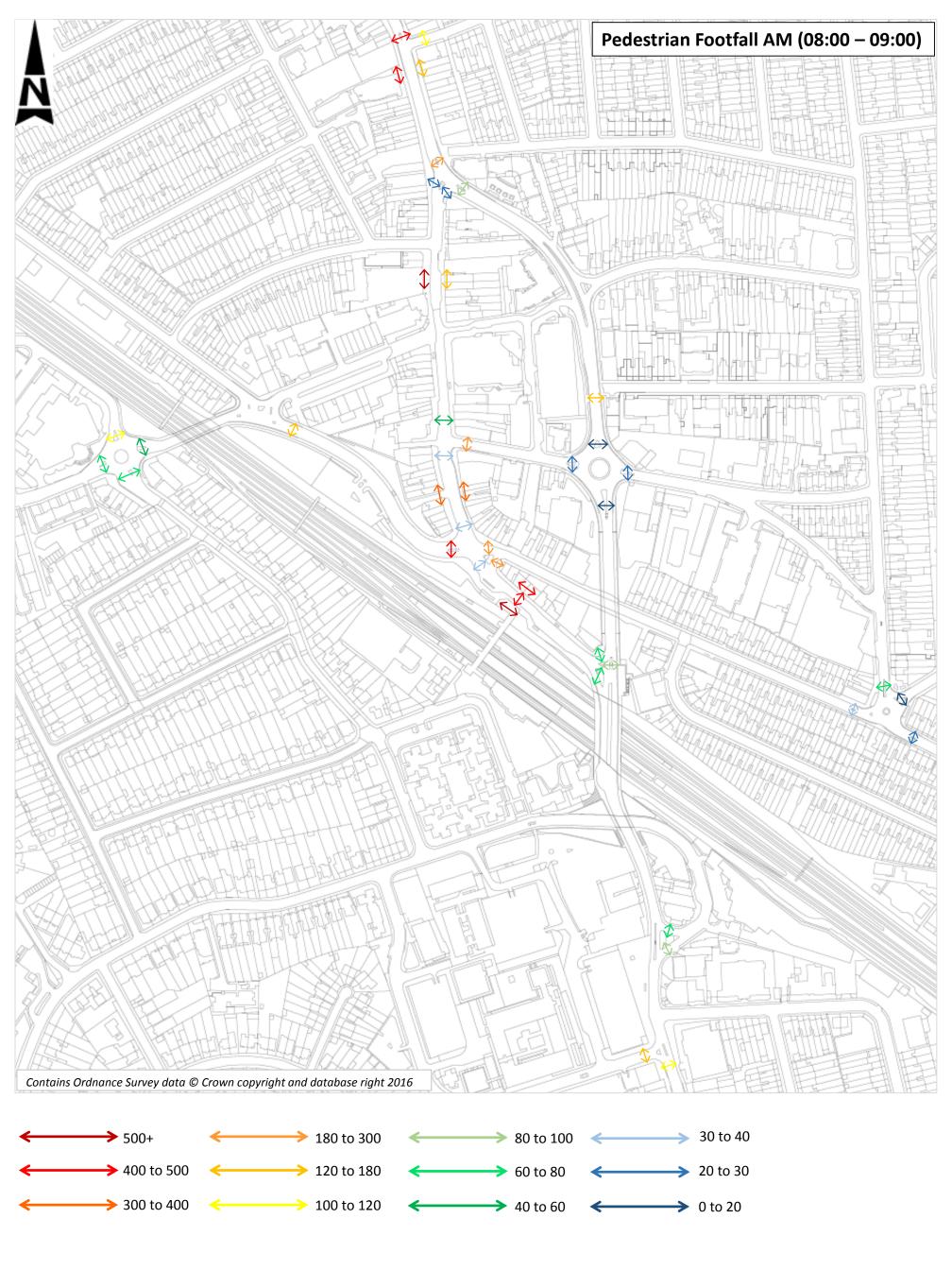


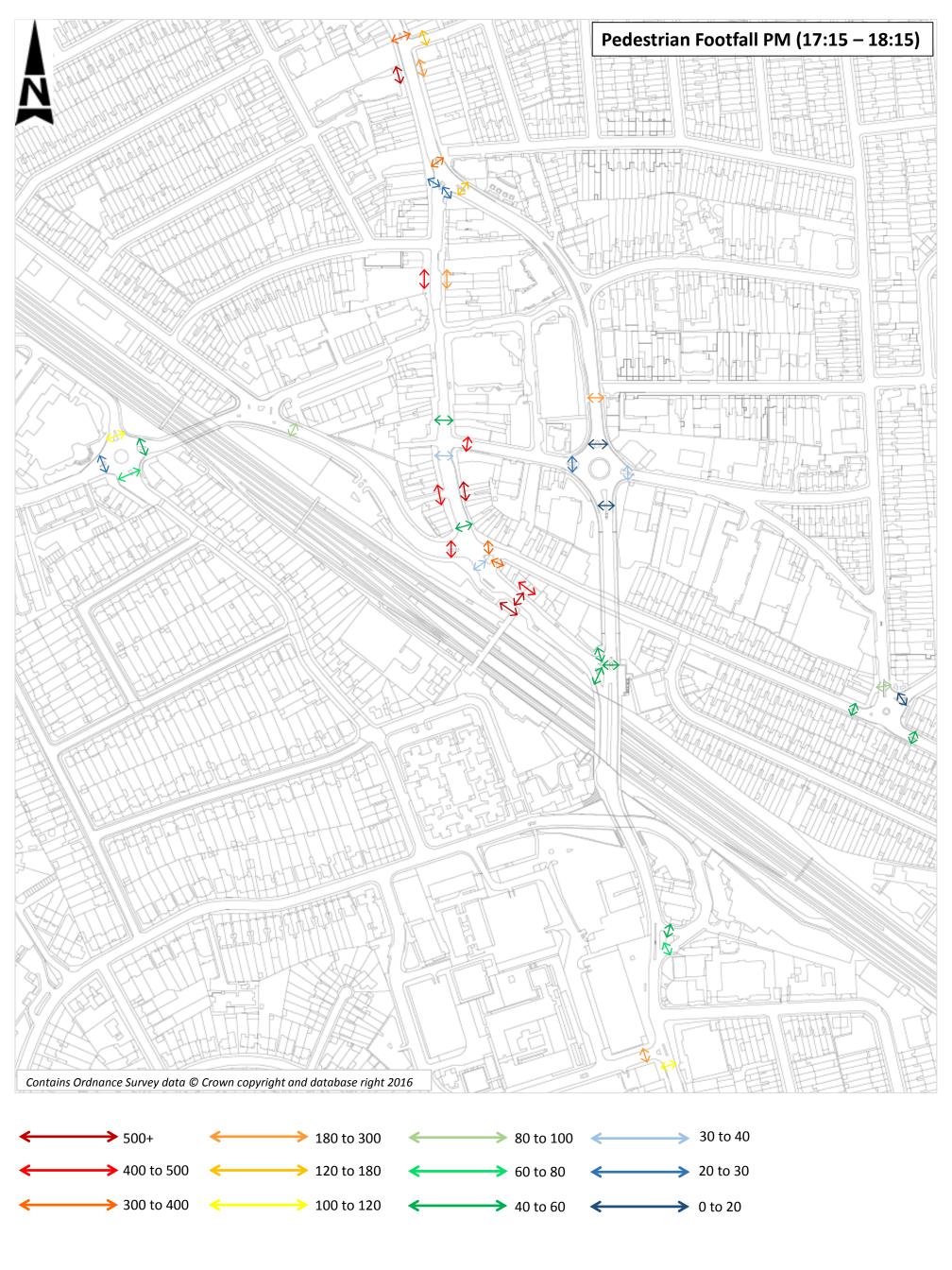


Wealdstone Traffic Restrictions











Project:	Wealdstone Town Centre	To:	David Eaglesham
Subject:	Parking Data Analysis	From:	John Malyon
Date:	3 Mar 2017	cc:	

1. Introduction

Atkins have been commissioned by the London Borough of Harrow (LBH) to undertake a transport study in Wealdstone town centre to determine the impact of additional proposed development on the highway network and develop measures to mitigate this impact and encourage travel by sustainable transport. As part of the study Atkins have completed an assessment of parking in the town centre to determine current demand.

There are a number of Controlled Parking Zones (CPZs) across the study area with varying restrictions for onstreet parking. The assessment of demand in the study area has focussed on the following car parks and onstreet pay and display bays:

Car parks

- Peel House multi-storey car park 257 bays; and
- Palmerston Road Pay & Display car park 27 bays.

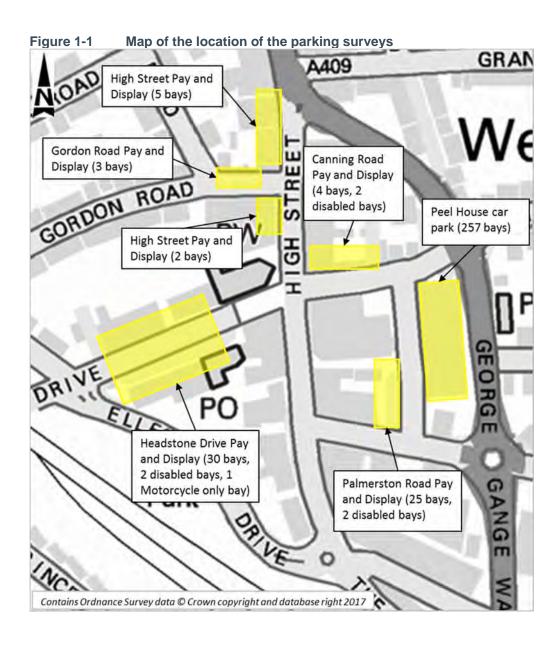
On-street pay and display bays

- High Street 7 bays (including 1 disabled bay);
- Canning Road 6 bays (including 2 disabled bays);
- Gordon Road 3 bays
- Headstone Drive 33 bays (including 1 disabled bay and 1 motorcycle bay)

The following car parks have not been included in the assessment:

- Harrow and Wealdstone station 118 bays
- Harrow Leisure Centre 445 bays

To determine the current level of demand for parking within the town centre, LBH provided the car park entry and exit data for the Peel House multi-storey car park to calculate the occupancy at specific times throughout the day. For the Palmerston Road car park LBH provided the daily number of tickets purchased and the average length of ticket purchased. Parking beat surveys were also completed for the Palmerston Road car park plus the on-street parking provision. These were conducted on eight separate occasions at varying times during the day between 0900 and 1700 hours on various weekdays in June and July 2016. The locations of the parking beat surveys are identified in Figure 1-1. The parking assessment did not include loading bays.



2. Peel House Car Park

Car park data was obtained from LBH for the Peel House multi-storey car park in order to analyse the occupancy at different times of the day and different days of the week. The volume of entries and exits to the car park per hour were provided for October 2015. The car park has a charge of £0.80 per hour.

Car park occupancy varied on different days of the week and times of the day. The capacity of the car park is 257 bays and the minimum occupancy recorded was 12 vehicles (5% of capacity) and the maximum recorded was 173 vehicles, 69% of the maximum capacity.

Figure 2-1 shows the weekday average occupancy recorded in October 2015, broken down by hour. The highest average occupancy recorded was 84 vehicles, or 33% of capacity. The data was also broken down by daily averages, with the highest average occupancy of 74 vehicles recorded on Fridays (29% of capacity).

Figure 2-2 to Figure 2-6 show the average occupancy of the car park by day of the week. The data for Monday, Tuesday and Wednesday follows a similar pattern to the weekday average, with occupancy peaking around midday. The data for Thursday and Friday shows higher average occupancy between 7pm and 11pm, which may be due to events held at Premier Banqueting, opposite the car park.

Figure 2-1 to Figure 2-6 also show the car park occupancy data broken down into business permit holders and 'pay on foot' tickets. On average, between 0900-1700 hours during weekdays there is an even split of permit holders and 'pay on foot' tickets in the car park. However, the average occupancy of business permit holders during the working day exceeds pay on foot on Monday, Tuesday and Thursday, whereas the number of pay on foot tickets are higher on a Friday. As expected, the number of business permit holders reduces from 1600 hours in all data sets.

Figure 2-7 and Figure 2-8 show the average car park occupancies on Saturday and Sunday respectively. The maximum average weekend occupancy was 98 vehicles or 38% of the car park capacity. As expected, the high majority of weekend parking is 'pay on foot' tickets.



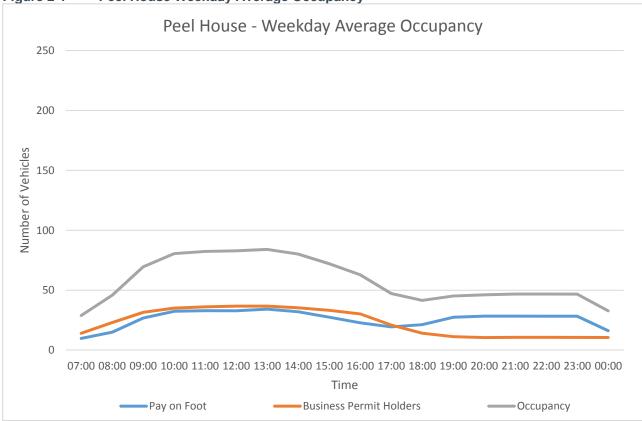


Figure 2-2 Peel House Average Occupancy - Monday

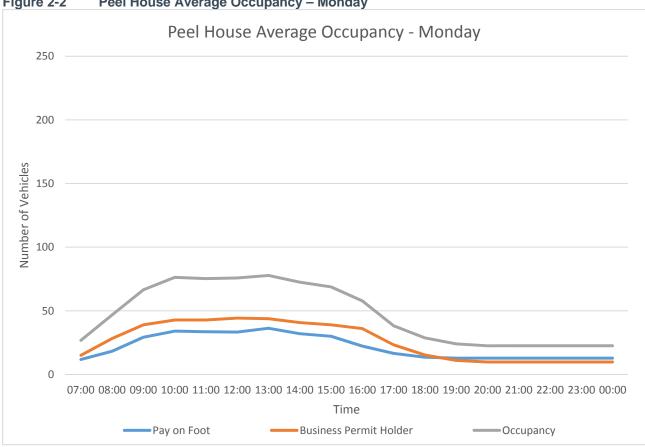


Figure 2-3 Peel House Average Occupancy – Tuesday

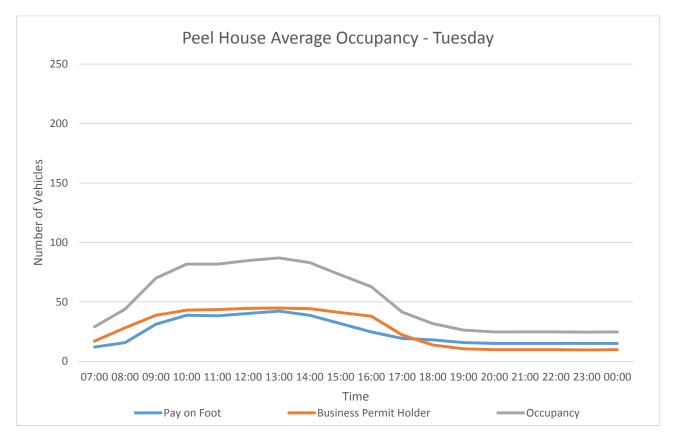


Figure 2-4 Peel House Average Occupancy – Wednesday

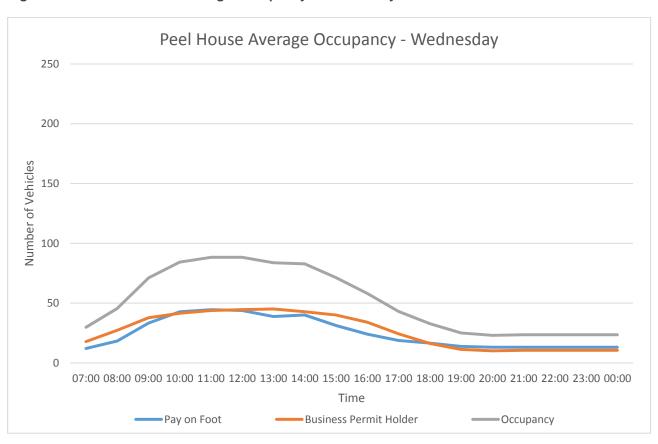


Figure 2-5 Peel House Average Occupancy – Thursday

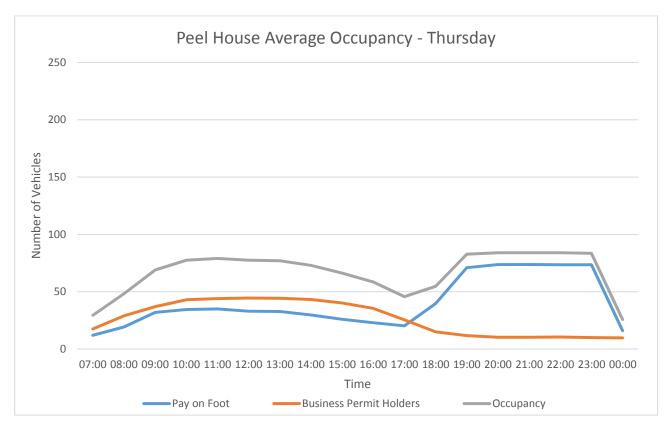


Figure 2-6 Peel House Average Occupancy – Friday

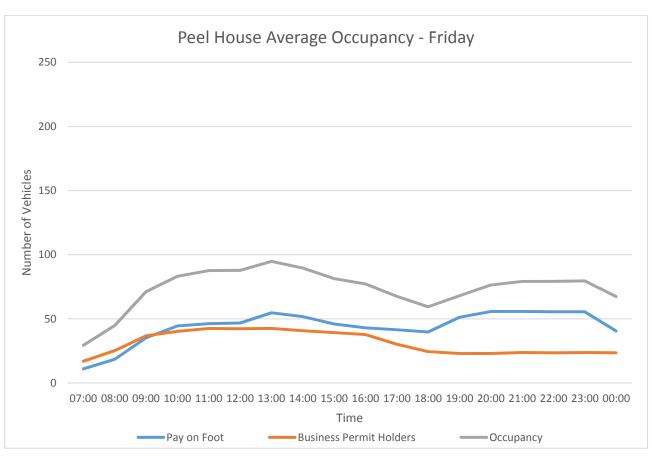


Figure 2-7 Peel House Average Occupancy – Saturday

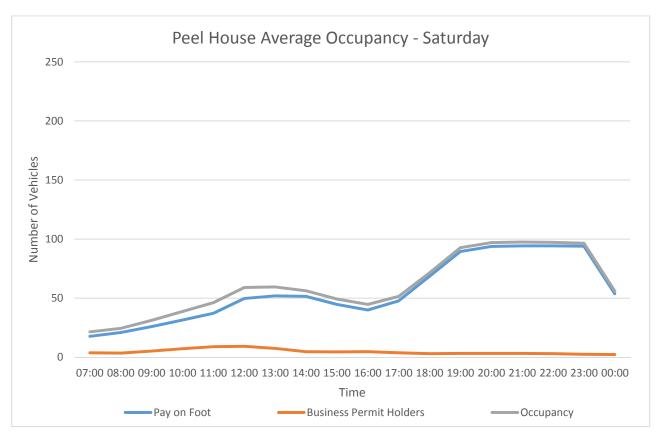
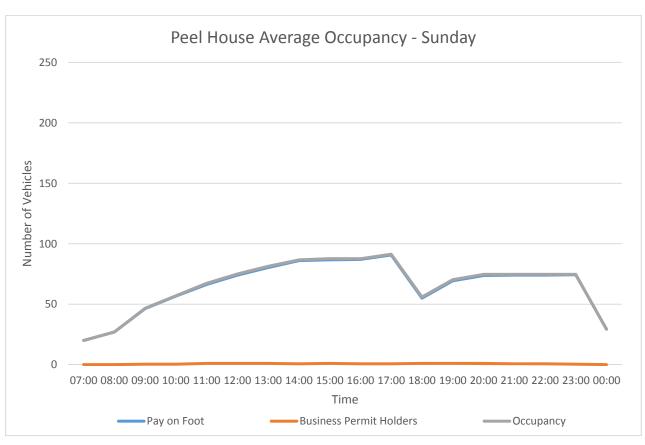


Figure 2-8 Peel House Average Occupancy – Sunday



3. Palmerston Road Pay and Display Car Park

Car park data for the Palmerston Road car park was provided by LBH for October 2015, showing the daily number of tickets purchased and the average length of ticket purchased. The car park has a charge of £0.80 per hour, with charges operating Monday to Saturday between 0800 and 1830 hours. As pay and display tickets are purchased in advance, cars may leave the car park prior to their tickets expiring so parking beat surveys were also conducted in the Palmerston Road car park.

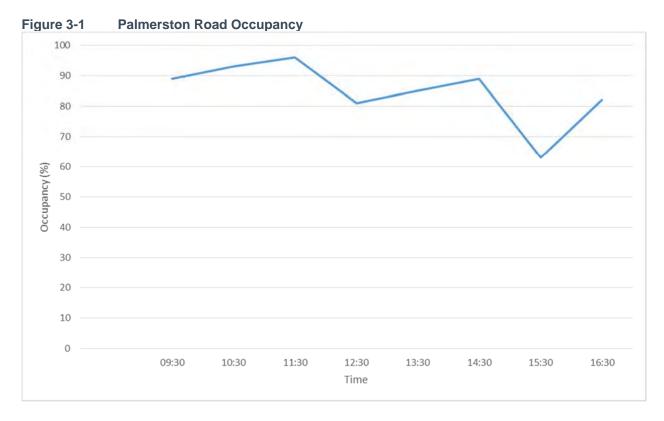
The data obtained from the LBH shows that, in October 2015, the average number of tickets purchased per day was 147, with an average transaction of 1.5 hours.

The results of the on-street parking beat surveys conducted by Atkins are presented in Table 3-1. In summary:

- The average occupancy recorded in the car park was 23 vehicles (85%), with a maximum recorded occupancy of 26 vehicles (96%).
- Demand recorded at the Palmerston Road car park was high, with occupancy varying between 62% and 96%.
- The highest occupancy (96%) was recorded at 1130 hours.
- The lowest recorded occupancy was 17 vehicles (62%) at 1530 hours.

Table 3-1 Palmerston Road Parking Beat Survey Results

No. of	Date / Time									B. d. and and and
Spaces (capacit	09/06/201 6	20/07/201	14/06/201 6	12/07/201 6	20/07/201	12/07/201 6	14/06/201 6	09/06/201 6	Averag e	Maximu m
y 27 vehicles	09:30	10:30	11:30	12:30	13:30	14:30	15:30	16:30		
)	24	25 26	26	22	22	24	17	22	22.9	26
			22	23	24	17	22	84.7%	96.3%	



4. New Civic Centre

It is understood that when the Civic Centre is relocated to the current Peel House car park site the Palmerston Road car park and the Peel House car park would be removed and replaced with a basement car park with a capacity of around 120 spaces. As a result, the number of parking spaces will be reduced compared to the existing provision. The data analysed from October 2015 indicates that, based on weekday average data, a total of 97 spaces (60 public spaces, plus 37 business permit spaces) would be required to accommodate existing demand (Palmerston Road and Peel House car parks), although based on maximum occupancy a total of 205 spaces would be required, as detailed in the breakdown in Table 4-1.

Table 4-1 Average and Maximum Car Park Occupancy

	Weekday	Average		
Car Park	Permit Holders	Pay on Foot	Maximum Occupancy	
Peel House	37	34	179	
Palmerston Road	-	26	26	
Total	97		205	

If this is not feasible within the proposed New Civic Centre layout, alternative parking provision may be required to accommodate the excess demand, assuming that demand remains at similar levels. The decision to provide alternative parking provision in a new designated car park will depend on LBH's parking policy. If additional provision is not created there is potential that demand may decline and/or on-street parking activity may increase.

Another factor to consider is the reduction in the number of parking spaces for council staff in the New Civic Centre. At the current site there is a capacity of 558 spaces for staff and 49 pay and display visitor spaces. As part of the New Civic Centre site it is understood around 50 car pool spaces will be provided for council staff. As this is a significant reduction in the number of spaces compared to the current site (around 500) this

may encourage staff to arrive by sustainable modes of transport or car share. However, there is a significant risk that there will be a large increase in on-street parking in residential roads where there are no parking restrictions and also a potential increase in illegal parking.

5. On-street Parking Beat Surveys

Parking beat surveys were conducted in Wealdstone town centre at the locations identified in Figure 1-1. Spot checks were undertaken at eight time periods during the day (between 0900 to 1700 hours) and on various days of the week across June and July 2016, in order to obtain a robust estimate of parking demand in the town centre. The surveys also recorded any illegal parking which occurred during the survey (i.e. parking outside of the marked bays) hence maximum occupancies occasionally exceed 100%.

A summary of the key waiting and loading restrictions and number of parking bays at each location is outlined below.

High Street (North)

- Parking bay between Gordon Road and the A409 George Gange Way; pay and display in operation Monday to Saturday 10am to 6:30pm.
- There are 4 parking bays plus one disabled parking bay.

Gordon Road

- Parking bays on Gordon Road near junction with the High Street; pay and display in operation Monday to Saturday 8am to 6:30pm.
- There are 3 parking bays with no disabled parking provision in this location.

High Street (South)

- Parking bays between Gordon Road and Headstone Drive; pay and display in operation Monday to Saturday 8:30am to 6:30pm.
- There are 2 parking bays.

Canning Road

- Parking bays on Canning Road near the junction with the High Street; pay and display in operation Monday to Saturday 8:30am to 6:30pm.
- There are four parking bays plus two disabled bays.

Headstone Drive

- Parking bays on Headstone Drive, accessed from the junction with Cecil Road / Ellen Webb Drive; pay and display in operation Monday to Saturday from 8am to 6:30pm.
- There are 31 parking bays plus two disabled bays and one motorcycle only bay.

The results of the parking beat survey are outlined in Table 5-1 and presented graphically in Figure 5-1 to Figure 5-4. The results show that the average and maximum parking occupancy is generally high in Wealdstone, with the maximum exceeding 100% where vehicles were recorded parking outside of marked bays. The following trends were observed:

- The demand for parking in Headstone Drive was high, with an average of 83% and maximum of 109% occupancy. The highest utilisations were recorded at 10:30 and 13:30 across the surveyed area.
- Occupancy exceeded 100% in three of the four surveyed areas, where vehicles were observed outside
 of marked bays or on double yellow lines.
- Every location in the survey was observed at 100% capacity at least once during the surveyed time periods.
- The survey indicates that all on-street parking within the surveyed area is well used, although there is only provision of 43 bays, 5 disabled bays and a motorcycle bay.

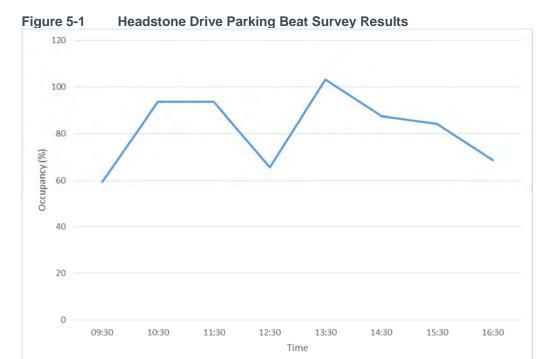
Table 5-1 **Parking Beat Survey Results**

		No. of Vehicles									
Location	Capacity	09/06/2016	20/07/2016	14/06/2016	12/07/2016	20/07/2016	12/07/2016	14/06/2016	09/06/2016	Average	Maximum
		0930	1030	1130	1230	1330	1430	1530	1630		
Headstone Drive	30	18	28	28	20	33	27	25	21	25 (83%)	33 (110%)
	2 disabled bays	1	2	2	1	0	1	2	1	1.3 (63%)	2 (100%)
	1 M/C bay	1	2	2	1	3	1	0	0	1.3	3
High Street	6	2	7	5	5	7	4	4	0	4.3 (71%)	7 (117%)
(North and South)	1 disabled bay	0	0	0	1	0	1	1	0	0.4 (38%)	1 (100%)
Gordon Road	3	3	4	2	0	2	2	1	0	1.8 (58%)	4 (133%)
Canning Road	4	4	4	N/A	5	6	4	N/A	4	4.5 (113%)	6 (150%)
	2 disabled bays	2	2	2	2	2	1	0	1	1.5 (75%)	2 (100%)
Total	48	30	47	37	34	50	40	33	33	39 (81%)	52 (108%)

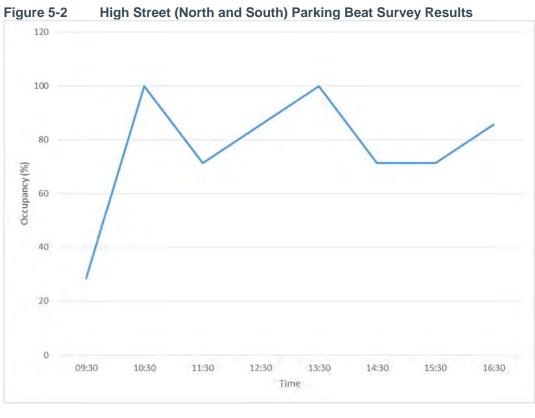
Notes:

The total capacity, and average and maximum occupancies do not include the motorcycle only bay on Headstone Drive.
 On 14th June 2016 the four parking bays on Canning Road were suspended due to road works. The survey results presented above for Canning Road do not include these time periods.

Technical note



- The demand for parking on Headstone Drive is high, with survey results showing occupancy between 60% and 103%.
- Vehicles were often observed stopping outside of marked bays on double yellow lines, particularly outside the post office.
- Whilst conducting the surveys, there was a high turnover of vehicles observed with short duration of stay, indicating that many people are making short visits to the area.



- The parking bays on the High Street were typically 80% full during the weekday surveys.
- The disabled bay was observed in use less than 40% of the time, which may be due to its very close proximity to the High Street / A409 junction, making the bays more difficult to access.

Technical note



- The occupancy on Gordon Road is more sporadic as there are only three bays provided.
- No parked vehicles were observed during the 1230 hours or 1630 hours survey.
- The maximum occupancy was exceeded during the 1030 hours survey as one vehicle was observed on the double yellow lines to the west of the parking bays.



- Generally, the demand for parking on Canning Road is high. The observations at 1130 hours and 1530 hours were impacted by four parking bays being temporarily suspended due to road works on 14th June 2016.
- The maximum occupancy was exceeded at 1230 hours and 1330 hours when vehicles were observed on double yellow lines to the east of the marked bays.

Technical note

6. Summary

In summary, a total of 333 parking bays in the vicinity of Wealdstone High Street have been surveyed. Of these 257 are located within the Peel House multi-storey car park, 27 in the Palmerston Road pay and display car park and 49 on-street pay and display parking bays.

There are a limited number of on-street bays in Wealdstone town centre, and based on the 2016 surveys, these are well used throughout the day. The Palmerston Road car park is also well used but, based on the October 2015 data, the Peel House car park has a lower level of occupancy, with a maximum of 69% (173 vehicles). The maximum occupancies were observed at the following times in each location:

- On-street 50 vehicles (104%), 1330 hours
- Peel House car park 173 vehicles (69%) Friday, 2300 hours
- Palmerston Road car park 26 vehicles (96%) 1130 hours.

The proposed scheme for the New Civic Centre would result in the replacement of the Peel House and Palmerston Road car parks with a basement car park with a capacity of around 120 spaces. The data analysed from October 2015 indicates that 97 spaces would be required to accommodate existing average public and business permit holder demand, and 205 spaces to accommodate the existing maximum level of demand. In addition, the parking provision for council staff at the New Civic Centre will be significantly reduced (by around 500 spaces), as the current Civic Centre site provides 558 staff parking spaces. The reduction in supply of parking spaces may encourage an increase in travel to Wealdstone by sustainable modes of transport but there is a significant risk that on-street parking (both legal and illegal) will increase significantly, particularly if travel by sustainable modes is not feasible for some staff/visitors. To relieve pressure on on-street parking, especially with the current Controlled Parking Zone restrictions preventing longer stay parking, alternative locations for long stay parking may need to be explored. As part of this further work it will be necessary to understand the level of provision of public car park spaces at the New Civic Centre site to fully assess the potential change/shortfall in public council staff and business permit holder car park spaces.



