Project Name:	Ellis Close, Arundel
Document Reference:	225.0001/A/TN/1
Document Name:	Technical Note
Prepared By:	Dan Hunt (December 2021)
Checked By:	Caitlin Turley (December 2021)
Approved By:	James Rand (December 2021)

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1. INTRODUCTION

1.1 This Technical Note (TN) has been prepared by Paul Basham Associates to support a planning application for 3 x two-bedroom dwellings at 30 Ellis Close, Arundel. The site location is demonstrated in **Figure 1** and the layout is attached in **Appendix A**.

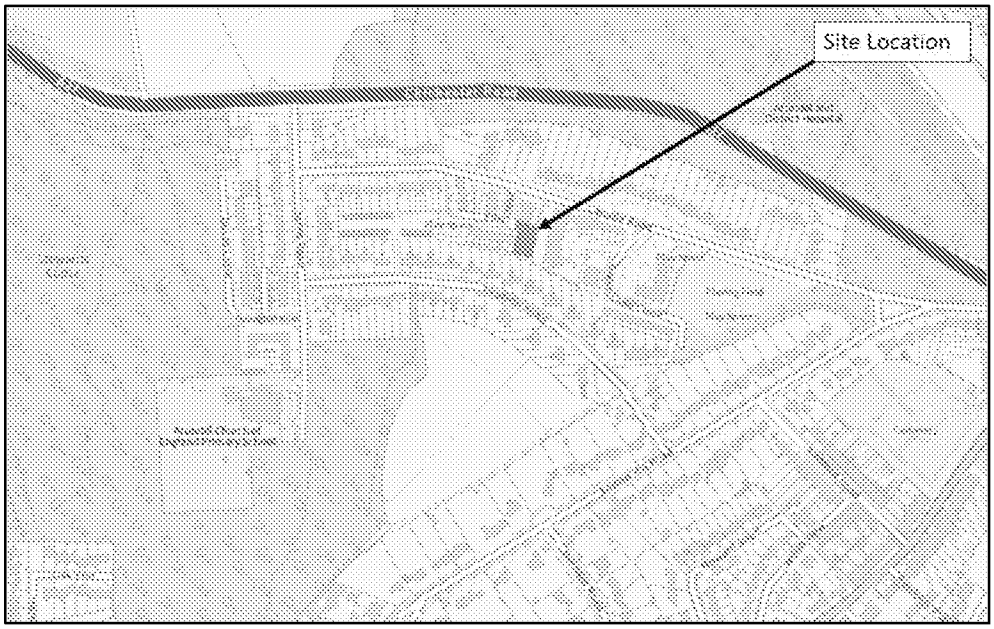


Figure 1: Site Location

2. PLANNING HISTORY

2.1 A planning application was submitted and approved in 2018 for 3 x two-bedroom dwellings at 30 Ellis Close (AB/39/18/PL). This included the submission of a car parking survey on roads surrounding the site to establish car parking capacity overnight (undertaken in September 2016).

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2.2 Given the time which has passed since the application was approved, the survey scope used within the original application has been repeated to provide updated results. However, given the 2016 surveys included dropped kerbs, white lining and double yellow lining in their inventory of parking capacity, no meaningful comparison can be concluded.

2.3 This report summarises the results of parking surveys undertaken on the 1st of December and 2nd December 2021, using a similar methodology to the 2016 survey. The full results are attached as **Appendix B**.

3. DEVELOPMENT PROPOSALS

3.1 This application proposes 3 x two-bedroom dwellings with rear gardens and six parking spaces, which will replace an area of hardstanding which can currently accommodate up to 18 vehicles. Therefore, car parking surveys have been undertaken to demonstrate that parking demand can be accommodated on the local highway network following the removal of hardstanding.

3.2 Six car parking spaces are proposed in front of the units, accessed from Ellis Close, which is in line with the approved plans submitted as part of the previous planning application. This equates to two spaces per dwelling. Cycle parking storage is proposed within each rear garden.

3.3 It should also be noted that the proposed development on Canada Road to provide 5 new residential properties will result in the removal of 6 on-street car spaces through the provision of new in-set bays. This note will also consider the combined impact of both developments on parking stress (- 24 vehicle spaces).

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4. PARKING SURVEYS AND METHODOLOGY

4.1 The methodology used for the survey was guided by the Lambeth methodology and the previous parking capacity survey, accepted and approved in 2018 application by ADC. The survey methodology was as follows:

- Study area includes Canada Road, Ellis Close, Green Lane Close, Pearson Road. Hill Terrace provides access to a private car park and as such signs prohibit vehicles from obstructing the footway or access. The road is narrow in width; therefore, vehicles cannot park here without parking half on the footway. Therefore, this has not been included in the survey.
- 2 x Snapshot surveys undertaken between 2330 – 0500 (Monday, Tuesday, Wednesday or Thursday).

4.2 The surveys were undertaken on Wednesday 1st December 2021 at 00:30 hours and Thursday 2nd December 2021 at 00:30 hours. The area included within the survey is provided below in **Figure 2**, along with the type of parking on each road.

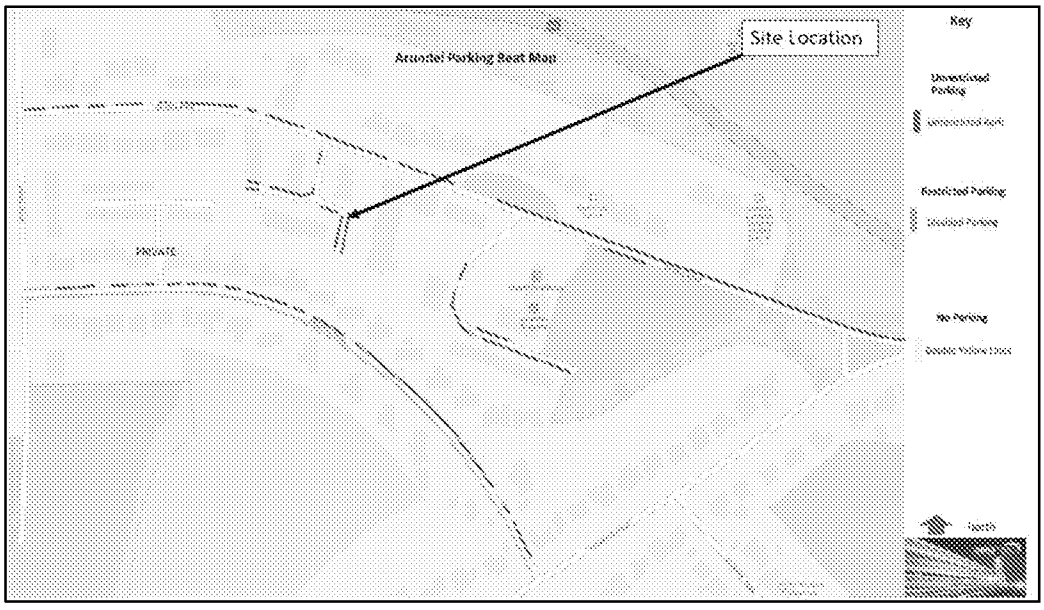


Figure 2: Parking Survey Area

4.3 The surveyed time of 00:30 provides a robust assessment as this is when the highway has the most demand for residential overnight parking and is at its maximum level of capacity. Consequently, the resulting figures from the survey present the worst-case scenario.

4.4 The results of the first survey are summarised in **Table 1**.

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Road Name	Number of Spaces Available	Number of Spaces Occupied	Number of Spaces Empty	Total Occupied %
Canada Road	119	83	36	70%
Ellis Close	28	23	5	82%
Green Lane Close	20	15	5	75%
Pearson Road	46	35	11	76%
Total	**213**	**156**	**57**	**73%**

Table 1: Parking Survey Results – Wednesday 1st December 2021

4.5 The results of the second survey are summarised in **Table 2**.

Road Name	Number of Spaces Available	Number of Spaces Occupied	Number of Spaces Empty	Total Occupied %
Canada Road	119	86	33	72%
Ellis Close	28	20	8	71%
Green Lane Close	20	14	6	70%
Pearson Road	46	37	9	80%
Total	**213**	**157**	**56**	**74%**

Table 2: Parking Survey Results – Thursday 2nd December 2021

4.6 The survey results demonstrate that the study area currently provides capacity for up to 213 vehicles to park. This will reduce to 189 spaces following the development proposals (-6 on Canada Road from the proposed in-set bays and -18 from the removal of hardstanding at Ellis Close). In addition, five spaces are designated as disabled within the study area, one at the eastern end of Pearson Road, two on Green Lane Close and two at the western end of Canada Road.

4.7 The highest level of parking was recorded on Wednesday, however the survey results are comparable on both days. **Table 2** illustrates that 157 vehicles were parked, which equates to 26% spare capacity (total of 213 spaces) or 17% (total of 189 spaces). This equates to 32 spaces being available when considering the impact of the development proposals.

4.8 It should be noted that the development proposals on Canada Road will only result in a net increase of one unit and the existing units do not provide any parking. In addition, all parking demand associated with the development proposals will be accommodated within the proposed on-site parking provision.

4.9 Of the five disabled bays, 3 were observed to be free on both survey nights, representing 40% stress.

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5. SUMMARY AND CONCLUSION

5.1 This Technical Note has been prepared by Paul Basham Associates to support a planning application for 3 x two-bedroom dwellings at 30 Ellis Close, Arundel. The purpose of this report has been to provide the details of an up-to-date parking capacity survey for the application and assesses whether the level of expected vehicle displacement can be suitably accommodated by the surround highway network.

5.2 This application proposes 3 x two-bedroom dwellings with rear gardens and six parking spaces, which will replace an area of hardstanding which can currently accommodate up to 18 vehicles.

5.3 Parking surveys undertaken in December 2021 demonstrate that up to 213 vehicles could be accommodated within the study area, which would reduce to 189 following the development proposals, with a further 5 accessible spaces. During the survey period, up to 157 vehicles were observed to park (excluding disabled spaces). Therefore, even after the development proposals reduce the overall level of parking available, parking demand can be accommodated on-street. No illegal or obstructive parking was observed at the time of the survey.

5.4 The results of the parking survey therefore indicate that there is sufficient capacity on the surrounding highway network to accommodate the vehicle spaces removed as part of the combined development proposals at Canada Road and Ellis Close.

5.5 We therefore encourage ADC to look favourably upon this development from a highway perspective.

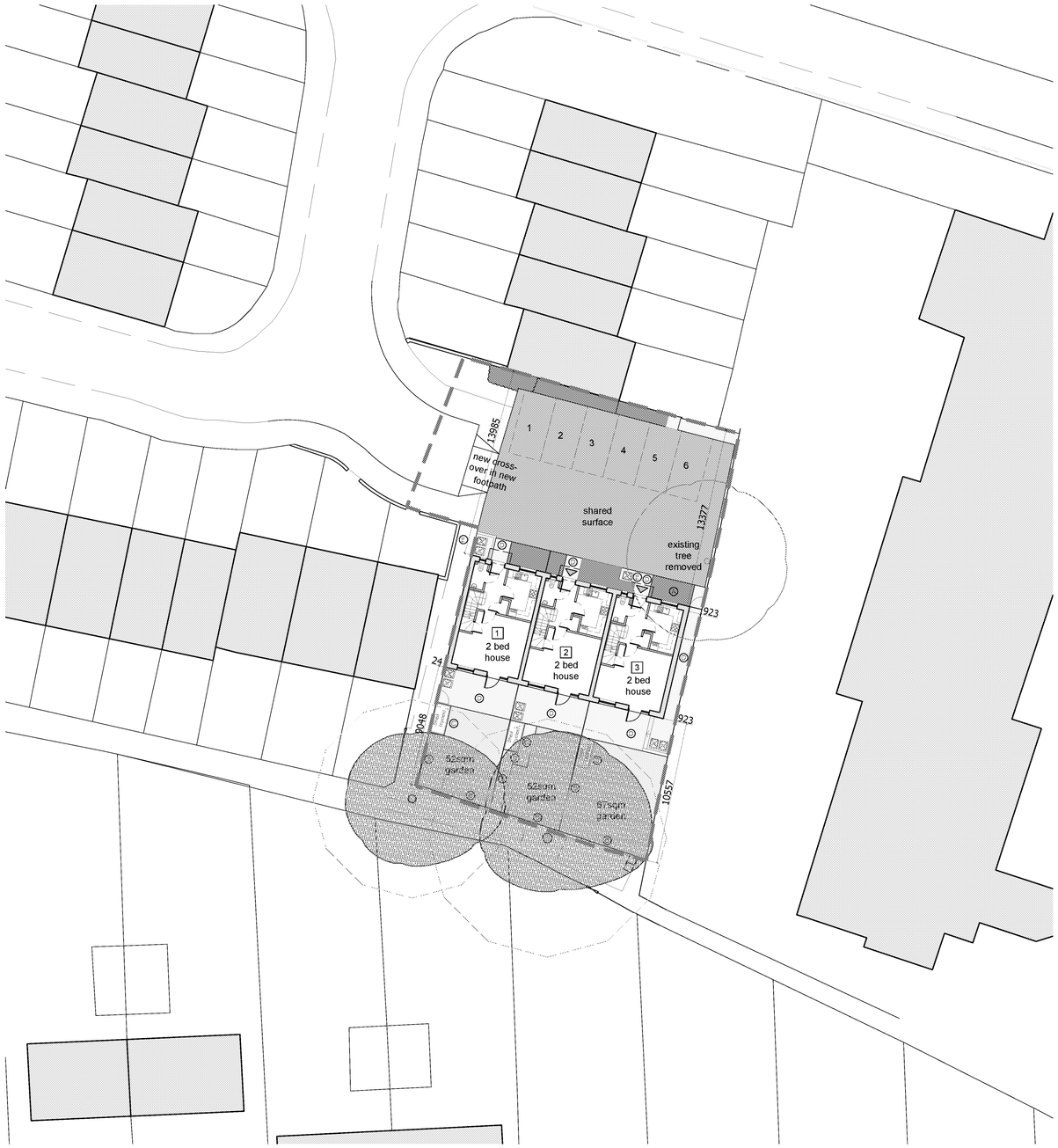
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Appendix A

Notes

1. This drawing is the copyright of MH Architects Ltd
2. Do not scale this drawing except for Local Authority planning purposes
3. All dimensions must be checked on site by the contractor prior to commencement of the works.

Rev.	Revision	By	Date	Check	Date
P1	Preliminary issue	CHS			
P2	Blue lines added to location plan Fence added to site section	CHS	03.04.18.	NKS	28.03.18.



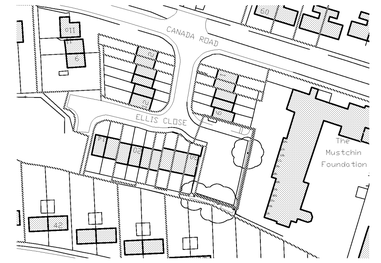
Site Plan 1:200

N

Plans 1:200 @ A1

2 0 2 4 6 8 10 12 14 16 18m

1:200



Location Plan 1:1250

N

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Location Plan 1:1250 @ A1

10 0 10 20 30 40 50 100m

1:1250

KEY

A: Planting including shrubs, native species to encourage bio-diversity.

B: 1800mm close boarded fence.

C: Secure sheds for cycle storage.

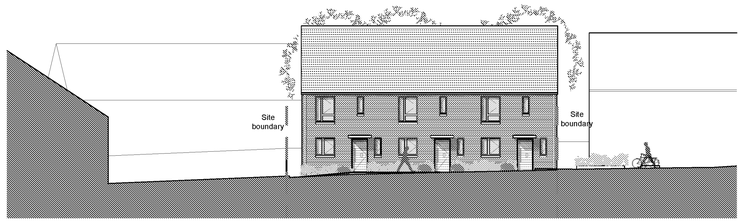
D: Footpaths, patios and garden paths to be 450 x 450 x 50mm light coloured paving slabs.

E: Bin Collection Point

SCHEDULE OF ACCOMMODATION

UNIT	ACCOMMODATION	Internal Area
01	2 bedroom, 4 person house	79.2 sq. m
02	2 bedroom, 4 person house	79.2 sq. m
03	2 bedroom, 4 person house	79.2 sq. m
TOTALS:-		
	3no. 2 bedroom, 4 person house	237.6 sq. m

Development Site	0.062 Ha
Site Density	48 Units/Ha
Car Parking	1 space allocated for each house
	3 spaces re provided
	TOTAL = 6 spaces
Cycle Parking:	1 secure cycle spaces per house in sheds (see plans)
Refuse & recycling :	Recycling space in all kitchens to meet CfSH
	Refuse vehicle collection points in front gardens
	bins stored in rear gardens



Street Scene 1:200

Sections 1:200 @ A1

2 0 2 4 6 8 10 12 14 16 18m

1:200

Residential Re-development

Ellis Close
Arundel
Arun District Council

Project & Drawing title

location plan &
proposed site plan /
proposed section

Drawn	Date	Checked	Date	Scale at A1
tgm	04/10/16	nks	04/10/16	1:1250 1:200

Job N°.	Drawing N°.	Rev.
16/021	010	P2

Status

PLANNING

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Registered in England No. 5994733

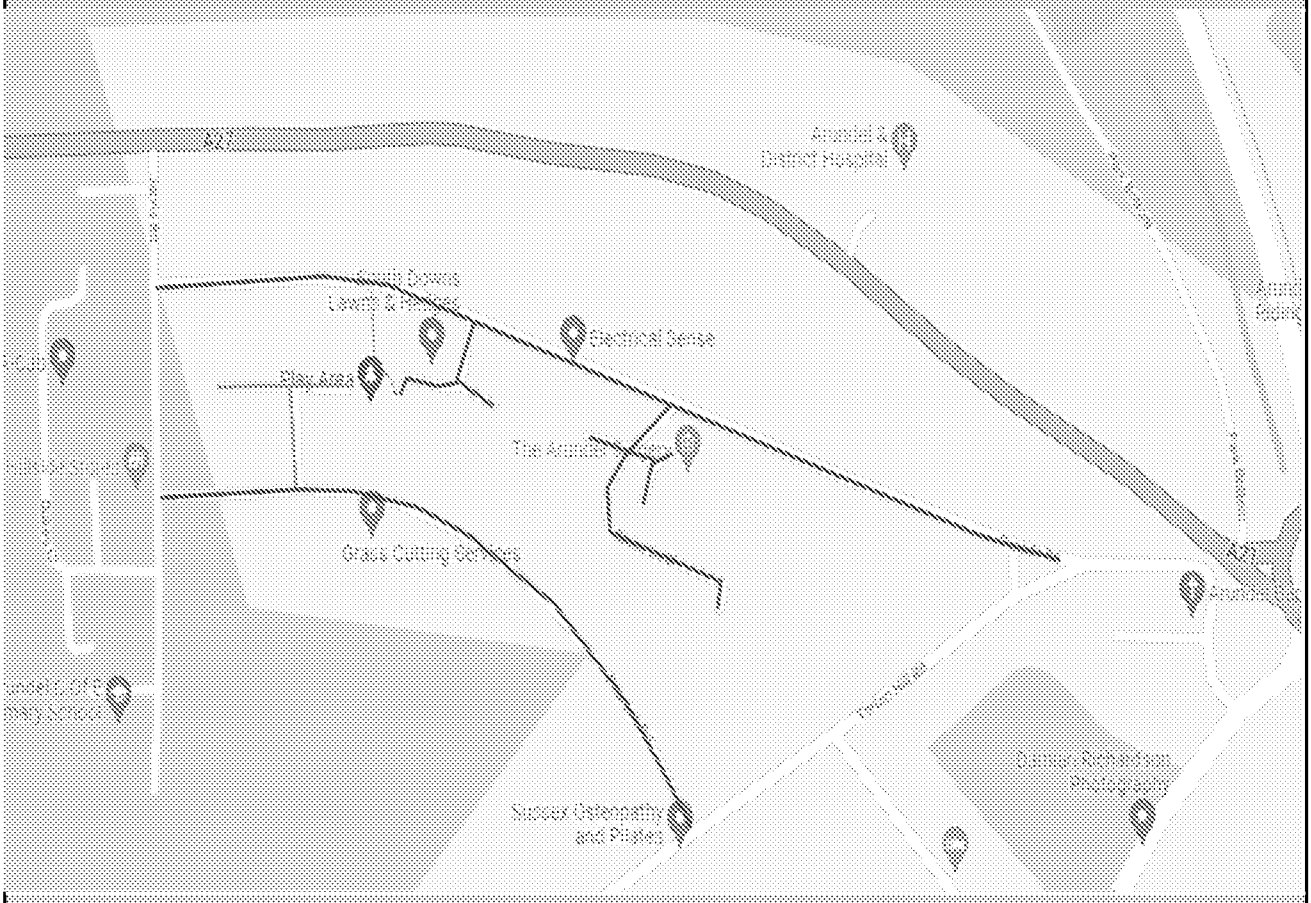
ARCHITECTS

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Appendix B

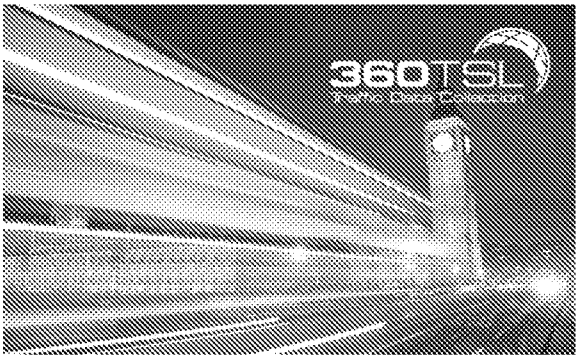
Parking Beat Survey

Ellis Close & Canada Road, Arundel



Wednesday 1st December 2021

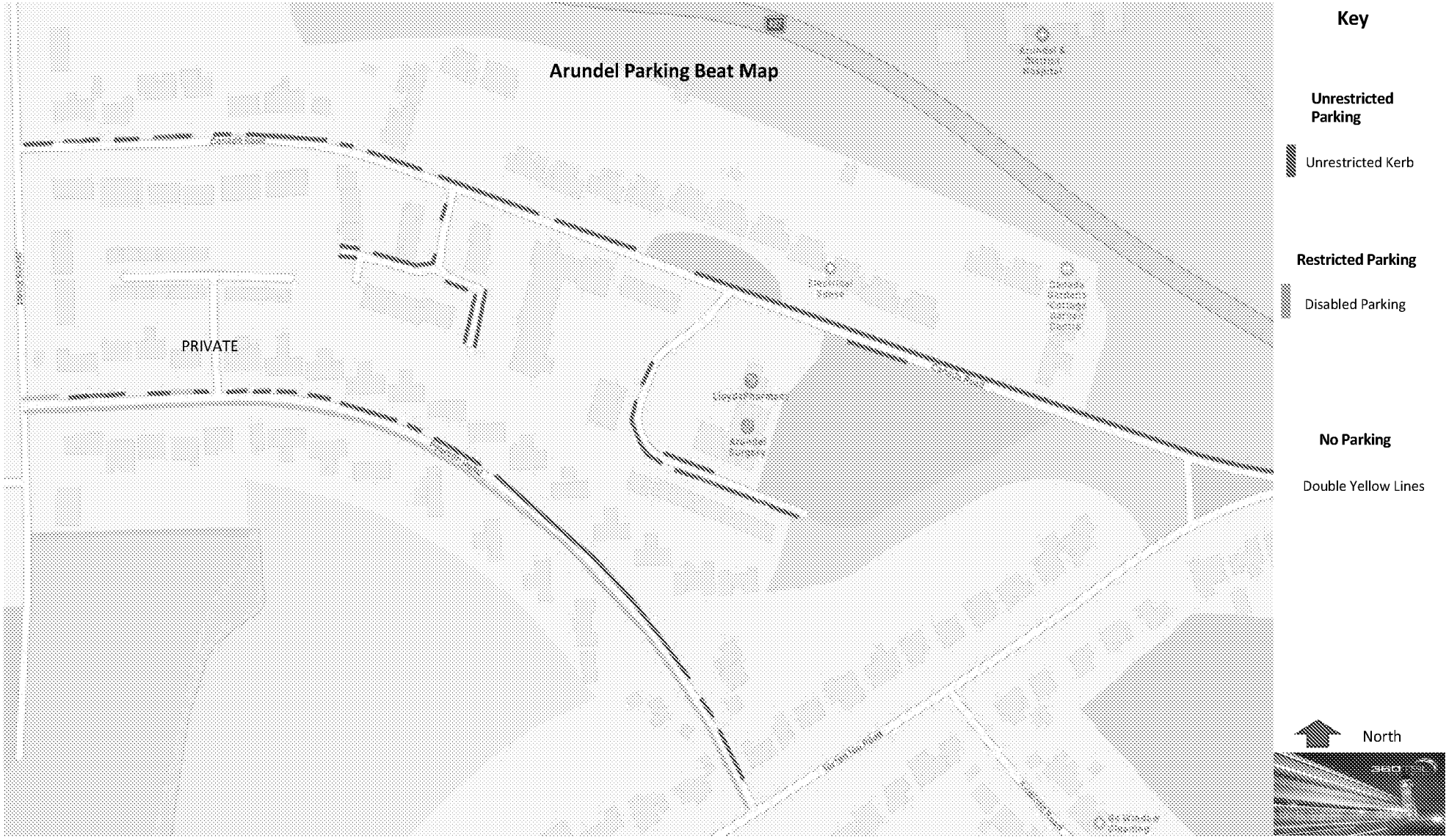
Thursday 2nd December 2021



Created by Bert Ramos

SURVEY DETAILS

Survey Type	PARKING BEAT SURVEY
Methodology Guidance	London Borough of Lambeth
Site	Ellis Close & Canada Road, Arundel
Survey Area	As advised by client
Date/s	Wednesday 1st December 2021 Thursday 2nd December 2021
Time/s	00:30 - 05:30hrs
Beat Frequency	Snapshot
Unit for 1 Unmarked Lengthwise Space (m)	5
Unit for 1 Unmarked Crosswise Space (m)	2.5
Areas Excluded From Survey	Private parking spaces, private roads and off road parking (unless requested in survey specification).
Sections of road excluded from parking capacity calculation	First 7.5m from junction mouth (for reasons of highway safety). Crossovers, dropped kerbs, build-outs, traffic islands, 24/7 illegal parking. Sections of legal lengthwise parking between illegal parking (crossover, dropped kerbs, double yellow etc) that measure less than the unit specified for 1 space. Where the width of the road is such that parking on both sides would cause an obstruction. In this instance one side of the road has been excluded from the capacity calculation.
Parking excluded from stress calculation	Skips or any other non-vehicle occupying a parking space (but noted separately if observed). Any illegal parking on double yellow lines, crossovers, keep clear lines etc (but noted separately if observed).
Terminology	"Parking Stress" - Calculation to express the number of parked vehicles as a percentage of available parking for each parking type. Stress can be over 100% if cars are small and/or parked very closely together. "Parking Capacity Calculation" - Measurement of each length of road between illegal parking (e.g. crossovers, traffic islands, double yellow etc) converted into parking spaces by rounding down to the nearest unit assigned to one parking space and dividing this figure by the unit. "Lengthwise Parking" - Vehicles parked in a lengthwise orientation with wheels parallel to the kerbside. "Crosswise Parking" - Vehicles parked in a crosswise orientation (as seen in car parks or wide sections of road)


Arundel Parking Beat Map
PRIVATE
Key
Unrestricted Parking
Unrestricted Kerb
Restricted Parking
Disabled Parking
No Parking
Double Yellow Lines
North

PARKING STRESS TABLES

Restriction 1 — Unrestricted Kerb

Location	Lengthwise Parking (m)	Lengthwise Spaces	Marked/Crosswise Bays	Total Spaces	Wednesday 1st December 2021 00:30 Occupied	Wednesday 1st December 2021 00:30 Spaces	Wednesday 1st December 2021 00:30 Stress (%)	Thursday 2nd December 2021 00:30 Occupied	Thursday 2nd December 2021 00:30 Spaces	Thursday 2nd December 2021 00:30 Stress (%)
Canada Road	470	94	25	**119**	83	36	70%	86	33	72%
Ellis Close	40	8	20	**28**	23	5	82%	20	8	71%
Green Lane Close	100	20	0	**20**	15	5	75%	14	6	70%
Pearson Road	230	46	0	**46**	35	11	76%	37	9	80%
Total	**840**	**168**	**45**	**213**	**156**	**57**	**73%**	**157**	**56**	**74%**

Restriction 2 — Disabled Parking

Location	Lengthwise Parking (m)	Lengthwise Spaces	Marked/Crosswise Bays	Total Spaces	Wednesday 1st December 2021 00:30 Occupied	Wednesday 1st December 2021 00:30 Spaces	Wednesday 1st December 2021 00:30 Stress (%)	Thursday 2nd December 2021 00:30 Occupied	Thursday 2nd December 2021 00:30 Spaces	Thursday 2nd December 2021 00:30 Stress (%)
Canada Road	10	2	0	**2**	1	1	50%	1	1	50%
Green Lane Close	10	2	0	**2**	1	1	50%	1	1	50%
Pearson Road	5	1	0	**1**	0	1	0%	0	1	0%
Total	**25**	**5**	**0**	**5**	**2**	**3**	**40%**	**2**	**3**	**40%**

Illegal/Obstructive Parking

Location	Description	Wednesday 1st December 2021 00:30 Occupied	Thursday 2nd December 2021 00:30 Occupied
		0	0
Total		0	0

PARKING CAPACITY MEASUREMENTS

A working table showing kerbside measurements for each parking type.

Location	Side of Road & Measuring Orientation	Parking Type	Section Length (m)	Crosswise Spaces or Lengthwise Marked Bays	Number of Crosswise Spaces or Marked Bays	Unit Round Down (If Lengthwise & Unmarked)	Total Spaces
Canada Road	N E-W	Unrestricted Kerb	244.2			48	48
Canada Road	N E-W	Unrestricted Kerb	16.8		6		6
Canada Road	N E-W	Unrestricted Kerb	24.1			24	4
Canada Road	N E-W	Crossover	4.6			0	0
Canada Road	N E-W	Unrestricted Kerb	26.2			26	5
Canada Road	N E-W	Unrestricted Kerb	10.2		4	0	4
Canada Road	N E-W	Crossover	3.5			0	0
Canada Road	N E-W	Unrestricted Kerb	4		1	0	1
Canada Road	N E-W	Unrestricted Kerb	46.2			46	9
Canada Road	N E-W	Crossover	6.2			0	1
Canada Road	N E-W	Unrestricted Kerb	26.9			26	5
Canada Road	N E-W	Crossover	4			0	0
Canada Road	N E-W	Unrestricted Kerb	2.9		1	0	1
Canada Road	N E-W	Crossover	4.7			0	0
Canada Road	N E-W	Unrestricted Kerb	3.1		1	0	1
Canada Road	N E-W	Unrestricted Kerb	65.9			65	13
Canada Road	N E-W	Crossover	7.2			0	1
Canada Road	N E-W	Unrestricted Kerb	7.9			0	1
Canada Road	N E-W	Crossover	10			10	2
Canada Road	N E-W	Unrestricted Kerb	5.1			0	1
Canada Road	N E-W	Disabled Parking	5			5	1
Canada Road	N E-W	Crossover	5.8			0	1
Canada Road	N E-W	Unrestricted Kerb	13.6			13	2
Canada Road	N E-W	Crossover	11.3			10	2
Canada Road	N E-W	Unrestricted Kerb	9.7			9	1
Canada Road	N E-W	Crossover	15.4			15	3
Canada Road	N E-W	Disabled Parking	5.1			5	1
Canada Road	N E-W	Crossover	7.7			0	1
Canada Road	N E-W	Unrestricted Kerb	27.1			25	5
Canada Road	N E-W	Crossover	5.5			0	1
Canada Road	S W-E	Crossover	4.2			0	0
Canada Road	S W-E	Too Narrow to Park	12.9			12	2
Canada Road	S W-E	Crossover	5.6			0	1
Canada Road	S W-E	Too Narrow to Park	5.6			0	1
Canada Road	S W-E	Crossover	5.6			0	1
Canada Road	S W-E	Too Narrow to Park	7.3			0	1
Canada Road	S W-E	Crossover	3.8			0	0
Canada Road	S W-E	Too Narrow to Park	47.7			45	9
Canada Road	S W-E	Crossover	6.5			0	1
Canada Road	S W-E	Too Narrow to Park	59			55	11
Canada Road	S W-E	Crossover	3.6			0	0
Canada Road	S W-E	Too Narrow to Park	20.2			20	4
Canada Road	S W-E	Crossover	4.6			0	1
Canada Road	S W-E	Too Narrow to Park	29.3			25	5
Canada Road	S W-E	Junction	16.3			15	3
Canada Road	S W-E	Too Narrow to Park	41.8			40	8
Canada Road	S W-E	Crossover	3.7			0	0
Canada Road	S W-E	Too Narrow to Park	73.6			70	14
Canada Road	S W-E	Junction	15.7			15	3
Canada Road	S W-E	Too Narrow to Park	52.9			50	10

Canada Road	S W-E	Crossover	3.7			6	0
Canada Road	S W-E	Too Narrow to Park	70.5			70	14
Canada Road	S W-E	Unrestricted Kerb	30.1		12	6	12
Canada Road	S W-E	Too Narrow to Park	46			46	9
Canada Road	S W-E	Crossover	4.6			6	0
Canada Road	S W-E	Too Narrow to Park	14			14	2
Canada Road	S W-E	Junction	8.9			9	1
Canada Road	S W-E	Too Narrow to Park	33.2			30	6
Ellis Close	W N-S	Crossover	6.1			6	1
Ellis Close	W N-S	Unrestricted Kerb	3.2			6	0
Ellis Close	W N-S	Crossover	20.5			20	4
Ellis Close	W N-S	Unrestricted Kerb	29			24	5
Ellis Close	W N-S	Crossover	5.5			6	1
Ellis Close	W N-S	Unrestricted Kerb	5.5			6	1
Ellis Close	S W-E	Unrestricted Kerb	4.1			6	0
Ellis Close	S W-E	Unrestricted Kerb	8		2	6	2
Ellis Close	S W-E	Too Narrow to Park	8			8	1
Ellis Close	S W-E	Crossover	6.4			6	1
Ellis Close	S W-E	Too Narrow to Park	1.9			6	0
Ellis Close	S W-E	Crossover	15.6			15	3
Ellis Close	S W-E	Unrestricted Kerb	10.7			10	2
Ellis Close	S W-E	Crossover	3.7			6	0
Ellis Close	S W-E	Unrestricted Kerb	21.3		8	6	8
Ellis Close	E S-N	Unrestricted Kerb	26.4		10	6	10
Ellis Close	E S-N	Too Narrow to Park	23.2			20	4
Ellis Close	E S-N	Crossover	16.7			15	3
Ellis Close	E S-N	Too Narrow to Park	6.6			6	1
Ellis Close	E S-N	Crossover	3.5			6	0
Ellis Close	E S-N	Too Narrow to Park	1.9			6	0
Green Lane Close	W N-S	Crossover	4			6	0
Green Lane Close	W N-S	Too Narrow to Park	13.1			12	2
Green Lane Close	W N-S	Crossover	3.7			6	0
Green Lane Close	W N-S	Too Narrow to Park	17.4			18	3
Green Lane Close	W N-S	Junction	13.6			12	2
Green Lane Close	W N-S	Unrestricted Kerb	12.1			12	2
Green Lane Close	W N-S	Crossover	4.4			6	0
Green Lane Close	W N-S	Unrestricted Kerb	23.5			24	4
Green Lane Close	W N-S	Crossover	5.4			6	1
Green Lane Close	W N-S	Unrestricted Kerb	13.9			12	2
Green Lane Close	W N-S	Disabled Parking	6.2			6	1
Green Lane Close	W N-S	Unrestricted Kerb	21.9			24	4
Green Lane Close	W N-S	Disabled Parking	5.6			6	1
Green Lane Close	W N-S	Unrestricted Kerb	23.3			24	4
Green Lane Close	W N-S	Crossover	10.9			12	2
Green Lane Close	N E-W	Too Narrow to Park	4.2			6	0
Green Lane Close	N E-W	Crossover	4.4			6	0
Green Lane Close	N E-W	Too Narrow to Park	26.7			25	5
Green Lane Close	N E-W	Unrestricted Kerb	23.5			24	4
Green Lane Close	N E-W	Too Narrow to Park	65.6			65	13
Green Lane Close	N E-W	Junction	16.6			18	3
Green Lane Close	N E-W	Too Narrow to Park	22.4			20	4
Pearson Road	N E-W	Too Narrow to Park	11			12	2
Pearson Road	N E-W	Crossover	3.7			6	0
Pearson Road	N E-W	Unrestricted Kerb	26			25	5
Pearson Road	N E-W	Crossover	7.3			6	1

Pearson Road	N.E-W	Unrestricted Kerb	5.1			5	1
Pearson Road	N.E-W	Crossover	14			10	2
Pearson Road	N.E-W	Unrestricted Kerb	102.2			100	20
Pearson Road	N.E-W	Crossover	9.7			5	1
Pearson Road	N.E-W	Unrestricted Kerb	21.1			20	4
Pearson Road	N.E-W	Crossover	4.5			5	1
Pearson Road	N.E-W	Unrestricted Kerb	3.2			0	0
Pearson Road	N.E-W	Crossover	5.1			5	1
Pearson Road	N.E-W	Unrestricted Kerb	42.2			40	8
Pearson Road	N.E-W	Crossover	9			5	1
Pearson Road	N.E-W	Unrestricted Kerb	11			10	2
Pearson Road	N.E-W	Crossover	6.4			5	1
Pearson Road	N.E-W	Unrestricted Kerb	6.8			5	1
Pearson Road	N.E-W	Crossover	14.2			10	2
Pearson Road	N.E-W	Unrestricted Kerb	6.6			5	1
Pearson Road	N.E-W	Crossover	5.5			5	1
Pearson Road	N.E-W	Unrestricted Kerb	3.3			0	0
Pearson Road	N.E-W	Double Yellow Line	23			20	4
Pearson Road	N.E-W	Unrestricted Kerb	10.7			10	2
Pearson Road	N.E-W	Crossover	4.7			5	0
Pearson Road	N.E-W	Unrestricted Kerb	7.5			5	1
Pearson Road	N.E-W	Crossover	9			5	1
Pearson Road	N.E-W	Disabled Parking	7.8			5	1
Pearson Road	N.E-W	Unrestricted Kerb	7.1			5	1
Pearson Road	N.E-W	Crossover	12			10	2
Pearson Road	N.E-W	Double Yellow Line	16.6			15	3
Pearson Road	S.W-E	Double Yellow Line	412			410	82