

TECHNICAL NOTE NO 1
PROPOSED CONVENIENCE STORE, GUTTER HILL, RHOS
10124 – 1ST JUNE 2010

- 1.1 Singleton Clamp and Partners Ltd are instructed by Watkin Jones to review and report upon the comments raised by the Highways Officer from Wrexham Council in respect of the proposed change of use from office to office and convenience store on land at Gutter Hill, Rhos.
- 1.2 The existing use of the building is as an office and was used by Watkin Jones. The building is 864 sqm over two floors and has the benefit of 33 no. parking spaces. The existing site layout is illustrated at Appendix 1 in relation to the local highway network. The site boundary is highlighted in red.
- 1.3 The red edged site is constrained by the presence of a SSSI which surrounds the site.
- 1.4 The site has a single point of access off Gutter Hill. The access also serves the 16 no. space car park which serves the Country Park.
- 1.5 The proposal is to convert the ground floor of the office building to provide a convenience store with a retail floor area not exceeding 300 sqm. The remaining area will be available for storage and stair areas to allow access to the offices above.
- 1.6 The Highways officer has reviewed the submitted plans and has raised a number of issues:
- 1) Adequacy of car parking within the site
 - 2) Adequacy of the service arrangements
 - 3) Adequacy of pedestrian links into the site
 - 4) Traffic Attraction of the proposals
- 1.7 This Technical Note reviews the comments made by the Highways officer.

CAR PARKING

- 1.8 Appendix 2 illustrates a proposed layout for the car park associated with the proposals. The layout illustrates 35 no. spaces and includes 4 spaces for mobility impaired drivers, motorcycles bays and 5 no Sheffield stands for 10 cycles.
- 1.9 The Highways officer has stated a requirement for 21 spaces associated with the convenience store and 16 spaces associated with the remaining office area, which totals a maximum requirement for 37 spaces on the site.
- 1.10 The above assessment treats the two uses in the building as completely separate and therefore does not allow for any cross trade.
- 1.11 Equally, the parking standards do not reflect the short stay / rapid turn over nature of the trips attracted to a convenience store.
- 1.12 It is considered that the proposed parking provision for the site would be suitable for the development, particularly as the scheme also provides cycle and motorcycle parking.
- 1.13 The site is located within 250 m of bus stops and the frequency and regularity of the services would be suitable, particularly for staff movements to /from the site.

SERVICE ARRANGEMENTS

- 1.14 The adequacy of the service arrangements has been questioned by the Highways officer. In response to earlier comments the applicant has confirmed that deliveries would be low in number and would be by means of a 7.5t box style van.
- 1.15 Appendix 3 illustrates the swept path of a 7.5t box style van entering the site in forward gear, turning within the main car park, manoeuvring into the dedicated service bay and then leaving the site in forward gear. It can be seen that the van can easily manoeuvre within the car park even assuming all the parking spaces are used. In practice given the normal early morning nature of the service trips it is highly unlikely that the car park would be anywhere near full and therefore the van would be able to perform a U turn within the southern part of the car park.
- 1.16 It is considered that the service arrangements would be suitable and safe for the proposed development.

PEDESTRIAN LINKS TO SITE

- 1.17 Appendix 2 illustrates a proposal to extend the existing footway, located on the western side of the existing access road up to the building. It is also proposed to install a dropped crossing to allow pedestrians to cross the existing bellmouth to the site access.
- 1.18 Other pedestrian routes into the site are constrained by the presence of the SSSI. The Applicant is however discussing with the CCW about the principle of making a contribution to CCW to enhance and maintain the SSSI and this could include improvements to the existing footpath network through the SSSI. Any such improvement would be a planning gain of the application.
- 1.19 It is considered that the proposed footway into the site and the proposed dropped crossing across the bellmouth would provide a material benefit over the existing pedestrian provision at the site.

ANTICIPATED TRAFFIC ATTRACTION

- 1.20 The traffic attraction associated with the planning application has been assessed using the TRICS database and has been compared with the potential for the existing office on the site to attract traffic.
- 1.21 We have utilised the current version of TRICS 2010(a) v6.5.2 to assess the anticipated trip rates for the existing office building. The anticipated trip rates are detailed at Appendix 4 and the trip rates and trips are summarised below:

TRIP RATE FOR OFFICE	AM PEAK		PM PEAK	
	ARR	DEP	ARR	DEP
TRIP RATE PER 100 SQM	2.137	0.250	0.423	2.367
MOVEMENTS	18 vph	2 vph	4 vph	20 vph

- 1.22 In order to assess the anticipated traffic attraction of the convenience store we have again utilised the TRICS database and the trip rates are detailed at Appendix 5. The trip rates are summarised below:

TRIP RATE FOR CONVENIENCE STORE	AM PEAK		PM PEAK	
	ARR	DEP	ARR	DEP
TRIP RATE PER 100 SQM (RETAIL)	12.581	9.892	8.387	14.409

- 1.23 The application proposals which consist of a convenience store, no greater than 300 sqm in size and 432 sqm of office would therefore be anticipated to attract the following trips:

ANTICIPATED TRIPS FROM APPLICATION PROPOSALS	AM PEAK		PM PEAK	
	ARR	DEP	ARR	DEP
OFFICE	9 vph	1 vph	2 vph	10 vph
CONVENIENCE STORE	38 vph	30 vph	25 vph	43 vph
TOTAL	47 vph	31 vph	27 vph	53 vph

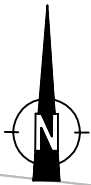
- 1.24 The gross impact of the proposals would be anticipated to lead to an increase in traffic flow on the site access of +58 vph (total two way) during the am peak and +56 vph (total two way) during the pm peak hour. The anticipated increase in flow on the access road equates to less than 1 additional vehicle per minute on average during the highway peak hours.
- 1.25 In terms of the anticipated increase in traffic flow on Gutter Hill it should be noted that a proportion of the traffic attracted to the convenience store would already be on the local highway network and whilst the vehicles would turn into the site they would not be new to the highway network.

- 1.26 It is considered reasonable to assume that 30% of the traffic attraction to the convenience store would already be on the network. The net increase in flow on Gutter Hill would, assuming a worst case scenario of all the traffic being loaded onto one arm of Gutter Hill, would be only +38 vph (total two way) during the am peak period and only +36 vph (total two way) during the pm peak period. The level of increase associated with the worst case assessment equates to only one additional vehicle every 1.6 minutes on average during the peak highway periods. This level of increase is considered to be insignificant.
- 1.27 Clearly with a more realistic assessment of the assignment of the site attracted traffic the increase in flow on Gutter Hill would reduce materially.
- 1.28 In summary, it is considered that the traffic, parking and servicing associated with the application proposals can be safely accommodated within the site and on the local highway network. The proposed footway leading into the site is a material benefit for all users of the site.
- 1.29 There can be, therefore, no overriding highways objections to the application proposals.

W. Booker
Singleton Clamp and Partners Ltd
1st June 2010.

APPENDICES

1



GUTTER HILL

EXISTING
EXTENT OF
HARDSTANDING
AROUND
BUILDING

New Foundary
Buildings

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Notes

Drawing Title

EXISTING SITE LAYOUT

Singleton Clamp
& PARTNERS

Consulting Engineers and Transportation Planners
2 Mount Street, Albert Square, Manchester, M2 5WQ.
Tel: 0161-832-4400, Email: Consult@SingletonClamp.co.uk

Drawing No.

APPENDIX 1

Job Title

PROPOSED CONVENIENCE STORE, GUTTER HILL, RHOS

Scale

1:500 @ A4

Date

MAY 2010

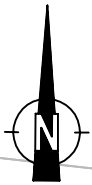
Drawn By

RB

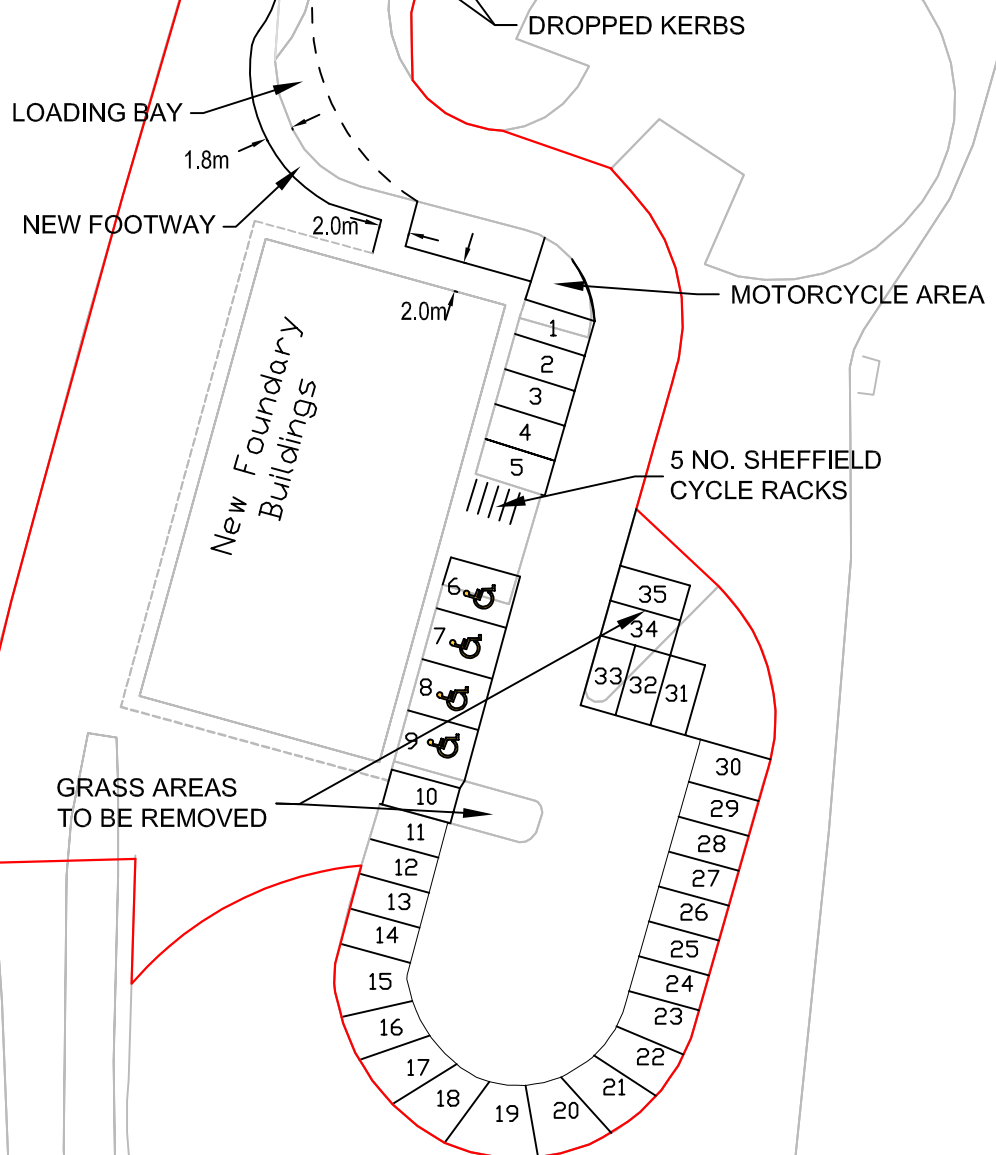
Job No

10124

2



GUTTER HILL



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Notes

Drawing Title

APPLICATION PROPOSALS

Singleton Clamp
& PARTNERS

Consulting Engineers and Transportation Planners
2 Mount Street, Albert Square, Manchester, M2 5WQ.
Tel: 0161-832-4400, Email: Consult@SingletonClamp.co.uk

Drawing No.

APPENDIX 2

Job Title

PROPOSED CONVENIENCE STORE, GUTTER HILL, RHOS

Scale

1:500 @ A4

Date

MAY 2010

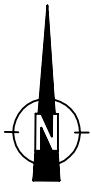
Drawn By

RB

Job No

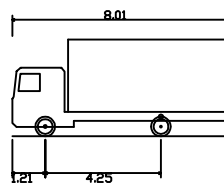
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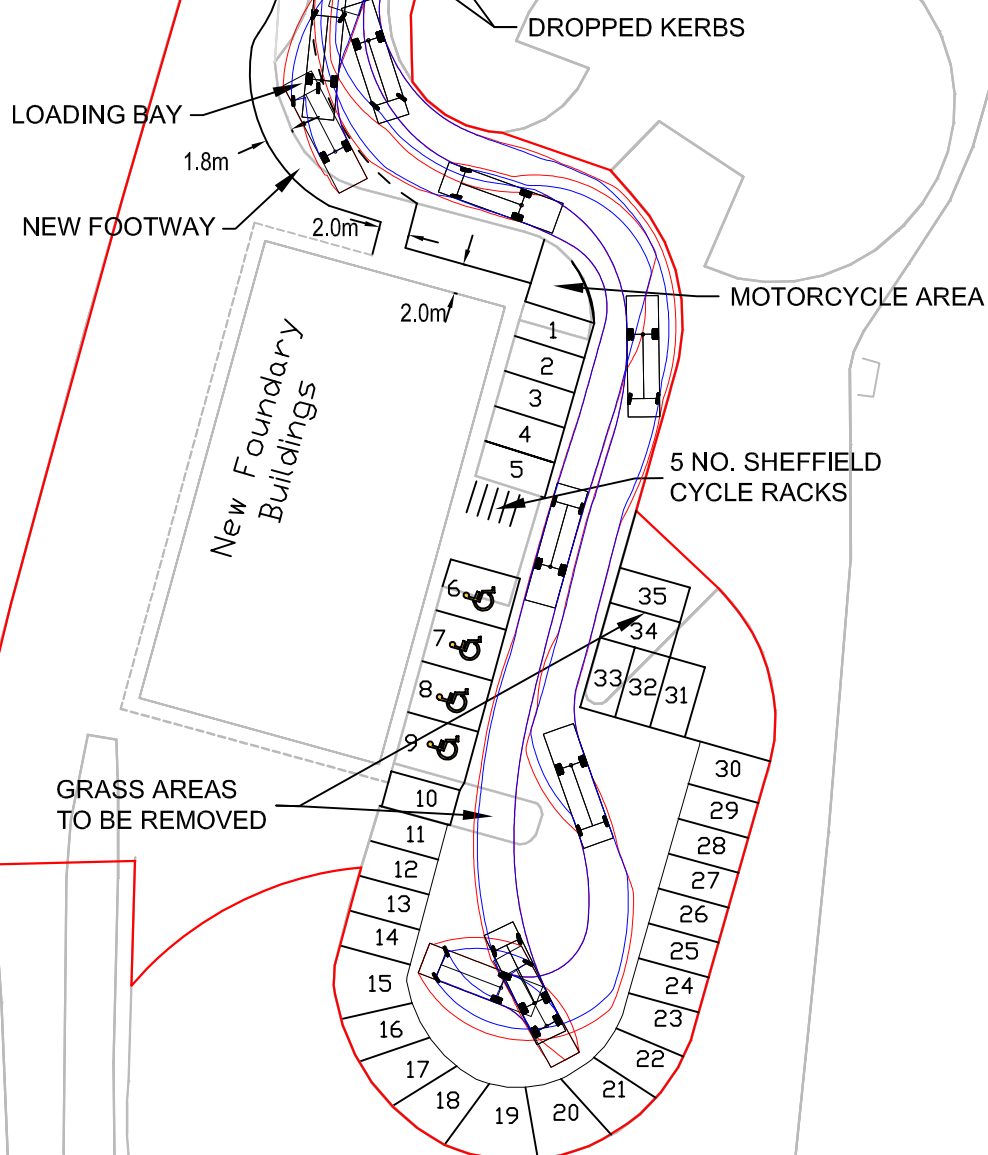


GUTTER HILL

VEHICLE PROFILE



7.5t Box Van	
Overall Length	8.010m
Overall Width	2.100m
Overall Body Height	3.556m
Min Body Ground Clearance	0.351m
Track Width	2.064m
Lock to Lock Time	4.00 sec
Kerb to Kerb Turning Radius	7.400m



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Notes

Drawing Title

7.5T BOX VAN SWEEP PATH FOR PROPOSED SITE LAYOUT

Drawing No.

APPENDIX 3

Job Title

PROPOSED CONVENIENCE STORE, GUTTER HILL, RHOS

Singleton Clamp
& PARTNERS

Consulting Engineers and Transportation Planners
2 Mount Street, Albert Square, Manchester, M2 5WQ.
Tel: 0161-832-4400, Email: Consult@SingletonClamp.co.uk

Scale

1:500 @ A4

Date

MAY 2010

Drawn By

RB

Job No

10124

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : A - OFFICE

VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	KC KENT	1 days
03	SOUTH WEST	
	DC DORSET	1 days
09	NORTH	
	CB CUMBRIA	1 days
	TW TYNE & WEAR	2 days

Filtering Stage 2 selection:

Parameter: Gross floor area

Range: 645 to 1550 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/02 to 29/09/09

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	1 days
Thursday	2 days

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	2

Selected Location Sub Categories:

Commercial Zone	1
Built-Up Zone	3
No Sub Category	1

LIST OF SITES relevant to selection parameters

- | | | | |
|---|------------|---|--|
| 1 | CB-02-A-01 | RADIO STATION, CARLISLE
ANNETWELL STREET | CUMBRIA |
| | | CARLISLE
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 999 sqm
Survey date: MONDAY 24/06/02 | Survey Type: MANUAL |
| 2 | DC-02-A-08 | OFFICE, DORCHESTER
STATION APPROACH | DORSET |
| | | DORCHESTER
Edge of Town Centre
No Sub Category
Total Gross floor area: 1550 sqm
Survey date: THURSDAY 03/07/08 | Survey Type: MANUAL |
| 3 | KC-02-A-04 | COUNCIL OFFICES, MAIDSTONE
SANDLING ROAD | KENT |
| | | MAIDSTONE
Edge of Town Centre
Built-Up Zone
Total Gross floor area: 1500 sqm
Survey date: THURSDAY 16/10/08 | Survey Type: MANUAL |
| 4 | TW-02-A-01 | RADIO STUDIOS, GATESHEAD
CHURCH STREET | TYNE & WEAR |
| | | GATESHEAD
Edge of Town Centre
Built-Up Zone
Total Gross floor area: 645 sqm
Survey date: WEDNESDAY 04/05/05 | Survey Type: MANUAL |
| 5 | TW-02-A-05 | TELEVISION CO., GATESHEAD
DELTA BANK ROAD
METRO RIVERSIDE PARK
GATESHEAD
Suburban Area (PPS6 Out of Centre)
Commercial Zone
Total Gross floor area: 1500 sqm
Survey date: TUESDAY 29/09/09 | TYNE & WEAR

Survey Type: MANUAL |

OFF-LINE VERSION SCP Mount Street Manchester

Licence No: 726001

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30	0	0	0.000	0	0	0.000	0	0	0.000
00:30 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 01:30	0	0	0.000	0	0	0.000	0	0	0.000
01:30 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 02:30	0	0	0.000	0	0	0.000	0	0	0.000
02:30 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 03:30	0	0	0.000	0	0	0.000	0	0	0.000
03:30 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 04:30	0	0	0.000	0	0	0.000	0	0	0.000
04:30 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 05:30	0	0	0.000	0	0	0.000	0	0	0.000
05:30 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 06:30	0	0	0.000	0	0	0.000	0	0	0.000
06:30 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 07:30	4	1299	0.231	4	1299	0.077	4	1299	0.308
07:30 - 08:00	4	1299	0.808	4	1299	0.115	4	1299	0.923
08:00 - 08:30	4	1299	0.751	4	1299	0.077	4	1299	0.828
08:30 - 09:00	4	1299	1.386	4	1299	0.173	4	1299	1.559
09:00 - 09:30	5	1239	0.807	5	1239	0.113	5	1239	0.920
09:30 - 10:00	5	1239	0.484	5	1239	0.226	5	1239	0.710
10:00 - 10:30	5	1239	0.307	5	1239	0.097	5	1239	0.404
10:30 - 11:00	5	1239	0.291	5	1239	0.145	5	1239	0.436
11:00 - 11:30	5	1239	0.178	5	1239	0.194	5	1239	0.372
11:30 - 12:00	5	1239	0.161	5	1239	0.210	5	1239	0.371
12:00 - 12:30	5	1239	0.081	5	1239	0.307	5	1239	0.388
12:30 - 13:00	5	1239	0.323	5	1239	0.355	5	1239	0.678
13:00 - 13:30	5	1239	0.242	5	1239	0.210	5	1239	0.452
13:30 - 14:00	5	1239	0.274	5	1239	0.178	5	1239	0.452
14:00 - 14:30	5	1239	0.371	5	1239	0.242	5	1239	0.613
14:30 - 15:00	5	1239	0.161	5	1239	0.097	5	1239	0.258
15:00 - 15:30	5	1239	0.161	5	1239	0.210	5	1239	0.371
15:30 - 16:00	5	1239	0.145	5	1239	0.210	5	1239	0.355
16:00 - 16:30	5	1239	0.113	5	1239	0.630	5	1239	0.743
16:30 - 17:00	5	1239	0.113	5	1239	0.549	5	1239	0.662
17:00 - 17:30	4	1299	0.269	4	1299	0.962	4	1299	1.231
17:30 - 18:00	4	1299	0.154	4	1299	1.405	4	1299	1.559
18:00 - 18:30	4	1299	0.038	4	1299	0.404	4	1299	0.442
18:30 - 19:00	4	1299	0.058	4	1299	0.500	4	1299	0.558
19:00 - 19:30	0	0	0.000	0	0	0.000	0	0	0.000
19:30 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 20:30	0	0	0.000	0	0	0.000	0	0	0.000
20:30 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 21:30	0	0	0.000	0	0	0.000	0	0	0.000
21:30 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 22:30	0	0	0.000	0	0	0.000	0	0	0.000
22:30 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 23:30	0	0	0.000	0	0	0.000	0	0	0.000
23:30 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			7.907			7.686			15.593

Parameter summary

Trip rate parameter range selected:	645 - 1550 (units: sqm)
Survey date date range:	01/01/02 - 29/09/09
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : O - CONVENIENCE STORE
 VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	BA BATH & NORTH EAST SOMERSET	1 days
	DC DORSET	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days

Filtering Stage 2 selection:

Parameter: Retail floor area
 Range: 120 to 360 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/02 to 28/11/08

Selected survey days:

Tuesday	1 days
Friday	3 days

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	2
Edge of Town	1

Selected Location Sub Categories:

Residential Zone	3
Built-Up Zone	1

LIST OF SITES relevant to selection parameters

1	BA-01-O-01	CO-OP, BATH	BATH & NORTH EAST SOMERSET
	JULIAN ROAD		
	BATH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Retail floor area:	120 sqm	
2	DC-01-O-01	LOND IS, DORCHESTER	DORSET
	MAUD ROAD		
	DORCHESTER		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Retail floor area:	150 sqm	
3	LN-01-O-01	SPAR, LINCOLN	LINCOLNSHIRE
	257 NEWARK STREET		
	NORTH HYKEHAM		
	LINCOLN		
	Edge of Town		
	Residential Zone		
	Total Retail floor area:	300 sqm	
4	WM-01-O-01	SAINSBURYS LOCAL,BIRMINGHAM	WEST MIDLANDS
	BROAD STREET		
	BIRMINGHAM		
	Edge of Town Centre		
	Built-Up Zone		
	Total Retail floor area:	360 sqm	

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate	No. Days	Ave. RFA	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	4	233	13.548	4	233	9.892	4	233	23.440
08:00 - 09:00	4	233	12.581	4	233	8.065	4	233	20.646
09:00 - 10:00	4	233	11.183	4	233	8.387	4	233	19.570
10:00 - 11:00	4	233	9.247	4	233	7.957	4	233	17.204
11:00 - 12:00	4	233	8.602	4	233	8.065	4	233	16.667
12:00 - 13:00	4	233	7.742	4	233	8.065	4	233	15.807
13:00 - 14:00	4	233	7.312	4	233	6.667	4	233	13.979
14:00 - 15:00	4	233	6.559	4	233	6.022	4	233	12.581
15:00 - 16:00	4	233	6.989	4	233	7.419	4	233	14.408
16:00 - 17:00	4	233	8.602	4	233	13.011	4	233	21.613
17:00 - 18:00	4	233	8.387	4	233	14.409	4	233	22.796
18:00 - 19:00	4	233	11.183	4	233	13.118	4	233	24.301
19:00 - 20:00	4	233	9.032	4	233	8.602	4	233	17.634
20:00 - 21:00	3	270	9.012	3	270	8.642	3	270	17.654
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			129.979			128.321			258.300

Parameter summary

Trip rate parameter range selected:

120 - 360 (units: sqm)

Survey date date range:

01/01/02 - 28/11/08

Number of weekdays (Monday-Friday):

4

Number of Saturdays:

0

Number of Sundays:

0

Surveys manually removed from selection:

2