

A/120/11.

Vacant Building at Rustington Golf Centre,
Golfers Lane, Rustington

Transport Assessment

for

Rustington Investments Limited and
Maplewell Limited

August 2011

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project number:	110601
prepared by:	JSh
checked by:	SD
issue date:	August 2011
status:	FINAL

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1.0 Introduction

- 1.1** This Transport Assessment has been prepared by Motion Transport Planning on behalf Rustington Investments Limited and Maplewell Limited. It deals with matters of highway and transport planning as they relate to the proposals for a change of use to an existing building from a family activity centre (use class D2) to a farm shop with cafe (use class A1 and ancillary A3), at the Rustington Golf Centre in Angmering, West Sussex.
- 1.2** The application site is located adjacent to the east of an existing Esporta Health Club and to the east of a golf centre building at the Rustington Golf Centre, on Golfers Lane. The application site contains a single building with a total floorspace of approximately 1,568 square metres. The building comprises use class D2 and is currently unoccupied.
- 1.3** A parking area is located outside of the main entrance of the site and neighbouring Esporta Health Club and golf centre buildings. The parking area comprises 343 spaces in total including 16 spaces for disabled users. Access to the parking area and building entrance is provided via Golfers Lane from the A259 New Road/ B2187 Mill Lane roundabout.
- 1.4** The proposals seek for a change of use from a use class D2 to allow the building to operate as a farm shop. No changes are proposed to the existing access, parking and servicing arrangements of the site.
- 1.5** This Transport Assessment has been prepared to accompany a planning application and considers the highway and transport planning implications of the proposals.
- 1.6** The remainder of this report is structured as follows:
- ▶ **Section 2** - outlines relevant transport policy at a national, regional and local level;
 - ▶ **Section 3** - details the existing conditions on the surrounding highway network and considers the accessibility of the site by non car modes;
 - ▶ **Section 4** - provides details of the proposals;
 - ▶ **Section 5** - provides a traffic attraction assessment;
 - ▶ **Section 6** - considers the effect of the development in terms of highway and transport matters; and
 - ▶ **Section 7** - sets out our summary and conclusions.

2.0 Policy Context

2.1 This section summarises relevant transport policy documents against which the development proposals would be considered at a national and local level.

National Policy

2.2 In relation to transport accessibility, Planning Policy Guidance Note 13: Transport (PPG 13) sets out Government policy and provides advice on integrated transport and land use planning. PPG 13 seeks to encourage development which minimises the need to travel by car and promotes transport choices that help to minimise CO₂ and other polluting emissions.

2.3 The objectives of PPG 13 are stated as:

"to

- ▶ *promote more sustainable transport choices for both people and for moving freight;*
- ▶ *promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling; and*
- ▶ *reduce the need to travel, especially by car."*

2.4 In accordance with PPG 13, when considering the location of sites for development, local authorities should:

- ▶ *"actively manage the pattern of urban growth to make the fullest use of public transport, and focus major generators of travel demand in city, town and district centres and near to major public transport interchanges; and*
- ▶ *actively manage the pattern of urban growth and the location of major travel generating development to make the fullest use of public transport."*

2.5 Planning Policy Statement 4 (PPS4) sets out the Government's comprehensive policy framework for planning for sustainable economic development in urban and rural areas. Policy EC2 (e) states:

2.6 *"Regional planning bodies and local planning authorities should ensure that their development plan:*

- ▶ *...identifies, protects and promotes key distribution networks, and locates or co-locates developments which generate substantial transport movements in locations that are accessible (including by rail and water transport where feasible), avoiding congestion and preserving local amenity as far as possible".*

Regional Policy

2.7 Regional planning policy is set out in the South East Plan (May 2009), the Regional Spatial Strategy (RSS) for South East England. Despite being revoked by the Government, a High Court ruling in November 2010 overturned that decision. As such, the South East Plan remains relevant to this proposal.

2.8 Policy T2 regarding mobility management states that:

"The policies and proposals set out in local development documents and local transport plans should include policies to achieve a rebalancing of the transport system in favour of sustainable modes based on an integrated package of measures drawn from the following:

- ▶ *the allocation and management of highway space used by individual modes of travel;*
- ▶ *the scope and management of public transport services;*
- ▶ *improvements in the extent and quality of pedestrian and cycle routes;*
- ▶ *changes in ways of working that alter the extent and balance of future demand for movement;*
- ▶ *demand responsive transport and other innovative solutions that increase accessibility; and*
- ▶ *measures that increase accessibility to rail stations.*

Plans will need to reflect the fact that low delivery from any one of these elements will require a compensatory increase in delivery from one or more of the others."

Local Policy

2.9 West Sussex Supplementary Planning Guidance (SPG) on 'Parking Standards' states:

"Parking Standards set the levels of parking provision permitted in association with new development. Transport policy and recent planning guidance recognises that the availability of car parking has a major influence on the means of transport people choose for their journeys."

2.10 West Sussex County Council seeks to adhere to national planning guidance which requires that local authorities review standards with a view to reducing the level of parking permitted at new developments. As such, revised maximum standards set out within the SPG reflect the aims and objectives of national guidance.

2.11 There are no specific parking standards for a farm shop contained within the Council's SPG. In light of this, it is acknowledged that the maximum car parking standard for A1 food retail is one space per 14 square metres. For a garden centre, one space per 20 square metres for covered sales areas and one space per 30 square metres for uncovered areas are the maximum allowable standards. Regarding cycle parking, a minimum of one space per 100 square metres for staff and one space per 100 square metres for customers is required.

2.12 Local planning policies are contained in the Arun District Council Local Plan (April 2003). Policy GEN4 relates to location and travel demand at new developments and states:

"When considering proposals for new development, consideration will be given to the effect the proposals will have on demand for transport. Planning permission will be granted for new development, provided that:-

- ▶ *it is located so as to minimise the demand for travel;*
- ▶ *it does not materially add to existing road congestion and air pollution; and*
- ▶ *appropriate provision is made for safe and convenient access by public transport, cyclists and pedestrians."*

3.0 Baseline Conditions

Site Location

3.1 The application site forms part of the Rustington Golf Centre. The site is located adjacent to the east of an Esporta Health Club and golf centre buildings, some 300 metres to the northwest of the New Road/Mill Lane/Golfers Lane roundabout. A site location plan is provided at **Figure 1**.

3.2 The site is situated in the vicinity of an established retail destination. The Rustington Retail Park is located approximately 700 metres to the southeast of the site, which comprises a Sainsbury's superstore as well as other non food retail units. Brookside Business Park is located approximately 1 kilometre to the south of the site. A golf course and open space are located to the north of the site, whilst residential areas are predominant within the wider surrounding area. Angmering rail station is located approximately 1.3 kilometres to the southeast of the site.

Existing Site Use

3.3 A plan showing the location of the site in context with the neighbouring Esporta Health Club and golf centre buildings, and associated parking area, is provided at **Appendix A**.

3.4 The application site contains a single building with a floorspace of approximately 1,568 square metres. The building currently operates a use class D2 following the grant of planning permission (A/176/06) in 2006. The existing building, although currently unoccupied, has been built out to include a 12 lane bowling alley, soft play area, a video games area, a laser quest and an ancillary cafe.

3.5 A parking area is located outside of the main entrance to the site and neighbouring Esporta Health Club and golf centre buildings. It is communal and associated with all of the uses. The parking area comprises 343 spaces in total including 16 spaces for disabled users. A servicing area lies between the application site and Esporta Health Club building.

Road Network

3.6 Golfers Lane is a two-way access road which serves the site and provides access to the strategic road network at its southern end via the New Road/Mill Lane roundabout.

3.7 New Road (A259) is a strategic transport route. It takes the form of a dual-carriageway in the vicinity of the site and is subject to a 50 mph speed limit. To the east, the A259 provides access towards Eastbourne, whilst to the west it provides access towards Chichester.

- 3.8** Mill Lane is a single carriageway which provides access towards Brookside Business Park and local residential areas within the vicinity of the site. In a strategic context, Mill Lane connects with Ash Lane to the south which provides access to the south coast and towards Littlehampton.

Personal Injury Accident (PIA) Data

- 3.9** To establish the road safety record on the local highway network, reference has been made to Personal Injury Accident (PIA) data obtained from Sussex Police for the most recent three-year period available (March 2008 to February 2011). This data includes information relating to the date, location, weather conditions, severity and cause for each PIA. A full set of the accident data is provided at **Appendix B**.

- 3.10** A total of 22 PIAs have been recorded within the study area over the three year period, one of which was classified as serious and the remaining as slight. Nine of these incidents were recorded at the New Road/Station Road roundabout and seven at the New Road/Mill Lane roundabout. No incidents were recorded on Golfers Lane, or on its approach to the New Road/Mill Lane roundabout.

- 3.11** Of the seven incidents that occurred at the New Road/Mill Lane roundabout, two involved cyclists. The remaining incidents were typically a result of drivers losing control of their vehicles, poor judgement, a failure to look properly, not braking in time, in addition to a vehicle disobeying traffic signals and driving through a red light.

Traffic Surveys

- 3.12** Manual Turning Counts (MTCs) were undertaken at New Road/Mill Lane roundabout on Friday 24th and Saturday 25th June 2011 between the hours 1600-1900 and 1100-1500 respectively. A full copy of the survey data is provided at **Appendix C**.

- 3.13** Diagrams D1 and D2, provided at **Appendix D**, illustrate 2011 observed traffic flows at the roundabout for the network peak hours (weekday evening 1700-1800 hours, and Saturday 1145-1245 hours).

- 3.14** Additionally, the total number of cars parked within the whole parking area located to the front of the site (and neighbouring Esporta Health Club and golf centre buildings) was recorded on Saturday 25th June 2011. A total of 136 cars were recorded as being parked at 1100 hours, and 92 cars at 1500 hours. A parking accumulation assessment shows the peak to occur between 1400 and 1415 hours with 148 vehicles parked in total. On this basis, there is available space for at least 193 additional cars to park.

Accessibility by Walking and Cycling

3.15 Golfers Lane is a private access road. There is no surfaced footway alongside the road, nor at the New Road/Mill Lane roundabout. Additionally, there is no footway provided along the northern side of New Road between its junctions with Golfers Lane and the Rustington Retail Park access.

3.16 A dual pedestrian/cycle route is provided along the southern side of New Road, between its junctions with Mill Lane and Station Road (Plate 1). A signal controlled crossing is provided at the New Road/Rustington Retail Park access junction (Plate 2).



Plate 1: Pedestrian/cycle route along the southern side of New Road



Plate 2: Signal controlled crossing at New Road/Rustington Retail Park access junction

3.17 Cycle parking is provided directly outside of the site frontage, towards the eastern end of the building. Five Sheffield stands are available, accommodating a total of 10 cycles.

Accessibility by Bus

3.18 Bus stops are located within Rustington Retail Park, approximately 700 metres to the southeast of the site. The bus stops provide access to bus routes B, C, D, E, F and G. The bus routes provide access towards Durrington, West Worthing, Westergate, Storrington, Bognor and Wick. Additional bus stops are provided on Station Road, approximately a further 550 metres to the east of the retail park. Access to further bus routes are provided in addition to those above, including bus routes 9 and 12.

3.19 The majority of routes are associated with the Sainsbury's superstore; route 9 is the most regular service in the area. Table 3.1 summarises the frequency of the bus services operating within the vicinity of the site.

Service	Route	Approximate Frequency (minutes) First Bus/Last Bus		
		Mon-Fri	Saturday	Sunday
B	Rustington Sainsburys - Durrington	1 per day - 11:35 (Monday, Wednesday and Friday only)		
C	Rustington Sainsburys - Goring	1 per day - 13:45 (Tuesday and Thursday only)		
D	Rustington Sainsburys - Westergate	1 per day - 12:00 (Tuesday and Thursday only)		
E	Rustington Sainsburys - Storrington	1 per day - 13:20 (Monday and Wednesday only)		
F	Rustington Sainsburys - Bognor Regis	1 per day - 13:10 (Friday only)		
G	Rustington Sainsburys - Wick	1 per day - 10:35 (Tuesday and Thursday only)		
9	Littlehampton - Southwick	Hourly	Hourly	-
12	Rustington - Littlehampton	1 every 2 hours	1 every 2 hours	-

Table 3.1: Local Bus Services

Accessibility by Train

3.20

Angmering rail station is the nearest station located approximately 1.3 kilometres to the southeast of the site. Services are managed by Southern with two trains operating per hour to London Victoria, Brighton and Littlehampton. In addition, hourly services provide access to Southampton Central.

4.0 Description of Proposals

- 4.1** It is proposed to change the use of the existing vacant building adjacent to Esporta Health Club from a family activity centre (use class D2) to a farm shop with cafe (use class A1 and ancillary A3). The farm shop will sell a range of fresh products, the majority of which will be sourced from local and regional farms and suppliers, including fruit and vegetables, meat, poultry, bread and bakery products, fresh and chilled foods, and seasonal flowers and shrubs.

Access, Parking and Servicing

- 4.2** No changes are proposed to the existing access, parking and servicing arrangements. As such, the existing vehicular access from Golfers Lane will serve the farm shop.
- 4.3** A parking area is located outside of the main entrance to the application site and neighbouring Esporta Health Club and golf centre buildings. The parking area comprises 343 spaces in total including 16 spaces for disabled users.
- 4.4** There is no specific adopted cycle parking standard for the proposed use class. Five Sheffield stands are already provided on site to accommodate 10 cycles in total. Should it be appropriate to apply the Council's minimum cycle parking standard for A1 use class, a total of 16 Sheffield stands would be required to provide a total of 32 spaces. The applicant would be willing to provide additional cycle parking stands as part of the proposals, if necessary; the details for which would be secured via a planning condition.
- 4.5** Servicing of the building will take place on site via an existing servicing area located between the application site and neighbouring Esporta Health Club building. Given the nature of the proposed farm shop, which is intended to sell local produce from local suppliers, it is expected that deliveries to the site will mainly comprise smaller delivery vehicles with the occasional need for larger vehicles (although limited to 10 tonnes).
- 4.6** Swept path analysis provided at **Appendix E** shows how a refuse vehicle may access the site, load/unload and egress in forward gear. This is likely to be the largest vehicle needing to access the building. Refuse stores are currently provided on land between the site and Esporta Health Club.

5.0 Trip Attraction

5.1 This section considers the trip generation associated with the lawful use of the existing building and the likely traffic attraction as a result of the proposals. A weekday evening and Saturday peak hour periods have been considered for this assessment. The weekday evening peak tends to represent the busiest period for traffic flows on the adjacent highway network. It is considered that a Saturday peak will typically represent the critical period in terms of traffic flows associated with the proposals and the demand for parking.

Existing Site Use

5.2 Traffic attraction rates (per 100 square metres Gross Floor Area (GFA)) have been established by reference to the land use 'leisure' and category 'bowling alleys' as provided within the TRICS database. The traffic attraction rates have been derived on the basis of all sites within England (excluding London) in suburban areas with floor areas ranging from 1,000 to 4,000 square metres. The surveys selected typically include sites with ancillary uses including a refreshment/bar area, similar to the lawful site use.

5.3 The trip rates for a weekday evening and Saturday peak hour periods are set out below. A copy of the full TRICS output reports are included at **Appendix F**.

Trip Rates	Weekday Peak (1700-1800)			Saturday Peak (1200-1300)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Vehicle	1.115	1.519	2.634	1.236	1.112	2.348

Table 5.1: Traffic Generation Rates per 100 square metre GFA for Leisure Use

5.4 The above trip rates have been applied to the total floor area of the existing building (1,568 square metres). The resulting weekday evening and Saturday peak hour traffic flows are shown below.

Trip Attraction	Weekday Peak (1700-1800)			Saturday Peak (1200-1300)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Vehicle	17	24	41	19	18	37

Table 5.2: Estimated Traffic Generation for Leisure Use

Proposed Site Use

5.5 The TRICS database has been analysed for surveys undertaken at comparable farm shops. Surveys held within the TRICS database however are limited; the few sites which are available are not considered to reflect the characteristics and scale of the proposals.

5.6 Following discussions with the highway officer of West Sussex County Council, it has been decided that the land use 'retail' and category 'garden centre' is more likely to be reflective of the proposals in traffic and transport terms, given that it is intended for the proposals to sell local produce, appealing to a particular niche-market.

5.7 A similar criterion to that set out above for the existing site use has been used to select surveys contained within the TRICS database for garden centres. The trip rates (per 100 square metres) for a weekday evening and Saturday peak hour periods are set out below. A copy of the full TRICS output reports are included at **Appendix F**.

Trip Rates	Weekday Peak (1700-1800)			Saturday Peak (1100-1200)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Vehicle	0.108	0.270	0.378	3.622	3.405	7.027

Table 5.3: Traffic Attraction Rates per 100 square metre GFA for Garden Centres

5.8 The trip rates shown in Table 5.3 have been derived from a single survey for each peak hour period, given the limited data for comparable sites provided within the TRICS database. To provide a more robust assessment, surveys provided under the land use 'retail' and category 'foodstore' within the TRICS database have also been considered.

5.9 In planning terms the characteristics of the proposed farm shop are not those of a foodstore, and in reality, the proposed farm shop is highly unlikely to attract a demand for customers similar to typical foodstores such as Sainsbury's and Somerfield. It is considered that the proposed farm shop could share some traffic characteristics with a garden centre use and some traffic characteristics with a foodstore.

5.10 With reference to the selection criterion used so far for this assessment, trip rates (per 100 square metres) for foodstores are set out below for a weekday evening peak hour and a Saturday peak hour. A copy of the full TRICS output reports are included at **Appendix F**.

Trip Rates	Weekday Peak (1700-1800)			Saturday Peak (1200-1300)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Vehicle	7.565	7.696	15.26	6.370	6.60	12.97

Table 5.4: Traffic Attraction Rates per 100 square metre GFA for Foodstores

5.11 It is considered that the trip rates set out in Table 5.4 alone provide an over estimation for the proposals. On balance, to provide a robust assessment without significantly over estimating the traffic attraction of the proposals, a hybrid approach has been adopted by considering 40% of the predicted trip rates for a garden centre with 60% of the predicted trip rates for a foodstore. The resultant trip attraction is shown in Table 5.5 below.

Trip Attraction	Weekday Peak (1700-1800)			Saturday Peak (1200-1100)		
	Inbound	Outbound	Total	Inbound	Outbound	Total
Vehicle	72	74	146	83	83	166

Table 5.5: Estimated Traffic Attraction for Proposed Site Use (40% Garden Centre: 60% Foodstore)

- 5.12** With reference to Table 5.5, it is predicted that approximately 146 two-way trips will occur with the development during a weekday evening peak hour, and 166 two-way trips during a Saturday peak hour. When considering the lawful use of the site, the net impact of the proposals is equivalent to 105 two-way trips during a weekday evening peak hour, and 129 two-way trips during a Saturday peak hour.
- 5.13** It is usual to assume that some customers attracted to the development are likely to comprise pass-by trips (work-shop-home) and linked trips associated with the nearby Rustington Retail Park and neighbouring Esporta Health Club and golf centre, in addition to some primary trips (home-shop-home). Hence not all of the traffic movements in Table 5.5 will be new to the road network.

6.0 Effect of the Development

Introduction

6.1 This section considers the effect of the proposals on the local highway and transport networks.

Local Highway Network

Committed Developments

6.2 It is acknowledged that planning consents have been granted at the Rustington Retail Park which are not currently built out and occupied. This assessment therefore refers to the trip generation detailed within the 2011 Transport Assessment produced by Russell Giles Partnership Limited, in order to take account of the planning consent at the existing Focus retail unit and Sainsbury’s superstore.

6.3 The Transport Assessment for the committed development identifies the change in link flow on New Road to the east of the roundabout. Given that the Rustington Retail Park does not offer a right-turn exit, all eastbound traffic must first u-turn at the New Road/Mill Lane/Golfers Lane roundabout, and it has been assumed that 50% of committed development traffic will perform this u-turn.

6.4 Diagrams D3 and D4 provided at **Appendix D** show the committed development traffic flows distributed at the New Road/Mill Lane roundabout. Diagrams D5 and D6 show the committed development traffic flows added to the 2011 observed traffic flows.

Assessment Years

6.5 Given that the application is for a change of use and hence refurbishment of the existing building, which could occur within a relatively short timeframe following a planning consent, no growth factors have been applied for this assessment.

Traffic Distribution

6.6 Table 6.1 summarises the existing distribution of approach and exit traffic observed at the roundabout during weekday evening and Saturday peak hours with reference to the MTC data collected on Friday 24th and Saturday 25th June 2011.

Arm	Weekday Evening Peak		Saturday Peak	
	Inbound	Outbound	Inbound	Outbound
New Road (east)	50%	50%	55%	50%
Mill Lane	20%	20%	20%	20%
New Road (west)	30%	30%	25%	30%

Table 6.1: Traffic Distribution

- 6.7** It is considered that the distributions shown in Table 6.1 provide an estimate of typical travel patterns that will occur at the site with the proposals, and as such have been applied to this assessment.
- 6.8** Development traffic flows (Table 5.5) have been distributed at the roundabout for a weekday evening and a Saturday peak hour periods with the assumption that 20% of trips are likely to comprise pass-by trips (for example, work-shop-home) associated with the nearby Rustington Retail Park (Diagrams D7-D10 provided at **Appendix D**).
- 6.9** The proposed development traffic flows have been added to the 2011 observed traffic flows with the committed development traffic flows (Diagrams D11 and D12).

Percentage Impact

- 6.10** Table 6.2 shows the total 2011 observed traffic flows plus committed development traffic flows on approach at each arm of the roundabout, with and without the proposed development.

Arm	Weekday Evening Peak Hour			Saturday Peak Hour		
	2011 Observed + Committed Develop- ment	2011 Observed + Committed Develop- ment + Proposals	%	2011 Observed + Committed Develop- ment	2011 Observed + Committed Develop- ment + Proposals	%
Access Road (Golf- ers Lane)	79	139	75.9%	79	145	83.5%
New Road (east)	2065	2087	1.1%	2015	2042	1.3%
Mill Lane	711	720	1.3%	736	746	1.4%
New Road (west)	1091	1104	1.2%	887	900	1.5%
Total	3946	4050	2.6%	3717	3833	3.1%

Table 6.2: Percentage Impact 2011

- 6.11** No allowance has been made for the traffic generation of the existing floor space at the site. With reference to Table 6.2, the greatest impact on the strategic road network occurs on the eastbound approach of New Road during a Saturday peak hour (1.5%).

Junction Capacity Assessments

- 6.12** To present a complete assessment, the impact of the proposals on the operation of the roundabout has been modelled using ARCADY.
- 6.13** ARCADY calculates the relationship between traffic flow and the capacity of the junction as a ratio, called ratio of flow to capacity (RFC). RFC values are provided for each movement and values of between 0 and 1 indicate that the junction is operating within capacity. It is generally accepted that free-flowing conditions can be achieved where the RFC is less than or around 0.85.
- 6.14** A copy of the full ARCADY output data is provided on the CD-Rom enclosed at **Appendix G**. A summary of the ARCADY assessment for the 2011 observed traffic flows at the roundabout during a weekday evening and a Saturday peak hour is summarised in Table 6.3 below.

2011 Observed	Weekday Peak Hour		Saturday Peak Hour	
	Max RFC	Max Queue (vehicles)	Max RFC	Max Queue (vehicles)
Access Road (Golfers Lane)	0.256	0.3	0.295	0.4
New Road (east)	0.813	4.2	0.788	3.6
Mill Lane	0.404	0.7	0.446	0.8
New Road (west)	0.438	0.8	0.393	0.6

Table 6.3: ARCADY Assessment – 2011 Observed Traffic Flows

- 6.15** The maximum RFC value for the existing situation at the roundabout is 0.813. This occurs at the westbound approach on New Road during the weekday evening peak hour.
- 6.16** Table 6.4 summarises the likely operation of the roundabout with the committed development traffic flows added to the 2011 observed traffic flows. Table 6.5 then shows the 2011 observed traffic flows and committed development with the proposals.

2011 Observed plus Committed Developments	Weekday Peak Hour		Saturday Peak Hour	
	Max RFC	Max Queue (vehicles)	Max RFC	Max Queue (vehicles)
Access Road (Golfers Lane)	0.301	0.4	0.385	0.6
New Road (east)	0.873	6.3	0.860	5.7
Mill Lane	0.437	0.8	0.490	1.0
New Road (west)	0.466	0.9	0.428	0.7

Table 6.4: ARCADY Assessment – 2011 Observed plus Committed Development Traffic Flows

2011 Observed plus Committed Developments plus Proposals	Weekday Peak Hour		Saturday Peak Hour	
	Max RFC	Max Queue (vehicles)	Max RFC	Max Queue (vehicles)
Access Road (Golfers Lane)	0.468	0.8	0.639	1.6
New Road (east)	0.890	7.2	0.880	6.6
Mill Lane	0.449	0.8	0.507	1.0
New Road (west)	0.475	0.9	0.440	0.8

Table 6.5: ARCADY Assessment – 2011 Observed plus Committed Development plus Proposal Traffic Flows

- 6.17** The RFC value for New Road (westbound) is predicted to increase to 0.873 during a weekday peak period with the committed development traffic flows. With the development traffic flows this is expected to marginally increase further by 0.017.
- 6.18** For a Saturday peak hour, the committed development traffic flows increases the maximum RFC value (New Road westbound approach) to 0.860. With the development proposals it is expected to marginally increase further by 0.02.
- 6.19** When considering the change in performance at a junction it is relevant also to consider the effect on queue lengths. As a result of the committed development the 'mean maximum' queue on New Road westbound approach is expected to increase by two vehicles during the peak hours, this is influence predominantly by the high demand for u-turning traffic.
- 6.20** As a result of the proposed change of use to allow a farm shop, the 'mean maximum' queue length is predicted to increase by one additional vehicle and as such the effect of the proposals is considered to be negligible.
- 6.21** As noted the effect of the lawful use of the site, which could generate traffic as a use class D2, has not been considered for this assessment.

Parking

- 6.22** An existing parking area comprising 343 spaces in total is provided to the front of the site and neighbouring Esporta Health Club and golf centre buildings. The parking area is communal and associated with all of these uses.
- 6.23** The traffic attraction for the farm shop is predicted to be greatest during a Saturday peak period compared with a weekday evening. A survey undertaken at the car park on Saturday 25th June 2011 indicates that 136 cars were parked at 1100 hours, and 92 cars at 1500 hours. A parking accumulation assessment shows the peak to occur between 1400 and 1415 hours with 148 vehicles parked in total. On this basis, there is available space for at least 193 cars to park.

- 6.24** With reference to the trip attraction set out in Table 5.5 it is considered that there is sufficient capacity within the existing car park to accommodate the effect of the proposals. It is considered that the predicted trip attraction for the proposals has been based on a robust methodology. The maximum parking accumulation based solely for the foodstore sites (selected to derive the trip rates set out in Table 5.4 for a Saturday) is in the order of 109 vehicles.

Servicing

- 6.25** Given the nature of the proposed farm shop, which is intended to sell local produce from local suppliers, it is envisaged that deliveries to the site will mainly comprise smaller delivery vehicles with the occasional need for larger vehicles (although limited to 10 tonnes). Therefore, the largest vehicle likely needing to access the site will be a refuse vehicle. Swept path analysis provided at **Appendix E** shows that there is sufficient area for a refuse vehicle to access the site, load/unload and egress in forward gear.

7.0 Summary and Conclusions

7.1 Motion has been appointed by Rustington Investments Limited and Maplewell Limited to consider the transport implications as they relate to the proposals for a change of use class to a single building located at Rustington Golf Centre in Angmering, West Sussex.

7.2 The site currently contains 1,568 square metres of use class D2. The proposals seek a change of use for the existing building to operate as a farm shop with an ancillary cafe. No changes are proposed to the existing access, parking and servicing arrangements associated with the site.

7.3 The report shows the following:

- ▶ Cycle parking is already provided on site and additional cycle parking could be accommodated should a need consider it to be necessary;
- ▶ It is considered that the existing car park can accommodate the likely effects of the proposals;
- ▶ Delivery and servicing vehicles can be accommodated on site; and
- ▶ A traffic assessment demonstrates that the proposals will have a negligible impact on the operation of the local highway network.

7.4 On this basis we consider that the proposals are acceptable traffic and transport terms.

Figures

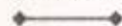


motion
transport planning

Proposed Change of Use,
Rustington Golf Centre

Figure 1 – Site Location Plan

Approx. Scale: 100 m



Appendix A



Appendix B – Site in Local Context

Source: <http://www.bing.com/maps>

Details of Personal Injury Accidents for Period - 01/03/2008 to 28/02/2011 (36) months

Selection:

Selected using Pre-defined Query : * Exclude damage only

Notes:

3 year collision data for littlehampton area

			Vehicles	Casualties
Police Ref.	Day	Location Description	Veh No / Type / Manv / Dir / Class	Sex / Age / Sev
Road No.	Date			
Grid Ref.	Time			
	D/L			
	R.S.C			
	Weather			
	Speed			
	Account of Accident			

0902968 Tuesday A259 NEW ROAD, ESPORTA Veh 2 Car Turning right W to S Dri F 25 Slight
28/04/2009 ROUNDABOUT m of B2189 MILL Veh 1 Car Stopping E to W
A 259 0013hrs LANE
Darkness: street lights present a
E 505,718 Wet/Damp
N 103,268 Other
50 mph

VEHICLE ONE HAS CRASHED INTO VEHICLE TWO AFTER APPROACHING ROUNDABOUT. IT APPEARS THAT VEHICLE ONE HAS NOT BRAKED IN TIME AND HAS HIT VEHICLE TWO CAUSING DAMAGE TO BOTH VEHICLES.

0904842 Monday A259 ANGMEIRING 200m East of A280 Veh 2 Car Going ahead E to W
06/07/2009 Veh 3 Car Going ahead E to W
A 259 0847hrs Veh 1 Car Stopping E to W Dri F 26 Slight
Daylight: no street lighting Veh 1 Car Stopping E to W FSP M 25 Slight
E 506,664 Wet/Damp
N 103,163 Other
50 mph

APPROACHING QUEUE OF TRAFFIC V1 HIT REAR OF V2 THEN V3 HIT REAR OF V1.

0905910 Wednesday A259 ANGMEIRING 30m East of A280 Veh 2 M/C < 125 cc O/take m/veh o/side W to E Dri M 52 Slight
12/08/2009 ANGMEIRING Veh 3 Car Going ahead W to E
A 259 1700hrs Veh 1 Car Starting W to E
Daylight: street lighting unknow
E 506,593 Dry
N 103,169 Fine without high winds
50 mph

VEHICLE ONE WAS TRAVELLING EAST BOUND ON THE A259 WHEN A MARKED POLICE VEHICLE NEEDED TO PASS. VEHICLE ONE MOVED OVER TOWARDS THE LAYBY AND LET POLICE VEHICLE PASS. VEHICLE ONE THEN MOVED BACK INTO THE ROAD KNOCKING VEHICLE TWO, THE MOTORCYCLIST OFF WHICH WAS A SHORT DISTANCE BEHIND THE POLICE VEHICLE. RIDER WAS NOT FOLLOWING POLICE VEHICLE BUT WAS OVERTAKING STATIONARY TRAFFIC.

0908613 Thursday A259 ROUNDSTONE BYPASS ROAD Veh 2 Goods > 7.5t Going ahead W to E Dri M 39 Slight
05/11/2009 m of U STATION ROAD Veh 1 Car Change lane to left W to E
A 259 0811hrs
Daylight: no street lighting
E 506,550 Dry
N 103,180 Fine without high winds
50 mph

V2 LORRY IN SLOW-MOVING LINE OF TRAFFIC NEGOTIATING THE ROUNDABOUT (EXACT LOCATION NOT STATED). AS V2 LEAVE R/A THE TWO LANES BECOME ONE AND V1 COMES ALONGSIDE. NO ROOM FOR V1 TO GET PAST V2 AS THERE IS AN ISLAND IN THE ROAD. V1 SWERVES INTO V2 CAUSING DAMAGE AND INJURY TO LORRY DRIVER. V1 BOUNCED OFF V2 AND MADE NO ATTEMPT TO BRAKE OR STOP. V1 MADE OFF BY DRIVING ON WRONG SIDE OF ROAD PAST TRAFFIC QUEUE TO GET AWAY.

Details of Personal Injury Accidents for Period - 01/03/2008 to 28/02/2011 (36) months

Selection: Notes:
Selected using Pre-defined Query : * Exclude damage only 3 year collision data for littlehampton area

			Vehicles				Casualties		
Police Ref.	Day	Location Description	Veh No / Type / Manv / Dir / Class				Sex / Age / Sev		
	Date								
Road No.	Time								
Grid Ref.	D/L								
	R.S.C								
	Weather								
	Speed								
	Account of Accident								

0908302 Saturday A259 NEW ROAD m of C0 MILL Veh 2 Car Going ahead E to W
07/11/2009 ROAD Veh 1 Car Wait to turn right S to E Dri M 78 Slight
A 259 0955hrs
Daylight:street lights present
E 505,662 Dry
N 103,256 Fine without high winds
60 mph

V1 NEGOTIATING R/B MILL ROAD J/W A259 NEW ROAD RUSTINGTON IN OFFSIDE LANE ATTEMPTING TO TURN RIGHT. V2 TRAVELLING WESTBOUND A259 NEGOTIATING R/B. V1 PULLED OUT OF JUNCTION NOT LEAVING ENOUGH TIME TO NEGOTIATE R/B HITTING FRONT OF V1.

0909122 Friday A259 m of B2140 STATION ROAD Veh 1 Car Change lane to right E to W Ped M 13 Slight
04/12/2009 1824hrs
A 259 Darkness: street lights present a
E 506,562 Wet/Damp
N 103,172 Fine without high winds
40 mph

VEHICLE 1 HEADING WEST, WAITING IN LANE 1 ON APPROACH TO ROUNDABOUT. VEHICLE 1 EMERGES FROM LANE 1 INTO LANE 2 IN AN ATTEMPT TO PROGRESS WHILST PEDESTRIAN IS CROSSING TO CENTRAL ISLAND. VEHICLE 1 COLLIDES WITH PEDESTRIAN AT LOW SPEED CAUSING MINOR INJURY.

0909174 Friday A259 m of C0 MILL LANE Veh 1 Car Stopping W to E RSP M 17 Slight
04/12/2009 Veh 1 Car Stopping W to E RSP F 16 Slight
A 259 2344hrs
Darkness: street lights present a
E 505,640 Wet/Damp
N 103,272 Raining with high winds
70 mph

VEHICLE 1 HAS LOST CONTROL OF VEHICLE BRAKED SHARPLY REARED OFF THE CARRIAGEWAY ON OFFSIDE, HITTING AND DAMAGING A LAMP POST JUST BEFORE ROUNDABOUT.

0909445 Tuesday A259 ROUNDSTONE BY-PASS m of Veh 2 Goods < 3.5t Stopping E to W
15/12/2009 B2180 STATION ROAD Veh 1 Pedal cycle Starting S to N Dri M 17 Slight
A 259 1720hrs
Darkness: street lights present a
E 506,550 Wet/Damp
N 103,182 Fine without high winds
40 mph

CYCLIST HAS PULLED AWAY FROM PAVEMENT INTO THE PATH OF VEHICLE 2.

Details of Personal Injury Accidents for Period - 01/03/2008 to 28/02/2011 (36) months

Selection:

Selected using Pre-defined Query : * Exclude damage only

Notes:

3 year collision data for littlehampton area

Police Ref.	Day	Location Description	Vehicles				Casualties			
			Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Road No.	Date									
Grid Ref.	Time									
	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									

1002398 Friday A259 NEW ROAD 285m East of B2187 Veh 1 Car Going ahead E to W FSP M 24 Slight
09/04/2010 MILL LANE LAMP POST 28 Veh 1 Car Going ahead E to W Dri M 24 Serious
A 259 0104hrs
Darkness: street lights present a
E 505,959 Dry
N 103,183 Fine without high winds
50 mph

VEHICLE TRAVELLING IN A WESTERLY DIRECTION ON THE A259, IN EXCESS OF SPEED LIMIT. DRIVER HAS LOST CONTROL AND HAS LEFT CARRIAGEWAY AND CROSSED ONTO OPPOSITE SIDE OF ROAD COLLIDING WITH LAMP POST. DRIVER HAS FAILED BREATH TEST.

1002285 Saturday A259 NEW ROAD of A280 STATION Veh 2 Pedal cycle Going ahead S to N Dri M 60 Slight
10/04/2010 ROAD Veh 1 Car Starting E to N
A 259 0820hrs
Daylight: street lights present
E 506,477 Dry
N 103,179 Fine without high winds
20 mph

VEHICLE 2 (PEDAL CYCLIST) MIDWAY ACROSS ROUNDABOUT HEADING NORTH, WAS STRUCK BY VEHICLE 1 ENTERING ROUNDABOUT TRAVELLING EAST, ALTHOUGH DETAILS WERE EXCHANGED AT SCENE, THE RIDER OF PEDAL CYCLE WAS KNOCKED TO THE GROUND AND INJURY WAS CAUSED HENCE REPORT TO POLICE.

1002692 Monday A259 NEW ROAD of B2187 MILL Veh 2 Pedal cycle Going ahead E to W Dri M 33 Slight
26/04/2010 LANE Veh 1 Car Starting S to E
A 259 0700hrs
Daylight: street lights present
E 505,686 Dry
N 103,250 Fine without high winds
50 mph

VEHICLE 1 HAS BEEN STATIC AT THE ROUNDABOUT AT MILL LANE AND THE A259 WAITING TO PULL OUT. VEHICLE 2 WHICH IS A PUSH BIKE HAS ENTERED THE ROUNDABOUT FROM THE DIRECTION OF WORTHING. VEHICLE 1 HAS THEN PULLED AWAY ONTO THE ROUNDABOUT AND COLLIDED WITH VEHICLE 2.

1003569 Friday A259 ROUNDSTONE BY PASS of Veh 2 Car Wait go ahead held E to W Dri F 36 Slight
21/05/2010 B2140 STATION ROAD Veh 1 Car Starting E to W
A 259 1920hrs
Daylight: street lights present
E 506,548 Dry
N 103,173 Fine without high winds
20 mph

VEHICLE TWO STATIONARY AT ROUNDABOUT FACING WEST, VEHICLE ONE IN SAME LANE DIRECTLY BEHIND STRUCK VEHICLE TWO IN REAR CAUSING DAMAGE, DETAILS WERE EXCHANGED AT THE SCENE HOWEVER DRIVER OF VEHICLE TWO IS NOW COMPLAINING OF WHIPLASH INJURY HENCE REPORT BEING SUBMITTED.

Details of Personal Injury Accidents for Period - 01/03/2008 to 28/02/2011 (36) months

Selection: Notes:
Selected using Pre-defined Query : * Exclude damage only 3 year collision data for littlehampton area

Police Ref.	Day	Location Description	Vehicles				Casualties		
			Veh No /	Type /	Manv /	Dir /	Class	Sex /	Age /
Road No.	Date							Sev	
Grid Ref.	Time								
	D/L								
	R.S.C								
	Weather								
	Speed								
	Account of								
	Accident								

1006071 Thursday A259 NEW ROAD of B2140 STATION Veh 2 Pedal cycle Going ahead E to W Dri M 45 Slight
09/09/2010 ROAD ON ROUNDABOUT Veh 1 Car Turning right S to E
A 259 0657hrs
Daylight:street lights present
E 506,494 Dry
N 103,140 Fine without high winds
50 mph

MORNING DAYLIGHT BRIGHT SUNSHINE V1 ENTERED R/ABOUT FROM STATION ROAD TO TURN RIGHT. ENTERED R/A BLINDED BY SUN DID NOT SEE CYCLIST. CYCLIST COLLIDED WITH VEH 1 ON OS WING NEAR TO DRIVERS DOOR.

1008661 Monday B2187 MILL LANE of A259 Veh 2 Car Wait go ahead held S to E RSP F 15 Slight
20/12/2010 Veh 2 Car Wait go ahead held S to E Dri F 50 Slight
B 2187 1615hrs Veh 1 Car Starting S to W
Darkness; street lighting unkno
E 505,687 Wet/Damp
N 103,242 Raining without high winds
30 mph

VEH 2 STATIONARY AT ROUNDABOUT. VEH 1 BEHIND VEH 2, VEH 1 PULLS AWAY, BELIEVING VEH 2 HAD PULLED AWAY TOO. HOWEVER VEH 2 HAD NOT MOVED AND VEH 1 COLLIDED WITH REAR OF VEH 2.

SITE: GOLFERS LANE / A259, NEW ROAD / MILL LANE / A259, ANGMERING
SURVEY TYPE: CLASSIFIED VEHICLE TURNING SURVEY
DATE: FRIDAY 24/06/2011
DURATION: 16:00 - 19:00
WEATHER: OVERCAST
INCIDENTS: NONE



		GOLFERS LANE (SOUTH BOUND TRAFFIC)				A259, NEW ROAD (WEST BOUND TRAFFIC)					MILL LANE (NORTH BOUND TRAFFIC)				A259 (EAST BOUND TRAFFIC)			
		LEFT	AHEAD	RIGHT	TOTAL (all)	LEFT	AHEAD	RIGHT	U- TURN	TOTAL (all)	LEFT	AHEAD	RIGHT	TOTAL (all)	LEFT	AHEAD	RIGHT	TOTAL (all)
16:00	LIGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	HEAVY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	LIGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	HEAVY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:41	LIGHT	3	0	0	3	39	64	2	11	116	6	1	32	39	0	66	6	72
-	HEAVY	0	0	0	0	1	3	0	0	4	0	0	0	0	0	4	0	4
16:45	TOTAL	3	0	0	3	40	67	2	11	120	6	1	32	39	0	70	6	76
16:45	LIGHT	7	4	4	15	184	257	14	44	499	8	8	149	165	5	188	10	203
-	HEAVY	0	0	0	0	5	1	0	0	6	0	0	1	1	0	4	0	4
17:00	TOTAL	7	4	4	15	189	258	14	44	505	8	8	150	166	5	192	10	207
17:00	LIGHT	13	3	3	19	175	226	8	25	434	12	4	148	164	9	258	15	282
-	HEAVY	1	0	0	1	5	7	0	0	12	0	0	0	0	1	3	0	4
17:15	TOTAL	14	3	3	20	180	233	8	25	446	12	4	148	164	10	261	15	286
17:15	LIGHT	13	2	5	20	187	263	19	26	495	12	10	164	186	16	239	19	274
-	HEAVY	0	0	0	0	1	6	0	2	9	1	0	3	4	0	2	0	2
17:30	TOTAL	13	2	5	20	188	269	19	28	504	13	10	167	190	16	241	19	276
17:30	LIGHT	8	4	1	13	174	235	6	41	456	9	7	145	161	3	214	15	232
-	HEAVY	0	0	0	0	5	6	0	0	11	0	0	6	6	0	3	0	3
17:45	TOTAL	8	4	1	13	179	241	6	41	467	9	7	151	167	3	217	15	235
17:45	LIGHT	15	5	6	26	196	244	11	52	503	12	5	149	166	6	234	15	255
-	HEAVY	0	0	0	0	2	1	0	0	3	0	0	0	0	0	4	0	4
18:00	TOTAL	15	5	6	26	198	245	11	52	506	12	5	149	166	6	238	15	259
18:00	LIGHT	13	6	8	27	169	265	4	39	477	11	5	134	150	8	183	15	206
-	HEAVY	0	0	0	0	1	5	0	0	6	0	0	3	3	0	4	0	4
18:15	TOTAL	13	6	8	27	170	270	4	39	483	11	5	137	153	8	187	15	210
18:15	LIGHT	3	13	8	24	171	225	2	37	435	12	1	143	156	7	207	8	222
-	HEAVY	0	0	0	0	2	2	0	0	4	0	0	1	1	0	2	0	2
18:30	TOTAL	3	13	8	24	173	227	2	37	439	12	1	144	157	7	209	8	224
18:30	LIGHT	4	5	5	14	144	185	4	29	362	7	2	119	128	3	163	12	178
-	HEAVY	0	0	0	0	0	4	0	0	4	0	0	1	1	0	1	0	1
18:45	TOTAL	4	5	5	14	144	189	4	29	366	7	2	120	129	3	164	12	179
18:45	LIGHT	8	6	2	16	144	171	7	37	359	5	2	118	125	2	163	12	177
-	HEAVY	0	0	0	0	0	7	0	0	7	0	0	1	1	0	3	0	3
19:00	TOTAL	8	6	2	16	144	178	7	37	366	5	2	119	126	2	166	12	180

		GOLFERS LANE (SOUTH BOUND TRAFFIC)				A259, NEW ROAD (WEST BOUND TRAFFIC)					MILL LANE (NORTH BOUND TRAFFIC)				A259 (EAST BOUND TRAFFIC)			
		LEFT	AHEAD	RIGHT	TOTAL (all)	LEFT	AHEAD	RIGHT	U- TURN	TOTAL (all)	LEFT	AHEAD	RIGHT	TOTAL (all)	LEFT	AHEAD	RIGHT	TOTAL (all)
16:00	LIGHT	87	48	42	177	1583	2135	77	341	4136	94	45	1301	1440	59	1915	127	2101
-	HEAVY	1	0	0	1	22	42	0	2	66	1	0	16	17	1	30	0	31
19:00	TOTAL	88	48	42	178	1605	2177	77	343	4202	95	45	1317	1457	60	1945	127	2132

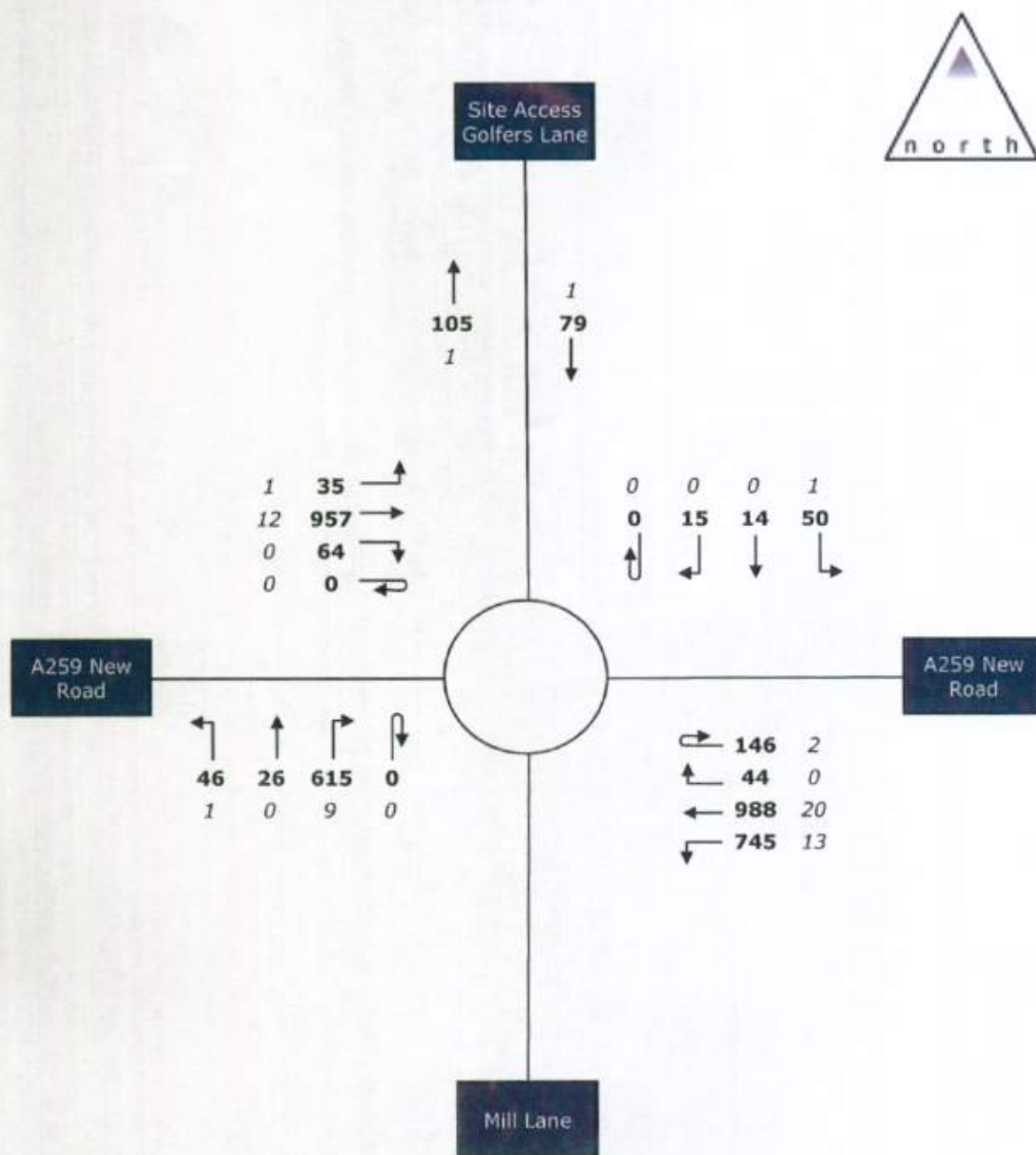
SITE: GOLFERS LANE / A259, NEW ROAD / MILL LANE / A259, ANGMERING
SURVEY TYPE: CLASSIFIED VEHICLE TURNING SURVEY
DATE: SATURDAY 25/06/2011
DURATION: 11:00 - 15:00
WEATHER: HOT, SUNNY
INCIDENTS: NONE



		GOLFERS LANE (SOUTH BOUND TRAFFIC)				A259, NEW ROAD (WEST BOUND TRAFFIC)					MILL LANE (NORTH BOUND TRAFFIC)				A259 (EAST BOUND TRAFFIC)			
		LEFT	AHEAD	RIGHT	TOTAL (all)	LEFT	AHEAD	RIGHT	U- TURN	TOTAL (all)	LEFT	AHEAD	RIGHT	TOTAL (all)	LEFT	AHEAD	RIGHT	TOTAL (all)
11:00	LIGHT	9	4	4	17	154	192	5	55	406	21	4	168	193	5	202	12	219
-	HEAVY	0	0	0	0	3	2	0	0	5	0	0	0	0	0	4	0	4
11:15	TOTAL	9	4	4	17	157	194	5	55	411	21	4	168	193	5	206	12	223
11:15	LIGHT	13	3	6	22	161	180	7	58	406	18	7	171	196	6	199	14	219
-	HEAVY	0	0	0	0	1	2	0	0	3	0	0	1	1	0	5	0	5
11:30	TOTAL	13	3	6	22	162	182	7	58	409	18	7	172	197	6	204	14	224
11:30	LIGHT	6	6	6	18	157	201	6	63	427	19	6	134	159	4	199	13	216
-	HEAVY	0	0	0	0	2	4	0	0	6	0	0	1	1	0	5	0	5
11:45	TOTAL	6	6	6	18	159	205	6	63	433	19	6	135	160	4	204	13	221
11:45	LIGHT	13	2	7	22	170	209	7	77	463	15	7	136	158	8	215	15	238
-	HEAVY	0	0	0	0	1	3	0	0	4	0	0	0	0	0	1	0	1
12:00	TOTAL	13	2	7	22	171	212	7	77	467	15	7	136	158	8	216	15	239
12:00	LIGHT	17	1	6	24	172	207	5	58	442	12	4	201	217	7	172	16	195
-	HEAVY	0	0	0	0	3	2	1	0	6	0	0	0	0	0	1	0	1
12:15	TOTAL	17	1	6	24	175	209	6	58	448	12	4	201	217	7	173	16	196
12:15	LIGHT	11	0	6	17	172	211	11	64	458	17	5	148	170	6	175	13	194
-	HEAVY	0	0	0	0	2	2	0	0	4	0	0	3	3	0	3	0	3
12:30	TOTAL	11	0	6	17	174	213	11	64	462	17	5	151	173	6	178	13	197
12:30	LIGHT	6	5	5	16	181	197	4	83	465	8	2	142	152	2	201	8	211
-	HEAVY	0	0	0	0	0	1	0	0	1	0	0	2	2	0	4	0	4
12:45	TOTAL	6	5	5	16	181	198	4	83	466	8	2	144	154	2	205	8	215
12:45	LIGHT	6	2	7	15	147	200	2	62	411	12	3	143	158	3	173	11	187
-	HEAVY	0	0	0	0	1	3	0	0	4	0	0	0	0	0	1	0	1
13:00	TOTAL	6	2	7	15	148	203	2	62	415	12	3	143	158	3	174	11	188
13:00	LIGHT	8	3	8	19	158	181	3	73	415	11	2	92	105	2	179	13	194
-	HEAVY	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	3
13:15	TOTAL	8	3	8	19	158	181	3	73	415	12	2	92	106	2	182	13	197
13:15	LIGHT	10	1	7	18	147	162	8	64	381	10	4	123	137	5	147	14	166
-	HEAVY	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	0	1
13:30	TOTAL	10	1	7	18	147	164	8	64	383	10	4	123	137	5	148	14	167
13:30	LIGHT	7	3	7	17	141	184	2	53	380	14	1	134	149	3	157	14	174
-	HEAVY	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0
13:45	TOTAL	7	3	7	17	142	185	2	53	382	14	1	134	149	3	157	14	174
13:45	LIGHT	8	3	4	15	178	198	5	41	422	10	2	99	111	5	179	8	192
-	HEAVY	0	0	0	0	0	1	0	0	1	0	0	1	1	0	2	0	2
14:00	TOTAL	8	3	4	15	178	199	5	41	423	10	2	100	112	5	181	8	194
14:00	LIGHT	3	0	2	5	141	177	8	53	379	18	3	140	161	6	159	11	176
-	HEAVY	0	0	0	0	1	1	0	0	2	0	0	1	1	0	2	0	2
14:15	TOTAL	3	0	2	5	142	178	8	53	381	18	3	141	162	6	161	11	178
14:15	LIGHT	9	5	7	21	127	176	5	50	358	4	2	130	136	4	185	14	203
-	HEAVY	0	0	0	0	1	3	1	0	5	0	0	1	1	0	3	0	3
14:30	TOTAL	9	5	7	21	128	179	6	50	363	4	2	131	137	4	188	14	206
14:30	LIGHT	4	2	6	12	133	186	6	45	370	11	2	125	138	2	170	11	183
-	HEAVY	0	0	0	0	0	2	0	0	2	0	0	1	1	0	2	0	2
14:45	TOTAL	4	2	6	12	133	188	6	45	372	11	2	126	139	2	172	11	185
14:45	LIGHT	5	0	4	9	116	186	6	51	359	1	1	112	114	8	179	5	192
-	HEAVY	0	0	0	0	0	1	0	0	1	0	0	2	2	0	3	0	3
15:00	TOTAL	5	0	4	9	116	187	6	51	360	1	1	114	116	8	182	5	195

		GOLFERS LANE (SOUTH BOUND TRAFFIC)				A259, NEW ROAD (WEST BOUND TRAFFIC)					MILL LANE (NORTH BOUND TRAFFIC)				A259 (EAST BOUND TRAFFIC)			
		LEFT	AHEAD	RIGHT	TOTAL (all)	LEFT	AHEAD	RIGHT	U- TURN	TOTAL (all)	LEFT	AHEAD	RIGHT	TOTAL (all)	LEFT	AHEAD	RIGHT	TOTAL (all)
11:00	LIGHT	135	40	92	267	2455	3047	90	950	5592	201	55	2198	2454	76	2891	192	3159
-	HEAVY	0	0	0	0	16	30	2	0	48	1	0	13	14	0	40	0	40
15:00	TOTAL	135	40	92	267	2471	3077	92	950	5640	202	55	2211	2468	76	2931	192	3199

Appendix D



motion
transport planning

2011 Observed Traffic Flows

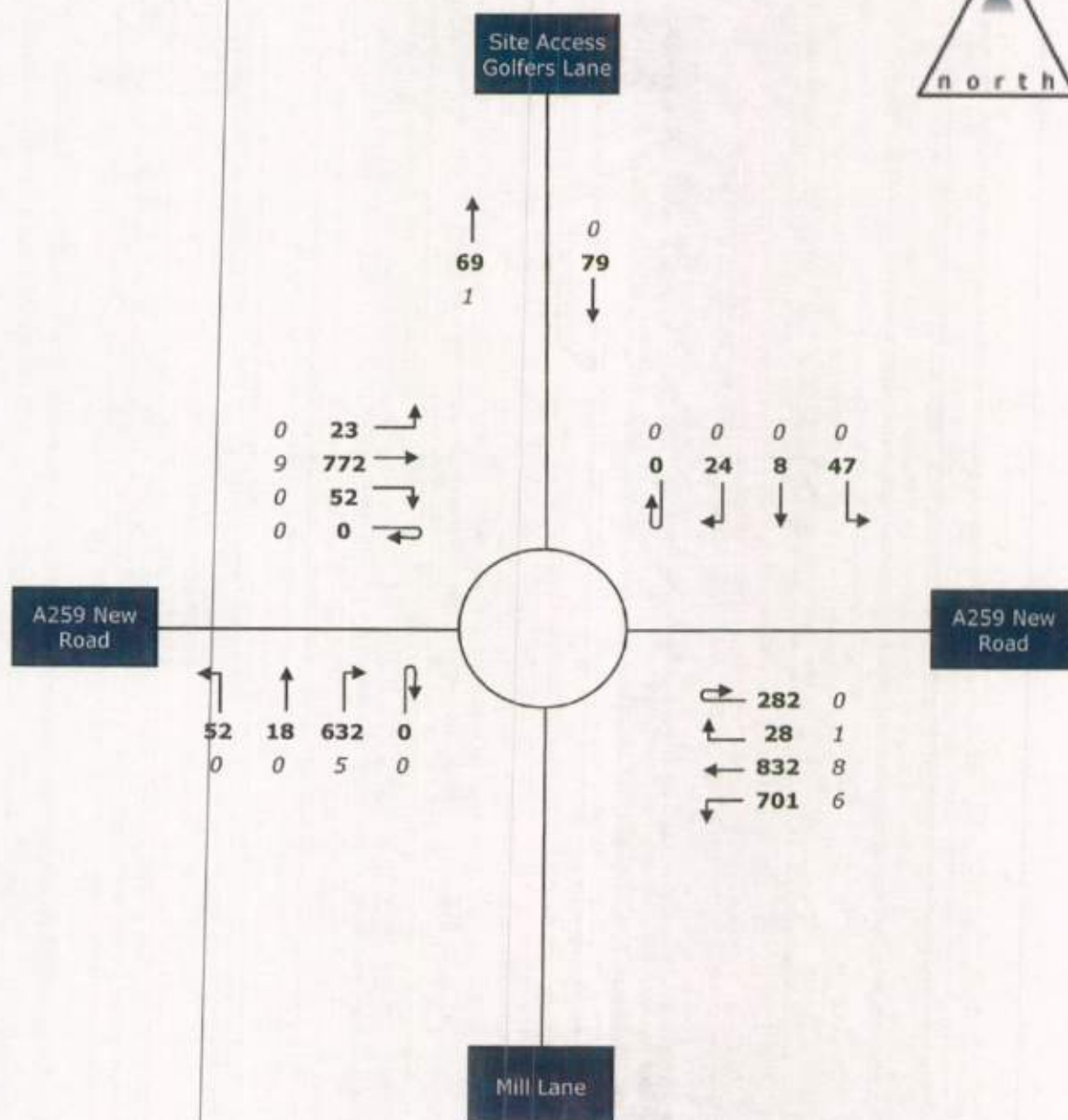
Weekday Peak Hour (1700-1800)

**Proposed Change of Use,
Rustington Golf Centre**

Diagram D1

Key:

0 Total Vehicles
0 Number of HGVs



motion
transport planning

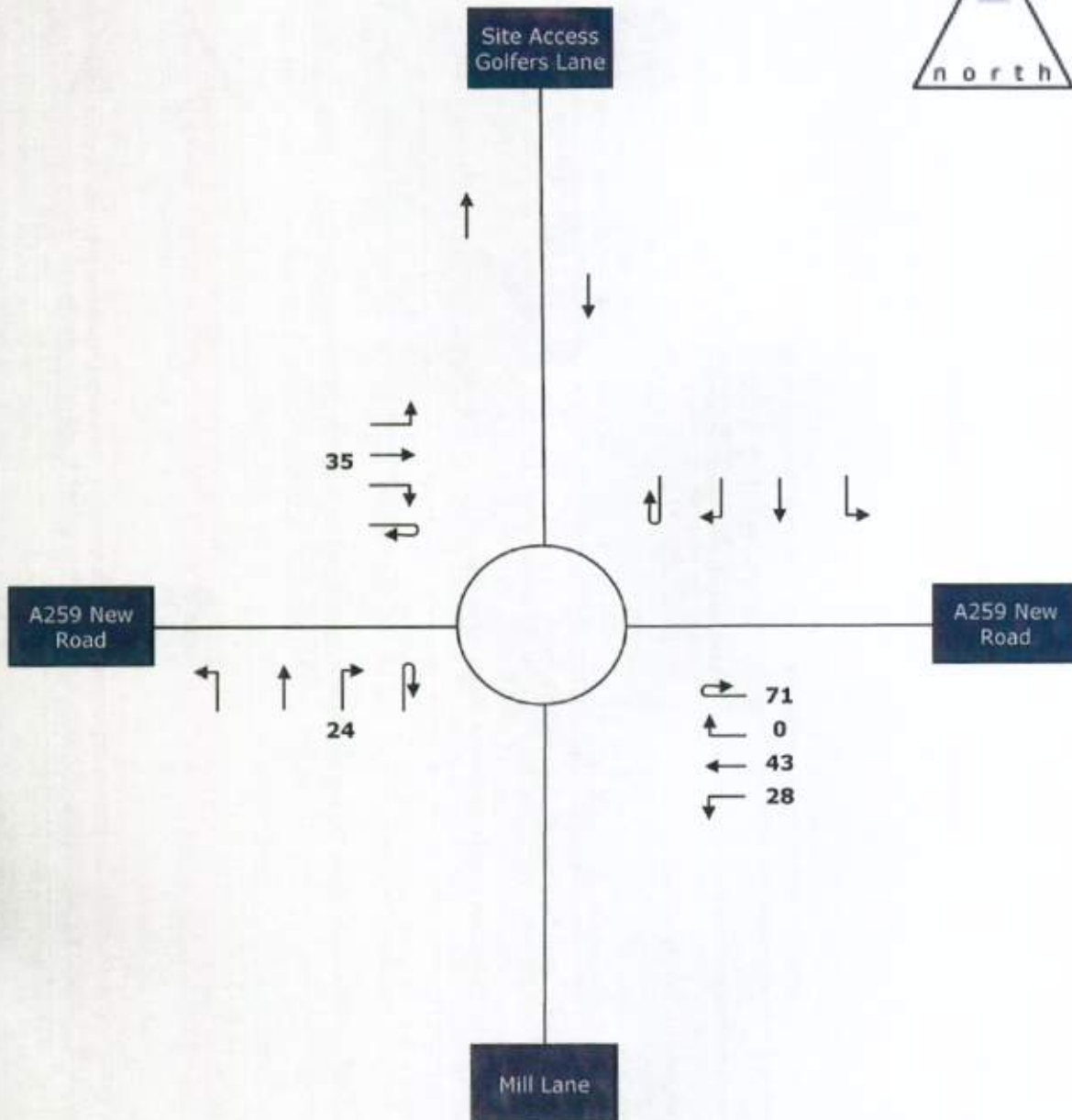
2011 Observed Traffic Flows
Saturday Peak Hour (1145-1245)

**Proposed Change of Use,
Rustington Golf Centre**

Diagram D2

Key:

0 Total Vehicles
0 Number of HGVs



motion
transport planning

Committed Development Traffic Flows

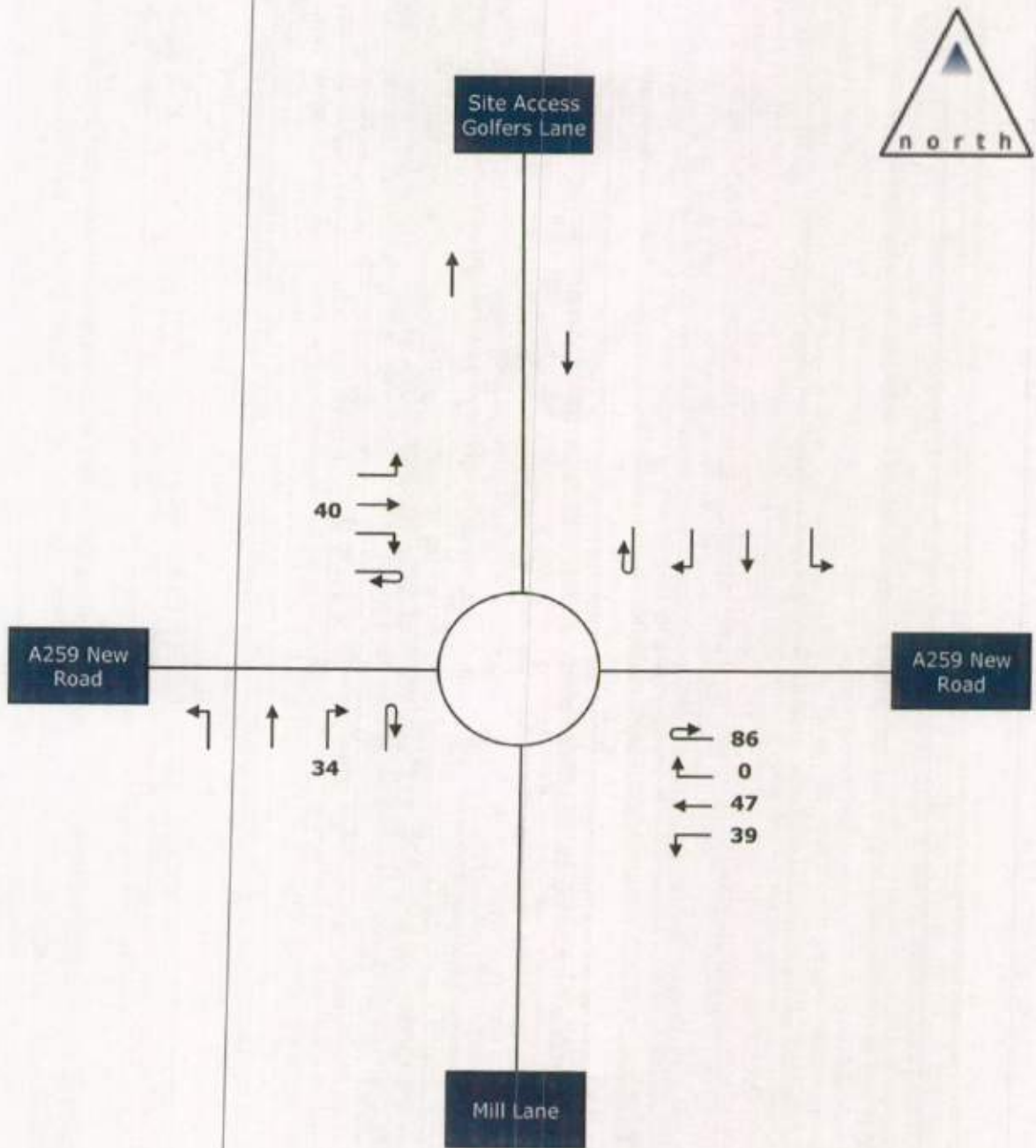
Weekday Peak Hour (1700-1800)

**Proposed Change of Use,
Rustington Golf Centre**

Diagram D3

Key:

0 Total Vehicles
0 Number of HGVs



motion
transport planning

Committed Development Traffic Flows

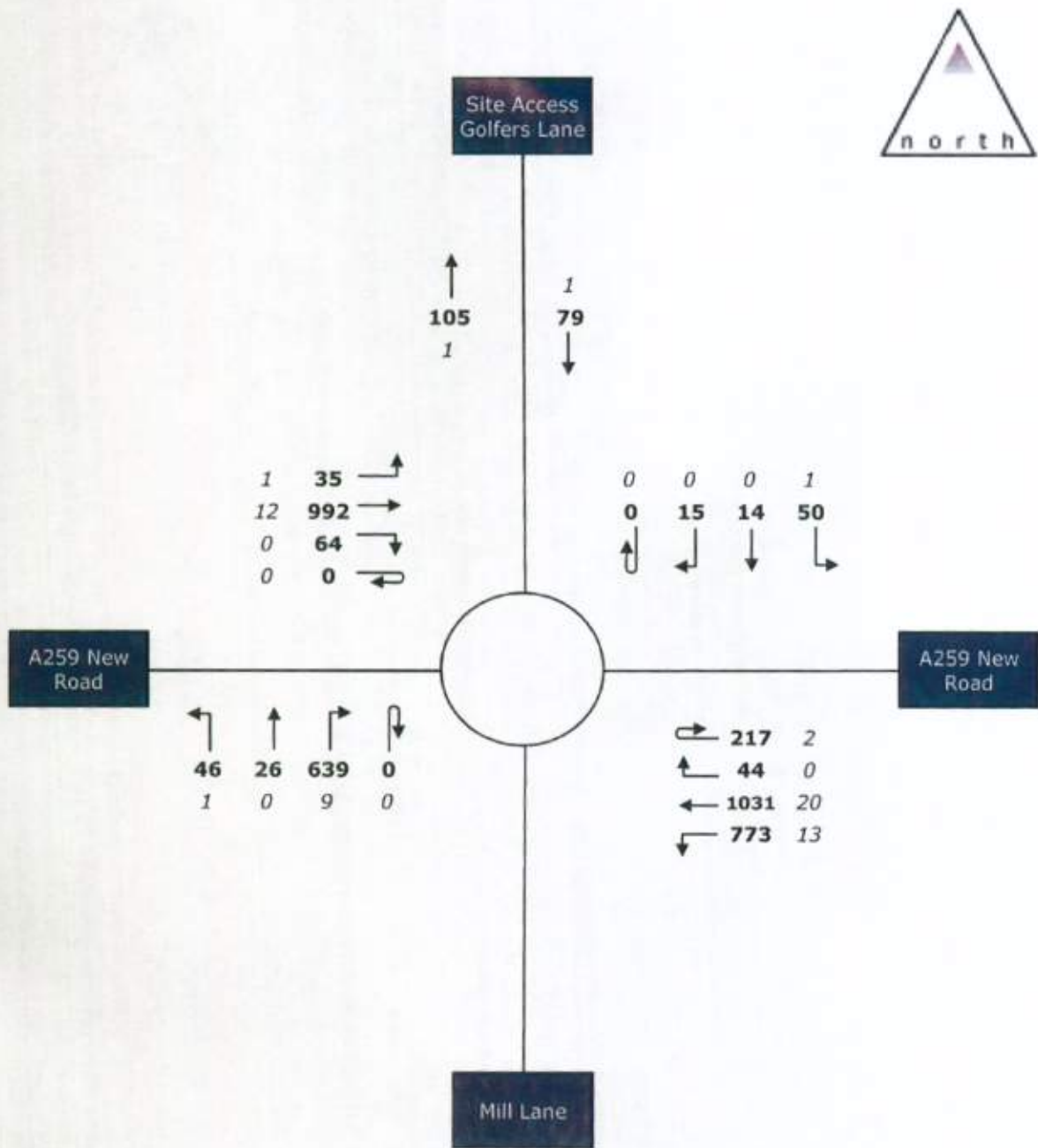
Saturday Peak Hour (1145-1245)

**Proposed Change of Use,
Rustington Golf Centre**

Diagram D4

Key:

0 Total Vehicles
0 Number of HGVs



motion
transport planning

2011 Observed plus Committed Development
Traffic Flows

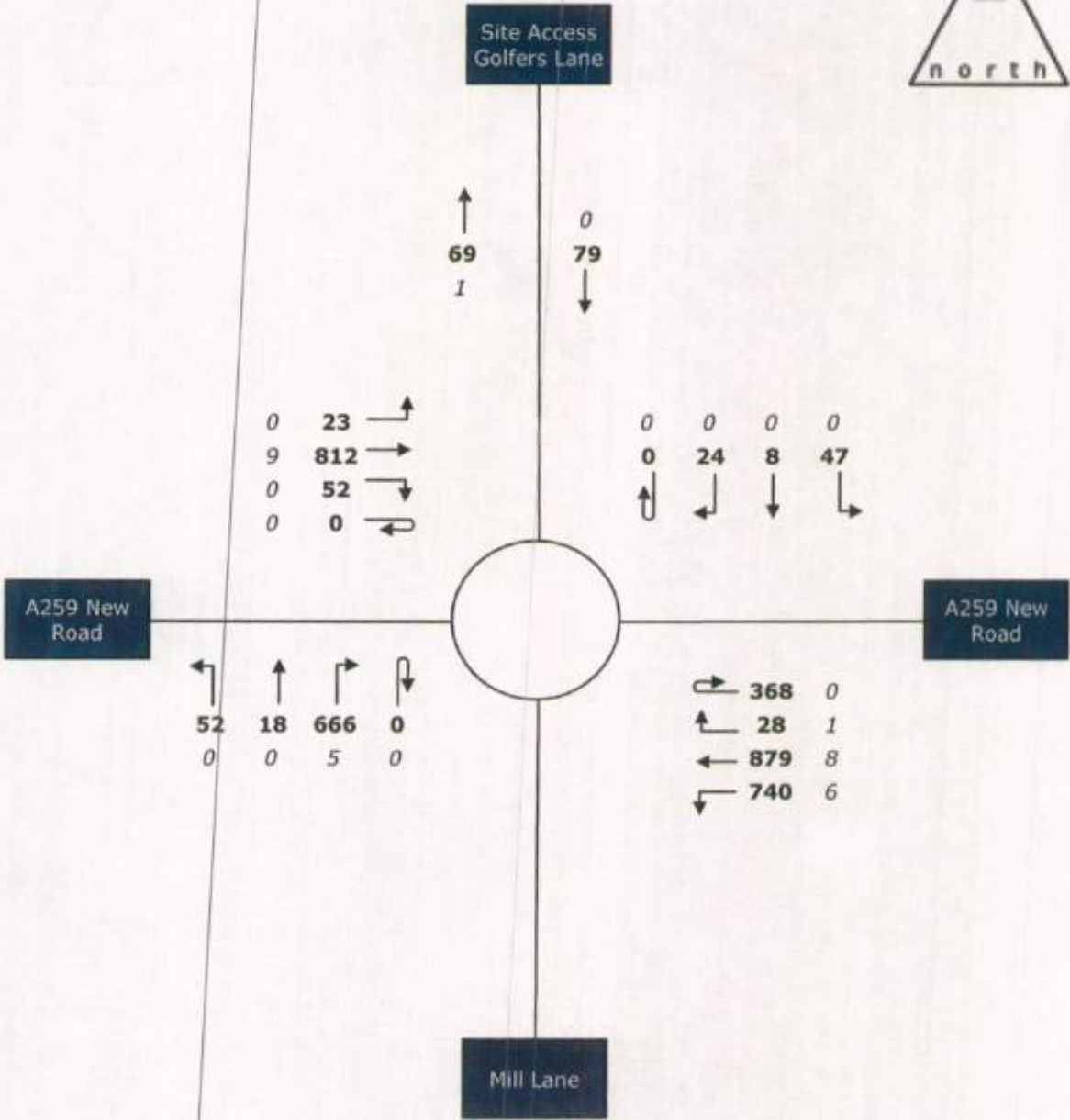
Weekday Peak Hour (1700-1800)

**Proposed Change of Use,
Rustington Golf Centre**

Diagram D5

Key:

0 Total Vehicles
0 Number of HGVs



motion
transport planning

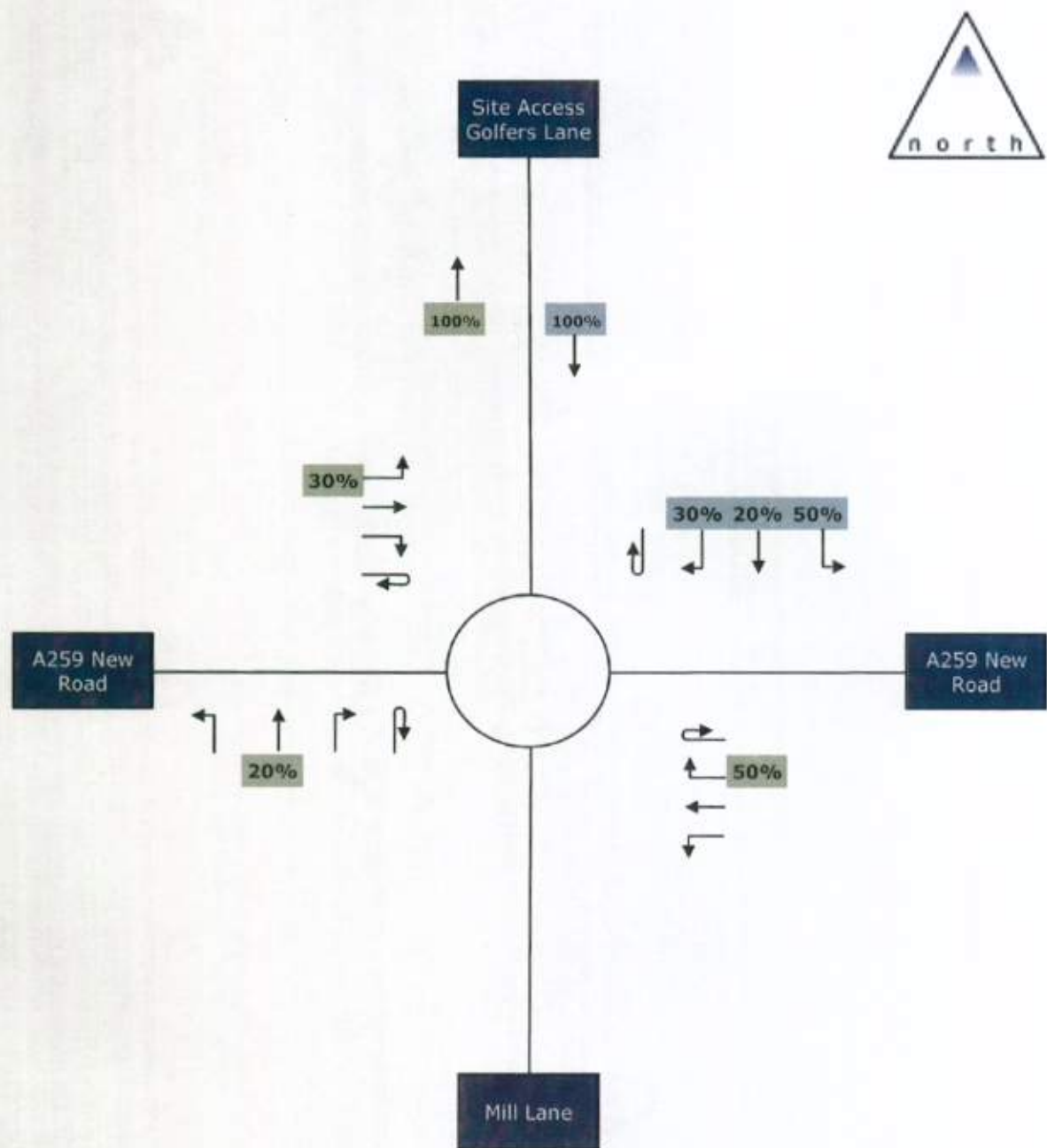
2011 Observed plus Committed Development
Traffic Flows

Saturday Peak Hour (1145-1245)

**Proposed Change of Use,
Rustington Golf Centre**

Diagram D6

Key:
0 Total Vehicles
0 Number of HGVs



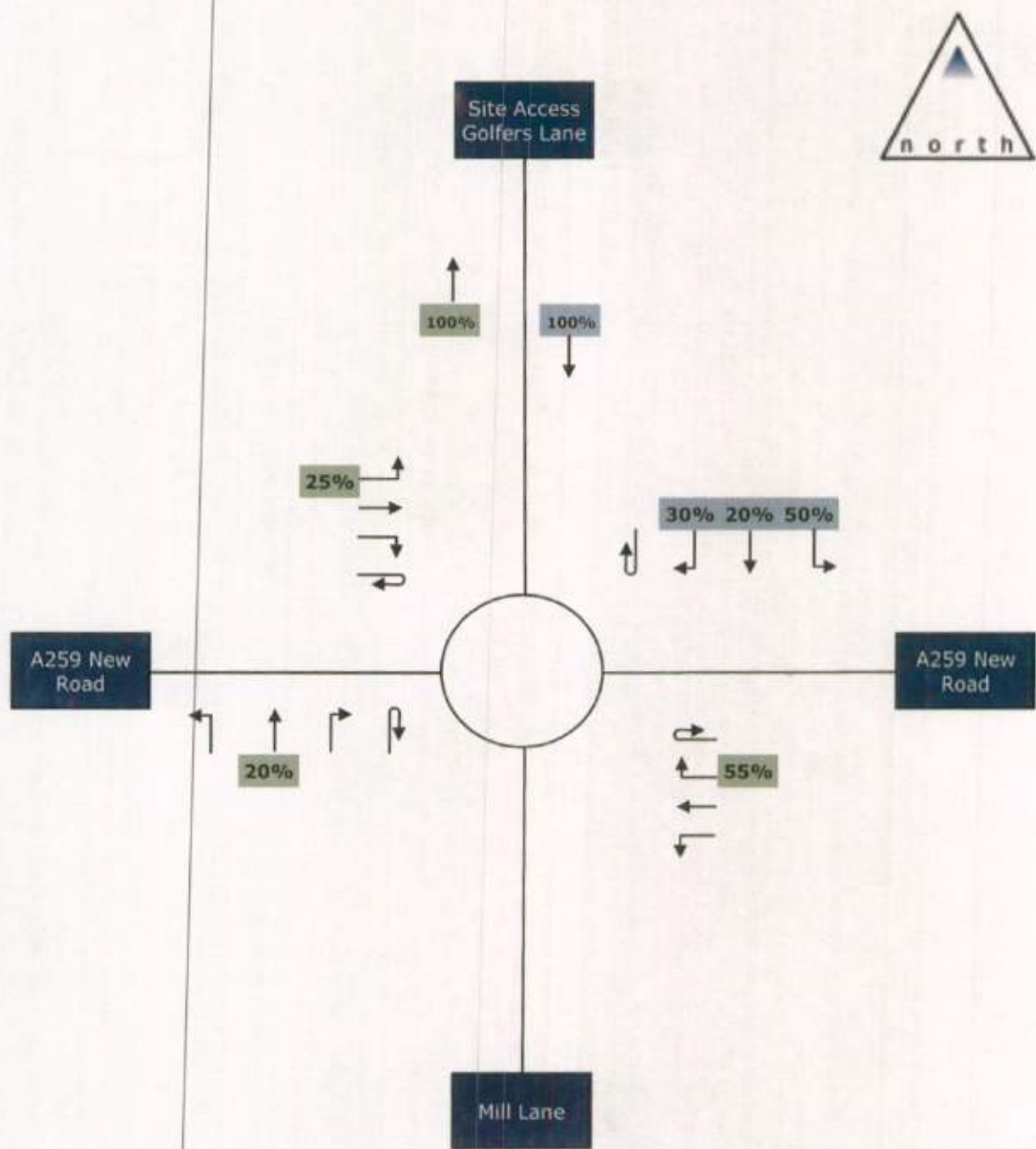
motion
transport planning

Trip Distribution

Weekday Peak Hour (1700-1800)

**Proposed Change of Use,
Rustington Golf Centre**

Diagram D7



motion
transport planning

Trip Distribution

Saturday Peak Hour (1145-1245)

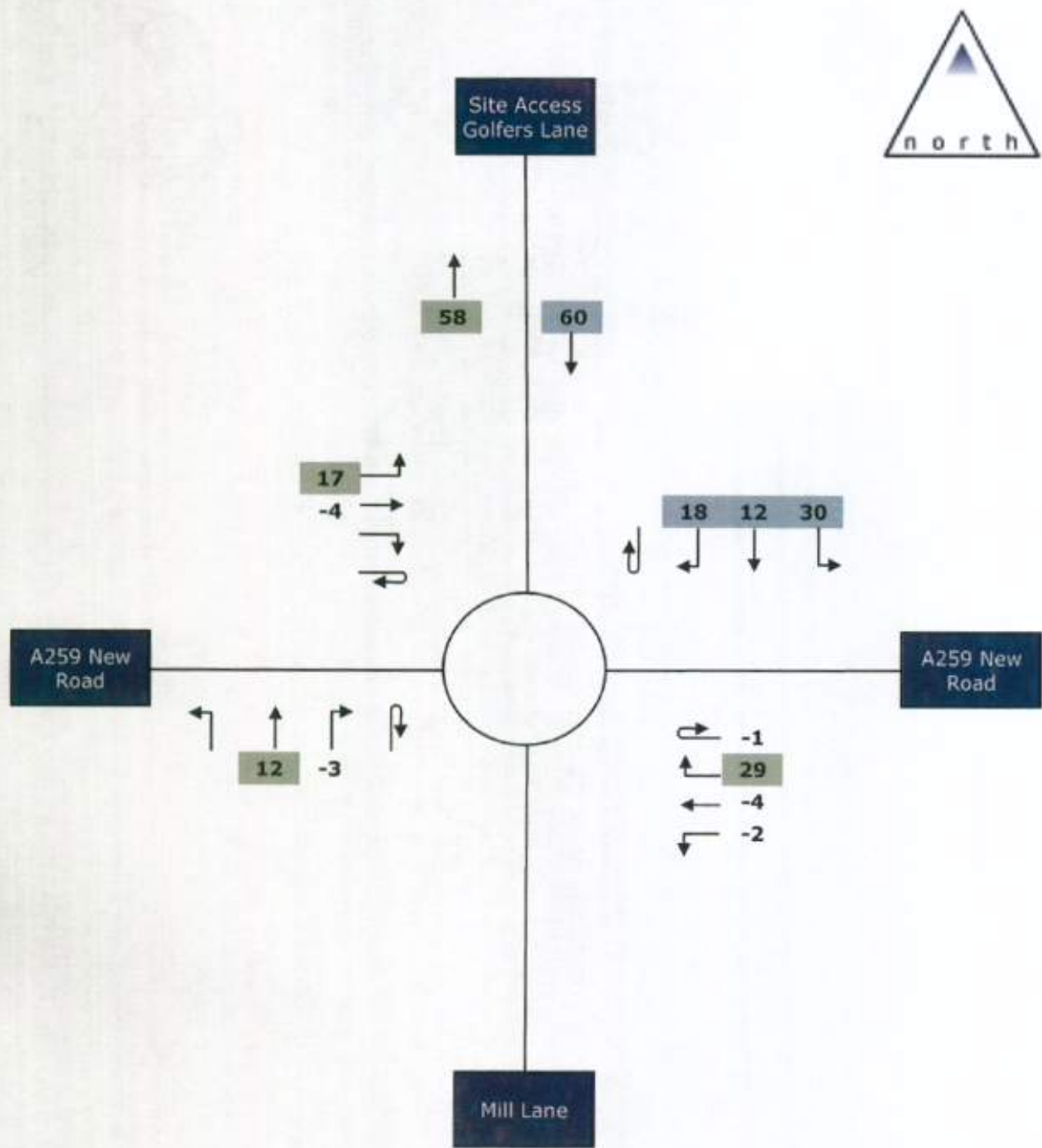
**Proposed Change of Use,
Rustington Golf Centre**

Diagram D8

Key:



Inbound Movements
Outbound Movements



motion
transport planning

Trip Attraction

Weekday Peak Hour (1700-1800)

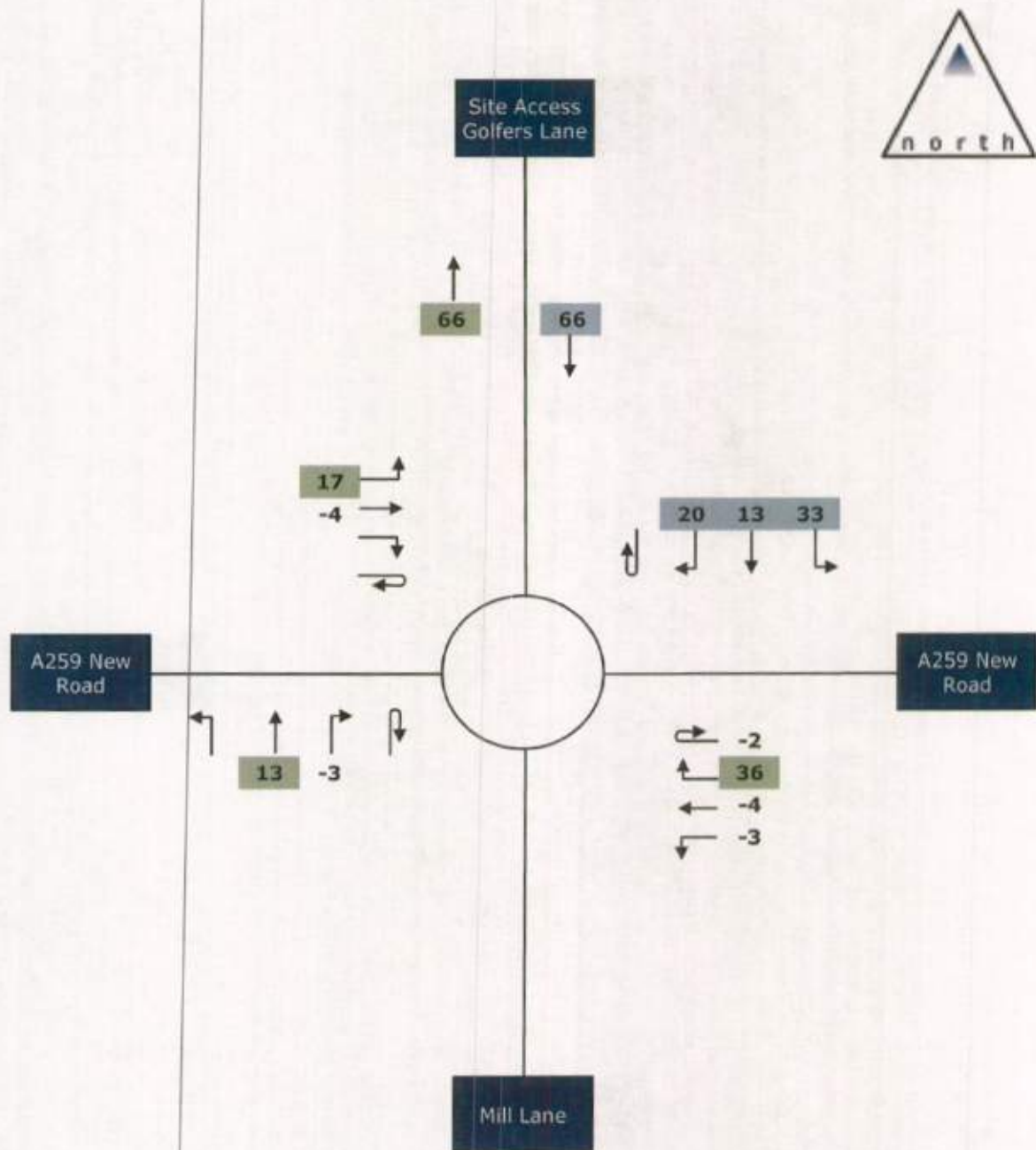
**Proposed Change of Use,
Rustington Golf Centre**

Diagram D9

Key:

58
60

Inbound Movements
Outbound Movements



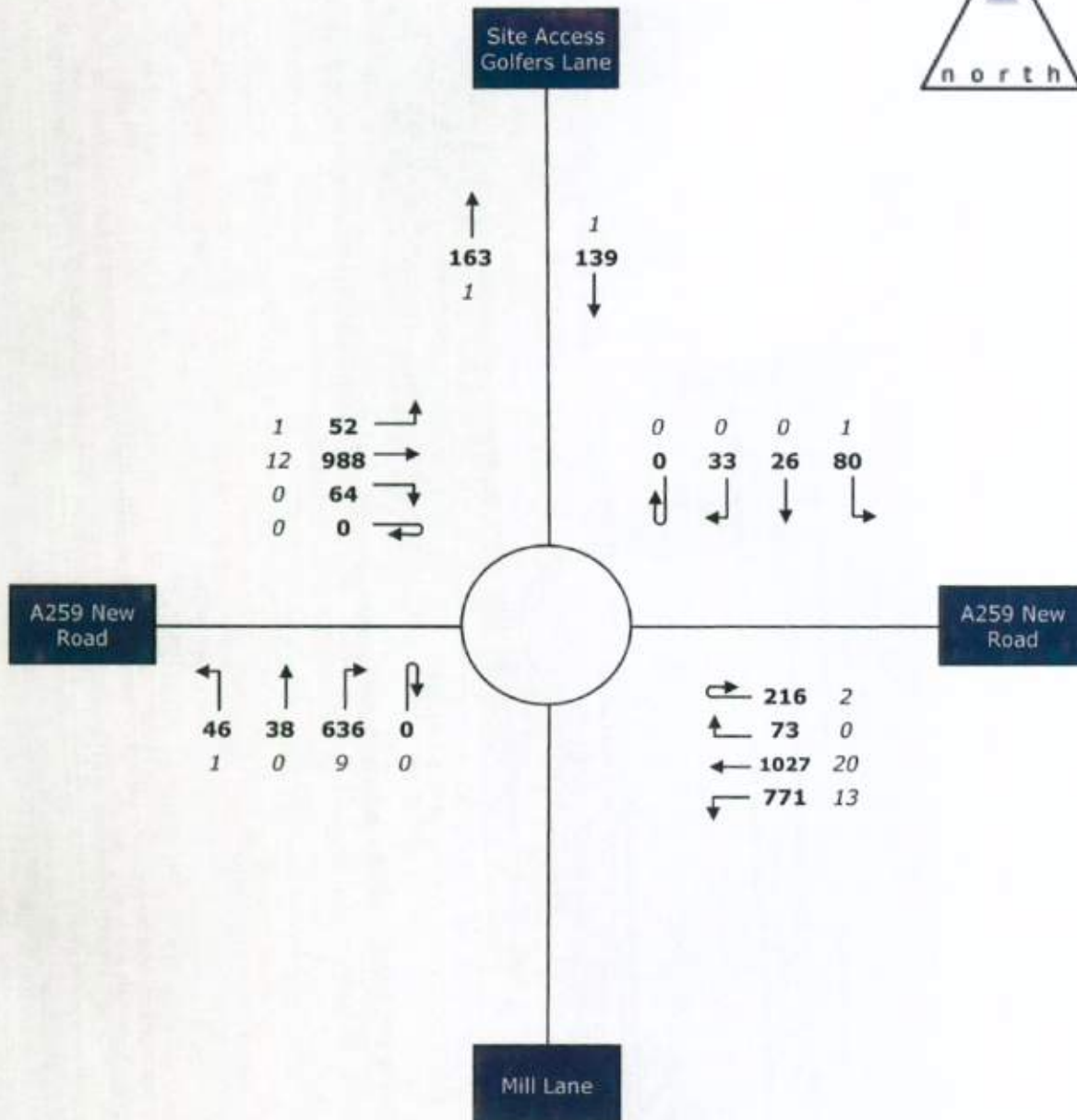
motion
transport planning

Trip Attraction

Saturday Peak Hour (1145-1245)

**Proposed Change of Use,
Rustington Golf Centre**

Diagram D10



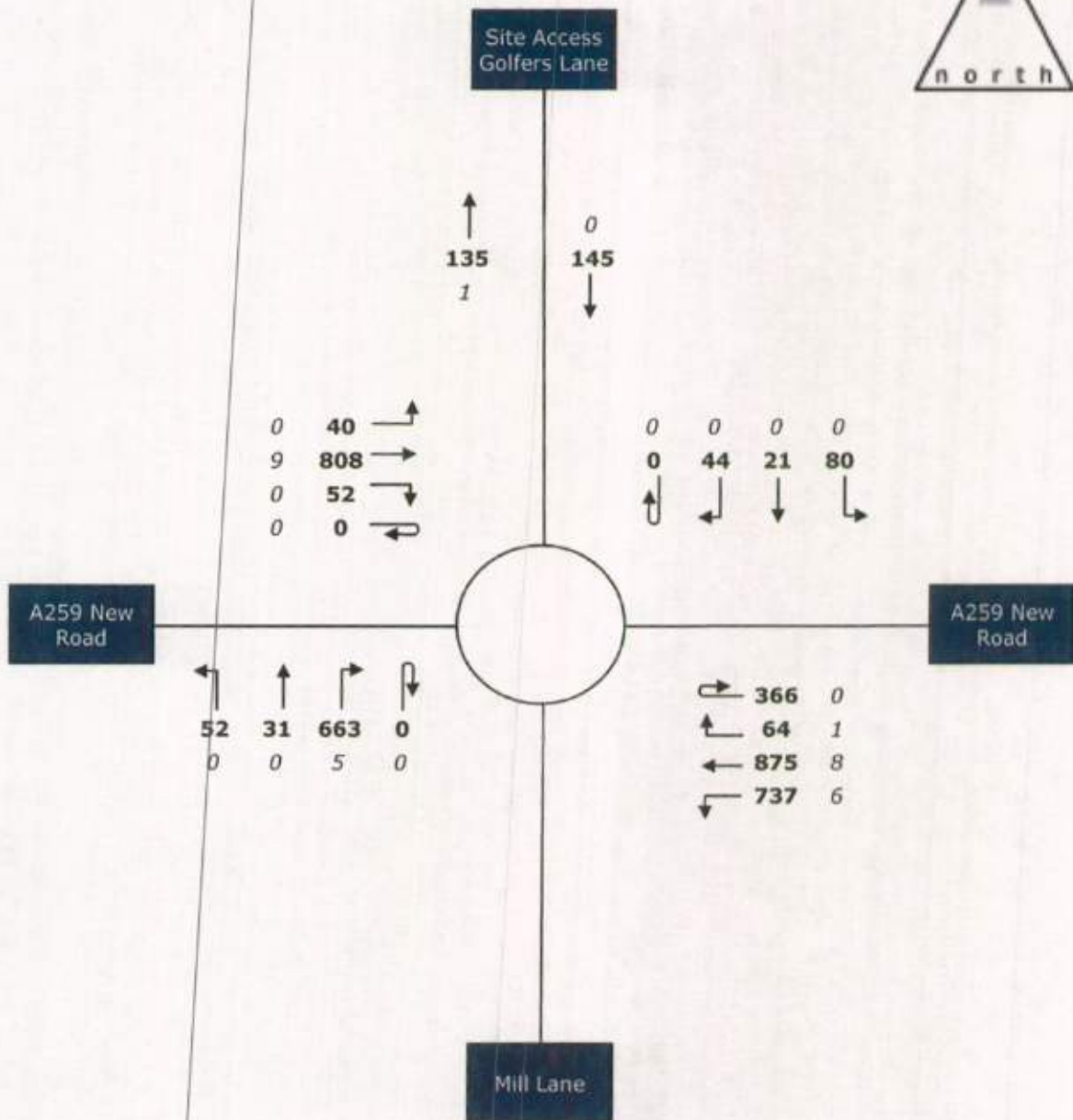
motion
transport planning

2011 Observed plus Committed Development
plus Proposal Traffic Flows

Weekday Peak Hour (1700-1800)

**Proposed Change of Use,
Rustington Golf Centre**

Diagram D11



motion
transport planning

2011 Observed plus Committed Development
plus Proposal Traffic Flows

Saturday Peak Hour (1145-1245)

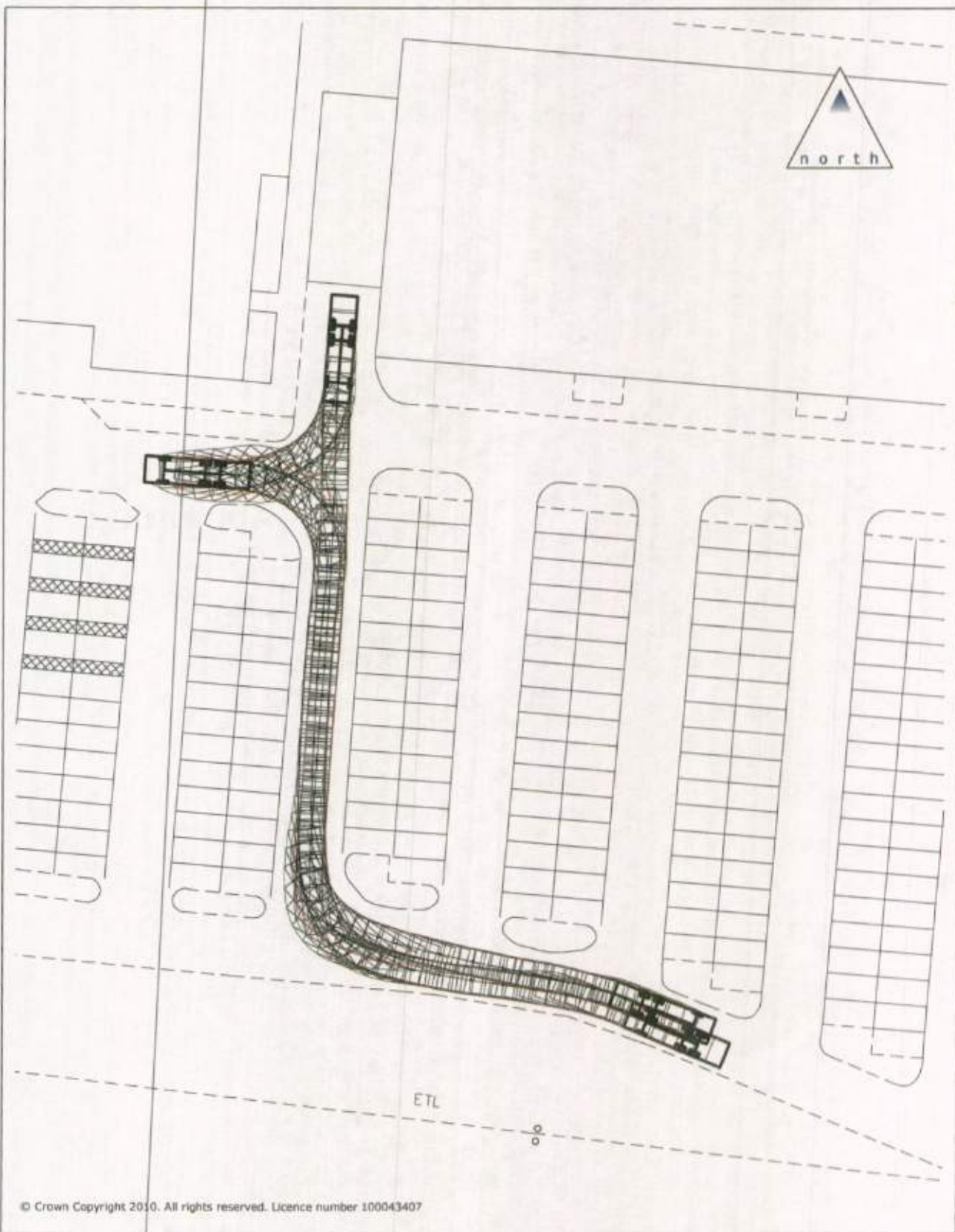
**Proposed Change of Use,
Rustington Golf Centre**

Diagram D12

Key:

0 Total Vehicles
0 Number of HGVs

Appendix E



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N:\London_CAD\sprust 110601\110601-TK02.dwg



Swept Path of Large Refuse Vehicle

Scale (@A4) 1:500
110601-TK02

1	WO-01-H-01	GARDEN C., NEAR BROMSGROVE	WORCESTERSHIRE
---	------------	----------------------------	----------------

BURCOT

NEAR BROMSGROVE

Neighbourhood Centre (PPS6 Local Centre)

Village

Total Gross floor area:

1850 sqm

Survey date: SATURDAY

11/05/02

Survey Type: MANUAL

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : H - GARDEN CENTRE

VEHICLES

Selected regions and areas:

06 WEST MIDLANDS
WO WORCESTERSHIRE 1 days

Filtering Stage 2 selection:

Parameter: Gross floor area
Range: 1850 to 1850 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/02 to 30/11/08

Selected survey days:

Saturday 1 days

Selected survey types:

Manual count 1 days
Directional ATC Count 0 days

Selected Locations:

Neighbourhood Centre (PPS6 Local Centre) 1

Selected Location Sub Categories:

Village 1

OFF-LINE VERSION Motion High Street Guildford

Licence No: 734001

TRIP RATE for Land Use 01 - RETAIL/H - GARDEN CENTRE

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 - 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	0	0	0.000	0	0	0.000	0	0	0.000
08:00 - 09:00	1	3700	0.351	1	3700	0.054	1	3700	0.405
09:00 - 10:00	1	3700	0.270	1	3700	0.270	1	3700	0.540
10:00 - 11:00	1	3700	0.757	1	3700	0.757	1	3700	1.514
11:00 - 12:00	1	3700	1.514	1	3700	1.595	1	3700	3.109
12:00 - 13:00	1	3700	0.838	1	3700	0.838	1	3700	1.676
13:00 - 14:00	1	3700	1.000	1	3700	0.865	1	3700	1.865
14:00 - 15:00	1	3700	1.405	1	3700	0.946	1	3700	2.351
15:00 - 16:00	1	3700	0.865	1	3700	1.243	1	3700	2.108
16:00 - 17:00	1	3700	0.351	1	3700	0.649	1	3700	1.000
17:00 - 18:00	1	3700	0.108	1	3700	0.270	1	3700	0.378
18:00 - 19:00	0	0	0.000	0	0	0.000	0	0	0.000
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
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:			7.459			7.487			14.946

Parameter summary

Trip rate parameter range selected: 3700 - 3700 (units: sqm)
Survey date date range: 01/01/02 - 30/11/08
Number of weekdays (Monday-Friday): 1
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 0

LIST OF SITES relevant to selection parameters

1	HC-01-H-03 ROMSEY ROAD	GARDEN CENTRE, WINCHESTER	HAMPSHIRE
	WINCHESTER Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area: Survey date: MONDAY	3700 sqm 19/11/07	Survey Type: MANUAL

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : H - GARDEN CENTRE

VEHICLES

Selected regions and areas:

02 SOUTH EAST

HC HAMPSHIRE

1 days

Filtering Stage 2 selection:

Parameter: Gross floor area
Range: 3700 to 3700 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/02 to 30/11/08

Selected survey days:

Monday 1 days

Selected survey types:

Manual count 1 days
Directional ATC Count 0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre) 1

Selected Location Sub Categories:

No Sub Category 1

TRIP RATE for Land Use 07 - LEISURE/B - BOWLING ALLEYS

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 - 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	0	0	0.000	0	0	0.000	0	0	0.000
08:00 - 09:00	1	1580	1.962	1	1580	0.823	1	1580	2.785
09:00 - 10:00	1	1580	0.380	1	1580	0.316	1	1580	0.696
10:00 - 11:00	2	2023	1.013	2	2023	0.692	2	2023	1.705
11:00 - 12:00	2	2023	0.766	2	2023	0.717	2	2023	1.483
12:00 - 13:00	2	2023	1.236	2	2023	1.112	2	2023	2.348
13:00 - 14:00	2	2023	0.816	2	2023	0.519	2	2023	1.335
14:00 - 15:00	2	2023	0.766	2	2023	0.989	2	2023	1.755
15:00 - 16:00	2	2023	1.186	2	2023	1.038	2	2023	2.224
16:00 - 17:00	2	2023	0.865	2	2023	1.261	2	2023	2.126
17:00 - 18:00	2	2023	1.063	2	2023	0.593	2	2023	1.656
18:00 - 19:00	2	2023	0.791	2	2023	0.989	2	2023	1.780
19:00 - 20:00	2	2023	0.840	2	2023	0.568	2	2023	1.408
20:00 - 21:00	2	2023	0.346	2	2023	0.791	2	2023	1.137
21:00 - 22:00	2	2023	0.198	2	2023	0.667	2	2023	0.865
22:00 - 23:00	2	2023	0.124	2	2023	0.445	2	2023	0.569
23:00 - 24:00	2	2023	0.025	2	2023	0.272	2	2023	0.297
Total Rates:			12.377			11.792			24.169

Parameter summary

Trip rate parameter range selected:1580 - 2466 (units: sqm)

Survey date date range:01/01/02 - 19/06/10

Number of weekdays (Monday-Friday):0

Number of Saturdays:2

Number of Sundays:0

Surveys manually removed from selection:2

OFF-LINE VERSION Motion High Street Guildford

Licence No: 734001

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
Category : B - BOWLING ALLEYS

VEHICLES

Selected regions and areas:

07 YORKSHIRE & NORTH LINCOLNSHIRE

SY SOUTH YORKSHIRE 1 days

08 NORTH WEST

LC LANCASHIRE 1 days

Filtering Stage 2 selection:

Parameter: Gross floor area
Range: 1580 to 2466 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/02 to 19/06/10

Selected survey days:

Saturday 2 days

Selected survey types:

Manual count 2 days

Directional ATC Count 0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre) 2

Selected Location Sub Categories:

Residential Zone 1

No Sub Category 1

OFF-LINE VERSION Motion High Street Guildford

Licence No: 734001

TRIP RATE for Land Use 07 - LEISURE/B - BOWLING ALLEYS

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 - 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	0	0	0.000	0	0	0.000	0	0	0.000
08:00 - 09:00	0	0	0.000	0	0	0.000	0	0	0.000
09:00 - 10:00	0	0	0.000	0	0	0.000	0	0	0.000
10:00 - 11:00	2	2600	0.596	2	2600	0.231	2	2600	0.827
11:00 - 12:00	2	2600	1.173	2	2600	0.423	2	2600	1.596
12:00 - 13:00	2	2600	1.115	2	2600	0.538	2	2600	1.653
13:00 - 14:00	2	2600	0.885	2	2600	0.923	2	2600	1.808
14:00 - 15:00	2	2600	1.058	2	2600	0.846	2	2600	1.904
15:00 - 16:00	2	2600	1.154	2	2600	1.481	2	2600	2.635
16:00 - 17:00	2	2600	0.942	2	2600	1.058	2	2600	2.000
17:00 - 18:00	2	2600	1.115	2	2600	1.519	2	2600	2.634
18:00 - 19:00	2	2600	0.846	2	2600	0.923	2	2600	1.769
19:00 - 20:00	2	2600	1.192	2	2600	1.615	2	2600	2.807
20:00 - 21:00	2	2600	1.250	2	2600	1.615	2	2600	2.865
21:00 - 22:00	2	2600	0.673	2	2600	0.942	2	2600	1.615
22:00 - 23:00	2	2600	0.269	2	2600	0.673	2	2600	0.942
23:00 - 24:00	2	2600	0.173	2	2600	0.308	2	2600	0.481
Total Rates:			12.441			13.095			25.536

Parameter summary

Trip rate parameter range selected: 1700 - 3500 (units: sqm)
 Survey date range: 01/01/02 - 19/06/10
 Number of weekdays (Monday-Friday): 2
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

OFF-LINE VERSION Motion High Street Guildford

Licence No: 734001

LIST OF SITES relevant to selection parameters

- | | | | |
|----------|--|---------------------------|---------------------|
| 1 | BD-07-B-01
COURT DRIVE | BOWLING, DUNSTABLE | BEDFORDSHIRE |
| | DUNSTABLE
Suburban Area (PPS6 Out of Centre)
Retail Zone
Total Gross floor area:
Survey date: FRIDAY | 3500 sqm
18/07/08 | Survey Type: MANUAL |
| 2 | DC-07-B-01
POOLE ROAD | BOWLPLEX, POOLE | DORSET |
| | POOLE
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area:
Survey date: FRIDAY | 1700 sqm
18/07/08 | Survey Type: MANUAL |

OFF-LINE VERSION Motion High Street Guildford

Licence No: 734001

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
 Category : B - BOWLING ALLEYS

VEHICLES

Selected regions and areas:

02 SOUTH EAST	
BD BEDFORDSHIRE	1 days
03 SOUTH WEST	
DC DORSET	1 days

Filtering Stage 2 selection:

Parameter: Gross floor area
 Range: 1700 to 3500 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/02 to 19/06/10

Selected survey days:

Friday 2 days

Selected survey types:

Manual count 2 days
 Directional ATC Count 0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre) 2

Selected Location Sub Categories:

Retail Zone 1
 Built-Up Zone 1

Appendix F

OFF-LINE VERSION Motion High Street Guildford

Licence No: 734001

TRIP RATE for Land Use 01 - RETAIL/H - GARDEN CENTRE

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 - 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	0	0	0.000	0	0	0.000	0	0	0.000
08:00 - 09:00	1	1850	0.541	1	1850	0.054	1	1850	0.595
09:00 - 10:00	1	1850	1.459	1	1850	0.703	1	1850	2.162
10:00 - 11:00	1	1850	2.432	1	1850	1.838	1	1850	4.270
11:00 - 12:00	1	1850	3.622	1	1850	3.405	1	1850	7.027
12:00 - 13:00	1	1850	3.243	1	1850	3.405	1	1850	6.648
13:00 - 14:00	1	1850	3.568	1	1850	3.459	1	1850	7.027
14:00 - 15:00	1	1850	4.595	1	1850	3.676	1	1850	8.271
15:00 - 16:00	1	1850	4.757	1	1850	4.649	1	1850	9.406
16:00 - 17:00	1	1850	3.784	1	1850	4.108	1	1850	7.892
17:00 - 18:00	1	1850	1.892	1	1850	3.351	1	1850	5.243
18:00 - 19:00	1	1850	0.595	1	1850	1.784	1	1850	2.379
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
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:			30.488			30.432			60.920

Parameter summary

Trip rate parameter range selected: 1850 - 1850 (units: sqm)
 Survey date range: 01/01/02 - 30/11/08
 Number of weekdays (Monday-Friday): 0
 Number of Saturdays: 1
 Number of Sundays: 0
 Surveys manually removed from selection: 1

OFF-LINE VERSION Motion High Street Guildford

Licence No: 734001

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : A - FOOD SUPERSTORE

VEHICLESSelected regions and areas:

02 SOUTH EAST
 WS WEST SUSSEX 1 days
09 NORTH
 CB CUMBRIA 1 days

Filtering Stage 2 selection:

Parameter: Gross floor area
 Range: 1700 to 2094 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/02 to 14/06/10

Selected survey days:

Thursday 1 days
 Friday 1 days

Selected survey types:

Manual count 2 days
 Directional ATC Count 0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre) 1
 Neighbourhood Centre (PPS6 Local Centre) 1

Selected Location Sub Categories:

Residential Zone 1
 Village 1

LIST OF SITES relevant to selection parameters

- | | | | |
|----------|--|---------------------------------|---------------------|
| 1 | CB-01-A-07 | SOMERFIELD, CARLISLE | CUMBRIA |
| | WIGTON ROAD | | |
| | NEWTOWN | | |
| | CARLISLE | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total Gross floor area: | 1700 sqm | |
| | Survey date: FRIDAY | 05/02/10 | Survey Type: MANUAL |
| 2 | WS-01-A-11 | SAINSBURYS,NR PULBOROUGH | WEST SUSSEX |
| | STANE STREET | | |
| | NEAR PULBOROUGH | | |
| | Neighbourhood Centre (PPS6 Local Centre) | | |
| | Village | | |
| | Total Gross floor area: | 2094 sqm | |
| | Survey date: THURSDAY | 20/03/03 | Survey Type: MANUAL |

OFF-LINE VERSION Motion High Street Guildford

Licence No: 734001

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE

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 - 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	2	1897	0.738	2	1897	0.132	2	1897	0.870
08:00 - 09:00	2	1897	2.557	2	1897	1.423	2	1897	3.980
09:00 - 10:00	2	1897	4.454	2	1897	3.374	2	1897	7.828
10:00 - 11:00	2	1897	5.087	2	1897	4.006	2	1897	9.093
11:00 - 12:00	2	1897	5.509	2	1897	5.377	2	1897	10.886
12:00 - 13:00	2	1897	5.324	2	1897	5.271	2	1897	10.595
13:00 - 14:00	2	1897	5.482	2	1897	5.904	2	1897	11.386
14:00 - 15:00	2	1897	6.115	2	1897	5.904	2	1897	12.019
15:00 - 16:00	2	1897	4.454	2	1897	5.746	2	1897	10.200
16:00 - 17:00	2	1897	7.196	2	1897	5.772	2	1897	12.968
17:00 - 18:00	2	1897	7.565	2	1897	7.696	2	1897	15.261
18:00 - 19:00	2	1897	6.220	2	1897	7.934	2	1897	14.154
19:00 - 20:00	2	1897	3.321	2	1897	4.296	2	1897	7.617
20:00 - 21:00	1	1700	2.235	1	1700	2.176	1	1700	4.411
21:00 - 22:00	1	1700	0.000	1	1700	0.529	1	1700	0.529
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:			66.257			65.540			131.797

Parameter summary

Trip rate parameter range selected: 1700 - 2094 (units: sqm)
 Survey date range: 01/01/02 - 14/06/10
 Number of weekdays (Monday-Friday): 2
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 5

OFF-LINE VERSION Motion High Street Guildford

Licence No: 734001

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : A - FOOD SUPERSTORE

VEHICLESSelected regions and areas:**02 SOUTH EAST**

EX ESSEX 1 days
 WS WEST SUSSEX 1 days

07 YORKSHIRE & NORTH LINCOLNSHIRE

NY NORTH YORKSHIRE 1 days

Filtering Stage 2 selection:

Parameter: Gross floor area
 Range: 2094 to 3000 (units: sqm)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/02 to 14/06/10

Selected survey days:

Saturday 3 days

Selected survey types:

Manual count 3 days
 Directional ATC Count 0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre) 2
 Neighbourhood Centre (PPS6 Local Centre) 1

Selected Location Sub Categories:

Retail Zone 1
 Village 1
 No Sub Category 1

1 EX-01-A-02 CO-OP, COLCHESTER

ESSEX

Total Gross floor area: 3000 sqm
Survey date: SATURDAY 12/07/08

Survey Type: MANUAL

NORTH YORKSHIRE

Total Gross floor area: 2300 sqm
Survey date: SATURDAY 26/09/09

Survey Type: MANUAL

WEST SUSSEX

Total Gross floor area: 2094 sqm
Survey date: SATURDAY 22/03/03

Survey Type: MANUAL

TRIP RATE for Land Use 01 - RETAIL/A - FOOD SUPERSTORE
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 - 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	2	2650	0.547	2	2650	0.226	2	2650	0.773
08:00 - 09:00	3	2465	2.867	3	2465	1.434	3	2465	4.301
09:00 - 10:00	3	2465	4.734	3	2465	3.841	3	2465	8.575
10:00 - 11:00	3	2465	6.857	3	2465	6.289	3	2465	13.146
11:00 - 12:00	3	2465	6.519	3	2465	6.384	3	2465	12.903
12:00 - 13:00	3	2465	6.370	3	2465	6.600	3	2465	12.970
13:00 - 14:00	3	2465	6.925	3	2465	6.884	3	2465	13.809
14:00 - 15:00	3	2465	5.207	3	2465	5.586	3	2465	10.793
15:00 - 16:00	3	2465	5.640	3	2465	5.694	3	2465	11.334
16:00 - 17:00	3	2465	6.059	3	2465	5.991	3	2465	12.050
17:00 - 18:00	3	2465	4.869	3	2465	5.667	3	2465	10.536
18:00 - 19:00	3	2465	4.233	3	2465	5.085	3	2465	9.318
19:00 - 20:00	3	2465	1.812	3	2465	2.516	3	2465	4.328
20:00 - 21:00	2	2650	0.358	2	2650	0.623	2	2650	0.981
21:00 - 22:00	2	2650	0.132	2	2650	0.208	2	2650	0.340
22:00 - 23:00	1	2300	0.043	1	2300	0.130	1	2300	0.173
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			63.172			63.158			126.330

Parameter summary

Trip rate parameter range selected:2094 - 3000 (units: sqm)

Survey date date range:01/01/02 - 14/06/10

Number of weekdays (Monday-Friday):0

Number of Saturdays:3

Number of Sundays:0

Surveys manually removed from selection:3

Appendix G