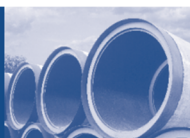
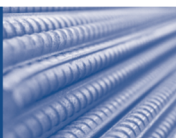


**LAND AT OLDLANDS FARM (PHASE 2)
BOGNOR REGIS
WEST SUSSEX**

**TECHNICAL NOTE
(A27 FONTWELL ROUNDABOUT)**

HANBURY PROPERTIES LTD

Date: 12th January 2016
Ref: 16/0017/5130



DOCUMENT CONTROL RECORD

Document Issue:

Rev	Date	Issue Status	Prepared by	Checked by
-	12/01/16	First Issue for comment	KS	WL
A	12/01/16	Amended as per comments	KS	



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1 Introduction and Overview

- 1.1.1 This Technical Note (TN) has been produced in response to the Highway England (HE) comments (dated 04/01/16) to the assessment of the traffic impacts on the A27 Fontwell roundabout (see **Appendix A**) in relation to the Oldlands Farm Phase 2 proposals.
- 1.1.2 HE has suggested that traffic generated by Oldlands Farm Phase 2 may trigger their 30 trip threshold for assessment of A27 Fontwell roundabout.
- 1.1.3 The outline planning application submitted to Arun DC in relation to the Oldlands Farm Phase 2 scheme was for 20,453sqm B2 together with B8 use. The document 'Land at Oldlands Farm (Phase 2), Bognor Regis, West Sussex – Addendum to Transport Assessment' 15 (Addendum TA) accompanied the application dated 24/09/15.
- 1.1.4 This report confirms the trip rates and concludes that the 30 trip threshold is well above what this development generates.
- 1.1.5 On this bases, MJA conclude no further HE work is required.

2 Oldlands Farm Phase 2

2.1 Trip Generation

2.1.1 The Addendum TA discussed the latest options for Oldlands Farm Phase 2 for: Option 1 – 20,590sqm GFA (B2 & B8); and Option 2 – 17,820sqm GFA (B2 only). However, the traffic flows used were for the total GFA at 21,300sqm (B2) in order to provide a very robust analysis of the local highway network.

2.1.2 Table 2.1 shows the trip generation for Option 1.

Table 2.1: Oldlands Farm Phase 2 – Option 1 (6,940sqm B2 & 13,650sqm B8)						
Uses	Weekday AM peak			Weekday PM peak		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
B2	34	14	48	7	28	36
B8	38	12	50	12	33	45
Total	71	26	98	20	61	89

2.1.3 Table 2.2 shows the trip generation for Option 2.

Table 2.1: Oldlands Farm Phase 2 – Option 2 (17,820sqm B2)						
Uses	Weekday AM peak			Weekday PM peak		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
B2	86	37	123	20	72	91

2.1.4 Table 2.3 shows the trip generation for 21,300sqm GFA B2 use of Oldlands Phase 2. These flows were subsequently used to assess the impact of Oldlands Farm Phase 2.

Table 2.3: Oldlands Farm Phase 2 – Trip generation for 21,300sqm B2						
All B2	Weekday AM peak			Weekday PM peak		
	Arrive	Depart	Two-way	Arrive	Depart	Two-way
Total	103	44	147	23	86	109

2.1.5 It should be noted that the traffic flows in Table 2.3 are higher than those in Table 2.1 and 2.2 and considered very robust. In reality the likely level of traffic generation will be lower than shown in the Addendum TA. Consequently this TN will assess the traffic flows associated with Option 2 in order to understand the traffic movements at the A27 Fontwell roundabout.

2.2 Distribution and Assignment

- 2.2.1 Traffic distribution from the SYSTRA 'Enterprise Bognor Regis – Local Development Order – Transport Assessment' (EBR TA) report dated 11/06/15 was used in the assignment of Oldlands Phase 2 development trips. The EBR TA identifies the traffic distribution for the local area, which is based on the West Sussex County Traffic Model (WSCTM). The Oldlands Farm Phase 2 development trips were assigned to the local highway network in the accordance with the distribution contained within the EBR TA Figures B1 – B10 (See **Appendix B**).
- 2.2.2 The Oldlands Farm Phase 2 development flows for Option 2 are shown in **Appendix C**. It can be seen that for Option 2 the maximum level of trips on the A29 (north) will be 34 two-way trips during the AM peak, whilst only 23 two-way trips will be generated during the PM peak.
- 2.2.3 The A29 stretches for approximately 6km between Oldlands Farm and A27 Fontwell roundabout. A number of settlements including Shripney, Woodgate and Westergate are situated between Oldlands Farm and the A27. It is feasible to assume that a proportion of trips generated by the Oldlands Farm employment development will originate/terminate at these settlements.
- 2.2.4 Beyond Westergate (approximately 4.2km from Oldlands Farm) the B2233 Nyton Road routes to the west to join the A27 at Crockerhill junction. This also provides routes to Nyton, Norton and Tangmere. To the east of Westergate lie the settlements of Fontwell, Eastergate, Walberton and Barnham. It is also likely that trips will originate/terminate at these settlements.
- 2.2.5 The 'Appraisal of Impact Upon A27 Junctions for Development at Site 6 Felpham & Bersted' report dated April 2009 was prepared by MJA Consulting. This was submitted and accepted by WSCC. The document includes trip distribution which indicates that traffic will split 80:20 to the east (Fontwell junction) and west (Crockerhill junction) respectively when travelling along the A29.
- 2.2.6 It is clear that there exists numerous opportunities for route choice for journeys along the A29 (north). Consequently it is considered that only a proportion of development trips

generated by Oldlands Farm Phase 2, which are assigned towards the A27, will route through the Fontwell roundabout. Also it should be remembered that the trips shown in the Addendum TA represent a much higher level of trips than will be expected by the final mix/size at the development when build.

2.3 Traffic Impact

- 2.3.1 Using the traffic flows for Option 2 indicates that during the AM peak period the total of 25 arrivals and 9 departures (34 two-way) will route north along the A29. Assuming 15% of these trips originate/terminate at the settlements discussed above it would reduce the Oldlands Farm Phase 2 trips to 29 two-way trips. Applying a similar split as previously accepted by WSCC at Westergate suggest that only 23 trips would route through the A27 Fontwell roundabout, whilst 6 trips would route via Crockerhill junction.
- 2.3.2 For the PM peak 23 two-way trips are forecast to use the A29. Using the same methodology as for the AM peak, the PM peak results in a total of only 16 two-way trips routing through the A27 Fontwell roundabout.
- 2.3.3 It can be seen that the development trips associated with the Oldlands Farm Phase 2 scheme will be minimal, as will the trips along the A29 (north). These trips will be dissipated through the highway network. Consequently the number of development trips at the A27 Fontwell roundabout will be further reduced to a level below the HE threshold for further assessment.

3 Summary and Conclusions

3.1 Summary

- 3.1.1 This TN provides details of the traffic generation associated with the Oldlands Farm Phase 2 development following a request by HE.
- 3.1.2 It focusses on the Option 2 traffic flows in order to understand the likely traffic movements and the impact at the A27 Fontwell roundabout.
- 3.1.3 Using previously accepted distributions and trip rates the TN demonstrated that the Oldlands Farm Phase 2 scheme will generate minimal trips (34 and 23 two-way) along the A29 (north) during the AM and PM peaks respectively.
- 3.1.4 It has also been demonstrated that a proportion of these trips will be dissipated along the highway network. Consequently reducing the effects on the A27 Fontwell roundabout (approximately 6km away).
- 3.1.5 It is considered that Oldlands Farm Phase 2 trips at the A27 Fontwell roundabout will be in the order of 23 and 16 two-way trips during the AM and PM peaks respectively.

3.2 Conclusion

- 3.2.1 It is concluded that the minimal trips associated with the development at Oldlands Farm Phase 2 will have a negligible effect at the A27 Fontwell roundabout. The level of trips generated does not reach the criteria of 30 trips, therefore it is not considered necessary to undertake further assessment.
- 3.2.2 No trip reduction has been applied to the development trips in relation to any travel planning/sustainable travel strategies, which would further reduce vehicle movements at the Fontwell junction.

APPENDIX A

HE Correspondence

From: Bowie, David
Sent: 04 January 2016 14:18
To: Woodward, Matthew
Subject: RE: AL/58/15/OUT - Highways England

Hi Matt,

Happy New Year to you. I'm just dealing with an MP letter on this very matter following a news paper article prior to Christmas.

Whilst I don't necessarily disagree with Dominic Smiths view on this matter we still don't know what impact this development has on Fontwell Roundabout and this should really have been included within the TA - the extra work required by the consultant is minimal as we both know. I suspect that much of the traffic going north and south on the A29 Shripney Road to and from the development site will ultimately end up through Fontwell Roundabout and that is likely to have an effect on its peak hours operation. Highways Englands position has been to request additional analysis when an additional 30 or more trips are placed on sensitive junctions. I suspect this application more than exceeds that amount.

I note Dominic's point over the agreed Fontwell improvements potentially taking into account this development (will check) but if this application were brought forward before these improvements then surely mitigation should be provided to ensure a no worsening in the meantime? Also should this applicant be making a contribution to those agreed improvements at Fontwell? Without knowing the effects we are not in a position to understand what that contribution might need to be? Is this something that the council are dealing with as part of wider S106 improvements?

As you are probably aware Systra have been employed to carry out further modelling work on the EBR LDO and Local Plan the outcome of which is some way off as they have only just been appointed. Their work will give a more robust understanding of the network with EBR but that will be too late for determination of this application.

Is it possible for you to shed some light on these issues before I formally respond as at this point I still don't consider Highways England has sufficient information on which we can determine this application. I'd also be grateful if you could advise when the council wish to determine this application – has it been scheduled for a DC committee?

Sorry about all the questions but hope you understand my concerns.

Best regards

David

David Bowie

Highways England | Bridge House | 1 Walnut Tree Close | Guildford | Surrey | GU1 4LZ

Mobile: [REDACTED]

Web: <http://www.highways.gov.uk>

APPENDIX B

Extracts from SYSTRA TA

(Figures B1 – B10)

Figure B1 - 2014 AM Peak Traffic Movements (PCUS)

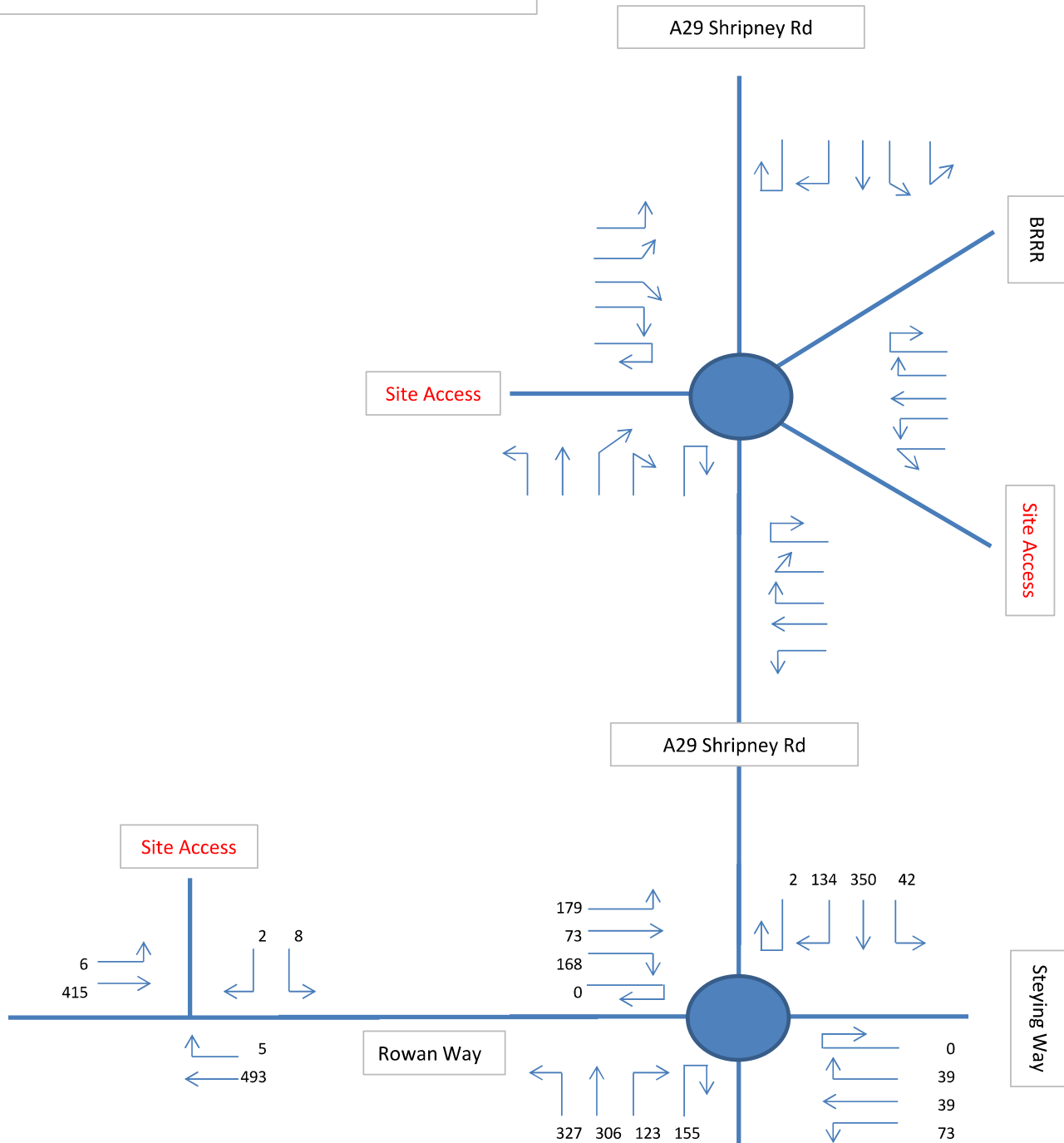


Figure B2 - 2014 PM Peak Traffic Movements (PCUS)

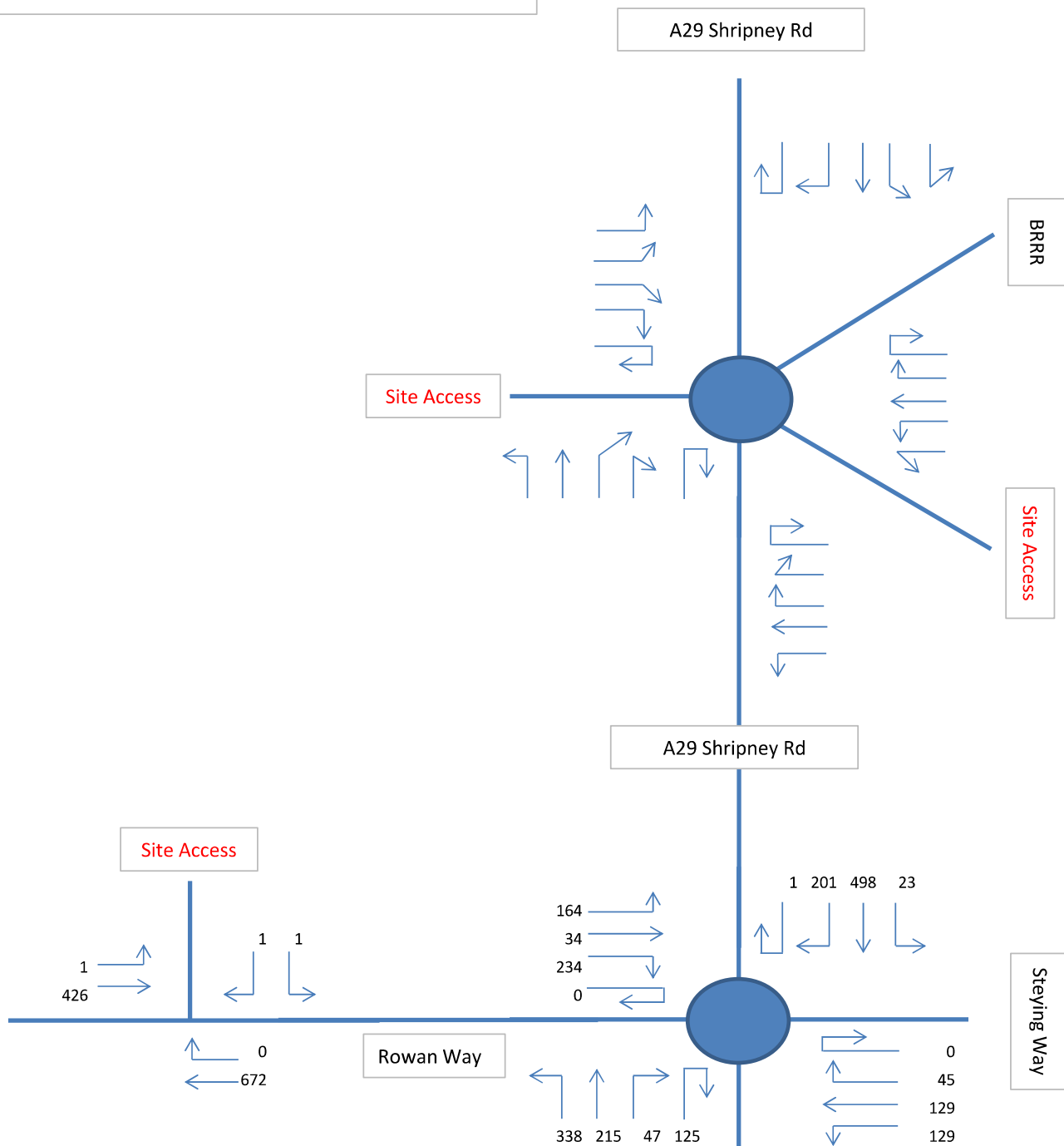


Figure B3 - Base Year WSCTM Traffic Flows

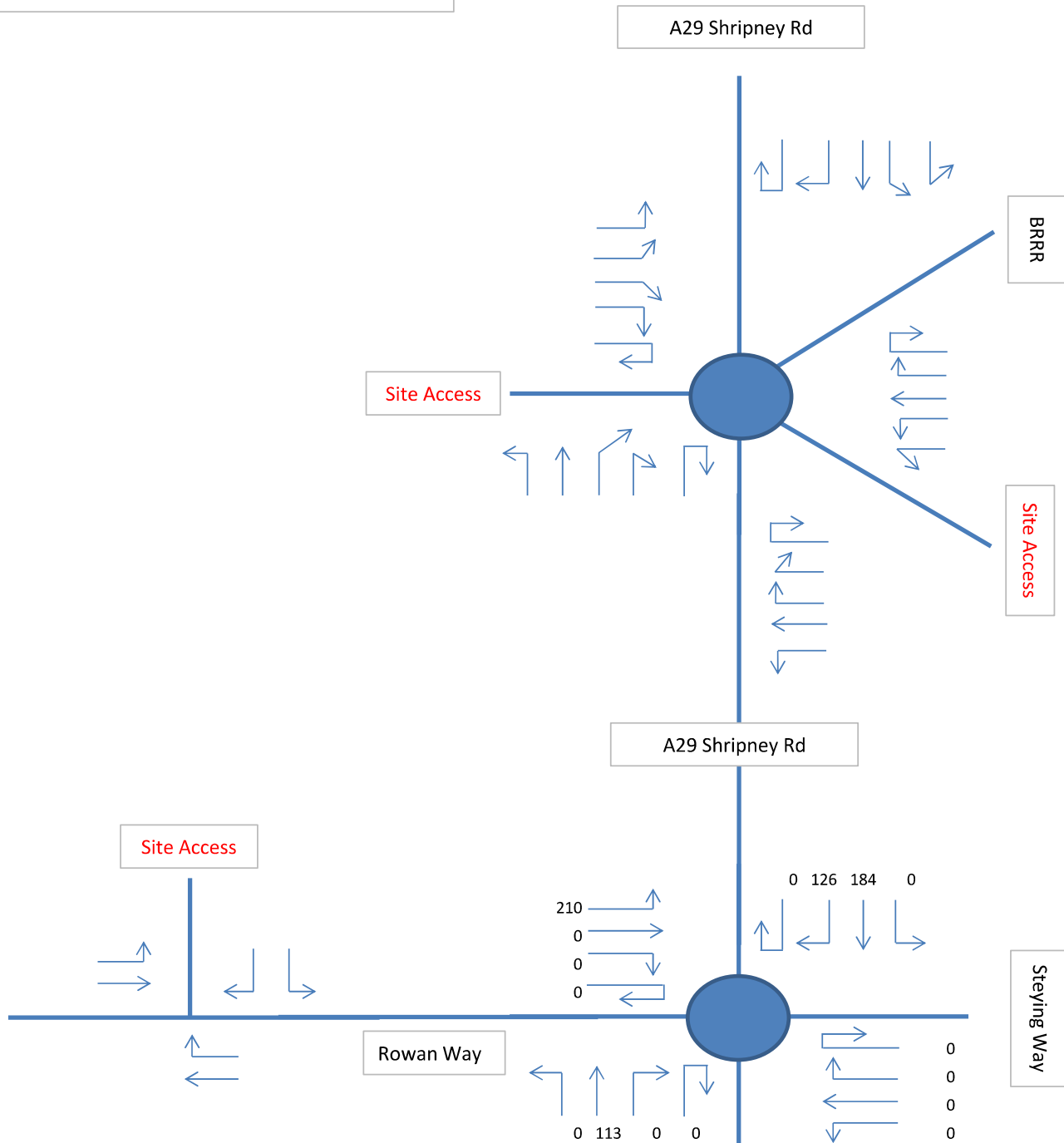


Figure B4 - WSCTM Traffic Flows 'Manual Adjustments'

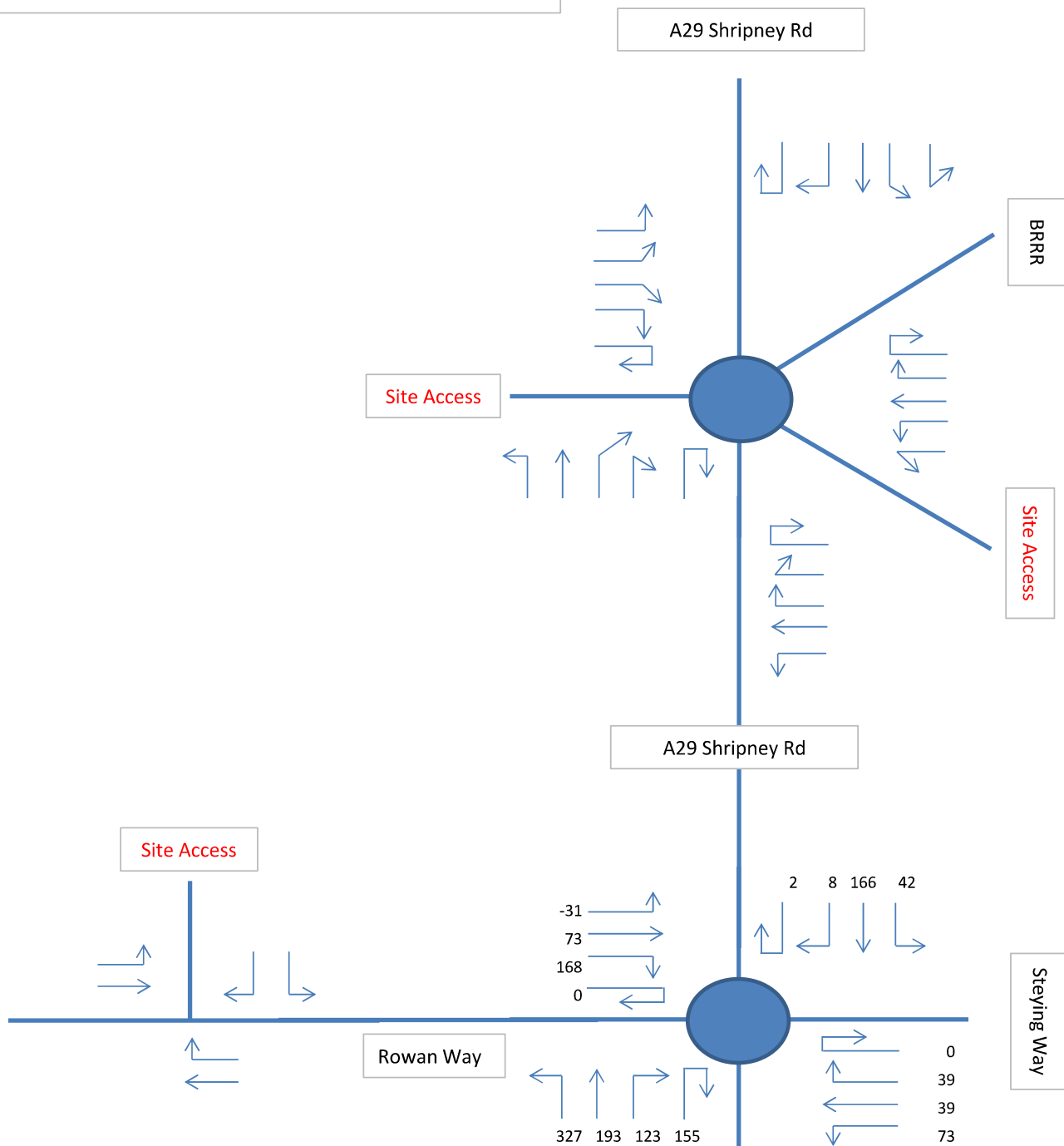


Figure B5 - 2031 AM Peak (Do Minimum)

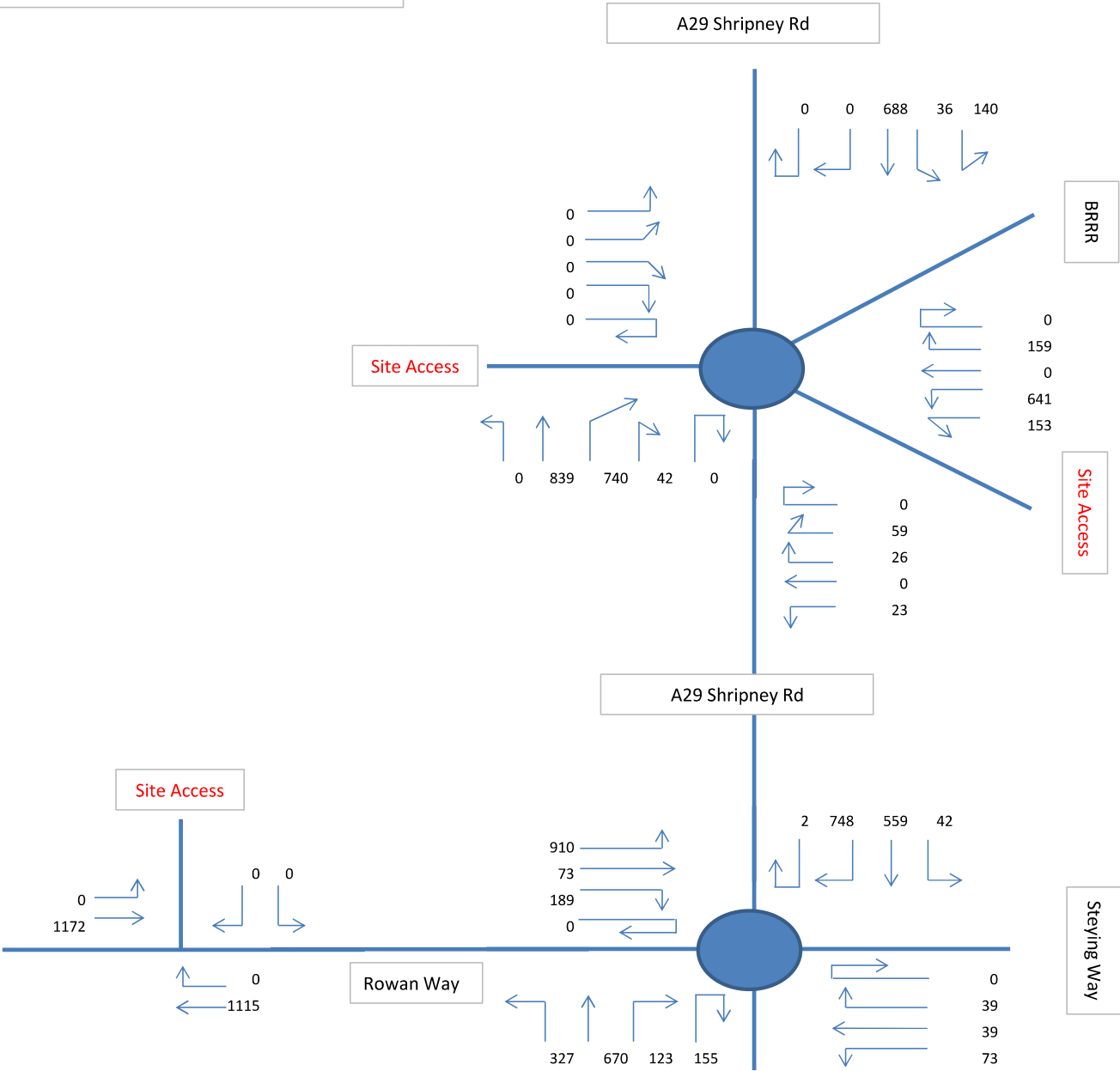


Figure B6 - 2031 PM Peak (Do Minimum)

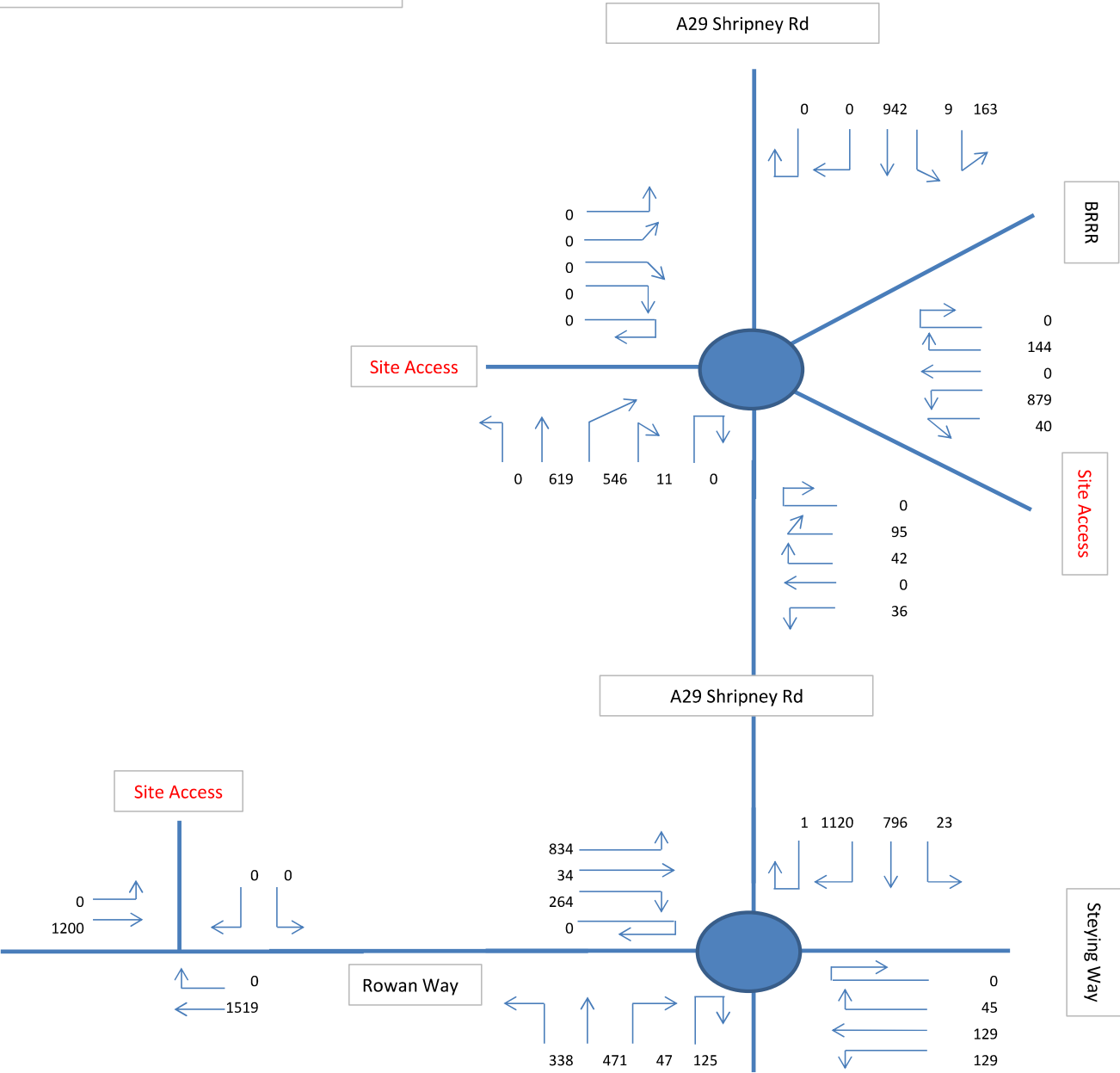


Figure B7 - 2031 AM Peak (Do Something 1)

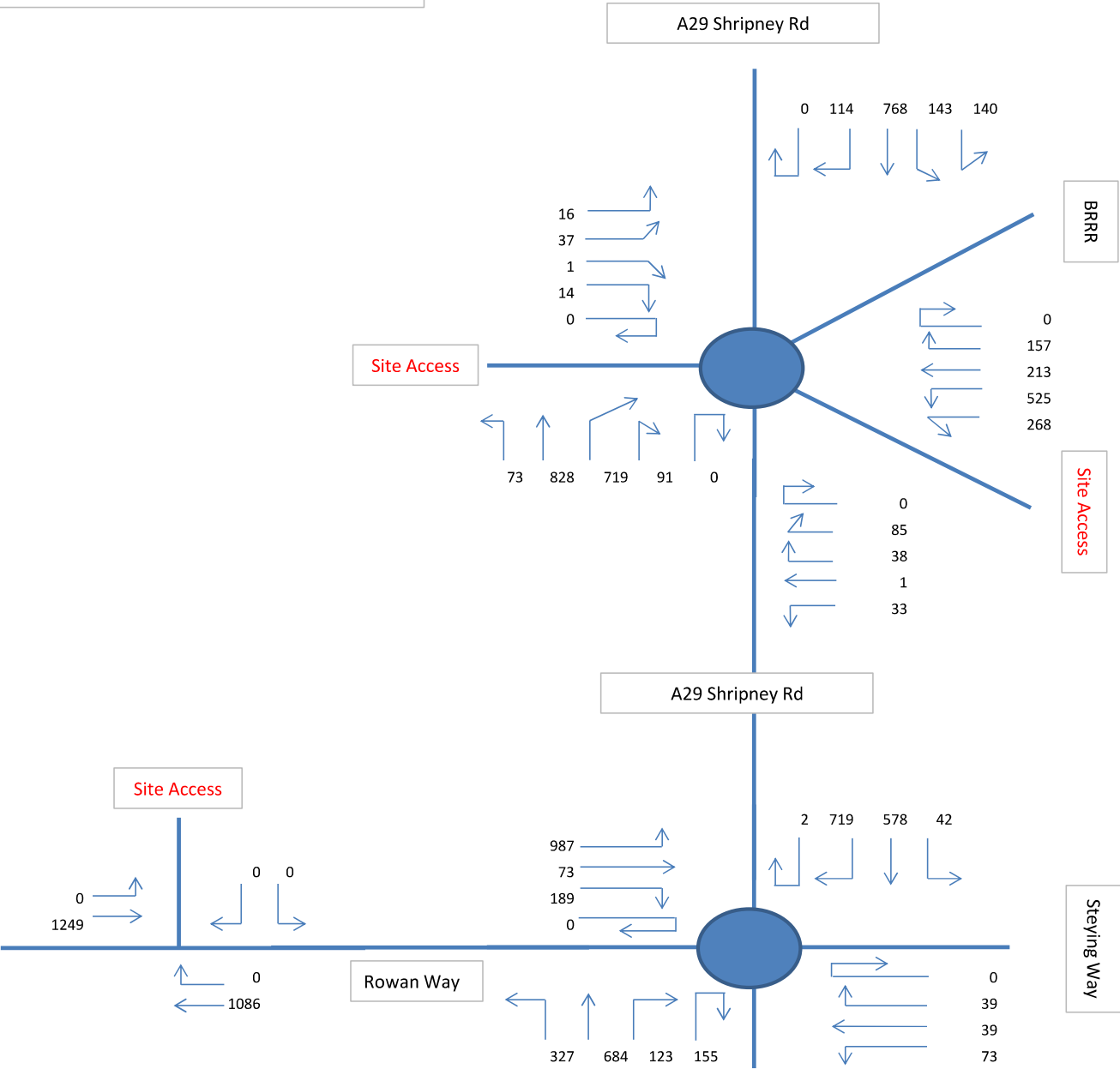


Figure B8 - 2031 PM Peak (Do Something 1)

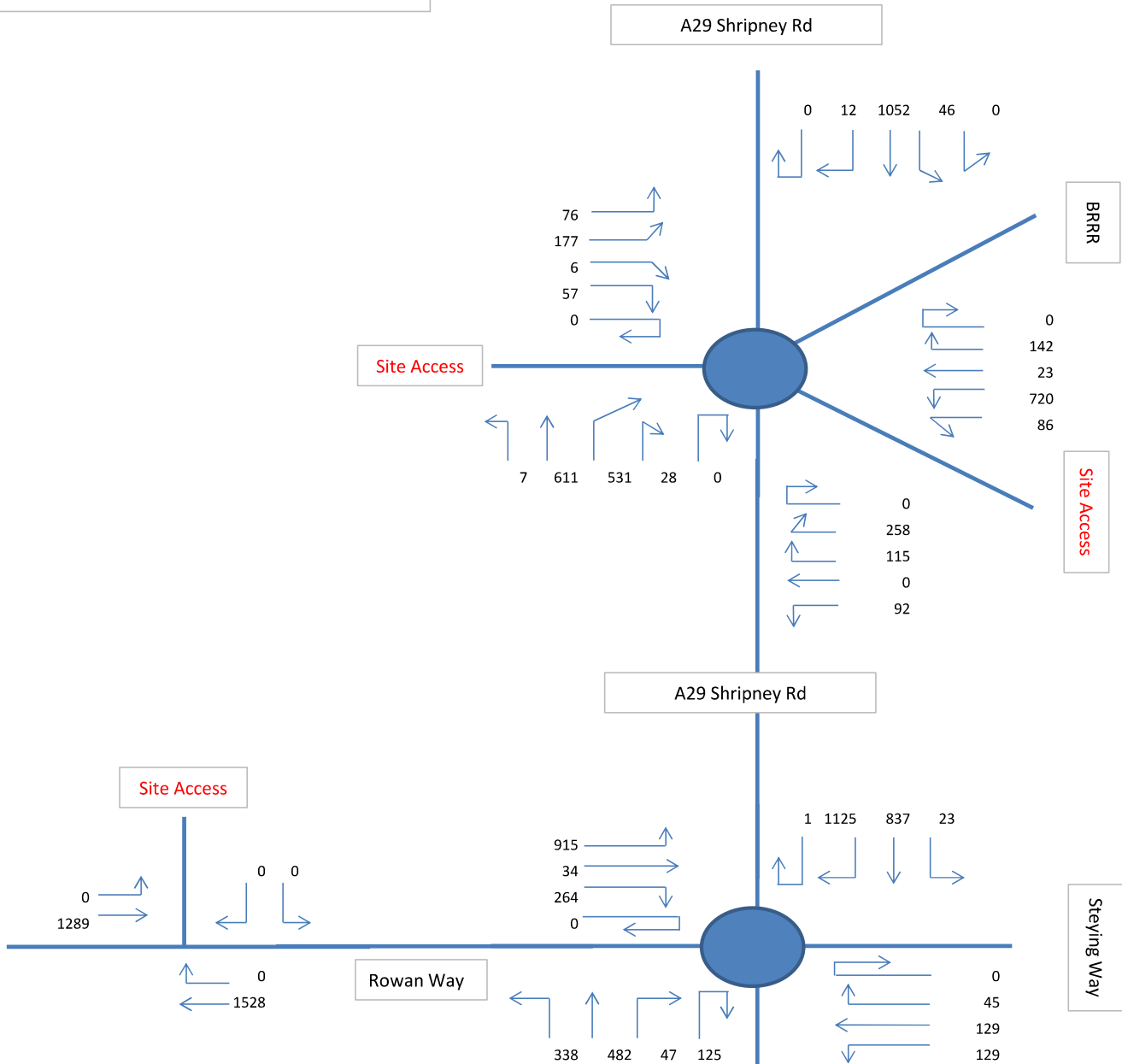


Figure B9 - 2031 AM Peak (Do Something 2)

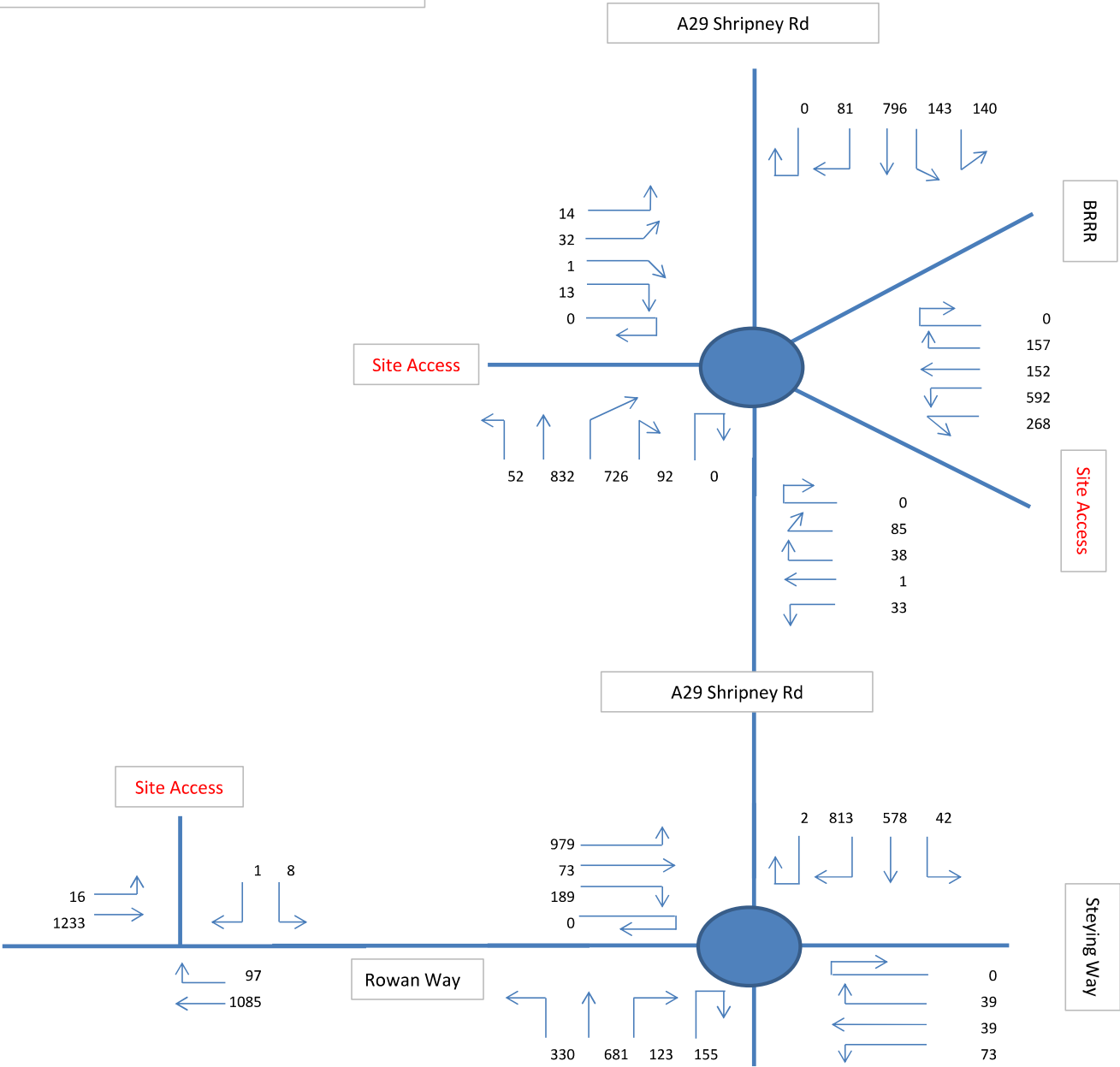
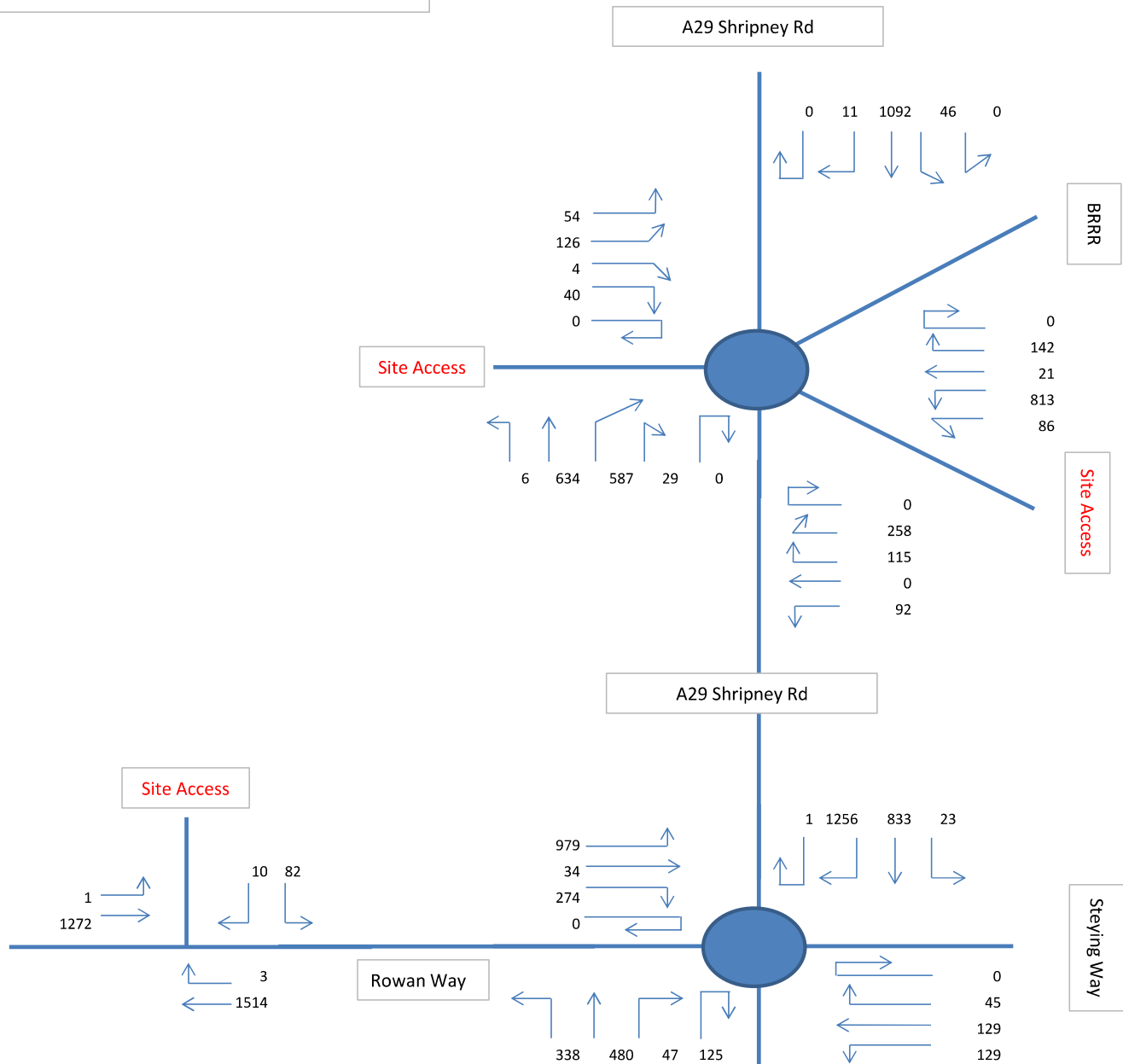


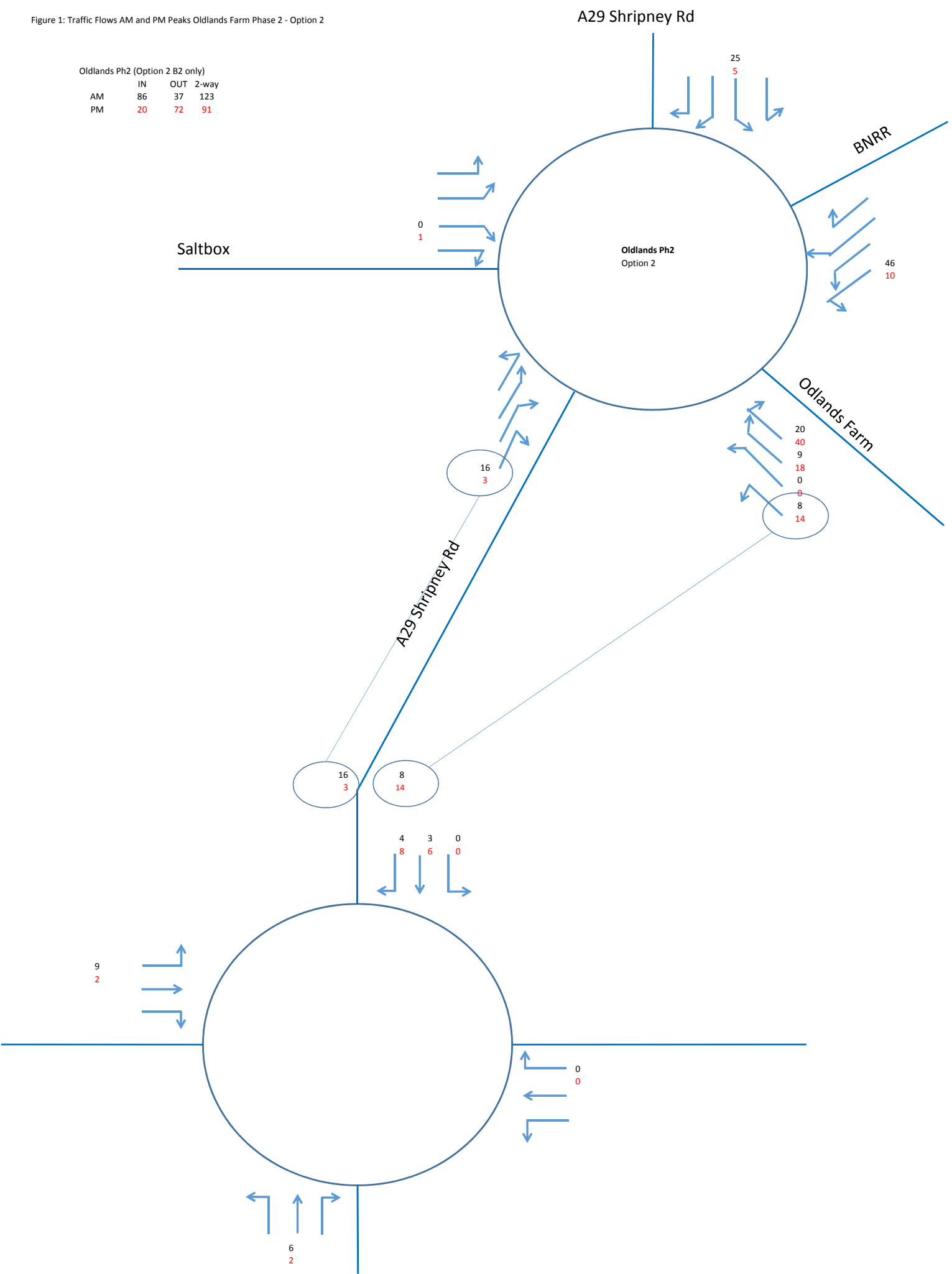
Figure B10 - 2031 PM Peak (Do Something 2)



APPENDIX C

Development Traffic Flows

Figure 1: Traffic Flows AM and PM Peaks Oldlands Farm Phase 2 - Option 2



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