



Hampshire
County Council

Shepherd's Spring Playing Fields

Transport Assessment



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Transport Assessment

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Job No. STH2550

Report No. 001

Prepared by MW

Verified SM

Approved by VB

Status FINAL

Issue No. 2

Date 13 October 2010



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Contents Amendments Record

This document has been issued and amended as follows:

Status/Revision	Revision description	Issue Number	Approved By	Date
DRAFT	DRAFT FOR DISCUSSION	1	P. Marshall	20/08/2010
FINAL	FINAL	2	V. Balboa	13/10/2010

Contents

1	INTRODUCTION	1
2	POLICY CONTEXT	3
	National Policy	3
	Regional Policy	5
	Local Policy	5
	Local Parking Policy	6
3	EXISTING SITUATION	7
	Existing Site Information	7
	Highway Network	7
	Collision Analysis	10
	Local Services and Amenities	10
	Site Accessibility	10
4	DEVELOPMENT PROPOSALS	13
	Proposed Trip Generation	14
	Traffic Distribution and Assignment	14
5	CAPACITY ASSESSMENT	17
	Newbury Road (A343)/Smannell Road Roundabout Junction Assessment	17
	Growth Factors	17
	MDA Traffic Generation	19
	Newbury Road A343/Smannell Road	21
	Site Access Assessment	23
6	SITE TRANSPORT STRATEGY	24
	Introduction	24
	Transport Measures	24
	Transport Contribution	24
7	SUMMARY AND CONCLUSIONS	25

Tables and Figures

Table 2.1	Car Parking Standards for Residential Developments	6
Table 3.1	A Summary of Bus Services within 400m of the Site	11
Table 4.1	Proposed Development Quantum	13
Table 4.2	Vehicular Trip Rates for the Proposed Development (Rate per Dwelling)	14
Table 4.3	Vehicle Trips for the Proposed Development	14
Table 5.1	Growth Rates to 2015	17
Table 5.2	Newbury Road A343/Smannell Road Base 2010 Scenario ARCADY Results	22
Table 5.3	Newbury Road A343/Smannell Road Base 2015 Scenario ARCADY Results	22



Table 5.4 Newbury Road A343/Smannell Road Base 2015 + Development Scenario ARCADY Results.....	22
Table 5.5 Percentage Impact	23
Table 5.6 Site Access PICADY Results	23

Figure 1.1 Site Location Plan	1
Figure 3.1 Photo Showing the Existing Site.....	7
Figure 3.2 Existing Access into the Site.....	8
Figure 3.3 Local Highway Network	9
Figure 3.4 Bus Stop Locations	10
Figure 3.5 Photo of Pedestrian and Cycle Facility on Smannell Road	12
Figure 3.6 Photo of Pedestrian and Cycle Facility on Smannell Road	12
Figure 4.1 AM Peak Hour Trip Distribution	15
Figure 4.2 PM Peak Hour Trip Distribution	15
Figure 4.3 AM Peak Hour Trip Assignment.....	16
Figure 4.4 PM Peak Hour Trip Assignment.....	16
Figure 5.1 2010 AM Peak Base Traffic Data.....	17
Figure 5.2 2010 PM Peak Base Traffic Data.....	18
Figure 5.3 2015 AM Peak Base Traffic Data (with TEMPRO/ NTM Growth Added)	18
Figure 5.4 2015 PM Peak Base Traffic Data (with TEMPRO/ NTM Growth Added)	19
Figure 5.5 AM Peak MDA Traffic Flows	20
Figure 5.6 PM Peak MDA Traffic Flows	20
Figure 5.7 2015 AM Peak Base Traffic Data (with Growth and MDA Traffic Added)	21
Figure 5.8 2015 PM Peak Base Traffic Data (with Growth and MDA Traffic Added)	21

Appendices

APPENDIX A Discussions with Test Valley Borough Council
APPENDIX B Accident Statistics
APPENDIX C Visibility Splays
APPENDIX D Swept Path Analysis
APPENDIX E Traffic Survey Data
APPENDIX F ARCADY Output Files: Newbury Road/ Smannell Road Roundabout
APPENDIX G PICADY Output Files: Site Access Junction
APPENDIX H Residential Travel Plan

1 Introduction

- 1.1 JMP Consultants (JMP) has been commissioned by Hampshire County Council (HCC) to prepare a Transport Assessment (TA) in support of a residential development on land formerly used as a playing field by Shepherd's Spring Infant and Junior schools, Andover. Following the closure of the schools, the adjoining playing fields have become available for redevelopment. The former school buildings are now occupied by Centre's for Education and Children (CEC) following separate planning applications.
- 1.2 This TA provides an update to a TA report prepared in October 2008 to take account of the changes of layout, reduction in unit numbers and other emerging developments and changes to the surrounding transport networks.
- 1.3 The proposed development is located adjacent to Newbury Road (A343) to the rear of the CEC buildings; this is approximately 1.8 km to the north east of Andover town centre. The location of the site is shown in Figure 1.1. Approximately 50 residential dwellings are proposed on the site and this would include a mix of houses and flats, with up to 40% of these being designated as affordable properties. The proposed development will utilise an existing access onto Smannell Road.

Figure 1.1 Site Location Plan



- 1.4 The scope of the Transport Assessment has been discussed with representatives of Test Valley Borough Council; this correspondence is included within **Appendix A**.

- 1.5 The East Anton Major Development Area (MDA) is currently being constructed to the east of the site incorporating a mix of land uses including 2,500 residential units, employment, education, retail, community, health and recreation facilities; it is understood that 150 residential dwellings are already built and occupied.
- 1.6 The TA for the MDA has been considered and given the close proximity of the two sites, a number of off site highway improvements associated with the MDA will be beneficial to the proposed residential development.
- 1.7 This report is set out in the following chapters:
- Chapter 2 sets out the policy context of the development;
 - Chapter 3 describes the existing conditions and baseline transport data;
 - Chapter 4 presents the development proposals including trip generation and parking;
 - Chapter 5 considers the development impacts and mitigation measures; and
 - Chapter 6 provides the conclusions

2 Policy Context

- 2.1 This chapter sets out national, regional and local transport policy to provide context for the proposed development.

National Policy

Planning Policy Guidance – PPG13

- 2.2 The core objectives of PPG13 are to integrate planning and transport policy at the national, regional, strategic and local level 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 by car.’*
- *‘Reduce the need to travel, especially by car.’*

- 2.3 PPG13 acknowledges that the availability of car parking has a major influence on the means of transport people choose for their journeys. It states that: *‘Reducing the amount of parking in new development (and in the expansion and change of use in existing development) is essential, as part of a package of planning and transport measures, to promote sustainable travel choices. At the same time, the amount of good quality cycle parking in developments should be increased to promote more cycle use.’*

- 2.4 It continues that local authorities should:

- *‘Require developers to provide designated parking spaces for disabled people in accordance with current good practice.’*
- *‘Require convenient safe and secure cycle parking in development at least at levels consistent with the cycle strategy in the local transport plan; and consider appropriate provision for motorcycle parking.’*

- 2.5 PPG13 suggests that local authorities should promote walking and cycling through measures including the provision of convenient, safe and secure cycle parking and changing facilities in developments.

Planning Policy Statement – PPS1

- 2.6 PPS1: Delivering Sustainable Development (2005) sets out the overarching policies on the delivery of sustainable development through the planning system. A widely used definition of sustainable development is: *‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs.’*

- 2.7 PPS1 states that the following principles should be applied to contribute to the delivery of sustainable developments:

‘Regional planning bodies and local planning authorities should ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change – through policies which reduce energy use, reduce emissions (for example, by encouraging patterns of development which reduce the need to travel by private car, or reduce the impact of moving freight), promote the development of renewable energy resources, and take climate change impacts into account in the location and design of development.’

2.8 PPS1 also indicates that in preparing development plans, planning authorities should seek to:

- *'Provide improved access for all to jobs, health, education, shops, leisure and community facilities, open space, sport and recreation, by ensuring that new development is located where everyone can access services or facilities on foot, bicycle or public transport rather than having to rely on access by car, while recognising that this may be more difficult in rural areas.'*
- *'Reduce the need to travel and encourage accessible public transport provision to secure more sustainable patterns of transport development. Planning should actively manage patterns of urban growth to make the fullest use of public transport and focus development in existing centres and near to major public transport interchanges.'*

Planning Policy Statement – PPS3

2.9 National policy with regards to housing is formulated in PPS3: Housing which has recently been updated (June 2010).

2.10 The Government's key housing policy goal is to ensure that everyone has the opportunity of living in a decent home, which they can afford, in a community where they want to live. To achieve this, the Government is seeking:

- *'To achieve a wide choice of high quality homes, both affordable and market housing, to address the requirements of the community;*
- *To widen opportunities for home ownership and ensure high quality housing for those who cannot afford market housing, in particular those who are vulnerable or in need;*
- *To improve affordability across the housing market, including by increasing the supply of housing; and*
- *To create sustainable, inclusive, mixed communities in all areas, both urban and rural.'*

2.11 Paragraph 12 states that: *'Good design is fundamental to the development of high quality new housing, which contributes to the creation of sustainable, mixed communities.'*

2.12 Paragraph 16 outlines matters to consider when assessing design quality seeking to ensure that a development:

- *'Is easily accessible and well-connected to public transport and community facilities and services, and is well laid out so that all the space is used efficiently, is safe, accessible and user-friendly';*
- *'Is well integrated with, and complements, the neighbouring buildings and the local area more generally in terms of scale, density, layout and access.'*

2.13 Paragraph 36 advises that housing should be developed in suitable locations which offer a range of community facilities. The policy seeks to ensure that the facilities are accessible by sustainable transport modes. It goes on to mention that this should be achieved by making effective use of land, existing infrastructure and available public and private investment.

Development Compliance

2.14 The site is accessible by public transport with two bus stops located outside of the site entrances and also benefits from the established walking and cycling networks. Additionally, a Travel Plan will be implemented to encourage residents to use sustainable modes of transport and to reduce reliance on the private car. The predominant land use in the site's vicinity is residential therefore the development will be well integrated with and complement the local area. The proposed

development will offer different housing mix including affordable housing and thus contributing to the Government's goal of creating diverse and mixed communities. The development therefore accords with national policies.

Regional Policy

South East Plan

- 2.15 The South East plan was withdrawn on 6th July 2010.

Local Policy

Hampshire County Council Local Transport Plan 2006 – 2011

- 2.16 The Local Transport Plan (LTP) sets out HCC's transport strategy for the period 2006-2011. The overall vision for this LTP is of a transport strategy that:

- *'Enhances quality of life and economic prosperity by connecting people, communities, employment, goods, services and amenities.'*

- 2.17 Chapter 8 sets out transport strategy for Central Hampshire including the town of Andover. The strategy refers to the construction of an MDA that is expected to provide around 2,500 new residential dwellings and associated facilities. Given the proximity of the MDA to the proposed site, the proposed residential development will benefit from a number of transport proposals associated with the MDA.

- 2.18 The long-term strategy for Andover focuses on: *'Accessibility improvements and improving travel choices to deal with prevailing issues and potential increasing congestion beyond the next five years.'*

- 2.19 In order to be able to work towards this goal, the key objectives are as follows:

- *'Provide improvements to pedestrian and cycle routes, producing complete routes and overcoming severance and ensuring adequate maintenance of these routes.'*
- *'Redevelop the existing bus station.'*
- *'Promoting bus use through QBPs [Quality Bus Partnerships], infrastructure improvements and better travel information, including real-time information at bus stops and other locations.'*
- *'Addressing localised congestion issues.'*

Test Valley Borough Local Plan 2006

- 2.20 The Local Plan contains proposals to guide development in the Borough to 2011 and beyond. Policies on transport are contained within Chapter 7 of the Plan.

- 2.21 Policy TRA 01 – 'Travel Generating Development' states a development will be permitted provided that it:

- *'Does not have an adverse impact on existing pedestrian, cycle or public transport users of the highway;*
- *'Includes measures that minimise its impact on the transport network;*
- *'Its location is well served by public transport; and*
- *'Is accessible to pedestrians and cyclists.'*

- 2.22 Policy TRA 01 continues to mention that all developments which generate an increase in movements should contribute to the objectives of reducing the need to travel.
- 2.23 The Plan states that new development should not inhibit existing patterns of travel by sustainable modes. It continues that: *'Developments should maximise accessibility to key destinations through their location and design and that it should be related to existing or proposed transport facilities in order to promote trips, which are made by non-car modes of transport.'*
- 2.24 Policy TRA 03 states that: *'development will be permitted provided that it would not result in either the loss or relocation to less convenient and accessible locations of public transport infrastructure.'*
- 2.25 Policy TRA 05 seeks to ensure that a safer access for all users is provided at all developments.
- 2.26 Policy TRA 06 deals with internal layout of sites seeking to ensure that is safe, attractive and functional for all highway users and that it connects with existing and proposed links to key destinations.
- 2.27 Policy TRA 09 states that: *'Development will be permitted provided that it does not have an adverse impact on the function, safety and character of the highway network.'*

Development Compliance

- 2.28 The site is well served by public transport and is also accessible by walking and cycling. The internal pedestrian links will be connected with the existing pedestrian network. The site will be developed in the already established residential area and will therefore be well integrated with the existing land uses in the vicinity.

Local Parking Policy

- 2.29 Car and cycle parking standards are set out in Annex 1 of the Test Valley Borough Local Plan 2006. The car and cycle parking provision should comply with standards set in Table 2.1 below. Car parking standards are expressed as maximum with cycle parking standards being expressed as minimum.

Table 2.1 Car Parking Standards for Residential Developments

Unit Type	Car Parking Standard	Cycle Parking Standards	
		Long Stay	Short Stay
1 Bed Units	1.0 space per unit	1 space per unit	1 loop/hoop per unit
2 - 3 Bed Units	2.0 spaces per unit	2 spaces per unit	1 loop/hoop per unit
4 or More Bed Units	3.0 spaces per units	2 spaces per unit	1 loop/hoop per unit

Test Valley Local Borough Local Plan 2006.

3 Existing Situation

- 3.1 This chapter describes the existing conditions and baseline transport data for the site, covering sustainable and active travel modes.

Existing Site Information

- 3.2 The development site is currently a green field which was formerly used as a playing field for Shepherd's Spring Infant and Junior Schools. The schools have now closed and have been replaced by Centres for Education and Children (CECs) resulting in the playing field becoming available for development. The existing field can be seen in Figure 3.1.

Figure 3.1 Photo Showing the Existing Site



Highway Network

- 3.3 The site is accessed via Smannell Road; this is a 2 single lane carriageway with a width of approximately 7.2m near the CECs entrance. The existing site access arrangement is shown by the photo in Figure 3.2.

Figure 3.2 Existing Access into the Site



- 3.4 To the west Smannell Road connects with Newbury Road (A343) at a roundabout while to the east it connects with Icknield Way at a mini roundabout. Further east, Smannell Road provides access to the MDA which is currently being constructed. Smannell Road has a speed limit of 30mph.
- 3.5 Newbury Road (A343) provides access to the Andover 'ring road', the town centre and the wider road network. Within the vicinity of the site, this road is a dual carriageway with central verge. Newbury Road (A343) has a speed limit of 40mph road. Figure 3.3 shows the local highway network.

Collision Analysis

- 3.6 A total of two collisions occurred in the vicinity of the site for the period from 01/06/07 – 31/05/10. The area of interest and the details of the collisions have been included in **Appendix B**.
- 3.7 The two collisions occurred at the roundabout junction of Smannell Road and Newbury Road (A343). The first collision involved a car clipping the kerb and colliding with a motorcycle. The other collision involved a pedestrian who attempted to cross Newbury Road prior to the roundabout but failed to look properly and collided with a car. Both collisions were of slight severity.

Local Services and Amenities

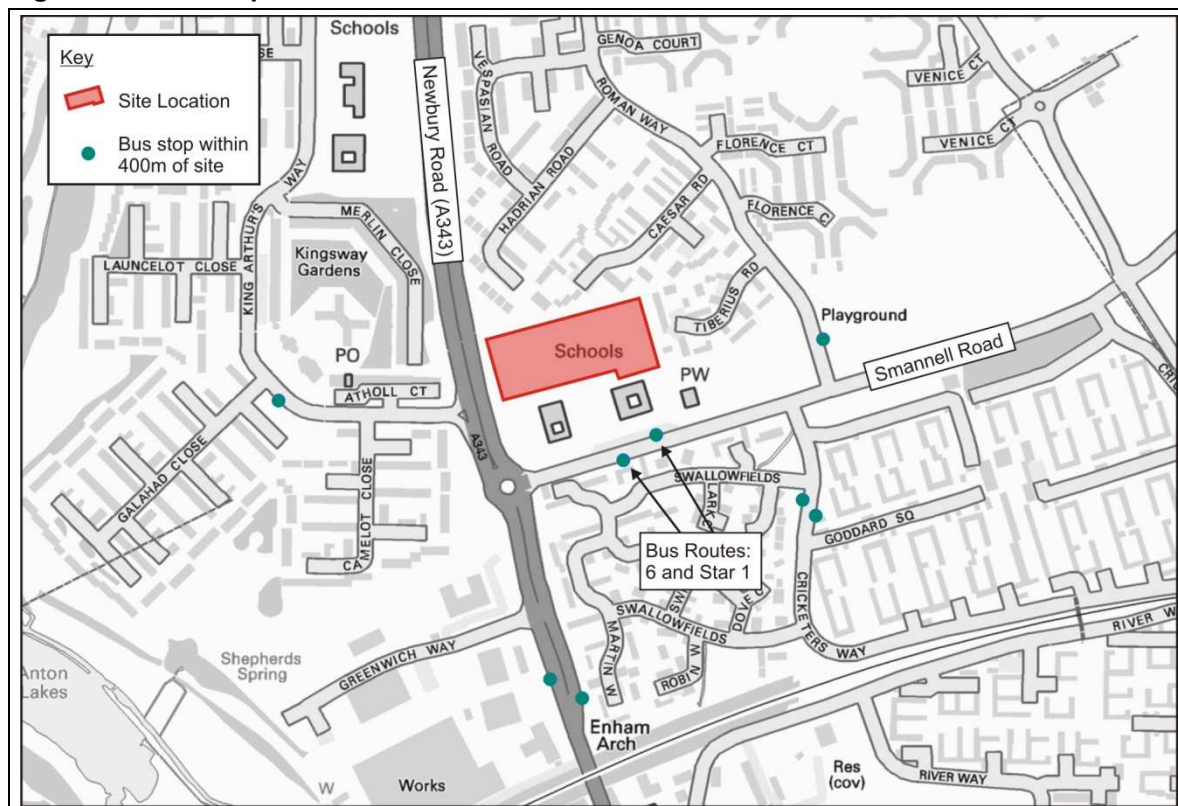
- 3.8 The surrounding area is predominately residential and already benefits from a choice of shops, education and leisure amenities. Local employment is also provided along the southern section of A343 Newbury Road at various retail outlets and on the Walworth Industrial Estate to the south east of the site. Andover Town Centre is approximately 1.8km from the site. This provides a number of facilities including banking and retail.

Site Accessibility

Public Transport Services

- 3.9 The site is served by two bus routes with the closest bus stops located on Smannell Road approximately 25 metres from the site access; the location of the bus stops are shown in Figure 3.4.

Figure 3.4 Bus Stop Locations



- 3.10 The high frequency Stagecoach Star 1 service runs every 10 minutes throughout most of the day on a weekday and Saturday. A summary of bus services within 400 metres of the site is provided in Table 3.1.

Table 3.1 A Summary of Bus Services within 400m of the Site

Bus Route	To	From	Frequency	
			08:00 – 09:00	17:00 – 18:00
Star 1*	Andover Bus Station	Andover Bus Station	6	6
6	King Arthur's Way	Andover Bus Station	1	2
6	Andover Bus Station	King Arthur's Way	1	2
Total			8	10

*Loop Service

- 3.11 As can be seen there is a total of 8 and 10 bus services available between 08:00 – 09:00 hours and 17:00 – 18:00 hours respectively.
- 3.12 Andover Railway Station is located approximately 2 km to the south west of the site. The station is served by South West trains and provides connections to destinations including Bristol, Exeter, London Waterloo, Salisbury and Southampton.

Walking and Cycling Networks

- 3.13 The site is accessible by foot and by bicycle. A number of footways exist in the vicinity of the site providing a pleasant walking environment.
- 3.14 The site also benefits from the pedestrian/cycle improvements delivered as part of the section 106 agreement for the East Anton MDA. These include a 3m wide cycleway/footway on Smannell Road, a pedestrian crossing point and a raised table. Figure 3.5 shows a photo of the recently completed pedestrian and cyclist facilities on Smannell Road.
- 3.15 At the junction of Smannell Road and Roman Way to the east of the site a pedestrian island has been provided along with extended dropped kerbs and bollards. This can be seen in Figure 3.6.

Figure 3.5 Photo of Pedestrian and Cycle Facility on Smannell Road



Figure 3.6 Photo of Pedestrian and Cycle Facility on Smannell Road



4 Development Proposals

- 4.1 This chapter describes the proposed development, future trip generation and site access arrangements.

Development Proposals

General

- 4.2 The proposals include a development of approximately 50 residential units comprising a mix of two, three and four dwellings with up to 40% being designated as affordable housing. A summary of the proposed dwellings are provided in Table 4.1.

Table 4.1 Proposed Development Quantum

Unit Type	No. Of Units
2 Bed House	22
3 Bed House	24
4 Bed House	4
Total	50

Site Access

- 4.3 It is proposed that the vehicular access is provided via the existing T-junction onto Smannell Road.
- 4.4 A visibility splay for the site access is provided in **Appendix C** based on the Manual for Streets requirement of 2.4m X distance by 40m Y distance for 30mph roads. The splays demonstrate that suitable visibility can be achieved. It is noted that a 90m Y distance can also be achieved from a 2.4m X distance.
- 4.5 Swept path assessments for the site access and car park are also shown in **Appendix D**. Swept paths are provided for medium cars, a minibus, refuse vehicle and fire tender, which demonstrate the suitability of the site access.

Pedestrian Access

- 4.6 Pedestrians would be able to access the development from Smannell Road, Newbury Road, Augustas Walk and Tiberius Way. Internal routes have been designed so pedestrians are considered above vehicular traffic. The pedestrian links will tie in with the surrounding pedestrian network.
- 4.7 As part of the Section 106 agreement for the MDA, the pedestrian crossing point on Smannell Road will be upgraded to a signalised crossing. In addition, a signalised pedestrian crossing will be provided on the A343 Newbury Road north arm of the Newbury Road/ Smannell Road roundabout. Improvements will also be made to footways on Newbury Road.
- 4.8 As part of the development proposals, a new off-site pedestrian link is proposed on the western side of the development. This will integrate with the measures to improve pedestrian access at the roundabout and provide a continuous at-grade pedestrian link along the A343 Newbury Road to the back of the development.

Car and Cycle Parking

- 4.9 A total of 89 car parking spaces are proposed; this is within the maximum permitted, as defined by the Test Valley Borough Local Plan (2006). Cycle parking provision will meet the standards within the Test Valley Borough Local Plan (2006).

Proposed Trip Generation

- 4.10 The weekday trip generation for the proposed 50 dwelling residential development has been based upon surveys within the TRICS 2010(b) v6.6.1 database. Surveys from Mondays and Fridays were excluded from the analysis so that 'neutral' days of Tuesday, Wednesday and Thursday were only included.
- 4.11 The TRICS sites were chosen based on the TRICS Best Practice Guide (2010). Whilst the guidance suggests the location of the site within the UK is not a significant influence on the trip rate, this analysis excludes surveys of sites from Scotland, Wales, Ireland and Greater London.
- 4.12 The location compatibility matrix (Table 4.1 in the TRICS Best Practice Guide) demonstrates that surveys chosen from sites in Suburban Areas, Edge of Town, and Neighbourhood Centres would be most compatible for use in this analysis. Therefore, only sites within both a residential zone and Suburban Areas, Edge of Town, and Neighbourhood Centres were chosen for the analysis.
- 4.13 The weekday vehicle trips rates used in this assessment are shown in Table 4.2 for the AM peak hour (8:00 to 9:00) and the PM peak hour (17:00 to 18:00). The development trip generation is shown in Table 4.3.

Table 4.2 Vehicular Trip Rates for the Proposed Development (Rate per Dwelling)

Hour	Arrivals	Departures	Total
08:00 – 09:00	0.157	0.381	0.538
17:00 – 18:00	0.376	0.234	0.61
Daily	2.651	2.725	5.376

Table 4.3 Vehicle Trips for the Proposed Development

Hour	Arrivals	Departures	Total
08:00 – 09:00	8	19	27
17:00 – 18:00	19	12	31
Daily	133	137	270

Traffic Distribution and Assignment

- 4.14 Development traffic has been assigned to Smannell Road and Newbury Road (A343)/Smannell Road roundabout based on existing traffic flow assignment from the survey undertaken on 14th July 2010 for the AM and PM peak hour. The trip distribution for the AM and PM peak hours are shown in Figures 4.1 and 4.2. The traffic survey is included within **Appendix E** of this Transport Assessment.

Figure 4.1 AM Peak Hour Trip Distribution

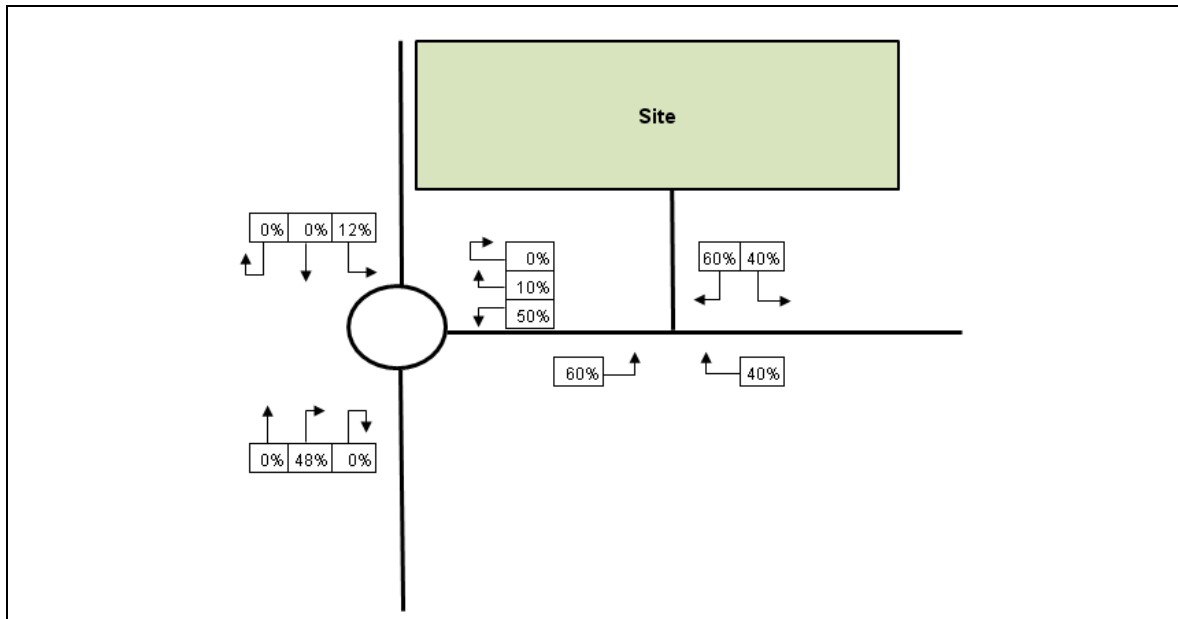
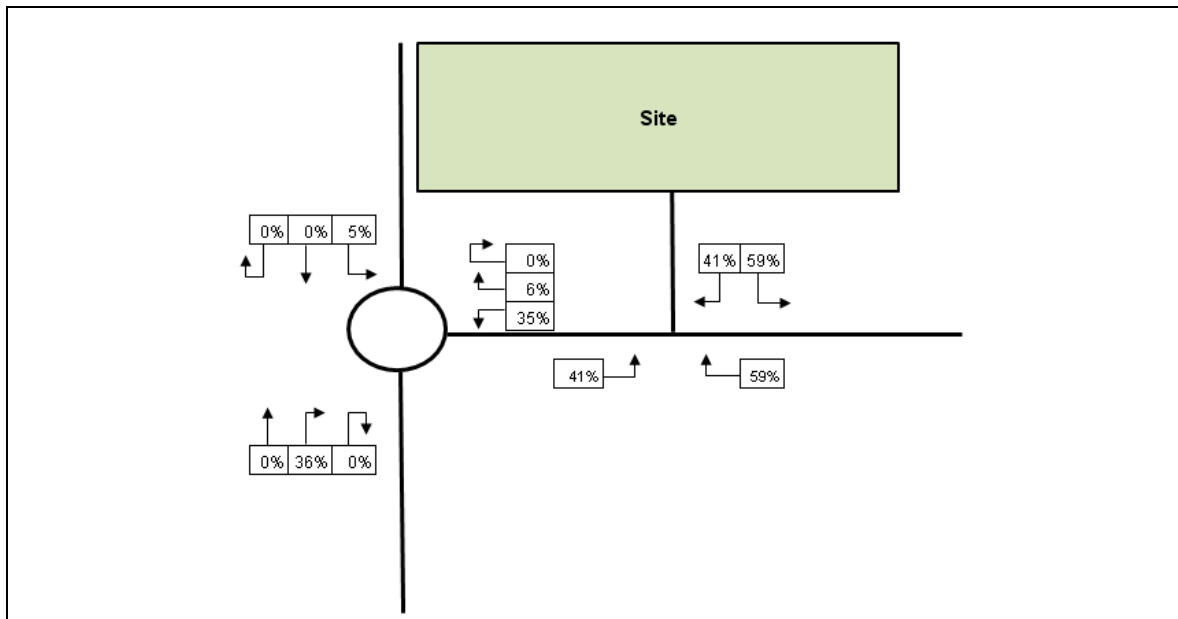


Figure 4.2 PM Peak Hour Trip Distribution



4.15 This distribution pattern has been used to assign the development traffic flows onto the local highway network and these can also be seen in Figures 4.3 and 4.4.

Figure 4.3 AM Peak Hour Trip Assignment

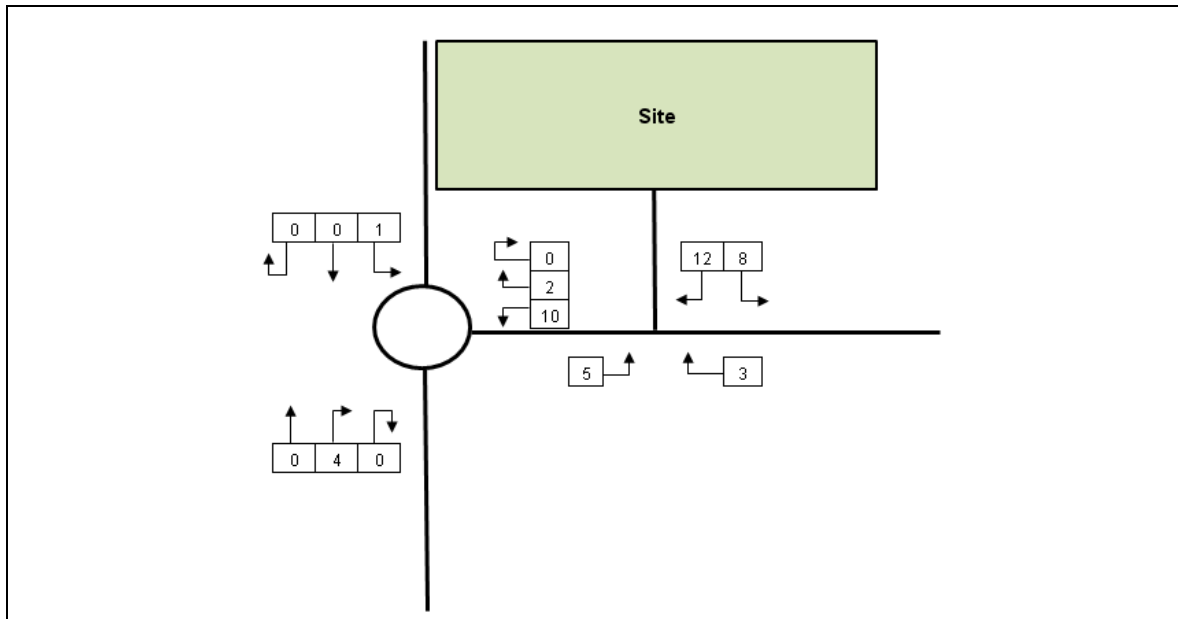
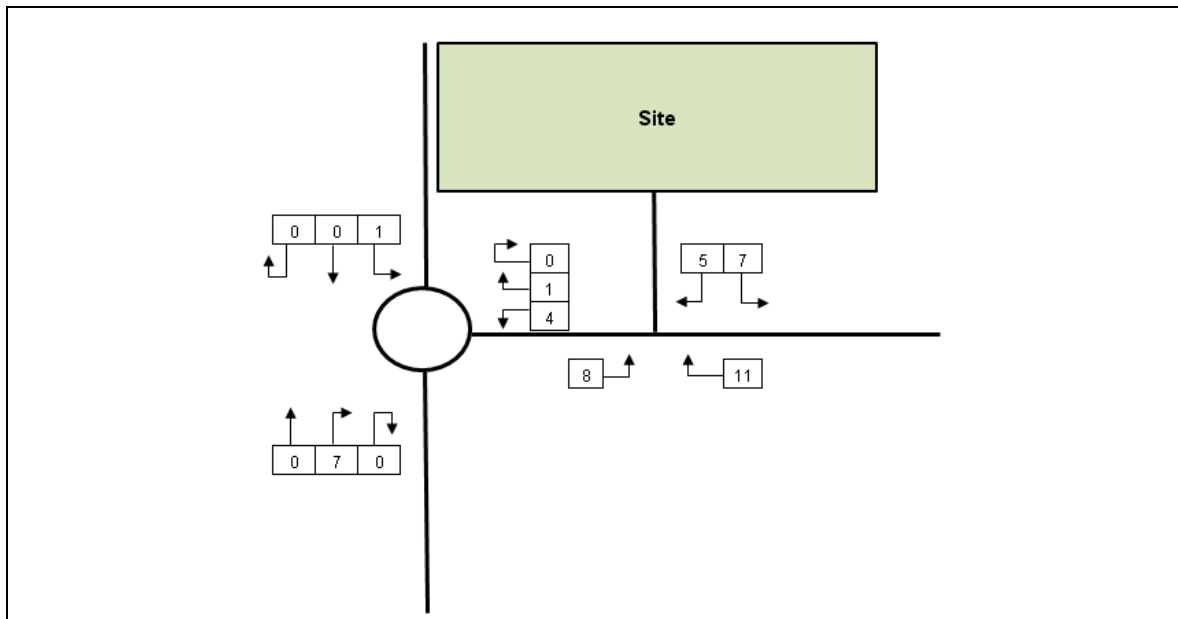


Figure 4.4 PM Peak Hour Trip Assignment



5 Capacity Assessment

Newbury Road (A343)/Smannell Road Roundabout Junction Assessment

5.1 The junction has been tested for both the AM and PM peak hours for the traffic flow scenarios set out below.

- 2010 base scenario (includes 150 MDA units and CECs trips)
- 2015 future base scenario (2010 + background network growth + 2350 MDA units + MDA education and employment trips); and
- 2015 future proposed scenario (2010 + background network growth + 2350 MDA units + MDA education and employment trips + proposed development traffic).

Growth Factors

5.2 The July 2010 surveys provide traffic flows for a 2010 base year assessment. In order to derive future year flows for 2015 it is necessary to apply growth to the base flows. The 2015 future year represents both the opening year of the development and 5 years after submission of the planning application.

5.3 The growth factors have been determined from TEMPRO V6.2 (Dataset 6.1) and NTM2009. Table 5.1 shows the growth factors for the Andover Main Zone. The 2010 and 2015 base traffic flows are shown in Figures 5.1 to 5.4.

Table 5.1 Growth Rates to 2015

Period	Growth Rate (AM)	Growth Rate (PM)
2010 – 2015	1.0225	1.0239

Figure 5.1 2010 AM Peak Base Traffic Data

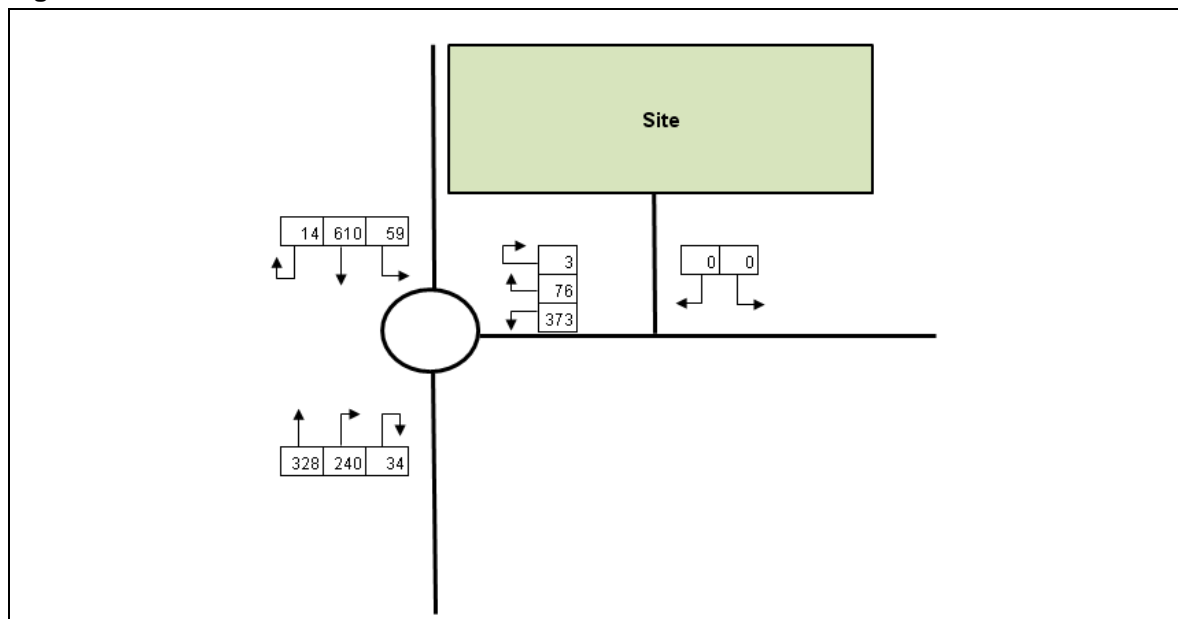


Figure 5.2 2010 PM Peak Base Traffic Data

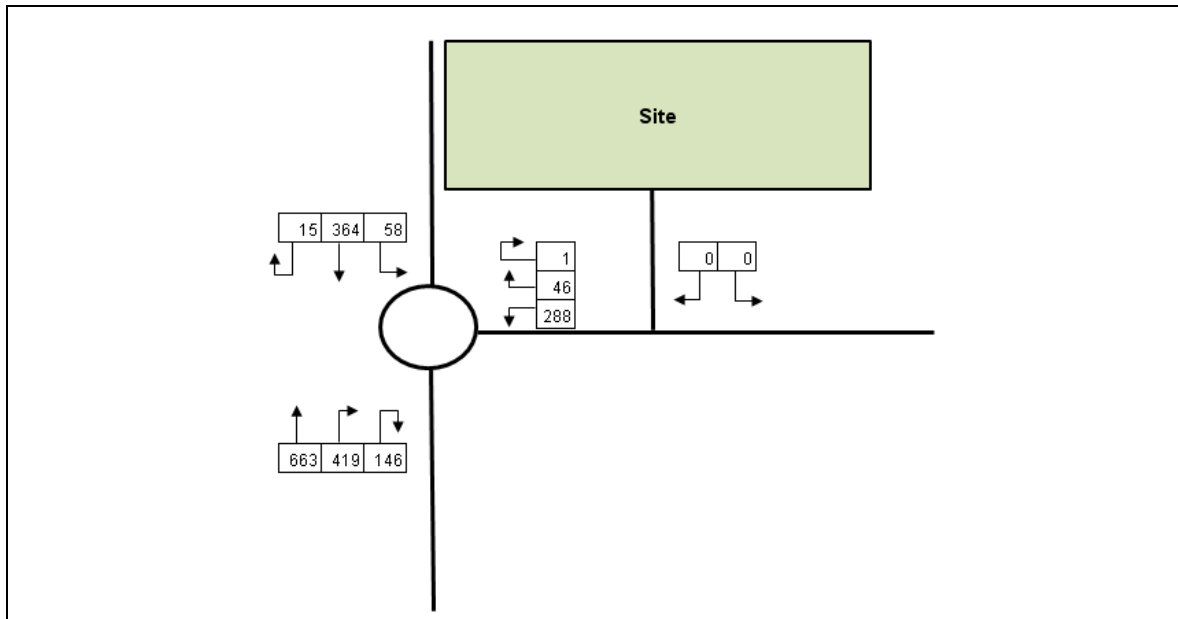


Figure 5.3 2015 AM Peak Base Traffic Data (with TEMPRO/NTM Growth Added)

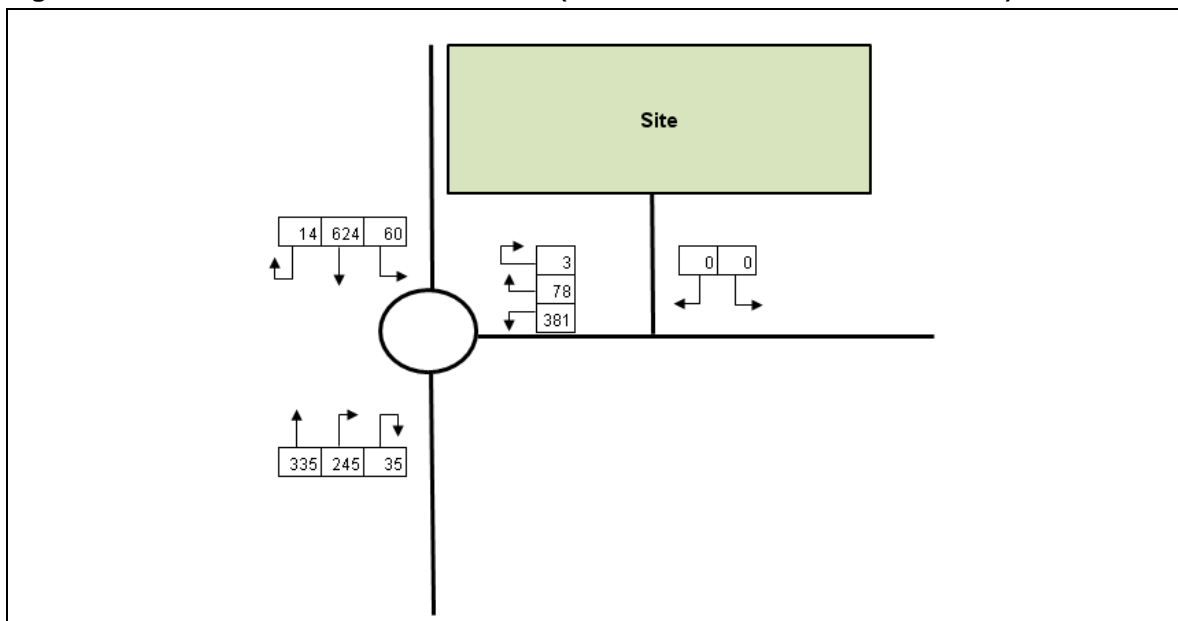
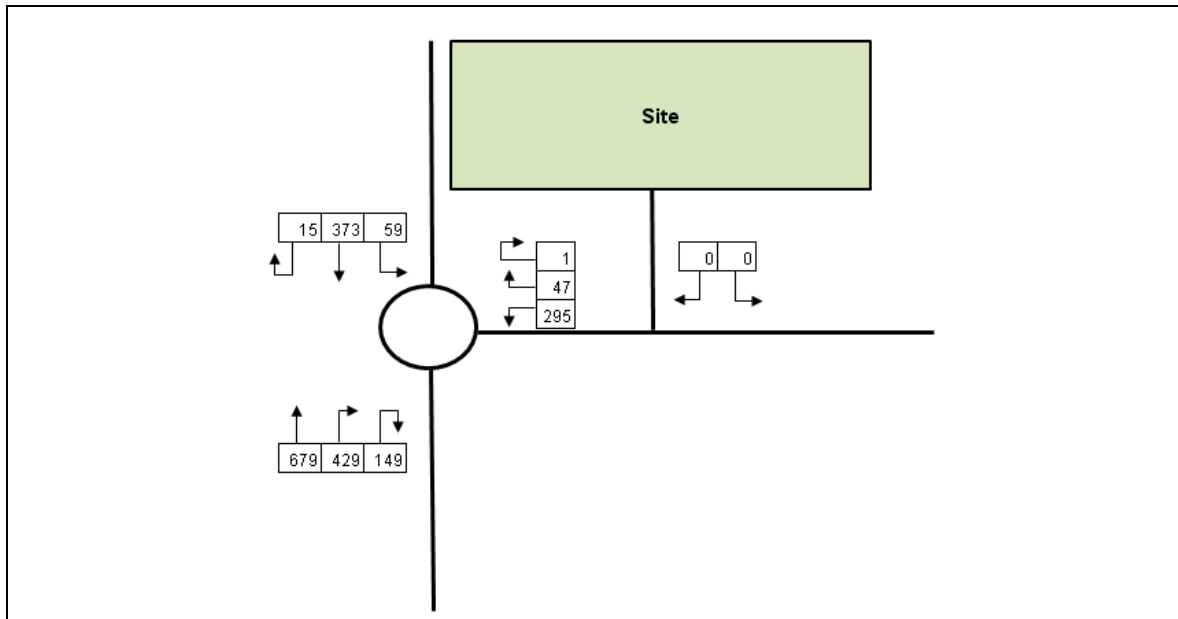


Figure 5.4 2015 PM Peak Base Traffic Data (with TEMPRO/ NTM Growth Added)



MDA Traffic Generation

- 5.4 A TA was written for the MDA site in 2004 and provided detail on the scale and impact of the proposed development. The reported traffic flows for the development have been used in this assessment.
- 5.5 It is understood that 150 dwellings of the MDA were built and occupied at the time of traffic survey for this assessment. Therefore, the traffic generated by these dwellings would be accounted for within the survey.
- 5.6 This assessment uses the traffic flows reported in the 2004 TA and adjusts the residential traffic numbers using a ratio of 150 to the total number of dwellings (2500). In addition, the traffic generation reported for the other site uses have also been included within this assessment of the committed development traffic. The traffic flows used in the modelling are shown in Figures 5.5 and 5.6.

Figure 5.5 AM Peak MDA Traffic Flows

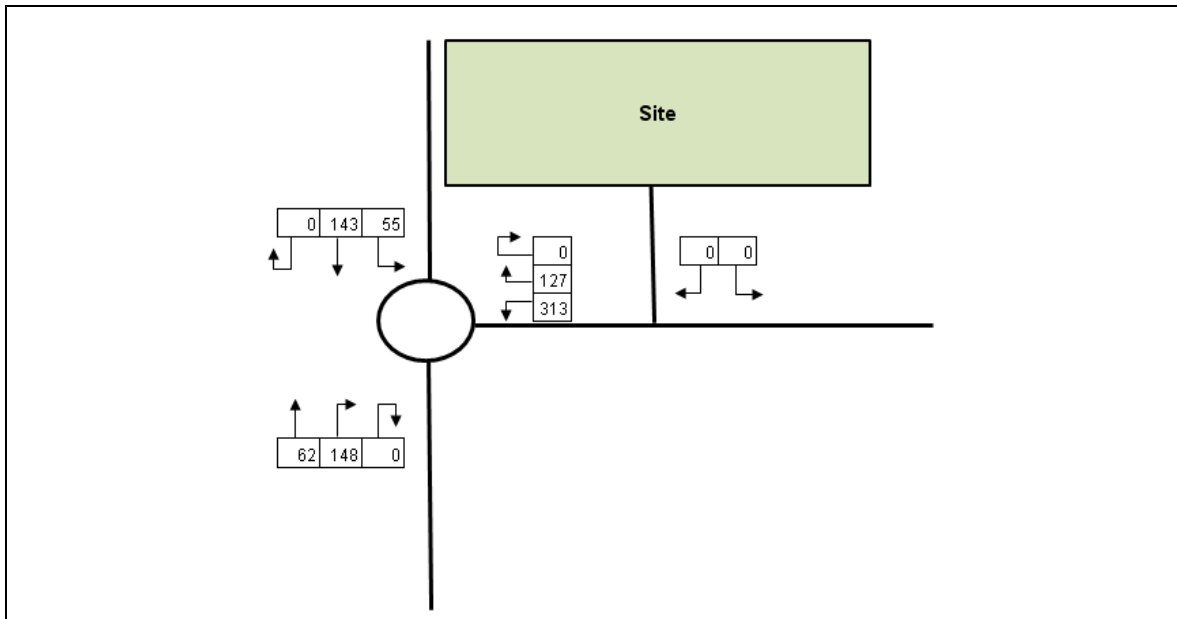
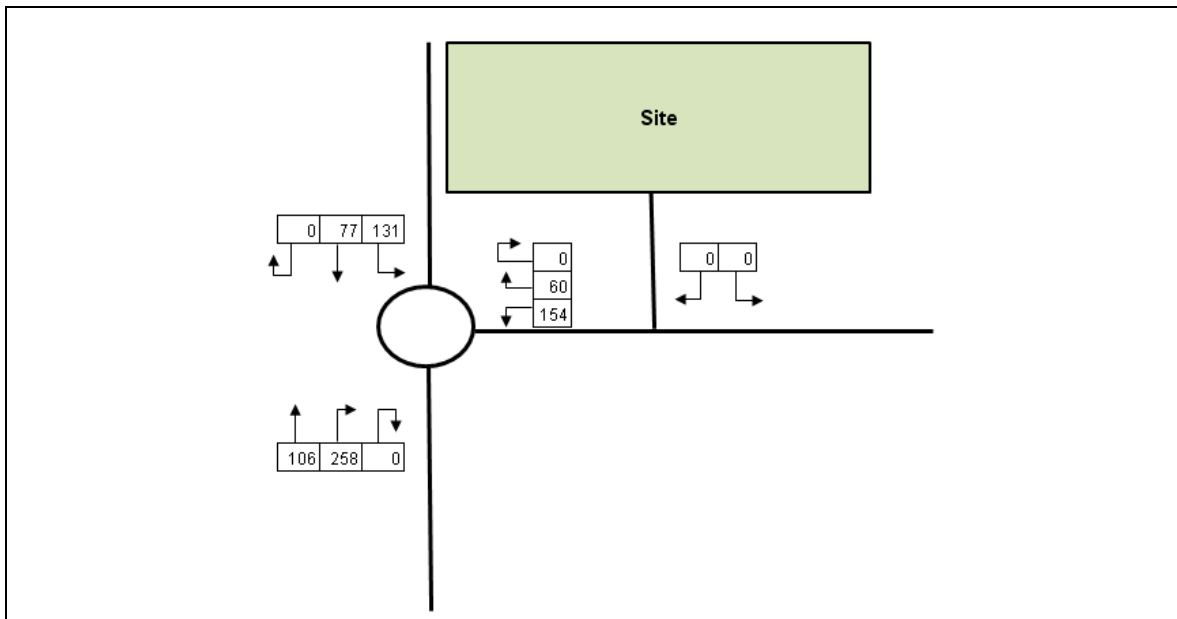


Figure 5.6 PM Peak MDA Traffic Flows



5.7 It is noted that the assessment of the proposed development's impact considers the addition of this committed development and the addition of background traffic growth from TEMPRO/ NTM factors. Therefore, it is considered likely that there is an element of double counting and that this represents a robust assessment. Figure 5.7 and 5.8 shows the 2015 base (including growth) plus MDA traffic flows.

Figure 5.7 2015 AM Peak Base Traffic Data (with Growth and MDA Traffic Added)

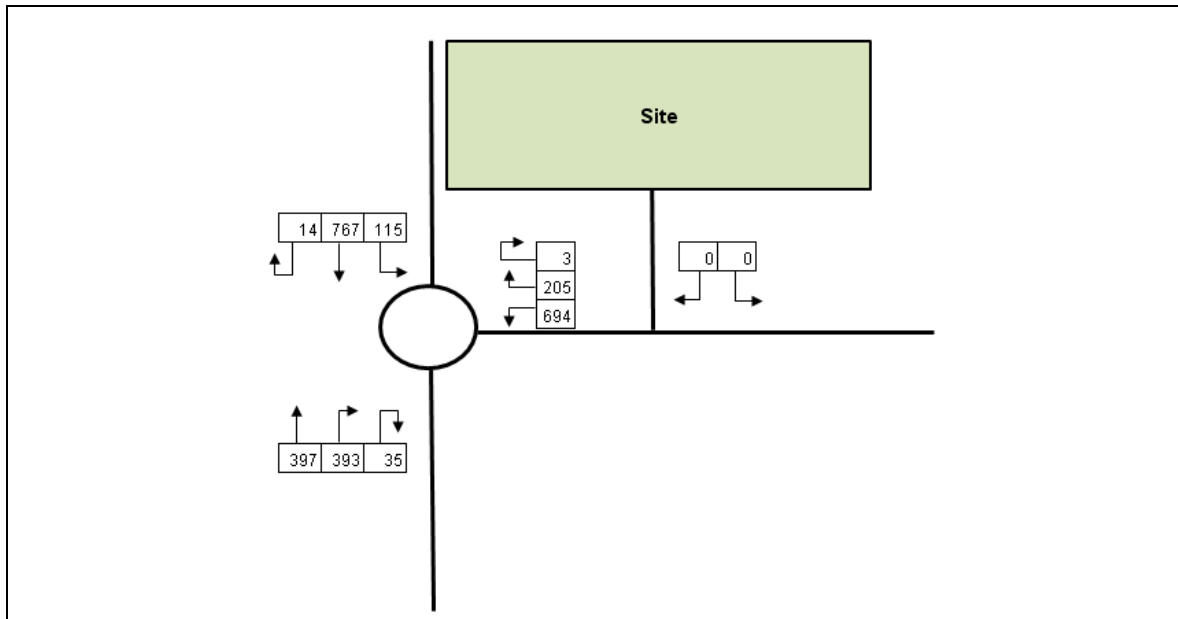
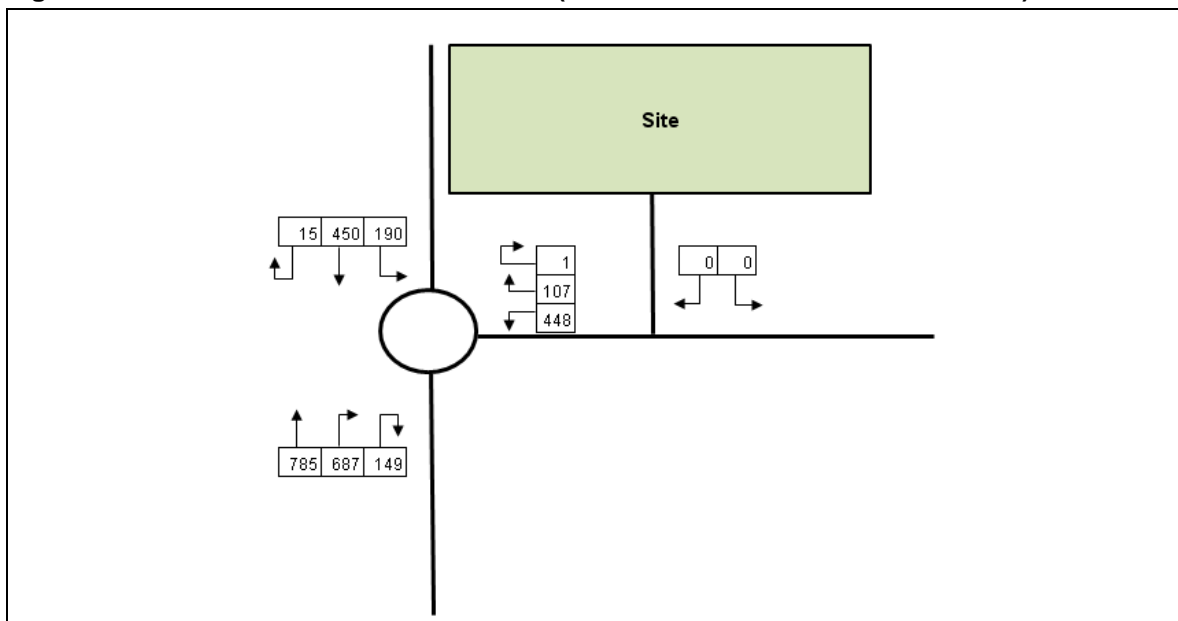


Figure 5.8 2015 PM Peak Base Traffic Data (with Growth and MDA Traffic Added)



Newbury Road A343/Smannell Road

5.8 The operation of the existing roundabout of Newbury Road/Smannell Road was tested using TRL's, ARCADY software for the following scenarios:

- 2010 base scenario (includes 150 MDA units and CECs trips)
- 2015 future base scenario (2010 + background network growth + 2350 MDA units + MDA education and employment trips); and
- 2015 future proposed scenario (2010 + background network growth + 2350 MDA units + MDA education and employment trips + proposed development traffic).

- 5.9 The findings from the capacity testing are shown in Tables 5.2, 5.3 and 5.4. The full ARCADY output files are included within **Appendix F**.

Table 5.2 Newbury Road A343/Smannell Road Base 2010 Scenario ARCADY Results

Junction Arm	AM Peak		PM Peak	
	RFC	Queue (Vehicles)	RFC	Queue (Vehicles)
Newbury Road (A343) North	0.341	0.5	0.248	0.3
Smannell Road	0.484	0.9	0.330	0.5
Newbury Road (A343) South	0.274	0.4	0.552	1.2

- 5.10 The findings from this assessment are that the Newbury Road/Smannell Road roundabout junction currently operates with a maximum Ratio Flow to Capacity (RFC) of 0.552 along Newbury Road South during the PM peak.

Table 5.3 Newbury Road A343/Smannell Road Base 2015 Scenario ARCADY Results

Junction Arm	AM Peak		PM Peak	
	RFC	Queue (Vehicles)	RFC	Queue (Vehicles)
Newbury Road (A343) North	0.478	0.9	0.428	0.7
Smannell Road	1.080	47.2	0.579	1.4
Newbury Road (A343) South	0.393	0.6	0.747	2.9

- 5.11 The 2015 base scenario includes the 2350 MDA residential units + MDA education and employment trips as a committed development. During the AM peak the Smannell Road approach is forecast to operate over capacity with a maximum RFC of 1.080 and consequent queue of 47 vehicles. The Newbury Road approaches continue to operate within capacity during the AM peak. During the PM peak all approaches to the junction operate within capacity.

Table 5.4 Newbury Road A343/Smannell Road Base 2015 + Development Scenario ARCADY Results

Junction Arm	AM Peak		PM Peak	
	RFC	Queue (Vehicles)	RFC	Queue (Vehicles)
Newbury Road (A343) North	0.479	0.9	0.431	0.8
Smannell Road	1.094	53.0	0.585	1.4
Newbury Road (A343) South	0.395	0.7	0.751	3.0

- 5.12 The 2015 base with development scenario is the before mentioned 2015 base scenario with the additional of the 50 residential unit development. The addition of the traffic associated with the proposed 50 unit development has a minor impact on traffic conditions, although overall patterns remain consistent with the 2015 no development scenario. During the AM peak the Newbury Road approaches continue to operate within capacity, however the RFC of the Smannell Road approach increases slightly to 1.094, with a consequent queue of 53 vehicles. During the PM peak the junction is forecast to operate within capacity.

Percentage Growth in Traffic from the Proposed Development

- 5.13 A percentage impact assessment on the Newbury Road/Smannell Road roundabout was undertaken to determine the impact of the proposed development for the future year of 2015. Calculations for each arm of the junction, and the roundabout as a whole were assessed. The results for this assessment are shown in Table 5.5.

Table 5.5 Percentage Impact

Junction Arm	Percentage Impact (%)	
	AM Peak	PM Peak
Newbury Road (A343) North	0.1	0.1
Smannell Road	1.3	0.9
Newbury Road (A343) South	0.5	0.4
Overall Junction	0.6	0.5

- 5.14 The highest impact is Smannell Road with 1.3% during the AM Peak period. Therefore the impact of the proposed development is considered negligible compared to the existing level of base traffic and the additional MDA traffic.

Site Access Assessment

- 5.15 The site access junction has been assessed using PICADY 4.1. One scenario been tested for the AM and the PM peak hours, which include:
- 2015 future proposed scenario (2010 + background network growth + 2350 MDA units + MDA education and employment trips + proposed development traffic).
- 5.16 The results are provided in Table 5.6 and the outputs can be found in **Appendix G**.

Table 5.6 Site Access PICADY Results

Arm	AM (08:00 to 09:00)		PM (17:00 to 18:00)	
	RFC	Queue (Vehicles)	RFC	Queue (Vehicles)
Proposed Access onto Smannell Road	0.072	0.1	0.046	0.0
Smannell Road East	0.010	0.0	0.044	0.1

- 5.17 The PICADY assessment demonstrates that the Smannell Road/Site Access junction can accommodate the 2015 base traffic and the development traffic. The maximum RFC value occurs on the site access and measures 0.072 in the AM peak, resulting in a queue of 0.1 vehicles.

6 Site Transport Strategy

Introduction

- 6.1 This chapter of the Transport Assessment considers the strategy to promote more sustainable modes of transport. The impact of the development on the local highway network is considered to be negligible so therefore no highway improvements are proposed, however a per-dwelling transport contribution would be required as part of the Section 106.
- 6.2 The transport measures proposed as part of this development are summarised and the Residential Travel Plan is appended to this Transport Assessment (**Appendix H**)

Transport Measures

Walking and Cycling

- 6.3 The proposed development will provide connections to existing pedestrian and cycle facilities and the future residents will be made of aware of these via walking and cycling maps issued.
- 6.4 The cycle parking at the proposed development would meet Test Valley Borough Council's minimum design standards.
- 6.5 The Residential Travel Plan proposes that the potential to offer cycle training to residents should be explored.

Public Transport

- 6.6 A map and timetable of all the public transport facilities and services within ten minutes walk of the site would be provided as part of a residents welcome pack.
- 6.7 The Residential Travel Plan suggests that the provision of a short term discount of the cost of public transport should be considered and negotiated with local public transport operators.

Transport Contribution

- 6.8 The developer would be required to provide a per-dwelling contribution to transport; this would need to be consider the Hampshire County Council Transport Contributions Policy (September 2007).
- 6.9 This contribution would be spent on transportation interventions that benefit the proposed development.

7 Summary and Conclusions

- 7.1 JMP has been commissioned by HCC to prepare a TA in support of a development of approximately 50 residential dwellings.
- 7.2 This TA provides an update to a TA report prepared in October 2008 to take account of the changes of layout, reduction in unit numbers and other emerging developments and changes to the surrounding transport networks.
- 7.3 The TA for the MDA has been considered and given the close proximity of the two sites; it is understood that 150 residential dwellings are already built and occupied.
- 7.4 The TA demonstrates that the site benefits from good pedestrian, cycle and public transport facilities.
- 7.5 The development proposals include approximately 50 residential units comprising a mix of two, three and four dwellings with 40% being designated as affordable housing.
- 7.6 The impact of the proposed development has been assessed and it is considered that the development would have a negligible impact on the operation of the Newbury Road/ Smannell Road roundabout. The addition of the traffic associated with the proposed 50 unit development has a minor impact on traffic conditions, although overall patterns remain consistent with the 2015 no development scenario. During the AM peak the Newbury Road approaches continue to operate within capacity, however the RFC of the Smannell Road approach increases slightly to 1.094, with a consequent queue of 53 vehicles. During the PM peak the junction is forecast to operate within capacity.
- 7.7 The site access would operate within capacity.
- 7.8 The transport strategy for this site includes provision of cycle parking that meets Test Valley Borough Council minimum standards, connections to existing pedestrian and cycle facilities, and a Residential Travel Plan.
- 7.9 The developer would be required to provide a per-dwelling contribution to transport; this would need to be consider the Hampshire County Council Transport Contributions Policy (September 2007). This contribution would be spent on transportation interventions that benefit the proposed development.