



## *Land at Hatton Green, Warwickshire*

### *Transport Strategy*



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Land at Hatton Green,  
Warwickshire

***Transport Strategy***

21<sup>st</sup> August 2012  
SJT/JS 14216-01\_Final TS

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***Prepared For:***

Edward Walpole-Brown

Job No:	14216
Revision:	-
Status:	Final
Prepared By:	JS
Date:	20/08/12
Checked By:	SJT
Date:	21/08/12



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## **1.0 INTRODUCTION**

1.1 DTA has been commissioned by Edward Walpole-Brown to set out the proposed transport and access strategy for the potential re-development of land adjacent to the A4177 Birmingham Road, The Green and Hockley Road in the village of Hatton, Warwickshire. The sites are located on **Figure 1**.

1.2 Hatton is being promoted for residential development within the emerging Local Plan and in the consultation draft it refers to 30 to 80 new dwellings. This strategy considers the potential transport and highway impacts of developing the sites for a residential and ancillary uses.

1.3 The methodology used for this Transport Strategy takes account of 'Guidance on Transport Assessment' (GTA) issued by the Department for Transport (DfT) and Department for Communities and Local Government (DCLG) in March 2007. A full Transport Assessment will be required at the planning application stage. The Guidance considers the following:

- **Reducing the need to travel, especially by car** – ensure, at the outset, that thought is given to reducing the need to travel; consider the types of uses (or mix of uses) and the scale of development in order to promote multipurpose or linked trips.

- **Sustainable accessibility** – promote accessibility by all modes of travel, in particular public transport, cycling and walking; assess the likely travel behaviour or travel pattern to and from the proposed site; and develop appropriate measures to influence travel behaviour.

- **Dealing with residual trips** – provide accurate quantitative and qualitative analyses of the predicted impacts of residual trips from the proposed development and ensure that suitable measures are proposed to manage these impacts.

- **Mitigation measures** – ensure as much as possible that the proposed mitigation measures avoid unnecessary physical improvements to highways and promote innovative and sustainable transport solutions.

1.4 The Government's sustainability objectives were embodied in updated Planning Policy Guidance. The National Planning Policy Framework (March 2012) confirms that:





*"developments should be located and designed where practical to;*

- accommodate the efficient delivery of goods and supplies;*
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;*
- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;*
- incorporate facilities for charging plug-in and other ultra-low emission vehicles;*  
*and*
- consider the needs of people with disabilities by all modes of transport.*

1.5 It goes onto say;

*All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:*

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- safe and suitable access to the site can be achieved for all people; and*
- improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.*

1.6 In terms of developments in rural locations, NPPF advises that:

*"Planning policies should support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable new development. To promote a strong rural economy, local and neighbourhood plans should:*

- support the sustainable growth and expansion of all types of business and enterprise in rural areas, both through conversion of existing buildings and well designed new buildings;*
- promote the development and diversification of agricultural and other land-based rural businesses;*
- support sustainable rural tourism and leisure developments that benefit businesses in rural areas, communities and visitors, and which respect the character of the countryside. This should include supporting the provision and expansion of tourist and visitor facilities in appropriate locations where identified needs are not met by existing facilities in rural service centres;*  
*and*



## **2.0 POLICY BACKGROUND**

### **2.1 Warwick District Local Plan**

2.1.1 Warwick District Council has prepared the new Local Plan which will guide the area's future development for the next 18 years. The Preferred Options for development prepared in May 2012 is currently under consultation and will inform the draft Local Plan due to be published in the Winter of 2012/13.

2.1.2 Hatton is identified in the Preferred Options as a Category 2 village along with Cubbington, Leek Wootton, Norton Lindsey, Rowington, Shrewley and Burton Green. Hatton is marked as a Category 2 village on Map 3 of the Preferred Options Paper which is located at Hatton Green specifically, rather than others areas in Hatton (i.e. Hatton Station and Hatton Park). It has been proposed that the housing allocation for Hatton and each of the other villages in this category is for between 30 and 80 houses to be provided. There are currently no defined sites for development in Hatton set out in the Local Plan.

2.1.3 The Preferred Options Paper also sets out a strategy for the Green Belt and under PO16, the Council states that the preferred option for the Green Belt is to remove villages, including Hatton, from the Green Belt and draw on new Green Belt boundaries around the settlements to allow for development.

### **2.2 Warwickshire Local Transport Plan 2011-2026**

2.2.1 The Local Transport Plan summarises the challenges facing the County and the potential solutions as follows:

#### Transport and the Warwickshire Economy

- Improve the connectivity by public transport to enable journeys to take place and to maximise accessibility of labour markets to jobs
- Transport and the Warwickshire Economy



- Reduce lost productive time including by maintaining or improving the reliability and predictability of journey times on key local routes
- Support the delivery of planned housing and employment growth in ways whilst minimising congestion levels
- Ensure the maintenance and work on the highway network and structures supports the efficient movement of traffic

#### Transport and Carbon Emissions

- Accommodate development in locations which reduce the need to travel
- Encourage a shift to lower carbon forms of travel, including walking, cycling and public transport
- Where motorised transport is necessary, encourage the efficient use of vehicles (e.g. car sharing) and improve driving techniques

#### Safety, Security and Health

- Continue to reduce the risk of death or injury due to accidents on the transport network
- Reduce / minimise the number of areas declared as having poor air quality as a result of road transport emissions
- Encourage a shift towards more active forms of travel, including promoting a more positive public perception of walking and cycling

#### Equality of Opportunity

- Enable disadvantaged people to more easily connect with a wide range of services and facilities
- Support the ageing population and associated service needs
- Working with partner agencies to support the delivery of services in ways which improve access to services

#### Quality of Life in Warwickshire

- Minimise the impacts of transport on the built and natural environment
- Managing transport related noise



- Improve the quality of transport integration into streetscapes and the urban environment
- Enhance well-being and sense of community by creating more opportunities for social contact and better access to leisure activities and the natural environment

## **2.3 Draft Hatton Parish Plan**

- 2.3.1 The Parish Plan forms part of a consultation process with local residents. The draft Plan highlights the positive aspects and sets out ways in which these can be conserved. It also considers the problems and includes an action plan which sets out what may be done to address the potential issues.





### **3.0 EXISTING CONDITIONS**

#### **3.1 Site Locations**

3.1.1 Two sites are identified for potential residential development in Hatton, specifically at Hatton Green. The location of the sites, identified as Site A and Site B, are shown on **Figure 1**.

3.1.2 Site A is located to the south west of the A4177 Birmingham Road, Hatton. It is bound by Hockley Road to the south, residential properties on The Green/Starmer Place to the west and by a further field to the north. Hatton Holy Trinity Church is located along the north eastern site boundary.

3.1.3 Site B is situated to the west of The Green and continues south west to meet Hockley Road at the southern boundary. Hatton Wood is located at the north western site boundary.

#### **3.2 Existing Sites**

3.2.1 Site A is currently a vacant parcel of land which has not previously been developed. The Starmer Place access links to the footpath which crosses the field to the Church. An existing track which supports the footpath is provided across the field from Starmer Place to the Church.

3.2.2 Site B is also a large undeveloped field extending west and south to adjoin Hockley Road.

#### **3.3 Local and Wider Road Network**

3.3.1 The A4177 Birmingham Road is a single carriageway road measuring approximately 7m at the frontage of Site A. The road is subject to a speed limit of 50mph and benefits from a c.1.4m footway on the southern side of the road.

3.3.2 The A4177 links with the B4439 Hockley Road at the eastern corner of the Site A. This junction is in the form of a priority with a separate left turn lane from Birmingham Road



- to Hockley Road for traffic from Warwick. The B4439 Hockley Road is single carriageway measuring c.5.5m in width. There is a footway measuring approximately 1.5m on the northern side of the road. Street lighting is not provided. The road is subject to the national speed limit.
- 3.3.3 The Green is a minor road provides access to a number of residential dwellings and to the local school. Street lighting is provided and a footway is located on the eastern side of the road. The Green links with the A4177 and Firs Lane via a priority crossroad junction to the north west of the site boundary. The Green meets the B4439 via a priority crossroad junction with Dark Lane at the south western corner of the site.
- 3.3.4 The A4177 continues north providing access to the A4141 at a four arm roundabout junction approximately 2.5km north of the proposed sites. The A4141 provides direct access to Knowle and Solihull. The A4177 continues further to Balsall Common merging with the A452 further north for the M42 and M6 junctions.
- 3.3.5 To the south east, the A4177 continues providing the main access through Hatton where the speed limit is reduced to 40mph. The road links with the A46 at Stank Island to the east of Hatton. At this junction the A425 continues east into Warwick town centre. The A46 provides access to the M40 at Junction 15 to the south and to Kenilworth and Coventry to the north.
- 3.3.6 Hockley Road continues in a westerly direction through the village of Shrewley and providing access to Lapworth and Hockley Heath to the north west.

#### 3.4 **Personal Injury Accidents**

- 3.4.1 Personal Injury Accident (PIA) data has been obtained from Warwickshire County Council (WCC) for the 5 year period from 1<sup>st</sup> January 2007 until 1<sup>st</sup> August 2012. The full details of the accident data including the study area, the severity and location of the accidents are attached as **Appendix A**.
- 3.4.2 During this period, there were 9 accidents recorded. 8 of these accidents were classed as "slight" and one was classed as "serious". There were no "fatal" accidents recorded.



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The data identify no accidents occurring in the years 2009 and 2010.

- 3.4.3 A total of 7 of the accidents, including the “serious” accident occurred at or within the vicinity of the Hockley Road and Birmingham Road priority junction. The “serious” accident involved a car and a motorcycle. The car pulled out of the give-way junction travelling from Hockley Road to Birmingham Road East and collided with the motorcyclist travelling westbound on the main road. Four of the “slight” accidents taking place at this junction involved the same manoeuvre, but the collision resulted between two cars.
- 3.4.4 Of the remaining two “slight” accidents occurring at this location, one involved a right turn manoeuvre from Birmingham Road into Hockley Road resulting in a collision between two cars. Another accident was a rear shunt collision between two cars occurring on the Birmingham Road. The vehicles were travelling north westbound on the main road. One car slowed for the left turn into Hockley Road and resulted in a rear shunt collision.
- 3.4.5 One “slight” accident occurred at the Haseley Manor junction with Birmingham Road. This accident involved 3 cars. Two were stopped waiting for a vehicle to turn right into the minor road. A third car failed to stop resulting in a rear shunt collision with both stationary vehicles.
- 3.4.6 One “slight” accident occurred at the crossroad junction of Birmingham Road with Firs Lane and The Green. The accident involved a car travelling from Firs Lane onto Birmingham Road failing to give way and colliding with a car travelling eastbound on Birmingham Road.
- 3.4.7 The A4177 is identified as a potential traffic issue in the Draft Hatton Parish Plan with residents concerned about the speed and volume of traffic on this road, particularly at the B4439 Hockley Road junction and the Haseley Business Centre/Haseley Manor junction.





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## **4.0 ACCESSIBILITY**

4.1.1 Local and National Policy highlight the importance of providing more sustainable travel modes. Accessibility to the site by walking, cycling and public transport is important as they provide an alternative to travelling by the private car.

4.1.2 To meet the requirements of current national and local policy guidance, appropriate arrangements will be made for providing good access to the development for residents by non-car modes.

### *Pedestrian Access*

4.1.3 Both the Birmingham Road and Hockley Road benefit from a footway on one side of the carriageway. Street lighting is provided at the Hockley Road junction and part of the way on Birmingham Road at the frontage of Site A. Footways are provided on the A4177 towards Warwick and along the Hockley Road to Shrewley.

4.1.4 The Green benefits from a footway on one side of the road which largely takes the form of a raised footway set back behind a grass verge. This raised area is protected by a wooden fence. Alternatively, a standard footway is provided on certain sections adjacent to the carriageway. Street lighting is provided.

### *Cycle Provision*

4.1.5 Cycling is an important journey to work mode that has the potential to perform a more significant role. In terms of on-site provision, cycle parking will be provided in accordance with local policy. The topography of the local area however, suggests that this would not be a limiting factor in people choosing to cycle, consequently there is potential to increase cycling to and from the site.

4.1.6 There are no official cycle routes in the Hatton area. The towpaths of the canal do however provide opportunities for cycling.





### *Bus Service Provision*

4.1.7 The nearest bus stop to the sites is on The Green which serves the 511, 514 and 521. A more frequent bus service is the 68 available from bus stops on Barcheston Drive, Hatton Park, approximately 1.2 km from the sites.

4.1.8 The bus stops are served by 4 services which are summarised in **Table 1** below.

**Table 1** – Summary of bus services

No.	Route	Frequency	Stop
68	Hatton Park – Warwick – Stud Farm - Cubbingdon	Mon – Sat Every 30 minutes	Barcheston Drive, Hatton Park
514	Hatton – Solihull	1 per day Mon, Thurs, Sat	The Green
521	Hatton - Stratford	1 per day Tues, Fri	
511	Claverdon – Hatton – Leamington Spa	1 per day Weds, Sat	

4.1.9 The bus services outlined in **Table 1** are indicative of rural bus services and therefore have a limited operation frequency. They do however provide access to the local town centres of Solihull, Warwick, Stratford upon Avon and Leamington Spa.

### *Rail Service Provision*

4.1.10 The nearest railway station is Hatton Railway Station located approximately 2.4km to the southwest of the sites. A number of key destinations such as London, Birmingham, Leamington Spa and Stratford upon Avon can be accessed from the station. Free car and cycle parking is available at the station.

4.1.11 More frequent services are available from Warwick Parkway Station approximately 4.5km from the sites.

### *Local Facilities*

4.1.12 The accessibility assessment considers the location of the nearest shop (general local/convenience shopping, excluding specialised shops); the location of the nearest



post office; the location of nearest doctors/GP surgery; and the location of the nearest schools.

4.1.13 The majority of trips that will be made by walking are for the purpose of short shopping trips, access to leisure facilities, trips to school and trips to bus stops as part of linked trips to other destinations.

4.1.14 Of particular interest are the levels of facilities and services that can be accessed locally. This is important in reducing the intensity of car use.

4.1.15 Hatton has a local school, The Ferncumbe Church of England Primary School located on The Green opposite Site B. The nearest local shops are on Hatton Park estate c.2.3km from the sites and in the village of Shrewley located c.2.5km. Leisure and retail facilities are also located at Hatton Country World on Dark Lane approximately 1.2km from the sites.

4.1.16 Hatton Village Hall is located on Birmingham Road to the north west of Site A which is used for weddings and other functions. Hatton Park Village Hall is also situated on Hatton Park estate and is a key location for local club gatherings and various dance and fitness classes. Two pub/restaurants are also provided within walking distance from both sites on Birmingham Road; The Falcon to the north west and The Hatton Arms to the south east.

4.1.17 In terms of local facilities and amenities, for a small village it has a relatively good range of facilities within walking and cycling distances (up to 5km). Warwick town centre is approximately 6km from the sites and offers a wider range of services and amenities including GP surgeries, pharmacy and secondary schools.



- *promote the retention and development of local services and community facilities in villages, such as local shops, meeting places, sports venues, cultural buildings, public houses and places of worship.*



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## **5.0 ACCESS STRATEGY**

### **5.1 Proposed Use**

- 5.1.1 Hatton is being promoted for residential development within the emerging Local Plan and in the consultation draft it has been proposed that the village could accommodate up to 80 new dwellings. However, for the purposes of this assessment up to a total of 100 dwellings have been considered.

### **5.2 Site Layout**

#### *Vehicle Access*

- 5.2.1 The layout and precise locations of the site access has not yet been fixed but will need to be considered in detail as part of a full Transport Assessment and following discussions with the Local Highway Authority. An initial appraisal however suggests that there are a number of solutions and the final form is likely to be informed by wider planning objectives.
- 5.2.2 The potential options for site access have been identified for the purposes of this assessment. Site A could be served via priority junction(s) from Birmingham Road or Hockley Road. The junction(s) could be provided with a separate right-turn lane and there is an opportunity to incorporate pedestrian facilities, and speed management measures such as splitter islands and road markings. The precise features to be incorporated into the design would be agreed with WCC to ensure consistency with their aspirations for the routes.
- 5.2.3 The preferred option for primary access to Site B would be from Hockley Road via a priority junction or roundabout. A pedestrian access/emergency access could be provided via The Green. The Green is a village street which suggests that an access designed in accordance with Manual for Streets that respects the existing character of the setting would be preferable. The potential access options for the sites are shown in **Figure 2.**



- 5.2.4 Any access junction would need to conform to highway design standards in terms of geometry and visibility. The existing speed limits would also require consideration in terms of whether these should be reduced or the speed transitions re-located.

*Access by Non-Car Modes*

- 5.2.5 Pedestrian access would need to be provided within the site which would tie into the existing network of footways on the local road. The level of development may warrant wider footway improvements.
- 5.2.6 Access for pedestrians could be provided from Starmer Place for Site A. Pedestrian access could be formed from The Green for Site B. This would allow for permeability between The Green and the sites. The potential locations for pedestrian access are also shown on **Figure 2**.
- 5.2.7 As part of the development, improvements to footways on The Green could be provided allowing improved access to the school and the Church.

*Potential Additional Use*

- 5.2.8 It is understood that Ferncumbe Primary School could be expanded to provide new school places for local school children. An additional access could be provided into the school from within Site A, in conjunction with the wider aspirations for residential development on this site.
- 5.2.9 This could ease current congestion experienced on The Green during peak school travel periods and potential residents on Site A would easily be able to walk their children to school.
- 5.2.10 There are also proposals to provide a formal car parking area and an additional burial ground for Hatton Holy Trinity Church. Access to a potential parking area could be served from within Site A, with the main site access provided from Birmingham Road or Hockley Road, depending on discussions with the Local Highway Authority.



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*Servicing*

5.2.11 The site layout would need to accommodate a large 3 axle refuse vehicle to access and egress the site in forward gear.

*Parking*

5.2.12 The extent quantum of parking will be finalised at the detailed design stage and will be in accordance with the Warwick District Council (WDC) standards. The standards are outlined in the Vehicle Parking Standards Supplementary Planning Document (SPD). A summary is provided in **Table 2** below.

**Table 2** – Summary of parking standards

Number of Beds	Car Parking Standards	Cycle Parking Standards
Studio apartment and 1 bedroom units	1 space	To be considered on merit – the use of garages and rear gardens for cycle storage would be acceptable
2 bedroom units	1.5 spaces, 2 spaces in rural areas	
3 bedroom units	2 spaces	
4+ bedroom units	2 spaces	

5.2.13 The provision of car and cycle spaces will be concurrent with the local policy.



## 6.0 TRAFFIC GENERATION AND IMPACT

### 6.1 Traffic Generation

6.1.1 In order to assess the potential traffic generation from the site, the TRICS database was interrogated (TRICS 2012 (b) v.6.10.1). This database contains surveys of the vehicle and multimodal trip generation of a wide variety of sites which are classified by land use and various other attributes.

6.1.2 The TRICS database 2012 was interrogated for multi modal surveys of 'private residential houses'. The resulting TRICS printouts are attached at **Appendix B**. The trip rates are summarised in **Table 3** below.

**Table 3** – TRICS assessment for private residential housing (trip rates/dwelling)

	Person Trip Rate			Vehicle Trip Rate		
	In	Out	Total	In	Out	Total
AM Peak (08:00 – 09:00)	0.273	0.826	1.099	0.168	0.404	0.572
PM Peak (17:00 – 18:00)	0.591	0.330	0.921	0.368	0.214	0.582
12 Hour (07:00 – 19:00)	4.397	4.525	8.922	2.647	2.697	5.344

6.1.3 A summary of the development generated person and vehicle trips relating to 50 dwellings is given in **Table 4**.

**Table 4** – Person and Vehicle trips for 100 dwellings

	Person Trips			Vehicle Trips		
	In	Out	Total	In	Out	Total
AM Peak (08:00 – 09:00)	27	83	110	17	40	57
PM Peak (17:00 – 18:00)	59	33	92	37	21	58
12 Hour (07:00 – 19:00)	440	453	893	265	270	535

6.1.4 **Table 4** illustrates that potential development for 100 houses is forecast to be 57 and 58 two-way vehicle trips in the AM and PM peak periods respectively.

6.1.5 The development generated traffic would equate to 1 additional vehicle every minute on the adjacent highway network for both the AM and PM peak hour periods. In absolute



terms, the level of traffic generation is minimal and would not have a material impact on the operation of the adjacent highway network.

- 6.1.6 This assessment has considered the traffic generation for 100 dwellings, however there would be no significant highway capacity implications if this number was increased.

## **6.2 Impact on the Wider Network**

- 6.2.1 It is not considered that the level of development would warrant highway improvement measures on the local network. However, it is noted that the B4439 Hockley Road-A4177 Birmingham Road junction in particular is identified as a potential problem due to relatively high traffic speeds and volumes on the A4177.
- 6.2.2 It may be possible to identify opportunities in the design of the site access to improve the accident record at these locations either as an integral part of the works or independent safety schemes. If deemed necessary, a developer could contribute towards a wider improvement scheme as part of a S106 agreement.





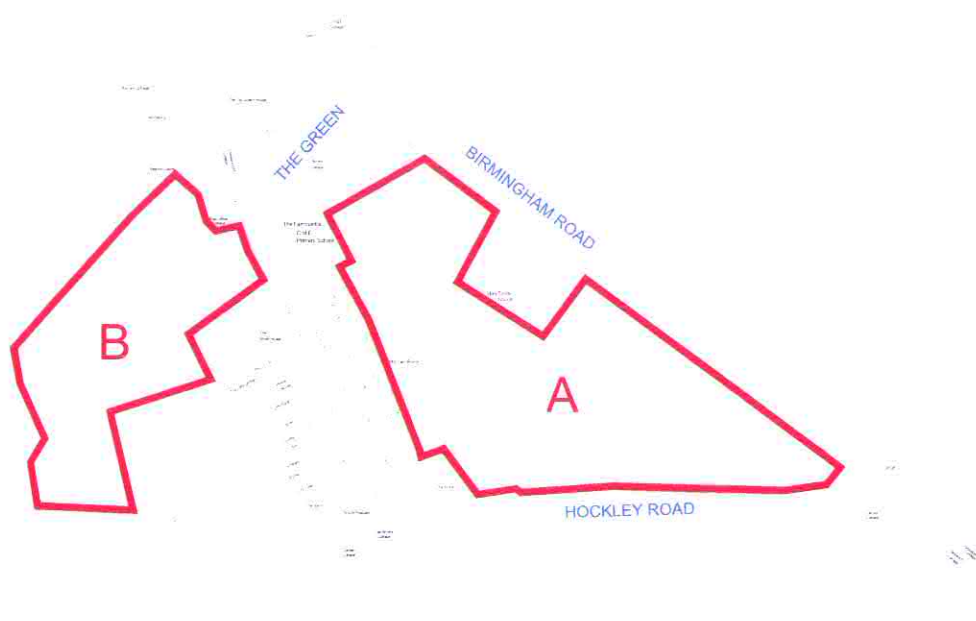
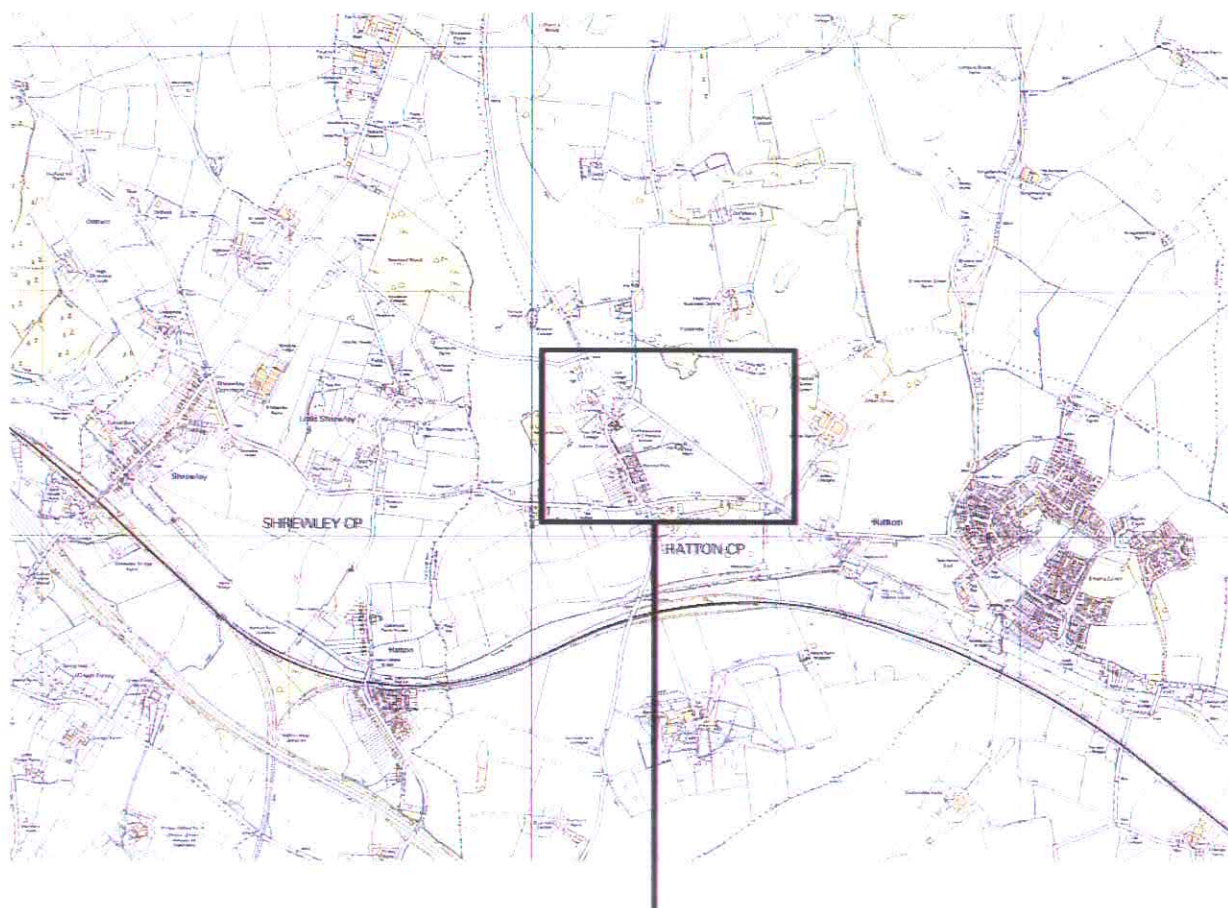
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## **7.0 CONCLUSIONS**

- 7.1 This strategy reviews the transport and accessibility issues associated with the potential for residential development on sites in Hatton Green, Warwickshire. Hatton is being promoted for residential development within the emerging Local Plan.
- 7.2 The potential access strategy for the sites has been considered. Accesses into Site A could be formed onto either Birmingham Road or Hockley Road. Both these existing roads have reasonably straight alignments onto which junctions with visibility and geometry commensurate with prevailing speeds would be formed. Access into Site B can be formed onto Hockley Road, subject to meeting acceptable design criteria.
- 7.3 Pedestrian access can be provided from The Green for both sites which will allow for links to the Church and the school.
- 7.4 The traffic generation associated with each of the potential residential development sites is not significant.
- 7.5 The development scheme would not warrant wider highway improvement works, however there may be investigate opportunities to improve the road safety record of local junctions as part of the works to access the sites. Local footway improvements can also be provided, in particular on The Green.
- 7.6 The site is accessible on foot to a relatively limited number of local facilities and as such it is anticipated that the majority of trips associated with the site will be by car/cycle.



## FIGURES



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Figure 1  
 Drawing Title  
 Job Title  
 Client

Drawing No : 14216-02a  
 Site Locations  
 Land at Hatton, Warwickshire  
 Edward Walpole-Brown

Scale : NTS

NORTH



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Figure 2  
Drawing No : 14216-03c  
Drawing Title : Site Access Arrangements  
Job Title : Land At Hatton, Warwickshire  
Client : Edward Walpole-Brown  
Scale : NTS  
NORTH

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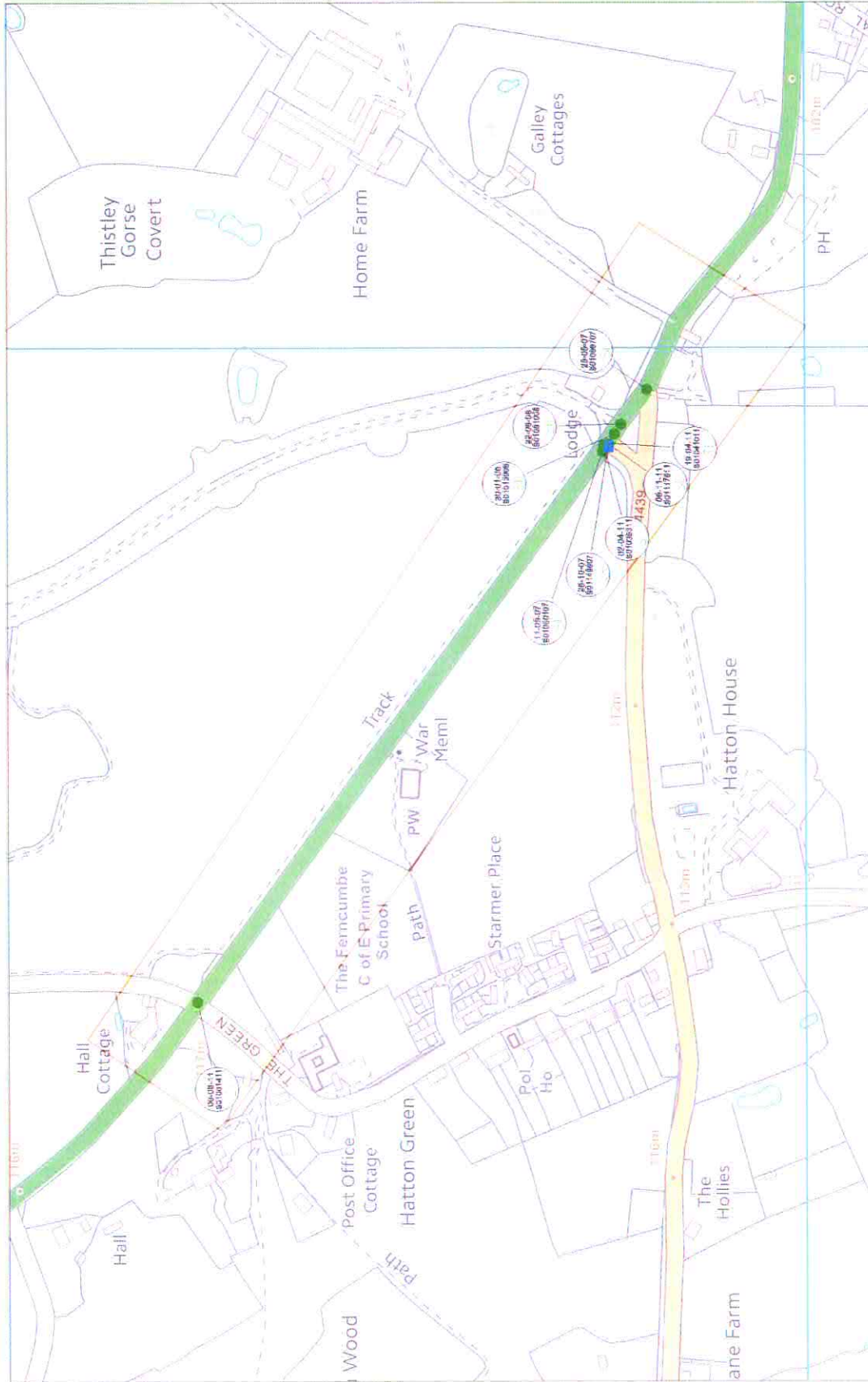
## **APPENDIX A**



**Reported Injury Accidents for  
14216 Birmingham Road, Hatton,  
Jan 2007 to date**

Report produced: 01/08/2012

Road Safety Intelligence Team  
Tel: 01926 412740  
email: [rsinfo@warwickshire.gov.uk](mailto:rsinfo@warwickshire.gov.uk)



Accident Severity

- Slight
- Serious
- ▲ Fatal

**Communities**

Grange Farm M6, M6, G Ling, M6s  
Head of Transport and Highways

**Warwickshire County Council**

PO Box 43, 3rd Floor  
Warwick, CV34 4AA  
Tel: 01925 415410  
Fax: 01925 415411  
Web: www.warwickshire.gov.uk

Road Safety Intelligence Team  
Tel: 01925 412740  
Email: rsinfo@warwickshire.gov.uk

**14216 Birmingham Road, Hatton**

# All Road Users

## Accidents

Year	Fatal	Serious	Slight	Total	Time	Fatal	Serious	Slight	Total	District	Fatal	Serious	Slight	Total
2007	0	1	2	3	0000-0100	0	0	0	0	Warwick	0	1	8	9
2008	0	0	2	2	0100-0200	0	0	0	0	Road Class	Fatal	Serious	Slight	Total
2011	0	0	4	4	0200-0300	0	0	0	0		0	0	0	0
Month	Fatal	Serious	Slight	Total	0300-0400	0	0	0	0		0	0	0	0
	0	0	1	1	0400-0500	0	0	0	0		0	0	0	0
	0	0	0	0	0500-0600	0	0	0	0		0	0	0	0
	0	0	0	0	0600-0700	0	1	0	1		0	1	8	9
	0	0	0	0	0700-0800	0	0	1	1		0	0	0	0
	0	0	2	2	0800-0900	0	0	0	0		0	0	0	0
	0	0	2	2	0900-1000	0	0	0	0		0	0	0	0
	0	0	1	1	1000-1100	0	0	1	1		0	0	0	0
	0	0	0	0	1100-1200	0	0	3	3		0	0	0	0
	0	0	1	1	1200-1300	0	0	1	1	Speed Limit	Fatal	Serious	Slight	Total
	0	0	0	0	1300-1400	0	0	0	0		0	0	0	0
	0	1	0	1	1400-1500	0	0	0	0		0	0	0	0
	0	0	1	1	1500-1600	0	0	1	1		0	0	0	0
	0	0	0	0	1600-1700	0	0	0	0		0	0	0	0
Day	Fatal	Serious	Slight	Total	1700-1800	0	0	1	1	Obstruction	Fatal	Serious	Slight	Total
	0	0	2	2	1800-1900	0	0	0	0		0	0	0	0
	0	0	1	1	1900-2000	0	0	0	0		0	0	0	0
	0	0	1	1	2000-2100	0	0	0	0		0	0	0	0
	0	1	2	3	2100-2200	0	0	0	0		0	0	0	0
	0	0	2	2	2200-2300	0	0	0	0	Junction Type	Fatal	Serious	Slight	Total
	0	0	0	0	2300-2400	0	0	0	0		0	0	1	1
Ped Crossing	Fatal	Serious	Slight	Total	Lighting	Fatal	Serious	Slight	Total		Fatal	Serious	Slight	Total
	0	1	8	9	Daylight	0	0	8	8		0	0	0	0
	0	0	0	0	Darkness	0	1	0	1		0	0	0	0
	0	0	0	0	Weather	Fatal	Serious	Slight	Total		0	0	0	0
	0	0	0	0		0	1	7	8		0	0	0	0
	0	0	0	0		0	0	1	1		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
Road Surface	Fatal	Serious	Slight	Total	Fine without high winds	Fatal	Serious	Slight	Total	Other Junction	Fatal	Serious	Slight	Total
	0	0	0	0	Raining without high winds	0	0	0	0		0	0	0	0
	0	0	0	0	Snowing without high winds	0	0	0	0		0	0	0	0
	0	0	0	0	Fine with high winds	0	0	0	0		0	0	0	0
	0	0	0	0	Raining with high winds	0	0	0	0		0	0	0	0
	0	0	0	0	Snowing with high winds	0	0	0	0		0	0	0	0
	0	0	0	0	Fog or mist - if hazard	0	0	0	0		0	0	0	0
	0	0	0	0	Other	0	0	0	0		0	0	0	0
	0	0	0	0	Unknown	0	0	0	0		0	0	0	0
	0	0	0	0	Road Surface	Fatal	Serious	Slight	Total		0	0	0	0
Not at crossing	0	0	0	0		0	0	6	6	Unknown	0	0	0	0
	0	0	0	0		0	1	2	3		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
Zebra	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
Pelican	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
Footbridge	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
Refuge	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
Unknown	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0
	0	0	0	0		0	0	0	0		0	0	0	0



### All Road Users

### Casualties

Year	Fatal	Serious	Slight	Total	Time	Fatal	Serious	Slight	Total	District	Fatal	Serious	Slight	Total
2007	0	1	4	5	0000-0100	0	0	0	0	Warwick	0	1	13	14
2008	0	0	3	3	0100-0200	0	0	0	0	Road Class	Fatal	Serious	Slight	Total
2011	0	0	6	6	0200-0300	0	0	0	0		0	1	13	14
	Fatal	Serious	Slight	Total	0300-0400	0	0	0	0		Fatal	Serious	Slight	Total
Month					0400-0500	0	0	0	0	Speed Limit	Fatal	Serious	Slight	Total
January	0	0	2	2	0500-0600	0	0	0	0	20	0	0	0	0
February	0	0	0	0	0600-0700	0	1	0	1	30	0	0	0	0
March	0	0	0	0	0700-0800	0	0	2	2	40	0	0	0	0
April	0	0	4	4	0800-0900	0	0	0	0	50	0	0	0	0
May	0	0	4	4	0900-1000	0	0	0	0	60	0	1	13	14
June	0	0	1	1	1000-1100	0	0	2	2	70	0	0	0	0
July	0	0	0	0	1100-1200	0	0	4	4	Obstruction	Fatal	Serious	Slight	Total
August	0	0	1	1	1200-1300	0	0	1	1	Sign/Signal	0	0	0	0
September	0	0	0	0	1300-1400	0	0	0	0	Lamp Post	0	0	0	0
October	0	1	0	1	1400-1500	0	0	0	0	Pole	0	0	0	0
November	0	0	1	1	1500-1600	0	0	2	2	Tree	0	0	0	0
December	0	0	0	0	1600-1700	0	0	0	0	Bus Stop	0	0	0	0
Day	Fatal	Serious	Slight	Total	1700-1800	0	0	2	2	Central Barrier	0	0	0	0
Sunday	0	0	2	2	1800-1900	0	0	0	0	NS/OS Barrier	0	0	0	0
Tuesday	0	0	2	2	1900-2000	0	0	0	0	Other	0	0	1	1
Wednesday	0	0	2	2	2000-2100	0	0	0	0	Junction Type	Fatal	Serious	Slight	Total
Friday	0	1	4	5	2100-2200	0	0	0	0	Not at Junction	0	0	0	0
Saturday	0	0	3	3	2200-2300	0	0	0	0	Roundabout	0	0	0	0
Ped Crossing	Fatal	Serious	Slight	Total	2300-2400	0	0	0	0	Mini R'about	0	0	0	0
Not at crossing	0	1	13	14	Lighting	Fatal	Serious	Slight	Total	T or Staggered	0	1	11	12
Zebra	0	0	0	0	Daylight	0	0	13	13	Slip Road	0	0	0	0
Pelican	0	0	0	0	Darkness	0	1	0	1	Crossroads	0	0	1	1
Ped Phase	0	0	0	0	Weather	Fatal	Serious	Slight	Total	Multiple Junct	0	0	0	0
Footbridge	0	0	0	0	Fine without high winds	0	1	11	12	Private Drive	0	0	1	1
Refuge	0	0	0	0	Raining without high winds	0	0	2	2	Other Junction	0	0	0	0
Unknown	0	0	0	0	Snowing without high winds	0	0	0	0	Unknown	0	0	0	0
					Fine with high winds	0	0	0	0					
					Raining with high winds	0	0	0	0					
					Snowing with high winds	0	0	0	0					
					Fog or mist – if hazard	0	0	0	0					
					Other	0	0	0	0					
					Unknown	0	0	0	0					
					Road Surface	Fatal	Serious	Slight	Total					
						0	0	9	9					
						0	1	4	5					
						0	0	0	0					
						0	0	0	0					
						0	0	0	0					

# Birmingham Road, Hatton

Accident Date BETWEEN '01-Jan-2007' AND '01-Aug-2012'

No	Area L/A	Reference	Severity	Day	Date	Time	Grid Coords	Link/Node	Street
1.	1	E07000222	S01081411	Slight	Saturday	06/08/2011	12:50	423400/267562	
Location: B4439 Hockley Rd, Hatton, J/W Dark Lane 1st Rd: A4177 2nd Rd: D5062									
Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
MPH	Single c'way	X-Rds Give	Daylight	Fine	Dry	None	None	None	None
Veh	Vehicle type	Towing	Manoeuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway
1	Car	No	Going ahead	N S	On main	Mid junction	No	None	None
2	Car	No	Going ahead	W E	On main	Mid junction	No	None	None
Cas No Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location	School Pupil
1	1	Drv/Rider	Female	35	Slight	No	Not ped	Not ped	Other
Description: V1 Trav S on Firs Lane, Ant Xroads Jnt with Birmingham Rd, V1 Fails to Give Way and Hits V2 Trav E on Birmingham Rd									
User Information:									
2.	1	E07000222	S01060107	Slight	Friday	11/05/2007	17:50	423905/267187	
Location: A4177 Birmingham Rd J/W B4439 Hockley Rd Hatton 1st Rd: A4177 2nd Rd: B4439									
Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
MPH	Single c'way	T/Stag Give	Daylight	Rain	Wet	None	None	None	None
Veh	Vehicle type	Towing	Manoeuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway
1	Car	No	Left turn	SW NW	On main	Mid junction	No	None	None
2	Car	No	Going ahead	SE NW	On main	Mid junction	No	None	Offside
Cas No Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location	School Pupil
1	1	Drv/Rider	Male	61	Slight	No	Not ped	Not ped	Other
2	2	Drv/Rider	Female	21	Slight	No	Not ped	Not ped	Other
Description: V1 Trav Ne Pulled out of Give Way onto Main Road and Collided with V2 Trav NW on Main Road									
User Information:									
3.	1	E07000222	S01148607	Serious	Friday	26/10/2007	06:56	423909/267182	
Location: A4177 Birmingham Rd Hatton J/W B4439 Hockley Rd 1st Rd: A4177 2nd Rd: B4439									
Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
MPH	Single c'way	T/Stag Give	Dark/no lights	Fine	Wet	None	None	None	None
Veh	Vehicle type	Towing	Manoeuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway
1	Car	No	Right turn	SW SE	On main	Mid junction	No	None	None
2	M/cycle 50 -	No	Going ahead	SE NW	On main	Mid junction	No	None	None
Cas No Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location	School Pupil
1	2	Drv/Rider	Male	36	Serious	No	Not ped	Not ped	Other
Description: V1 Trav Ne Pulled over Give Way and Collided with V2 Trav NW on Main Rd									
User Information:									
4.	1	E07000222	S01035311	Slight	Saturday	02/04/2011	15:40	423911/267186	
Location: A4177 Birmingham Rd Jw B4439, Warwick 1st Rd: A4177 2nd Rd: B4439									
Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
MPH	Single c'way	T/Stag Give	Daylight	Fine	Dry	None	None	None	None
Veh	Vehicle type	Towing	Manoeuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway
1	Car	No	Start	SW SE	On main	Mid junction	No	None	None
2	Car	No	Going ahead	SE NW	On main	Mid junction	No	None	None
Cas No Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location	School Pupil
1	1	Drv/Rider	Male	91	Slight	No	Not ped	Not ped	Other
2	2	Drv/Rider	Male	58	Slight	No	Not ped	Not ped	Other
Description: V1 Pulling out of B4439 onto A4177, Pulls out and Hits V2 Trav NW on A4177									
User Information:									

# Birmingham Road, Hatton

Accident Date BETWEEN '01-Jan-2007' AND '01-Aug-2012'

No	Area L/A	Reference	Severity	Day	Date	Time	Grid Coords	Link/Node	Street
5	1	E07000222	S01117611	Slight	Sunday	06/11/2011	11:29	423911/267181	
Location: A4177 Birmingham Rd J/W B4439 Hockley Rd Hatton 1st Rd: A4177 2nd Rd: B4439									
Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
MPH	Single c'way	T/Stag Give	Daylight	Fine	Dry	None	None	None	None
Veh	Vehicle type	Towing	Manoeuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway
1	Car	No	Right turn	W SE	On main	Enter main	No	None	None
2	Car	No	Going ahead	SE NW	On main	Mid junction	No	None	None
Cas No Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location	School Pupil
1	2	Passenger	Female	25	Slight	Front	Not ped	Not ped	Other

Description: V2 Trav Nw on A4177. V1 Trav E on B4439 Turned R onto A4177 E/B & Hitting N/S of V2.

User Information:

6	1	E07000222	S01041011	Slight	Tuesday	19/04/2011	11:45	423912/267181	
Location: A4177 Birmingham Rd Jw B4439 Hockley Rd Hatton 1st Rd: A4177 2nd Rd: B4439									
Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
MPH	Single c'way	T/Stag Give	Daylight	Fine	Dry	None	None	None	None
Veh	Vehicle type	Towing	Manoeuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway
1	Car	No	Right turn	NW W	On main	Mid junction	No	None	None
2	Car	No	Going ahead	SE NW	On main	Mid junction	No	None	None
Cas No Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location	School Pupil
1	2	Drv/Rider	Male	62	Slight	No	Not ped	Not ped	Other
2	1	Passenger	Male	5	Slight	Rear	Not ped	Not ped	Other

Description: V1 Trav Se Turned Rt into Minor Rd across Path of V2 Trav Nw and Collision Occurred

User Information:

7	1	E07000222	S01013908	Slight	Wednesday	30/01/2008	10:50	423921/267176	
Location: A4177 Birmingham Rd Hatton J/W B4439 Hockley Rd 1st Rd: A4177 2nd Rd: B4439									
Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
MPH	Single c'way	T/Stag Give	Daylight	Fine	Wet	None	None	None	None
Veh	Vehicle type	Towing	Manoeuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway
1	Car	No	Going ahead	SE NW	On main	Junt appr	No	None	None
2	Car	No	Stop	SE NW	On main	Junt appr	No	None	None
Cas No Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location	School Pupil
1	1	Drv/Rider	Female	35	Slight	No	Not ped	Not ped	Other
2	2	Drv/Rider	Female	26	Slight	No	Not ped	Not ped	Other

Description: both Vehs Trav NW. V2 Slowed on Approach to Junction. V1 Ran into Rear of V2

User Information:

8	1	E07000222	S01081008	Slight	Sunday	22/06/2008	11:55	423930/267170	
Location: A4177 Hatton Jw Hazeley Manor 1st Rd: A4177 2nd Rd:									
Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
MPH	Single c'way	Priv Give	Daylight	Fine	Dry	None	None	None	None
Veh	Vehicle type	Towing	Manoeuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway
1	Car	No	Going ahead	NW SE	On main	Mid junction	No	None	None
2	Car	No	Waiting	NW SE	On main	Mid junction	No	None	None
3	Car	No	Waiting	NW SE	On main	Mid junction	No	None	None
Cas No Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location	School Pupil
1	1	Drv/Rider	Male	63	Slight	No	Not ped	Not ped	Other

Description: V2 and 3 Stationary Waiting for U/K Veh. to Turn R, V1 Fails to Stop and Hits V2 Pushing it into V3

User Information:



# Birmingham Road, Hatton

Accident Date BETWEEN '01-Jan-2007' AND '01-Aug-2012'

No	Area L/A	Reference	Severity	Day	Date	Time	Grid Coords	Link/Node	Street
9	1	E07000222	S01066707	Slight	Friday	25/05/2007	07:32	423962/267146	
Location: A4177 Birmingham Rd, Hatton, J/W B4439 Hockley Rd 1st Rd: A4177 2nd Rd: B4439									
Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
MPH	Single c'way	T/Stag Give	Daylight	Fine	Dry	None	None	None	None
Veh	Vehicle type	Towing	Manceuvre	Dir	Veh loc	Junct. loc	Skidding	Hit obj in	Left cway
1	Car	No	Right turn	SW	SE On main	Junt appr	Yes	None	Nearside
2	Car	No	Going ahead	SE	NW On main	Junt appr	Over	None	Nearside
Cas	No Veh ref	Cas Class	Sex	Age	Severity	Car Pass	Ped Direction	Ped Movement	Ped location
1	1	Drv/Rider	Female	50	Slight	No	Not ped	Not ped	Not ped
2	2	Drv/Rider	Male	44	Slight	No	Not ped	Not ped	Not ped
Description: V2 Tvl NW on A4177, V1 is Trying to Turn R from B4439 onto A4177, V1 Edged out but Collided with V2 Causing V2 to Become Airborne and Come to Rest in a Field.									
User Information:									





## **APPENDIX B**

# TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : A - HOUSES PRIVATELY OWNED

## MULTI-MODAL VEHICLES

### Selected regions and areas:

<b>02 SOUTH EAST</b>		
BD	BEDFORDSHIRE	2 days
ES	EAST SUSSEX	1 days
<b>03 SOUTH WEST</b>		
CW	CORNWALL	2 days
GS	GLOUCESTERSHIRE	1 days
WL	WILTSHIRE	1 days
<b>04 EAST ANGLIA</b>		
CA	CAMBRIDGESHIRE	1 days
SF	SUFFOLK	2 days
<b>05 EAST MIDLANDS</b>		
DS	DERBYSHIRE	1 days
LE	LEICESTERSHIRE	1 days
LN	LINCOLNSHIRE	1 days
<b>06 WEST MIDLANDS</b>		
SH	SHROPSHIRE	2 days
ST	STAFFORDSHIRE	1 days
WM	WEST MIDLANDS	3 days
WO	WORCESTERSHIRE	3 days
<b>07 YORKSHIRE &amp; NORTH LINCOLNSHIRE</b>		
NY	NORTH YORKSHIRE	4 days
<b>08 NORTH WEST</b>		
CH	CHESHIRE	2 days
GM	GREATER MANCHESTER	1 days
LC	LANCASHIRE	1 days
<b>09 NORTH</b>		
CB	CUMBRIA	2 days

**Filtering Stage 2 selection:**

Parameter: Number of dwellings  
Actual Range: 9 to 150 (units: )  
Range Selected by User: 9 to 150 (units: )

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/04 to 18/11/11

Selected survey days:

Monday	5 days
Tuesday	11 days
Wednesday	4 days
Thursday	6 days
Friday	6 days

Selected survey types:

Manual count	32 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	2
Suburban Area (PPS6 Out of Centre)	15
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	1

Selected Location Sub Categories:

Residential Zone	24
Out of Town	1
No Sub Category	7

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

**MULTI-MODAL VEHICLES****Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	32	63	0.067	32	63	0.282	32	63	0.349
08:00 - 09:00	32	63	0.168	<b>32</b>	<b>63</b>	<b>0.404</b>	32	63	0.572
09:00 - 10:00	32	63	0.196	32	63	0.233	32	63	0.429
10:00 - 11:00	32	63	0.161	32	63	0.198	32	63	0.359
11:00 - 12:00	32	63	0.195	32	63	0.184	32	63	0.379
12:00 - 13:00	32	63	0.209	32	63	0.181	32	63	0.390
13:00 - 14:00	32	63	0.203	32	63	0.184	32	63	0.387
14:00 - 15:00	32	63	0.203	32	63	0.201	32	63	0.404
15:00 - 16:00	32	63	0.288	32	63	0.227	32	63	0.515
16:00 - 17:00	32	63	0.332	32	63	0.192	32	63	0.524
17:00 - 18:00	<b>32</b>	<b>63</b>	<b>0.368</b>	32	63	0.214	<b>32</b>	<b>63</b>	<b>0.582</b>
18:00 - 19:00	32	63	0.257	32	63	0.197	32	63	0.454
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:			2.647			2.697			5.344

**Parameter summary**

Trip rate parameter range selected: 9 - 150 (units: )  
 Survey date range: 01/01/04 - 18/11/11  
 Number of weekdays (Monday-Friday): 32  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 1



TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

**MULTI-MODAL TOTAL PEOPLE**

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	32	63	0.106	32	63	0.418	32	63	0.524
08:00 - 09:00	32	63	0.273	<b>32</b>	<b>63</b>	<b>0.826</b>	<b>32</b>	<b>63</b>	<b>1.099</b>
09:00 - 10:00	32	63	0.294	32	63	0.377	32	63	0.671
10:00 - 11:00	32	63	0.252	32	63	0.321	32	63	0.573
11:00 - 12:00	32	63	0.306	32	63	0.290	32	63	0.596
12:00 - 13:00	32	63	0.322	32	63	0.287	32	63	0.609
13:00 - 14:00	32	63	0.311	32	63	0.287	32	63	0.598
14:00 - 15:00	32	63	0.312	32	63	0.311	32	63	0.623
15:00 - 16:00	<b>32</b>	<b>63</b>	<b>0.620</b>	32	63	0.390	32	63	1.010
16:00 - 17:00	32	63	0.580	32	63	0.345	32	63	0.925
17:00 - 18:00	32	63	0.591	32	63	0.330	32	63	0.921
18:00 - 19:00	32	63	0.430	32	63	0.343	32	63	0.773
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:			4.397			4.525			8.922

**Parameter summary**

Trip rate parameter range selected: 9 - 150 (units: )  
 Survey date range: 01/01/04 - 18/11/11  
 Number of weekdays (Monday-Friday): 32  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys manually removed from selection: 1

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