

Transport Statement

Proposed Residential Development,
Land off Lidsey Road (A29),
Woodgate,
West Sussex,
PO20 3SU



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Executive Summary

The existing site is currently occupied by a large area of pasture land, situated in the south of the village of Woogate, West Sussex. The existing access off Lidsey Road (A29) will be retained for the proposed development as a vehicular access/ egress into the site. The proposed access is existing and currently serves the Willows Caravan Park.

The proposed development is to construct 38 dwellings, comprised of the following development mix, associated parking and landscaping.

Social Housing:

- 4 x 3-bedroom houses;
- 8 x 2-bedroom houses.

Private Housing:

- 5 x 4-bedroom houses;
- 10 x 3-bedroom houses;
- 11 x 2-bedroom houses.

This Transport Statement summarises the existing situation, local and national transport policy, and considers the likely transport impact of the proposed development through a trip forecasting exercise.

The proposals are compliant with policy objectives of Arun District Council and West Sussex County Council and the National Planning Policy Framework, as well as the national guidance document, Manual for Streets.

Trips rates have been determined using the TRICS database and the proposed development only adds a small number of trips on Lidsey Road in the peak hours. The proposed development is forecast to generate:

- Around 18 * 2-way vehicle trips in the morning peak hour;
- Around 15 * 2-way vehicle trips in the afternoon peak hour.

There is a right turn lane ghost island provided on the A29 to facilitate right turning movements. The access onto the A29 will be improved with the provision of a new length of footway on the south side. The proposed development will provide adequate car parking spaces and cycle parking spaces for the proposed development whilst considering West Sussex County Council Parking Demand Tool 2018 and 'Guidance for New Residential Developments'.

Improvements to local footpaths to provide a link from Woodgate to Church Lane Eastergate have been secured via a Section 106 agreement tied to a residential development in Hook Lane. These improvements will provide a good walking link towards Barnham Railway Station.

There are local shops and amenities which are within walking distance of the site including a primary school and the A29 has footways on both sides providing pedestrian access to the site. Education, entertainment and community facilities are also within walking distance of the proposed development. There are also bus stops that provide the number 66 service which runs 6 times daily and provides speedy links to Barnham, Bognor Regis and Yapton.

The site is located south of the level crossing where trains run through about 3 times per hour in each direction (6 times in total). This causes a minor delay as the barriers go down. There is an average delay of 34 seconds for each train which is extremely minor in comparison to many other level crossing locations such as Chichester and West Worthing.

Overall, the proposed scale of development will generate only a small number of vehicle movements which does not create any significant impact on the highway network that prevents development of this site.

1 Introduction

- 1.1 This report has been prepared for Whaleback Ltd in conjunction with the above development and no responsibility is accepted to any third party for all or part of this study in connection with this or any other development.
- 1.2 GTA Civils Ltd has been commissioned by Whaleback Ltd to prepare a Transport Statement in connection with the proposed development at the Land off Lidsey Road (A29), Woodgate, West Sussex.
- 1.3 Specifically, the report has been prepared to investigate and advise on the impacts of the proposed residential development on the local and nearby strategic highway networks.

Scope of Report

- 1.4 The report has been prepared in accordance with the principles and advice in:
 - National Planning Policy Guidance (NPPG);
 - National Planning Policy Framework (NPPF);
 - Manual for Streets 1 & 2 (2007);
 - West Sussex County Council's Local Transport Plan;
 - Arun District Council Local Plan;
 - Aldingbourne Parish Neighbourhood Development Plan.
- 1.5 The WSCC Transport Assessment Methodology refers to the indicative thresholds for Transport Statements, Transport Assessments and Travel Plans in Appendix B of the DfT 'Guidance on Transport Assessment'.
- 1.6 Although the document has been rescinded, it remains an appropriate guidance framework. A threshold of <50 units does not require a Transport Statement, however, this document has been produced to support the planning application and to demonstrate the acceptability of the proposal in transport terms.
- 1.7 The approved residential development off Hook Lane (AL/39/13) is located north of the proposed development. This approval involves upgrading existing Public Right of Way; footpaths 296 and 300.

2 Policy

National Planning Policy Framework (NPPF)

- 2.1 The National Planning Policy Framework, first published in 2012 and revised in June 2019, sets out the Governments planning policies for England and how these are expected to be applied. The NPPF provides a framework within which locally-prepared plans for housing and other development can be produced.
- 2.2 NPPF supports sustainable development, with a 'presumption in favour of sustainable development', as set out in paragraph 10 and 11:

*"At the heart of the National Planning Policy Framework is a **presumption in favour of sustainable development**:*

*For **plan-making** this means that:*

- a) plans should positively seek opportunities to meet the development needs of their area, and be sufficiently flexible to adapt to rapid change;*
- b) strategic policies should as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas, unless:*
 - i. the application of policies in this Framework that protect areas or assets of particular importance produces a strong reason for restricting the overall scale, type or distribution of development in the plan area; or*
 - ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole;*

*For **decision-taking** this means:*

- c) approving development proposals that accord with an up-to-date development plan without delay; or*
- d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:*
 - i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or*
 - ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."*

2.3 In the context of sustainable transport and in considering development proposals the NPPF states in paragraphs 108-111:

Paragraph 108, "In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- appropriate opportunities to promote sustainable transport modes can be - or have been - taken up, given the type of the development and its location;*
- safe and suitable access to the site can be achieved for all users; and*
- any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*

Paragraph 109, "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

Paragraph 110, "Within this context, applications for development should:

- a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."*

Paragraph 111, "All developments that will generate significant movement should be required to provide a travel plan and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed."

National Planning Practice Guide (NPPG)

- 2.4 National Planning Practice Guidance (NPPG) is supplementary advice intended to expand on and support the principles and practices of the National Planning Policy Framework (NPPF). It is managed and maintained by the Department of Communities & Local Government. Amongst other things, NPPG provides advice on the need for, and the preparation of, Travel Plans, Transport Statements and Transport Assessments.
- 2.5 NPPG states that Travel Plans, Transport Assessments and Transport Statements can positively contribute to:
- encouraging sustainable travel;
 - lessening traffic generation and its detrimental impacts;
 - reducing carbon emissions and climate impacts;
 - creating accessible, connected, inclusive communities;
 - improving health outcomes and quality of life;
 - improving road safety; and
 - reducing the need for new development to increase existing road capacity or provide new roads.
- 2.6 NPPG advises that the key transport issues to be considered in a transport evidence base should:
- assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms; and
 - consider the cumulative impacts of existing and proposed development on transport networks

Manual for Streets (MfS)

- 2.7 MfS and MfS2 was published in 2007 and 2010 and are referred to throughout the report.
- 2.8 The purpose of MfS was to help rebalance the function of residential streets which had on many occasions resulted in places that were dominated by motor vehicles, which failed to make a positive contribution to the quality of life. MfS demonstrates the benefits that flow from good design and assigns a higher priority to pedestrians and cyclists, setting out an approach to residential streets that recognises their role in creating places that work for all members of the community. MfS refocuses on the place function of residential streets, giving clear guidance on how to achieve well-designed streets and spaces that serve the community in a range of ways.
- 2.9 The 'Department for Transport' and 'Department for Communities and Local Government' support the guidance provided in the manuals, though importantly, they do not outline any new policies or legal requirements.
- 2.10 Some of the key aims for streets in the introduction, are as follows:
- help build and strengthen the communities they serve;
 - meet the needs of all;
 - form part of a well-connected network;
- It also discourages designs that:
- primarily meet motor traffic needs;
 - are difficult to serve by public transport.
- 2.11 MfS 2 applies the same principles to a wider variety of situations including both rural and urban. Both aim to deliver contextually sensitive designs, which involves understanding the unique landscape and role of individual modes of transport in the area.

West Sussex County Council's Local Transport Plan

2.12 The Local Transport Plan (LTP3) for West Sussex covers the period 2011 to 2026 and was adopted by the County Council on March 2011. The 4 main objectives of LTP3 are:

- Promoting Economic Growth
- Tackling a Changing Climate
- Providing Access to Services, Employment and Housing
- Improving Safety, Security and Health

2.13 Under each of these main objectives are the LTP3 strategies as shown below in **Table 2.1**.

Table 2.1 LTP3 Themes and Objectives

Objectives	Strategies
Promoting Economic Growth	- o Maintain or improve the reliability of journey times on key routes; - o Improve connectivity and access to local labour markets and key centres; - o Deliver transport improvements to support and facilitate sustainable growth; - o Ensure local transport networks are resistant & adaptable to shocks & impacts including climate change.
Tackling a Changing Climate	- o Adapt transport infrastructure to increase its resilience to the effects of climate change; - o Support new low emission fuels, infrastructure and technologies; - o Reduce unnecessary trips by motorised vehicles and encourage the use of more sustainable modes of transport; - o Reduce the need to travel at all by encouraging provision of local services; - o Reduce the carbon footprint of the County Council's own operations; - o Maximise reuse and recycling of materials in construction and maintenance.
Providing Access to Services, Employment and Housing	- o Identify problem areas using survey approaches & accessibility mapping techniques; - o Work in partnership with service providers and stakeholders to set priorities; - o Ensure that accessibility is a central consideration when planning local services; - o Seek to ensure that places of work, education, leisure and food retail opportunities are located close together in new development; - o Enable disadvantage people to access employment opportunities, key services, social networks and goods; - o Encourage local delivery of services so that people have to travel less.
Improving Safety, Security and Health	- o Reduce the risk of death or injury due to transport incidents through engineering, training and publicity particularly targeted at vulnerable road users; - o Reduce crime, fear of crime and anti-social behaviour on the transport network; - o Reduce the negative impacts of transport on public health; - o To encourage and to enable physically active travel such as walking and cycling through behaviour change initiatives and provision of information and education; - o Invest in new infrastructure which improves the County and creates safer conditions for all, and particularly vulnerable road users.

Arun District Council Local Plan

- 2.14 The Arun Local Plan is the part of the Local Development Framework that sets out the Council's vision for the period of 2011 to 2031. The main vision and objectives are as follows.

Vision for the places – 'place shaping'

- *New homes and jobs will have been provided through well designed and sustainable development, delivered in conjunction with new or improved infrastructure, services and community facilities, whilst the potential impacts of climate change will have been fully taken into account;*
- *Smaller villages will develop their roles as well-connected large villages serving inland Arun; providing an enhanced range of shops, employment, housing, community facilities and local services, supported by improved transport links;*
- *The District's smaller settlements and rural areas will retain their character with limited new development to meet their needs.*

Objectives

- *To strengthen Arun's economic base and provide local job opportunities by increasing, diversifying and improving the quality of employment sites, better infrastructure including road access, quality affordable accommodation and the development of business support and partnerships;*
- *To reduce the need to travel and promote sustainable forms of transport.*

Aldingbourne Parish Neighbourhood Development Plan

- 2.15 The plan sets out the vision for the local area and is based on the thoughts and feelings of the local people. It sets out key objectives for the period of 2011-2034. There are a number of policies relating to the proposed development which are set out below:

2.16 **Policy GA1 Connection to sustainable transport, local networks and green infrastructure.**

New developments should connect to walking and cycling routes, public and community transport and integrate with the current green infrastructure network to provide access to the social, community and retail facilities of the village. Existing community transport will be preserved and, where appropriate, be enhanced as demand increases.

2.17 **Policy GA3 Parking and new development.**

Development proposals will be supported only if they include the maximum level of off street parking consistent with the current standards under the Local Plan. Developments that reduce the amount of off-street parking currently available will only be supported if they make enforceable provision for equivalent off-street parking nearby. Parking spaces provided in connection with such proposals will be required to be made available in perpetuity.

3 Existing Site Location

- 3.1 The site is located at the southern end of the village of Woodgate in West Sussex. It is located on land on the east side of the Lidsey Road (A29) as illustrated below in **Figure 3.1**.

Figure 3.1 Site Location Outline



- 3.2 The site lies in a residential area with properties to the north and a caravan park to the east. There is industrial use situated to the south of the site. The site is located south of the railway line that runs through Woodgate.

Existing Site Access

- 3.3 The application site is currently vacant pasture land with residential properties to the north and caravan park to the east. There is currently a field access from the caravan park access road into the site. The site is currently accessed from the existing access serving Willows Caravan Park. The existing access to the caravan park will be used for the proposed development. A right turn lane is provided on the A29 to serve the access. Photographs of the existing site access can be seen in **Appendix A**.

4 Local Highway Network

- 4.1 The site is located on the land to the east of the Lidsey Road (A29). The access road that runs along the northern boundary of the site provides access to the caravan park to the east. The access road has a width of about 5m and a small grass verge on the north side.
- 4.2 Lidsey Road (A29) is approximately 7m wide and has footways on either side with a speed restriction of 30mph. There is street lighting on Lidsey Road.
- 4.3 The A29 runs from the A24 in Surrey, through Billingshurst and terminates at Bognor Regis. Having left the A24, entering West Sussex, the road passes minor villages and crosses Pulborough, Bury Hill and Fontwell Park Racecourse before terminating at Bognor Regis.
- 4.4 From the site, the A29 runs south to a large roundabout junction connecting to the A259. This provides links into Littlehampton to the east and Chichester to the west.

Accident Data

- 4.5 Accident records for the local highway network in the site vicinity were reviewed for the 5-year period of 2014-2018, using Crashmaps.co.uk. There has been 1 recorded accident over the 5-year period in a 250m radius of the site access.
- 4.6 Locations of the incidents are shown in **Figure 4.1** with details of the one incident detailed in **Table 4.1**.

Figure 4.1 Recorded Traffic Incidents (2014-2018)



Table 4.1 Recorded Traffic Incidents (2014-2018)

Date	Category	Location	No. vehicles involved	No. casualties involved
08/07/2014	Slight	The junction of Woodgate Road/ Lidsey Road (A29)	2	1

- 4.7 Overall, due to the low severity and accident incidence rate, there is no evidence that the proposed development would lead to an increase in the risk of accidents.

5 Modal Choices

Bus Services

- 5.1 The nearest bus stop with frequent services can be found on Lidsey Road (A29) (Willows Caravan Park) located approximately 50m (1-minute walk) from the proposed development.
- 5.2 The bus stop has services to Barnham, Bognor Regis and Yapton. The bus services provided are listed in **Table 5.1**.

Table 5.1 Bus Services from Willows Caravan Park

Services	Destinations Served	Weekday Frequency	Saturday Frequency	Sunday Frequency
66A	Bognor Regis - Yapton - Bognor Regis	07:55, 11:07, 15:33	11:07, 15:33	-
66C	Bognor Regis - Yapton - Bognor Regis	08:30, 12:49, 16:47	08:30, 12:49, 16:47	-

Rail Services

- 5.3 The closest railway station is Barnham which is located about 4km from the site. Although this is considered too far to walk at present, Barnham can be reached by car and cycle providing 142 car parking spaces including 2 accessible spaces and 62 cycle spaces. These are provided at the front of the station. The 66A & 66C bus services also give a direct connection to Barnham Station within a relatively short journey time.
- 5.4 Services from this station are run by Southern. There are frequent services giving access to many local places as well as London for commuting residents. These destinations include Bognor Regis, Southampton, Portsmouth, Brighton, Chichester, etc. Key destinations, service frequencies and journey times are set out below in **Table 5.2**.

Table 5.2 Train Services from Barnham Station

Destination	Frequency in peak hours (AM and PM)	Journey Time
Chichester	5-6 per hour	8 minutes
Bognor Regis	2-4 per hour (peak) 2-3 per hour (off-peak)	11 minutes
Portsmouth	2 per hour (peak)	35-45 minutes
Gatwick Airport	4 per hour (peak)	50 minutes
Southampton	2-3 per hour (peak) 1-2 per hour (off-peak)	55 minutes
London Victoria	Every 30-40 min	71 minutes
Brighton	2-3 per hour (peak) 2 per hour (off-peak)	46 minutes

- 5.5 West Sussex County Council has a proposal to provide a cycleway/footpath link from the Woodgate area to Barnham Station. The appeal decision in respect of a Hook Lane development (AL/39/13) also secured improvements to local Public Rights of Ways to provide safe convenient and sustainable links from Woodgate to Eastergate and Barnham. This is covered in more detail in paragraph 6.7.

Walking and Cycling

- 5.6 The topography in Woodgate is fairly level which is conducive for walking and cycling. Most roads within the village have footways and roads are generally flat and of a reasonable width to allow cycling to take place. Barnham Station is around 4.2km from the site and is, therefore, within cycle distance.
- 5.7 It is noted that under the planning permission (AL/39/13) for the residential development off Hook Lane just north of the site, the applicant must upgrade existing Rights of Way to deliver a footpath link to Eastergate which then provides good access to Barnham including the Railway Station and St Philip Howard Catholic High School. These improvements are to Footpaths 296 & 300 providing a surfaced link from Woodgate to Church Lane Eastergate. The improvements are secured by way of a Section 106 agreement dated 11/12/14.

- 5.8 The level crossing is located north of the proposed site location. There are about 3 trains that go through this crossing per hour in each direction causing an average 34 second delay each when the barriers go down. The possible delay per hour is calculated as follows: 6 trains x 34 seconds = 204 seconds (or just over 3 minutes) delay per hour, although as this is an average, this will sometimes be longer. This delay is unlikely to influence mode of transport used and it is likely that existing residents chose to make journeys in the extensive gaps between trains.
- 5.9 The publication 'Guidelines for Providing Journeys on Foot, 2000' from the Institution of Highway and Transportation (IHT) contains a table of suggested walking distances. This table takes into account the different preferred walking distances for different purposes. This can be seen below in **Table 5.3**.

Table 5.3 Extract from IHT 'Guidelines for Providing Journeys on Foot'

Distance (m)	Town Centre	Commuting	School/ Elsewhere
Acceptable	200	500	400
Desirable	400	1000	800
Maximum	800	2000	1200

- 5.10 Key destinations in the local area of the site are listed below in **Table 5.4**.

Table 5.4 Accessibility of Development Site to Local Amenities

Destination	Distance from site centre (m)	Walk time (+ crossing delay)
Local bus stops	180	3 minutes
Prince of Wales Public House	360	5 minutes
Aldingbourne Post Office and village stores	500	6.5 minutes
Aldingbourne Primary School	700	9 minutes
Aldingbourne Tennis Club	1340	17 minutes

- 5.11 The table above shows that the site is located within desirable walking distances of local shops and the primary school. There are various additional amenities and schools in Westergate, Eastergate, Barnham and Bognor Regis which can be accessed via the 66A & 66C bus services.

- 5.12 The site can be accessed by bus services that link to amenities in both Barnham and Bognor Regis. The number 66A/66C bus services run 6 times daily due to a low demand based on the number of people in the village that use these services. However, the proposed Hook Lane development and Local Plan site allocations will provide extra demand for more frequent services.
- 5.13 There are also essential amenities within walking distance of the site including a school.
- 5.14 The approved Hook Lane site (AL/39/13) located north of this proposed development is considered a sustainable location. The proposed development site examined in this report is only a further 3-minute walk from the local amenities that contribute to the Hook Lane development being considered a sustainable location. It is reasonable, therefore, that the proposed development of this report is sustainable as Hook Lane is sustainable.

6 Proposed Development

- 6.1 The proposed development is for 38 residential units and associated parking. This will comprise of a mix of private and affordable housing. The proposed development mix is as follow:

Social Housing:

- 4 x 3-bedroom houses;
- 8 x 2-bedroom houses.

Private Housing:

- 5 x 4-bedroom houses;
- 10 x 3-bedroom houses;
- 11 x 2-bedroom houses.

- 6.2 The site is proposed to include communal gardens, and outdoor areas. There will be shared allotment spaces that can be accessed via the communal gardens. A site layout plan is included in **Appendix B**.

Proposed Access & Layout

- 6.3 It is proposed to gain access to the site from the existing access road from the A29 that currently serves the caravan park. It is intended to widen the access to 6m and include a footway along the north edge of the access to tie into the existing footway along Lidsey Road. Some over-run areas may be required at the junction for caravan deliveries.
- 6.4 The proposed access arrangements have been subject to a Stage 1 Road Safety Audit (RSA1). This raised 1 point which has been addressed in the Designer's Response to the RSA1. Both the RSA1 and the Designer's Response are included in **Appendix C**.
- 6.5 As part of the access improvements, the proposed access will connect to the access road that serves the caravan park. It has been moved further away from the A29 to provide adequate space for cars to easily enter the site. As shown in the layout plan in **Appendix B**, the site will have two perimeter access roads provided for vehicular access and an interior grassed over track to be used for emergency access only. There will be appropriate turning heads provided for service vehicles to comply with guidance found in Manual for Streets (MfS).

Stage 1 Road Safety Audit

- 6.6 A Stage 1 Road Safety Audit was undertaken to assess the proposed development access with Lidsey Road and associated highway changes in conjunction with the vehicular and pedestrian access to the development site. The full audit report, undertaken by EC Road Safety, is provided in **Appendix C**.

- 6.7 A summary is provided in **Table 6.1** below with proposed action. It is suggested that the proposed action would be taken forward in discussion with WSCC Highways Officers and it is considered that the single issue raised in the Safety Audit can be mitigated.

Table 6.1 Stage 1 RSA Summary of Issues Raised: Site Access with Lidsey Road

Report Reference	Location	Summary	Auditor Recommendation	Designer's Response
3.1.1	Proposed informal crossing point on access road.	The proposed informal crossing is located such that the visibility for pedestrians crossing from north to south on the access road is restricted and could result in them being unable to see southbound traffic turning into the access road. As a result, there is the risk they could be struck by vehicles turning into the development site.	Relocate the informal pedestrian crossing point to ensure visibility splays for pedestrians using the informal crossing point.	Agreed. This will be picked up at the detailed design stage.

Proposed Car Parking

- 6.8 The on-site car parking provision has been considered utilising the West Sussex County Council Parking Demand Tool 2018. This calculates the parking need based on behavioural zones. The proposed development is located in behavioural zone 2. The parking demand tool is shown in **Appendix D**.

- 6.9 The parking tool states 87 spaces are required across the development.

Analysis of Car Ownership

- 6.10 Although the standards recognise a much higher provision of 87 spaces that may be necessary, an analysis of local car ownership was undertaken to identify a more exact level of parking demand that would be required for a development of this nature.
- 6.11 When specifically considering car ownership of 1 – 3-bedroom houses in the 2011 Census in Barnham ward, 28% of 1 – 3-bedroom houses owned no vehicle, 43% of 1 – 3-bedroom houses owned 1 vehicle whilst 21% of 1 – 3 bedroom houses owned 2 vehicles. The total car ownership for the area is 1.1 per 1 – 3-bedroom house.

- 6.12 When specifically considering car ownership of 4+-bedroom houses in the 2011 Census in Barnham ward, 17% of 4+-bedroom houses owned no vehicle, 51% of 4+-bedroom houses owned 1 vehicle whilst 27% of 4+-bedroom houses owned 2 vehicles. The total car ownership for the area is 1.2 per 4+-bedroom houses. More information can be seen below in **Table 6.2**.

Table 6.2 Car Ownership Data of the Barnham Ward from the 2011 Census

Size of House or Bungalow	Total number of Houses or Bungalows	No cars or vans in household	1 car or van in household	2 cars or vans in household	3 or more cars or vans in household	Total cars or vans in household
1 – 3 bedrooms	58	16	25	12	5	64
4+ bedrooms	394	67	202	105	20	472

- 6.13 In relation to the proposed development of 33 * 1 – 3-bedroom houses and 5 * 4-bedroom houses, 1.1 * 33 1 – 3-bedroom houses = 37 (36.3) cars owned and 5 * 4-bedroom houses, 1.2 * 5 4-bedroom houses = 6 cars owned. Therefore, the forecast car parking demand for the proposed development would require 42 spaces in total. Including visitor parking at 0.2 per dwelling, a total of 50 spaces would be required based on the census data for the ward.

Electric Vehicle Parking

- 6.14 Electric vehicle charging points should be provided to enable the charging of electric vehicles at all dwellings. The WSCC guidance provides minimum standards on a rising scale, commensurate with the projected national growth of electric vehicle sales. In terms of the development proposed, as every dwelling has a parking space, EV charging provision would also be provided which easily complies with the minimum requirements.

Cycle Parking

- 6.15 The West Sussex County Council 'Guidance for Parking in New Residential Developments' sets out the following standards for cycle parking provisions for new houses, see **Table 6.3** below.

Table 6.3 WSCC Cycle Parking Standards

Type of Dwelling	Size (No. of Bedrooms)	Cycle Provision (per unit)
House	1 and 2 bedrooms	1 space
House	3 bedrooms or more	2 spaces

- 6.16 Covered and secure cycle parking to meet the West Sussex County Council standards will be provided for each unit.

Emergency Access and Service Vehicles

- 6.17 The proposed layout of the site will include turning heads at the end of the two access roads and a central loop with 'grasscrete' type surfacing for emergency access only to enable emergency vehicles to enter and turn on site. This will enable all dwellings to be accessed within 45m of the highway and meet the requirements set out for emergency vehicles in paragraph 6.7.2 of Manual for Streets.
- 6.18 The service arrangements for the proposed dwellings will be for refuse vehicles to enter the site and use the turning heads to exit in a forward gear. Bin stores will be located close to the access road within the site, in line with the requirements set out in paragraph 6.8.9 of Manual for Streets 1 that vehicles should be able to get within 25m of the storage point. No residents should be required to carry waste for more than 30m as set out in MfS1.

7 Traffic Generation and Impact

Existing Traffic Generation

- 7.1 The site is currently undeveloped and therefore no traffic generation is associated with the existing site.

Proposed Traffic Generation

- 7.2 The TRICS database has been examined for appropriate matches to the proposed development. The units are a mix of private and affordable houses, although a robust approach has been taken and the database has been interrogated to establish the likely traffic generation using the land use categories of 'Houses Privately Owned' only.
- 7.3 The TRICS search has been restricted to sites that reflect the location of the proposed site and the output file is provided in **Appendix E. Table 7.1** below details vehicle trips for developments of a similar nature.

Table 7.1 Likely Trip Rates for the Proposed Development

Development Parcel	Two-way trip rate			Dwelling units	Two-way trips		
	AM Peak	PM Peak	Daily		AM Peak	PM Peak	Daily
Houses Privately Owned	0.477	0.397	4.24	38	18	15	162

- 7.4 According to the analysis undertaken using the TRICS database, the likely traffic generation of the proposed development is as follows:
- Around 18 * 2-way vehicle trips in the morning peak hour;
 - Around 15 * 2-way vehicle trips in the afternoon peak hour.
- 7.5 In summary, the proposed residential dwellings result in a very small number of additional vehicle trips over the course of an average weekday which will have a negligible impact on the local highway network.

8 Conclusions

- 8.1 The site is located to the east of A29 Lidsey Road, Woodgate and lies within the Arun District of West Sussex.
- 8.2 The proposed development consists of 38 new residential units including access and associated parking. This comprises of a mix of private and affordable houses.
- 8.3 The proposed access will be gained via the existing access road to the caravan park located to the east of the proposed site. This is located off the A29. The existing access onto the A29 will be widened to a width of 6m. The proposed access will connect to the access road that serves the caravan park.
- 8.4 Based on the TRICS analysis, the proposed development is likely to generate around 18 additional trips in the AM peak hour (0800 - 0900) and an additional 15 in the PM peak hour (1700 – 1800).
- 8.5 The site is located within walking distance of local shops, schools and other facilities. There is an improvement proposed to upgrade existing public footpaths to link Woodgate to Eastergate and Barnham. This will provide a direct sustainable link to the railway station and St Philip Howard Catholic High School. The level crossing to the north of the site is calculated to cause a 204 second (or just over 3 minutes) delay per hour.
- 8.6 The proposed development will provide adequate car parking spaces and cycle parking spaces for the proposed development whilst considering West Sussex County Council Parking Demand Tool 2018 and 'Guidance for New Residential Developments'.
- 8.7 Overall, the proposed scale of development will generate only a small number of vehicle movements which does not create any significant impact on the highway network that prevents development of this site.

Appendix A

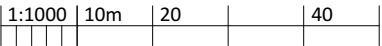
Photograph of the Existing Access



Appendix B

Proposed Site Layout

Land At Lidsey Road
Proposed Site Plan [DRAFT FOR COMMENT]



Accommodation Schedule:

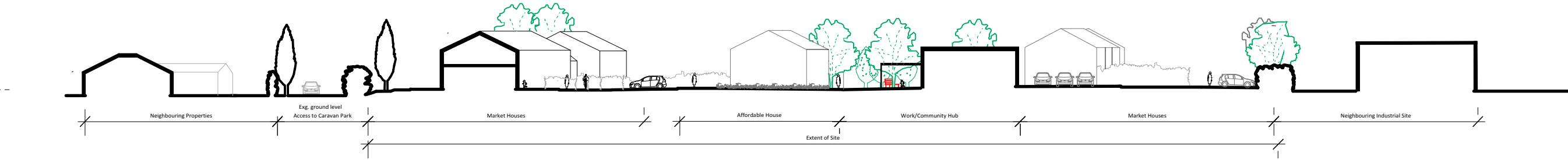
38 total number of houses comprised of:
26 market homes (68%) and 12 affordable (31%)
Note: all house types are two storeys.

MARKET HOMES
5 x 4B Homes (7 persons) 115sqm GIA. Attached garage (2 spaces)
10 x 3B Homes (5 persons) 93sqm GIA. Single off road car space
11 x 2B Homes (4 persons) 79sqm GIA. Single off road car space

AFFORDABLE HOMES
4 x 3B Homes (5 persons) 93sqm GIA. Single off road car space
8 x 2B Homes (4 persons) 79sqm GIA. Single off road car space

- The affordable homes are all contained within an area of the site, so that this can be separately demised and managed. This could suit community led housing initiatives.
- Communal facilities, such as a hub building, attenuation pond, growing beds and green are all contained and managed within the 'affordable' portion of the site
- ▲ = Primary entrance position to dwellings

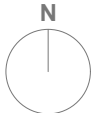
Land At Lidsey Road
Section [DRAFT FOR COMMENT]



Revisions:

A	26/09/2019	Preliminary issue for comment
B	11/10/2019	Issue for comment
C	05/10/2019	Issue for comment
D	02/02/2010	Issue for comment

Checked



Dwg No. 1428A-SK-002

Drawing Title Proposed Site Plan
Address Land at Lidsey Road
Client Tim & Stewart Johnson
Scale 1:1000
Stage Feasibility
Drawn by ns
Checked by



4 Gloucester Passage, Brighton BN1 4AS
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Appendix C

Stage 1 Road Safety Audit & Designer's Response

Designers Response to RSA1

Proposed development at:

Land off A29, Woodgate



Client: Alex Bateman, Stiles Harold Williams Partnership LLP, One Jubilee Street,
Brighton, BN1 1GE

Ref: 6530/2.3
Date: August 2017

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2	Designer's Response to the RSA1	3
3	Conclusion	4

Issue	Issue date	Compiled	Checked
Preliminary Issue	August 2017	LNS	RIN

Report by: Lawrence Stringer CEng, MCIHT, MRTPI

Checked by: Roger New CEng, MICE, BSc, MSc

1 Introduction

- 1.1 EC Road Safety Limited has been commissioned by GTA Civils Ltd to undertake a Stage 1 Road Safety Audit on the access arrangements forming part of the proposed development of land situated off the A29, Woodgate.
- 1.2 The proposed scheme consists of an amended access which currently serves the existing caravan site to allow for access into the proposed development site. The existing access will be amended to provide a direct access into the development site with a give way junction leading into the caravan site spurred off the amended access road. The existing footway on the eastern side of Lidsey Road will be extended into the access road, where an informal crossing point is proposed to allow pedestrians to cross the access road and continue on foot into the development site. This report subsequently describes a Stage 1 Road Safety Audit of the proposed scheme.

2 Designer's Response to the RSA1

- 2.1 Only one point was raised through the RSA1 process. This is detailed in **Table 1** below, together with the recommendation and designer's response.

Table 1 – RSA1 Problems, Recommendations & Designer's Response

Problem	Location	Description	Recommendation	Designer's Response	Comments
3.4.1	Proposed informal crossing point on access road	The proposed informal crossing is located such that the visibility for pedestrians crossing from north to south on the access road is restricted and could result in them being unable to see southbound traffic turning into the access road. As a result, there is the risk they could be struck by vehicles turning into the development site.	Relocate the informal pedestrian crossing point to ensure visibility splays for pedestrians using the informal crossing point.	Agreed. This will be picked up in the detailed design.	

3 Conclusion

- 3.1 There was only one problem raised through the RSA1 process which was of a minor nature and relatively straight forward to address. Therefore, the RSA1 has not raised any fundamental problems that cannot be resolved.

- End of Report -



Drainage - Flood Risk - Highways - Transport

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Land off A29 Woodgate
Woodgate
Chichester
PO20 3SU

Proposed Access Arrangements

STAGE 1 ROAD SAFETY AUDIT

Report No. EC/2017/08/GTA1

August 2017



Prepared by:

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Sponsor / Client: Shellbee Hadley-Smith / GTA Civils Ltd

Project: Proposed Access Arrangements

Address: Land off A29 Woodgate, Woodgate, Chichester.

PREPARED BY

Name: Paul Nevard

Position: Principal Engineer

Date: 24 August 2017

AGREED BY

Name: Vinny Rey

Position: Principal Engineer

Date: 24 August 2017

AUTHORISED FOR ISSUE

Name: Paul Nevard

Position: Principal Engineer

Date: 24 August 2017

DISTRIBUTION

Issue No.	Issued To	Date Issued
1.	Shellbee Hadley-Smith – GTA Civils	24/08/2017
2.	Vinny Rey – Team Member	24/08/2017
3.	Office Copy	24/08/2017

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1. INTRODUCTION

1.1 General

1.1.1 EC Road Safety Limited has been commissioned by GTA Civils Ltd to undertake a Stage 1 Road Safety Audit on the access arrangements forming part of the proposed development of land situated off A29 Woodgate.

1.1.2 The proposed scheme consists of an amended access which currently serves the existing caravan site to allow for access into the proposed development site. The existing access will be amended to provide a direct access into the development site with a give way junction leading into the caravan site spurred off the amended access road. The existing footway on the eastern side of Lidsey Road will be extended into the access road, where an informal crossing point is proposed to allow pedestrians to cross the access road and continue on foot into the development site. This report subsequently describes a Stage 1 Road Safety Audit of the proposed scheme.

1.1.3 The scope of the audit relates to the proposed access arrangements into the development site and associated highway improvements.

1.1.4 Lidsey Road forms part of the A29 linking Westergate in the north and Lidsey in the south. The road is a single carriageway road subject to a 30mph speed limit. Street lighting is present along the route and the route serves both residential and commercial units. The route is also a bus route and there are two bus stops located just north of the proposed development site. A level crossing is also located further along Lidsey Road to the north of the proposed development site.

1.1.5 The Road Safety Audit Team (approved by the Project Sponsor) consisted of:

Paul Nevard
MSc, BA (Hons) CMILT, MCIHT, MSoRSA
RSA, Cert. Comp

Director – EC Road Safety Ltd
Road Safety Audit Team Leader

Vinny Rey
BA (Hons) MCIHT, MSoRSA
RSA, Cert. Comp

Principal Traffic Engineer
Road Safety Audit Team Member

1.1.6 Before the site investigation, both the Audit Team Leader and Audit Team Member met at the EC Road Safety office on Tuesday 22nd August 2017 to assess the plans and raise any initial concerns and issues. The site was subsequently examined by Paul Nevard and Vinny Rey together in daylight hours between 11:00 and 11:30 hours on Wednesday 23rd August 2017. The weather during the daytime site visit was dry and bright. Traffic flows were moderate and vehicle speeds were observed as being low. Some local northbound congestion was present as a result of the queues forming from the level crossing.

1.1.7 The Road Safety Audit also comprised of an examination of the plans supplied to the Road Safety Audit Team, referenced in Appendix A of this report. The location of problems raised can be found within the report, photographed for reference or referenced in Appendix B of this report. If no problems are identified, only a location plan will be provided for reference in Appendix B.

1.1.8 The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges (DMRB) Standard HD19/15. The Road Safety Audit Team has

examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. This Road Safety Audit has not considered structural safety or checked for compliance to standards. This safety audit does not perform any “Technical Check” function on these proposals. It is assumed that the Project Sponsor is satisfied that such a “Technical Check” has been successfully completed prior to requesting this safety audit.

- 1.1.9 This Road Safety Audit has been undertaken based on the Road Safety Audit Team's previous experience and knowledge in undertaking Accident Investigation, Road Safety Engineering and Road Safety Audits. No member of the Road Safety Audit Team has had any previous input to the design of the scheme. The audit has been carried out with the sole purpose of identifying any features of the design that could be removed or modified in order to improve the safety of the scheme. The problems identified have been noted in this report together with suggestions for safety improvements, which we recommend should be studied for implementation.

1.2 Purpose of Scheme

The purpose of the scheme is to provide a new access into the proposed development site.

2. PROBLEMS IDENTIFIED IN PREVIOUS ROAD SAFETY AUDITS

No previous audits have been supplied to the Audit Team and the Audit Team believe that none have been produced.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1 General

No Problems identified in this category at this Stage.

3.2

Local Alignment

No Problems identified in this category at this Stage.

3.3

Junctions

No Problems identified in this category at this Stage.

3.4 Non-Motorised User Provision

3.4.1 PROBLEM

Location: Proposed informal crossing point on access road.

Summary: Restricted sightlines cause result in pedestrians being struck by vehicles.

Detail: The proposed informal crossing is located such that the visibility for pedestrians crossing from north to south on the access road is restricted and could result in them being unable to see southbound traffic turning into the access road. As a result, there is the risk they could be struck by vehicles turning into the development site.



RECOMMENDATION

Relocate the informal pedestrian crossing point to ensure visibility splays for pedestrians using the informal crossing point.

3.5 Road Signs, Carriageway Markings & Street Lighting

No Problems identified in this category at this Stage.

End of list of Problems identified and Recommendations offered in this Stage 1 Audit

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with HD 19/15.

AUDIT TEAM LEADER

Paul Nevard

Signed:



Date: 24/08/2017

AUDIT TEAM MEMBER

Vinny Rey

Signed:



Date: 24/08/2017

EC Road Safety Ltd
1 Draven Close
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BR2 7PN
United Kingdom

Tel: 07508 76 76 96

Email: audits@ecroadsafety.co.uk

APPENDIX A

List of documents and plans considered during this Stage 1 Road Safety Audit:

- 6530A_102a_Access Plan_14.08.pdf
- 6530A_101a_Vehicle Tracking.pdf
- TRIP Generation Section - Land off A29 Woodgate 1st ISSUE updated 7th Aug.pdf
- Site Location Plan. pdf

Problems identified from this Stage 1 Road Safety Audit:



Appendix D

WSCC Parking Demand Tool 2018

WEST SUSSEX COUNTY COUNCIL RESIDENTIAL CAR PARKING PROVISION TOOL

This parking demand tool has been compiled by West Sussex County Council. If you have queries relating to the information provided or require additional information please contact planninghighways@westsussex.gov.uk.

GUIDANCE ON USE

This parking demand calculator has been designed to comply with the West Sussex County Council Revised Guidance for Parking Provision (2018). This calculator supersedes the West Sussex Car Ownership Parking Demand Tool.

This tool has been designed for use by developers as an initial assessment of car parking provision required in residential developments. This tool provides an indication as to the potential overall parking demand that could be associated with specific development quantum. In addition to the information presented within this calculator it is for the developer to justify the appropriateness of the parking levels proposed with other appropriate data and in discussion with the Local Planning Authority and West Sussex County Council as Highway Authority.

The following is a step by step process for the calculation of development parking demand, all GREY cells require no user input:

1. Select the Ward in which the development is located;

a. If known select from the drop down in the BLUE box marked "Ward"

b. If unknown use the Ward finder tool by entering the development post code (including the standard space separation e.g. RH6 0AQ, BN11 1DR), then complete a. above.
2. Enter the number of units of each size in the GREEN boxes marked "Number of Units of this Type", with respect to the number of bedrooms or number of habitable rooms in the dwelling type.
3. Your total "Parking Demand if 100% Unallocated" (all parking on site is shared) is shown in the adjacent cells.
4. If known, enter the total number of spaces allocated to each dwelling type across the development in the PINK boxes marked "Enter Total Number of Allocated Spaces".
5. Your development parking demand using your existing allocation design is then displayed in the ORANGE boxes marked "Total Parking Required if Design Allocated Used"
6. The Unallocated Parking Demand is the additional number of unallocated spaces over the design allocated required to meet the total parking demand, and includes visitors parking demand.
7. If your Total Number of Allocated Spaces is greater than the "Parking Demand if 100% Unallocated" then the existing parking design should be reviewed in line with the West Sussex County Council Revised Guidance for Parking Provision (2018).



Ward	District	Parking Behaviour Zone
Barnham	Arun	2

Ward Finder			
Postcode		Ward	Please Enter Postcode

Number of Bedrooms	Number of Habitable Rooms	Number Of Units Of this Type	Parking Demand if 100% Unallocated
1	1 to 3	0	0
2	4	19	33
3	5 to 6	14	30
4+	7 or more	5	14
Total		38	77

PARKING DEMAND INCLUDING ALLOCATED PARKING				
Number of Bedrooms	Number of Habitable Rooms	Enter Total Number of Allocated Spaces	Unallocated Parking Demand	Total Parking Required if Design Allocated Used
1	1 to 3			
2	4	19	21	40
3	5 to 6	14	16	30
4+	7 or more	10	7	17
Total		43	44	87

Appendix E

TRICS Database Report

Calculation Reference: AUDIT-349901-200309-0325

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	IW ISLE OF WIGHT	1 days
	WS WEST SUSSEX	1 days
03	SOUTH WEST	
	DV DEVON	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
 Actual Range: 24 to 72 (units:)
 Range Selected by User: 6 to 80 (units:)

Parking Spaces Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 25/09/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	3 days
Thursday	2 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Neighbourhood Centre (PPS6 Local Centre)	2
Free Standing (PPS6 Out of Town)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	4
Village	2
Out of Town	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3

7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less

1 days

1,001 to 5,000

1 days

5,001 to 10,000

3 days

10,001 to 15,000

2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000

1 days

25,001 to 50,000

3 days

50,001 to 75,000

3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0

1 days

1.1 to 1.5

5 days

1.6 to 2.0

1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes

2 days

No

5 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present

7 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	CH-03-A-11	TOWN HOUSES	CESHIRE
	LONDON ROAD		
	NORTHWICH		
	LEFTWICH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	24	
	Survey date: THURSDAY	06/06/19	Survey Type: MANUAL
2	DV-03-A-03	TERRACED & SEMI DETACHED	DEVON
	LOWER BRAND LANE		
	HONITON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	70	
	Survey date: MONDAY	28/09/15	Survey Type: MANUAL
3	HC-03-A-20	HOUSES & FLATS	HAMPSHIRE
	CANADA WAY		
	LIPHOOK		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	62	
	Survey date: TUESDAY	20/11/18	Survey Type: MANUAL
4	IW-03-A-01	DETACHED HOUSES	ISLE OF WIGHT
	MEDHAM FARM LANE		
	NEAR COWES		
	MEDHAM		
	Free Standing (PPS6 Out of Town)		
	Out of Town		
	Total Number of dwellings:	72	
	Survey date: TUESDAY	25/06/19	Survey Type: MANUAL
5	NF-03-A-01	SEMI DET. & BUNGALOWS	NORFOLK
	YARMOUTH ROAD		
	CAISTER-ON-SEA		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	27	
	Survey date: TUESDAY	16/10/12	Survey Type: MANUAL
6	SF-03-A-06	DETACHED & SEMI-DETACHED	SUFFOLK
	BURY ROAD		
	KENTFORD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Number of dwellings:	38	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL
7	WS-03-A-07	BUNGALOWS	WEST SUSSEX
	EMMS LANE		
	NEAR HORSHAM		
	BROOKS GREEN		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Number of dwellings:	57	
	Survey date: THURSDAY	19/10/17	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
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									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	7	50	0.063	7	50	0.300	7	50	0.363
08:00 - 09:00	7	50	0.123	7	50	0.354	7	50	0.477
09:00 - 10:00	7	50	0.174	7	50	0.160	7	50	0.334
10:00 - 11:00	7	50	0.114	7	50	0.177	7	50	0.291
11:00 - 12:00	7	50	0.137	7	50	0.160	7	50	0.297
12:00 - 13:00	7	50	0.183	7	50	0.163	7	50	0.346
13:00 - 14:00	7	50	0.163	7	50	0.149	7	50	0.312
14:00 - 15:00	7	50	0.177	7	50	0.180	7	50	0.357
15:00 - 16:00	7	50	0.203	7	50	0.154	7	50	0.357
16:00 - 17:00	7	50	0.263	7	50	0.163	7	50	0.426
17:00 - 18:00	7	50	0.300	7	50	0.097	7	50	0.397
18:00 - 19:00	7	50	0.183	7	50	0.114	7	50	0.297
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.083			2.171			4.254

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected: 24 - 72 (units:)
 Survey date range: 01/01/11 - 25/09/19
 Number of weekdays (Monday-Friday): 7
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 3
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



Drainage - Flood Risk - Highways - Transport

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