

TRANSPORT STATEMENT



Proposed Development Land East of Orchard Gardens Woodgate, Chichester

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1.0 EXECUTIVE SUMMARY

- 1.1 The existing site comprises a Greenfield area with no current use.
- 1.2 The proposed development is to construct 57 units comprising of private and affordable flats and houses.
- 1.3 A Right Turn Lane is proposed on the A29 at the junction with Orchard Gardens with adequate visibility splays being provided in accordance with MfS1.
- 1.4 There are bus stops within walking distance, about 240m from the site entrance. The northbound bus stop is provided with timetable information and the southbound bus stop is provided with both timetable information and a shelter.
- 1.5 The proposed access will connect directly onto the end of the existing road known as Orchard Gardens.
- 1.6 The site is within 400m of the primary school, local supermarket with a post office and a restaurant. These close amenities will give easy access to the new residents of the proposed development.
- 1.7 Car Parking and cycle parking provision on site will be in accordance with West Sussex County Council Standards.
- 1.8 There are no unacceptable highway or transport impacts as a result of the proposed development.

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2.0 INTRODUCTION

- 2.1 This report has been prepared for Andrew Loosley 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.
- 2.2 GTA Civils Ltd has been commissioned by Andrew Loosley to prepare a Transport Statement in connection with the proposed development at land east of Orchard Gardens, Woodgate.
- 2.3 Specifically, the report has been prepared to investigate and advise on the impacts of a proposed residential development.

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3.0 POLICY

3.1 National Planning Policy Framework (NPPF)

3.1.1 The National Planning Policy Framework, published 27th march 2012, sets out the Governments planning policies for England and how these are expected to be applied. The NPPF provides a framework to allow local authorities to produce individual local plans reflecting the specific needs of their community. The NPPF states that when setting local parking standards for development local planning authorities should take into account:

- *The accessibility of the site;*
- *The type, mix and use of development;*
- *The availability of and opportunities for public transport;*
- *Local car ownership levels; and*
- *An overall need to reduce the use of high-emissions vehicles.*

3.1.2 NPPF supports sustainable development, with a 'presumption in favour of sustainable development' set out in para 14:

*"14. At the heart of the National Planning Policy Framework is a **presumption in favour of sustainable development**, which should be seen as a golden thread running through both plan-making and decision-taking.*

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

- *local planning authorities should positively seek opportunities to meet the development needs of their area;*
- *Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless:*
 - *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; or*
 - *specific policies in this Framework indicate development should be restricted.*

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

- *approving development proposals that accord with the development plan without delay; and*
- *where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless:*
 - *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; or*
 - *specific policies in this Framework indicate development should be restricted."*

3.1.3 In respect of transport, the NPPF states at para 32:

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"32. 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."*

3.2 West Sussex County Council's Local Transport Plan

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

Under each of these main objectives are the LTP3 strategies as shown below in **Table 1:**

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Table 1 LTP3 Themes and Objectives

LTP3 Objectives	LTP3 Strategies
Promoting Economic Growth	• Maintain or improve the reliability of journey times on key routes • Improve connectivity and access to local labour markets and key centres • Deliver transport improvements to support and facilitate sustainable growth • Ensure local transport networks are resistant and adaptable to shocks and impacts including climate change
Tackling a Changing Climate	• Adapt transport infrastructure to increase its resilience to the effects of climate change • Support new low emission fuels, infrastructure and technologies • Reduce unnecessary trips by motorised vehicles and encourage the use of more sustainable modes of transport • Reduce the need to travel at all by encouraging provision of local services • Reduce the carbon footprint of the County Council's own operations • Maximise reuse and recycling of materials in construction and maintenance
Providing Access to Services, Employment and Housing	• Identify problem areas by using survey approaches and accessibility mapping techniques where appropriate • Work in partnership with service providers and stakeholders to set priorities • Ensure that accessibility is a central consideration when planning local services • Seek to ensure that places of work, education, leisure and food retail opportunities are located close together in new development • Enable disadvantage people to access employment opportunities, key services, social networks and goods • Encourage local delivery of services so that people have to travel less
Improving Safety, Security and Health	• Reduce the risk of death or injury due to transport incidents through engineering, training and publicity particularly targeted at vulnerable road users • Reduce crime, fear of crime and anti-social behaviour on the transport network • Reduce the negative impacts of transport on public health • To encourage and to enable physically active

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	travel such as walking and cycling through behaviour change initiatives and provision of information and education Invest in new infrastructure which improves the County and creates safer conditions for all, and particularly vulnerable road users
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3.3 Arun District Council Local Plan

3.3.1 The Arun Local Plan is the part of the Local Development Framework sets out the Council's vision for the period from 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 within the District through the provision of appropriate 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;*

3.3.2 The West Sussex Transport Plan 2011-2026 identifies key transport issues in the District including: Road congestion during peak hours which cause disruption and air pollution, level crossings causing delays, low use of some bus services and inadequate pedestrian and cycling facilities.

Policy T SP1

“Improvements to existing links between public transport services and the PROW and cycle network, would act to reduce congestion and benefit both residents and visitors to the District. It is important that these routes are convenient, easily accessible, safe, comfortable and attractive to users”

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3.4 Aldingbourne Parish Neighbourhood Development Plan

3.4.1 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:

3.4.2 **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.

3.4.3 **Policy GA2 Footpath and cycle path network.** Support will be given to proposals that improve and extend the existing footpath and cycle path network, allowing better access to the local amenities and services, to green spaces, to any new housing and to the open countryside. The loss of existing footpaths and cycle paths will be resisted.

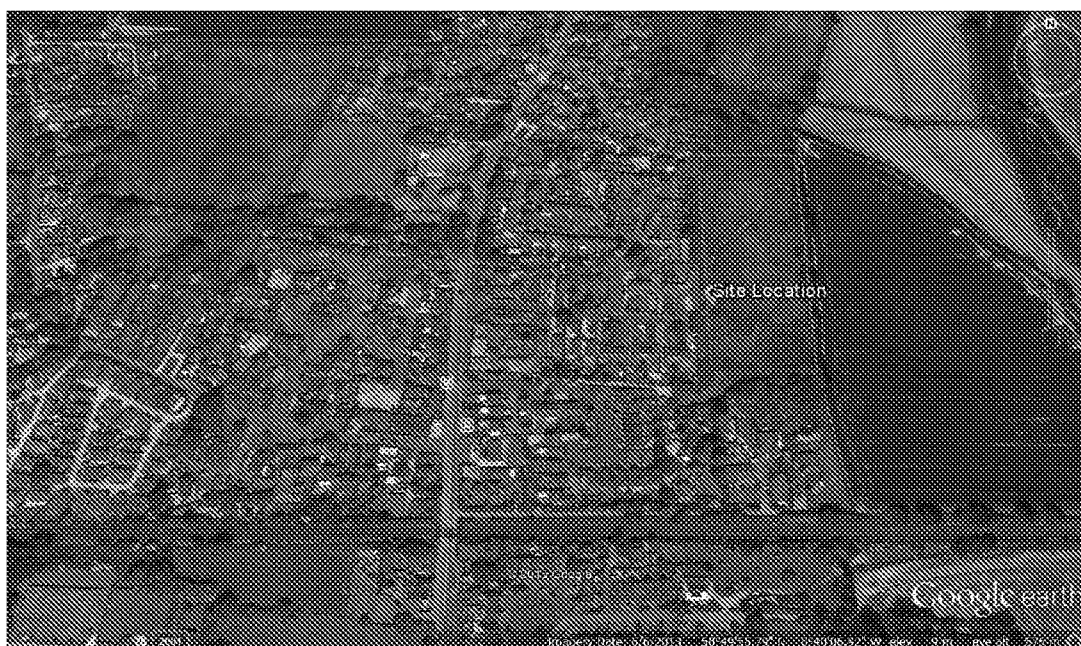
Specifically there is support for a new links from: (a) Woodgate via Westergate to Barnham Station without using the A29 or B2233

3.4.4 **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

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4.0 SITE LOCATION

- 4.1 The site is located on Orchard Gardens, a cul-de-sac, which takes access from the A29 Westergate St, north of the railway level crossing in Woodgate, West Sussex. Orchard Gardens forms a priority junction with the A29, Westergate St, approximately 180 metres to the north of the railway level crossing. There are 20 dwellings currently served by Orchard Gardens within a residential area adjacent to Westergate St (A29). Orchard Gardens also serves 60 dwellings on Woodgate Park. Orchard Gardens currently terminates at the beginning of the site, as illustrated below:



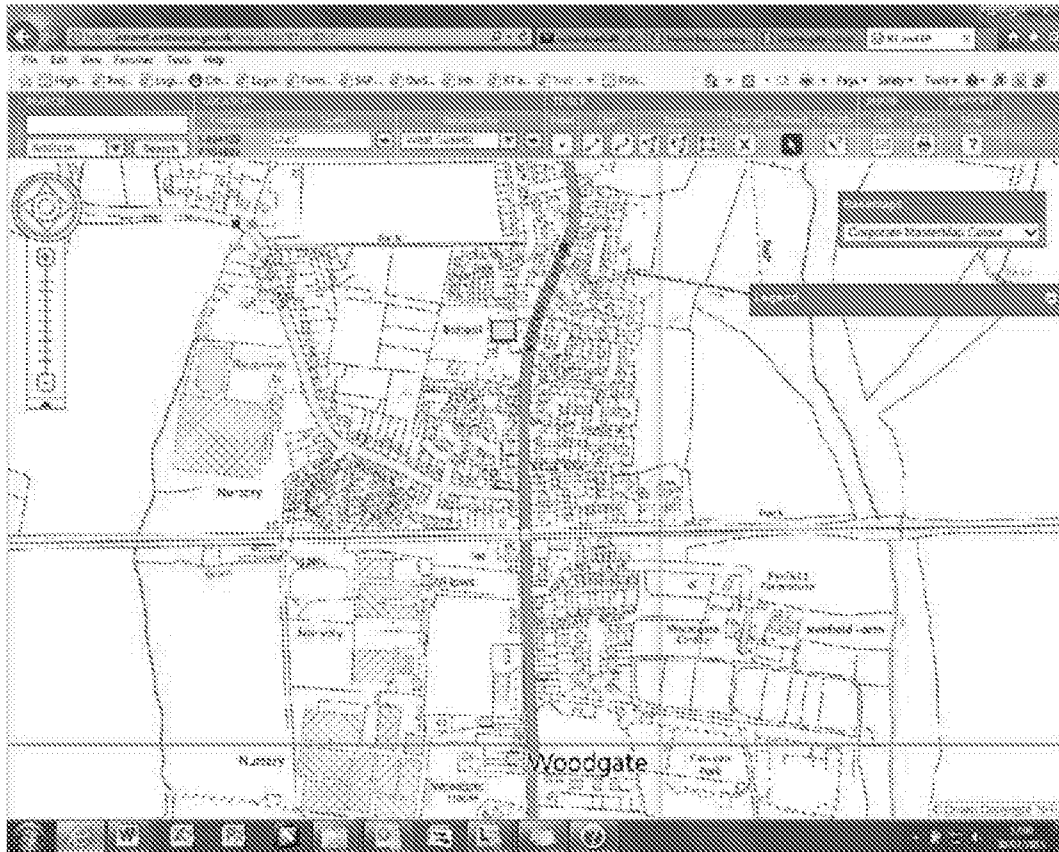
- 4.2 The site does not currently have an independent access onto a classified road but is within 100m via Orchard Gardens.

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5.0 LOCAL HIGHWAY NETWORK

- 5.1 The site is located on the Land to the east of Orchard Gardens, Woodgate, West Sussex. Orchard Gardens is an unclassified, adopted road, that connects to Westergate Street (A29).
- 5.2 Orchard Gardens is approximately 5 metres wide and has footways on either side of the road, which are about 1.8 metres wide; the road is subject to a speed restriction of 30mph. The Westergate St (A29) is 7 metres wide and has 2 metres wide footways on either side of the road with a speed restriction of 30mph. There is street lighting on both Orchard Gardens and Westergate Street (A29).
- 5.3 The A29 runs from Billingshurst and terminates at Bognor Regis. Having left the A24, entering West Sussex, the road passes minor villages and crosses Pulborough, Bury Hill and passes Fontwell Park Racecourse before terminating at Bognor Regis on the English Channel.
- 5.4 Orchard Gardens ends on the A29 at around 5km and an 11min drive from the end of the road at Bognor Regis.
- 5.5 For the local area crash records it was used the data from 'Crashmaps' reviewed for the years 2011-2013 and also a more up to date review up to May 2015 from WSCC, as seen on the image below. The obtained data from 'Crashmaps' gives 3 slight incidents within the village during the period of 2011-2013, one to the west of the site on Hook Lane. Two of the three accidents within the village are on the A29 and one of them involved just one vehicle with one slight injury.

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6.0 EXISTING SITE

6.1 Existing Site Access

- 6.1.1 The site comprises a Greenfield site. There is currently not an existing field access, however Orchard Gardens finishes as a spur leading directly into the site.

6.2 Existing Traffic Generation of the Site

- 6.2.1 The site is currently a Greenfield area and therefore very limited traffic generation is associated with the site.

6.3 Existing Parking

- 6.3.1 The 20 properties in Orchard Gardens all have off street parking. Orchard Gardens serves a further 60 houses in Woodgate Park.

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7.0 PROPOSED DEVELOPMENT

7.1 The proposed development mix is as follows:

6 x No. 1 bedroom flats
6 x No. 2 bedroom flats
3 x No. 2 bedroom bungalows
10 x No. 2 bedroom houses
2 x No. 3 bedroom bungalows
24 x No. 3 bedroom houses
6 x No. 4 bedroom houses

57 No. total units

7.2 Proposed Access Arrangements

7.2.1 A new Right Turn Lane (RTL) is also proposed on the A29 at the junction of Orchard Gardens. This has been proposed for safety reasons due to the queuing of traffic along this section of the A29. Queues are formed due to the level crossing that is located south of the A29 junction with Orchard Gardens and these queues extend past the junction. When the level crossing opens anyone travelling north-bound and wishing to turn right into Orchard Gardens could potentially block the west side of the A29 causing traffic queues to extend south past the level crossing. This is a potential hazard which can be resolved by the proposed RTL. Widening of the existing carriageway is necessary to provide the 3m running lanes and RTL. This is achievable due to the wide nature of the existing highway. A plan of the proposed RTL is included in **Appendix B**.

7.2.2 Manual for Streets 1 (MfS1) is the appropriate guidance for determining visibility splay requirements for this type of road. MfS1 determines the Y distance visibility splay requirements for roads with speeds up to 37mph. It also confirms, in paragraph 7.7.6, that a distance of 2.4m is the appropriate X distance for most roads.

7.2.3 Based on the speed limit of traffic of 30mph along the A29, in accordance with Table 7.1 of MfS1, visibility splays of 2.4m x 43m are required in each direction at the junction onto Orchard Gardens. These splays are readily achievable at the junction due to the wide verges and the straight nature of the road. Therefore, adequate visibility to meet the Manual for Streets standards is achievable.

7.2.4 It is proposed to create an access onto Orchard Gardens near the south east corner of the site. This will be 5.48m wide with footways on either side of the roads leading into the site. The proposed access will be laid out to AMdesign Architecture Design Development.

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7.2.5 There are bus stops with timetable information provided on both sides of Westergate Street, connecting to the centre of the village. The southbound stop is also provided with a shelter. These are within a 240m walk of the site entrance.

7.2.6 The proposed layout has been the subject of a Stage 1 Road Safety Audit (RSA1). This identified no problems caused by the layout of the proposed development. The RSA1 is included in **Appendix C**.

7.3 **Proposed Site Layout**

7.3.1 In accordance with the Manual for Streets, the roads inside the proposed development will be laid out as a 'Minor Access Road'. After the initial 20m in length, the access road will vary in width in order to keep speeds down to the target speed of 15mph. The proposed layout is shown in **Appendix A**.

7.4 **Emergency Access and Service Vehicles**

7.4.1 The proposed layout of the site will include a turning head at the end of the roads to enable Emergency Vehicles to enter the site and turn. All dwellings can be accessed within 45m of the road. This is in line with the requirements set out for emergency vehicles in paragraph 6.7.2 of Manual for Streets.

7.4.2 The service arrangements for the proposed dwellings will be for refuse vehicles to enter the site and use the turning head to turn at the end of the road. Where required for bin stores are located close to the main access road within the site. This meets the requirements set out in paragraph 6.8.9 of Manual for Streets 1 that vehicles should be able to get to within 25m of the storage point. No residents will be required to carry waste for more than 30m as set out in MfS1. The site layout is shown in **Appendix A**.

7.5 **Traffic Generation of Proposed Development**

7.5.1 The proposed development consists of 57No. dwellings which have been assessed using the TRICS database. All units are dwellings so a robust approach has been taken and the database has been interrogated to establish the likely traffic generation using the land use categories of 'Private housing' and 'Affordable housing'.

7.5.2 The TRICS search has been restricted to sites that reflect the location of the proposed site.

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Table 2 - Estimated Trip Generation for proposed development

Orchard Gardens, Woodgate								
Proposed Use	2-way trip rate (per dwelling unit)				2-way trips (Total)			
	AM Peak Hour (0800-0900)		PM Peak Hour (1700-1800)		AM Peak Hour (0800-0900)		PM Peak Hour (1700-1800)	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Private housing – 40 units	0.129	0.382	0.382	0.159	5	15	15	6
Affordable housing – 17 units	0.125	0.232	0.224	0.164	2	4	4	3

The TRICS data for the proposed development is also included in **Appendix D**

7.5.3 Using the information from the TRICS database, the proposed development would lead to:

- Around 26 additional trips in the morning peak hour
- Around 28 additional trips in the afternoon peak hour

7.6 Base Flows

7.6.1 Base traffic flows on Westergate Street (A29) are based on the traffic flow data for Woodgate obtained from West Sussex County Council. This data has been included in **Appendix E**. Flows are shown to be around 11,700 vehs/5 day average 24hr period 2-way. The peak hour flow is circa 520 vehicles northbound and 470 southbound between 0800-0900, and 420 northbound and 640 southbound in the peak hour between 1700-1800.

7.6.2 There is no universally agreed approach to determining the capacity of an urban road, but one indication is given by TA79/99 in The Design Manual for Roads and Bridges (DMRB). This would suggest that the traffic capacity of roads of the type and nature of the A29 are likely to be greater than 2166 vehicles per hour 2-way. Orchard Gardens has adequate capacity to accommodate the two-way trips generated by the total 137 dwellings.

7.6.3 In conclusion, the low base flows show the A29 isn't at full capacity and it can easily accommodate the traffic flows of the proposed development and the other consented developments at Nyton Road (220) and Hook Lane (73).

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8.0 MODAL CHOICES

8.1 Bus Services

- 8.1.1 Bus services can be found on The A29 about 240m from the main site access. These stops provide a number of services and are both provided with timetable information. The bus services are summarised in **Table 3**:

Table 3 - Bus Services in Woodgate

Service	Route	Approximate Average Frequency		
		Mon-Fri	Sat	Sun
66	Bognor Regis – Glenwood	7 services daily	7 services daily	N/A
85	Barnham - Chichester	5 services daily	5 services daily	N/A

8.2 Rail Services

- 8.2.1 The closest railway station is Barnham which is about 3.7km from the site. Although this is too far to walk Barnham Station is easily accessible by cycle and car providing 142 car parking spaces including 2 accessible spaces available. There are 62 cycle spaces at the front of the station.
- 8.2.2 Services from this station are run by Southern. There are frequent services giving access to many local places as well as London locations such as Bognor Regis, Southampton, Portsmouth, Brighton, Chichester, etc. Key destinations, service frequencies and journey times are set out below:

Table 4 – Services from Barnham Station

Destination	Frequency	Journey time
Chichester	5-6 per hour (peak)	8 minutes
Bognor Regis	2 - 4 per hour (peak) 2- 3 an hour (off-peak)	11 minutes
Portsmouth	2 per hour (peak)	35-45
Gatwick	4 per hour (peak)	50 minutes
Southampton	2- 3 an hour (peak) 1- 2 an hour (off-peak)	55 minutes
London Victoria	Every 30/40 min	1hrs11minutes(Peak) 1hrs32min(off-peak)
Brighton	2 - 3 per hour (peak) 2 an hour (off-peak)	46 minutes

8.3 Walking & Cycling

- 8.3.1 The topography of the ground in Woodgate is fairly level which is conducive to 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 Railway Station is around 3.7km from the site along a relatively flat road and is therefore, within cycling distance of the site and there are 62 cycle parking spaces provided.
- 8.3.2 Within the 5km cycle radius there is also North Bersted employment centre including Rolls Royce which is 3.5km away. There are two supermarkets and other retail shops located within 4km.
- 8.3.3 Covered and secure cycle parking meeting the West Sussex Council Parking Standards will be provided for the future residents of the development.

8.4 Accessibility

- 8.4.1 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. **Table 5** recreates this table:

Table 5 – Extract from IHT 'Guidelines for Providing Journeys on Foot'

Distance in metres	Town Centres	Commuting	School/Elsewhere
Acceptable	200	500	400
Desirable	400	1000	800
Maximum	800	2000	1200

- 8.4.2 Within the vicinity of the site there are many local facilities and essential services that will be easily accessible for the residents of the new development. In the local area the residents of the proposed development will be able to reach some local facilities within the village. Key destinations in the local area of the site are listed below in **Table 6.1 – 6.3**:

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Table 6.1 – Local Convenience Stores and Supermarkets provided in Woodgate

Destination	Distance from site (m)	Time taken to Walk	Within IHT Walking Distance
Post Office	300	6 minutes	YES
Costcutter supermarket	300	6 minutes	YES
Pet Care Store	500	10 minutes	YES
Newsagent and mini-supermarket	900	18 minutes	YES
Supermarket	950	19 minutes	YES
Petrol station and mini-market	1600	32 minutes	NO

Table 6.2 – Schools provided in Woodgate

Destination	Distance from site (m)	Time taken to walk	Within IHT Walking Distance
Aldingbourne Primary school	320	6 minutes	YES
Hopscotch Pre-school	1100	22 minutes	YES
Ormiston Six Villages Academy	1300	26 minutes	NO
Eastergate Primary School	1500	30 minutes	NO

Table 6.3 – Entertainment facilities provided in Woodgate

Destination	Distance from site (m)	Time taken to walk	Within IHT Walking Distance
Gastropub	350	7 minutes	YES
Aldingbourne Sports Centre	1000	20 minutes	YES
Westergate Methodist Church and Church Hall	1000	20 minutes	YES
Indian Restaurant	1300	26 minutes	NO
Six Villages Sports Centre	1300	26 minutes	NO
Wilkes Head pub and restaurant	1600	32 minutes	NO

8.4.3 As seen from **Tables 6.1 – 6.3** above, there are local amenities within the maximum IHT walking distance from the site and the ones there are not within walking distance are within cycling distance.

8.4.4 The site is close to bus stops that provide services to larger local towns such as Bognor Regis, Chichester and Barnham.

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9.0 PROPOSED PARKING

9.1 Car Parking

- 9.1.1 The West Sussex County Council Parking Demand Calculator was used to determine the appropriate provision for the site. The results of the calculator are set out in **Table 8** below:

Table 8 – WSCC Parking Demand Calculator results

Dwelling type	Spaces allocated per dwelling	Number of spaces allocated for residents	Number of spaces unallocated for residents	Number of spaces unallocated for visitors
6 No. x 1 bed flats	1	6	1	1
6 No. x 2 bed flats	1	6	2	1
3 No. x 2 bed bungalow	2	6	0	1
10 No. x 2 bed houses	2	6	0	1
2 No. x 3 bed bungalow	2	4	0	0
21 No. x 3 bed houses	2	42	3	4
3 No. x 3 bed house (with internal garage)	3+	9	0	1
6 No. x 4 bed houses	2	12	1	1
Total 57 units		91	8.75	10

- 9.1.2 As seen from the above table all flats are allocated 1 space and all 2, 3 & 4 bedroom dwellings are allocated 2 spaces. This is with the exception of the 3 No. 3 bedroom dwellings provided with internal garages that are allocated 3 spaces.
- 9.1.3 There is a requirement for 91 spaces allocated to residents of the proposed development with an additional 9 unallocated spaces. Visitor parking has also been taken into consideration and so 10 extra spaces are required for this demand. This equates to a total parking requirement of 110 spaces. The site layout shows a total of 101 parking spaces provided plus 3 internal garages.

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9.2 Cycle Parking

- 9.2.1 Covered and secure cycle parking will be provided within sheds in gardens of the houses and within communal areas of the flats. This will be in accordance with local standards for the proposed development.

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10.0 MITIGATION

- 10.1 As part of the improvement works the developer is prepared to put forward a contribution toward the footpath improvement to Barnham Station in accordance with Policy GA2 from the Aldingbourne Parish Neighbourhood Development Plan.

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11.0 CONCLUSIONS

- 11.1 The proposed development consists of 6 x No. 1 bedroom flats, 6 x No. 2 bedroom flats, 13 x No. 2 bedroom houses, 26 x No. 3 bedroom houses and 6 x No. 4 bedroom houses. This equates to 57 units in total.
- 11.2 It is also proposed to have a Right Turn Lane on the A29 at the junction with Orchard Gardens with adequate visibility splays being provided in accordance with MfS1. Visibility splays of 2.4m x 43m are required at this junction and are achievable in both directions.
- 11.3 The proposed access road will link to the end of the existing road.
- 11.4 The proposed layout was subject to an RSA1 and no problems resulting from the proposed development were raised.
- 11.5 The bus stops are located about 240m from the site representing a 5 minute walk. The main bus route provides links to Bognor Regis and Barnham. There is also a school and a few local shops within the vicinity of the site giving easy access to the new residents of the proposed development. Within the Aldingbourne Parish Neighbourhood Plan, there are proposals to improve the pedestrian links to Barnham Station. A proportionate contribution towards this upgrade will be made.
- 11.6 Based on a robust TRICS analysis, the proposed development is likely to generate around 24 additional trips in the morning peak hour (0800 – 0900) and an additional 37 in the PM peak hour (1700 – 1800)
- 11.7 The proposed development will provide adequate car and cycle parking in accordance with West Sussex County Council parking standards. This equates to 110 car parking spaces being required for the proposed development as determined using the WSCC Parking Demand Calculator.
- 11.8 In conclusion, there are no unacceptable highway or transport impacts as a result of the proposed development.

W:\Projects\5919 Orchard Gardens, Woodgate, Chichester PO20 3QW\2.3 Specifications & Reports\E. Transport Assessments	Date July 2015	Job No. CPH - 5919
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Appendices

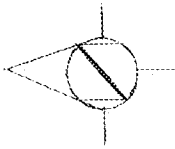
Appendix A	Proposed Site Layout Plan
Appendix B	Drawing 5919/100 showing Right Turn Lane
Appendix C	Stage 1 Road Safety Audit (RSA1)
Appendix D	TRICS data
Appendix E	Traffic Flow Data – A29 Woodgate

W:\Projects\5919 Orchard Gardens, Woodgate, Chichester PO20 3QW\2.3 Specifications & Reports\E. Transport Assessments	Date July 2015	Job No. CPH - 5919
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Appendix A

Proposed Site Layout Plan

W:\Projects\5919 Orchard Gardens, Woodgate, Chichester PO20 3QW\2.3 Specifications & Reports\E. Transport Assessments	Date July 2015	Job No. CPH - 5919
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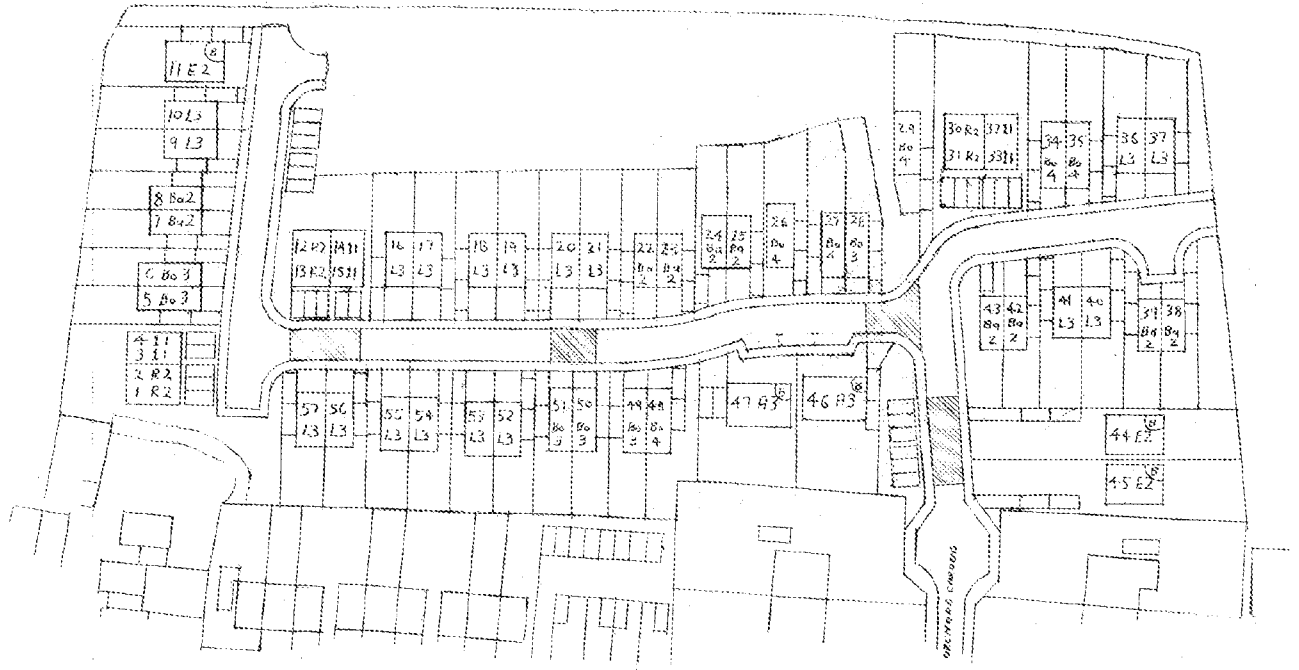


0 5 10 15 20
SCALE BAR
1:200 = A2
MAY 2016

EAST ORCHARD WOODGATE

KEY

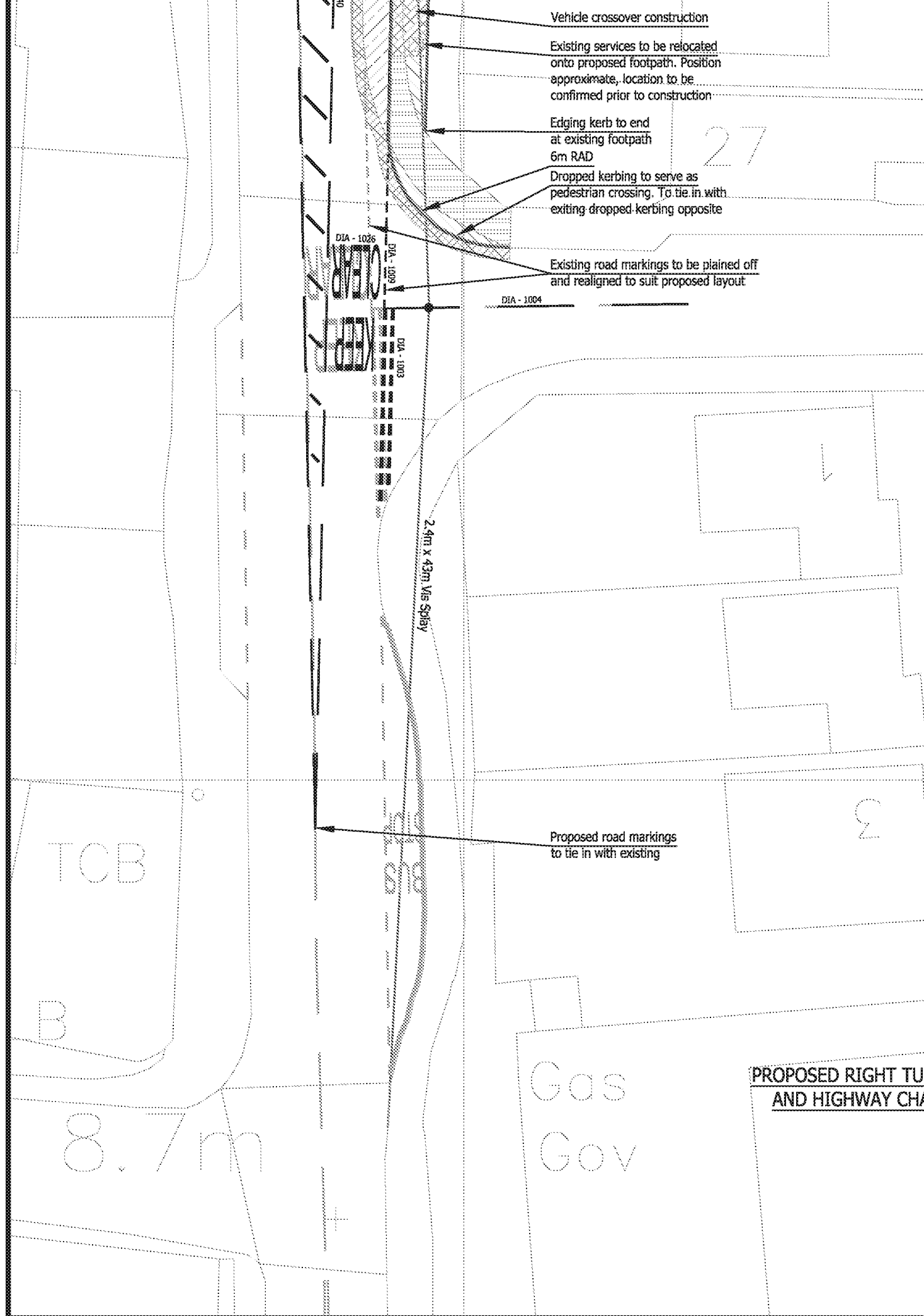
R3	ALDINGBORNE	3 BED BUNGALOW
Bu2	BARNETT	2 BED HOUSE
Bu3	BOGNOR	3 BED HOUSE
Bu4	BOGNOR	4 BED HOUSE
E2	EASTERGATE	2 BED BUNGALOW
L1	IVY	1 BED FLAT
R2	ROSVARA	2 BED FLAT
L3	LYDSEY	3 BED HOUSE



Appendix B

Drawing 5919/100 showing Right Turn Lane

W:\Projects\5919 Orchard Gardens, Woodgate, Chichester PO20 3QW\2.3 Specifications & Reports\E. Transport Assessments	Date July 2015	Job No. CPH - 5919
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27

Σ

TCB

B

8.7m

Gas
Gov

PROPOSED RIGHT TURN
AND HIGHWAY CHANGING

Appendix C

Stage 1 Road Safety Audit (RSA1)

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**Land East of Orchard Gardens
Westergate
West Sussex**

Proposed Development -

Right Turn Lane (A29) j/w Orchard Gardens

STAGE 1 ROAD SAFETY AUDIT

Report No. EC/2015/08/GTA2

August 2015



Prepared by:

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ORCHARD GARDENS, WESTERGATE, WEST SUSSEX
STAGE 1 ROAD SAFETY AUDIT

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Project: Orchard Gardens-- Proposed Development & Right Turn Lane from A29
Address: Land East of Orchard Gardens, Westergate, West Sussex

PREPARED BY

Name: Paul Nevard
Position: Principal Traffic Engineer
Date: 20th August 2015

AGREED BY

Name: Vinny Rey
Position: Traffic Engineer
Date: 20th August 2015

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Date: 20th August 2015

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ORCHARD GARDENS, WESTERGATE, WEST SUSSEX
STAGE 1 ROAD SAFETY AUDIT

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APPENDICES

- A. List of documents and plans considered during this Stage 1 Road Safety Audit

ORCHARD GARDENS, WESTERGATE, WEST SUSSEX
STAGE 1 ROAD SAFETY AUDIT

1. INTRODUCTION

1.1 General

1.1.1 Elix Consultancy Limited has been commissioned by GTA Civils to undertake a Stage 1 Road Safety Audit on a proposal for a residential development located off Orchard Gardens, Westergate, West Sussex. The scheme also involves the introduction of a right turn lane / pocket for the new access. For the proposed development, the local Highway Authority will require an independent Road Safety Audit to consider the safety implications affecting the scheme. This information is required for consideration before the Planning Authority will progress a planning application for a development of this size and nature. This audit has been produced for formal consideration by the local Highway Authority.

1.1.2 The Road Safety Audit Team Membership was the following:

Paul Nevard,
MSc, BA (Hons) CMILT, MCIHT
HA RSA Cert. comp

Director - Elix Consultancy Ltd
Principal Traffic Engineer
Road Safety Audit Team Leader

Vinny Rey,
BA (Hons) MCIHT, MSoRSA

Elix Consultancy Ltd
Traffic Engineer
Road Safety Audit Team Member

1.1.3 This audit took place at the Elix Consultancy office on Wednesday 19th August 2015 and the site was examined by Paul Nevard and Vinny Rey together in daylight hours between 13.00 and 14.00 hours, Thursday 20th August 2015. The weather during the daytime site visit was overcast with occasional light showers. Traffic flows along the A29 were moderate and vehicle speeds were also observed as being moderate. Turning movements into Orchard Gardens was noted as being very low.

1.1.4 The Road Safety Audit also comprised of an examination of the site plan supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

1.1.5 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.

1.1.6 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.

1.2 Purpose of Scheme

1.2.1 The purpose of the scheme is to assess the suitability of the proposed vehicular and pedestrian junction onto the existing carriageway in terms of geometry, use and visibility taking into consideration the impact of the proposed residential development and the right

**ORCHARD GARDENS, WESTERGATE, WEST SUSSEX
STAGE 1 ROAD SAFETY AUDIT**

turn lane into Orchard Gardens. Widening of the existing carriageway is necessary to provide the 3.0m running lanes and right turn lane.

**ORCHARD GARDENS, WESTERGATE, WEST SUSSEX
STAGE 1 ROAD SAFETY AUDIT**

2. PROBLEMS IDENTIFIED IN PREVIOUS ROAD SAFETY AUDITS

- 2.1.1 No other Road Safety Audits had been carried out on the proposals at the time of the submission.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1 General

No problems relating to the general layout have been identified as part of this audit.

3.2 Local Alignment

No problems relating to local alignment have been identified as part of this audit.

3.3 Junctions

No problems relating to junctions have been identified as part of this audit.

3.4 Non-Motorised User Provision

No problems relating to junctions have been identified as part of this audit.

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

This Road Safety Audit has resulted in a nil return

4. AUDIT TEAM STATEMENT

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

No member of the safety audit team has been involved with the design of the measures.

AUDIT TEAM LEADER

Paul Nevard

Signed:



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Vinny Rey

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