

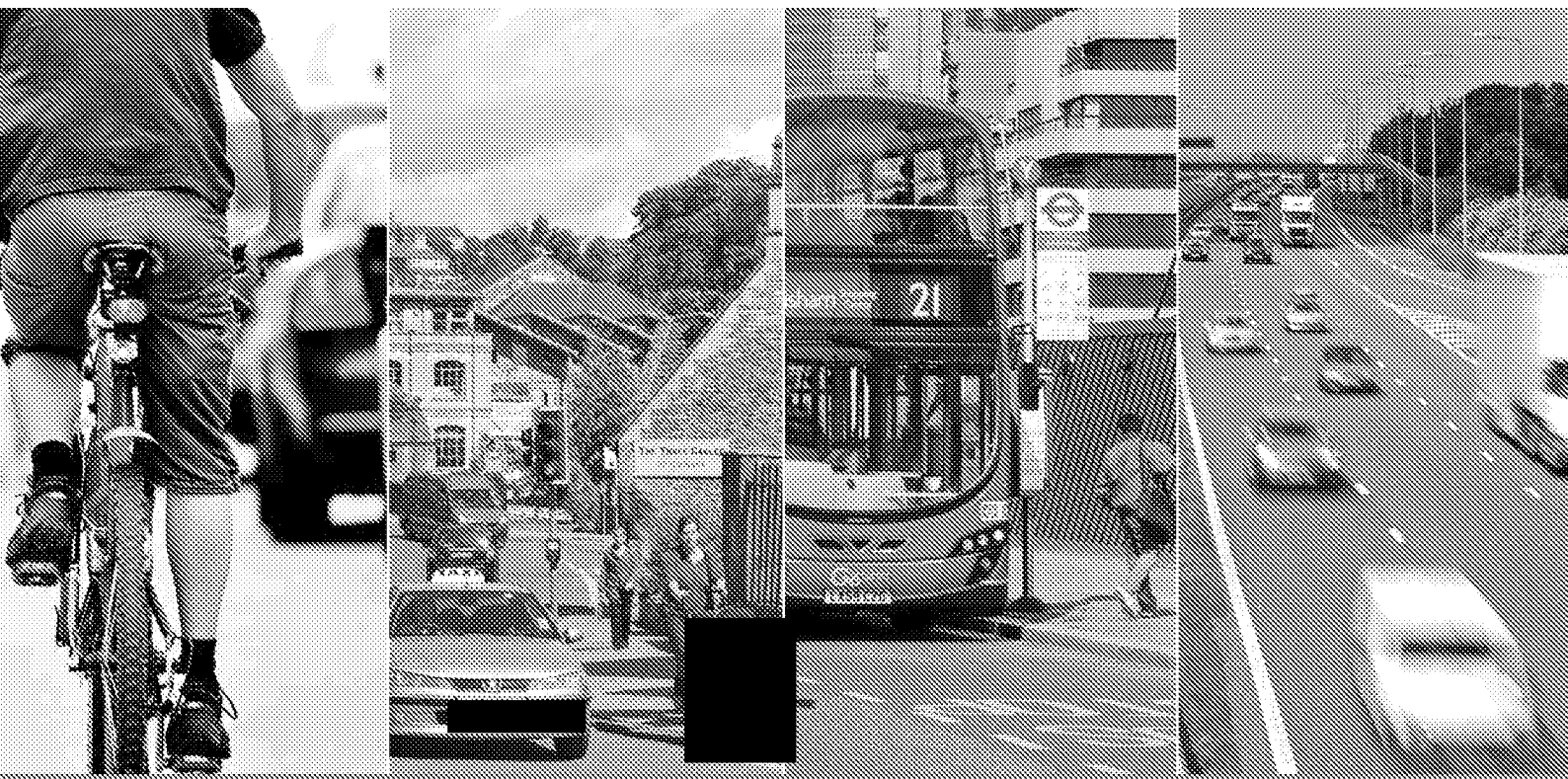
# Transport Report

Proposed Development at: Land Adjacent to Lake Lane

Lake Lane

Barnham

PO22



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Issue	Issue date	Compiled	Checked	Authorised
2	February 2024	EM	RW	LNS

## Executive Summary

The existing site is an unused parcel of land located off Lake Lane, in Barnham, West Sussex. The site has an existing shared cross over access onto Lake Lane with the dwellings known as St Annes and Lynton and existing right of access.

This Transport Report summarises the existing situation, local and national transport policy, the local highway network and the proposed access.

The proposals are in accordance with current policies and guidance provided by West Sussex County Council and are compliant with national guidance documents such as Manual for Streets and the National Planning Policy Framework 2021 (NPPF).

The proposed development is for 5no. 4-bedroom houses & 2no. 3-bedroom houses at land adjacent to Lake Lane. The proposed development will also provide:

- ✦ 14 allocated car parking spaces (2 spaces per dwelling) and 2 visitor spaces;
- ✦ 7 active EV charging points (1 per dwelling) and 7 passive EV spaces (1 per dwelling);
- ✦ 14 cycle parking spaces (2 spaces per dwelling);
- ✦ New permeable surfacing and turning area;

The access road leading into the site will be resurfaced with new permeable surfacing and the site will provide a turning head. 2.4m x 47m visibility splays (30mph requirements) can be achieved to the east and west of the existing access.

Using the TRICS database, the development is likely to result in approximately 3 additional two-way trips in the peak AM period (0800-0900) and 3 additional two-way trips in the peak PM period (1700-1800). The trips generated by the development will not result in a highway impact that could be considered as severe.

In conclusion, there are no unacceptable highway or transport impacts as a result of the proposed development.

## 1 Introduction

- 1.1 This Transport Report has been prepared for Property Sphere 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 The site is situated on land adjacent to Lake Lane, in Barnham, in Arun District and the county of West Sussex. The existing site is a parcel of land situated off Lake Lane, adjacent to the neighbouring dwellings known as St Annes and Lynton, which it shares an existing access with.
- 1.3 GTA Civils and Transport Ltd has been commissioned by Property Sphere Ltd to prepare an Transport Report in connection with the proposed development of 6no. 3-bedroom houses.

### Policy Context

- 1.4 This Transport Report has been written in accordance with the following frameworks:
  - ✦ National Planning Policy Framework (NPPF);
  - ✦ National Planning Policy Guidance (NPPG);
  - ✦ Manual for Streets 1 & 2 (2007);
  - ✦ West Sussex County Council Local Transport Plan;
  - ✦ Arun District Council Local Plan 2011 – 2031;
  - ✦ West Sussex Guidance on Parking at New Developments (September 2020).

## 2 Policy and Guidance

### National Planning Policy Framework (NPPF)

- 2.1 The National Planning Policy Framework, first published in 2012 and last revised in September 2023, 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 all plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects;*
- 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:*
- e) 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*
- f) 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 110-113:

*Paragraph 110, "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
- ✦ the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; 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 111, "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 112, "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 113, "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 Assessments 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 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.

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

Table 2.1. - LTP3 Themes and Objectives

LTP3 Objective	LTP3 Strategies
Promoting Economic Growth	<ul style="list-style-type: none"> <li>✦ Maintain or improve the reliability of journey times on key routes;</li> <li>✦ Improve connectivity and access to local labour markets and key centres;</li> <li>✦ Deliver transport improvements to support and facilitate sustainable growth;</li> <li>✦ Ensure local transport networks are resistant and adaptable to shocks and impacts including climate change.</li> </ul>
Tackling a Changing Climate	<ul style="list-style-type: none"> <li>✦ Adapt transport infrastructure to increase its resilience to the effects of climate change;</li> <li>✦ Support new low emission fuels, infrastructure and technologies;</li> <li>✦ Reduce unnecessary trips by motorised vehicles and encourage the use of more sustainable modes of transport;</li> <li>✦ Reduce the need to travel at all by encouraging provision of local services;</li> <li>✦ Reduce the carbon footprint of the County Council's own operations;</li> <li>✦ Maximise reuse and recycling of materials in construction and maintenance.</li> </ul>
Providing Access to Services, Employment and Housing	<ul style="list-style-type: none"> <li>✦ Identify problem areas by using survey approaches and accessibility mapping techniques where appropriate;</li> <li>✦ Work in partnership with service providers and stakeholders to set priorities;</li> <li>✦ Ensure that accessibility is a central consideration when planning local services;</li> </ul>

	<ul style="list-style-type: none"> <li>» Seek to ensure that places of work, education, leisure and food retail opportunities are located close together in new development;</li> <li>» Enable disadvantage people to access employment opportunities, key services, social networks and goods;</li> <li>» Encourage local delivery of services so that people have to travel less.</li> </ul>
Improving Safety, Security and Health	<ul style="list-style-type: none"> <li>» Reduce the risk of death or injury due to transport incidents through engineering, training and publicity particularly targeted at vulnerable road users;</li> <li>» Reduce crime, fear of crime and anti-social behaviour on the transport network;</li> <li>» Reduce the negative impacts of transport on public health;</li> <li>» To encourage and to enable physically active travel such as walking and cycling through behaviour change initiatives and provision of information and education;</li> <li>» Invest in new infrastructure which improves the County and creates safer conditions for all, and particularly vulnerable road users.</li> </ul>

#### Arun District Council Local Plan 2011 – 2031

2.13 The Arun Local Plan covers 2011 to 2031 for the Arun District and was adopted on the 18th of July 2018.

2.14 Arun's Local Plan strategic objectives for transport are:

- » *"Reduce the need to travel and promote sustainable forms of transport;*
- » *Plan for climate change and work in harmony with the environment to conserve natural resources and increase biodiversity;*
- » *Create vibrant, attractive, safe and accessible towns and villages that build upon their unique characters to provide a wide range of uses and which are a focus for quality shopping, entertainment, leisure, tourism and cultural activities;*
- » *Promote strong, well integrated and cohesive communities, through the promotion of healthy lifestyles, provision of good quality accessible community facilities and a safe environment, which delivers an enhanced quality of life to all. This includes meeting the needs of a growing elderly population;*
- » *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 and rail access, quality affordable accommodation and the development of business support and partnerships."*

2.15 Key policies relevant to the proposed development are:

### Policy T SP1 - Transport and Development

*To ensure that growth in the District strengthens Arun's economic base, reduces congestion, works to tackle climate change and promotes healthy lifestyles; the Council will ensure that development: provides safe access on to the highway network; contributes to highway improvements and promotes sustainable transport, including the use of low emission fuels, public transport improvements and the cycle, pedestrian and bridleway network. The Council will support transport and development which:*

- a. Is designed to reduce the need to travel by car by identifying opportunities to improve access to public transport services and passenger transport services whilst making provision for safe access to the highway network through improvements to the existing road network and the promotion of vehicles which use low-carbon energy;*
- b. Is incorporated into the District's green infrastructure network and gives priority to pedestrian and cycle movements;*
- c. Protects committed and indicative lines of major road schemes from development and, where applicable, contributes towards new road schemes which improve north-south links between Bognor Regis and Littlehampton and the A27, to ensure that they are delivered in line with strategic growth in the District;*
- d. Incorporates appropriate levels of parking in line with West Sussex County Council guidance on parking provision and the forthcoming Arun Design Guide taking into consideration the impact of development upon on-street parking and;*
- e. Is supported by an effective and deliverable Transport Assessment which demonstrates that the transport effects of development on the local and strategic road network can be satisfactorily mitigated and a Travel Plan, which is effective and deliverable, and;*
- f. Explains how the development has been designed to:
 
  - i. accommodate the efficient delivery of goods and supplies;*
  - ii. give priority to pedestrian and cycle movements and have access to high quality public transport facilities;*
  - iii. create safe and secure layouts for traffic, cyclists and pedestrians whilst avoiding street clutter; iv. incorporate facilities for charging electric and plug-in hybrid vehicles (where charging facilities are to be omitted from the development, evidence of market demand and viability must be provided); and*
  - iv. consider the needs of people with disabilities by all modes of transport.**
- g. Provides improved crossing points over the railway line to improve transport links between the coast and the A27, in particular at Ford.*

### Policy T DM1 - Sustainable Travel and Public Rights of Way

*New development must ensure ease of movement, prioritising safe pedestrian and cycle access to the green infrastructure network and access to public transport and community transport services where a need has been identified. Access to alternative modes of transport including public transport services, the public right of way and cycle networks, must be available and accessible to all members of the community.*

## Policy T DM2 - Public Parking

Proposals which involve the loss of existing town centre car parks or town centre parking spaces, including provision for motorcycle and bicycle parking, must demonstrate either that:

- a. The loss of parking provision is acceptable or
- b. Provides sufficient parking spaces to meet anticipated demand, which must be:
  - i. Conveniently located to access town centre and tourist facilities attractions;
  - ii. Sufficiently safe and secure in line with the Safer Parking Scheme guidelines; and
  - iii. Accessible for cars, motorcycles and bicycles.

## Arun District Council Parking Standards SPD (2020)

- 2.16 The Arun District Council Parking Standards Supplementary Planning Document (SPD) was adopted in January 2020. The Arun District Council SPD has been established on the guidance and standards of the WSCC Guidance on Parking at New Developments (May 2019), with the exception of:
- ✧ *standards for Electric Vehicle provision takes a hybrid approach using both the Arun Electric Vehicle Infrastructure Study (2017) requirements alongside the WSCC GPND approach;*
  - ✧ *rounded figures are given in table 3.1 'Expected level of provision for new residential developments';*
  - ✧ *lower stepped percentage Electrical Vehicle Charging Points requirements are required from 2018 to 2030 but include 100% provision of active EV charging facilities target by 2033;*
  - ✧ *cycle provision rounded from 0.5 to 1 space for Flats with up to 3 rooms (1 & 2 bed).*
- 2.17 ADC set out their standards to ensure functionality and efficiency of developments, stating that consideration should be given to the following:
- a) *Providing garages of sufficient size - If garages are provided, they must be at least 6m x 3m internally. If garages meet this requirement, they will be regarded as an allocated parking space of 0.5 but a car port or parking space of this dimension would count as 1 parking space and calculations of parking demand will take account of this. Where garages do not meet this minimum size, they will not be counted towards meeting parking demand;*
  - b) *Providing adequate visitor parking - Adequate visitor parking is required and this will be influenced by the level of unallocated parking;*
  - c) *Likely cycle ownership and storage - Good cycle storage facilities are important, but requirements should take account of dwelling size and type. The minimum standard of cycle provision is set out in Table 2.3;*
  - d) *Where accessible or wheelchair friendly accommodation is proposed or required, parking spacing and garaging should be provided in accordance with the requirements for increased*

*parking space proportions;*

- e) Impact on "total demand" where electric vehicle charging points are provided. e) Spaces for disabled people – Provision should be consistent with guidance in "Manual for Streets";*
- f) Motorcycle parking - Provision should be consistent with guidance in "Manual for Streets";*
- g) Space for storage bins – Part H of the Building Regulations suggests storage areas dimensions which are suitable for refuse and recycling bin storage. Development may be required to demonstrate suitable storage to ensure parking provision is available at all times.*

2.18 Table 2.3 in the SPD sets out the recommended levels of cycle provision. This can be seen below in **Table 2.2**.

Table 2.2 – ADC Recommended Levels of Cycling Provision

Type	Dwelling Size	Cycle Provision (per unit)
Houses	Up to 4 rooms (1 & 2 bed)	1 space
Houses	5+ rooms (3+ bed)	2 spaces
Flats	Up to 3 rooms (1 & 2 bed)	1 space (if communal storage otherwise same as 1 & 2 bed house)
Flats	4+ rooms (3+ bed)	1 space

2.19 ARC residential parking guidance states:

### Section 3.1

*The values of parking demand presented in Table 3.1 will be used as expected levels of demand for the design and master planning of new residential developments. These include provision of EV spaces as set out in Principle 3. As part of the Design & Access Statement applicants will be expected to schedule the parking provision, detailing the number of allocated and unallocated spaces including garages and electric vehicle charging spaces (active and passive). The Design & Access Statement should explain how the provision of parking will meet the needs of the development including how these needs are expected to change in the future.*

### Section 3.2

*To satisfy the promotion of sustainable travel modes and choices it is considered that a 10% variation below the target parking demand value be allowed where appropriate travel option provision is provided including travel plans, public transport contributions (e.g. through section 106 contributions involving Strategic Allocations and Community Infrastructure Levy once adopted, for other non-strategic sized developments for offsite infrastructure of a strategic nature) and other sustainable travel initiatives. This is also as a result of increasing affordability issues resulting in young people staying with parents for longer.*

### Section 3.3

*In addition to the above, visitor parking will be required to be provided at a ratio of 20% of the total number of residential units. For example, if there were 100 dwellings proposed, in addition to the allocated residents parking, 20 visitor spaces should be provided. A more flexible approach will be taken with schemes that incorporate flats and on sites close to urban centres.*

2.20 Table 3.1 of the SPD sets out the expected levels of parking provision in new residential developments. This can be seen in **Table 2.** below.

2.21 The following Parking Behaviour Zones are relevant to ADC Parking Standards:

- ✦ Zone 1 - Rural (village locations, e.g. Walberton);
- ✦ Zone 2 - Peri-rural (large villages or small settlements close to towns e.g. Angmering, Barnham); and
- ✦ Zone 4 - Urban (within towns but not in a central location).

Number of bedrooms	Number of habitable rooms	Parking Behaviour Zone		
		1	2	4
1	1 to 3	2	2	1
2	4	2	2	1
3	5 to 6	2	2	2
4+	7 or more	3	3	2

### 3 Existing Site Details

- 3.1 The existing site is an unused parcel of land located off Lake Lane, in Barnham, West Sussex. The site has an existing shared cross over access onto Lake Lane with the dwellings known as St Annes and Lynton and existing right of access.
- 3.2 An aerial view of the existing site can be seen in **Figure 3.1**, indicated by the red boundary line.

Figure 3.1 – Aerial View of the Site



## 4 Local Highway Network

- 4.1 The site is located on Lake Lane. Lake Lane is subject to a 30mph speed limit and connects the site to Barnham village centre via a footway along the northern side of Lake Lane.
- 4.2 Lake Lane connects to the B2233, approximately 1km to the west of the site. The B2233 connects Climping in the south to Crockerhill in the north, via Burndell, Barnham and Eastergate.

### Accident Data

- 4.3 Local vehicle incident records in a 200m vicinity of the site were reviewed for the years 2017-2021 using [www.crashmap.co.uk](http://www.crashmap.co.uk). CrashMap uses data collected by the police about road traffic accidents occurring on British roads where someone is injured which is then compiled into an accessible format showcasing each incident on a map. This data is approved by the National Statistics Authority and reported on by the Department for Transport each year.
- 4.4 There have been no incidents over the last 5 years (2018-2022) within a 200m radius of the site. Accordingly, there are no concerns with the location of the existing access.

Figure 4.1 – Recorded Accident Crash Map





## 5 Proposed Development

- 5.1 The proposed development is for 6no. 3-bedroom houses at land adjacent to Lake Lane.
- 5.2 The proposed development will also provide:
- ✦ 14 allocated car parking spaces (2 spaces per dwelling) and 2 visitor spaces;
  - ✦ 7 active EV charging points (1 per dwelling) and 7 passive EV spaces (1 per dwelling);
  - ✦ 14 cycle parking spaces (2 spaces per dwelling);
  - ✦ New permeable surfacing and turning area;
- 5.3 The proposed development layout plan can be seen in **Appendix A**.

### Proposed Access

- 5.4 Vehicles will access the site via the existing cross over access onto Lake Lane that is shared with the dwellings known as St Annes and Lynton and existing right of access. This access is measured at 4.4m at its narrowest to 4.8m at it's widest where the access meets Lake Lane. The existing access can therefore accommodate two-way flows of vehicles. The access road leading into the site will be resurfaced with new permeable surfacing and the site will provide a turning head.
- 5.5 To ensure that the existing access has adequate visibility for a 30mph road, 2.4m x 47m visibility splays have been provided to the east and west (see **Appendix B**). A highways boundary can be seen in **Appendix C**. This demonstrates that the visibility splays do not cross any third party land.

### Proposed Car Parking

- 5.6 **Table 2.3** provides the parking standards for new residential developments in Arun District Council. The site is located in Parking Behavioural Zone 2 (Peri-rural).
- 5.7 Accordingly, 3 & 4 bedroom dwellings require 2 parking spaces per dwelling. The proposed development has an allocated parking demand for 14 car parking spaces. The proposed development will provide 14 allocated parking spaces.
- 5.8 Visitor parking is to be provided at a ratio of 20% of the total number of residential units. The parking demand set out by ADC therefore requires a total of 2 visitor parking spaces. The proposed development will provide 2 visitor car parking spaces and therefore conforms to ADC parking standards.
- 5.9 In accordance with 'Infrastructure for the charging of electric vehicles, Approved Document S', each new dwelling will be provided with 1 active EV charging point per house and passive EV infrastructure for each other associated parking space.

### Proposed Cycle Parking

- 5.10 In accordance with ADC cycle parking standards (see **Table 2.3**), the proposed development of 7no. houses requires 2 cycle parking spaces per house. The proposed development therefore conforms with ADC cycle parking standards by providing 14 cycle parking spaces (2 spaces per house) in garden sheds.

### Servicing & Emergency Access

- 5.11 The proposed layout is set out to comply with the provisions in paragraph 6.8.9 of Manual for Streets 1 that requires refuse vehicles to be able to reach within 25metres of the storage point for collection, and that residents are not required to carry waste for more than 30metres. Refuse collection vehicles should not be required to reverse more than 12metres. The layout complies with these requirements.
- 5.12 **Appendix D** demonstrates the vehicle tracking for a service vehicle of 11.2 metres in length around the proposed development and exemplifies that the site is in accordance with the above MfS standards.
- 5.13 In accordance with Manual for Streets, a fire appliance is also able to access the development and reach within 45metres of all dwelling entrances (see **Appendix D**).

## 6 Trip Generation

### Existing Trip Generation

- 6.1 Although the existing site is a parcel on unused land and is not associated with any trips, since the proposed development will share an access with the dwellings known as St Annes and Lynton, an existing trip generation for 2 dwellings has been generated.
- 6.2 The TRICS database has been interrogated for C3 Privately Owned Houses with the following relevant parameters being applied.
- ✦ Post 2010 surveys;
  - ✦ All regions in England, with the exception of London;
  - ✦ Weekdays only;
  - ✦ Neighbourhood Centre location types (villages);
  - ✦ Populations of 5,000 to 50,000 within a 5 miles radius;
  - ✦ Car ownership from 1.1 to 2.0
- 6.3 **Appendix E** provides the full details of the TRICS assessment.
- 6.4 **Table 6.1** and **Table 6.2** below provide the trip rate data, based on the site selection criteria.

Table 6.1 - C3 Privately Owned Houses (1 Unit) – Weekday Trip Rates

Mode	AM Peak (8:00 – 9:00)			PM Peak (17:00 – 18:00)			Daily (7:00 – 19:00)		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Vehicles	0.126	0.283	0.409	0.262	0.15	0.412	1.797	1.848	3.645

Table 6.2 – C3 Privately Owned Houses (2 Units) – Weekday Trips

Mode	AM Peak (8:00 – 9:00)			PM Peak (17:00 – 18:00)			Daily (7:00 – 19:00)		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Vehicles	0	1	1	1	0	1	4	4	7

### Proposed Development

- 6.5 The same TRICS output as the existing use has been used to generate the trip rate data for the 6 additional houses.
- 6.6 **Table 6.3** below provide the trip rate data, based on the site selection criteria.

**Table 6.3 – C3 Privately Owned Houses (6 Units) – Weekday Trips**

Mode	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily (7:00 – 19:00)		
	In	Out	2-Way	In	Out	2-Way	In	Out	2-Way
Vehicles	1	3	3	2	1	3	13	13	26

### Summary

- 6.7 The proposed development is likely to lead to additional trips of:
- 3 additional two-way vehicle trips in the AM peak hour (0800-0900);
  - 3 two-way vehicle trips in the PM peak hour (1700-1800); and
  - 26 additional two-way daily vehicle trips.
- 6.8 The trips generated by the development will not result in a highway impact that could be considered as severe.

## 7 Conclusion

- 7.1 This Transport Report has summarised the current and retrospective situation and has provided an overview of the land-use change from a transport perspective.
- 7.2 Key transport-relevant elements of the development, including parking, access, trip generation and the impacts upon the surrounding transport networks, have been considered from a policy context.
- 7.3 The proposed development will provide:
- ✦ 14 allocated car parking spaces (2 spaces per dwelling) and 2 visitor spaces;
  - ✦ 7 active EV charging points (1 per dwelling) and 7 passive EV spaces (1 per dwelling);
  - ✦ 14 cycle parking spaces (2 spaces per dwelling);
  - ✦ New permeable surfacing and turning area;
- 7.4 The sites provision of car / cycle parking complies with WSCC parking standards.
- 7.5 Vehicles will access the site via the existing cross over access onto Lake Lane that is shared with the dwellings known as St Annes and Lynton and existing right of access. The access road leading into the site will be resurfaced with new permeable surfacing and the site will provide a turning head. 2.4m x 47m visibility splays (30mph requirements) can be achieved to the east and west of the existing access.
- 7.6 Using the TRICS database, the development is likely to result in approximately 3 additional two-way trips in the peak AM period (0800-0900) and 3 additional two-way trips in the peak PM period (1700-1800). The trips generated by the development will not result in a highway impact that could be considered as severe.
- 7.7 In conclusion, there are no unacceptable highway or transport impacts as a result of the proposed land-use change.

- End of Report -

## Appendix A

### Proposed Development Layout

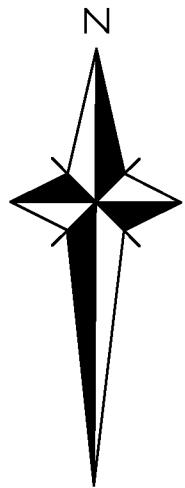


Site Plan 1:500 @ A1

## Appendix B


### Visibility Splays





**VISIBILITY SPLAYS**  
1:200

- GENERAL NOTES**
1. The location, size, depth and identification of existing services that may be shown or referred to on this drawing have been assessed from non intrusive observations , record drawings or the like. The contractor shall safely carry out intrusive investigations, trial holes or soundings prior to commencing work to satisfy himself that it is safe to proceed and that the assessments are accurate. any discrepancies shall be notified to gta prior to works commencing.
  2. Tender or billing drawings shall not be used for construction or the ordering of materials.
  3. Do not scale. All dimensions and levels to be site confirmed.
  4. This drawing shall be read in conjunction with all relevant architects, consultants drawings and specifications, together with H&S plan requirements.
  5. Copyright : This drawing must not be copied, amended nor reproduced without the prior written agreement of gta.
  6. All drawings specifications and recommendations made by gta are subject to Local Authority and other relevant Statutory Authorities approval. Any works or services made abortive due to the client proceeding prior to these approvals is considered wholly at the Clients risk. gta hold no responsibility for resulting abortive works or costs.

P1	INITIAL ISSUE	13.09.2022	TM	JMW
Rev	Amendments	Date	Disn	Chk
Status				
Client				
PROPERTY SPHERE LTD				
Architect				
Project				
LAKE LANE BARNHAM				
Title				
ACCESS DRAWING				
Date		Scale @ A1		
SEPTEMBER 2022		AS SPECIFIED		
Clients Ref.		Project Ref.		
		12188		
<div><div></div><div><div>Civils &amp; Transport</div><div>Gloucester House, 66a Church Walk, Burgess Hill, West Sussex, RH15 9AS Tel.01444 871444 Web: www.gtacivils.co.uk</div></div></div>				
Drawing Number			Rev.	
12188_2100			P1	

## Appendix C

### Highway Boundary



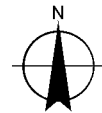
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**Local Development**  
*for Customers and Communities*

Information about the status of a highway, and in some circumstances the extent of the highway, may be taken from a number of sources held by the County Council. Unless taken from a legal agreement the information should be regarded as guidance only.

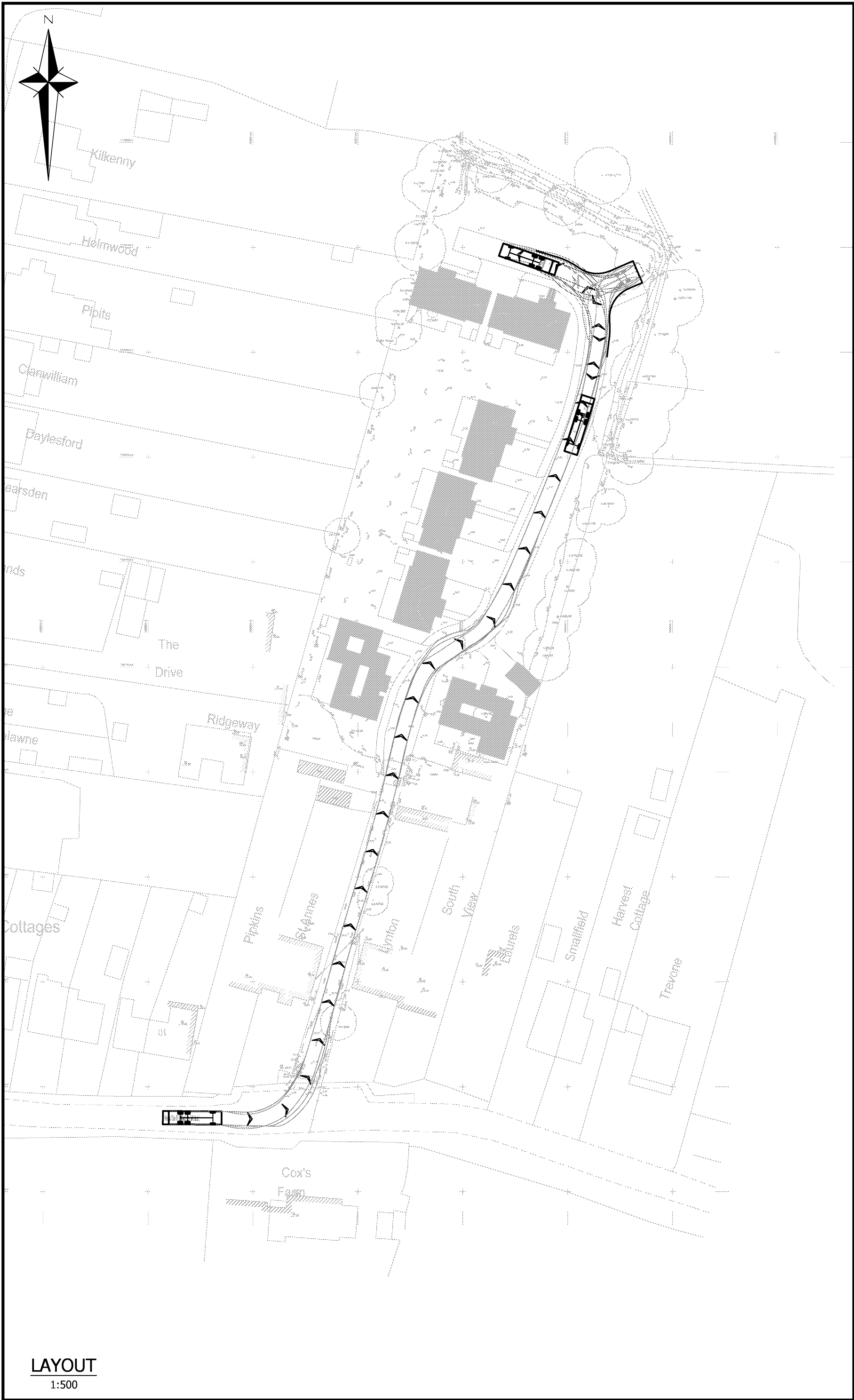
Date: 12/09/2022

Scale: 1:1,250

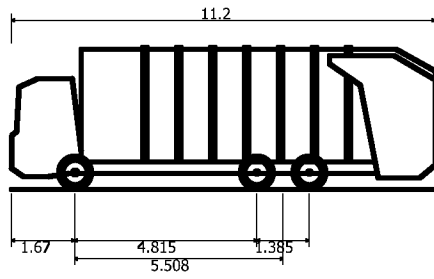


## Appendix D

### Vehicle Tracking

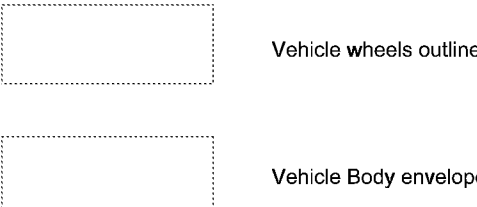



- GENERAL NOTES
1. The location, size, depth and identification of existing services that may be shown or referred to on this drawing have been assessed from non intrusive observations, record drawings or the like. The contractor shall safely carry out intrusive investigations, trial holes or soundings prior to commencing work to satisfy himself that it is safe to proceed and that the assessments are accurate. any discrepancies shall be notified to gta prior to works commencing.
  2. Tender or billing drawings shall not be used for construction or the ordering of materials.
  3. Do not scale. All dimensions and levels to be site confirmed.
  4. This drawing shall be read in conjunction with all relevant architects, consultants drawings and specifications, together with H&S plan requirements.
  5. Copyright : This drawing must not be copied, amended nor reproduced without the prior written agreement of gta.
  6. All drawings specifications and recommendations made by gta are subject to Local Authority and other relevant Statutory Authorities approval. Any works or services made abortive due to the client proceeding prior to these approvals is considered wholly at the Clients risk. gta hold no responsibility for resulting abortive works or costs.



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m



P1	INITIAL ISSUE	22.02.2024	JMW	LS
Rev	Amendments	Date	Dsn	Chk
Status	PRELIMINARY			
Client	PROPERTY SPHERE LTD			
Architect				
Project	LAKE LANE BARNHAM			
Title	REFUSE VEHICLE TRACKING			
Date	FEB 2024	Scale @ A1	1:500 / 1:200	
Clients Ref.		Project Ref.	12188	
<div> <b>Civils &amp; Transport</b></div> <div>Maple House, 192-198 London Road, Burgess Hill, West Sussex, RH15 9RD Tel 01444 871444 Web: <a href="http://www.gtacivils.co.uk">www.gtacivils.co.uk</a></div>				
Drawing Number	12188/2200			Rev. P1

## Appendix E

### TRICS Output

Calculation Reference: AUDIT-349901-220913-0912

**TRIP RATE CALCULATION SELECTION PARAMETERS:**

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

**TOTAL VEHICLES**Selected regions and areas:

<b>02 SOUTH EAST</b>	
ES EAST SUSSEX	1 days
KC KENT	1 days
WS WEST SUSSEX	1 days
<b>04 EAST ANGLIA</b>	
CA CAMBRIDGESHIRE	1 days
SF SUFFOLK	1 days

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

**Primary 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: No of Dwellings  
 Actual Range: 12 to 380 (units: )  
 Range Selected by User: 6 to 4334 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling 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: 01/01/14 to 23/11/21

*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:

Tuesday	2 days
Wednesday	1 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	5 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:

Neighbourhood Centre (PPS6 Local Centre)	5
--	---

*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:

Village	5
---------	---

*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 5 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 500m Range:

All Surveys Included

### Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	3 days
5,001 to 10,000	1 days

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

### Population within 5 miles:

25,001 to 50,000 5 days

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

### Car ownership within 5 miles:

1.1 to 1.5 5 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	3 days
No	2 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 5 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
-----------------------	-----	--



LIST OF SITES relevant to selection parameters

<b>1</b>	<b>CA-03-A-07</b>	<b>MIXED HOUSES</b>	<b>CAMBRIDGESHIRE</b>
	FIELD END		
	NEAR ELY		
	WITCHFORD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	32	
	Survey date: THURSDAY	27/05/21	Survey Type: MANUAL
<b>2</b>	<b>ES-03-A-06</b>	<b>MIXED HOUSES</b>	<b>EAST SUSSEX</b>
	BISHOPS LANE		
	RINGMER		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	12	
	Survey date: WEDNESDAY	16/06/21	Survey Type: MANUAL
<b>3</b>	<b>KC-03-A-08</b>	<b>MIXED HOUSES</b>	<b>KENT</b>
	MAIDSTONE ROAD		
	CHARING		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
<b>4</b>	<b>SF-03-A-06</b>	<b>DETACHED &amp; SEMI-DETACHED</b>	<b>SUFFOLK</b>
	BURY ROAD		
	KENTFORD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	38	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL
<b>5</b>	<b>WS-03-A-15</b>	<b>MIXED HOUSES</b>	<b>WEST SUSSEX</b>
	HILLAND ROAD		
	BILLINGSHURST		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	380	
	Survey date: TUESDAY	23/11/21	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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
SC-03-A-06	Flats included
WS-03-A-07	Bungalows

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

**TOTAL VEHICLES****Calculation factor: 1 DWELLS****Estimated TRIP rate value per 1 DWELLS shown in shaded columns****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS				DEPARTURES				TOTALS			
	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated Trip Rate	No. Days	Ave. DWELLS	Trip Rate	Estimated 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	5	124	0.074	0.000	5	124	0.224	0.000	5	124	0.298	0.000
08:00 - 09:00	5	124	0.126	0.000	<b>5</b>	<b>124</b>	<b>0.283</b>	<b>0.000</b>	5	124	0.409	0.000
09:00 - 10:00	5	124	0.118	0.000	5	124	0.127	0.000	5	124	0.245	0.000
10:00 - 11:00	5	124	0.121	0.000	5	124	0.132	0.000	5	124	0.253	0.000
11:00 - 12:00	5	124	0.137	0.000	5	124	0.140	0.000	5	124	0.277	0.000
12:00 - 13:00	5	124	0.151	0.000	5	124	0.135	0.000	5	124	0.286	0.000
13:00 - 14:00	5	124	0.114	0.000	5	124	0.118	0.000	5	124	0.232	0.000
14:00 - 15:00	5	124	0.111	0.000	5	124	0.132	0.000	5	124	0.243	0.000
15:00 - 16:00	5	124	0.190	0.000	5	124	0.134	0.000	5	124	0.324	0.000
16:00 - 17:00	5	124	0.182	0.000	5	124	0.167	0.000	5	124	0.349	0.000
17:00 - 18:00	<b>5</b>	<b>124</b>	<b>0.262</b>	<b>0.000</b>	5	124	0.150	0.000	<b>5</b>	<b>124</b>	<b>0.412</b>	<b>0.000</b>
18:00 - 19:00	5	124	0.211	0.000	5	124	0.106	0.000	5	124	0.317	0.000
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			1.797	0.000			1.848	0.000			3.645	0.000

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:	12 - 380 (units: )
Survey date range:	01/01/14 - 23/11/21
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	2

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.

GTA Cycles & Transport, Gloucester House, 66a Church Walk, Burgess Hill, West Sussex, BN15 9AS