

TRANSPORT STATEMENT

Land to the rear of Sheepleas House, Epsom Road, West Horsley, KT24 6AL



Prepared for: BlackOnyx Projects
Ref: 004_8230659_JB_Transport_Statement

Document History

Issue	Date	Description	Prepared By	Checked By
1	14 Mar 24	First issue	J Cooper	J Birch
2	22 Mar 24	Updated following client comments	J Birch	J Birch

Hertfordshire | Oxfordshire | Cambridgeshire | Bristol
 postbox@glanvillegroup.com | www.glanvillegroup.com



© Glanville Consultants Ltd. All rights reserved.

This report contains confidential information intended solely for the recipient. No part of this report may be copied, reproduced or stored electronically without prior written permission from Glanville Consultants Ltd. This report has been prepared in accordance with the commissioning brief and is for the client's exclusive use unless otherwise agreed in writing. Glanville Consultants Ltd does not accept liability for any use of this report, other than for the purposes for which it was originally prepared and provided. Third parties should not use or rely on the contents of this report without written permission from Glanville Consultants Ltd.

Contents

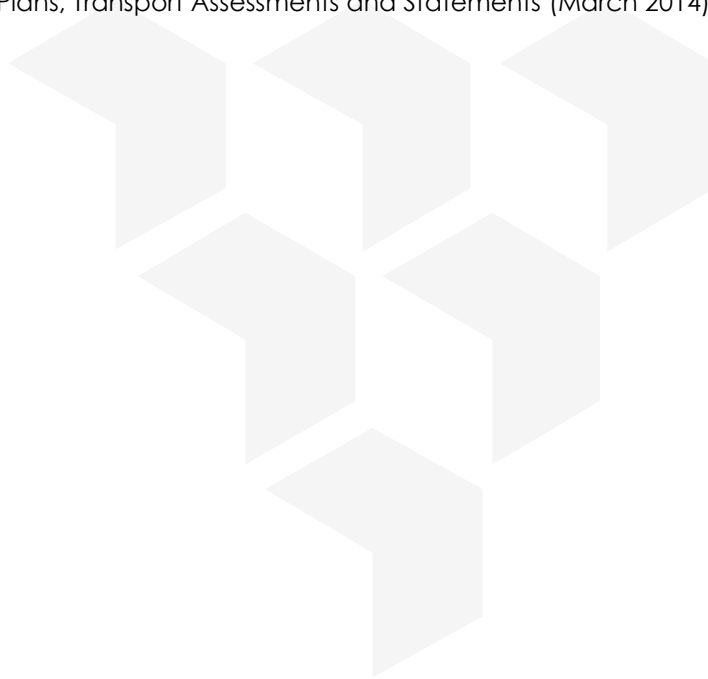
1.0	Introduction.....	1
2.0	Existing Site Context	2
3.0	Development Proposals	5
4.0	Traffic Generation and Impact	8
5.0	Summary and Conclusion	10

Appendices

- Appendix A: Proposed Site Layout Plan
- Appendix B: Extent of Public Highway
- Appendix C: Automatic Traffic Count Data
- Appendix D: Site Access & Visibility Splay Drawings
- Appendix E: Swept Path Analysis Drawings
- Appendix F: TRICS Output

1.0 Introduction

- 1.1 This Transport Statement has been prepared by Glanville Consultants on behalf of BlackOnyx Projects in relation to a proposed residential development on land to the rear of Sheepleas House, Epsom Road, West Horsley, KT24 6AL.
- 1.2 Development proposals are for the construction of 5 residential dwellings with associated access, parking, and landscaping. The existing property is to be retained and is outside of the application red line boundary. The proposed site plan is provided at Appendix A.
- 1.3 This report outlines the existing use of the site and its context as well as the scale of the proposed development. Matters pertaining to access, car and cycle parking, traffic generation and highways impact are also considered.
- 1.4 This Transport Statement has been prepared in accordance with Central Government policies set out in the National Planning Policy Framework (December 2023) and in line with the planning practice guidance, Travel Plans, Transport Assessments and Statements (March 2014).



2.0 Existing Site Context

- 2.1 The application site is located along Epsom Road in East Horsley, Surrey, approximately 12.5km to the east of Guildford and 9.5km to the west of Leatherhead.
- 2.2 The site is situated on the western edge of the village of East Horsley, to the north of Epsom Road, and currently comprises an existing detached dwelling, known as 'Sheepleas House', with associated garden space, a detached garage at the front, and a tennis court to the rear.
- 2.3 The application site is bordered by agricultural land to the north and west, existing residential development to the east, and A246 Epsom Road to the south, from which the site is currently accessed at the western end of the site frontage.

Local Highway Network

- 2.4 Within the immediate vicinity of the site, A246 Epsom Road, which runs along the site frontage in an east-west direction, operates under a speed limit of 40mph. Epsom Road extends westwards, facilitating access to West Horsley, East Clandon and Guildford, and eastwards, becoming Guildford Road and facilitating access to East Horsley, Effingham, Great Bookham, Fetcham and Leatherhead.
- 2.5 Epsom Road / Guildford Road benefits from a footway on the north side of the carriageway past the application site, which extends westwards into the village of West Horsley and eastwards into the wider extents of East Horsley.
- 2.6 A plan showing the extent of highway maintainable at public expense is provided in Appendix B.

Accessibility

- 2.7 The following paragraphs outline the accessibility of the site by sustainable transport modes and consider access to local services and facilities within reasonable walking and cycling distances, and by public transport.

Walking and Cycling

- 2.8 It is generally considered that 2km is a reasonable upper limit for those travelling on foot, whilst 5km is a reasonable distance for cycling. Therefore, the majority of East Horsley and West Horsley are within a reasonable walking distance of the site; and the entirety of East Horsley, West Horsley, Effingham and East Clandon are accessible within a reasonable cycling distance of the site. Horsley railway station is around 2.2km away.
- 2.9 As stated above, the nearest footway to the site runs along the north side of Epsom Road, across the site frontage. This footway is approximately 1.5m wide and extends eastwards to the centre of East Horsley and westwards to West Horsley, facilitating access on foot to a range of local services and facilities. There is no footway present on the southern side of Epsom Road in the vicinity of the site.
- 2.10 Surrey County Council's Public Right of Way (PRoW) map shows that the nearest PRoW to the site is Bridleway 104 which is located some 65m to the east of the site and on the southern side of Epsom Road. This bridleway extends southwards connecting to a network of other PRoWs within Sheepleas Nature Reserve. To the west, Bridleway 98 extends northwards connecting to the northern extent of West Horsley and Footpaths 96 and 92 also extend into the wider areas of West Horsley.

2.11 The following facilities and amenities are accessible within a reasonable walking or cycling distance from the site:

- Duke of Wellington bus stops – 270m / 4-minute walk;
- The Duke of Wellington public house – 350m / 5-minute walk;
- St Mary's Church – 350m / 4-minute walk;
- Little Waitrose – 450m / 6-minute walk;
- East Horsley Post Office – 650m / 9-minute walk;
- Yasmin Indian Takeaway – 650m / 9-minute walk;
- Horsley dental practice – 650m / 9-minute walk; and
- Squires Garden Centre – 850m / 12-minute walk;
- Henderson playing fields – 1.1km / 3-minute cycle;
- Cranmore School – 1.2km / 5-minute cycle;
- Horsley Sports Club – 1.7km / 6-minute cycle;
- Barley Mow Pub – 1.8km / 7-minute cycle;
- West Horsley village hall – 1.9km / 6-minute cycle;
- Horsley convenience store – 2.0km / 5-minute cycle;
- Horsley railway station – 2.2km / 5-minute cycle;
- Horsley medical practice – 2.2km / 28-minute walk;
- Glenesk Pre-Prep & Nursery School – 2.7km / 7-minute cycle; and
- Howard of Effingham School & Sixth Form – 3.9km / 14-minute cycle.

Public Transport

2.12 The nearest bus stops to the site, called 'Duke of Wellington', are located less than 300m to the east of the site along Guildford Road. Both bus stops are equipped with shelters and include signposts that highlight the location of the stop and provide a timetable for the bus routes being served.

2.13 Services operating from these stops include 479 and 678, which are operated by Falcon Buses and Reptons Coaches, respectively, and provide access to key destinations, including Leatherhead, Epsom and Guildford. A summary of the available services is shown in Table 1 below.

Table 1: Bus Service Summary

Service	Route	Service Frequency			Operator
		Mon – Fri	Saturday	Sunday	
479	Guildford – Bookham – Leatherhead – Epsom	Hourly	Hourly	2 hours	Falcon Buses
678	Ripley – Howard of Effingham School	School service	-	-	Reptons Coaches

2.14 The nearest railway station to the site is Horsley, which is located approximately 2.2km to the north of the site and is accessible within a 31-minute walk, 6-minute cycle or 4-minute drive. Horsley station benefits from the provision of 72 sheltered and secure cycle storage spaces and 170 car parking spaces.

2.15 Services from Horsley can be taken to key destinations such as Guildford, Leatherhead, Clapham Junction and London Waterloo. A summary of train services, as well as the peak hour frequencies and journey times, are presented in Table 2.

Table 2: Train Service Summary

Destination	Peak Hour Journey Frequency	Journey Time
Effingham Junction	3	3 minutes
Guildford	4	18 minutes
Leatherhead	1	14 minutes
Clapham Junction	3	50 minutes
London Waterloo	2	53 minutes

- 2.16 The above demonstrates that the application site lies in a sustainable location in terms of accessibility to local facilities and amenities, including public transport services.



3.0 Development Proposals

- 3.1 The development proposals are for the construction of 5 residential dwellings (including 2 x 3-bed units, 2 x 4-bed units and 1 x 5-bed unit). The existing property – Sheepleas House – is to be retained and is outside of the application red line boundary. The proposals also include associated access, parking, and landscaping. A proposed site layout plan is provided at Appendix A.
- 3.2 Access to the site is proposed to take the form of a vehicle crossover off A246 Epsom Road and a private driveway that will be 4.1m wide, typically. The access will also serve Sheepleas House, which is to be retained alongside the proposed dwellings. Thus, the access will serve 6 dwellings in the future and a vehicle crossover with 4.1m access road complies with Surrey County Council's requirements to serve a development of up to 25 dwellings.
- 3.3 Appropriate visibility splays for the site access have been calculated from the 85th percentile speeds recorded by an automatic traffic count (ATC) survey undertaken at two locations on A246 Epsom Road / Guildford Road, either side of the site access. The ATC survey data provided at Appendix C confirmed 85th percentile approach speeds of 35.0mph eastbound and 42.8mph westbound. Stopping sight distances of 53.6m eastbound and 115.8m westbound have been calculated based on these approach speeds in accordance with Manual for Streets guidance. A reaction time of 1.5s and deceleration rate of 4.41 m/s² has been applied to the approach speed of 35.0mph whilst a reaction time of 2.0s and deceleration rate of 2.45m/s² has been applied to the approach speed of 42.8mph.
- 3.4 As shown on the site access drawing at Appendix D, visibility splays measuring 2.4m x 53.6m eastbound and 2.4m x 115.8m westbound can be achieved from the proposed site access within the public highway. As such, the access can be expected to operate safely based on existing approach speeds.
- 3.5 The internal access road has been designed as a 4.1m wide shared surface driveway which subsequently narrows to 3.7m wide (with a short pinch point of 3.5m). This complies with Building Regulations which states that: *'Any street or private drive forming part of such a fire access way must be no less than 3.7m wide between kerbs (though this may reduce to 3.1m for a gateway or similar short narrowing) ...'*. The driveway includes three formal passing places to allow vehicles travelling in opposite directions to pass each other safely. Forward visibility of 11m based on a design speed of 10mph can be provided throughout the internal access road, as shown on the drawings provided at Appendix D.
- 3.6 Safe access for pedestrians and cyclists to/from the development will be via the site access off Epsom Road, with the driveway acting as a shared surface, which will be subject to low traffic speeds and lightly trafficked and therefore expected to operate safely.

Servicing

- 3.7 In line with the existing dwellings along Epsom Road / Guildford Road, it is expected that refuse collection will take place from the kerb side such that refuse vehicles will not have to access the development. A bin collection point is proposed close to the access from Epsom Road.
- 3.8 The site layout has been designed to accommodate emergency vehicles. A vehicle tracking exercise has been undertaken for a fire tender, which demonstrates that a vehicle of this size will be able to safely enter the development from Epsom Road via the private driveway, turn within the site and park within 45m of all points within each dwelling, in accordance with Building Regulations. The swept path drawing is provided at Appendix E.

- 3.9 It is also anticipated that the site will be accessed by home delivery vehicles. Given that the development layout has been shown to accommodate a fire tender, which is larger than a home delivery vehicle, it can be assumed that there would be no issues with a home delivery vehicle accessing the site.

Parking

- 3.10 Residential parking standards are outlined in Guildford Borough Council's 'Parking Standards for New Development Supplementary Planning Document' (SPD) (March 2023). The relevant standards are outlined in Table 3 and Table 4 below.

Table 3: Guildford Borough Council's Vehicle Parking Standards

Location	Standards for Village & Rural Locations
1 bed houses	1.5 spaces per unit
2 bed houses	1.5 spaces per unit
3 bed houses	2 spaces per unit
4+ bed houses	2.5 spaces per unit

Table 4: Guildford Borough Council's Minimum Cycle Parking Standards

Residential	Minimum cycle parking – short stay	Minimum cycle parking – long stay
All except sheltered / elderly housing etc	Individual assessment / justification	1 per bedroom

- 3.11 The development proposals comprise 2 x 3-bed units, 2 x 4-bed units and 1 x 5-bed unit. Based on the standards set out in Table 3, the development would be required to provide 16 car parking spaces and 19 cycle parking spaces for long stay use.
- 3.12 The level of vehicle and cycle parking proposed is presented in Table 5 and complies with Guildford Borough Council's standards. In addition, two car parking spaces for use by visitors are proposed on the west side of the access road between Plots 2 and 3.

Table 5: Proposed Parking Provision

Plot	No. of Bedrooms	Vehicle Parking Spaces	Cycle Parking Long Stay Spaces
1	4	4	4
2	4	4	4
3	3	2	3
4	3	2	3
5	5	4	5
Total		16	19

- 3.13 The Council's guidance for short-stay cycle parking states that this should be provided based on an individual site assessment. Due to the small scale of development proposed, and the somewhat rural location of the site, additional short stay cycle provision is not considered necessary, and it is considered that the provision of 19 long stay cycle spaces will be adequate to serve the scheme.

- 3.14 In relation to the provision of electric vehicle (EV) charging points, the aforementioned SPD states that:
- 'Policy ID10: Parking Standards for New Development requires that new development must provide the requirements of the Building Regulations (Part S) for EVCPs as a minimum'.*
- 3.15 Building Regulations Part S states that for the erection of new residential buildings:
- 1) *A new residential building with associated parking must have access to electric vehicle charge points as provided for in paragraph (2).*
 - 2) *The number of associated parking spaces which have access to electric vehicle charge points must be –*
 - a) *The total number of associated parking spaces, where there are fewer associated parking spaces than there are dwellings contained in the residential building; or*
 - b) *The number of associated parking spaces that is equal to the total number of dwellings contained in the residential building, where there are the same number of associated parking spaces as, or more associated parking spaces than, there are dwellings.*
 - 3) *Cable routes for electric vehicle charge points must be installed in any associated parking spaces which do not, in accordance with paragraph (2), have an electric vehicle charge point where –*
 - a) *A new residential building has more than 10 associated parking spaces; or*
 - b) *There are more associated parking spaces than there are dwellings contained in the residential building.*
- 3.16 Based on the standards outlined above, each dwelling will be provided with an EV charge point.

4.0 Traffic Generation and Impact

- 4.1 This section of the Transport Statement considers the existing traffic generation and the anticipated number of vehicle trips that will be generated by the development proposals.

Existing Traffic Generation

- 4.2 Although the application boundary does not include the existing dwelling, Sheepleas House, the driveway which will provide access to the development currently serves this dwelling and therefore it is appropriate to calculate the current level of traffic which uses the private driveway.
- 4.3 To calculate the existing traffic generation, the TRICS database has been interrogated. Trip rates from the category 'Land Use 03 – Residential/A – Houses Privately Owned' and the resultant traffic generation figures are provided in Tables 6 and 7 respectively. A copy of the TRICS Output is contained at Appendix F.

Table 6: Trip Rates – Private Dwellings

Period	Trip Rates (per dwelling)		
	Inbound	Outbound	Total
AM Peak (08:00-09:00)	0.273	0.636	0.909
PM Peak (17:00-18:00)	0.364	0.273	0.637
Daily (07:00-19:00)	3.455	3.591	7.046

Table 7: Traffic Generation – Existing Dwelling

Period	Traffic Generation (1 dwelling)		
	Inbound	Outbound	Total
AM Peak (08:00-09:00)	1	1	2
PM Peak (17:00-18:00)	1	1	2
Daily (07:00-19:00)	3	4	7

- 4.4 The existing dwelling can be expected to generate a total of 2 two-way trips in the AM and PM peak hours, and 7 two-way trips across the day.

Proposed Traffic Generation

- 4.5 The traffic generation for the proposed development, which comprises 5 new dwellings, has been calculated using the trip rates from Table 6, and is summarised in Table 8.

Table 8: Traffic Generation – Proposed Dwellings

Period	Traffic Generation (5 dwellings)		
	Inbound	Outbound	Total
AM Peak (08:00-09:00)	1	3	5
PM Peak (17:00-18:00)	2	1	3
Daily (07:00-19:00)	17	18	35

- 4.6 The development proposals are anticipated to generate 5 two-way vehicle movements in the AM peak hour, 3 two-way vehicle movements in the PM peak hour and 35 two-way vehicle movements across the day.

Total Traffic Generation

- 4.7 The traffic generation figures outlined in Table 8 above will occur in addition to those generated by the existing dwelling (Sheepleas House). The total site traffic generation is therefore presented in Table 9.

Table 9: Total Site Traffic Generation

Period	Traffic Generation (6 dwellings)		
	Inbound	Outbound	Total
AM Peak (08:00-09:00)	2	4	7
PM Peak (17:00-18:00)	3	2	5
Daily (07:00-19:00)	20	22	42

- 4.8 Thus, the wider Sheepleas House site can be expected to generate a total of 7 two-way trips in the AM peak hour, 5 two-way trips in the PM peak hour and 42 two-way trips across the day.

Summary

- 4.9 Based on the information provided in this section, it has been demonstrated that the proposed development's traffic generation will not result in a significant adverse impact on the local highway network in terms of road safety or operational capacity and would not result in a severe cumulative impact in the context of paragraph 115 of the National Planning Policy Framework (NPPF).

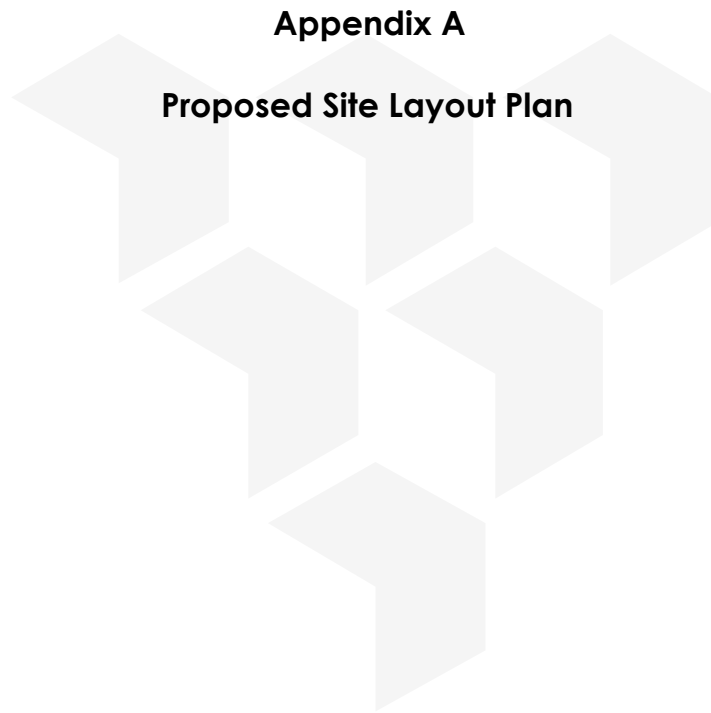
5.0 Summary and Conclusion

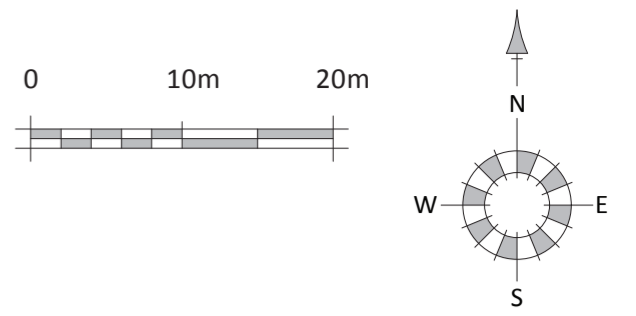
- 5.1 This Transport Statement has been prepared to accompany a planning application for the construction of 5 residential dwellings with associated access, parking, and landscaping on land to the rear of Sheepleas House, Epsom Road, West Horsley, KT24 6AL. The existing property will be retained with the proposals and is outside of the application red line boundary.
- 5.2 The application site is considered to lie in a sustainable location in terms of access to local amenities and facilities, including public transport services, and is therefore able to accommodate the development without reliance on the private car for all journeys.
- 5.3 There is no evidence of a pre-existing road safety issue on the local highway network, and it is not anticipated that the development proposals will have an adverse impact on the local highway network in terms of road safety.
- 5.4 Access to the site is proposed to take the form of a vehicle crossover and private driveway off Epsom Road. The driveway will also serve Sheepleas House, which is to be retained. The driveway will be 4.1m wide for the initial section and subsequently reduce to 3.7m wide (with a pinch point of 3.5m wide) to provide access for a fire appliance. The driveway will also include 3 passing bays, to allow vehicles travelling in opposite directions to pass one another safely.
- 5.5 Visibility splays measuring 2.4m x 53.6m eastbound and 2.4m x 115.8m westbound, based on the recorded 85th percentile approach speeds on Epsom Road, can be achieved from the proposed site access with land that is public highway. As such, the access can be expected to operate safely.
- 5.6 Safe access for both pedestrians and cyclists will also be via the site access driveway off Epsom Road.
- 5.7 Refuse collection will be carried out from the kerb side on Epsom Road so that refuse vehicles do not need to access the site. A refuse collection point will be located adjacent to access, close to Epsom Road.
- 5.8 The layout of the site has been designed to accommodate access for emergency vehicles such that a fire appliance can park within 45m of all points of each dwelling, in accordance with Building Regulations. A tracking exercise has been undertaken that demonstrates a fire tender can enter, turn within, and exit the site in a forward gear.
- 5.9 An appropriate level of car and cycle parking and provision for EV charging will be provided in accordance with the prevailing local standards.
- 5.10 The proposed residential dwellings will lead to a modest increase in traffic and therefore will not result in a significant adverse impact on the local highway network in terms of road safety or operational capacity.
- 5.11 It can be concluded that the proposals are in accordance with the National Planning Policy Framework (December 2023), which is in favour of sustainable development and advises at paragraph 115 that '*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*'.

Appendices



Appendix A
Proposed Site Layout Plan

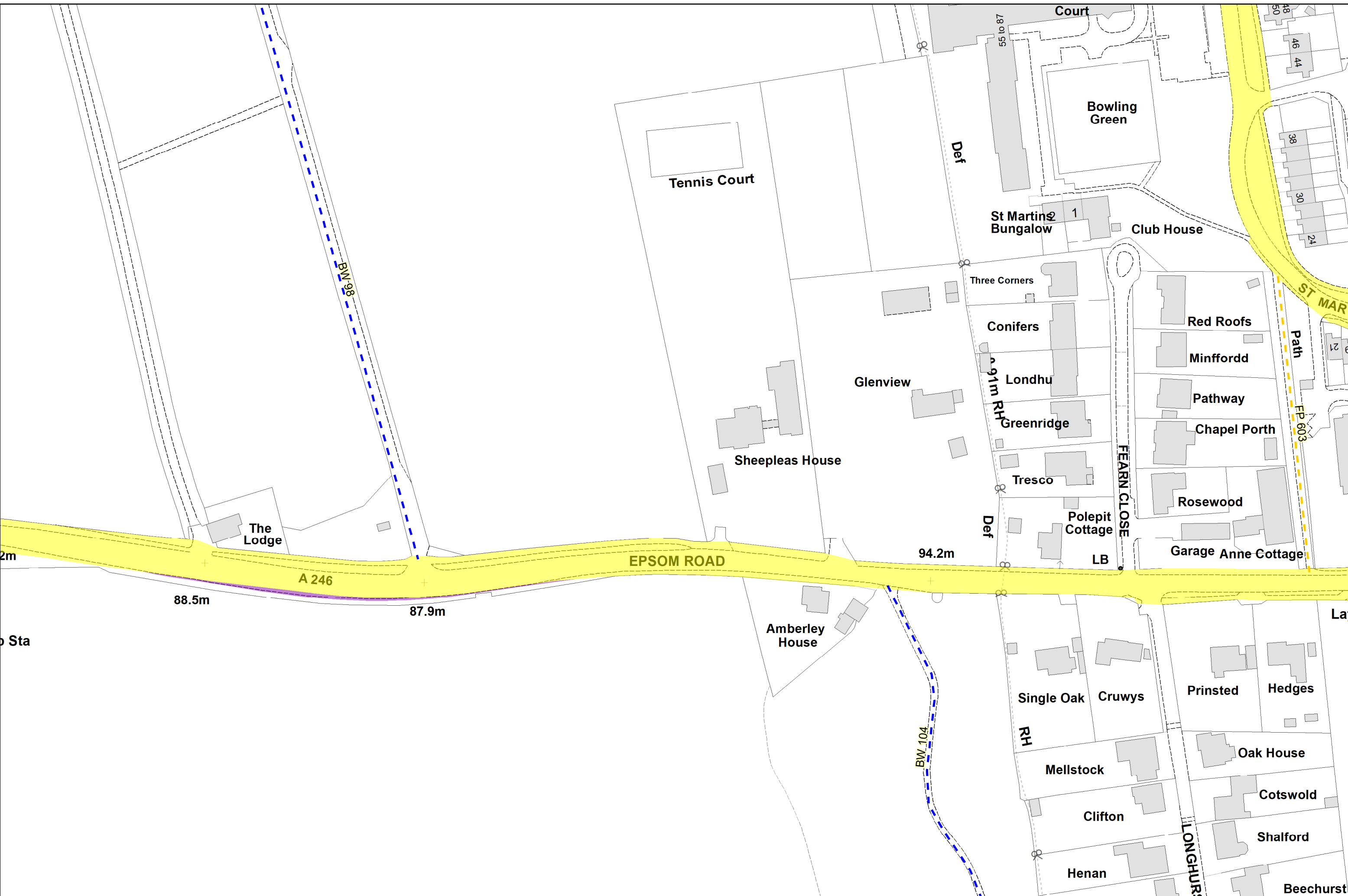




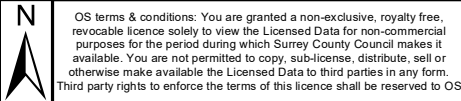

 Coloured Site Layout
 Sheepleas House, West Horsley
23125 / C101A
 Scale 1:500 @ A2 March 2024

Appendix B
Extent of Public Highway





© Crown copyright and database rights 2023 OS 100019613. Use of this data is subject to terms and conditions (see below). Except A-Z Street Atlas © Copyright of the Publishers Geographers' A-Z Map Company Ltd.



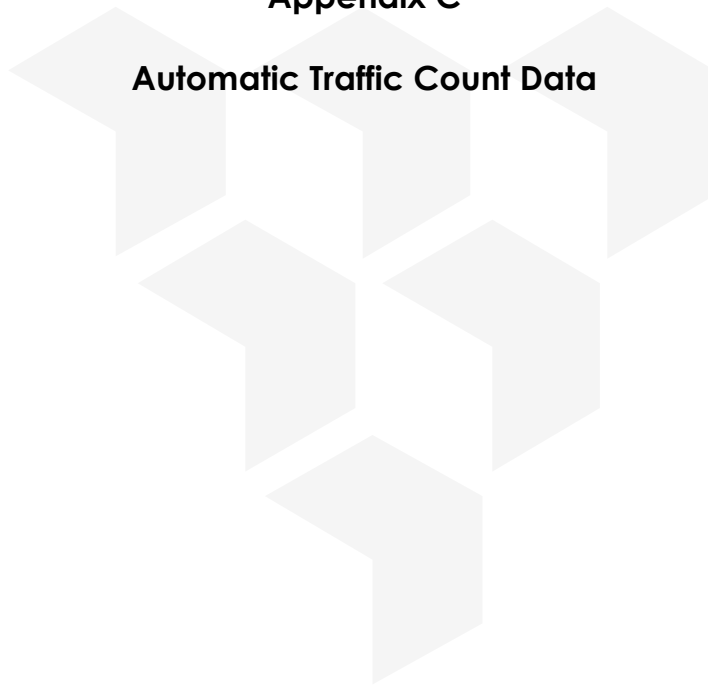
Printed By: Highway Information
 Printed On: 2023-09-28
 Project No: 72990
 Scale: 1:1,250 Original Size A3

Extent of Publicly Maintainable Highway



Appendix C

Automatic Traffic Count Data



















Survey Type: Automatic Traffic Counter

Location: Sheeples House, Epsom Road,
West Horsley KT24 6A



















SITE: A246 Epsom Road, West Horsley East Site (51.262678, -0.435601)

Class	Axes	Groups	Description	Parameters	Dominant Vehicle	Aggregate	
1	SV	2	1 OR 2	Short - Car, light Van	$d(1) >= 1.7m, d(1) <= 3.2m \text{ \& \; axes}=2$		Light
2	SVT	3, 4 OR 5	3	Short Towing - Trailer, Caravan, Boat, etc.	$groups=3, d(1) >= 2.1m, d(1) <= 3.2m, d(2) >= 2.1m \text{ \& \; axes}=3,4,5$		
3	TB2	2	2	Two axle truck or Bus	$d(1) > 3.2m \text{ \& \; axes}=2$		Medium
4	TB3	3	2	Three axle truck or Bus	$axes=3 \text{ \& \; groups}=2$		
5	T4	>3	2	Four axle truck	$axes > 3 \text{ \& \; groups}=2$		
6	ART3	3	3	Three axle articulated vehicle or Rigid vehicle and trailer	$d(1) > 3.2m, axes=3 \text{ \& \; groups}=3$		Heavy
7	ART4	4	>2	Four axle articulated vehicle or Rigid vehicle and trailer	$d(2) < 2.1m \text{ or } d(1) < 2.1m \text{ or } d(1) > 3.2m \text{ axes} = 4 \text{ \& \; groups} > 2$		
8	ART5	5	>2	Five axle articulated vehicle or Rigid vehicle and trailer	$d(2) < 2.1m \text{ or } d(1) < 2.1m \text{ or } d(1) > 3.2m \text{ axes} = 5 \text{ \& \; groups} > 2$		
9	ART6	>=6	>2	Six (or more) axle articulated vehicle or Rigid vehicle and trailer	$axes=6 \text{ \& \; groups} > 2 \text{ or } axes > 6 \text{ \& \; groups}=3$		
10	BD	>6	4	B-Double or Heavy truck and trailer	$groups=4 \text{ \& \; axes}=6$		
11	DRT	>6	5	Double road train or Heavy truck and two trailers	$groups=5,6 \text{ \& \; axes} > 6$		
12	TRT	>6	>6	Triple road train or Heavy truck and three (or more) trailers	$groups > 6 \text{ \& \; axes} > 6$		
14	M/C	2	1 OR 2	Motorcycle	$d(1) >= 1.18m, d(1) <= 1.7m \text{ \& \; axes}=2$		Light
15	CYCLE	2	1 OR 2	Cycle	$d(1) < 1.18 \text{ \& \; axes}=2$		

	Eastbound	Westbound
Total	42849	42486
Mean Speed	31.8	30.5
85%	36	35



SITE: A246 Epsom Road, West Horsley West Site (51.262772, -0.437950)

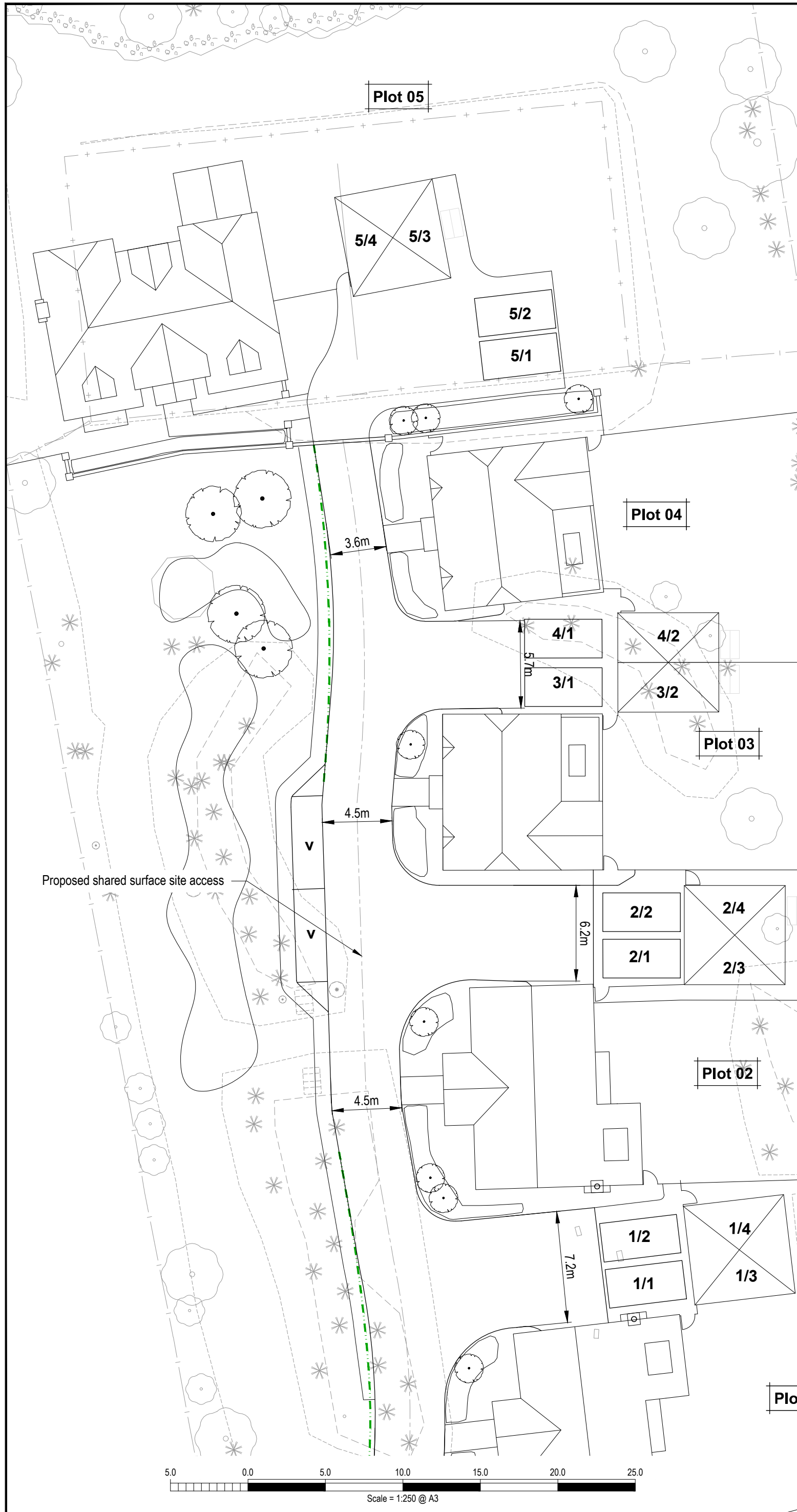
Class	Axes	Groups	Description	Parameters	Dominant Vehicle	Aggregate	
1	SV	2	1 OR 2	Short - Car, light Van	$d(1) >= 1.7m, d(1) <= 3.2m \text{ \& \; axes}=2$		Light
2	SVT	3, 4 OR 5	3	Short Towing - Trailer, Caravan, Boat, etc.	$groups=3, d(1) >= 2.1m, d(1) <= 3.2m, d(2) >= 2.1m \text{ \& \; axes}=3,4,5$		
3	TB2	2	2	Two axle truck or Bus	$d(1) > 3.2m \text{ \& \; axes}=2$		Medium
4	TB3	3	2	Three axle truck or Bus	$axes=3 \text{ \& \; groups}=2$		
5	T4	>3	2	Four axle truck	$axes > 3 \text{ \& \; groups}=2$		
6	ART3	3	3	Three axle articulated vehicle or Rigid vehicle and trailer	$d(1) > 3.2m, axes=3 \text{ \& \; groups}=3$		Heavy
7	ART4	4	>2	Four axle articulated vehicle or Rigid vehicle and trailer	$d(2) < 2.1m \text{ or } d(1) < 2.1m \text{ or } d(1) > 3.2m \text{ axes} = 4 \text{ \& \; groups} > 2$		
8	ART5	5	>2	Five axle articulated vehicle or Rigid vehicle and trailer	$d(2) < 2.1m \text{ or } d(1) < 2.1m \text{ or } d(1) > 3.2m \text{ axes} = 5 \text{ \& \; groups} > 2$		
9	ART6	>=6	>2	Six (or more) axle articulated vehicle or Rigid vehicle and trailer	$axes=6 \text{ \& \; groups} > 2 \text{ or } axes > 6 \text{ \& \; groups}=3$		
10	BD	>6	4	B-Double or Heavy truck and trailer	$groups=4 \text{ \& \; axes}=6$		
11	DRT	>6	5	Double road train or Heavy truck and two trailers	$groups=5,6 \text{ \& \; axes} > 6$		
12	TRT	>6	>6	Triple road train or Heavy truck and three (or more) trailers	$groups > 6 \text{ \& \; axes} > 6$		
14	M/C	2	1 OR 2	Motorcycle	$d(1) >= 1.18m, d(1) <= 1.7m \text{ \& \; axes}=2$		Light
15	CYCLE	2	1 OR 2	Cycle	$d(1) < 1.18 \text{ \& \; axes}=2$		

	Eastbound	Westbound
Total	46561	46357
Mean Speed	36.8	35.3
85%	42.9	42.4

Appendix D

Site Access & Visibility Splay Drawings





NOTES

- This drawing is to be read in conjunction with all relevant documents and specifications.
- Dimensions are not to be scaled.

Source: Greenhatch Group topographical survey drawing number 49441_01_T Rev 0
 Architect drawing 23125 - SK10 (Site Plan).

© Crown copyright and database rights 2023 OS 100018363.

KEY

--- 11m forward visibility splays (10mph)

Proposed shared surface site access

Rev.	Description	Date	By	Chkd
------	-------------	------	----	------



- Civil Engineering
 - Structural Engineering
 - Transport Planning
 - Highways Engineering
 - Building Surveying
 - Geomatics
- Hertfordshire | Oxfordshire | Cambridgeshire | Bristol

Client: **BlackOnyx Projects Limited**

Project: **Sheepleas House, Epsom Road, West Horsley, KT24 6AL**

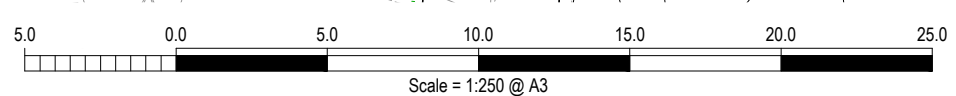
Title: **General Arrangement Proposed Site Access Sheet 2 of 2**

Engineer: A. Harper Date: March 2024

Director: J. Birch Scale: 1:250 @ A3

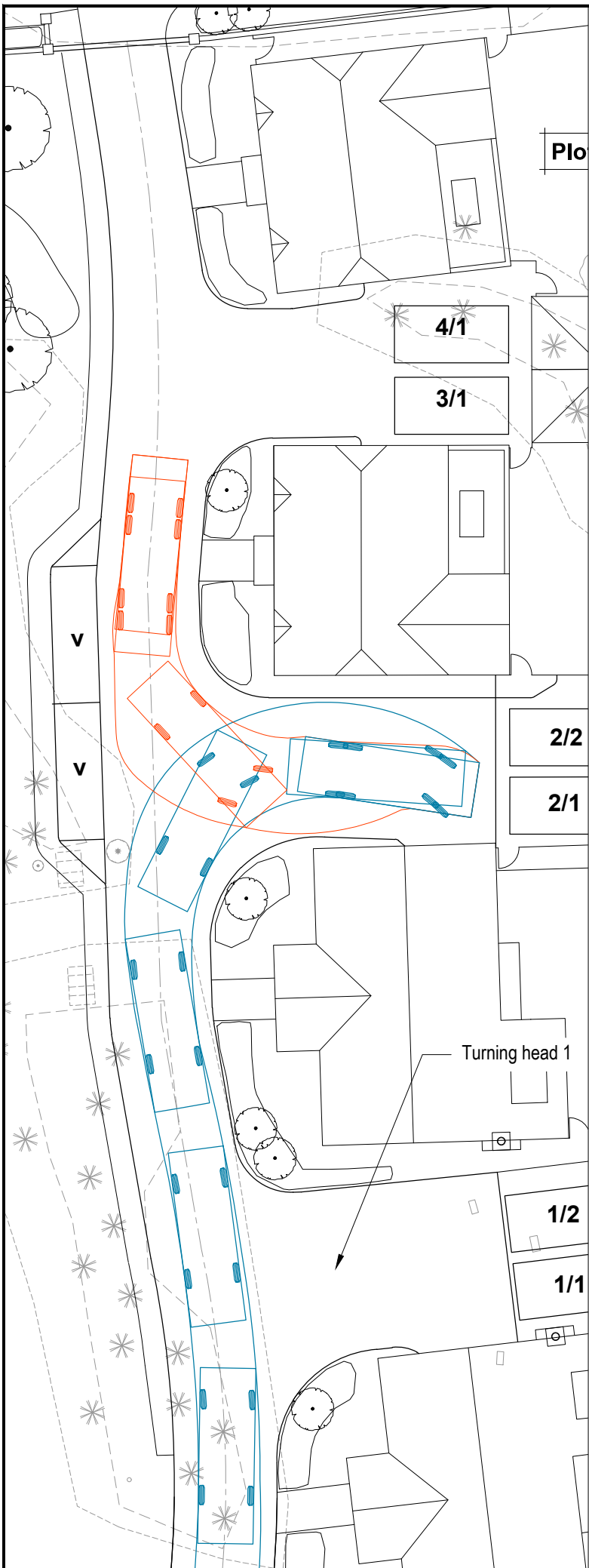
Status: PLANNING

Drawing No. **8230659/6103** Rev

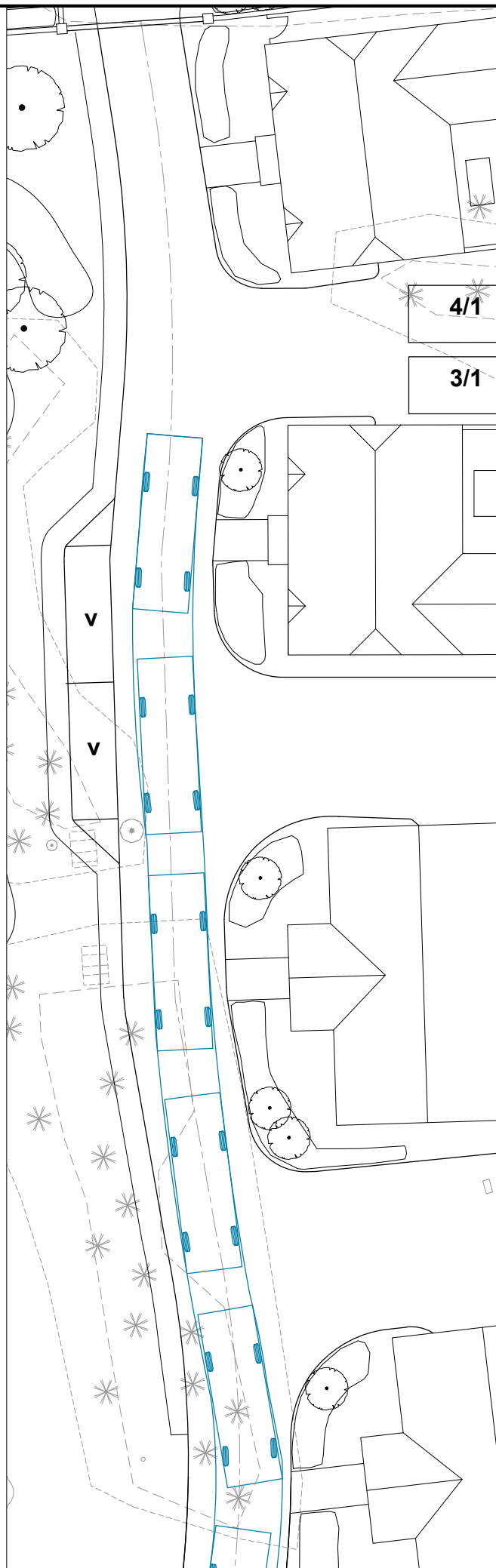


Appendix E
Swept Path Analysis Drawings





SITE ACCESS - ENTRY



SITE ACCESS - EXIT



TURNING HEAD 1

NOTES

1. This drawing is to be read in conjunction with all relevant documents and specifications.
2. Dimensions are not to be scaled.

Source: Greenhatch Group topographical survey drawing number 49441_01_T Rev 0.
Architect drawing 23125 - SK10 (Site Plan).

© Crown copyright and database rights 2023 OS 100018363.

KEY



7.7m Fire Tender without 0.75m clearance envelope - forward gear



7.7m Fire Tender without 0.75m clearance envelope - reverse gear



A	Vehicle tracking amended.	20/03/2024	AH	JB
Rev.	Description	Date	By	Chkd

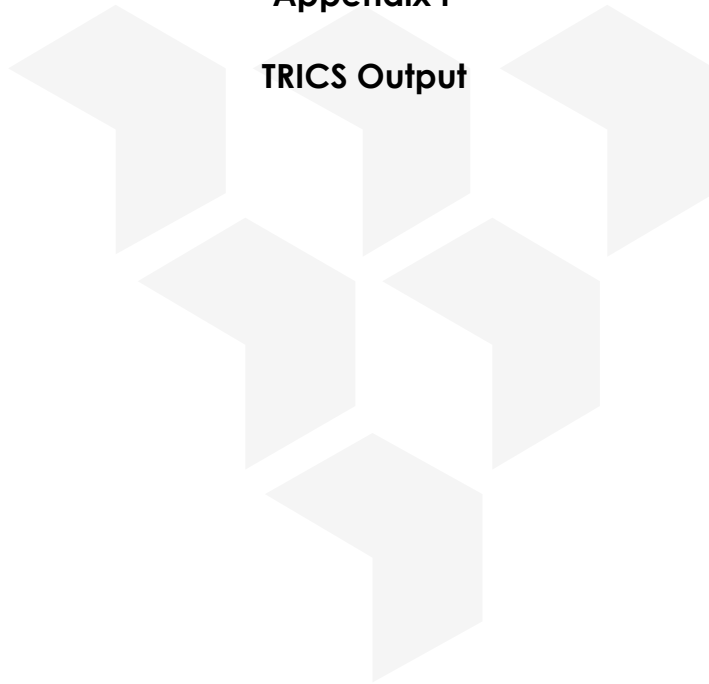


- Civil Engineering
- Structural Engineering
- Transport Planning
- Highways Engineering
- Building Surveying
- Geomatics

Hertfordshire | Oxfordshire | Cambridgeshire | Bristol

Client :	BlackOnyx Projects Limited
Project :	Sheepleas House, Epsom Road, West Horsley, KT24 6AL
Title :	Site Access Swept Path Analysis 7.7m Fire Tender - Sheet 2 of 2
Engineer : A. Harper	Date : March 2024
Director : J. Birch	Scale : 1:250 @ A3
Status :	PLANNING
Drawing No.	8230659/6202
Rev	A

Appendix F
TRICS Output



Glanville Foxhall Road Didcot

Licence No: 225601

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	6-20 DWELLS	
Actual Trip Rate Calculation Parameter Range	10-12 DWELLS	
Date Range	Minimum: 01/01/15	Maximum: 06/06/22
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	
Days of the week selected	Wednesday	2
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	1
	Neighbourhood Centre (PPS6 Local Centre)	1
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	1 - Selected
	Servicing vehicles Excluded	3 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	1
	15,001 to 20,000	1
Population <5 Mile ranges selected	25,001 to 50,000	1
	50,001 to 75,000	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	1
	1.1 to 1.5	1
PTAL Rating	No PTAL Present	2

Calculation Reference: AUDIT-225601-240219-0257

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	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: 10 to 12 (units:)
Range Selected by User: 6 to 20 (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: 01/01/15 to 06/06/22

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:

Wednesday 2 days

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

Selected survey types:

Manual count 2 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) 1
Neighbourhood Centre (PPS6 Local Centre) 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 1
Village 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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 1 days - Selected
Servicing vehicles Excluded 3 days - Selected

Secondary Filtering selection:

Use Class:

C3 2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	1 days
15,001 to 20,000	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	1 days
50,001 to 75,000	1 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	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	1 days
No	1 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	2 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

Site(1):	ES-03-A-06	Site area:	0.99 hect
Development Name:	MIXED HOUSES	No of Dwellings:	12
Location:	RINGMER	Housing density:	19
Postcode:	BN8 5LQ	Total Bedrooms:	38
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	16/06/21
Sub-Location Type:	Village	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	39
Site(2):	NY-03-A-13	Site area:	0.30 hect
Development Name:	TERRACED HOUSES	No of Dwellings:	10
Location:	CATTERICK GARRISON	Housing density:	33
Postcode:	DL9 4SB	Total Bedrooms:	32
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	10/05/17
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	19

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

TOTAL 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	2	11	0.227	2	11	0.545	2	11	0.772
08:00 - 09:00	2	11	0.273	2	11	0.636	2	11	0.909
09:00 - 10:00	2	11	0.182	2	11	0.136	2	11	0.318
10:00 - 11:00	2	11	0.227	2	11	0.273	2	11	0.500
11:00 - 12:00	2	11	0.227	2	11	0.227	2	11	0.454
12:00 - 13:00	2	11	0.455	2	11	0.182	2	11	0.637
13:00 - 14:00	2	11	0.409	2	11	0.409	2	11	0.818
14:00 - 15:00	2	11	0.273	2	11	0.364	2	11	0.637
15:00 - 16:00	2	11	0.318	2	11	0.182	2	11	0.500
16:00 - 17:00	2	11	0.364	2	11	0.273	2	11	0.637
17:00 - 18:00	2	11	0.318	2	11	0.273	2	11	0.591
18:00 - 19:00	2	11	0.182	2	11	0.091	2	11	0.273
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.455			3.591			7.046

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected: 10 - 12 (units:)
Survey date range: 01/01/15 - 06/06/22
Number of weekdays (Monday-Friday): 2
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
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.

