Proposed Residential Development
Land West of Station Road, Lingfield

Transport Assessment

For

Woolbro Group and Morris Investment

motion

Document Control Sheet

Proposed Residential Development

Land West of Station Road, Lingfield

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This document has been issued and amended as follows:

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1.0 Introduction

1.1 This Transport Assessment has been prepared by Motion on behalf of Woolbro Group and Morris Investment in relation to the development of circa 99 dwellings on Land West of Station Road, Lingfield (herein referred to as 'the site'). This report considers the highway and transport related matters in respect of the proposed development.

1.2 The site is located within the built-up area of Lingfield, approximately 500 metres to the east of the village centre. Town Hill (B2028) borders the south of the site, while Station Road borders to the east. The site benefits from close proximity to Lingfield railway station, as well as the principal road network via the A22. The administrative authorities are Tandridge District Council (TDC - Local Planning Authority) and Surrey County Council (SCC - Local Highway Authority).

1.3 The site is currently undeveloped land. The proposals seek outline planning permission for the construction of 99 dwellings on the site. Access will be achieved through a new priority junction taken from the B2028 Town Hill to the south of the site. Appropriate levels of car and cycle parking will be provided in accordance with relevant standards.

1.4 The site has been identified by Tandridge District Council as a draft allocation for housing in its forthcoming Local Plan. As part of this process SCC were consulted, and raised no highways objections subject to any proposal demonstrating the site to be appropriate via a formal planning application.

1.5 Further discussions have been undertaken with SCC as part of a pre-application request for advice. A copy of the pre-application response is attached as **Appendix A**.

1.6 This Transport Assessment has been prepared to address the highway aspects relating to the above proposals, specifically the proximity of the site to sustainable transport modes, as well as the impact of the proposal in traffic, parking and servicing terms.

1.7 The remainder of this Transport Assessment is arranged as follows:

- Section 2 considers the relevant transport policy at national, regional and local level;
- Section 3 identifies the baseline transport conditions in the area;
- Section 4 explains the development proposals;
- Section 5 considers the trip generation potential of the proposals, and the implications of development traffic on the site access junction; and
- Section 6 provides a summary and conclusion.

2.0 Policy Context

2.1 There are a number of documents which contain planning policies relevant to transport. The key policy documents which set out the context for this development are as follows:

- National Planning Policy Framework – July 2021;
- Tandridge District Council's 'Core Strategy' – October 2008;
- Tandridge District Council's 'Local Plan Part 2 – Detailed Policies' – July 2014;
- Tandridge District Council's emerging 'Local Plan 2033' – January 2019; and
- Tandridge District Council's 'Parking Standards – Supplementary Planning Document' – September 2012.

National Policy

National Planning Policy Framework

2.2 The National Planning Policy Framework (NPPF) July 2021 sets out the Government's planning policies for England and how they are expected to be applied.

2.3 The NPPF presumes in favour of sustainable development and is a material consideration in planning decisions. Section 9 of the NPPF deals with 'Promoting Sustainable Transport', with Paragraph 104 stating:

"Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

a) the potential impacts of development on transport networks can be addressed;

b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;

c) opportunities to promote walking, cycling and public transport use are identified and pursued;

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places."

2.4 Off-street parking provision is referred to by Paragraph 107 which states that local planning authorities should take into account the following if setting local parking standards for development:

"a) the accessibility of the development;

b) the type, mix and use of the development;

c) the availability of and opportunities for public transport;

d) local car ownership levels; and

e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra low emission vehicles"

2.5 Paragraph 108 states:

"Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport."

2.6 Paragraph 110 addresses the relationship between development and sustainable transport as follows:

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

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) 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."

2.7 Paragraph 111 states:

"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."

2.8 Paragraph 112 suggests that development should be located and designed where practical to, among other things, give priority to pedestrians and cycle movements, have access to high quality public transport facilities, create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians and consider the needs of people with disabilities by all modes of transport. Additionally, allow efficient delivery of goods and access by emergency vehicles and be designed to enable charging of plug-in and other ultra-low emission vehicles.

2.9 Paragraph 113 states:

"All developments that will generate significant amounts of 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."

Local Policy

Core Strategy

2.10 The Tandridge District Core Strategy was adopted in October 2008. It sets out key planning policies for the District. Policy TSP 12 relates to managing travel demand and states that:

"The Council will require new development to:

- *Make improvements, where appropriate, to the existing infrastructure network, including road and rail, facilities for bus users, pedestrians and cyclists and those with reduced mobility.*
- *Have regard to adopted highway design standards and vehicle and other parking standards."*

2.11 The proposal will provide a vehicular access from Town Hill in accordance with relevant design guidance. Parking is dealt with in Section 4, where it is shown that an appropriate number of parking spaces will be provided per dwelling.

Local Plan Part 2

2.12 Tandridge District Council adopted the 'Local Plan Part 2 - Detailed Policies' in July 2014. Of particular relevance is policy DP5, which relates to Highway Safety & Design:

"Development will be permitted subject to meeting the requirements of all other appropriate Development Plan policies and where the proposal:

1. Complies with the relevant Highway Authority's and any other highways design guidance;

2. Does not unnecessarily impede the free flow of traffic on the existing network or create hazards to that traffic and other road users;

3. Retains or enhances existing footpaths and cycleway links;

4. Provides safe and suitable access to the site which is achievable by all and promotes access by public transport, foot and bicycle to nearby residential, commercial, retail, educational, leisure and recreational areas where appropriate; and

5. Fully funds where appropriate, or contributes towards the costs of any measures required to cost effectively mitigate the significant impacts arising from the development.

In accordance with the Council's Local Validation Requirements and national guidance, all development proposals that generate significant amounts of movement should be supported by a Travel Plan and either a Transport Statement or Transport Assessment (proportionate to the scale of the proposed scheme and extent of the transport implications), both of which should be submitted alongside the planning application."

Emerging Local Plan

2.13 TDC released their emerging 'Local Plan 2033' in January 2019. Since this date, various on-going discussions have taken place between TDC and the Planning Inspectorate. The discussions focus on the need for highway improvements to accommodate likely traffic flow generated by development sites included in the TDC Local Plan. Discussions are on-going.

2.14 Chapter 31 'Sustainable Transport and Travel' of the Local Plan sets out transport related policies relevant to the proposed development.

2.15 Policy TLP50 'Sustainable Transport and Travel' states:

"The Council is committed to developing well-integrated communities with sustainable transport which connects people to jobs, services and community facilities, while recognising that Tandridge is a rural District. This will be achieved by taking the following steps:

- *Proposals will need to demonstrate how they will ensure that the principle objectives and overall vision of the Surrey Local Transport Plan are met, particularly in relation to active travel and air quality.*
- *Locating most new development in the Tier 1 and 2 settlements close to services, served by a range of sustainable travel options, such as public transport, walking and cycling, to minimise the need to travel and distance travelled.*
- *Ensuring development proposals provide appropriate infrastructure measures to mitigate the adverse effects of traffic and other environmental and safety impacts (direct or cumulative).*
- *Transport Assessments will be required for development proposals, where relevant, to fully assess the impacts of development and identify appropriate mitigation measures."*

Cycling and Walking

"The Council will support development that includes integrated comprehensive cycle and walking routes. Development proposals shall demonstrate how safe and accessible pedestrian access and cycle routes will be delivered and how they will connect to the wider travel network. Opportunities should be proactively taken to connect with and enhance Public Rights of Way whenever possible, encouraging journeys on foot and active travel.

Developments will provide cycle parking in accordance with the Parking Standards set out in the Surrey Local Transport Plan or updated guidance. Planning applications must include full details of the proposed cycle parking."

Electric Vehicles

"The provision of charging points for electric vehicles on all developments that result in additional units, both residential and business, will be required in line with the Surrey Local Transport Plan. Developers will be strongly encouraged to go further in order to help the District transition towards the Government's target year of 2040. The installation of electric vehicle charging points at public car parks, supermarket car parks, petrol filling stations and Clacket Lane Services will be supported where it is safe to do so and the visual impact is appropriately mitigated for."

Parking Standards

Tandridge Parking Standards SPD

2.16 Car parking standards for new developments are contained within the 'Tandridge Parking Standards' Supplementary Planning Document (SPD) dated September 2012. The residential required car parking standards are summarised in Table 2.1 below.

Size of Dwelling	Requirement
1 and 2 bedroom flats	1.5 spaces unallocated OR 2 spaces allocated
3 bed flats	2 spaces unallocated OR 2 spaces allocated plus 0.25 unallocated
1 bed houses	1.5 spaces unallocated OR 1 space allocated PLUS 1 space unallocated per 2 dwellings as a 'legible space'
2 bed houses	2 spaces allocated PLUS 1 space unallocated per 4 dwelling as a 'legible space' OR 1.5 spaces unallocated PLUS 1 space unallocated per 4 dwelling as a 'legible space'
3 bedroom houses	2 spaces allocated PLUS 1 space unallocated per 4 dwelling as a 'legible space'
4+ bedroom houses	3 spaces allocated PLUS 1 space unallocated per 4 dwelling as a 'legible space'

Table 2.1: Tandridge Residential Parking Standards

Summary

2.17 On the basis of the above review, it is evident that the location of a site in relation to sustainable modes of transport is a key consideration when assessing the acceptability of a proposal. Furthermore, appropriate provision should be made for parking and enabling access by more sustainable modes of transport.

2.18 The following sections of this report review the accessibility of the site and evaluates whether the development proposals will encourage sustainable modes of transport. In addition to this, a further assessment has been undertaken to establish the impact of the proposals on the local highway network.

3.0 Existing Conditions

Overview

3.1 This section provides information on the site and surrounding area, including a review of the local highway network and opportunities to access the site by more sustainable forms of travel.

The Site

3.2 The site is located within the built-up area of Lingfield, 500 metres east of the village centre. Town Hill is located to the south of the site, while Station Road is located to the east. The site benefits from close proximity to Lingfield railway station as well as the principal road network via the A22. The site is situated within the administrative authorities of Tandridge District Council (TDC - Local Planning Authority) and Surrey County Council (SCC - Local Highway Authority).

3.3 Footpath 381a runs through the centre of the site with an east-west alignment, connecting Station Road in the east with Church Road in the west.

3.4 The site in relation to strategic transport links is shown in Figure 3.1 below.

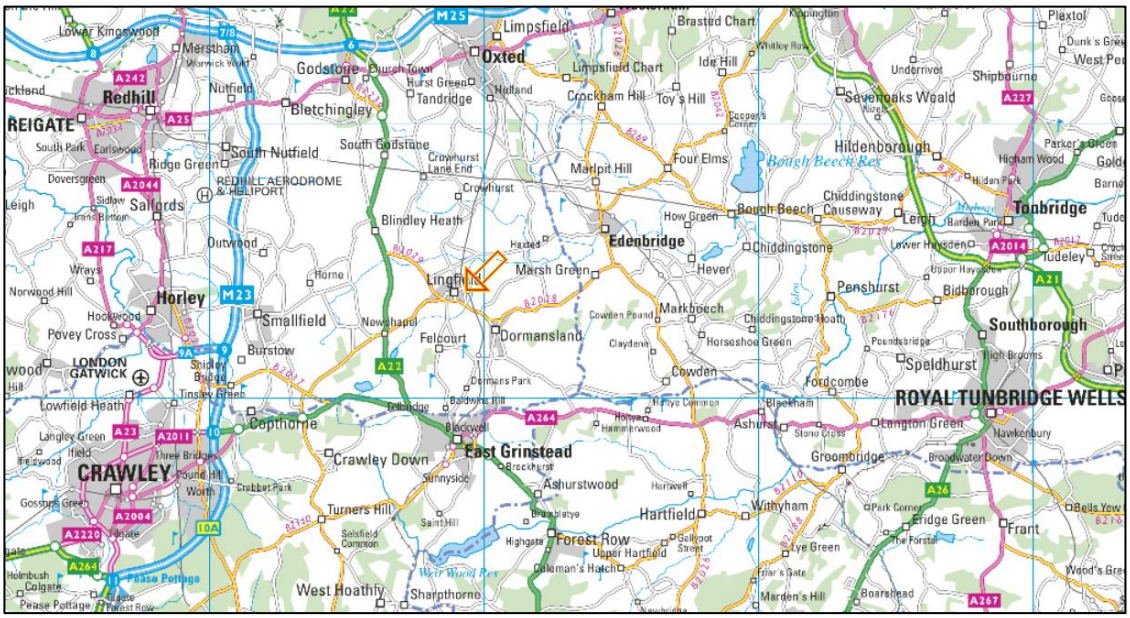


Figure 3.1 – Strategic Site Location

3.5 The area surrounding the site is predominantly residential. The site in relation to the local area is shown in Figure 3.2.

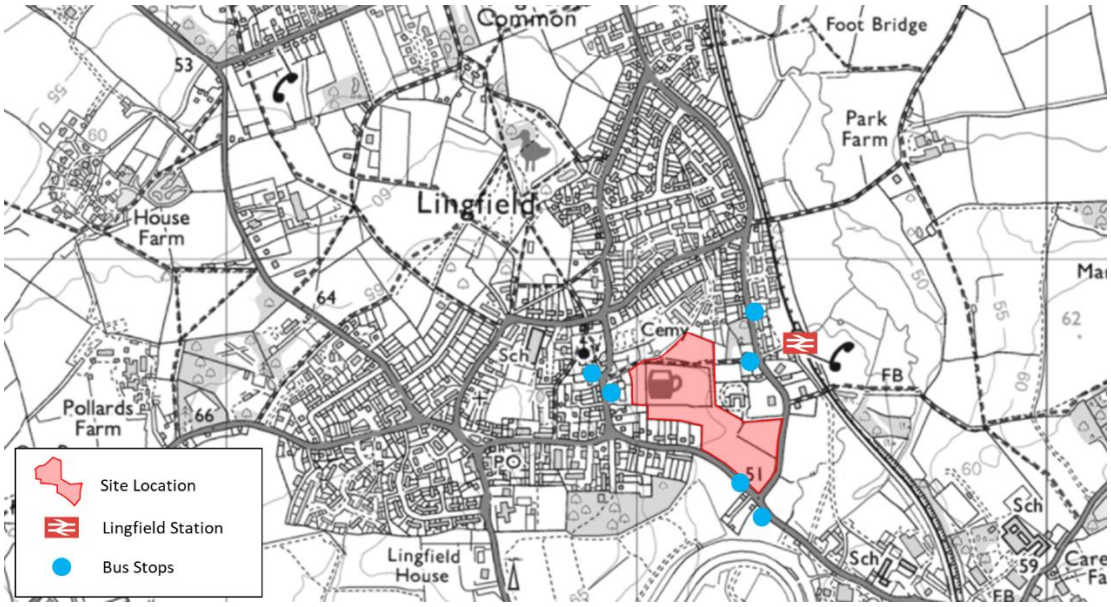


Figure 3.2 – Site Location Plan

Accessibility by Non-Car Modes

3.6 It is generally accepted that walking and cycling provide important alternatives to the private car and should be encouraged to form part of longer journeys via public transport. The Chartered Institution of Highways and Transportation released two documents, 'Planning for Walking' in April 2015 and 'Planning for Cycling' in October 2014. The documents provide an insight into the sustainable methods of transport, including:

- *"Across Britain about 80% of journeys shorter than 1 mile are made wholly on foot…but beyond that distance cars are the dominant modes" (Planning for Walking, 2015).*
- *"Majority of cycling trips are used for short distances, with 80% being less than five miles and with 40% being less than two miles" (Planning for Cycling, 2014)."*

3.7 The NPPF recognises that "*the transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel*". Furthermore, Manual for Streets identifies 'walkable neighbourhoods' as *"having a range of facilities within 10 minutes' (up to about 800m) walking distance of residential areas which residents may access comfortably on foot*".

3.8 Within Manual for Streets, it is noted that 800 metres is not considered the maximum walking distance for pedestrians, highlighting that walking can replace short car trips, particularly those under 2 kilometres. The National Travel Survey 2020 (NTS) also noted that "*81% of all trips under one mile are walks"*, making it the most frequent mode of travel for very short distances.

3.9 The following paragraphs outline the existing opportunities for travel to the site via the more sustainable forms of transport, including on foot, by cycle and public transport.

Accessibility on Foot

3.10 The site is accessible on foot via the footway along the northern edge of Town Hill. There will be footways provided on either side of the access road that continue throughout the site. The footway along the norther edge of Town Hill provides a continuous route between the site and central Lingfield.

3.11 Pedestrian access will also be possible through a new pedestrian access proposed to lead east out of the site onto Station Road. The footway along the eastern edge of Station Road allows safe access to the station on foot. A new informal pedestrian crossing point will be provided on Station Road to enable safe connections to the existing footway.

3.12 Footpath 381a provides pedestrian access through the site and enables easy access to both station road, directly adjacent Lingfield station, and Church Road on foot. Development proposals for the site include improvements to this footpath, which is detailed later in this report.

3.13 Footways adjacent to the site provide access to a number of everyday local facilities, bus stops and railway station, the details of which will be expanded upon later in this section. A walk isochrone is attached to this report as **Figure 3.3**, illustrating the extent of area accessible within two kilometres of the site.

Accessibility by Cycle

3.14 Government guidance in respect of cycling indicates that people are prepared to cycle up to 5km in order to access local facilities or ravel to work. Within 5km of the site, cyclists can reach Lingfield, Dormansland, Felbridge and East Grinstead.

3.15 While there are no dedicated provisions for cyclists on local roads, the low speed limits on the majority of roads makes the environment suitable for cycling. A cycle isochrone is attached to this report as **Figure 3.4**, illustrating the extent of area accessible within five kilometres of the site.

Accessibility by Bus

3.16 As illustrated above in Figure 3.2, there are multiple bus stops located within walking distance of the site, all positioned close to the site's various pedestrian and vehicular accesses. Table 3.1 below contains the details of the bus services running from these stops.

Stop	Service	Route	Approximate Frequency		
			Mon-Fri	Sat	Sun
Town Hill (B2028)	231	Lingfield – Dormansland – Edenbridge – Penshurst – Langton Green – Tunbridge Wells	1 morning stop, 2 evening stops	1 morning and 1 evening service	No service
	233	Lingfield – Dormansland – Edenbridge – Penshurst – Southborough – Tunbridge Wells	3 morning stops, 2 afternoon stops	1 morning stop, 1 evening stop	No service
Church Road	409	East Grinstead – Lingfield – Blindley Heath – Godstone – Caterham – Whyteleafe – Warlingham – Chelsham – Selsdon	Hourly	Every 2 hours	2 Services A Day
Station Road & Church Road	236	Oxted – Limspfield – Edenbridge – Dormansland – Lingfield – East Grinstead	Every 2 – 4 hours	No service	No service
All Three Stops	281	Crawley – Three Bridges – Copthorne – East Grinstead – Dormansland – Lingfield	Every 2 hours	Every 2 hours	No service
	315	Dormansland – Lingfield – Blindley Heath – Smallfield – Redhill – Earlswood East Surrey Hospital	3 services each way	No service	No service

Table 3.1 – Local Bus Services

3.19 Table 3.1 demonstrates that there are a variety of bus services available in the vicinity of the site. These services offer access to a large range of destinations, such as East Grinstead and Tunbridge Wells which are likely to attract commuters from the site.

Accessibility by Rail

3.20 Lingfield station is located within an 150m walking distance east of the site. The station can be accessed via the footway along Station Road as well as via the footpath through the centre of the site. Details of the services running from Lingfield station are contained in Table 3.2 below.

Destination	Route	Approximate Frequency		
		Weekday AM Peak	Weekday PM Peak	Saturday Daytime
East Grinstead	Lingfield – Dormans – East Grinstead	Every 30 minutes	Every 30 minutes	Every 30 minutes
London Victoria	Lingfield – Hurst Green – Oxted – Woldingham – Upper Warlingham – Riddlestown – Sanderstead – East Croydon – Clapham Junction – London Victoria	Every 30 minutes	Every 30 minutes	Every 30 minutes

Table 3.2 – Train Services from Lingfield Railway Station

3.21 Table 3.2 demonstrates it is possible to access regular train services to lager towns such as East Grinstead and Warlingham, along with a direct train to London Victoria. The journey to London Victoria takes approximately 50 minutes, the journey to East Grinstead via train takes 9 minutes.

Access to Local Facilities

3.22 There are a number of facilities accessible on foot and by cycle from the site. The majority of these are located to the west of the site in Lingfield village centre. Figure 3.3 below indicates the location of a range of local amenities, which includes convenience stores, health facilities, and education facilities.

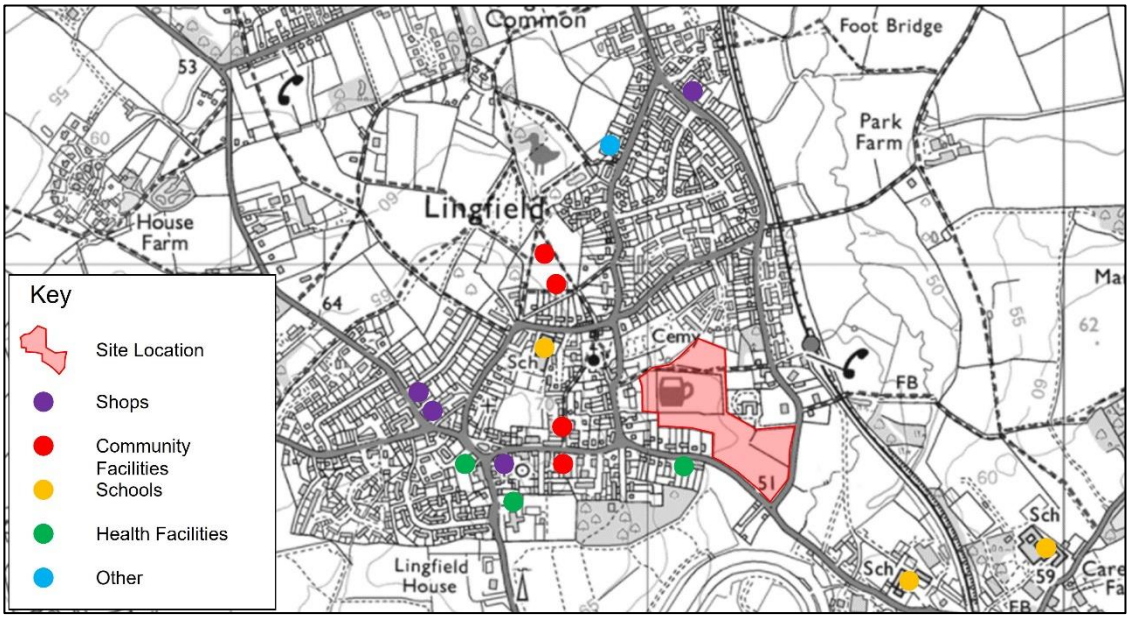


Figure 3.3 – Local Amenities Plan

3.23 The distance each of the above amenities is from the site, along with walk and cycle access time, is contained in Table 3.3 below.

Amenity	Distance	Walk Time	Cycle Time
Co-op Food	600m	8 minutes	3 minutes
Tesco Express	750m	10 minutes	3 minutes
Lingfield Post Office	900m	12 minutes	4 minutes
Station Road Stores	1,200m	14 minutes	3 minutes
Lingfield College Prep	500m	6 minutes	2 minutes
Lingfield Primary School	750m	10 minutes	4 minutes
Lingfield College	900m	11 minutes	3 minutes
Fairoaks Dental Surgery	140m	2 minutes	1 minute
Boots Pharmacy	650m	9 minutes	3 minutes
The Lingfield Practice	750m	10 minutes	3 minutes
Victoria Sports & Social Club	450m	6 minutes	2 minutes
Community Centre	450m	6 minutes	2 minutes
Playground/Skate Park	850m	11 minutes	3 minutes

Table 3.3 – Amenities within Walking Distance of the Site

3.24 Table 3.3 indicates that there are a variety of amenities within walking distance of the site, which enables residents to carry out daily tasks without relying on the private car. If residents wish to access further amenities, they can do so in East Grinstead, approximately 5km south of the site. As noted previously, East Grinstead can easily be accessed via a nine minute rail journey.

Highway Network

3.25 Vehicular access to the site will be achieved via Town Hill, to the south of the site. Town Hill is a two-way single carriageway road operating a 40mph speed limit in the vicinity of the proposed site access. The road connects the site with Lingfield village centre in the west and Dormansland in the south east. The speed limit of the road reduces to 30mph as it approaches central Lingfield. A footway is provided along the northern edge of Town Hill.

3.26 Station Road is located to the east of the site, forming a junction with Town Hill at the south eastern corner of the site. The road has a north-south alignment and operates a 40mph speed limit until approximately 180 metres north of the junction, where the speed limit reduces to 30mph. There is a footway provided along the eastern edge of Station Road.

3.27 In order to access the A22 from the site, residents will need to route west/south-west along Town Hill (B2028) which leads to connections with the A264 in Copthorne. The A22 can be accessed via the A264. The A22 enables access south to East Grinstead (continuing on to Eastbourne) and north to London and the M25.

Road Safety Review

3.28 Consideration has been given to crashmap.com to identify any incidents that have occurred on the road network surrounding the site over the last 5 years (up to 2021). Five accidents have occurred on the road network bordering the site. One of these accidents occurred at the junction between Town Hill and Church Road, three occurred at the southern end of Station Road, with the final incident occurring at the junction between Town Hill and Station Road. Four of these accidents were classified as 'slight' while one (located on Station Road), was classified as 'serious'.

3.29 The serious incident occurred on Station Road, and involved a car colliding with a tree at the edge of the carriageway. A pedestrian using the footway sustained 'serious' injuries during the incident. This occurred in darkness, under wet conditions. The crashmap report for this incident is attached at **Appendix B**.

3.30 The 'slight' incidents all involved collisions with vehicles, and did not involve any vulnerable road users (pedestrians, cyclists, motorcyclists).

3.31 The above accident record is not considered excessive over a five year period. While one accident involved a pedestrian and resulted in 'serious' injury, it is not considered that this occurred due to a fault in the highway network, and more likely due to driver error. As a result, the increase in traffic associated with the development is unlikely to cause any road safety issues.

Pre-Application Discussions

3.32 As noted previously, discussions have been undertaken with SCC as part of a pre-application request for advice. The response sought advice/comments in respect of the following:

- Provision of an appropriate vehicular access, including visibility splays and swept path analysis;
- Provision of an improved footway along Town Hill along the site frontage;
- The production of a Stage 1 Road Safety Audit;
- Junction modelling of various off-site junctions to ascertain any impact resulting from the proposal;

- The provision of appropriate levels of car and cycle parking, alongside electric charging facilities. SCC also recommended the provision of a car club vehicle on site;
- The provision of a Travel Plan to encourage sustainable travel;
- Improvements to public transport modes, including bus stop provision;
- Improvements to the existing public right of way which passes through the site; and
- Contributions set out in the draft Local Plan.

Summary of Existing Conditions

3.33 Based upon the above, it can be concluded that the site is located in a sustainable location and can be accessed on foot, by cycle and by a variety of modes of public transport. Furthermore, there are a variety of amenities within walking distance, reducing reliance on the private car for residents carrying out daily tasks.

3.34 The PIC data suggests there is no perceived accident problem in the last 5 years. No accidents have occurred within the immediate vicinity of the proposed site access. The data also demonstrates there are no specific areas on the local highway network where there is considered to be a problem in terms of highway safety. The site is therefore in compliance with relevant policy guidance.

4.0 Development Proposals

4.1 Development proposals for the site include the construction of 99 dwellings, comprising a mixture of affordable and open market housing on Land West of Station Road, Lingfield. The architects site layout plan is attached at **Appendix C.**

4.2 Table 4.1 below contains the schedule of accommodation for the site.

Housing Size	Tenure	Number
3 bed house	Private	21
4 bed house	Private	31
5 bed house	Private	7
1 bed apartment	Affordable	5
2 bed apartment	Affordable	21
3 bed house	Affordable	14
Total	**-**	**99**

Table 4.1 – Accommodation Schedule

Access Arrangements

4.3 Vehicular access to the development is proposed via a new junction at the southern extent of the site onto Town Hill (B2028). Pedestrians will also be able to achieve access through this junction. The drawing attached at **Appendix D** illustrates the proposed access arrangements.

4.4 The provision of a simple priority junction is considered appropriate when taking into account the quantum of the proposed development. The access road has been designed with a 5.5 metre wide carriageway with 6m junction radii that allows easy access for an HGV or refuse vehicle.

4.5 Dropped kerbs and tactile paving will be provided at the access to accommodate passing pedestrian movements, whilst 2 metre wide footways will be accommodated on both sides of the spine road, providing pedestrians with safe access into and out of the site.

4.6 Vehicle speeds along Town Hill have been recorded as part of an automatic traffic counter, the results of which are attached at **Appendix E**. Relevant 85th percentile speeds are shown below.

- Eastbound 85th percentile speed – 35mph; and
- Westbound 85th percentile speed – 36mph.

4.7 Visibility requirements have been assessed based on recorded speeds using the formula contained within Manual for Streets. The required visibility splays are as follows:

- Visibility splay to the east (for westbound speeds) – 55.0m
- Visibility splay to the west (for eastbound speeds) – 54.3m

4.8 The above visibility splays are shown at **Appendix D**.

4.9 Pedestrians will also be able to access the site via the public footpath running through the centre of the site. This allows access to the site from both Station Road and Church Road. The development proposals include improvements to this footpath, which is detailed later in this report.

Internal Layout

4.10 The internal layout will adhere to the following design principles, as set out in Surrey's Design Guide:

- 5.5m internal road width, reducing in width where provision is made for a cul-de-sac. The Surrey Design Guide requires 5.5m wide carriageways for schemes of 51-300 units;
- 2 metre internal footways;
- Car parking spaces will be a minimum of 2.4m by 4.8m; and,
- Maximum 25 metres from refuse collection vehicle to bin store.

4.11 The proposals include a total of nine residential dwellings located to the north of the footpath which navigates through the site on an east-west axis. A suitable crossing point will be designed into the scheme to ensure safe passage for both pedestrians and cyclists. It is envisaged that this will be addressed at the reserved matters stage since the current scheme seeks outline planning consent.

Parking Provision

4.12 Car parking will be provided on site to ensure that it is well located in relation to the housing it serves, and to ensure that on-street parking does not occur to any serious degree. This means that access to all parts of the site will be maintained at all times for use by larger vehicles (refuse trucks and delivery vehicles) and for the emergency services.

4.13 This approach recognises that the need to provide sufficient parking spaces to avoid parking that would adversely affect the operation of surrounding streets, but not providing parking to a level that would overly encourage car usage. This is a balanced approach that is consistent with local and national policies.

4.14 Car parking standards for new developments are contained within the 'Tandridge Parking Standards' Supplementary Planning Document (SPD) as set out in Section 2. These standards will be considered when designing the internal layout in detail to ensure sufficient parking spaces are accommodated on site. The architect's indicative layout demonstrates how it is possible to achieve suitable car parking for the quantum of development proposed, however the layout is shown for indicative purposes at this stage.

4.15 It is expected that cycle parking can be accommodated within the curtilage of each residential house. Cycle stores will be provided for the proposed flats, and will accommodate the required cycle parking in accordance with the 'Tandridge Parking Standards' SPD.

Servicing and Refuse Collection

4.16 Servicing and refuse collection will occur within the site, with the layout designed to allow for a large refuse vehicle to manoeuvre without impacting on passing vehicle movements. Guidance has been sought from MfS in this respect, where it is recommended that a carriageway width of 5.5 metres is provided for roads that require an HGV to pass a car.

4.17 The proposed site access has been designed to allow for a refuse vehicle to pass a car, whilst the provision of turning heads within the site will allow for a refuse vehicle to turn safely on-site and return to Town Hill in a forward gear.

Mitigation Measures

4.18 The development proposal will include appropriate mitigation to address the increase in trips generated by the site. This is set out in more detail within the following paragraphs.

Footway Improvements

4.19 Footway and pedestrian crossing improvements include a formal crossing point on Station Road to the east of the site which would allow residents to safely access the footway on the eastern side of Station Road, subsequently improving access to the railway station.

4.20 As per the request by SCC as part of the aforementioned pre-application, a further informal crossing point could be provided on Town Hill creating a direct link with the existing westbound bus stop.

4.21 The above pedestrian crossings are indicatively illustrated on the drawing attached as **Appendix F.**

Public Footpath Improvements

4.22 Improvements to the public footpath through the site will also be accommodated, which will involve the upgrading of the surface to improve the accessibility of the route. As per the request from SCC within the pre-application response, this will include the following:

- Resurfacing of the footpath to include a top dressing of tarmac;
- Widening of the footpath to 1.5 metres where the footpath falls within the site ownership;
- The inclusion of 'STOP' and 'Pedestrian' signage on the proposed crossing point over the footpath to ensure drivers are aware of the presence of passing pedestrians.
- The provision of a stop line and a road hump on either side of the footpath to slow drivers; and
- Consideration of any improvements to lighting along the route.

4.23 It is envisaged that the above will be brought forward as part of a detailed scheme of works and secured via a planning condition.

Speed Limit Reduction

4.24 It is proposed to reduce the speed limit on both Station Road and the B2028 adjoining the site to 30mph. This would improve the safety of surrounding roads, and better encourage non-car travel. It is envisaged that this will be secured via any Section 278 works.

Travel Plan

4.25 A Travel Plan has been developed for the site to encourage sustainable travel. The Travel Plan incentives that are likely to be made available to the first residents of each dwelling are:

- Resident travel packs; and
- Cycle parking provision.

4.26 The Travel Plan is provided as a separate report as part of the planning submission.

Local Plan Contributions

4.27 The aforementioned draft Local Plan allocation also requires contributions towards various highway related measures. Relevant measures include:

- Mobility impaired persons bridge at Lingfield Station;
- Opportunities to improve Lingfield station car park; and
- Car Park Provision at Station Road/Town Hill.

4.28 It is envisaged that an appropriate contribution will be agreed towards the above measures through on-going discussions with SCC.

5.0 Impact of the Development Proposals

Overview

5.1 This section sets out the trip generation potential of the proposed development.. For the purpose of this assessment, the weekday morning peak hour associated with residential developments is 08:00-09:00, while the evening peak hour is 17:00-18:00. The assessment also identifies trip rates across a daily profile.

Existing Trip Generation

5.2 As the site is currently undeveloped, the existing site will be assumed to generated zero trips for the purpose of the net impact assessment.

Proposed Trip Generation

5.3 The trip generation potential of the 99 residential dwellings has been based on trip rates derived from the TRICS database using the category '03 Residential – A Houses Privately Owned, with the following criteria:

- Areas within England, excluding Greater London;
- Sites with between 6-600 dwellings;
- Surveys that occurred between 01/01/13 and 16/06/21;
- Locations classed as 'Suburban' and 'Edge of Town'.

5.4 While flats and affordable dwellings may be included as part of the scheme, this TRICS category will give a robust assessment of potential trip generation.

5.5 The predicted trip generation of the site, based on the current proposals for 99 dwellings is contained in Table 5.1. The full TRICS output is included at **Appendix G**.

Mode of Travel	Weekday AM Peak (08:00-09:00)		Weekday PM Peak (17:00-18:00)		Weekday Daily Movements	
	Arr	Dep	Arr	Dep	Arr	Dep
Total Person Trip Rates	0.215	0.741	0.543	0.259	3.965	4.133
Total Person Trips	21	73	54	26	393	409
Vehicular Trip Rates	0.125	0.346	0.309	0.153	2.220	2.310
Vehicular Trips	12	34	31	15	220	229

Table 5.1 – Residential Trip Rates and Associated Trips – 99 Units

5.6 Table 5.1 indicates that the proposed development could generate 94 total person trips in the weekday morning peak hour, 46 of which would be vehicular. In the evening peak hour, the development could generate 80 total person trips, again 46 of which would be vehicular. Over an average weekday the development could generate 802 two-way total person trips, of which 449 would be vehicular.

5.7 To support the above trip attraction, typical models of the existing resident population have been established with reference to Census data for 'Method of Travel to Work' for the resident population (2011 output) for the Lingfield and Crowhurst Ward.

5.8 The census modal split of travel is summarised in Table 5.2 below. The total person trips identified in Table 5.1 for both weekday morning and evening peak hours have been assigned based on the Census modal split percentages and are also summarised in Table 5.2 below.

Mode of Travel	Census Modal Split	Weekday AM Peak		Weekday PM Peak		Weekday Daily Movements	
		Arr	Dep	Arr	Dep	Arr	Dep
Car Driver	66%	14	48	36	17	259	270
Train	19%	4	14	10	5	75	78
On Foot	8%	2	6	4	2	31	33
Passenger in Car	3%	1	2	2	1	12	12
Bus	1%	0	1	1	0	4	4
Motorcycle	1%	0	1	1	0	4	4
Bicycle	1%	0	1	1	0	4	4
Other	1%	0	1	1	0	4	4
Total	100%	21	73	54	26	393	409

Table 5.2 – Census Modal Split (Lingfield and Crowhurst Ward)

5.9 The Lingfield and Crowhurst Ward experiences a higher proportion of car driver trips than the average trip rate taken from the TRICS surveys sites, with 62 two-way car trips in the morning peak hour and 53 two-way movements in the evening peak hour.

5.10 However, the above does also highlight how a large percentage of residents in the surrounding area commute via rail services. As shown in section 3 of this report, Lingfield station offers frequent access to both London and East Grinstead. This mode of travel will be prioritised within the accompanying Travel Plan to further encourage sustainable travel to and from the site.

Wider Traffic Implications

Traffic Distribution and Assignment

5.11 Development related traffic has been distributed on the network with reference to relevant Census data (2011 output) for 'Location of Usual Residence and Place of Work by Method of Travel to Work'. Car driver is selected as the method of travel to work, with the location of usual residence restricted to the 'Tandridge 010 super output area- middle layer' within the Tandridge district, as shown in Figure 5.1 below. This is the most detailed level of census data available for assessing travel patterns.

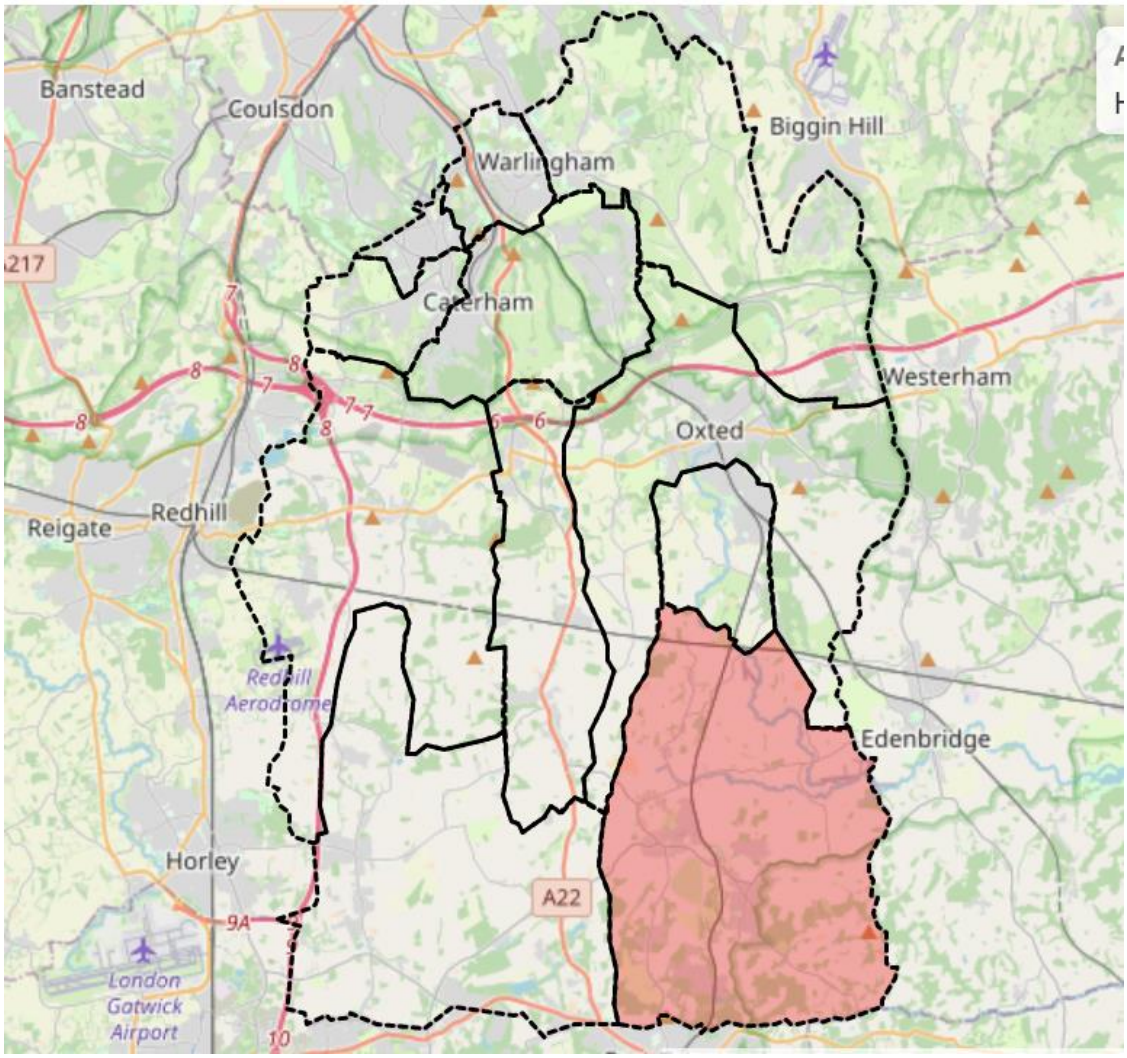


Figure 5.1: 'Tandridge 010' Output Area

5.12 The above census output enables an understanding of all output areas that residents within Tandridge 010 travel to for their place of work. A summary of all key destinations (those that attract less than 10 vehicle movements have been excluded for the purposes of this assessment) is shown within **Appendix H.**

5.13 The census data suggests that 30% of residents within the Tandridge 010 output area travel to work to output areas located within Tandridge district (including those that start and end their journey within Tandridge 010), this includes areas such as Oxted and Caterham. Other key workplace destinations include Croydon, Crawley, Reigate, and East Grinstead.

5.14 16% of the working population within the output area do not leave the output area to travel to work and therefore stay within Lingfield or Dormansland but still use a car or van to travel. Considering the area covered by the output area it is likely that most people residing in Tandridge 010 and working in the same output area are travelling into Lingfield or Dormansland centres.

5.15 Analysis of the census data provides an understanding on the likely routes the local population currently take in order to access their place of work. This has been verified via Google Maps journey times during peak periods. The key routes to/from the site are demonstrated below in Figure 5.2, and summarised in more detail within **Appendix H**.

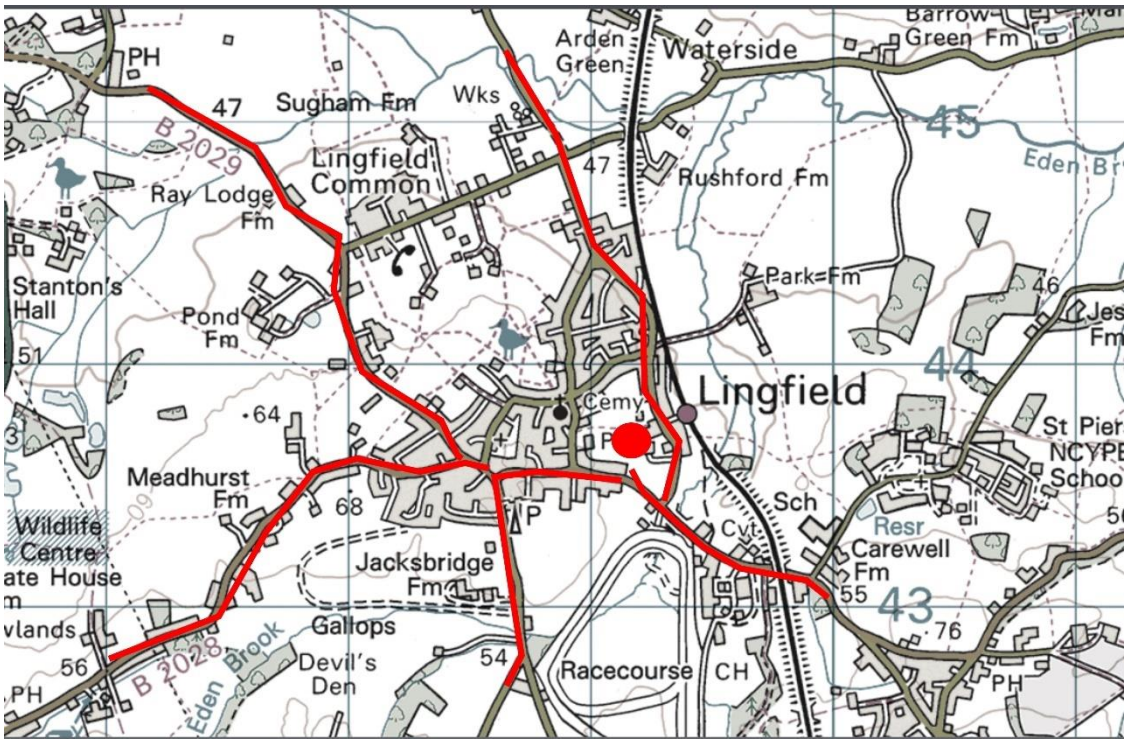


Figure 5.2: Key Routes to/from the Site

5.16 Table 5.3 below summarises the routes out of the network taken by the workforce population of the output area, as well as the percentage split of vehicular trips based on the aforementioned census data. This accounts for those destinations that attract more than 10 vehicles from the residential population of the aforementioned output area. Considering the level of development traffic associated with the development site, this is considered an appropriate methodology.

Direction of Travel	Percentage Split of Vehicular Trips
Godstone Road (NW)	20.2%
Station Road (NE)	7.4%
Racecourse Road (E)	28.3%
Felcourt Road (S)	16.9%
B2028 (W)	27.2%
TOTAL	**100%**

Table 5.3: Census Data

5.17 The above analysis indicates that 35.7% of the potential working population at the site would likely travel east from the site access, routing either along Racecourse Road or Station Road. The remaining 64.3% would route west, before routing either into Lingfield or to destinations further afield.

5.18 Table 5.4 below summarises the distribution of vehicular trips associated with the proposal, based on the census data split established in Table 5.2.

Direction of Travel	Two-Way Vehicular Trips	
	Weekday AM Peak	Weekday PM Peak
Godstone Road (NW)	13	11
Station Road (NE)	5	4
Racecourse Road (E)	18	15
Felcourt Road (S)	10	9
B2028 (W)	17	14
TOTAL	**62**	**53**

Table 5.4 - Development Traffic Distribution

5.19 Table 5.4 demonstrates that development trips will travel in a variety of directions, with no more than 18 vehicles in either peak hour (both arrivals and departures) navigating via one specific direction. The data highlights that 19-23 vehicles will route east from the site access and navigate either along Station Road or Racecourse Road. Some 40 (AM) and 34 (PM) two-way vehicle movements will route west tp/from the site.

5.20 The 34-40 two-way vehicle movements will all route via the B2028/East Grinstead Road junction, albeit this will reduce to 26-30 vehicle movements an hour via the B2028/Godstone Road roundabout. This relates to around one additional vehicle movement every two minutes, which is not considered a material increase.

Summary

5.21 The above assessment demonstrates that vehicular trips associated with the development will be distributed relatively evenly in all directions from the site. No individual junction will experience notable increases in traffic flow, and therefore the proposal is unlikely to result in any material impact on any individual junction on the surrounding road network.

5.22 Consideration in the following paragraphs is given to the resultant impact of the scheme in respect of

Highway Impact Assessment

Assessment Years

5.23 The impact of the proposed development is to be tested five years following the submission of the planning application, i.e. 2027. This reflects the request made by SCC within the pre-application response.

5.24 Traffic growth figures have been obtained from TEMPro version 7.2c for the Tandridge 010 middle layer super output area (MSOA) and adjusted with reference to the National Transport Model (NTM) RTF 2018 Scenario 1 – Reference dataset. The TEMPro growth factors for the 2022 to 2027 weekday morning and evening peak periods are provided within Table 5.5 below.

Time Period	Weekday Morning Growth Factor	Weekday Evening Growth Factor
2022 – 2027	1.0285	1.0301

Table 5.5: TEMPro Growth Factors

5.25 The potential impact of the development on the site access junction with Town Hill has been modelled for 2022 and five years following the submission of the planning application (2027) using the Junctions 9 (PICADY) software. This software expresses the relationship between traffic flow and the capacity of a junction as a ratio, referred to as the Ratio to Flow Capacity (RFC). Based upon these results, it also predicts the anticipated queue lengths.

5.26 The scenarios has been modelled for the weekday morning peak hour of 08:00 – 09:00, and weekday evening peak hour of 17:00 – 18:00. Table 5.6 below summarises the junction operation during the weekday AM peak 2022 and 2027 scenarios, with Table 5.7 providing the weekday PM peak 2022 and 2027 scenarios. The detailed model outputs are included for reference at **Appendix I**.

Arm	2022 AM Peak with Development		2027 AM Peak with Development	
	RFC	Queue (veh)	RFC	Queue
Site Access	0.14	0	0.14	0
B2028 Town Hill	0.01	0	0.01	0

Table 5.6: Weekday AM Development Results Summary

Arm	2022 AM Peak with Development		2027 AM Peak with Development	
	RFC	Queue (veh)	RFC	Queue
Site Access	0.05	0	0.05	0
B2028 Town Hill	0.03	0	0.04	0

Table 5.6: Weekday PM Development Results Summary

5.27 Tables 5.6 and 5.7 demonstrate that the Site Access junction will operate well within its theoretical capacity following the inclusion of development traffic, in both the 2022 and 2027 scenarios. There is negligible queueing in all scenarios.

5.28 The proposed 99 units would result in up to one vehicle movements every minute (two-way) during the peak hours. On this basis, the traffic flows identified above can be accommodated onto Town Hill and the surrounding network without material impact on the operational capacity of the road. Modelling of the proposed site access junction indicates that the free-flow of traffic will not be affected.

Additional Junction Modelling

5.29 Additional junction modelling of the surrounding road network will be undertaken at the request of SCC as part of their pre-application feedback. This will include:

- Junction of Station Road/Town Hill;
- Junction of High Street/East Grinstead Road/Plaistow Street; and
- Junction of Godstone Road/Newchapel Road/Plaistow Street.

5.30 It is envisaged that the above will be issued as part of an addendum TA.

6.0 Summary and Conclusion

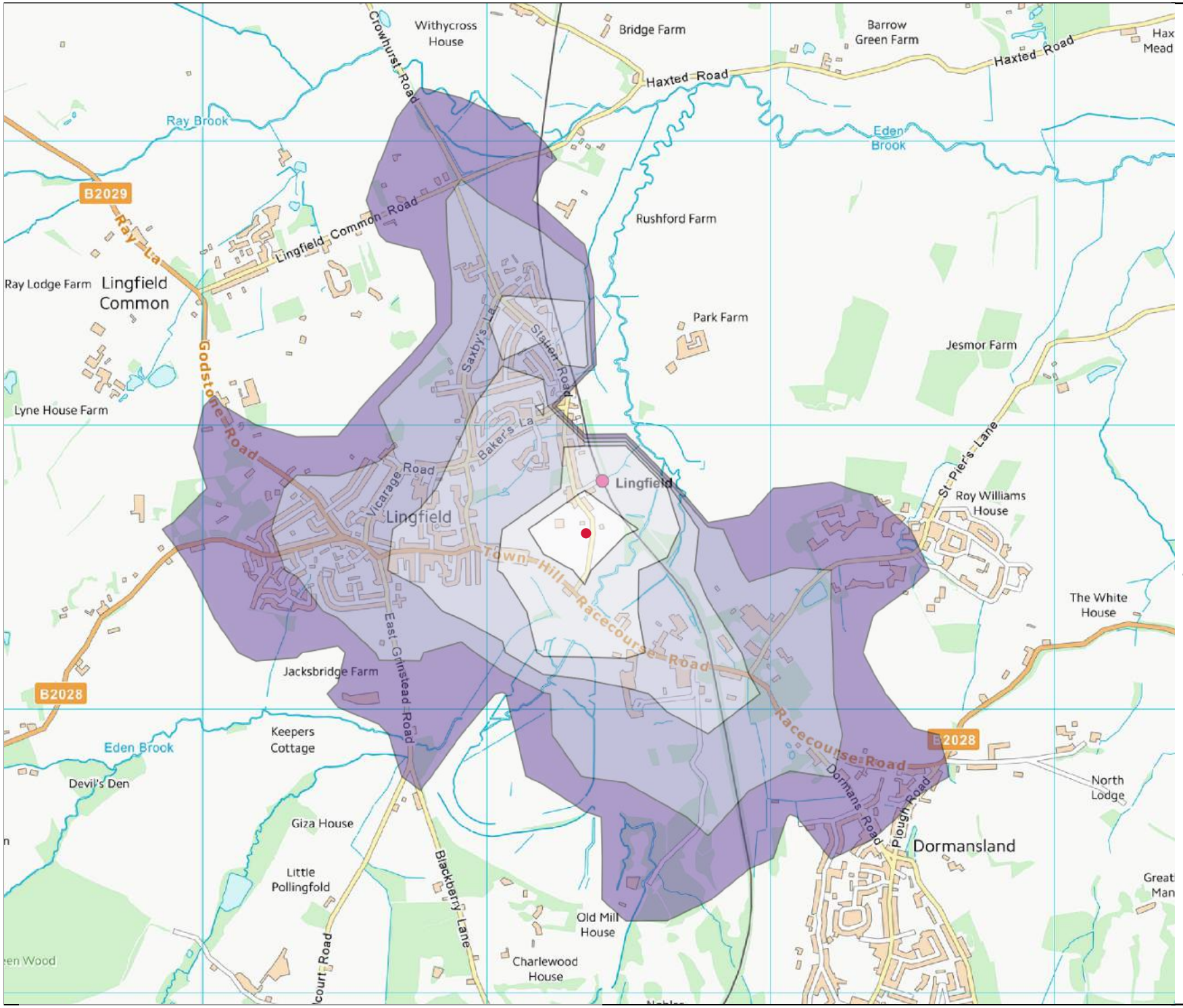
6.1 Motion has been instructed by Woolbro Group and Morris Investment to prepare this Transport Assessment to accompany an outline planning application relating to a proposed residential development on Land West of Station Road, Lingfield, Surrey. The proposal seeks outline planning permission for the construction of 99 dwellings on the site.

6.2 In summary, this Transport Assessment has identified the following:

- Bus services are accessible within close proximity of the site;
- Regular train services to London and East Grinstead are available from Lingfield station;
- The site benefits from on foot access to Lingfield village centre. Subsequently, there are various amenities within close walk and cycle distance of the site, meaning residents will have less reliance on the private car;
- Vehicular access to the site will be achieved from Town Hill;
- Pedestrian access from the site will be possible from Town Hill, Church Road and two separate accesses from Station Road;
- Cycle parking will be provided on site;
- Appropriate levels of car parking will be provided on site;
- Census data demonstrates that 19% of residents in the surrounding area travel to work by train, demonstrating future residents will not be reliant on the private car; and,
- The proposals would not result in a material increase in traffic generation on the surrounding road network in the weekday peak hours an over a typical weekday. Junction capacity testing demonstrates that the site access junction will operate within capacity in the future year scenarios.

Conclusion

6.3 In view of the above, the proposed development is considered to be acceptable in transport terms and meets with local and national policy criteria. The assessment work undertaken has shown that there would not be any demonstrable harm arising from the proposed scheme and it will not cause any severe impacts. Therefore, there ae no traffic and transport related reasons why the development should not be granted planning consent.



north

Key:

- 5 minutes
- 10 minutes
- 15 minutes
- 20 minutes
- 25 minutes

Assumed Walk Speed: 4.8 km/h

Project

Proposed residential development, Lingfield

Title

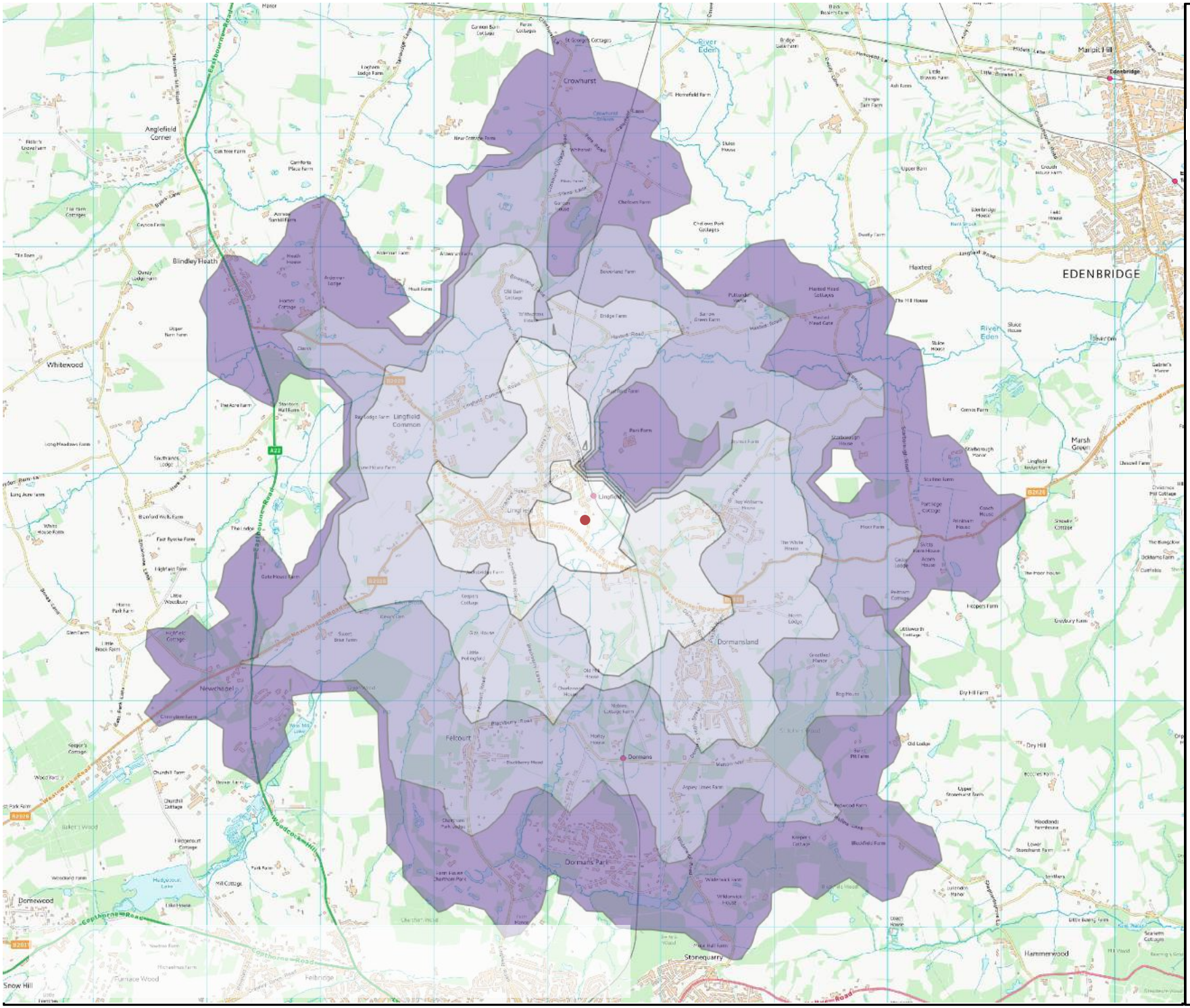
Accessibility by Foot

motion

9 Greyfriars Road, Reading, RG1 1NU
Tel: +44 (0) 118 206 2930

scale	drawn by	date
stated	MS	03/03/22

drawing number	rev
1912026	-



north

- 5 minutes
- 10 minutes
- 15 minutes
- 20 minutes
- 25 minutes

Project

Proposed residential development, Lingfield

Title

Accessibility by Cycle

motion

9 Greyfriars Road, Reading, RG1 1NU
Tel: +44 (0) 118 206 2930

scale	drawn by	date
stated	MS	03/03/22

drawing number	rev
1912026	-

Appendix A

Surrey County Council Pre-Application Response

Highway Authority Pre-Planning Advice

Land at Old Cottage, Station Road, Lingfield

11 March 2022

SURREY COUNTY COUNCIL

Introduction

The following advice is offered to Motion following a request for pre-planning application advice and further to a Teams meeting conducted on 1 February 2022. A site visit was conducted on 4 February 2022.

The advice is offered without prejudice to any future planning application submitted and any advice or recommendations provided by the Local Planning Authority.

Proposed development

You sought advice on a development proposal comprising 130 dwellings on Station Road Limpsfield.

Policy and Standards

- National Planning Policy Framework (NPPF 2021)
- Tandridge District Saved Policies DP5, CSP12
- Surrey Design Guide Technical Appendix
- Tandridge Parking Standards DPD
- Vehicular, Cycle and Electric Vehicle Parking Guidance for new Development September 2021
- Travel Plans – A Good Practice Guide for Developers 2018
- Manual for Streets 1 & 2
- Surrey Local Transport Plan

Sustainability

The site is accessible by a range of transport modes with a number of bus stops serving different routes within walking distance of the site however, some services are infrequent and most either have very restricted services or no services at all on Saturdays and Sundays. Lingfield railway station is located within 150 m walking distance to the east of the site and provides twice hourly services to East Grinstead and London Victoria. There is a signed advisory cycle route along Town Hill/Racecourse Road/St Piers Lane and Station Road. The village of Lingfield which has a variety of amenities is located within walking/cycling distance from the site. Public Footpath 381A runs through the proposed site connecting Church Road with Station Road and exits opposite Lingfield railway station.

Site Access

The proposed access to the site would be taken from a new priority junction onto the Town Hill (B2028), a B classified road with a posted speed limit of 40 mph within the vicinity of the site changing to 30 mph a short distance to the north of the access. A speed survey has been undertaken to inform appropriate visibility splays using an automatic traffic counter at the location of the proposed access and the recorded 85th percentile speeds used to calculate the required splays in accordance with Manual for Streets. A drawing has been provided demonstrating that visibility splays can be provided from a 2.4 m ‘x’ distance within the extent of the public highway. Visibility splays will need to be kept clear of any obstruction in both directions above 0.6 m in height.

It is agreed that the proposed access should be a minimum width of 5.5 m and provided with appropriate kerb radii and 2m segregated footways either side of the access with pram crossing points and tactile paving. The developer would be expected to widen the existing footway along the entire frontage of the site to a minimum width of 2 m or 3m if it is to be a shared cycle/pedestrian route and install tactile paving across the junction of Station Road. It was noted during the site visit that there appears to be a ditch running along at least some of the perimeter of the site and if this exists within the location of the proposed access then a culvert may be required.

The speed survey data will need to be included within the Transport Assessment submitted within any future planning application.

An assessment of personal injury accidents should be provided within the vicinity of the access for the last 5 year period. Accident data can be obtained from data@sussexsaferroads.gov.uk

A swept path analysis should be provided to demonstrate that all service vehicles that will need to access the site such as removal/refuse/delivery vehicles can turn and exit the site onto Town Hill in a forward gear. Consideration should be given to access for fire engines either using the main access to the development or a secondary access.

Safety Audit

A Stage 1 Safety Audit will need to accompany any future planning application. It would be preferred for this to be undertaken by Surrey County Council (SCC) Safety Audit Team. If it is decided that the Safety Audit will be carried out by a private company, the CVs of the auditors will need to be provided prior to the Audit being commissioned to be checked by the Highway Authority that they comply with the team competencies required by GG119.

Trip Generation

SCC supports the use of the TRICS database to demonstrate the likely trip rates associated with the development. I would also suggest that a multi modal TRICS assessment be included given the accessible location of the site in addition to the vehicular trip rates.

Traffic Surveys/Junction Assessment

In terms of modelling of local junctions, I would agree that the site access and the junction of Station Road/Town Hill should be modelled and also the roundabout junctions of High Street/East Grinstead Road/Plaistow Street and Godstone Road/Newchapel Road/Plaistow Street to demonstrate they will operate satisfactorily as a result of the development and any changes to them. Further afield, I think modelling should be considered when we have more information on the likely distribution of traffic from the site. Tandridge District Council Planning Department should be contacted to obtain a list of any committed development, this can then be reviewed and agreed with SCC.

In terms of growth rates, this should be application year + 5 years.

The SCC Transport Studies team will carry out an audit on the traffic modelling used to support a future planning application.

Car Parking

The proposed parking arrangements for the site should be in accordance with the design principles of Manual for Streets (MfS). With regard to the level of parking provision, Tandridge Parking Standards SPD (2012) should be referred to.

Cycle Parking

SCC's Vehicular and Cycle Parking Guidance (2021) require that 1 & 2 bedroom units be provided with a minimum of 1 secure and covered cycle parking space each, and 3 or more bedroom units be provided with a minimum of 2 secure and covered cycle parking spaces each provided in easily accessible locations. Vertical cycle stands mounted on walls are unacceptable. A charging point for electric bikes/mobility scooters should also be provided for each dwelling.

Electric Vehicle and Car Clubs

The development is expected to include charging provision for electric vehicle use as standard. SCC's Vehicular and Cycle Parking Guidance (2021) states that the County Council will seek the provision of electric vehicle (EV) charging points within all new developments. As per this advice, 1 fast charge socket should be provided per dwelling and according to current guidance the charge point specification for dwellings is 7 kw Mode 3 with Type 2 Connector with power requirement of 230 v AC 32 Amp Single Phase dedicated supply.

In addition, the use of Car Club vehicles across Surrey is supported by SCC via the preferred provider Enterprise Car Club. Sites of this size and use are potentially very good locations for car club vehicles to be installed offering opportunities for significant reductions in car ownership levels – research suggests a single car club vehicle could replace up to 12 privately owned vehicles.

Travel Plan

For a development of more than 120 dwellings a residential Travel Plan is required and an audit fee of £6,150 would need to be paid. The Travel Plan should include measures to promote sustainable transport options and it is agreed that public transport vouchers and cycle purchase vouchers should be offered to the first time occupiers of each dwelling with the value of the vouchers to be agreed with SCC.

I have attached a link below to 'Travel Plans – A Good Practice Guide for Developers' is included below for guidance.

Travel plans: new development - Surrey County Council (surreycc.gov.uk)

Site Layout

It is not clear at this stage if the internal road layout will remain private or be adopted. If it is to be adopted as maintainable highway, must conform to Surrey Design. This would require an Agreement under Section 38 of the Highways Act 1980. This should be made clear at the planning stage.

Mitigation

Public Transport Improvements

The site benefits from being within walking distance of a number of bus stops serving various services and routes which can be utilised by future residents. High quality bus stop infrastructure must be provided for the site. In general SCC would look to see the following improvements to bus stops:

- New accessible kerbing of 140mm height, for a length of 9m and associated footway improvements.
- Sufficient footway width/space available for a new bus shelter and Real Time Passenger Information (RTPI) to be provided if required.
- Bus stop clearway markings on the carriageway, as well as a clearway plate. The markings would normally be up to 23 m in length.

Additionally, and in respect of the particular stops, the Developer should fund a review of the current bus stop locations, to determine whether they are currently in the best locations, in terms of existing requirements, as well as those applying after the new development is constructed.

In addition to reviewing the existing bus stop provision and bus service frequencies and looking at how there can be improved, an overall review of bus service provision in this area should be carried out with any necessary improvements being supported by the Developer. This could include looking at existing service gaps (e.g. no services operating on Sundays) and the Developer should engage with SCC in investigating the possibility of demand responsive transport operating in this area which could be of benefit to the residents/staff and visitors to/from the development.

Notwithstanding the above, the following improvements should be provided for these bus stops:

B2028 Town Hill outside Glyn Cottage

The footway is quite narrow here and the existing bus stop post is located in a grass verge. We would like to see an area of hardstanding provided at the back of the footway to enable a better pedestrian waiting area as well as a new shelter / RTPI if required.

B2028 Town Hill opposite Gatton

The footway is quite narrow here and the existing bus stop post is located in a verge which can become overgrown. We would like to see an area of hardstanding provided at the back of the footway to enable a better pedestrian waiting area as well as a new shelter / RTPI if required.

Church Road outside The Star PH

The existing concrete bus stop post and flag should be replaced, and the bench seat replaced with a bus shelter with seating and RTPI.

Church Road opposite The Star PH

Although the northbound bus stop is indicated as being across from the bus stop outside The Star, there is no actual bus stop pole / flag in evidence on Google Streetview. The developer should fund the investigations to confirm the best location for the northbound bus stop.

Station Road opposite Lingfield Rail Station

The developer should fund investigations to confirm the best location for this northbound bus stop, as the current location does have drawbacks (e.g. located directly across from the

junction with the Station Access Road, no hardstanding for passengers to board/alight from the bus).

Station Road outside no.135

The developer should fund investigations to confirm the best location for this southbound bus stop, as the current location does have drawbacks (e.g. due to existing dropped kerbs / driveways, only short lengths of kerbside available for fully accessible bus stop).

Rights of Way

Public Footpath 381a which runs through the site connecting Church Road to Station Road is a town path, and is a really well used route from the village through to the station, especially at school time. It already has a sealed surface maintained by Highways but a recorded highway width of only 4' all of which is tarmac.

SCC would like the Developer to undertake to resurface the whole footpath but it will probably only require a top dressing of fresh tarmac. This can be undertaken on their section only as they don't have the power to work on land they don't own. The land to the west is unregistered, to the east it is owned by the Old Cottage, so work on these sections of path may require a S106 Agreement which would leave SCC to carry out the work.

There is more available width than the 4' quoted especially along the central section of the path than there is at either end which is constrained by fences so surfacing to a minimum of 1.5m would provide a better facility for users.

Ideally our Countryside Access Team would like the Developer to look at the possibility of acquiring additional width of either end of the path to provide greater highway width and to then dedicate to 3m and provide a cycle track order to allow cycling between the village and the station and would require further discussion with SCC.

With regard to the vehicular crossing over the Footpath, there are concerns because of the potential for conflict with walkers and the reduction in amenity value for them and it really compromises how the path will be used. Currently people can walk freely without any concerns, but if there is a road access even with low traffic movements, people will have to be more cautious and in particular parents with young children on scooters and bikes.

The vehicular crossing over the Footpath must have 'STOP' and 'Pedestrian' signs, a stop line and ideally a hump on either side of the footpath to slow down and stop traffic before crossing the path. Depending on the size of the road and likely traffic an at grade zebra crossing might be appropriate. It is expected that vegetation removal would be required to improve sightlines for both pedestrians on the path and drivers on the road. It is noted that there are already lamp columns along the path but it should be investigated whether any improvements are required to lighting or whether any additional lamp columns are required.

Highway Improvements

An assessment should be carried out of the existing footways and opportunities for pedestrians to cross the road including along the route to Lingfield and included in the Transport Assessment.

It is noted that there is currently no crossing point to connect the bus stops on Town Hill and so provision for this should be considered. Paragraph 3.5 of the Scoping Note suggests that

a formal pedestrian crossing point from the site to the footway on the east side of Station Road could be provided. It is assumed that the crossing point would be where the proposed pedestrian entrance emerges from the field onto Station Road. This is close to a bend to the north and therefore may need to be moved further south to provide adequate visibility. There is currently no crossing point where the Public Footpath exits to get pedestrians over to the station. Potential crossing facilities should be considered and the type and location of them will need to be agreed with SCC.

Paragraph 4.9 of the Scoping Note refers to the reduction in speed limits on Station Road and Racecourse Road to 30 mph. SCC is aware there has been a desire from residents to have a lower 20 mph speed limit in Lingfield however this would only be possible with traffic calming measures (raised road tables) and require additional lighting in Town Hill. The measured speeds would need to comply with SCC's policy for a signed only speed limit reduction to 20 mph.

Draft Local Plan Contributions

I have carried out a consultation in respect of the required draft Local Plan contributions for the following:

- Mobility impaired persons bridge at Lingfield Station
- Opportunities to improve Lingfield Station car park
- Car park provision at Station Road/Town Hill

The improvements to Lingfield Station car park assuming these are on railway land, would need to be discussed with the rail operator/Network Rail.

With regard to the mobility impaired persons bridge at Lingfield Station, I am looking into this with our Passenger Transport Team who will need to contact Network Rail to ascertain whether there is a proposal for this and whether a contribution would be required and I will come back to you on this matter.

Delivery of Development Highway Works

The proposed highway works can be delivered by a Mini S278 Agreement under the provisions of the Highway Act 1980 if the cost of works is under £50,000 and the works are on highway land. If any private land needs to be dedicated as highway then a full S278 Agreement will be needed. Works constructed under a S278 Agreement will require the payment of a commuted sum for the future maintenance and replacement cost of additional highway features.

Please see more details on SCC's website that shows the process and fees involved. Once you have planning permission, please send me the required forms to get the process started.

Alterations to existing roads under S278 Highways Act 1980 - Surrey County Council (surreycc.gov.uk)

Additional Advice

A Construction Transport Management Plan (CTMP) will need to be provided prior to the commencement of any approved works. This will be secured through a suitably worded planning condition.

In addition to the above advice, I also refer you to guidance which is contained on our website, and the following link will direct you to a lot of the basic information needed to assist in the highway and transport consideration of many proposals.

Transport Development Planning - Surrey County Council (surreycc.gov.uk)

There are also references on that web site to other documentation and advice which may assist you in formulating a viable proposal.

Summary

Given the information currently available to me regarding the site, I consider that there are several opportunities to mitigate the impact of the development in terms of its impact on the local highway network and to improve the sustainable transport credentials of the site.

Notwithstanding this advice, as you will be aware, the Highway Authority is a statutory consultee in the planning process, and the final decision on any planning application will be made by the Local Planning Authority.

If you would like to discuss this scheme further or feel there is something I have not covered, please do not hesitate to contact me.

Yours sincerely,

Angela Goddard

Transport Development Planning Officer – South Area Team

Planning & Development

Surrey County Council

E: angela.goddard@surreycc.gov.uk
T: 07968 832451
Web: www.surreycc.gov.uk/tdp

Appendix B

Personal Injury Accident Data

crashmap.co.uk

Validated Data

Crash Date:	Monday, March 12, 2018	**Time of Crash:**	10:22:00 AM	**Crash Reference:**	**2018450275374**

Highest Injury Severity:	Serious	**Road Number:**	U0	**Number of Casualties:**	1
Highway Authority:	Surrey			**Number of Vehicles:**	1
Local Authority:	Tandridge District			**OS Grid Reference:**	539349 143469
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	40				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				

For more information about the data please visit: *www.crashmap.co.uk/home/Faq*
To subscribe to unlimited reports using CrashMap Pro visit *www.crashmap.co.uk/Home/Premium_Services*

powered by agilysis

Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	15	Female	16 - 20	Vehicle proceeding normally along the carriageway, on a right hand bend	Back	Other	None	Tree

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Pedestrian	Female	66 - 75	On footway or verge	Unknown or other

Appendix C

Architect's Site Layout Plan

N

0 m 10 m 20 m 30 m 40 m 50 m

Scale

Omega Architects

The Front Barn, 124 Manor Road North,
Thames Ditton Surrey, KT7 0BH
T: 01372 470 313 W: www.omega-architects.co.uk

Client:
WOOLBRO MORRIS

Project:
LAND AT THE OLD COTTAGE,
STATION ROAD, LINGFIELD

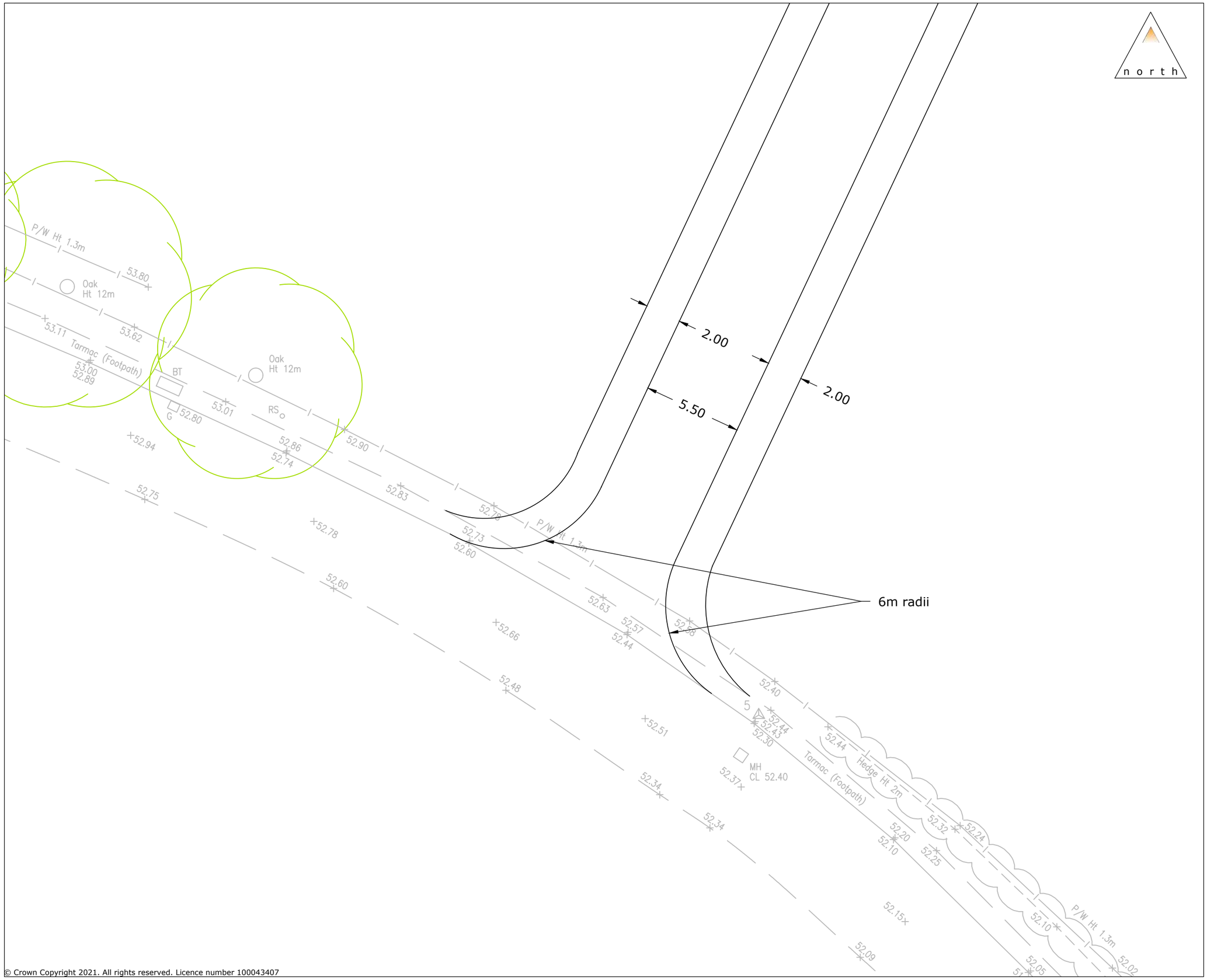
Drawing Title:
SKETCH SCHEME 5

Scale:	Revision	Drawn	Check	Date
1:500 @ A0	S	RN	TJ	04.02.22
	SB	JL	TJ	09.02.22
	SC/D	JL	TJ	11.02.22

Project No:	Class	Dwg No:	Status	Rev
2661	C	1005	SK	5D

Appendix D

Proposed Site Access Junction Arrangement



C:\Users\andrew.rock\OneDrive - Motion\Motion\Working\1912026 - Land at Old Cottage, Station Road\Drawings\1912026 - 02A.dwg

Rev:	Description:	Date:	Rev By:	Chk'd:

motion

9 Greyfriars, Reading, Berkshire, RG1 1NU

T: 0118 206 2930

Guildford - London - Reading

www.motion.co.uk

Project:
Land at Old Cottage, Station Road

Title:
Indicative Access Arangement

Client:
Woolbro homes Ltd

Drawing Status:

Scale: 1:200 (@ A3) Date:10/12/2021

Drawn: Checked: Approved:

Drawing: 1912026 - 02

Revision: A

Rev:	Description:	Date:	Rev By:	Chk'd:

motion

9 Greyfriars, Reading, Berkshire, RG1 1NU
T: 0118 206 2930
Guildford - London - Reading
www.motion.co.uk

Project:
Land at Old Cottage, Station Road

Title:
Visibility Splay

Client:
Woolbro homes Ltd

Drawing Status:

Scale: 1:500 (@ A3) Date: 10/12/2021

Drawn: Checked: Approved:

Drawing: 1912026 - 01 Revision: A

Appendix E

Traffic Survey

VEHICLE SPEED AND VOLUME SURVEY – B2028 TOWN HILL, LINGFIELD RH7 6AG.

DATASETS:

Site: [Lingfield] Town Hill, on speed sign
Direction: 8 - East bound A>B, West bound B>A. Lane: 0
Survey Duration: 00:00 04 December 2021 => 20:00 08 December 2021
File: Lingfield08Dec2021.EC0 (Plus)
Algorithm: Advanced.

PROFILE:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 80 mph.
Units: Non-Metric (ft, mi, f/s, mph, lb, ton).

DEFINITIONS / ABBREVIATIONS*

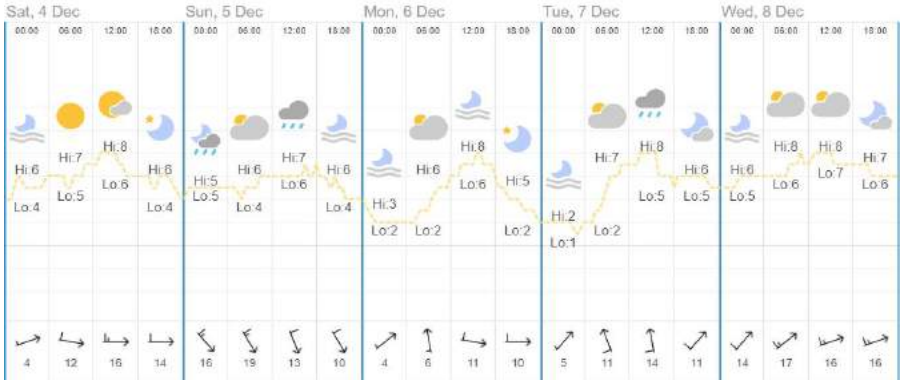
Time - Time period commencing. (1-hour summaries given).
Total - Total number of vehicles counted in time period.
RunTot - Running or cumulative total of vehicles over survey period.
Vbin
30 (eg) - Number of vehicles between 30 and 35 mph (30.0 – 34.9).
35
Mean - Mean speed.
Vmin - Minimum speed.
Vmax - Maximum speed.
n> PSL 30 - Number of vehicles exceeding Posted Speed Limit (30 mph).
%> PSL 30 - Percentage of vehicles exceeding Posted Speed Limit (30 mph).
Vpp 85 - 85th percentile speed.

*Not all definitions may be used in a single report.

VEHICLE CLASSES

1	Bicycle	
2	Motor Cycle	
3	Car / Van	(cars and vans - without trailer).
4	Car / Van (T)	(cars and vans towing trailer).
5	R2 / Bus	(HGV / bus 2-axle rigid).
6	R3 / Bus	(HGV / bus 3-axle rigid).
7	R4	(HGV 4-axle rigid).
8	A3	(HGV 3-axle articulated).
9	A4	(HGV 4-axle articulated).
10	A5	(HGV 5-axle articulated).
11	A6	(HGV 6-axle articulated).
12	A6 [2]	(HGV 6-axle articulated comprising two trailers).
13	A7 [2]	(HGV 7 + axle articulated comprising two trailers).

Seven Day Weather Report



Sat 04	December	2021	Eastbound																				
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0700	35	35	0	0	1	4	2	8	13	5	1	1	0	0	0	0	0	0	14.6	30	49.2	20	57.1	36.7
0800	207	242	0	0	0	0	1	45	96	62	3	0	0	0	0	0	0	0	23.4	32.9	44.8	161	77.8	37.1
0900	270	512	0	0	0	0	9	66	139	50	5	1	0	0	0	0	0	0	20.6	32.1	45.9	195	72.2	35.6
1000	277	789	0	0	0	0	10	64	152	46	5	0	0	0	0	0	0	0	23.9	32	42.5	203	73.3	35.3
1100	354	1143	0	0	0	1	7	90	193	57	6	0	0	0	0	0	0	0	19.2	32	44.4	256	72.3	35.3
1200	312	1455	0	0	2	1	14	68	158	60	8	1	0	0	0	0	0	0	13.5	32.2	45.5	227	72.8	35.6
1300	234	1689	0	0	0	1	4	56	135	35	2	1	0	0	0	0	0	0	19.7	31.8	46.6	173	73.9	34.9
1400	175	1864	0	0	0	1	3	59	81	25	5	1	0	0	0	0	0	0	18.6	31.9	45	112	64	35.8
1500	125	1989	0	0	0	0	6	40	54	20	4	1	0	0	0	0	0	0	21.7	31.8	46.1	79	63.2	36
1600	134	2123	0	0	0	0	4	41	58	26	5	0	0	0	0	0	0	0	22.5	31.9	42.4	89	66.4	36.2
1700	148	2271	0	0	2	1	15	44	64	18	4	0	0	0	0	0	0	0	12	30.4	43.8	86	58.1	34.9
1800	161	2432	0	0	0	0	8	47	76	22	7	1	0	0	0	0	0	0	22.3	31.5	46.1	106	65.8	35.3
1900	168	2600	0	0	0	0	4	46	85	27	6	0	0	0	0	0	0	0	20.2	32.1	44.7	118	70.2	35.3
2000	89	2689	0	0	0	1	1	14	49	17	6	1	0	0	0	0	0	0	18.4	33.4	49.6	73	82	37.4
2100	91	2780	0	0	0	0	2	13	33	30	11	2	0	0	0	0	0	0	22.5	35	45.9	76	83.5	39.6
2200	64	2844	0	0	0	0	0	8	20	30	6	0	0	0	0	0	0	0	26.5	34.9	43.4	56	87.5	38.7
2300	65	2909	0	0	0	0	2	11	33	11	6	1	1	0	0	0	0	0	20.3	33.6	53.6	52	80	38
07-19	2432	2909	0	0	5	9	83	628	1219	426	55	7	0	0	0	0	0	0	12	31.9	49.2	1707	70.2	35.6
06-22	2780	2909	0	0	5	10	90	701	1386	500	78	10	0	0	0	0	0	0	12	32.1	49.6	1974	71	35.8
06-00	2909	2909	0	0	5	10	92	720	1439	541	90	11	1	0	0	0	0	0	12	32.2	53.6	2082	71.6	36
00-00	2909	2909	0	0	5	10	92	720	1439	541	90	11	1	0	0	0	0	0	12	32.2	53.6	2082	71.6	36

Sun 05	December	2021	Eastbound																				
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	39	2948	0	0	0	0	1	10	17	8	1	1	0	1	0	0	0	0	21.3	33.2	57	28	71.8	36.9
0100	16	2964	0	0	0	0	0	2	5	7	2	0	0	0	0	0	0	0	27.6	35.2	43.1	14	87.5	38.7
0200	7	2971	0	0	0	1	0	2	3	1	0	0	0	0	0	0	0	0	18.9	30.4	35.5	4	57.1	-
0300	4	2975	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	34.3	37.2	40.7	4	100	-
0400	5	2980	0	0	0	0	0	1	1	2	0	0	1	0	0	0	0	0	26.3	36.9	53	4	80	-
0500	7	2987	0	0	0	0	0	1	4	1	1	0	0	0	0	0	0	0	28.9	34.7	42.8	6	85.7	-
0600	29	3016	0	0	0	0	1	6	13	7	1	1	0	0	0	0	0	0	23.6	33.4	47.4	22	75.9	38.9
0700	63	3079	0	0	0	0	0	15	30	16	2	0	0	0	0	0	0	0	26.3	32.8	40.4	48	76.2	37.1
0800	89	3168	0	0	0	0	0	16	47	17	7	2	0	0	0	0	0	0	25.5	33.5	48.2	73	82	38.9
0900	121	3289	0	0	0	0	3	21	57	37	2	1	0	0	0	0	0	0	21.4	33.2	46.4	97	80.2	36.7
1000	221	3510	0	0	0	2	6	52	120	38	3	0	0	0	0	0	0	0	19.2	32	41.6	161	72.9	35.6
1100	237	3747	0	0	0	4	4	32	123	67	7	0	0	0	0	0	0	0	18.3	33.1	44.8	197	83.1	36.9
1200	266	4013	0	0	2	4	4	68	142	39	7	0	0	0	0	0	0	0	14.5	31.7	42.4	188	70.7	35.3
1300	283	4296	0	0	0	1	7	66	143	58	7	1	0	0	0	0	0	0	20	32.3	49.3	209	73.9	36
1400	234	4530	0	0	0	0	0	51	126	53	4	0	0	0	0	0	0	0	25	32.6	41.9	183	78.2	36.2
1500	240	4770	0	0	0	0	4	59	127	42	8	0	0	0	0	0	0	0	22.9	32.2	43.3	177	73.8	35.6
1600	193	4963	0	0	0	0	2	49	106	33	3	0	0	0	0	0	0	0	23.6	32.1	40.9	142	73.6	36
1700	154	5117	0	0	0	0	1	42	76	30	5	0	0	0	0	0	0	0	24.2	32.5	42.3	111	72.1	36.9
1800	126	5243	0	0	0	0	1	22	59	36	7	1	0	0	0	0	0	0	23.6	33.5	45.7	103	81.7	37.1
1900	131	5374	0	0	0	0	3	23	48	45	11	1	0	0	0	0	0	0	23.8	33.9	45.9	105	80.2	38.3
2000	72	5446	0	0	0	0	1	9	27	30	4	0	1	0	0	0	0	0	21.4	34.8	50.2	62	86.1	38.3
2100	68	5514	0	0	0	0	3	10	22	29	1	2	1	0	0	0	0	0	23.4	34	53.5	55	80.9	37.4
2200	38	5552	0	0	0	0	0	5	14	17	2	0	0	0	0	0	0	0	25.3	34.5	40.9	33	86.8	37.8
2300	12	5564	0	0	0	0	0	1	3	5	1	2	0	0	0	0	0	0	25.3	37	49.2	11	91.7	42.5
07-19	2227	5564	0	0	2	11	32	493	1156	466	62	5	0	0	0	0	0	0	14.5	32.5	49.3	1689	75.8	36.2
06-22	2527	5564	0	0	2	11	40	541	1266	577	79	9	2	0	0	0	0	0	14.5	32.7	53.5	1933	76.5	36.7
06-00	2577	5564	0	0	2	11	40	547	1283	599	82	11	2	0	0	0	0	0	14.5	32.7	53.5	1977	76.7	36.7
00-00	2655	5564	0	0	2	12	41	563	1315	619	87	12	3	1	0	0	0	0	14.5	32.8	57	2037	76.7	36.7

Mon 06	December	2021	Eastbound																				
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	15	5579	0	0	0	0	0	2	4	2	4	1	2	0	0	0	0	0	25.6	39	50.7	13	86.7	48.3
0100	3	5582	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	32.8	36.2	40.5	3	100	-
0200	3	5585	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	35.4	40.6	47.2	3	100	-
0300	2	5587	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	36.7	37.1	37.4	2	100	-
0400	3	5590	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	24.1	29.1	38.2	1	33.3	-
0500	24	5614	0	0	0	0	1	2	12	7	2	0	0	0	0	0	0	0	22.7	33.6	42.9	21	87.5	37.1
0600	99	5713	0	0	0	0	2	21	45	29	1	1	0	0	0	0	0	0	20.4	33.2	46.9	76	76.8	36.9
0700	278	5991	0	0	4	1	8	87	126	45	7	0	0	0	0	0	0	0	10.7	31.5	44.7	178	64	35.8
0800	345	6336	71	133	7	7	11	52	46	14	4	0	0	0	0	0	0	0	1.7	15.3	42.9	64	18.6	31.1
0900	296	6632	0	0	0	0	9	66	175	43	3	0	0	0	0	0	0	0	22.8	31.8	44.2	221	74.7	34.9
1000	269	6901	0	0	0	2	9	77	121	49	10	1	0	0	0	0	0	0	18	31.9	46.4	181	67.3	36
1100	246	7147	0	0	0	0	2	65	133	40	4	2	0	0	0	0	0	0	23	32.1	45.2	179	72.8	35.3
1200	266	7413	0	0	0	0	3	59	160	42	2	0	0	0	0	0	0	0	24.2	32.1	43.4	204	76.7	35.1
1300	259	7672	0	0	0	0	6	80	124	43	6	0	0	0	0	0	0	0	21.1	31.7	42.6	173	66.8	35.3
1400	283	7955	0	0	0	0	9	79	149	40	6	0	0	0	0	0	0	0	21.2	31.6	41.6	195	68.9	35.1
1500	445	8400	0	0	0	2	1	183	212	44	3	0	0	0	0	0	0	0	19.4	30.9	44.5	259	58.2	34
1600	393	8793	0	0	2	1	34	153	187	14	2	0	0	0	0	0	0	0	11.5	29.8	43.5	203	51.7	32.9
1700	379	9172	0	0	0	0	11	123	208	32	4	1	0	0	0	0	0	0	21.6	31.2	48.3	245	64.6	34
1800	272	9444	0	0	0	0	4	57	155	52	4	0	0	0	0	0	0	0	23.3	32.2	41.3	211	77.6	35.8
1900	171	9615	0	0	0	0	3	38	96	29	4	1	0	0	0	0	0	0	23.7	32.3	46.5	130	76	35.8
2000	122	9737	0	0	0	0	2	20	59	33	6	2	0	0	0	0	0	0	22	33.3	46.7	100	82	37.6
2100	98	9835	0	0	0	0	1	25	33	35	3	1	0	0	0	0	0	0	20.2	33.4	46.2	72	73.5	37.6
2200	54	9889	0	0	0	1	0	9	29	13	2	0	0	0	0	0	0	0	17.6	32.9	40.2	44	81.5	37.4
2300	24	9913	0	0	0	0	1	5	8	4	6	0	0	0	0	0	0	0	22.7	34.7	44.9	18	75	40.3
07-19	3731	9913	71	133	13	13	107	1081	1796	458	55	4	0	0	0	0	0	0	1.7	29.9	48.3	2313	62	34.7
06-22	4221	9913	71	133	13	13	115	1185	2029	584	69	9	0	0	0	0	0	0	1.7	30.3	48.3	2691	63.8	34.9
06-00	4299	9913	71	133	13	14	116	1199	2066	601	77	9	0	0	0	0	0	0	1.7	30.4	48.3	2753	64	35.1
00-00	4349	9913	71	133	13	14	119	1203	2083	616	84	11	2	0	0	0	0	0	1.7	30.4	50.7	2796	64.3	35.1

Tue 07	December	2021	Eastbound																					
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	6	9919	0	0	0	0	0	0	1	4	1	0	0	0	0	0	0	0	32.9	37.8	43.2	6	100	-
0100	5	9924	0	0	0	0	0	0	2	1	1	0	1	0	0	0	0	0	30.2	38.7	51.8	5	100	-
0200	3	9927	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	28.1	35.1	45	2	66.7	-
0300	3	9930	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	35.6	39.5	42.7	3	100	-
0400	3	9933	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	31.4	32.7	33.4	3	100	-
0500	17	9950	0	0	0	0	0	2	8	5	2	0	0	0	0	0	0	0	29.5	34.7	42	15	88.2	38.3
0600	87	10037	0	0	0	0	6	15	51	15	0	0	0	0	0	0	0	0	21.6	31.8	39	66	75.9	35.1
0700	285	10322	0	1	0	5	13	117	124	23	2	0	0	0	0	0	0	0	8.8	30.1	43	149	52.3	33.1
0800	346	10668	60	78	13	16	7	87	76	8	0	1	0	0	0	0	0	0	3.4	19.2	45.6	85	24.6	32
0900	281	10949	0	0	0	0	12	82	143	43	1	0	0	0	0	0	0	0	21.5	31.5	40.9	187	66.5	35.3
1000	269	11218	0	0	1	0	5	44	157	51	11	0	0	0	0	0	0	0	14.8	32.7	45	219	81.4	36
1100	240	11458	0	0	0	0	11	64	133	31	1	0	0	0	0	0	0	0	20.1	31.3	40.1	165	68.8	34.4
1200	264	11722	0	0	0	0	6	59	141	49	9	0	0	0	0	0	0	0	22.4	32.4	44.1	199	75.4	36
1300	282	12004	0	0	0	0	10	111	122	37	2	0	0	0	0	0	0	0	21.4	31	41.7	161	57.1	34.4
1400	289	12293	0	0	1	0	8	107	137	34	2	0	0	0	0	0	0	0	11.7	31.1	43.8	173	59.9	34.4
1500	457	12750	0	0	0	2	53	241	147	13	1	0	0	0	0	0	0	0	18.5	29	43	161	35.2	31.8
1600	362	13112	7	36	1	16	95	169	34	4	0	0	0	0	0	0	0	0	4.2	23.8	37.2	38	10.5	29.3
1700	397	13509	0	0	0	1	38	193	140	22	3	0	0	0	0	0	0	0	18.8	29.6	42.8	165	41.6	32.9
1800	273	13782	0	0	0	2	14	88	127	36	3	1	2	0	0	0	0	0	18.3	31.3	52.1	169	61.9	34.9
1900	157	13939	0	0	0	0	5	42	79	24	7	0	0	0	0	0	0	0	20.7	32.3	44.1	110	70.1	36.2
2000	103	14042	0	0	0	1	1	17	53	24	5	2	0	0	0	0	0	0	19.8	33.7	49.5	84	81.6	37.4
2100	85	14127	0	0	0	0	1	16	47	17	3	1	0	0	0	0	0	0	25	33.1	45.1	68	80	36.7
2200	47	14174	0	0	1	0	0	7	23	11	2	2	1	0	0	0	0	0	12.2	34.3	51.3	39	83	38.7
2300	18	14192	0	0	0	0	0	2	9	5	2	0	0	0	0	0	0	0	27.9	34.9	44.2	16	88.9	37.8
07-19	3745	14192	67	115	16	42	272	1362	1481	351	35	2	2	0	0	0	0	0	3.4	29	52.1	1871	50	34
06-22	4177	14192	67	115	16	43	285	1452	1711	431	50	5	2	0	0	0	0	0	3.4	29.4	52.1	2199	52.6	34.2
06-00	4242	14192	67	115	17	43	285	1461	1743	447	54	7	3	0	0	0	0	0	3.4	29.5	52.1	2254	53.1	34.2
00-00	4279	14192	67	115	17	43	285	1464	1758	458	61	7	4	0	0	0	0	0	3.4	29.6	52.1	2288	53.5	34.4

Wed 08	December	2021	Eastbound																					
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	6	14198	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	31.9	35.3	39	6	100	-
0100	9	14207	0	0	0	0	0	1	3	3	2	0	0	0	0	0	0	0	28.2	36.1	42.5	8	88.9	-
0200	3	14210	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	33	39.5	47.9	3	100	-
0300	6	14216	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	31.6	34.8	37.8	6	100	-
0400	8	14224	0	0	0	0	0	1	2	3	1	0	1	0	0	0	0	0	26	36.6	51.3	7	87.5	-
0500	25	14249	0	0	0	0	1	0	8	7	7	1	1	0	0	0	0	0	24.3	37.6	53	24	96	42.1
0600	101	14350	0	0	0	0	5	29	41	19	6	1	0	0	0	0	0	0	21.5	32.3	45.1	67	66.3	37.6
0700	303	14653	0	1	5	7	7	71	156	45	10	1	0	0	0	0	0	0	9.3	31.4	46	212	70	35.3
0800	367	15020	64	120	12	3	14	63	75	16	0	0	0	0	0	0	0	0	3.5	17.2	37.4	91	24.8	32.2
0900	358	15378	0	0	0	3	27	115	168	41	4	0	0	0	0	0	0	0	17.3	30.8	44.2	213	59.5	34.4
1000	295	15673	0	0	0	0	15	81	146	47	4	2	0	0	0	0	0	0	21.5	31.7	48.9	199	67.5	35.1
1100	394	16067	0	0	0	2	20	119	186	64	2	1	0	0	0	0	0	0	19.2	31.3	47.9	253	64.2	35.1
1200	318	16385	0	1	0	0	11	81	164	56	5	0	0	0	0	0	0	0	5.4	31.9	43	225	70.8	35.3
1300	295	16680	0	0	0	1	3	63	159	60	9	0	0	0	0	0	0	0	19.9	32.7	44.8	228	77.3	36
1400	307	16987	0	0	0	2	6	66	174	52	7	0	0	0	0	0	0	0	16	32.2	42.8	233	75.9	35.6
1500	456	17443	0	0	0	0	13	178	214	48	3	0	0	0	0	0	0	0	23.1	30.8	41.5	265	58.1	34
1600	410	17853	0	0	2	6	28	161	177	34	2	0	0	0	0	0	0	0	12.1	29.9	41.9	213	52	33.8
1700	399	18252	0	0	0	1	1	80	233	69	11	3	1	0	0	0	0	0	19.5	32.7	53.8	317	79.4	35.8
1800	274	18526	0	0	0	0	4	60	161	39	10	0	0	0	0	0	0	0	20.5	32.2	42.4	210	76.6	35.1
1900	167	18693	0	0	0	0	4	27	94	31	8	3	0	0	0	0	0	0	20.8	33	47.8	136	81.4	36.5
07-19	4176	18693	64	122	19	25	149	1138	2013	571	67	7	1	0	0	0	0	0	3.5	30.2	53.8	2659	63.7	34.9
06-22	4444	18693	64	122	19	25	158	1194	2148	621	81	11	1	0	0	0	0	0	3.5	30.4	53.8	2862	64.4	35.1
06-00	4444	18693	64	122	19	25	158	1194	2148	621	81	11	1	0	0	0	0	0	3.5	30.4	53.8	2862	64.4	35.1
00-00	4501	18693	64	122	19	25	159	1196	2167	642	91	13	3	0	0	0	0	0	3.5	30.5	53.8	2916	64.8	35.1

Summary			Eastbound																					
	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
	18693	18693	202	370	56	104	696	5146	8762	2876	413	54	13	1	0	0	0	0	1.7	30.8	57	12119	64.8	35.3

Sat 04	December	2021	Westbound																				
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	0	-
0700	21	21	0	0	0	0	1	10	7	3	0	0	0	0	0	0	0	0	23.1	30.5	38.4	10	47.6	34.9
0800	201	222	0	0	0	0	5	28	91	69	7	1	0	0	0	0	0	0	23.9	33.5	46.5	168	83.6	37.4
0900	273	495	0	0	0	0	0	49	145	73	6	0	0	0	0	0	0	0	26.6	33.1	43	224	82.1	36.2
1000	336	831	0	0	0	0	3	67	178	81	7	0	0	0	0	0	0	0	20.5	32.7	43	266	79.2	36
1100	326	1157	0	0	2	3	5	52	165	88	11	0	0	0	0	0	0	0	13.3	32.9	43.5	264	81	36.5
1200	325	1482	0	0	12	6	4	63	172	62	6	0	0	0	0	0	0	0	11.4	31.6	41.7	240	73.8	35.6
1300	224	1706	0	0	2	3	1	53	114	43	8	0	0	0	0	0	0	0	13.5	32.3	42	165	73.7	36.2
1400	217	1923	0	0	0	1	1	60	105	46	3	1	0	0	0	0	0	0	19.1	32.3	47.8	155	71.4	36
1500	152	2075	0	0	0	0	4	35	77	28	8	0	0	0	0	0	0	0	21.3	32.7	43.6	113	74.3	36.7
1600	150	2225	0	0	0	1	1	41	78	29	0	0	0	0	0	0	0	0	17.8	31.9	38.9	107	71.3	35.6
1700	154	2379	0	0	0	0	5	55	76	16	0	2	0	0	0	0	0	0	23	31.2	46.2	94	61	34.2
1800	127	2506	0	0	0	0	4	32	64	24	2	1	0	0	0	0	0	0	22.2	32.3	45.1	91	71.7	36.2
1900	87	2593	0	0	0	0	3	18	41	24	1	0	0	0	0	0	0	0	24.2	32.6	41.8	66	75.9	37.1
2000	87	2680	0	0	0	0	5	15	34	27	5	1	0	0	0	0	0	0	20.8	33.2	47	67	77	37.6
2100	72	2752	0	0	0	0	0	14	34	17	4	2	1	0	0	0	0	0	25.6	33.8	52.6	58	80.6	38.7
2200	66	2818	0	0	0	1	2	14	28	19	0	2	0	0	0	0	0	0	17.1	32.7	49.8	49	74.2	36
2300	51	2869	0	0	0	0	1	16	18	14	2	0	0	0	0	0	0	0	21	32.4	41.8	34	66.7	36
07-19	2506	2869	0	0	16	14	34	545	1272	562	58	5	0	0	0	0	0	0	11.4	32.4	47.8	1897	75.7	36.2
06-22	2752	2869	0	0	16	14	42	592	1381	630	68	8	1	0	0	0	0	0	11.4	32.5	52.6	2088	75.9	36.2
06-00	2869	2869	0	0	16	15	45	622	1427	663	70	10	1	0	0	0	0	0	11.4	32.5	52.6	2171	75.7	36.2
00-00	2869	2869	0	0	16	15	45	622	1427	663	70	10	1	0	0	0	0	0	11.4	32.5	52.6	2171	75.7	36.2

Sun 05	December	2021	Westbound																				
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	33	2902	0	0	0	1	1	8	13	5	5	0	0	0	0	0	0	0	18.7	32.9	43.6	23	69.7	38.7
0100	27	2929	0	0	0	0	0	11	10	5	0	1	0	0	0	0	0	0	25.4	32.1	46.8	16	59.3	35.6
0200	11	2940	0	0	0	0	1	1	5	3	1	0	0	0	0	0	0	0	20.8	32.8	41.8	9	81.8	37.6
0300	6	2946	0	0	0	0	1	1	3	1	0	0	0	0	0	0	0	0	23.7	31.3	38.6	4	66.7	-
0400	5	2951	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	31	34.6	38	5	100	-
0500	12	2963	0	0	0	0	0	1	4	5	2	0	0	0	0	0	0	0	27.8	35.6	44.4	11	91.7	39.4
0600	29	2992	0	0	0	0	0	5	13	7	3	1	0	0	0	0	0	0	26	34.6	46.7	24	82.8	39.6
0700	54	3046	0	0	0	0	1	7	26	15	4	1	0	0	0	0	0	0	23.9	34.1	45.7	46	85.2	38.3
0800	112	3158	0	0	0	0	3	16	57	31	5	0	0	0	0	0	0	0	23.7	33.7	42.5	93	83	37.4
0900	159	3317	0	0	1	0	5	23	70	45	15	0	0	0	0	0	0	0	13.2	33.8	44.4	130	81.8	37.6
1000	223	3540	0	0	0	0	1	27	139	51	5	0	0	0	0	0	0	0	24.6	33.1	41.2	195	87.4	36
1100	282	3822	0	0	0	1	3	63	146	62	5	2	0	0	0	0	0	0	19.9	32.6	48.5	215	76.2	36
1200	312	4134	0	0	1	3	7	41	196	63	1	0	0	0	0	0	0	0	14.6	32.5	40.7	260	83.3	35.6
1300	237	4371	0	1	4	3	8	41	130	42	8	0	0	0	0	0	0	0	8.4	32	42.7	180	75.9	36
1400	251	4622	0	0	0	0	0	56	131	55	6	3	0	0	0	0	0	0	25	33	46.9	195	77.7	36.5
1500	198	4820	0	0	0	1	5	37	114	38	3	0	0	0	0	0	0	0	17.6	32.3	42.4	155	78.3	35.6
1600	198	5018	0	0	0	0	1	61	105	26	5	0	0	0	0	0	0	0	24.9	31.9	41.1	136	68.7	34.9
1700	159	5177	0	0	0	0	6	42	79	26	6	0	0	0	0	0	0	0	23.8	31.9	44.4	111	69.8	35.6
1800	125	5302	0	0	0	1	8	36	62	14	4	0	0	0	0	0	0	0	19.2	31.3	42	80	64	34.7
1900	101	5403	0	0	0	0	0	11	51	30	9	0	0	0	0	0	0	0	26.4	33.9	43	90	89.1	37.6
2000	79	5482	0	0	0	0	3	17	38	16	5	0	0	0	0	0	0	0	22.8	33	44.4	59	74.7	37.4
2100	60	5542	0	0	0	0	2	8	27	14	9	0	0	0	0	0	0	0	24.2	34.2	44.3	50	83.3	39.8
2200	25	5567	0	0	0	0	0	4	10	7	4	0	0	0	0	0	0	0	25.7	34.4	44.3	21	84	39.4
2300	20	5587	0	0	0	0	1	3	7	4	5	0	0	0	0	0	0	0	24.2	34.1	42.6	16	80	40.5
07-19	2310	5587	0	1	6	9	48	450	1255	468	67	6	0	0	0	0	0	0	8.4	32.6	48.5	1796	77.7	36.2
06-22	2579	5587	0	1	6	9	53	491	1384	535	93	7	0	0	0	0	0	0	8.4	32.7	48.5	2019	78.3	36.5
06-00	2624	5587	0	1	6	9	54	498	1401	546	102	7	0	0	0	0	0	0	8.4	32.7	48.5	2056	78.4	36.5
00-00	2718	5587	0	1	6	10	57	520	1439	567	110	8	0	0	0	0	0	0	8.4	32.7	48.5	2124	78.1	36.7

Mon 06	December	2021	Westbound																				
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	5	5592	0	0	0	0	1	2	0	1	0	0	1	0	0	0	0	0	21.6	33.2	54	2	40	-
0100	4	5596	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	29.3	30.7	32.3	3	75	-
0200	2	5598	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	29	33.6	38.2	1	50	-
0300	4	5602	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	32.6	34.5	36.8	4	100	-
0400	4	5606	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	30	35.4	40.8	3	75	-
0500	56	5662	0	0	0	0	0	5	20	19	9	3	0	0	0	0	0	0	27.6	36.5	49.7	51	91.1	42.3
0600	158	5820	0	0	0	0	1	21	68	50	15	2	1	0	0	0	0	0	22.3	34.6	50.2	136	86.1	38.3
0700	351	6171	0	0	0	0	6	53	207	75	10	0	0	0	0	0	0	0	23.6	33	44.4	292	83.2	36.2
0800	436	6607	7	2	2	6	37	194	157	28	2	1	0	0	0	0	0	0	1.6	29	47.5	188	43.1	33.1
0900	340	6947	0	0	1	0	2	72	181	79	5	0	0	0	0	0	0	0	14.7	32.4	44.5	265	77.9	35.8
1000	273	7220	0	0	2	1	8	64	157	36	4	1	0	0	0	0	0	0	12.4	31.7	45.4	198	72.5	34.9
1100	268	7488	0	0	0	0	5	77	134	48	4	0	0	0	0	0	0	0	21.2	31.9	41.9	186	69.4	36
1200	272	7760	0	0	0	1	6	52	161	44	7	1	0	0	0	0	0	0	19.3	32.3	45.2	213	78.3	36
1300	265	8025	0	0	0	0	8	58	148	45	6	0	0	0	0	0	0	0	22.1	32.1	43.6	199	75.1	35.3
1400	293	8318	0	0	0	0	5	83	166	37	2	0	0	0	0	0	0	0	20.8	31.7	42.1	205	70	34.7
1500	407	8725	0	0	1	0	14	148	198	40	5	1	0	0	0	0	0	0	11.4	30.9	46.4	244	60	34
1600	471	9196	5	15	4	0	41	215	166	25	0	0	0	0	0	0	0	0	3	28.4	39.3	191	40.6	32.4
1700	352	9548	0	0	0	1	13	134	175	26	3	0	0	0	0	0	0	0	15.1	30.7	41.4	204	58	33.6
1800	225	9773	0	0	0	0	10	64	116	30	5	0	0	0	0	0	0	0	21.7	31.6	44	151	67.1	34.9
1900	161	9934	0	0	0	0	3	43	83	30	1	1	0	0	0	0	0	0	22.9	31.9	46.4	115	71.4	35.8
2000	89	10023	0	0	0	0	4	20	45	18	2	0	0	0	0	0	0	0	23.1	32.3	41.5	65	73	35.6
2100	88	10111	0	0	0	0	4	12	39	23	10	0	0	0	0	0	0	0	21.3	33.7	43.5	72	81.8	38.7
2200	60	10171	0	0	0	0	0	7	24	21	7	1	0	0	0	0	0	0	25.1	35	47.2	53	88.3	39.6
2300	18	10189	0	0	0	0	1	1	11	2	2	1	0	0	0	0	0	0	23.8	34.3	48.4	16	88.9	37.4
07-19	3953	10189	12	17	10	9	155	1214	1966	513	53	4	0	0	0	0	0	0	1.6	31.1	47.5	2536	64.2	34.9
06-22	4449	10189	12	17	10	9	167	1310	2201	634	81	7	1	0	0	0	0	0	1.6	31.3	50.2	2924	65.7	35.1
06-00	4527	10189	12	17	10	9	168	1318	2236	657	90	9	1	0	0	0	0	0	1.6	31.4	50.2	2993	66.1	35.1
00-00	4602	10189	12	17	10	9	169	1328	2262	681	100	12	2	0	0	0	0	0	1.6	31.4	54	3057	66.4	35.3

Tue 07	December	2021	Westbound																				
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	9	10198	0	0	0	0	1	3	3	1	1	0	0	0	0	0	0	0	21	31.6	43.3	5	55.6	-
0100	5	10203	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	28.3	31.5	37.2	3	60	-
0200	3	10206	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	28.4	31.5	37.7	1	33.3	-
0300	3	10209	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	25.6	31.3	37.2	2	66.7	-
0400	8	10217	0	0	0	0	0	1	1	3	3	0	0	0	0	0	0	0	26.6	37.2	42.5	7	87.5	-
0500	45	10262	0	0	0	0	0	4	21	9	10	1	0	0	0	0	0	0	25.5	35.7	45.6	41	91.1	42.1
0600	137	10399	0	0	0	0	3	17	63	43	8	3	0	0	0	0	0	0	24.4	34.3	46.8	117	85.4	37.8
0700	357	10756	0	0	0	0	12	76	206	52	11	0	0	0	0	0	0	0	23.2	32.2	44	269	75.4	35.1
0800	450	11206	5	1	5	5	30	230	154	19	1	0	0	0	0	0	0	0	0.8	28.8	40.5	174	38.7	32.7
0900	310	11516	0	0	0	0	3	65	159	78	4	1	0	0	0	0	0	0	23.9	32.8	45.1	242	78.1	36.2
1000	275	11791	0	0	0	2	5	64	149	49	6	0	0	0	0	0	0	0	15.8	32	44	204	74.2	35.6
1100	273	12064	0	0	0	0	3	65	150	47	7	1	0	0	0	0	0	0	23.7	32.4	46.8	205	75.1	35.8
1200	334	12398	0	0	0	0	4	83	177	60	9	1	0	0	0	0	0	0	23.9	32.3	46.8	247	74	35.3
1300	310	12708	0	0	0	0	9	83	168	47	2	1	0	0	0	0	0	0	20.7	31.6	47.2	218	70.3	35.3
1400	327	13035	0	0	1	0	6	124	167	26	3	0	0	0	0	0	0	0	11.7	30.8	40.4	196	59.9	34
1500	409	13444	0	1	0	5	53	231	113	5	1	0	0	0	0	0	0	0	8.1	28.3	42.7	119	29.1	32
1600	418	13862	0	1	3	78	197	123	16	0	0	0	0	0	0	0	0	0	6.2	23.3	32.9	16	3.8	26.4
1700	387	14249	0	0	0	0	67	214	85	20	1	0	0	0	0	0	0	0	20.5	28.1	43.8	106	27.4	31.8
1800	210	14459	0	0	0	3	10	79	100	14	4	0	0	0	0	0	0	0	19.7	30.5	41.3	118	56.2	34
1900	152	14611	0	0	0	0	5	46	76	22	3	0	0	0	0	0	0	0	20.7	31.5	42.4	101	66.4	35.3
2000	86	14697	0	0	0	1	4	17	40	21	3	0	0	0	0	0	0	0	20	32.4	43.1	64	74.4	36.9
2100	67	14764	0	0	0	0	0	4	33	22	7	1	0	0	0	0	0	0	25.1	35	49.4	63	94	38.3
2200	66	14830	0	0	0	0	2	15	28	18	3	0	0	0	0	0	0	0	23.3	33	44.3	49	74.2	36.2
2300	13	14843	0	0	0	0	1	1	8	2	0	0	1	0	0	0	0	0	22.8	33.6	53.6	11	84.6	35.3
07-19	4060	14843	5	3	9	93	399	1437	1644	417	49	4	0	0	0	0	0	0	0.8	29.9	47.2	2114	52.1	34.2
06-22	4502	14843	5	3	9	94	411	1521	1856	525	70	8	0	0	0	0	0	0	0.8	30.2	49.4	2459	54.6	34.7
06-00	4581	14843	5	3	9	94	414	1537	1892	545	73	8	1	0	0	0	0	0	0.8	30.3	53.6	2519	55	34.7
00-00	4654	14843	5	3	9	94	415	1550	1920	561	87	9	1	0	0	0	0	0	0.8	30.4	53.6	2578	55.4	34.7

Wed 08	December	2021	Westbound																					
Time	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
0000	10	14853	0	0	0	0	0	4	2	2	2	0	0	0	0	0	0	0	27.9	34.3	41.6	6	60	-
0100	5	14858	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	36	37	39	5	100	-
0200	8	14866	0	0	0	0	0	2	4	2	0	0	0	0	0	0	0	0	28.8	33.2	38.2	6	75	-
0300	5	14871	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	33.4	35.6	37.5	5	100	-
0400	11	14882	0	0	0	0	0	2	5	2	1	1	0	0	0	0	0	0	27.9	34.5	45.3	9	81.8	38.3
0500	50	14932	0	0	0	0	0	2	19	18	11	0	0	0	0	0	0	0	25.9	36.2	43	48	96	41.6
0600	151	15083	0	0	0	0	0	11	76	48	13	1	1	1	0	0	0	0	25.8	34.8	59.4	140	92.7	38.7
0700	379	15462	0	0	1	0	6	64	220	79	7	2	0	0	0	0	0	0	11.7	32.8	45.8	308	81.3	36
0800	461	15923	5	2	0	1	59	222	139	29	4	0	0	0	0	0	0	0	1.1	28.6	42.8	172	37.3	32.7
0900	345	16268	0	0	0	0	0	72	205	63	5	0	0	0	0	0	0	0	25.4	32.5	40.9	273	79.1	35.8
1000	282	16550	0	0	0	2	6	57	174	40	3	0	0	0	0	0	0	0	16.9	32	42.8	217	77	35.1
1100	273	16823	0	0	1	0	4	58	157	47	6	0	0	0	0	0	0	0	14.2	32.3	42.2	210	76.9	35.6
1200	321	17144	0	0	0	2	7	91	169	51	0	1	0	0	0	0	0	0	18.6	31.6	48.9	221	68.8	34.9
1300	319	17463	0	0	0	0	8	69	170	62	8	2	0	0	0	0	0	0	23.1	32.6	46.4	242	75.9	36.2
1400	378	17841	1	3	5	14	10	95	197	45	7	1	0	0	0	0	0	0	3.6	30.7	45.1	250	66.1	34.7
1500	512	18353	0	0	0	0	47	226	199	36	4	0	0	0	0	0	0	0	21	29.8	41.9	239	46.7	32.9
1600	593	18946	0	0	2	18	65	308	175	23	2	0	0	0	0	0	0	0	11.8	28.5	41.2	200	33.7	32.2
1700	402	19348	0	0	0	1	9	161	188	40	3	0	0	0	0	0	0	0	18.9	30.8	42.6	231	57.5	34
1800	239	19587	0	0	0	0	6	65	124	39	5	0	0	0	0	0	0	0	24.2	32.2	43.7	168	70.3	35.3
1900	158	19745	0	0	0	1	4	45	77	30	1	0	0	0	0	0	0	0	19.5	31.8	43.4	108	68.4	35.1
07-19	4504	19745	6	5	9	38	227	1488	2117	554	54	6	0	0	0	0	0	0	1.1	30.9	48.9	2731	60.6	34.7
06-22	4813	19745	6	5	9	39	231	1544	2270	632	68	7	1	1	0	0	0	0	1.1	31	59.4	2979	61.9	34.9
06-00	4813	19745	6	5	9	39	231	1544	2270	632	68	7	1	1	0	0	0	0	1.1	31	59.4	2979	61.9	34.9
00-00	4902	19745	6	5	9	39	231	1554	2302	664	82	8	1	1	0	0	0	0	1.1	31.1	59.4	3058	62.4	34.9

Summary			Westbound																					
	Total	RunTot	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vmin	Mean	Vmax	>PSL	>PSL%	Vpp
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75				30	30	85
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						
	19745	19745	23	26	50	167	917	5574	9350	3136	449	47	5	1	0	0	0	0	0.8	31.4	59.4	12988	65.8	35.6

Appendix F

Pedestrian Crossing Improvements

Internal Pedestrian Connection

Informal Pedestrian Crossing
with Tactile Paving

Informal Pedestrian Crossing
with Tactile Paving

Station Road

Gatton

Garth

50.9m

north

Rev:	Description:	Date:	Rev By:	Chk'd:

motion

9 Greyfriars, Reading, Berkshire, RG1 1NU

T: 0118 206 2930

Guildford - London - Reading

www.motion.co.uk

Project:
Land at Old Cottage, Station Road

Title:
Proposed Pedestrian Crossings

Client:
Woolbro homes Ltd

Drawing Status:

Scale: 1:500 (@ A3) Date:22/03/2022

Drawn: Checked: Approved:

Drawing: Revision:
1912026 - 03

C:\Users\andrewcook\OneDrive - Motion\Within Motion\Projects\1912026\Drawings\1912026 - 03.dwg

Appendix G

TRICS Output

Calculation Reference: AUDIT-734001-211130-1100

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	3 days
	HC	HAMPSHIRE	3 days
	HF	HERTFORDSHIRE	2 days
	KC	KENT	4 days
	SC	SURREY	2 days
	WS	WEST SUSSEX	5 days
03	SOUTH WEST		
	DC	DORSET	1 days
	DV	DEVON	3 days
	SM	SOMERSET	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	4 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	5 days
	SY	SOUTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	3 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	DH	DURHAM	2 days
	TW	TYNE & WEAR	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:	8 to 432 (units:)
Range Selected by User:	6 to 600 (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: 01/01/13 to 16/06/21

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:

Monday	12 days
Tuesday	7 days
Wednesday	14 days
Thursday	13 days
Friday	6 days

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

Selected survey types:

Manual count	52 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 undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	17
Edge of Town	35

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	49
Village	1
No Sub Category	2

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	52 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

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	3 days
5,001 to 10,000	15 days
10,001 to 15,000	16 days
15,001 to 20,000	7 days
20,001 to 25,000	5 days
25,001 to 50,000	5 days

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

Population within 5 miles:

5,001 to 25,000	6 days
25,001 to 50,000	4 days
50,001 to 75,000	8 days
75,001 to 100,000	11 days
100,001 to 125,000	1 days
125,001 to 250,000	16 days
250,001 to 500,000	6 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	14 days
1.1 to 1.5	36 days
1.6 to 2.0	2 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	17 days
No	35 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	52 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

1 CA-03-A-05 DETACHED HOUSES CAMBRIDGESHIRE
EASTFIELD ROAD
PETERBOROUGH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 28
Survey date: MONDAY *17/10/16* *Survey Type: MANUAL*

2 CH-03-A-09 TERRACED HOUSES CHESHIRE
GREYSTOKE ROAD
MACCLESFIELD
HURDSFIELD
Edge of Town
Residential Zone
Total No of Dwellings: 24
Survey date: MONDAY *24/11/14* *Survey Type: MANUAL*

3 CH-03-A-10 SEMI-DETACHED & TERRACED CHESHIRE
MEADOW DRIVE
NORTHWICH
BARNTON
Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: TUESDAY *04/06/19* *Survey Type: MANUAL*

4 CH-03-A-11 TOWN HOUSES CHESHIRE
LONDON ROAD
NORTHWICH
LEFTWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 24
Survey date: THURSDAY *06/06/19* *Survey Type: MANUAL*

5 DC-03-A-08 BUNGALOWS DORSET
HURSTDENE ROAD
BOURNEMOUTH
CASTLE LANE WEST
Edge of Town
Residential Zone
Total No of Dwellings: 28
Survey date: MONDAY *24/03/14* *Survey Type: MANUAL*

6 DH-03-A-01 SEMI DETACHED DURHAM
GREENFIELDS ROAD
BISHOP AUCKLAND

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 50
Survey date: TUESDAY *28/03/17* *Survey Type: MANUAL*

7 DH-03-A-03 SEMI-DETACHED & TERRACED DURHAM
PILGRIMS WAY
DURHAM

Edge of Town
Residential Zone
Total No of Dwellings: 57
Survey date: FRIDAY *19/10/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 DS-03-A-02 MIXED HOUSES DERBYSHIRE
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

9 DV-03-A-01 TERRACED HOUSES DEVON
BRONSHILL ROAD
TORQUAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 37
Survey date: WEDNESDAY *30/09/15* *Survey Type: MANUAL*

10 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 116
Survey date: FRIDAY *25/09/15* *Survey Type: MANUAL*

11 DV-03-A-03 TERRACED & SEMI DETACHED DEVON
LOWER BRAND LANE
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 70
Survey date: MONDAY *28/09/15* *Survey Type: MANUAL*

12 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

13 ES-03-A-04 MIXED HOUSES & FLATS EAST SUSSEX
NEW LYDD ROAD
CAMBER

Edge of Town
Residential Zone
Total No of Dwellings: 134
Survey date: FRIDAY *15/07/16* *Survey Type: MANUAL*

14 ES-03-A-05 MIXED HOUSES & FLATS EAST SUSSEX
RATTLE ROAD
NEAR EASTBOURNE
STONE CROSS
Edge of Town
Residential Zone
Total No of Dwellings: 99
Survey date: WEDNESDAY *05/06/19* *Survey Type: MANUAL*

15 HC-03-A-21 TERRACED & SEMI-DETACHED HAMPSHIRE
PRIESTLEY ROAD
BASINGSTOKE
HOUNDMILLS
Edge of Town
Residential Zone
Total No of Dwellings: 39
Survey date: TUESDAY *13/11/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

16 HC-03-A-22 MIXED HOUSES HAMPSHIRE
BOW LAKE GARDENS
NEAR EASTLEIGH
BISHOPSTOKE
Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: WEDNESDAY *31/10/18* *Survey Type: MANUAL*

17 HC-03-A-23 HOUSES & FLATS HAMPSHIRE
CANADA WAY
LIPHOOK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 62
Survey date: TUESDAY *19/11/19* *Survey Type: MANUAL*

18 HF-03-A-03 MIXED HOUSES HERTFORDSHIRE
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total No of Dwellings: 160
Survey date: MONDAY *08/07/19* *Survey Type: MANUAL*

19 HF-03-A-04 TERRACED HOUSES HERTFORDSHIRE
HOLMSIDE RISE
WATFORD
SOUTH OXHEY
Edge of Town
Residential Zone
Total No of Dwellings: 8
Survey date: TUESDAY *08/06/21* *Survey Type: MANUAL*

20 KC-03-A-03 MIXED HOUSES & FLATS KENT
HYTHE ROAD
ASHFORD
WILLESBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 51
Survey date: THURSDAY *14/07/16* *Survey Type: MANUAL*

21 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

22 KC-03-A-06 MIXED HOUSES & FLATS KENT
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

23 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

24 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
LIVERPOOL
OTTERSPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 15
Survey date: FRIDAY *21/06/13* *Survey Type: MANUAL*

25 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total No of Dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

26 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY
THETFORD

Edge of Town
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY *16/09/15* *Survey Type: MANUAL*

27 NF-03-A-04 MIXED HOUSES NORFOLK
NORTH WALSHAM ROAD
NORTH WALSHAM

Edge of Town
Residential Zone
Total No of Dwellings: 70
Survey date: WEDNESDAY *18/09/19* *Survey Type: MANUAL*

28 NF-03-A-05 MIXED HOUSES NORFOLK
HEATH DRIVE
HOLT

Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: THURSDAY *19/09/19* *Survey Type: MANUAL*

29 NF-03-A-06 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 275
Survey date: MONDAY *23/09/19* *Survey Type: MANUAL*

30 NY-03-A-08 TERRACED HOUSES NORTH YORKSHIRE
NICHOLAS STREET
YORK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 21
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

31 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE
GRAMMAR SCHOOL LANE
NORTHALLERTON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 52
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

32 NY-03-A-10 HOUSES AND FLATS NORTH YORKSHIRE
BOROUGHBRIDGE ROAD
RIPON

Edge of Town
No Sub Category
Total No of Dwellings: 71
Survey date: TUESDAY *17/09/13* *Survey Type: MANUAL*

33 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Edge of Town
Residential Zone
Total No of Dwellings: 23
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

34 NY-03-A-13 TERRACED HOUSES NORTH YORKSHIRE
CATTERICK ROAD
CATTERICK GARRISON
OLD HOSPITAL COMPOUND
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY *10/05/17* *Survey Type: MANUAL*

35 SC-03-A-04 DETACHED & TERRACED SURREY
HIGH ROAD
BYFLEET

Edge of Town
Residential Zone
Total No of Dwellings: 71
Survey date: THURSDAY *23/01/14* *Survey Type: MANUAL*

36 SC-03-A-05 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total No of Dwellings: 207
Survey date: MONDAY *01/04/19* *Survey Type: MANUAL*

37 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE
BURY ST EDMUNDS

Edge of Town
Residential Zone
Total No of Dwellings: 18
Survey date: WEDNESDAY *09/09/15* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

38 SF-03-A-07 MIXED HOUSES SUFFOLK
FOXHALL ROAD
IPSWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 73
Survey date: THURSDAY *09/05/19* *Survey Type: MANUAL*

39 SH-03-A-05 SEMI-DETACHED/TERRACED SHROPSHIRE
SANDCROFT
TELFORD
SUTTON HILL
Edge of Town
Residential Zone
Total No of Dwellings: 54
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

40 SH-03-A-06 BUNGALOWS SHROPSHIRE
ELLESMERE ROAD
SHREWSBURY

Edge of Town
Residential Zone
Total No of Dwellings: 16
Survey date: THURSDAY *22/05/14* *Survey Type: MANUAL*

41 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
BRIDGWATER
NORTHFIELD
Edge of Town
Residential Zone
Total No of Dwellings: 33
Survey date: THURSDAY *24/09/15* *Survey Type: MANUAL*

42 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total No of Dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

43 SY-03-A-01 SEMI DETACHED HOUSES SOUTH YORKSHIRE
A19 BENTLEY ROAD
DONCASTER
BENTLEY RISE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 54
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

44 TW-03-A-02 SEMI-DETACHED TYNE & WEAR
WEST PARK ROAD
GATESHEAD

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 16
Survey date: MONDAY *07/10/13* *Survey Type: MANUAL*

45 WK-03-A-02 BUNGALOWS WARWICKSHIRE
NARBERTH WAY
COVENTRY
POTTERS GREEN
Edge of Town
Residential Zone
Total No of Dwellings: 17
Survey date: THURSDAY *17/10/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

46	WK-03-A-04 DETACHED HOUSES		WARWICKSHIRE
	DALEHOUSE LANE		
	KENILWORTH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	49	
	Survey date: FRIDAY	*27/09/19*	*Survey Type: MANUAL*
47	WL-03-A-02 SEMI DETACHED		WILTSHIRE
	HEADLANDS GROVE		
	SWINDON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	27	
	Survey date: THURSDAY	*22/09/16*	*Survey Type: MANUAL*
48	WS-03-A-04 MIXED HOUSES		WEST SUSSEX
	HILLS FARM LANE		
	HORSHAM		
	BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	151	
	Survey date: THURSDAY	*11/12/14*	*Survey Type: MANUAL*
49	WS-03-A-08 MIXED HOUSES		WEST SUSSEX
	ROUNDSTONE LANE		
	ANGMERING		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	180	
	Survey date: THURSDAY	*19/04/18*	*Survey Type: MANUAL*
50	WS-03-A-09 MIXED HOUSES & FLATS		WEST SUSSEX
	LITTLEHAMPTON ROAD		
	WORTHING		
	WEST DURRINGTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	197	
	Survey date: THURSDAY	*05/07/18*	*Survey Type: MANUAL*
51	WS-03-A-10 MIXED HOUSES		WEST SUSSEX
	TODDINGTON LANE		
	LITTLEHAMPTON		
	WICK		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	79	
	Survey date: WEDNESDAY	*07/11/18*	*Survey Type: MANUAL*
52	WS-03-A-12 MIXED HOUSES		WEST SUSSEX
	MADGWICK LANE		
	CHICHESTER		
	WESTHAMPNETT		
	Edge of Town		
	Village		
	Total No of Dwellings:	152	
	Survey date: WEDNESDAY	*16/06/21*	*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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	52	98	0.076	52	98	0.306	52	98	0.382
08:00 - 09:00	52	98	0.125	52	98	0.374	52	98	0.499
09:00 - 10:00	52	98	0.142	52	98	0.169	52	98	0.311
10:00 - 11:00	52	98	0.128	52	98	0.159	52	98	0.287
11:00 - 12:00	52	98	0.134	52	98	0.150	52	98	0.284
12:00 - 13:00	52	98	0.159	52	98	0.151	52	98	0.310
13:00 - 14:00	52	98	0.162	52	98	0.152	52	98	0.314
14:00 - 15:00	52	98	0.165	52	98	0.185	52	98	0.350
15:00 - 16:00	52	98	0.264	52	98	0.178	52	98	0.442
16:00 - 17:00	52	98	0.280	52	98	0.162	52	98	0.442
17:00 - 18:00	52	98	0.339	52	98	0.152	52	98	0.491
18:00 - 19:00	52	98	0.288	52	98	0.164	52	98	0.452
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.262			2.302			4.564

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.*

Parameter summary

Trip rate parameter range selected:	8 - 432 (units:)
Survey date date range:	01/01/13 - 16/06/21
Number of weekdays (Monday-Friday):	52
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	4
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	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	52	98	0.111	52	98	0.524	52	98	0.635
08:00 - 09:00	52	98	0.200	52	98	0.774	52	98	0.974
09:00 - 10:00	52	98	0.220	52	98	0.304	52	98	0.524
10:00 - 11:00	52	98	0.205	52	98	0.280	52	98	0.485
11:00 - 12:00	52	98	0.216	52	98	0.254	52	98	0.470
12:00 - 13:00	52	98	0.263	52	98	0.247	52	98	0.510
13:00 - 14:00	52	98	0.266	52	98	0.249	52	98	0.515
14:00 - 15:00	52	98	0.268	52	98	0.302	52	98	0.570
15:00 - 16:00	52	98	0.559	52	98	0.316	52	98	0.875
16:00 - 17:00	52	98	0.558	52	98	0.288	52	98	0.846
17:00 - 18:00	52	98	0.608	52	98	0.258	52	98	0.866
18:00 - 19:00	52	98	0.507	52	98	0.299	52	98	0.806
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.981			4.095			8.076

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.*

Appendix H

Journey to Work Census Data

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

population	All usual residents aged 16 and over in employment the week before the census
units	Persons
date	2011
method of travel to work	Driving a car or van

place of work	usual residence E02006437 : Tandridge 010							
E02006431 : Tandridge 004	35	2%	Godstone Road					
E02006432 : Tandridge 005	12	1%	Godstone Road	NW	Godstone Road	18.9%	20.2%	
E02006433 : Tandridge 006	85	4%	Station Road	NE	Station Road	6.9%	7.4%	
E02006434 : Tandridge 007	13	1%	Station Road	E	Racecourse Road	26.5%	28.3%	
E02006435 : Tandridge 008	12	1%	Godstone Road	S	Felcourt Road	15.8%	16.9%	
E02006436 : Tandridge 009	55	3%	Godstone Road	W	B2028	25.5%	27.2%	
E02006437 : Tandridge 010	304	16%	East along Racecourse Road			93.5%	100.0%	
E02006438 : Tandridge 011	68	3%	West along B2028					
Brighton and Hove	13	1%	West along B2028					
Crawley	217	11%	West along B2028					
Epsom and Ewell	11	1%	Godstone Road					
Guildford	16	1%	Godstone Road					
Horsham	14	1%	West along B2028					
Mid Sussex	308	16%	South along Felcourt Road					
Mole Valley	47	2%	Godstone Road					
Reigate and Banstead	185	9%	West along B2028					
Sevenoaks	114	6%	East along Racecourse Road					
Tonbridge and Malling	19	1%	East along Racecourse Road					
Tunbridge Wells	35	2%	East along Racecourse Road					
Wealden	44	2%	East along Racecourse Road					
Bromley	37	2%	Station Road					
Croydon	94	5%	Godstone Road					
Hillingdon	10	1%	Godstone Road					
Kingston upon Thames	13	1%	Godstone Road					
Lambeth	13	1%	Godstone Road					
Merton	19	1%	Godstone Road					
Sutton	19	1%	Godstone Road					
Wandsworth	12	1%	Godstone Road					
	1,950							

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

Appendix I

Junction Modelling Output

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Lingfield Site Access Junction 2.j9
Path: C:\Users\DavidMcMurtary\Documents
Report generation date: 07/03/2022 13:25:46

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2022 With Dev									
Stream B-AC	D1	0.2	11.83	0.14	B	D2	0.1	10.87	0.05	B
Stream C-AB		0.0	4.42	0.01	A		0.0	4.81	0.03	A
	2027 With Dev									
Stream B-AC	D3	0.2	11.98	0.14	B	D4	0.1	11.00	0.05	B
Stream C-AB		0.0	4.38	0.01	A		0.0	4.77	0.04	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	07/03/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTION\DavidMcMurtary
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	2022 With Dev	AM	FLAT	08:00	09:00	60	60

2022 With Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			0.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	440	0.080	0.202	0.127	0.289
B-C	574	0.088	0.222	-	-
C-B	574	0.222	0.222	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	376	100.000
B		✓	48	100.000
C		✓	466	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	367
	B	31	0	17
	C	461	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	11.83	0.2	B
C-AB	0.01	4.42	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	48	352	0.136	48	0.2	11.834	B
C-AB	11	826	0.014	11	0.0	4.419	A
C-A	455			455			
A-B	9			9			
A-C	367			367			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Lingfield Site Access Junction 2.j9
Path: C:\Users\DavidMcMurtary\Documents
Report generation date: 07/03/2022 13:26:22

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2022 With Dev									
Stream B-AC	D1	0.2	11.83	0.14	B	D2	0.1	10.87	0.05	B
Stream C-AB		0.0	4.42	0.01	A		0.0	4.81	0.03	A
	2027 With Dev									
Stream B-AC	D3	0.2	11.98	0.14	B	D4	0.1	11.00	0.05	B
Stream C-AB		0.0	4.38	0.01	A		0.0	4.77	0.04	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	07/03/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTION\DavidMcMurtary
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2022 With Dev	PM	FLAT	17:00	18:00	60	60

2022 With Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			0.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	440	0.080	0.202	0.127	0.289
B-C	574	0.088	0.222	-	-
C-B	574	0.222	0.222	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	422	100.000
B		✓	17	100.000
C		✓	415	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	23	399
	B	11	0	6
	C	402	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.05	10.87	0.1	B
C-AB	0.03	4.81	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	348	0.049	17	0.1	10.869	B
C-AB	27	775	0.035	27	0.0	4.813	A
C-A	388			388			
A-B	23			23			
A-C	399			399			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Lingfield Site Access Junction 2.j9
Path: C:\Users\DavidMcMurtary\Documents
Report generation date: 07/03/2022 13:27:37

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2022 With Dev									
Stream B-AC	D1	0.2	11.83	0.14	B	D2	0.1	10.87	0.05	B
Stream C-AB		0.0	4.42	0.01	A		0.0	4.81	0.03	A
	2027 With Dev									
Stream B-AC	D3	0.2	11.98	0.14	B	D4	0.1	11.00	0.05	B
Stream C-AB		0.0	4.38	0.01	A		0.0	4.77	0.04	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	07/03/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTION\DavidMcMurtary
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2027 With Dev	AM	FLAT	08:00	09:00	60	60

2027 With Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			0.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	440	0.080	0.202	0.127	0.289
B-C	574	0.088	0.222	-	-
C-B	574	0.222	0.222	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	387	100.000
B		✓	48	100.000
C		✓	479	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	378
	B	31	0	17
	C	474	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	11.98	0.2	B
C-AB	0.01	4.38	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	48	348	0.138	48	0.2	11.983	B
C-AB	12	833	0.014	12	0.0	4.380	A
C-A	467			467			
A-B	9			9			
A-C	378			378			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: Lingfield Site Access Junction 2.j9
Path: C:\Users\DavidMcMurtary\Documents
Report generation date: 07/03/2022 13:27:06

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2022 With Dev									
Stream B-AC	D1	0.2	11.83	0.14	B	D2	0.1	10.87	0.05	B
Stream C-AB		0.0	4.42	0.01	A		0.0	4.81	0.03	A
	2027 With Dev									
Stream B-AC	D3	0.2	11.98	0.14	B	D4	0.1	11.00	0.05	B
Stream C-AB		0.0	4.38	0.01	A		0.0	4.77	0.04	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	07/03/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTION\DavidMcMurtary
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2027 With Dev	PM	FLAT	17:00	18:00	60	60

2027 With Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			0.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	440	0.080	0.202	0.127	0.289
B-C	574	0.088	0.222	-	-
C-B	574	0.222	0.222	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	434	100.000
B		✓	17	100.000
C		✓	427	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	23	411
	B	11	0	6
	C	414	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.05	11.00	0.1	B
C-AB	0.04	4.77	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	344	0.049	17	0.1	10.998	B
C-AB	28	782	0.035	28	0.0	4.774	A
C-A	399			399			
A-B	23			23			
A-C	411			411			