



TRANSPORT ASSESSMENT

Land off Old Ashford Road,
Lenham, Kent

Client: Dean Lewis Estates Ltd



Document Control		
Job Number	P19013	
Document Version	Final Revision A	
File Reference	N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\7.Reports\TA	
Date	September 2019	
Client	Dean Lewis Estates Ltd	
	Name	Position
Written By	Anthony Morley	Transport Planner
	Ben Gaze	Senior Transport Planner
Checked & Approved By	David Stoddart	Associate Director

CONTENTS

1	INTRODUCTION	3
1.1	Purpose of the Report	3
1.2	Scope of Report	3
2	TRANSPORT POLICY AND GUIDANCE.....	5
2.1	Introduction.....	5
2.2	National Planning Policy Framework.....	5
2.3	Planning Practice Guidance	6
2.4	Manual for Streets.....	7
2.5	Kent County Council Transport Plan 2016-2031.....	8
2.6	Maidstone Borough Local Plan 2011-2031.....	9
2.7	Maidstone Integrated Transport Strategy 2011-2031.....	9
2.8	Lenham Neighbourhood Plan - Transport Assessment 2019	11
2.9	The Kent Design Guide	11
2.10	Summary	12
3	EXISTING SITUATION	13
3.1	Site Description	13
3.2	Local Walking and Cycling Network.....	13
3.3	Local Highway Network.....	14
3.4	Existing Traffic Conditions	15
3.5	Road Safety.....	17
4	DEVELOPMENT PROPOSAL	21
4.1	Development Description.....	21
4.2	Access Strategy.....	21
4.3	Access for Commercial Vehicles and Internal Layout.....	23
4.4	Stage 1 Road Safety Audit	24
4.5	Parking.....	27
4.6	Summary	28
5	ACCESS BY SUSTAINABLE MODES.....	29
5.1	Introduction to Sustainable Modes of Transport	29
5.2	Access on Foot.....	29
5.3	Access by Cycle	31
5.4	Access by Local Bus Services	33
5.5	Rail	34
5.6	Travel Plan	35
5.7	Summary	35
6	IMPACT ASSESSMENT	37

6.1	Introduction.....	37
6.2	Traffic Growth	37
6.3	Committed Developments	37
6.4	Vehicular Trip Generation	39
6.5	Person Trip Rates.....	42
6.6	Trip Distribution	43
6.7	Off Site Assessment.....	44
6.8	Junction Capacity Assessment.....	45
6.9	M20 Junction 8 & A20 Assessment	58
6.10	Summary	59
7	SUMMARY AND CONCLUSIONS.....	61
7.1	Summary	61
7.2	Conclusion	62

APPENDICES

Appendix A	Scoping Correspondence with KCC
Appendix B	Figures
Appendix C	Traffic Flow Diagrams
Appendix D	ATC Speed Data
Appendix E	Accident Plot
Appendix F	Technical Drawings
Appendix G	Stage 1 Road Safety Audit
Appendix H	RTF Calculation
Appendix I	Lenham Neighbourhood Plan TA Extracts
Appendix J	TRICS Report Output
Appendix K	Distribution Calculations
Appendix L	Junction Capacity Assessment Report Outputs

1 INTRODUCTION

1.1 Purpose of the Report

- 1.1.1 This Transport Assessment (TA) considers the highways and transportation implications associated with a proposed mixed-use development comprising 100 dwellings (40% affordable), sports pitches and a sports pavilion on land located to the south of Old Ashford Road, Lenham, Kent. The Hybrid application is seeking Outline planning permission with all matters reserved except for access for the residential element and a Full application for change of use of land for public sport, play and recreation. This site has been identified as a Lenham Neighbourhood Plan development site.
- 1.1.2 It is acknowledged that Kent County Council (KCC) is the Local Highway Authority (LHA) for the area with Maidstone Borough Council (MBC) being the Local Planning Authority (LPA).
- 1.1.3 Prime Transport Planning (herein referred to as 'Prime') has produced this TA on behalf of the applicant, Dean Lewis Estates (DLE).
- 1.1.4 The document has been prepared in accordance with the Government's *Planning Practice Guidance: Transport evidence bases in plan making* (October 2014) and *Travel plans, transport assessments and statements in decision-taking* (March 2014) as well as the Department for Transport's (DfT) *Guidance on Transport Assessment* (GTA) (March 2007). It considers the accessibility of the site and safety for all modes of travel but specifically walking, cycling and public transport.
- 1.1.5 The conclusions and recommendations contained herein have been drawn based on information available and obtained in advance of the planning submission to which this report relates.
- 1.1.6 Reasonable checks have been carried out on any third-party information used in the preparation of this report but, nonetheless, Prime accepts no liability for the accuracy or otherwise of this data.
- 1.1.7 Third-party rights are excluded for the use of information contained within this report.

1.2 Scope of Report

- 1.2.1 As stated above, this report has been prepared in accordance with *Transport evidence bases in plan making*, which replaced the DfT's GTA on the 22nd October 2014. However, the new document is not a like-for-like replacement for GTA, providing no guidance on the production of Transport Assessments to accompany developments. The latest guidance instead helps local planning authorities assess strategic transport needs to reflect and, where appropriate, mitigate these in their Local Plan.
- 1.2.2 More relevant information is provided within the PPG under *Travel Plans, transport assessments and statements in decision-taking*, however, this also does not provide the level of detailed guidance that was contained within DfT's GTA.

-
- 1.2.3 The lack of current detailed guidance places greater emphasis on agreeing the scope of a TA with the LHA responsible for the location in which the development is proposed and in employing industry best-practice. Given that GTA was in place for 7-years, Prime believes that assessment in-line with the document still represents industry best-practice, particularly for aspects where the current guidance lacks the necessary detail to form a robust assessment.
- 1.2.4 An email based scoping exercise was undertaken with the LHA, with an initial scoping note highlighting the proposed methodology being submitted to the highway's officers at KCC on 2nd April 2019, and KCC responding on 7th June 2019. Further discussions took place following the initial exchange. The original Scoping Note and KCC's response, as well as further correspondence with KCC, are provided in **Appendix A**.
- 1.2.5 Following this introduction, the remainder of this report is structured as follows:
- **Section 2** describes the relevant local and national transport policy and guidance;
 - **Section 3** describes the existing situation in terms of the site, local highway network and traffic conditions, whilst also reviewing the five-year accident records for the local highway network;
 - **Section 4** details the development proposal including the access strategy and parking arrangements;
 - **Section 5** details access to the site by sustainable modes of travel which includes walking, cycling and public transport, and provides a summary of the Travel Plan;
 - **Section 6** discusses the forecasting methodology, trip generation of the site and the ability of the proposed site access and various off-site junctions to accommodate the generated traffic; and
 - **Section 7** summarises and concludes the findings of the Transport Assessment.

2 TRANSPORT POLICY AND GUIDANCE

2.1 Introduction

- 2.1.1 It is important that new developments conform to and complement national and local planning policy and therefore this section details the policies that are relevant to this development.

2.2 National Planning Policy Framework

- 2.2.1 The current *National Planning Policy Framework* (NPPF) was published in February 2019 and sets out the Government's current planning policies. At the core of NPPF is '*a presumption in favour of sustainable development*' as detailed in paragraphs 10 and 11.

- 2.2.2 Section 9 of the NPPF, *Promoting sustainable transport*, outlines the important role that the planning system has in facilitating sustainable development. It states in paragraph 103 that:

'Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health.'

- 2.2.3 The document offers guidance for planning policies including:

- supporting appropriate mixes of land uses;
- minimising the number and length of journeys;
- actively involving local highway authorities, transport infrastructure providers and operators and neighbouring councils in order to align strategies and investments for supporting sustainable travel; and
- providing high quality walking and cycling networks and associated supporting facilities such as cycle parking.

- 2.2.4 Paragraph 108 of the NPPF provides direction for the assessment of sites for development, stating:

'...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.'

2.2.5 In determining planning applications, paragraph 109 states that:

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

2.2.6 Paragraph 110 continues:

‘Within this context, applications for development should:

a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second - so far as possible - to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and

e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.’

2.2.7 In the context of maximising sustainable transport solutions, paragraph 103 of NPPF acknowledges that the opportunities to do so will vary between urban and rural locations.

2.2.8 In the context of PRow connections and enhancement, point a) of paragraph 118 acknowledges improved public access to the countryside as being a benefit that should be encouraged.

2.2.9 Paragraph 111 highlights the need for planning applications for developments that will *‘generate significant amounts of movements’* to be accompanied by a Transport Assessment or Transport Statement and a Travel Plan so that the *‘likely impacts of the proposal can be assessed’*.

2.3 Planning Practice Guidance

2.3.1 The theme of sustainable development runs throughout Planning Practice Guidance, with the detailed elements regarding transport being focussed in the following sections:

- Transport evidence bases in plan making and decision taking; and
- Travel plans, transport assessments and statements in decision-taking.

2.3.2 Both sections of the Guidance provide significant amounts of detail on the information types and sources that are appropriate for helping Local Planning Authorities to take forward their Local Plan with an appropriate evidence base. The Guidance is also a useful reference for assessing schemes such as the development which this report accompanies.

2.3.3 The core components of the requirements for assessment, as set out in the Guidance, can be summarised as:

‘The key issues, which should be considered in developing a transport evidence base, include the need to:

- assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms;
- assess the opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport;
- highlight and promote opportunities to reduce the need for travel where appropriate;
- identify opportunities to prioritise the use of alternative modes in both existing and new development locations if appropriate;
- consider the cumulative impacts of existing and proposed development on transport networks;
- assess the quality and capacity of transport infrastructure and its ability to meet forecast demands; and
- identify the short, medium and long-term transport proposals across all modes’.

2.3.4 The principles set out in Planning Practice Guidance are consistent with the approach undertaken in the production of this TA.

2.4 Manual for Streets

2.4.1 *Manual for Streets* (MfS) was published on behalf of the DfT and Communities and Local Government in March 2007 and provides advice for the design of residential streets in England and Wales.

2.4.2 The focus of MfS is to demonstrate the:

‘benefits that flow from good design and assigns a higher priority to pedestrians and cyclists, setting out an approach to residential streets that recognises their role in creating places that work for all members of the community. MfS refocuses on the place function of residential streets, giving clear guidance on how to achieve well-designed streets and spaces that serve the community in a range of ways’ (MfS p. 7).

2.4.3 The guidance addresses many common design principles and discusses detailed design issues, often presenting recommended design criteria. Some of the key principles of MfS include:

- The need to shift from focusing on designing for motor vehicles to designing streets around the needs of pedestrians, cyclists and public transport users which in turn enhances safety;
- Good design can help to create and strengthen a sense of place and community;
- Creating streets that are permeable and offer good quality connections to main destinations for all road users;
- Inclusive design that recognises the needs of people of all ages and abilities; and
- Cost-effective construction often by avoiding over-designing.

2.4.4 In September 2010 a companion document *Manual for Streets 2 - wider application of the principles* (MfS2) was published. This document expands on some of the design principles of MfS and provides examples of places where designs based on these principles have been implemented.

2.5 Kent County Council Transport Plan 2016-2031

2.5.1 The *Local Transport Plan 2016-2031: Delivering Growth without Gridlock* (referred to as LTP4) was adopted in August 2016. LTP4 builds on the success of the previous LTP3 and incorporates the strategic priorities for Growth Without Gridlock (2010) Kent's Transport Delivery Plan.

2.5.2 The LTP4 is a statutory document which '*clearly identifies our transport priorities for the County, as well as emphasising to national Government and the South East Local Enterprise Partnerships (SELEP) the investment required to support growth*'.

2.5.3 It contains numerous policies to help achieve the overarching ambition:

'To deliver safe and effective transport, ensuring that all Kent's communities and businesses benefit, the environment is enhanced and economic growth is supported'.

2.5.4 KCC aligns these policies with the regional vision in '*Increasing Opportunities, Improving Outcomes*' contained within Kent's Strategic Statement 2015-2020.

2.5.5 The LTP4 acknowledges that investment in transport networks is essential for unlocking development sites, relieving congestion, improving safety and enabling a shift towards more sustainable modes. The Outcomes and associated Policies reflect this, are as follows:

- **Outcome 1: Economic Growth and Minimised Congestion**
Policy: Deliver resilient transport infrastructure and schemes that reduce congestion and improve journey time reliability to enable economic growth and appropriate development.
- **Outcome 2: Affordable and Accessible Door-to-Door Journeys**
Policy: Promote affordable, accessible and connected transport to enable access for all to jobs, education, health and other services.
- **Outcome 3: Safer Travel**

Policy: Provide a safer road, footway and cycleway network to reduce the likelihood of casualties and encourage other transport providers to improve safety on their networks.

- **Outcome 4: Enhanced Environment**

Policy: Deliver schemes to reduce the environmental footprint of transport and enhance the historic and natural environment.

- **Outcome 5: Better Health and Wellbeing**

Policy: Provide and promote active travel choices for all members of the community to encourage good health and wellbeing, and implement measures to improve local air quality.'

- 2.5.6 Alongside the strategic and countrywide priorities, LTP4 provides the opportunity to bring together Local Plans and Supporting Transport Strategies.

2.6 Maidstone Borough Local Plan 2011-2031

- 2.6.1 The *Maidstone Borough Local Plan* was adopted by MBC in October 2017 and sets out the overall vision and objectives for the delivery of growth in the Maidstone District between 2011 and 2031. The Local Plan is the principle Development Plan Document (DPD) for the Borough and all other Local Plan documents conform to it.

- 2.6.2 **Policy SP23 - Sustainable Transport** centres on facilitating the '*delivery of transport improvements to support the growth proposed by the local plan*' and will involve the production of an Integrated Transport Strategy. The policy states that the council and its partners will:

'Deliver modal shift through managing demand on the transport network through enhanced public transport and the continued Park and Ride services and walking and cycling improvements;

Deliver strategic and public transport links to and from Maidstone, including increased bus service frequency along the radial routes into the town centre and its railway stations, particularly in the morning and evening peak travel times;

Work with service providers to improve bus links to the rural service centres and larger villages, including route options and frequency.'

2.7 Maidstone Integrated Transport Strategy 2011-2031

- 2.7.1 The *Integrated Transport Strategy* (ITS) was adopted in 2011 and updated in 2016 and assesses the principal existing and future challenges affecting the transport network. It sets out a vision and identifies a detailed programme of interventions to support the measures and interventions set out in the Maidstone Borough Local Plan.

- 2.7.2 The vision underlines five key strategic objectives:

1. Enhancing and encouraging sustainable travel choices;
2. Enhancement of strategic transport links to, from and within Maidstone town;
3. Ensure the transport system supports the growth projected by Maidstone's Local Plan;
4. Reducing the air quality impacts of transport; and
5. Ensure the transport network considers the needs of all users, providing equal accessibility by removing barriers to use.

2.7.3 To achieve the key strategic objectives, the ITS seeks to:

- Reduce the demand for travel;
- Change travel behaviour;
- Promote modal shift; and
- Improve network efficiency.

2.7.4 There are several ITS 'actions' that are applicable to Lenham as follows:

- Action H1 – Highway Improvements. This consists of improvements to three junctions in Lenham, specifically A20/Ham Lane, A20/Old Ashford Road and Faversham Road/Old Ashford Road/Maidstone Road/High Street. The A20/Faversham Road junction has recently been upgraded.
- Action PT5 – Rail Improvements.
- Action PT8 – Promote high quality bus services from Rural Service Centres.
- Action W1 – Provision of accessible pedestrian routes for all users through widening footways and providing step free access to facilities.
- Action C2 – Maintain and develop cycle routes in rural settlements including, routes to schools, railway stations and providing appropriate cycle parking.

2.7.5 Modal shift targets have also been set which include a 4% increase in walking, 2.2% increase in cycling and a 4.7% increase in public transport use with a 7.3% reduction in car drivers.

Maidstone Walking and Cycling Strategy 2016

2.7.6 The ITS includes the *Maidstone Walking and Cycling Strategy (MWCS)* which provides an evidence base for the walking and cycling actions in the ITS. The MWCS outlines the following four objectives to achieve the walking and cycling targets of the ITS:

- Creating new links;
- Maintenance of the cycle route network;
- Creating a safer environment for walkers and cyclists; and
- Spreading the word (raising awareness of the emerging facilities available).

2.8 Lenham Neighbourhood Plan - Transport Assessment 2019

2.8.1 The Lenham Neighbourhood Plan Infrastructure Delivery Report sets out a number of infrastructure aspirations that the Parish Council are seeking to be delivered by the committed and proposed developments in Lenham. These include the following:

- Link road from A20 Ashford Road to Ham Lane North of the Railway Crossing;
- Improvement to the Ham Lane crossing over the railway (Smokey Bridge);
- Improvements to the carriageway of Ham Lane including provision of an improved junction of Ham Lane with A20 Ashford Road;
- Provision of footway crossing over the Railway to facilitate access to Lenham Station from the south side; and
- Strategic footpath and cycleway from the boundary with Charing Parish to the east to Harrietsham Parish to the west.

2.8.2 In addition to the above proposals, it is understood that the Parish Council have aspirations for additional interventions to be delivered. These include:

- The extension of the 30mph zone along Old Ashford Road to the access of the proposed development; and
- The routing of the distributor link road through the Old Goods Yard.

2.8.3 In order for this assessment to align with that undertaken to support the Local Plan, several aspects of the Neighbourhood Plan TA methodology have been adopted, including trip generation, link road reassignment and mode share. Extracts from the Neighbourhood Plan TA are included in the Appendices for ease of reference.

2.9 The Kent Design Guide

2.9.1 The Kent Design Guide (KDG) and its interim guidance notes are the current design document provided by KCC to developers and 'seeks to provide a starting point for good design while retaining scope for creative, individual approaches to different buildings and different areas'. The document was prepared prior to MfS but has been reviewed by one of the MfS authors who concluded that the KDG was largely in accordance with it. Three areas of the KDG were however found to be no longer in line with MfS which has led to the production of three Interim Guidance Notes.

2.9.2 *Step 3 Designing for movement of Section 2 - Creating the Design* also contains specific guidance for access via all likely modes of transportation. Its principles very much echo those of MfS, particularly in terms of designing permeable developments, creating safe and direct routes for pedestrians, cyclists and public transport users. It introduces road hierarchy and states that '*highway design should relate to a specific spatial type, use, form and function*'.

2.9.3 It details the typical design parameters, including geometry, for each road type. **Section 4** of this report describes the access arrangements which are to be incorporated with this proposed development.

2.9.4 *Interim Guidance Note 2: Visibility* (2008) has been produced as a review of the KDG and has reported that the stopping sight distances (SSD) presented in it, are somewhat historic with recent research demonstrating that these distances are unreasonably high. The Guidance Note expands on the MfS SSD calculation and the SSDs presented are in line with those in MfS and the methodology in MfS and MfS2.

2.10 Summary

2.10.1 This section has outlined national and local transport policies and guidance which are applicable to the development site. How the site conforms to and complements these policies and guidance will be discussed in the following sections of this report, where relevant.

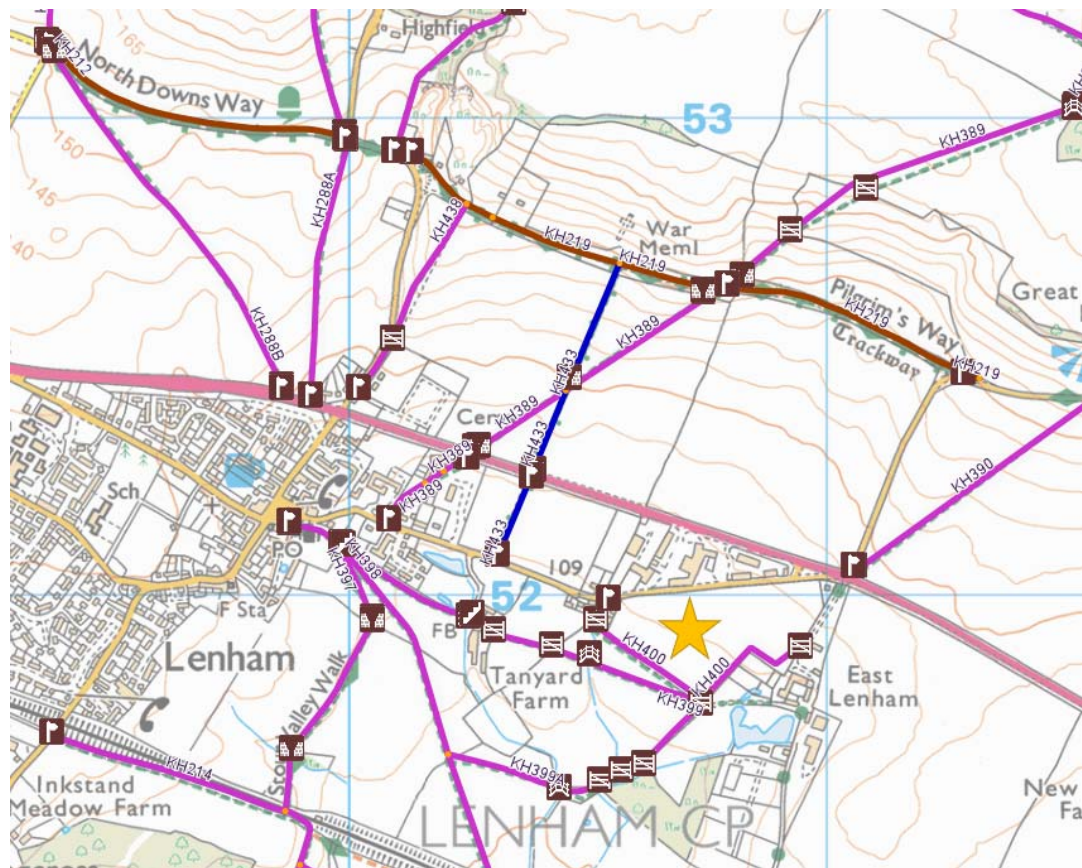
3 EXISTING SITUATION

3.1 Site Description

- 3.1.1 The application site is currently undeveloped and in agricultural use. It is located to the east of the centre of the village of Lenham.
- 3.1.2 Old Ashford Road forms the northern boundary of the site, while Burnside Cottages form the western boundary. Farmland and open countryside form the site's eastern and southern boundaries.
- 3.1.3 Lenham is a market village in Kent situated circa 15km to the south-east of Maidstone and circa 15km to the north-west of Ashford. More locally, Lenham is situated circa 5km to the north-west of the village of Charing. The location of the site, in the context of Lenham and the local highway network, is illustrated in **Figure 1** in **Appendix B**.

3.2 Local Walking and Cycling Network

- 3.2.1 **Image 3.1** below shows the Public Rights of Way (PRoW) network within the vicinity of the site, this being an extract of KCC's online mapping system. The site is highlighted by the yellow star and the PRoW footpaths are highlighted in purple, restricted byways in blue and byways in brown.
- 3.2.2 It can be seen from a review of **Image 3.1** that there is a fairly extensive PRoW network in the vicinity of the proposed development. PRoW footpath KH400 runs alongside the southern and eastern boundaries of the site, which provides a connection to the village centre to the west via PRoW footpath KH399 and to KH398 which forms part of the Stour Valley Walk. Restricted byway KH433 runs from Old Ashford Road to byway (open to all traffic) KH219 which forms part of the North Downs Way National Trail and National Cycle Network (NCN) Route 17 that runs from Rochester via Maidstone and Ashford to the South coast between Folkestone and Lydd. Cycling is permitted along both the local byway and restricted byway.

Image 3.1: Extract from KCC's Online Mapping System Depicting the Public Rights of Way

Source: <https://webapps.kent.gov.uk/countrysideaccesscams/standardmap.aspx>

3.3 Local Highway Network

- 3.3.1 As stated earlier in this section, Old Ashford Road forms the northern boundary of the site, with this frontage measuring circa 380m in length. Circa 50m to the west of the site's north eastern corner, a somewhat rural gated access is provided.
- 3.3.2 Old Ashford Road is a two-way single carriageway, which provides a connection into the centre of Lenham to the west and the A20 to the east. Adjacent to the site frontage, it has a width of circa 6.0m.
- 3.3.3 There are no footways provided in either verge along the site frontage, with a circa 2.0m wide footway commencing in the southern verge at the site's north western corner. This footway provides a continuous connection into the centre of Lenham.
- 3.3.4 Along the site frontage in its entirety, the road is subject to national speed limit (60mph), with it becoming 30mph circa 300m to the west of the site's north western corner. The speed limit change is delineated through the provision of speed limit signs on both sides of the carriageway. No street lighting is provided along the site frontage, with such provision commencing within the 30mph speed limit zone.

- 3.3.5 The nearest bus stops are provided on Old Ashford Road to the west of the site, adjacent to Glebe Gardens. Further information regarding the bus stops and their associated services is provided in **Section 5** of this report.
- 3.3.6 The A20 is a regional distributor road which provides a connection to Maidstone and Ashford to the north west and south east respectively, while also providing access on to the M20. The A20 runs to the north of Lenham, acting as a bypass for through movements. Ghost islands are provided for right turns onto the local roads that lead to the village.
- 3.3.7 The A20 and Old Ashford Road form junction with Faversham Road which is known as High Street in the village centre and Headcorn Road to the south. As the names suggest, it provides a north-south route to the two settlements while more locally forms the village High Street containing shops and other amenities.

3.4 Existing Traffic Conditions

- 3.4.1 Several site visits to Lenham have been undertaken which included weekday AM and PM peak periods. No major queues or delays were observed. Observations made during the site visit have been used to inform the proposed site access strategy detailed in **Section 4**.
- 3.4.2 Within the aforementioned Scoping Note sent to KCC, Prime proposed to undertake the following manual classified turning count (MCC) surveys at the following junctions:
- A20/Old Ashford Road;
 - Faversham Road/Old Ashford Road/High Street/Maidstone Road; and
 - A20/Faversham Road.
- 3.4.3 KCC stated in their response that MCC surveys should also be undertaken at the A20/Maidstone Road junction which has also been included in the surveys.
- 3.4.4 The location of the MCC surveys are shown geographically in **Figure 1** within **Appendix B**.
- 3.4.5 The MCC surveys were carried out by external traffic data collection specialist 360TSL Traffic Data Collection, on behalf of Prime, between 07:00 and 10:00 and 15:30 and 18:30 to ensure that the commuter peaks were surveyed, allowing the morning (AM) and evening (PM) peak hours to be determined. A survey of queue lengths on the various approaches to the above junctions was also undertaken as part of these surveys.
- 3.4.6 The utilisation of the results of these surveys, in ascertaining the capacity of the site access and the abovementioned junctions, is described in **Section 6**.
- 3.4.7 The traffic survey data had been interrogated to derive the AM and PM peak hours of the local highway network which were found to be as follows:

- AM Peak: 07:00-08:00; and
- PM Peak: 16:30-17:30.

- 3.4.8 Not all junction peaks matched the network AM peak of 07:00-08:00, with the Faversham Road/Old Ashford Road/High Street/Maidstone Road junction experiencing an AM peak of 07:45-08:45. It is evident that the A20 influences the network AM peak by virtue of it being the only study junction which excludes the A20, thereby experiencing a different AM peak hour. The raw traffic survey data is available on request.
- 3.4.9 KCC also stated in their response to the Scoping Note that *‘the cumulative effects of planned growth in Lenham also mean that M20 J8 and the section of the A20 between J8 and the B2163 also need to be included’*. As such, in order to undertake such assessment, traffic data from two DfT counts has been utilised. Count no.99598 (2015 data) is located on the link road between the A20 and the M20 Junction 8 slips, with Count no. 16232 (2017 data) located on the A20 just east of the A20/link road roundabout.
- 3.4.10 **Traffic Flow Diagrams 1 and 2**, included at **Appendix C**, summarise the observed peak hour traffic flows and queue lengths. In order to aid the capacity assessment modelling detailed in **Section 6**, the three user classes surveyed have been condensed into two, with buses added to the ‘heavies’ user class. The queue length surveys recorded the maximum queue lengths every five minutes at the various junctions surveyed. Queues were measured as stationary and/or slow-moving traffic less than 5mph.
- 3.4.11 The observed traffic speeds along Old Ashford Road adjacent to the site were measured via an Automatic Traffic Counter (ATC), which was installed for 7 days from Monday 11th February 2019 to Sunday 17th February 2019. The results of the ATC survey are shown in **Table 3.1** below and the raw speed survey data is included in **Appendix D**.

Table 3.1: Recorded Speeds along Old Ashford Road in the Vicinity of the Site

Direction	Speed (mph)	
	Average	85th %ile
Eastbound	36.9	43.3
Westbound	37.0	43.5

- 3.4.12 The ATC was placed near to the access point associated the coach depot, now a car wash, located opposite the site’s north western corner. The above results demonstrate that vehicles are travelling much slower than the prevailing derestricted speed limit (60mph), with the 85th%tile speeds of eastbound and westbound vehicles being 43.3mph and 43.5mph respectively. The speeds are however notably higher than 30mph which is a more desirable speed for the approach to a village centre. The speeds are in line with those surveyed as part of the Neighbourhood Plan TA. The

applicant intends to provide funding for a traffic regulation order (TRO) to extend the 30mph speed limit further north-east beyond the proposed site accesses as mentioned in **Section 4**.

3.5 Road Safety

- 3.5.1 Personal injury accident data has been purchased from KCC for the latest five-year period between 1st October 2013 and 30th September 2018. The study area covers the A20 from its junction with Rayners Hill to its junction with Maidstone Road, as well as Old Ashford Road from its junction with the A20 to its junction with Faversham Road, Maidstone Road and High Street. As such, the study area comprises all junctions assessed in **Section 6**.
- 3.5.2 The study area was agreed with KCC during scoping discussions and a plan illustrating the location of the recorded accidents is provided in **Appendix E**, with the accident reports available on request.
- 3.5.3 In total there were 25 accidents within the study area, 16 of which were slight injury accidents, 8 of which were serious and 1 fatal. The annual breakdown is shown in **Table 3.2** below.

Table 3.2: Summary of Reported Personal Injury Accidents

Year	Accident Severity			Total
	Slight	Serious	Fatal	
From Oct 2013	1	1	-	2
2014	2	1	-	3
2015	4	2		6
2016	-	-	-	0
2017	3	2	1	6
Up to Sept 2018	6	2	-	8
Total	16	8	1	25

- 3.5.4 There appears to have been a recent peak in accidents with 6 in 2017 and 8 in the first 9-months of 2018, although no accidents were reported in 2016.
- 3.5.5 The accidents have been reviewed to identify geographic clusters or common causation factors across the highway network near to the site.

A20/Faversham Road

- 3.5.6 A fatal accident occurred at this junction in October 2017. The details state that a vehicle had exited the southern arm of Faversham Road to cross the A20 carriageway and reach the northern arm of Faversham Road. Upon making this manoeuvre, the vehicle collided with a second vehicle which was travelling towards Charing along the A20. No contributing factors are stated within the report, though given the good visibility which exists at this junction, it is believed the accident occurred as a result of driver error.

- 3.5.7 The first serious accident occurred in 2013 when a vehicle failed to stop in time when approaching the A20/Faversham Road junction and has then collided into the rear of a stationary vehicle. The second serious accident occurred in 2014 when a vehicle exited Faversham Road, onto the A20, and in performing this manoeuvre collided with a second vehicle already travelling along the A20. A third serious accident occurred in 2015 and involved a car and a motorcycle. The details state that the vehicle had again pulled out from Faversham Road onto the A20 carriageway. In performing this manoeuvre, the vehicle had pulled into the path of a motorcycle already travelling along the A20 resulting in a collision. A second similar accident occurred in July 2018, with a vehicle pulling into the path of a motorcycle from Faversham Road.
- 3.5.8 Three other slight accidents occurred at this junction. All of the accidents to occur at this junction did so as a result of driver error, with no details indicating that carriageway design contributed towards these accidents.
- 3.5.9 As informed by KCC, a safety improvement scheme has recently been implemented at the junction. The scheme appears to consist of footway widening, new footway provision, uncontrolled crossing on northern arm, traffic island with illuminated bollards and uncontrolled crossing on the western arm and removal of the traffic island on the eastern arm to provide a longer ghost island length. It is anticipated that this scheme will help to reduce accident frequency and severity at the junction.

Faversham Road/Old Ashford Road/High Street/Maidstone Road

- 3.5.10 The only serious accident to occur at this crossroads involved a vehicle and a motorcycle. The accident occurred as a vehicle had exited a car park near to the crossroads the wrong way, into the path of the motorcycle.
- 3.5.11 The other four accidents to occur at this junction were slight, with the details provided suggesting that the accidents occurred as a result of driver error, with no information to suggest that they occurred as a result of highway design.

A20/Old Ashford Road

- 3.5.12 Two slight accidents occurred at the western fork of the junction, both of which resulted in slight injury. The first accident occurred in 2017 when a car driver, turning out of Old Ashford Road, reportedly had their vision impaired by low sunlight resulting in a collision with a light goods vehicle. The second slight accident occurred in 2018 and involved three cars. One car was waiting to turn right out of Old Ashford Road when a driver on the A20 gave the driver an indication that they could pull-out, however a third vehicle travelling in the opposite direction on the A20 was unaware of this, resulting in a collision.
- 3.5.13 A single slight accident occurred to the east of the eastern fork of the junction at Hubbards Hill in 2015 when a car pulled out of Hubbards Hill into the path of a vehicle travelling on the A20.

Other Accidents of Note

- 3.5.14 Two other serious accidents occurred within the study area. The first incident occurred along the A20, with details stating that a motorcycle attempted to overtake a right turning vehicle, thereby causing a collision. The second serious accident occurred along Old Ashford Road, with the details stating a drunk driver had deliberately collided with another vehicle, before crashing into a tree.
- 3.5.15 A slight accident occurred on Old Ashford Road close to the northeast corner of the site in 2014 when a car collided with a pedestrian who had crossed the road.
- 3.5.16 All other remaining accidents were classed as slight, occurred independently from each other with no clustering, and had no information to suggest that they occurred as a result of highway design. There is no evidence to suggest that the development proposals will result in an increase in the frequency or severity of traffic accidents. Several safety enhancements are proposed as part of the development as detailed in **Section 4** which should be of benefit to existing road users.

This page has been
left intentionally
blank

4 DEVELOPMENT PROPOSAL

4.1 Development Description

- 4.1.1 The Hybrid application comprises of Outline application (all matters reserved except for access) for up to 100 dwellings with associated works and infrastructure and Full application for change of use of land for public sport, play and recreation, on land located to the south of Old Ashford Road, Lenham, Kent. This site has been identified as a Lenham Neighbourhood Plan development site.
- 4.1.2 The residential element will include 40% affordable dwellings while the sports facility will include two senior football pitches, one junior pitch and a sports pavilion building containing changing facilities with toilets along with room for a squash court. It should be noted by KCC that the application for the change of use of land for sports and recreational use will deal with the matter for the principle of land use only. The layout of this element including the car park and associated buildings and structures will be the subject of an appropriately worded planning condition that will require submission of the details of any buildings or any engineering works.
- 4.1.3 A Development Framework Plan (DFP) has been produced by FPCR and forms part of the supporting documentation for the planning application. It is not included within this document as it has the potential to be revised up to the point of submission and therefore to avoid conflicting and superseded layouts being submitted within the various planning documents, it is omitted from this report. The planning documents should be available via the LPA's planning portal.
- 4.1.4 The DFP shows that the site is to be accessed via two priority-controlled junctions located on Old Ashford Road. The eastern access will primarily serve the residential element; the western access will primarily serve the sports facility. The western priority-controlled junction will connect with the existing footway provision on Old Ashford Road while a shared cycleway/footway will run along the northern boundary of the site in order to retain as much of the hedgerow between the site and Old Ashford Road as possible.

4.2 Access Strategy

Vehicular Access

- 4.2.1 The site will be served by two priority-controlled junctions, both of which will be located on Old Ashford Road, which itself will be widened to a minimum width of 5.5m across the site frontage.
- 4.2.2 The eastern vehicular access will comprise a 6.75m wide carriageway with 10m corner radii, a 3m wide shared cycleway on the western side and a 2m wide footway on the eastern side, in accordance with KCC's standards for a local distributor road.

- 4.2.3 The western vehicular access will comprise a 5.5m wide carriageway stepping down to 4.8m as it passes closer to the sports facility, 10m corner radii, a 3m wide shared cycleway on the western side and a 2m wide footway on the eastern side.
- 4.2.4 It is anticipated that an internal connection between the two accesses will be provided.
- 4.2.5 **Drawing P19013-001G in Appendix F** illustrates the proposed access strategy.

Visibility

- 4.2.6 In order to ensure that both proposed vehicular access points are a safe design, the empirical visibility splays have been calculated based on the Stopping Sight Distance (SSD) for vehicles. MfS2 contains the following calculation for SSD:

$$SSD = vt + v^2/2(d+0.1a)$$

where:

v = speed (m/s)

t = driver perception-reaction time (seconds)

d = deceleration (m/s²)

a = longitudinal gradient (%)

- 4.2.7 Table 10.1 in MfS2 provides a recommendation of variable SSD criteria. For speeds above 60kph (37mph), a reaction time of 2s and deceleration rate of 0.375g (3.68m/s²) (absolute), or 0.25g (2.45m/s²) (desirable), should be used.
- 4.2.8 As established in **Table 3.1 in Section 3** the 85th percentile speeds along Old Ashford Road were found to be 43.3mph and 43.5mph in an eastbound and westbound direction respectively.
- 4.2.9 Applying these speeds in the SSD calculation provided above gives the appropriate SSD, otherwise known as the 'y' distance, of 116m to the left on exit and 117m to the right on exit.
- 4.2.10 Visibility splays of **2.4m x 116m** to the left on exit and **2.4m x 117m** to the right on exit have therefore been shown on **Drawing P19013-001G in Appendix F**, these being deliverable either within the red line boundary of the site or the boundary of the highway.
- 4.2.11 Any vegetation encroaching on the visibility splays between a height of 0.6m and 2.0m will be removed, relocated or cut-back to maintain clear visibility splay envelopes.
- 4.2.12 The applicant is willing to fund the traffic regulation order (TRO) to extend the 30mph speed limit further north-east on Old Ashford Road, this being a desired improvement as part of the Neighbourhood Plan. The applicant is also willing to provide funding for new gateway features to be discussed with KCC to accompany the speed limit extension. The reduction in speeds along Old Ashford Road will help to improve highway safety.

Pedestrian and Cycle Access

- 4.2.13 Pedestrian and cycle access to the site will be provided at the north-west and north-east corners of the site on to Old Ashford Road, which will both be connected via a proposed internal foot/cycle way. As stated above, the new footway along Old Ashford Road, a requirement of the Neighbourhood Plan, will be set-back behind the existing hedgerow in order to retain as much vegetation as possible and to create a safe and pleasant pedestrian/cycle environment segregated from the Old Ashford Road carriageway. A similar arrangement has been proposed as part of the application on land north of Old Ashford Road (17/500357/HYBRID).
- 4.2.14 The footway/cycleway will continue east to the eastern fork of the A20/Old Ashford Road which will be realigned as detailed in **Section 6.8**. An uncontrolled crossing with refuge island wide enough for pedestrians and cyclists to use will then be provided across the A20 to the existing footway provision on the northern side. This northern footway will be widened to 3m up to Hubbards Hill, with the lightly trafficked road providing cycle connection to NCN Route 17 (North Downs Way). Tactile paving and localised footway widening will be provided to aid the crossing of Hubbards Hill for pedestrians.
- 4.2.15 It is noted that the footway on the southern side of Old Ashford Road to the west of the site is narrowed by overgrown vegetation. It is the responsibility of the landowners to regularly cut-back this vegetation and the responsibility of the local highway authority to enforce this. Removal of this overgrown vegetation will help to create a wider, safer walking route for pedestrians.
- 4.2.16 Additional pedestrian connections will be provided to the local PRow footpaths where they enter/exit the site in order to maximise the site's permeability by this sustainable mode of travel and to encourage access to the countryside in line with NPPF guidance. The footway/cycleway improvements will offer considerable benefit to existing local residents as well as future residents of the site.

4.3 Access for Commercial Vehicles and Internal Layout

- 4.3.1 The dimensions suggested for the main vehicular access points also ensure an allowance is made for the largest vehicles expected to regularly access the site, such as refuse collection vehicles, to do so in a safe manner without disruption to other road users and without over-designing.
- 4.3.2 To demonstrate that the accesses will be safe and suitable for larger vehicles, a swept path analysis using the industry approved *AutoTrack* software has been undertaken for a typical non-commercial refuse collection vehicle (three axle Dennis Eagle Elite), which is the largest vehicle expected to regularly access the site. The swept path analysis for the refuse collection vehicle has been illustrated in **Drawings P19013-200B and P19013-201B in Appendix F**, which demonstrates that the vehicle can safely access and egress the site in a forward gear.
- 4.3.3 An additional swept path analysis has been undertaken for a coach using the western access as shown in **Drawing P19013-202B in Appendix F**, which shows that the access arrangement will be sufficient

for coaches, although movement by these vehicles will be very infrequent with the majority of vehicles visiting the site being cars and occasional mini-buses.

4.3.4 Whilst the internal layout will be subject to a subsequent Reserved Matters application, the detailed design will include turning areas in the various parcels of development for large vehicles, such as refuse collection vehicles and coaches, either in the form of internal loops or turning heads.

4.3.5 The design speed of the roads associated with the proposed development is likely to be 20mph. It is expected that the internal road layout will be based on the principals of KDG and MfS, meaning that the layout will focus on the needs of pedestrians, cyclists and public transport users, create a sense of place and community, create permeable streets offering good quality connections and will recognise the needs of people of all ages and abilities. All of these should be achieved without over-designing.

4.4 Stage 1 Road Safety Audit

4.4.1 At the request of KCC, a Stage 1 Road Safety Audit (RSA) has been undertaken for an earlier version of the proposed access arrangement and an earlier mitigation measure at the A20/Old Ashford Road junction detailed in **Section 6.8**. Extracts of these drawings are included in Appendix Three of the RSA which is provided in **Appendix G** of this TA.

4.4.2 Prime commissioned the independent consultant six:TEN Highways & Traffic Ltd (six:TEN) to undertake the audit. The RSA was undertaken by two Society of Road Safety Auditors qualified professionals who undertook a site visit as part of the RSA on 9th September 2019. The RSA was carried out based on the DMRB document GG119 – *Road Safety Audit* which was the current guidance at the time of the site visit.

4.4.3 The RSA identified seven ‘problems’. These are detailed below along with a Designers’ Response provided to each:

RSA Comment 6.1: Proposed uncontrolled pedestrian crossings on new access roads

Summary: Risk of pedestrians walking directly into carriageway increasing the risk of pedestrian/vehicular collisions

The drawings show that the proposed uncontrolled pedestrian dropped crossings on the access roads are directly at the end of the proposed inset footways. There is a risk that pedestrians reaching the end of the inset footways may walk directly into the carriageway, as they may not be fully aware of the access roads. This issue is especially apparent for child pedestrians who may be running along the inset footways. This may result in pedestrian/vehicular collisions.

Recommendation: The proposed uncontrolled pedestrian crossings on the access roads should be offset from the end of the inset footways and appropriate measures should be provided to ensure pedestrians do not walk directly into the carriageway.

Designers' Response to Comment 6.1

- 4.4.4 The updated access arrangement in **Drawing P19013-001G** shows offset crossing points. Appropriate measures to discourage pedestrians and cyclists from directly crossing, such as guardrails, can be included at the detailed design stage.

RSA Comment 6.2: Proposed inset footways on Old Ashford Road

Summary: Lack of facilities for cyclists increasing risk of collisions with vehicles or pedestrians

The drawings show that both access roads will have, what is assumed to be a 3m wide shared footway/cycleway on the approaches to Old Ashford Road, however, the proposed inset footway along Old Ashford Road only appears to be 2m wide. The lack of facilities for cyclists may result in them using the carriageway or footway, increasing the risk of collisions with passing vehicles or pedestrians respectively.

Recommendation: The proposed inset footways along Old Ashford Road should be widened to allow use for cyclists.

Designers' Response to Comment 6.2

- 4.4.5 The applicant is willing to provide a 3m wide shared cycleway inside the Old Ashford Road site frontage as shown in **Drawing P19013-001G**, rather than a standard footway.

RSA Comment 6.3: Old Ashford Road junction with A20 Ashford Road

- 4.4.6 This 'problem' is detailed and addressed in **Section 6.8**.

RSA Comment 6.4: Proposed uncontrolled pedestrian crossing on Old Ashford Road near the junction with A20 Ashford Road

Summary: Increased risk of pedestrian/vehicular collisions due to excessive vehicles speeds for those turning left off A20 Ashford Road

The proposed location of the uncontrolled pedestrian crossing on Old Ashford Road is relatively close to the junction with A20 Ashford Road. It was observed on site that some vehicles travel at excessive speed when turning left off A20 Ashford Road onto Old Ashford Road. This may increase the risk of collisions between pedestrians crossing Old Ashford Road and vehicles turning left off A20 Ashford Road.

Recommendation: The proposed uncontrolled pedestrian crossing on Old Ashford Road near the junction with A20 Ashford Road should be relocated further west, however, pedestrian/driver inter-

visibility will need to be considered at the proposed location. The existing kerb radius at the junction of Old Ashford Road and A20 Ashford Road should be reduced to encourage lower speeds for those turning left off A20 Ashford Road. This recommendation should be read in conjunction with the recommendation in 6.3 above.

Designers' Response to Comment 6.4

- 4.4.7 The crossing and cycleway arrangement location is rationalised in **Drawing P19013-001G** and shown in more detail in **Drawing P19013-003D (Appendix F)** described in **Section 6.8** as part of a mitigation measure. The addition of a radius, as opposed to the taper arrangement, on the eastern fork of the A20/Old Ashford Road junction will help to reduce speeds on the eastern fork and provide the opportunity to construct a pedestrian crossing with refuge island over the A20, negating the need for pedestrians to directly cross the eastern fork.

RSA Comment 6.5: A20 Ashford Road eastbound and westbound approaches to proposed uncontrolled pedestrian crossing

Summary: Lack of High Friction Surfacing (HFS) may increase the risk of pedestrian/vehicular collisions

It was observed on site that there is existing HFS on the A20 Ashford Road on both the eastbound and westbound approaches to the junction with Old Ashford Road, however, it does not continue up to the location of the proposed uncontrolled pedestrian crossing. A lack of HFS on the approaches to the uncontrolled pedestrian crossing may increase the risk of collisions between pedestrians crossing the A20 Ashford Road and approaching vehicles.

Recommendation: High Friction Surfacing should be proposed on the A20 eastbound and westbound approaches to the proposed uncontrolled pedestrian crossing.

Designers' Response to Comment 6.5

- 4.4.8 The applicant is willing to provide additional HFS to include the eastern fork of the A20/Old Ashford Road junction and the proposed crossing over the A20 as shown in **Drawings P19013-001G and P19013-003D**.

RSA Comment 6.6: A20 Ashford Road southern grass verge near to proposed uncontrolled pedestrian crossing

Summary: Street furniture obscuring footway and pedestrian visibility

It was observed on site that there is existing street furniture (traffic signs/feeder pillar) within the southern verge on the A20 Ashford Road near to the proposed uncontrolled pedestrian crossing. The traffic signs may obscure visibility for those pedestrians wishing to cross the A20 Ashford Road from south to north, increasing the risk of pedestrian/vehicular collisions. The feeder pillar, if it remains in

its current location, may obstruct the footway, resulting in pedestrians colliding with it or manoeuvrability issues for those with pushchairs, wheelchairs and mobility scooters.

Recommendation: The street furniture should be removed/relocated accordingly.

Designers' Response to Comment 6.6

- 4.4.9 This comment is no longer directly applicable to the updated proposals, however any street furniture that obstructs the path of pedestrians or cyclists as part of the revised proposals will be rationalised or relocated and addressed at the detailed design stage.

RSA Comment 6.7: A20 Ashford Road proposed footway in southern grass verge near to proposed uncontrolled pedestrian crossing

Summary: Excessive footway gradient may result in manoeuvrability issues for those with pushchairs, wheelchairs and mobility scooters

It was observed on site that the existing gradient on the southern grass verge on the A20 Ashford Road near to the proposed pedestrian crossing is relatively steep. An excessive gradient on the proposed footway at this location may create manoeuvrability issues for those with pushchairs, wheelchairs and mobility scooters. Additionally, a steep gradient may result in self-propelled wheelchairs being unable to stop at the carriageway edge when wishing to cross Old Ashford Road from north to south.

Recommendation: The gradient on the proposed footway should be such that it is not too steep for those with pushchairs, wheelchairs and mobility scooters.

Designers' Response to Comment 6.7

- 4.4.10 This comment is no longer directly applicable to the updated proposals, however any new foot/cycleway provision will be constructed to an agreeable gradient and addressed at the detailed design stage.

4.5 Parking

- 4.5.1 As the final housing mix is not known and subject to future submissions, calculations relating to detailed parking provision for the residential element have not been undertaken. Reserved Matters applications will provide sufficient parking, both in terms of numbers and dimensions, to comply with the relevant standards at the time of submission.
- 4.5.2 It is anticipated that the sports facility will require parking provision in line with KCC and Sports England guidance. Whilst the numbers and layout will be subject to Reserved Matters, the applicant is keen to demonstrate that a sufficient number of spaces can be provided. FPRC have produced an indicative layout based on KCC's *Supplementary Planning Guidance SPG 4 Kent Vehicle Parking Standards* (July 2006). The standards within the document for outdoor sports facilities are 1 space per

2 participants plus 1 space per 15 spectators. Assuming that there will be an average of 14 players per team (including substitutes), 2 teams x 3 pitches = 84 players meaning 42 spaces for players. FPCR's indicative layout shows 56 spaces including 3 disabled spaces, leaving 14 spaces for spectators and squash players. The exact requirement can be considered further at the Reserved Matters stage.

4.6 Summary

- 4.6.1 As described in this section, the development proposals, particularly the vehicular access, will conform to national and local policy guidance. The design of the access roads will conform to the standards in the KDG and MfS. Comments raised in a Stage 1 RSA have been addressed.
- 4.6.2 The footway and cycleway improvements offer a considerable improvement which will be of benefit to existing and future residents. The shared cycleway provision along Old Ashford Road inside and along the site frontage up to Hubbards Hill will provide a safe and pleasant route for journeys on foot and by bicycle, helping to integrate the development site and this area of Old Ashford Road into the existing infrastructure provision.
- 4.6.3 The design reflects the MfS principles of inclusive design, shifting from focusing on designing for motor vehicles to designing streets around the needs of pedestrians, cyclists and public transport users, controlling speeds, not overdesigning and creating permeable streets. These principles in turn help the site to conform to NPPF guidance, as seen within paragraph 110 in giving priority to pedestrian and cycle movements and considering the '*needs of people with disabilities*', as well as paragraph 108 in creating '*safe and suitable access to the site*' and paragraph 118 by providing improved access to the countryside.
- 4.6.4 The design also reflects Outcome 3 of LTP4, Policy SP23 of the Maidstone Borough Local Plan, the strategic objectives of the Maidstone Integrated Transport Strategy and the aspirations of the Parish Council set out in the Lenham Neighbourhood Plan.

5 ACCESS BY SUSTAINABLE MODES

5.1 Introduction to Sustainable Modes of Transport

- 5.1.1 National and local transport planning policy centres on the importance of sustainable development, meaning that new developments should be located in areas where there is access to sustainable modes of travel, or where sustainable modes of travel can be introduced. These sustainable modes include walking, cycling, public transport, car sharing and use of low emission vehicles (electric/hybrid).
- 5.1.2 Walking, cycling and public transport are commonly regarded to be the most sustainable modes of transportation. This section of the report will describe how accessible the site is by these modes.

5.2 Access on Foot

- 5.2.1 The site is located to the east of the centre of the village of Lenham, which itself has a well-established network of pedestrian infrastructure in the form of good quality footways and street lighting.
- 5.2.2 The development site is proposed to take access from Old Ashford Road in the form of two priority-controlled junctions. A hedgerow currently exists along the site frontage. In the interest of preserving as much of this vegetation as possible, a shared cycleway/footway will run behind this hedgerow, facilitating eastern and western pedestrian movements. The western priority-controlled junction will meet and adjoin to the existing footway provision on Old Ashford Road west of the site. New crossing facilities will be provided over the A20 to the east of the site.
- 5.2.3 As established in **Section 3.2** of this report, a number of PRoW are located in proximity to the development site. The proposed connections to these PRoW help to enhance the accessibility of the development to the surrounding area, including the village centre and the countryside.
- 5.2.4 Research has indicated that acceptable walking distances depend on a number of factors, including the quality of the development, the type of amenity offered, the surrounding area and other local facilities. The Chartered Institution of Highways and Transportation (CIHT) document entitled *Providing for Journeys on Foot* (2000) suggests walking distances which are relevant to this application. These distances are shown in **Table 5.1**.

Table 5.1: Suggested Acceptable Walking Distances

Criteria	Town Centres (m)	Commuting/School/Sightseeing (m)	Elsewhere/Local Services (m)
Desirable	200	500	400
Acceptable	400	1000	800
Preferred Maximum	800	2000	1200

Source: CIHT Document 'Providing for Journeys on Foot' (2000)

- 5.2.5 In order to highlight the site's accessibility on foot, an indicative walking isochrone has been produced using the Geographic Information System (GIS) software Visography TRACC. **Figure 2** in **Appendix B** represents the site's walking catchment with the CIHT's 'Preferred Maximum' distances of 1200m and 2000m for local service and commuting/school trips respectively illustrated.
- 5.2.6 To provide an accurate representation of the future highway and PRow network, the site's proposed vehicular access points have been manually added to the network used for the isochrone. The accessibility distance is based on an origin/destination point in the approximate centre of the portion of the site to be developed for housing.
- 5.2.7 **Table 5.2** below summarises the distance and the typical time it would take to walk from the centre of the site to the local amenities and centres of employment and education identified in **Figure 2** of **Appendix B** via the road/footway network. It provides a comparison against those distances recommended in the CIHT's *Providing for Journeys on Foot*. The time it takes is based on a walking speed of 4.8kph which corresponds with the TRACC default, which itself is based on advice in the DfT document *Transport Connectivity Travel Time Indicators: Guidance Notes*.

Table 5.2: Distance and Walking Time Taken from Site to Local Amenities

Employment/ Education/ Amenity	Distance from Site (m)	Preferred Max Walk Distance (m)	Walk Time (mm:ss)
Ashmill Business Park	553	2000	06:55
Northdown Business Park	667	2000	08:21
The Len Valley Practice	668	1200	08:22
Lenham Community Centre	712	1200	08:55
St Mary's Church	823	1200	10:17
Lenham Library	907	1200	11:22
Lenham Village Centre	931	1200/2000	11:38
Post Office	938	1200	11:44
Village Store	965	1200	12:05
Co-operative Foodstore	1067	1200	13:20
Lenham Social Club	1106	1200	13:50
Bowling Club	1292	1200	16:09
Lenham Primary School	1434	2000	17:57
The Lenham School	1595	2000	19:58
McColl's Convenience Store	1629	1200	20:22
Lenham Train Station	1750	-	21:53
Lenham Storage	1832	1200	22:55
Football Club	2016	1200	25:13
Bus Stops			
opp Glebe Gardens	619	-	07:45
adj Glebe Gardens	659	-	08:16

- 5.2.8 The results in **Table 5.2** show that Ashmill Business Park and Northdown Business Park, which provide employment opportunities for future residents of the site, can be reached within an acceptable walking distance for commuting trips (1000m), while the Len Valley Practice and Lenham Community Centre can be reached within an acceptable walking distance for local service trips (800m). Many amenities and services such as St Mary's Church, Lenham library, a post office, the village store, a Co-operative foodstore and Lenham social club, as well as Lenham village centre which provides a further array of additional amenities, can be reached within the preferred maximum walking distance for local service trips (1200m). A bowling club, a McColl's convenience store, Lenham train station, Lenham Storage and Lenham Football Club can all be reached within 26 minutes by foot. In relation to educational establishments, Lenham Primary School and the Lenham School can both be reached within the preferred maximum walking distance for school trips (2000m). The proposed sport facility will be located in close proximity to the residential element.
- 5.2.9 The nearest pair of bus stops to the development site are located to the west of the site on Old Ashford Road, adjacent to its junction with Glebe Garden. Both bus stops are within a 10-minute walk from the site and can be accessed by the existing footways provided along Old Ashford Road. The applicant is willing to provide funding for an additional pair of bus stops at the site frontage on Old Ashford Road in order to encourage travel by this sustainable mode.
- 5.2.10 Given the evidence presented in **Figure 2** of **Appendix B** and **Table 5.2**, walking can be considered a realistic and viable method of travel indicating that the site's location is accessible via this sustainable mode.

5.3 Access by Cycle

- 5.3.1 The shared cycleway provision as part of the development proposals will help encourage cycling locally, providing a safe and largely traffic-free connection between the site and NCN Route 17.
- 5.3.2 It is widely recognised that cycling can offer an attractive alternative to short car trips, particularly those under 5km, but also as part of longer journeys by public transport.
- 5.3.3 The DfT's Local Transport Note 2/08 Cycle Infrastructure Design states that:
- 'The road is the most basic (and important) cycling facility available, and the preferred way of providing for cyclists is to create conditions on the carriageway where cyclists are content to use it, particularly in urban areas.'*
- 5.3.4 A cycling isochrone showing the site's catchment has also been produced using TRACC and is shown as **Figure 3** in **Appendix B**. The figure illustrates 2000m and 5000m catchment ranges which equate to 10-minute and 25-minute journey times respectively which are based on the somewhat conservative or leisurely cycle speed of 12kph. Anecdotally, commuting cyclists are generally thought

to travel at speeds between 15-20kph and often willing to cycle up to 8000m so a greater catchment may be more realistic.

- 5.3.5 The cycling distances and times to a selection of key local centres of education, employment and amenities, as well as neighbouring settlements, are shown in **Table 5.3**, although the cycle times detailed in the table are based on a cycling speed of 16kph which corresponds with the TRACC default, which the software developer has based on DfT advice. It should be noted that some of the cycle distances differ from the walking distances as cycling along PRowS is typically not allowed unless designated as cycleways, bridleways or byways.

Table 5.3: Distance and Cycling Time Taken from Site to Local Centres of Employment, Education, Amenities and Neighbouring Settlements

Amenity/ Settlement	Distance from Site (m)	Cycle Time (mm:ss)
Ashmill Business Park	553	02:07
Northdown Business Park	667	02:34
The Len Valley Practice	668	02:36
Lenham Community Centre	712	02:46
St Mary's Church	823	03:07
Lenham Library	907	03:32
Lenham Village Centre	931	03:31
Post Office	938	03:35
Village Store	965	03:44
Co-operative Foodstore	1067	04:02
Lenham Social Club	1106	04:11
Bowling Club	1292	04:52
Lenham Primary School	1434	05:28
The Lenham School	1595	06:06
McColl's Convenience Store	1629	06:08
Lenham Train Station	1750	06:37
Lenham Storage	1832	06:55
Football Club	2016	07:36
BP Garage/M&S Food	2316	08:49
Dickley Lane Industrial Estate	2351	08:51
Platt's Heath	3470	13:05
Harrietsham	4090	15:25
Charing Heath	4729	17:58
Charing	5051	19:02

- 5.3.6 **Figure 3 in Appendix B** and **Table 5.3** above illustrate that there is a considerable range of local amenities, places of employment, places of education and settlements within the cycle catchment. All of the local amenities mentioned in the Access on Foot section above are within the 2000m catchment of the site (with only Lenham Football Club slightly exceeding this) and can be reached within 10-minutes by cycle.

- 5.3.7 An examination of **Table 5.3** shows that a BP Garage/M&S foodstore and Dickley Lane Industrial Estate can both be reached within a 9-minute cycle time. The settlements of Platt's Heath, Harrietsham, Charing Heath and Charing can all be cycled within a 20-minute cycling time. Each of these settlement areas provide their own employment/educational opportunities and amenities as well as providing a good catchment of potential users of the sports facility.
- 5.3.8 Given the evidence presented in **Figure 3** of **Appendix B** and **Table 5.3**, cycling can be considered a realistic and viable method of travel indicating that the site's location is accessible via this sustainable mode.
- 5.3.9 Clearly the site location and the surrounding infrastructure will mean that travel on foot and by cycle will be realistic and convenient modes of travel for future residents of the site and users of the sports facility. The potential numbers of walking and cycling trips that the site will generate will be discussed in **Section 6** of this report, but clearly the scale of the site is not such that it will disadvantage existing pedestrians and cyclists.

5.4 Access by Local Bus Services

- 5.4.1 As **Table 5.2** shows, the 'Opposite Glebe Gardens' and 'Adjacent Glebe Gardens' bus stops can be reached within a circa 8-minute walking time. The local footway network provides a convenient connection to these bus stops. Both bus stops comprise flag and timetable bus information as well as painted bus cages.
- 5.4.2 The applicant is however willing to provide funding towards a new pair of bus stops which will be expected to provide access to the same services as the existing Glebe Gardens stops as detailed in **Table 5.4** below. It is expected that the new stops will be *Disability Discrimination Act* (1995) compliant stops with raised boarding areas, timetable information and potentially with shelter and seating.
- 5.4.3 Copies of the timetable information (correct at the time of writing) are available on request while the most up-to-date timetables are available from: <http://www.traveline.info>.

Table 5.4: Summary of Key Bus Services

Service	Route	Weekday Period	Weekend	
			Sat	Sun
10X	Maidstone – Ashford (Some School days/School holiday services only)	0744 – 1918 Approx. 1 service per 1 hr/1hr 45mins	0909 – 1918 Approx. 1 service per 1 hr/1hr 45mins	0930, 1145, 1430, 1645, 1850
	Ashford – Maidstone (Some School day/School holiday day services only)	0646 – 1814 Approx. 1 service per 1 hr/1hr 45mins	0726 -1814 Approx. 1 service per 1 hr/1hr 45mins	0831, 1041, 1251, 1541, 1751
T11	Larkfield – Lenham (Monday Only)	1329	-	-
	Lenham – Larkfield (Monday Only)	1025	-	-

5.4.4 The above table shows that service 10X, operated by Stagecoach, provides a varying frequency of operation, however, it should be noted that the majority of the service operates on an hourly frequency. The frequency of service remains consistent between Maidstone and Ashford, and vice versa between Ashford and Maidstone. Saturday frequencies are similar to those provided during the week, with a slightly later AM operating time. The 10X provides 5 services on Sundays.

5.4.5 Service T11 only runs on Mondays, with a singular morning and afternoon service. The route provides access to local settlements, such as Harrietsham, Larkfield and Hollingbourne.

5.5 Rail

5.5.1 As **Table 5.2** and **Table 5.3** show, Lenham train station can be reached by within a 22-minute walking time and 7-minute cycle time.

5.5.2 The station is operated by Southeastern and is open 24-hours a day, 7-days a week. From Monday to Saturday, an hourly direct service is provided throughout the day to London Victoria, with the journey taking circa 1 hour 20 minutes. On Sundays, two services per hour are provided. Additional services are provided to Canterbury West, with a similar operating schedule, taking circa 50 minutes.

5.5.3 The station also provides a connection to Ashford International, with the journey time being circa 10-minutes. Furthermore, Ashford International provides high speed services to London St Pancras via Ebbsfleet International and Stratford International via High Speed 1 (HS1). The Eurostar also operates at Ashford International, providing continental services to Paris, Brussels, Geneva and Amsterdam.

5.6 Travel Plan

5.6.1 An Interim Travel Plan (TP) has been produced as part of the package of documents supporting the planning application. The document forms the start of an ongoing process to encourage and monitor the use of sustainable modes of travel to/from both the residential element and the sports facility. As many aspects of the TP will be applicable to this TA, a summary of the key points is as follows:

- Outlines the key local and national objectives of the TP process;
- Sets targets for the reduction of car or van driver trips based upon the Lenham Neighbourhood Plan;
- Indicates potential measures that can be implemented to achieve these targets; and
- Provides details of how the TP will be managed, monitored and reviewed.

5.6.2 It should however be noted that in order to provide a robust assessment, the traffic impact assessment detailed in **Section 6** of this TA, does not take into account any trip reduction as part of the TP.

5.7 Summary

5.7.1 This section of the report has demonstrated that the site is in a sustainable location where several local amenities, places of employment and education, as well as neighbouring settlements are within nationally recognised acceptable walking and cycling distances. Connections will be made to the local PRoW network providing convenient connections to other part of Lenham and to the countryside.

5.7.2 The existing local bus services provide a connection to numerous locations including Ashford, Charing, Harrietsham and Maidstone, all of which provide an extensive range of employment opportunities. The applicant is willing to provide funding towards a new pair of bus stops closer to the site on Old Ashford Road.

5.7.3 Lenham train station is accessible by foot and cycle, with the station providing services to London Victoria and Canterbury. Ashford International Station is also accessible via a 10-minute train journey, this providing access to high speed services to London St Pancras International, Folkestone and Dover and to Eurostar services.

5.7.4 Mentioned above is the fact that a TP will be also be produced in support of the development which will provide encouragement for potential residents of the site to use sustainable modes of transport. The TP will include Travel Packs and notice boards and the applicant will be willing to appoint a TP co-ordinator. It is hoped that a combination of the site's sustainable location and design and adoption of the TP will help to maximise the use of sustainable modes of transport.

5.7.5 A key theme of national and local transport planning policy is that development should be located where the need to travel will be limited and the use of sustainable transport modes can be promoted. As detailed in **Section 2** of this report, the NPPF states the developments need to '*create places that*

are safe, secure and attractive' and that priority should be given *'first to pedestrian and cycle movements'*.

- 5.7.6 It can be concluded that the proposed development accords to this NPPF guidance as well as the principles of Paragraph 108 in terms of promoting opportunities for sustainable travel and it is located and designed to give priority to pedestrian, cycle and public transport movements. The proposals also align with NPPF paragraph 118 by providing improved access to the countryside.
- 5.7.7 The development proposals also accord with a number of local policies and guidance including Outcomes 2, 4 and 5 of LTP4, Policy SP23 of the Maidstone Borough Local Plan and the strategic objectives of the Maidstone Integrated Transport Strategy.

6 IMPACT ASSESSMENT

6.1 Introduction

- 6.1.1 This section of the report details the methodology used to predict the demand associated with the development. It then provides an assessment of the impact of the development on the highway network. Based on the findings of the assessment, this section discusses whether mitigation measures are required to accommodate the additional trips generated by the development.

6.2 Traffic Growth

- 6.2.1 In accordance with GTA, the interim forecast year of assessment is 2024, which represents the year of application (2019) plus five years. It is expected that the site will be fully built-out and occupied by this forecast year. A second forecast year of 2031 has also been assessed in line with the Lenham Neighbourhood Plan.
- 6.2.2 The observed 2019 traffic flows, shown in **Traffic Flow Diagrams 1 and 2** in **Appendix C**, were factored to the assessment year using the DfT software TEMPro (Trip End Model Presentation Program) version 7.2. This package allows access to data used in the National Trip End Model (NTEM) and can be used to *'provide summaries of traffic growth using data from the National Transport Model (NTM)'* (<https://www.gov.uk/government/collections/tempo>).
- 6.2.3 In order to derive local traffic growth factors, the 'Maidstone 011 (E02005078)' mid layer super output area (MSOA) was selected as it contains Lenham in its entirety. Trip end growth factors for car drivers were derived and adjusted by NTM dataset AF15 for 'rural' area types and 'principal' road types.
- 6.2.4 DfT derived Road Traffic Forecast (RTF) growth factors for the South-East England region have been applied to heavy vehicles as TEMPro is not applicable to such vehicle classes as detailed in WebTAG guidance. The RTF calculation for heavy vehicles is provided in **Appendix H**.
- 6.2.5 Before applying the traffic growth factors derived from the above method, the trips from local committed development have been considered.

6.3 Committed Developments

- 6.3.1 The following developments have been treated as being committed as requested by KCC during scoping discussions:
- 14/500219 - Old Goods Yard, Lenham: 65 dwellings;
 - 14/502973 - Land at Ham Lane, Lenham: 82 dwellings;
 - 17/500357 - Land North of Old Ashford Road, Lenham: 145 dwellings;
 - 13/1823 - Land to the South of the A20 Ashford Road, Harrietsham: 49 dwellings;
 - 14/503411 - Land of the Paddock Site, Lenham: 23 dwellings;

- 17/502396 - Land off Glebe Gardens, Lenham: 10 dwellings;
- 17/502331 - Land at Woodcut Farm, Maidstone: Mixed Commercial Development (45,295 sqm);
- 14/0095 - Land at Bell Farm, Harrietsham: 90 dwellings; and
- 14/0828 - Land South of Ashford road, Harrietsham: 117 dwellings.

6.3.2 As the developments associated with the 14/0095 and 14/0828 applications were built-out and occupied at the time of the 2019 traffic surveys, their associated traffic flows are contained within the observed flows.

6.3.3 Prime are also aware of the Lenham Neighbourhood Plan allocations. It has been assumed that these developments and the associated link road (referred to in the Neighbourhood Plan as the 'Do Something' scenario) will not be built-out in the interim forecast year of 2024, but have been included in the 2031 forecast year. The exclusion of the link road from the interim year also presents a useful assessment of the existing network ('Do Minimum') with the development in place. The Neighbourhood Plan allocation sites are as follows, as referenced from page 40 of the Neighbourhood Plan TA included in **Appendix I**:

- Land West of Headcorn Road (South): 110 dwellings;
- Land East of Old Ham Lane: 230 dwellings;
- Land West of Headcorn Road (North): 110 dwellings;
- Land West of Ham Lane: 360 dwellings;
- William Pitt Playing Field: 50 dwellings; and
- Land West of Lodder Close: 55 dwellings.

6.3.4 As TEMPro includes government derived planning forecasts, it is necessary to manually adjust the planning assumptions within the database software to remove the numbers of dwellings associated with the committed developments which would otherwise result in double-counting.

6.3.5 The difference between base (2019) households and future (2024) households in the default assumptions is 247, which is less than the total number of units associated with the committed developments (374 dwellings) already included within the assessment. As such, 247 dwellings have been removed from the planning assumptions to limit double-counting but not apply negative growth.

6.3.6 The difference between base (2019) households and future (2031) households in the default assumptions is 544, which is less than the total number of units associated with the Lenham Neighbourhood Plan developments (915 dwellings) already included within the assessment. As such, 544 dwellings have been removed from the planning assumptions, again to limit double-counting but not apply negative growth.

- 6.3.7 A comparative summary of the reduction in the household planning assumptions is shown in **Table 6.1**.

Table 6.1: TEMPro Default and Alternative Household Planning Assumptions

Base Year	Forecast Year	Default Assumptions			Alternative Assumptions		
		Base HH	Future HH	Difference	Base HH	Future HH	Difference
2019	2024	3676	3923	247	3676	3676	0
2019	2031	3676	4220	544	3676	3676	0

- 6.3.8 The subsequent growth factors derived from the above are shown in **Table 6.2**.

Table 6.2: Traffic Growth Factors

Year		Local Growth Figure	
Base	Forecast	AM	PM
2019	2024	1.0445	1.0416
2019	2031	1.0628	1.0593

- 6.3.9 The 2019-2024 and 2019-2031 growth factors shown in **Table 6.2** above have been applied to the 2019 Observed flows, resulting in the 2024 and 2031 Base flows and are shown in **Traffic Flow Diagrams 3 and 4 (2019-2024)** and **Traffic Flow Diagrams 32 and 33 (2019-2031)** respectively.
- 6.3.10 The trips associated with the committed developments, derived from their associated assessments, are shown in **Traffic Flow Diagrams 5-20**, which have been added to the 2024 Base flows to form the 2024 Without Development flows (Do Minimum) and are shown in **Traffic Flow Diagrams 21 and 22**.

6.4 Vehicular Trip Generation

Residential Dwellings

- 6.4.1 As the proposed development has been identified as a Lenham Neighbourhood Plan site, the TRICS derived trip rates presented on page 43 of the Lenham Neighbourhood Plan TA (**Appendix I**) have been utilised. This was agreed with KCC Highways during scoping discussions.
- 6.4.2 As mentioned in **Section 4** of this report, the proposed development will provide 60% private and 40% affordable housing.
- 6.4.3 The trip rates and resulting trip generation is presented in the tables below.

Table 6.3: Peak Hour Trip Rates and Trip Generation for 60 Private Dwellings

Time	Average Trip Rates			Average Trip Generation		
	Arrivals	Departures	Totals	Arrivals	Departures	Totals
08:00-09:00	0.182	0.361	0.543	11	22	33
17:00-18:00	0.336	0.197	0.533	20	12	32

Table 6.4: Peak Hour Trip Rates and Trip Generation for 40 Affordable Dwellings

Time	Average Trip Rates			Average Trip Generation		
	Arrivals	Departures	Totals	Arrivals	Departures	Totals
08:00-09:00	0.178	0.333	0.511	7	13	20
17:00-18:00	0.333	0.240	0.573	18	10	28

Table 6.5: Trip Generation for Total Residential Development (100 Dwellings)

Time	Average Trip Generation		
	Arrivals	Departures	Totals
08:00-09:00	18	35	53
17:00-18:00	33	22	55

- 6.4.4 As **Table 6.5** above shows, the residential element of the site is likely to generate 53 two-way trips in the AM peak hour and 55 two-way trips in the PM peak hour. These figures are equivalent to less than one new trip per minute in the peak hours at the site access before dissipating across the highway network. The trip totals in the other weekday hours and at the weekend are expected to be less than this. The residential peak hours have been applied to the observed network peak hours in order to provide a robust assessment.

Sports Pitches & Sports Pavilion

- 6.4.5 In order to determine the traffic generation associated with the proposed sports pitches, the TRICS 7.6.1 database has been used. This industry-standard database contains traffic generation surveys of numerous sites of various land use types across the UK and Eire.
- 6.4.6 The most suitable land use within TRICS is 5-a-side football, however an adjustment has been made to take into account the senior and junior pitches. A summary of the key selections applied in order to derive the sample is as follows:

- Land use category - football (5-a-side);
- Regions excluded - London, Northern Ireland and Eire;
- No. pitches range selection - 2 to 18 units (7 to 18 actual);
- Date range - 15/07/08 to 14/07/18;
- Weekend surveys excluded;
- Selected locations - suburban areas & edge of town; and
- Location subcategories - residential zone & no subcategory.

- 6.4.7 The above selections returned a sample of 5 sites. The full reports of the TRICS data and selection process are included in **Appendix J**.
- 6.4.8 The derived trip rates were then applied to the 3 football pitches resulting in the trip generation. The trip rates and resultant network peak hour trip generation of the site is shown in **Table 6.6** in below.

Table 6.6: Peak Hour TRICS Derived Average Trip Rates and Trip Generation for 3 Football Pitches

Time	Trip Rates			Trip Generation		
	Arrivals	Departures	Totals	Arrivals	Departures	Totals
08:00-09:00	0.482	0.161	0.643	1	0	2
17:00-18:00	2.750	0.571	3.321	8	2	10

- 6.4.9 All of the sites in the TRICS sample comprised predominantly 5-a-side sports centre facilities ('Goals' & 'Powerleague'). Typically, a 5-a-side football match consists of a total of 14 players (including 2 substitutes per team). If all 3 football pitches would operate as 5-a-side football pitches, this would result in a total of 42 players. As previously stated in this report, the proposed development will comprise two senior pitches and one junior pitch (under 14s), all of which will operate as 11-a-side football pitches. Typically, an 11-a-side football match consists of a total of 28 players (including 3 substitutes per team). As such, the 3 football pitches are expected to consist of a total of 84 players when all in operation at the same time, double that of three 5-a-side pitches. Based on the preceding calculations, the trip generation presented in **Table 6.6** above has been doubled.
- 6.4.10 In addition, the squash court will result in a maximum of 4 players, resulting in up to 8 two-way trips, which have also been added on to the trip generation presented in **Table 6.6**. It should however be noted that the squash court may also be used by just two players and may not actually generate trips in the network peak hours, however the worst-case has been included in the assessment. The final trip generation associated with the sports pitches and sports pavilion is presented in **Table 6.7** below. It should be noted that the peak periods of the sports facilities will be 18:00 - 21:00 during the week and weekend late mornings and afternoons, therefore these peaks do not fully align with the network and residential peaks.

Table 6.7: Peak Hour Trip Generation for the Proposed Sports Pitches and Sports Pavilion

Time	Trip Generation		
	Arrivals	Departures	Totals
08:00-09:00	10	8	18
17:00-18:00	24	12	36

- 6.4.11 As the above table shows, the sports pitches and sports pavilion are likely to generate in the region of 18 two-way trips in the AM peak hour and 36 two-way trips in the PM peak hour. The pavilion building itself, other than the squash courts, will only contain ancillary uses, specifically changing rooms and toilet facilities and will therefore not generate any traffic independent of the pitches.

Total Proposed Development

- 6.4.12 **Table 6.8** below presents the combined vehicular trip generation associated with the 100 dwellings and sports pavilion.

Table 6.8: Peak Hour Trip Generation for the Proposed 100 dwellings, Sports Pitches and Sports Pavilion

Time	Trip Generation		
	Arrivals	Departures	Totals
08:00-09:00	28	43	71
17:00-18:00	57	34	91

- 6.4.13 As **Table 6.8** shows, the proposed development is estimated to generate in the region of 71 and 91 two-way trips in the AM and PM network peak hours respectively, with the higher figure equivalent to around 3 new trips every 2 minutes i.e. 1.5 trips per minute at the site accesses before dissipating. In order to provide a robust assessment, no trip internalisation has been applied i.e. residential development traffic visiting the sports facility and vice versa.

6.5 Person Trip Rates

- 6.5.1 The number of non-car trips likely to be generated by the residential element of the site has been forecast using the existing proportions for the local area presented on page 82 of the Lenham Neighbourhood Plan (**Appendix I**), which were derived from the Maidstone ITS.
- 6.5.2 The non-car proportion of 35.8% was divided by the car driver proportion of 64.2%, creating a factor of 55.8%. This factor was applied to the car trips listed above to create the non-car trips which were then spread across the non-car modal splits as details in **Table 6.9**.

Table 6.9: Forecast Multimodal Person Trips

Mode	Modal Split	Non-car Split	AM Peak	PM Peak
Walking	11.6%	32.4%	13	16
Cycling	1.2%	3.4%	1	2
Public Transport	10.5%	29.3%	12	15
Car Driver	64.2%	-	71	91
Other Modes	12.5%	34.9%	14	18
Total	100.0%	100.0%	111	142
Non-car %	35.8%	-		
Non-car vs Car %	55.8%	-		
Total non-car trips			40	51

- 6.5.3 Based on the results in **Table 6.9**, the site is estimated to generate 111 and 142 total people trips in the AM and PM peaks respectively. Following driving a car being the most frequent method of travel likely to be used by residents of the site, walking will account for around 13 and 16 trips in the respective AM and PM peaks. Travelling by public transport (bus or train) will account for 12 and 15

trips in each peak, while cyclists will each account for 1 to 2 trips in each peak hour. Travel by other modes will collectively account for around 14 and 18 trips in the respective peak hours, we assume that these trips will primarily be car passenger trips.

6.6 Trip Distribution

- 6.6.1 Traffic generated by the development proposal has been distributed on to the highway network based on 2011 Census Method of Travel to Work (MTW) data for car drivers using the Maidstone 011 MSOA, which contains Lenham as an area of residence. Origin-destination pairs containing 3 trips or less were removed from the data, accounting for less than 17% of the total trips, to make the data more manageable and to eliminate less common and generally longer distance trips from the dataset.
- 6.6.2 The main commuter destinations/origins (urban areas, industrial estates, business parks, etc.) within each workplace MSOA were identified and the most likely route from/to the site, referred to as the primary route, was derived using web-based route planning software (Google Maps). Whilst some destinations may have more than one suitable route available, the most efficient routes (based on travel time and distance) have been chosen in order to concentrate the traffic on these routes within the exercise, forming a worst-case assessment.
- 6.6.3 Six routes through the study area have been identified and are shown in **Table 6.10** with a summary of the percentage of development trips that would be distributed along each also shown.

Table 6.10: Development Traffic Distribution Summary

Route	Typical Destination	Route %
1A,7A	Lenham, Headcorn, Staplehurst & Marden	9%
1B,2A,3B,4A	Maidstone, Harrietsham & Hollingbourne	18%
1B,2A,3B,4A,5	Maidstone	20%
1B,2A,3B,4A,5,6	London, Rochester & Gillingham	31%
1B,2A,3C	Sittingbourne	8%
1B,2B	Ashford, Canterbury & Charing	14%

- 6.6.4 Given that the majority of trips to the sports pitches and sports pavilion are likely to be made on the way back from work (linked trips), the routes listed in **Table 6.10** have been applied to all elements of the site. The observed proportions of traffic using the western and eastern forks of the A20/Old Ashford Road junction have been used to supplement the census-based distribution at this junction.
- 6.6.5 Details of the MTW distribution calculation are provided in **Appendix K**.
- 6.6.6 The development distribution and development traffic flows are shown in **Traffic Flow Diagrams 23 to 29**. For illustrative purposes all of the residential traffic has been assigned to the eastern access and all of the residential traffic has been assigned to the western access, however there is likely to be a mixing of this traffic. The development flows have been added to the 2024 Without Development flows forming the 2024 With Development (Do Something) flows are shown in **Traffic Flow Diagrams 30 and 31**.

6.6.7 The trips associated with Lenham Neighbourhood Plan development, derived from the associated Neighbourhood Plan TA, are shown in **Traffic Flow Diagrams 34 and 35**. A trip reassignment representing the link road, based on the resultant change in traffic flows shown on pages 56-59 in the Neighbourhood Plan TA (**Appendix I**), and are shown in **Traffic Flow Diagrams 36 to 39**. The 2031 Without Development flows with the link road (Do Something) are shown in **Traffic Flow Diagrams 40 and 41**. The development flows have been added to form the 2031 With Development (Do Something) flows shown in **Traffic Flow Diagrams 42 and 43**.

6.7 Off Site Assessment

6.7.1 Having derived estimated traffic flows for the forecast year in the Without and With Development scenarios it is possible to compare expected traffic flows within the study area. The following junctions within the study area have been considered for the basis of the assessment:

6.7.2 **Table 6.11** provides a comparison of flows in the forecast year for the 2024 Without and 2024 With Development scenarios summarising the difference, while **Table 6.12** presents the same information for the 2031 Without and 2031 With Development scenarios.

Table 6.11: Comparison of Two-Way Traffic Flows - 2024 Without and 2024 With Development

Junction	2024 AM Peak				2024 PM Peak			
	Without Dev	With Dev	Abs Diff	% Diff	Without Dev	With Dev	Abs Diff	% Diff
1. A20/ Maidstone Road	1616	1665	49	3.0%	1664	1727	63	3.8%
2. Faversham Road/ Old Ashford Road/ High Street/ Maidstone Road	788	795	7	0.9%	751	759	8	1.1%
3. A20/ Faversham Road	1794	1848	54	3.0%	1874	1944	70	3.7%
4. A20/ Old Ashford Road	1808	1872	64	3.5%	1937	2020	83	4.3%

6.7.3 Based on the flow differences in **Table 6.11**, the greatest impact of the development will be on the A20/Old Ashford Road junction, with an increase of 64 two-way trips (3.5%) in the AM peak and 83 two-way trips (4.3%) in the PM peak. The A20/Faversham Road junction is expected to experience an increase of 54 two-way trips (3.0%) and 70 two-way trips (3.7%) in the AM peak and PM peak respectively. The A20/Maidstone Road junction is expected to experience an increase of 49 two-way trips (3.0%) in the AM peak and 63 two-way trips (3.8%) in the PM peak. The Faversham Road/Old

Ashford Road/High Street/Maidstone Road junction is expected to experience the least impact with an increase of just 7 two-way trips (0.9%) in the AM peak and 8 two-way trips in the PM peak (1.1%).

Table 6.12: Comparison of Two-Way Traffic Flows - 2031 Without and 2031 With Development

Junction	2031 AM Peak				2031 PM Peak			
	Without Dev	With Dev	Abs Diff	% Diff	Without Dev	With Dev	Abs Diff	% Diff
1. A20/ Maidstone Road	1760	1809	49	2.8%	1830	1893	63	3.4%
2. Faversham Road/ Old Ashford Road/ High Street/ Maidstone Road	806	813	7	0.9%	771	779	8	1.0%
3. A20/ Faversham Road	1961	2015	54	2.8%	2047	2117	70	3.4%
4. A20/ Old Ashford Road	1970	2034	64	3.2%	2116	2199	83	3.9%

6.7.4 Upon viewing the above table it is evident that the percentage impact at each junction decreases due to the increase in traffic growth and the additional Neighbourhood Plan trips. The percentage impact at all four junctions will decrease by up to 0.4%.

6.7.5 GTA suggests that an increase of 30 two-way trips is a useful point of reference regarding traffic impact at junctions, implying that any increase in trips less than this figure is unlikely to cause a detrimental impact.

6.7.6 Although the increase in trips at junction 2 falls below this threshold, for the purposes of a robust assessment, junction capacity assessments have been undertaken at all off-site junctions.

6.8 Junction Capacity Assessment

6.8.1 As all junctions are/will be priority controlled and crossroads, the capacity assessment has been undertaken using the industry standard software Junctions 9, development by TRL software. This software includes the PICADY module which is used to model said junctions.

6.8.2 When interpreting the results, the capacity of each arm or movement is calculated as the Ratio of Flow to Capacity (RFC) with 0.85 representing the practical capacity threshold of the arm and 1.00 representing the theoretical capacity threshold. It is above the practical capacity threshold where capacity problems begin to occur while exceeding the theoretical capacity means that arms are over capacity.

- 6.8.3 Modelled queues are shown in passenger car units (PCUs), this being equivalent to a distance of 5.75m which is the length of road space (car length plus gap length) that a typical car will occupy when queueing. In order to convert the traffic flows into PCUs, which is the requisite input flow unit required in the modelling software, a factor of 2.0 has been applied to the heavy vehicle user class, while cars effectively have a factor of 1.0.
- 6.8.4 Junction geometry has been coded into the models based on a mixture of OS mapping and aerial photography. Traffic flows have been input based on the 'ONE HOUR' (ODTAB) option which synthesises a 'peak within a peak' at the middle of the time period modelled and is generally seen as being the worst-case form of assessment in terms of impact. However, where appropriate, other flow input methods have been considered.
- 6.8.5 The A20/Old Ashford Road junction has been modelled as three junctions to represent the three give-way lines.
- 6.8.6 All model report outputs are included in **Appendix L**. The results of the capacity assessment for each of the junctions are described below.

A20/Maidstone Road

- 6.8.7 The results of the capacity assessment are summarised in **Table 6.13**.

Table 6.13: Junction Capacity Assessment Results - A20/Maidstone Road

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2019 Observed				
Maidstone Road	0.14	0.2	0.12	0.1
A20 Ashford Road (Western Arm)	0.11	0.1	0.08	0.1
2024 Without Development				
Maidstone Road	0.23	0.3	0.16	0.2
A20 Ashford Road (Western Arm)	0.15	0.2	0.14	0.2
2024 With Development				
Maidstone Road	0.23	0.3	0.16	0.2
A20 Ashford Road (Western Arm)	0.16	0.2	0.14	0.2
2031 Without Development				
Maidstone Road	0.25	0.3	0.17	0.2
A20 Ashford Road (Western Arm)	0.16	0.2	0.15	0.2
2031 With Development				
Maidstone Road	0.25	0.3	0.18	0.2
A20 Ashford Road (Western Arm)	0.17	0.2	0.15	0.2

- 6.8.8 The results show that the junction will operate with a considerable level of spare capacity in all scenarios, with the highest RFC being 0.25 on the Maidstone Road arm in the AM peak at 2031 with the development in place.

Faversham Road/Old Ashford Road/High Street/Maidstone Road

6.8.9 The results of the capacity assessment are summarised in **Table 6.14**.

Table 6.14: Junction Capacity Assessment Results - Faversham Road/Old Ashford Road/High Street/Maidstone Road

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2019 Observed				
Old Ashford Road	0.43	0.8	0.34	0.5
Faversham Road	0.03	0.0	0.03	0.0
Maidstone Road	0.22	0.3	0.11	0.1
High Street	0.21	0.3	0.36	0.7
2024 Without Development				
Old Ashford Road	0.61	1.5	0.46	0.8
Faversham Road	0.03	0.0	0.04	0.1
Maidstone Road	0.28	0.4	0.20	0.3
High Street	0.26	0.4	0.44	0.9
2024 With Development				
Old Ashford Road	0.62	1.6	0.46	0.9
Faversham Road	0.03	0.0	0.04	0.1
Maidstone Road	0.28	0.4	0.20	0.3
High Street	0.27	0.4	0.45	1.0
2031 Without Development				
Old Ashford Road	0.64	1.7	0.50	1.0
Faversham Road	0.03	0.0	0.04	0.1
Maidstone Road	0.29	0.4	0.20	0.3
High Street	0.31	0.5	0.47	1.0
2031 With Development				
Old Ashford Road	0.65	1.8	0.51	1.0
Faversham Road	0.03	0.0	0.04	0.1
Maidstone Road	0.29	0.4	0.20	0.3
High Street	0.31	0.5	0.48	1.1

6.8.10 The results show that the junction will operate with spare capacity in all scenarios, with the highest RFC being 0.65 on the Old Ashford Road arm in the AM peak.

A20/Faversham Road

6.8.11 The results of the capacity assessment are summarised in **Table 6.15**.

Table 6.15: Junction Capacity Assessment Results - A20/Faversham Road (ONE HOUR Profile)

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2019 Observed				
Faversham Road (Southern Arm) Nearside	0.18	0.2	0.25	0.3
Faversham Road (Southern Arm) Offside	0.39	0.6	0.49	1.0
A20 Ashford Road (Eastern Arm)	0.05	0.1	0.12	0.1
Faversham Road (Northern Arm) Offside	0.30	0.4	0.31	0.4
Faversham Road (Northern Arm) Nearside	0.36	0.6	0.41	0.7
A20 Ashford Road (Western Arm)	0.07	0.1	0.03	0.0
2024 Without Development				
Faversham Road (Southern Arm) Nearside	0.31	0.4	0.36	0.5
Faversham Road (Southern Arm) Offside	0.49	0.9	0.60	1.4
A20 Ashford Road (Eastern Arm)	0.06	0.1	0.13	0.2
Faversham Road (Northern Arm) Offside	0.37	0.6	0.47	0.8
Faversham Road (Northern Arm) Nearside	0.43	0.7	0.56	1.2
A20 Ashford Road (Western Arm)	0.10	0.1	0.06	0.1
2024 With Development				
Faversham Road (Southern Arm) Nearside	0.34	0.5	0.41	0.7
Faversham Road (Southern Arm) Offside	0.53	1.1	0.65	1.7
A20 Ashford Road (Eastern Arm)	0.06	0.1	0.14	0.2
Faversham Road (Northern Arm) Offside	0.40	0.6	0.60	1.4
Faversham Road (Northern Arm) Nearside	0.46	0.8	0.66	1.7
A20 Ashford Road (Western Arm)	0.10	0.1	0.07	0.1
2031 Without Development				
Faversham Road (Southern Arm) Nearside	0.59	1.3	0.65	1.6
Faversham Road (Southern Arm) Offside	0.75	2.5	0.79	3.0
A20 Ashford Road (Eastern Arm)	0.06	0.1	0.14	0.2
Faversham Road (Northern Arm) Offside	0.49	0.9	0.94	4.3
Faversham Road (Northern Arm) Nearside	0.54	1.1	0.90	3.6
A20 Ashford Road (Western Arm)	0.14	0.2	0.09	0.1
2031 With Development				
Faversham Road (Southern Arm) Nearside	0.94	4.0	0.96	4.7
Faversham Road (Southern Arm) Offside	0.88	3.8	0.92	4.9
A20 Ashford Road (Eastern Arm)	0.07	0.1	0.16	0.2
Faversham Road (Northern Arm) Offside	0.55	1.2	1.13	9.0
Faversham Road (Northern Arm) Nearside	0.59	1.3	1.08	6.1
A20 Ashford Road (Western Arm)	0.15	0.2	0.00	0.1

6.8.12 The results show that the Faversham Road northern arm will operate above theoretical capacity in the PM peak of the '2031 With Development' scenario, with an RFC value of 1.13 on its offside and 1.08 on its nearside.

- 6.8.13 Given the values returned by the modelling software are above the theoretical capacity threshold, the observed flow profile for this junction was reviewed with a summary of the flows and profile provided in **Table 6.16** below.

Table 6.16: Observed Flow Profile

Time	Flow	%
0700-0715	419	25.2%
0715-0730	422	25.4%
0730-0745	429	25.8%
0745-0800	391	23.5%
0745-0845	1661	100.0%
1630-1645	432	24.8%
1645-1700	433	24.9%
1700-1715	446	25.6%
1715-1730	431	24.7%
1630-1730	1742	100.0%

- 6.8.14 Both peak profiles appear to be relatively flat (i.e. close to 25%). As such, the use of a FLAT profile, rather than the bell-shaped curve of the synthesised peak used in the ONE HOUR option, is therefore more appropriate and justified. The results are provided in **Table 6.17** below.

Table 6.17: Junction Capacity Assessment Results - A20/Faversham Road (FLAT Profile)

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2019 Observed				
Faversham Road (Southern Arm) Nearside	0.13	0.2	0.18	0.2
Faversham Road (Southern Arm) Offside	0.29	0.4	0.40	0.7
A20 Ashford Road (Eastern Arm)	0.05	0.0	0.10	0.1
Faversham Road (Northern Arm) Offside	0.23	0.3	0.22	0.3
Faversham Road (Northern Arm) Nearside	0.30	0.4	0.32	0.5
A20 Ashford Road (Western Arm)	0.06	0.1	0.03	0.0
2024 Without Development				
Faversham Road (Southern Arm) Nearside	0.22	0.3	0.25	0.3
Faversham Road (Southern Arm) Offside	0.36	0.6	0.47	0.9
A20 Ashford Road (Eastern Arm)	0.05	0.1	0.11	0.1
Faversham Road (Northern Arm) Offside	0.28	0.4	0.30	0.4
Faversham Road (Northern Arm) Nearside	0.34	0.5	0.40	0.6
A20 Ashford Road (Western Arm)	0.08	0.1	0.06	0.1
2024 With Development				
Faversham Road (Southern Arm) Nearside	0.23	0.3	0.27	0.4
Faversham Road (Southern Arm) Offside	0.38	0.6	0.50	1.0
A20 Ashford Road (Eastern Arm)	0.05	0.1	0.12	0.1
Faversham Road (Northern Arm) Offside	0.29	0.4	0.34	0.5
Faversham Road (Northern Arm) Nearside	0.36	0.5	0.43	0.7
A20 Ashford Road (Western Arm)	0.08	0.1	0.06	0.1
2031 Without Development				
Faversham Road (Southern Arm) Nearside	0.29	0.4	0.34	0.5
Faversham Road (Southern Arm) Offside	0.50	1.0	0.58	1.4
A20 Ashford Road (Eastern Arm)	0.05	0.1	0.12	0.1
Faversham Road (Northern Arm) Offside	0.33	0.5	0.39	0.6
Faversham Road (Northern Arm) Nearside	0.40	0.7	0.50	1.0
A20 Ashford Road (Western Arm)	0.12	0.1	0.08	0.1
2031 With Development				
Faversham Road (Southern Arm) Nearside	0.32	0.5	0.39	0.6
Faversham Road (Southern Arm) Offside	0.54	1.2	0.62	1.6
A20 Ashford Road (Eastern Arm)	0.06	0.1	0.13	0.2
Faversham Road (Northern Arm) Offside	0.36	0.6	0.48	0.9
Faversham Road (Northern Arm) Nearside	0.42	0.7	0.56	1.2
A20 Ashford Road (Western Arm)	0.12	0.1	0.08	0.1

6.8.15 The results show that the junction will operate with spare capacity in all scenarios, with the highest RFC being 0.62 on the offside of Faversham Road southern arm in the PM peak. The increase in RFC as a result of the development is minimal.

A20/Old Ashford Road (Western Fork) – Existing Layout

6.8.16 The results of the capacity assessment are summarised in **Table 6.18**.

Table 6.18: Junction Capacity Assessment Results - A20/Old Ashford Road (Western Fork) (ONE HOUR Profile)

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2019 Observed				
Old Ashford Road	0.53	1.1	0.99	9.5
A20 Ashford Road (Western Arm)	0.03	0.0	0.04	0.0
2024 Without Development				
Old Ashford Road	0.75	2.7	1.18	22.1
A20 Ashford Road (Western Arm)	0.04	0.0	0.04	0.0
2024 With Development				
Old Ashford Road	0.94	6.6	1.38	39.9
A20 Ashford Road (Western Arm)	0.10	0.1	0.13	0.2
2031 Without Development				
Old Ashford Road	1.04	9.5	1.53	46.9
A20 Ashford Road (Western Arm)	0.07	0.1	0.08	0.1
2031 With Development				
Old Ashford Road	1.27	23.3	1.82	69.3
A20 Ashford Road (Western Arm)	0.13	0.1	0.18	0.2

6.8.17 The results show that in the PM peak the Old Ashford Road arm is currently operating just below the theoretical capacity threshold and exceeding said threshold in all remaining scenarios. In relation to the AM peak, Old Ashford Road arm begins to operate above practical capacity in the '2024 With Development' scenario, before exceeding the theoretical capacity threshold in the '2031 Without Development' and '2031 With Development' scenarios.

6.8.18 Limitations in the software algorithms lead to an almost exponential reduction in performance when the theoretical capacity threshold (RFC 1.00) is exceeded, producing longer queue lengths than would likely occur in reality so the level of impact may be somewhat exaggerated

6.8.19 The observed flow profile for this junction was reviewed and a summary of the flows and profile is provided in **Table 6.19** below.

Table 6.19: Observed Flow Profile

Time	Flow	%
0700-0715	378	24.9%
0715-0730	396	26.1%
0730-0745	398	26.2%
0745-0800	348	22.9%
0745-0845	1520	100.0%
1630-1645	411	24.6%
1645-1700	420	25.1%
1700-1715	426	25.5%
1715-1730	416	24.9%
1630-1730	1673	100.0%

- 6.8.20 Both peak profiles appear to be relatively flat (i.e. close to 25%), particularly in the PM peak. As such, the use of a FLAT profile, rather than the bell-shaped curve of the synthesised peak used in the ONE HOUR option, is therefore appropriate and justified. The results are provided in **Table 6.20** below.

Table 6.20: Junction Capacity Assessment Results - A20/Old Ashford Road (Western Fork) (FLAT Profile)

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2019 Observed				
Old Ashford Road	0.41	0.7	0.79	3.4
A20 Ashford Road (Western Arm)	0.03	0.0	0.03	0.0
2024 Without Development				
Old Ashford Road	0.56	1.3	0.92	7.6
A20 Ashford Road (Western Arm)	0.03	0.0	0.04	0.0
2024 With Development				
Old Ashford Road	0.70	2.2	1.06	22.3
A20 Ashford Road (Western Arm)	0.08	0.1	0.12	0.1
2031 Without Development				
Old Ashford Road	0.73	2.5	1.14	32.2
A20 Ashford Road (Western Arm)	0.06	0.1	0.07	0.1
2031 With Development				
Old Ashford Road	0.88	5.8	1.31	62.8
A20 Ashford Road (Western Arm)	0.11	0.1	0.15	0.2

- 6.8.21 In the PM peak, the results show the Old Ashford Road arm to be operating above practical capacity but below theoretical capacity in the '2024 Without Development' scenario before exceeding the theoretical capacity threshold in all remaining scenarios including without the development at 2031. In the AM peak, said arm is expected to operate with spare capacity.

- 6.8.22 While the impact of the traffic growth and committed development is greater than that of the proposed development, DLE are willing to provide funding, at a level commensurate to the scale of the impact of the site, towards an improvement at the junction given its proximity to the site.

Initial Mitigation Option (now no longer favoured) - A20/Old Ashford Road (Western Fork)

- 6.8.23 An initial mitigation scheme was considered as presented in **Drawing P19013-003B in Appendix F**. This potential scheme would widen Old Ashford Road in proximity to the A20 in order to provide a flare lane which will allow left and right turning traffic to queue side-by-side.
- 6.8.24 A third model has been created taking in to account the improved geometries using the flat profile with the results shown in **Table 6.21** below.

Table 6.21: Junction Capacity Assessment Results - A20/Old Ashford Road (Western Fork) Proposed Junction Improvement Scheme P19013-003B (FLAT Profile)

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2024 With Development				
Old Ashford Road (Nearside)	0.14	0.2	0.13	0.1
Old Ashford Road (Offside)	0.40	0.7	0.68	2.1
A20 Ashford Road (Western Arm)	0.08	0.1	0.11	0.1
2031 With Development				
Old Ashford Road (Nearside)	0.21	0.3	0.31	0.4
Old Ashford Road (Offside)	0.50	1.0	0.83	4.4
A20 Ashford Road (Western Arm)	0.11	0.1	0.15	0.2

- 6.8.25 The results show that the proposed improvement scheme would result in the junction operating with spare capacity in all scenarios, with the highest RFC value being 0.83 on the offside of Old Ashford Road in the PM peak. The improvement provides a better than nil-detriment level of operation i.e. the junction will operate with more capacity with the development and the improvement than without both.
- 6.8.26 The proposed improvement was however subject to a Stage 1 RSA (**Appendix G**) undertaken as part of the RSA that considered the access arrangements detailed in **Section 4.4**. The RSA raised the following specific 'problem' with problems 6.4, 6.5, 6.6 and 6.7 (addressed in **Section 4.4**) also applicable:

RSA Comment 6.3: Old Ashford Road junction with A20 Ashford Road

Summary: Two-lane layout at junction may result in increased risk of vehicular collisions at junction due to obstruction of visibility

The proposed two-lane layout at Old Ashford Road junction with A20 Ashford Road may result in vehicles which are side by side at the give way line obscuring the visibility for the other driver wishing to enter the A20 Ashford Road. This may increase the risk of vehicular collisions between those exiting Old Ashford Road and those travelling along the A20 Ashford Road.

Recommendation: The existing single lane layout at the junction of Old Ashford Road and A20 Ashford Road should remain. The acute junction to the east should be “squared up” to assist with visibility for those drivers wishing to turn right onto A20 Ashford Road. This recommendation should be read in conjunction with the recommendation in 6.4.

Designers’ Response to Comment 6.3

- 6.8.27 The two lane layout presented is a common improvement measure made to such junctions across the country. Many of these junctions operate without major safety issues. However, an alternative mitigation measure as recommend by the safety auditors, appears to be more appropriate.
- 6.8.28 **Drawing P19013-003D in Appendix F** presents an option whereby the western fork remains as it is, but the eastern fork is ‘squared up’ by introducing a corner radius to provide a safer angle of approach on the minor arm and thereby improving the level of visibility. This improvement should help to encourage the use of the eastern fork for right turners onto the A20. The swept path analysis of this arrangement presented in **Drawing P19013-203 in Appendix F** shows that a large vehicle, such as a bus, can safety turn at the junction even with an oncoming car on the opposite side of the road.
- 6.8.29 More frequent use of the eastern fork would be likely to occur anyway as traffic levels increase in the future, with or without the improvement, with right turning drivers naturally opting to use the eastern fork when queues are developing on the western one.
- 6.8.30 The traffic flows on the three forks of the junction have been adjusted to model the more frequent use of the eastern folk and less frequent use of the western one. As the adjustment influences the results of all three give-ways, the results are presented collectively later in this section following the modelling results of the existing arrangement.
- 6.8.31 The proposed improvement also provides a better footway/cycleway arrangement allowing for a new uncontrolled crossing over the A20 to be provided as well as includes suggested traffic calming measures on the eastern fork in the form of ‘count-up’ rumble strips and ‘SLOW’ markings. We are however willing to consider alternative traffic calming measures subject to the views of KCC.

A20/Old Ashford Road (Eastern Fork)

- 6.8.32 The results of the capacity assessment are summarised in **Table 6.22**.

Table 6.22: Junction Capacity Assessment Results - A20/Old Ashford Road (Eastern Fork)

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2019 Observed				
Old Ashford Road	0.12	0.1	0.06	0.1
A20 Ashford Road (Western Arm)	0.00	0.0	0.00	0.0
2024 Without Development				
Old Ashford Road	0.22	0.3	0.08	0.1
A20 Ashford Road (Western Arm)	0.00	0.0	0.00	0.0
2024 With Development				
Old Ashford Road	0.23	0.3	0.09	0.1
A20 Ashford Road (Western Arm)	0.00	0.0	0.00	0.0
2031 Without Development				
Old Ashford Road	0.29	0.4	0.11	0.1
A20 Ashford Road (Western Arm)	0.00	0.0	0.00	0.0
2031 With Development				
Old Ashford Road	0.30	0.4	0.13	0.1
A20 Ashford Road (Western Arm)	0.00	0.0	0.00	0.0

- 6.8.33 The results show that the junction will operate with a considerable level of spare capacity in all scenarios, with the highest RFC being 0.30 on the Old Ashford Road arm in the AM peak.

A20/Old Ashford Road (Southern Fork)

- 6.8.34 The results of the capacity assessment are summarised in **Table 6.23**.

Table 6.23: Junction Capacity Assessment Results – A20/Old Ashford Road (Southern Fork)

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2019 Observed				
Old Ashford Road (Eastern Arm)	0.25	0.3	0.22	0.3
Old Ashford Road (Western Arm)	0.03	0.0	0.02	0.0
2024 Without Development				
Old Ashford Road (Eastern Arm)	0.28	0.4	0.27	0.4
Old Ashford Road (Western Arm)	0.05	0.1	0.02	0.0
2024 With Development				
Old Ashford Road (Eastern Arm)	0.29	0.4	0.29	0.4
Old Ashford Road (Western Arm)	0.05	0.1	0.03	0.0
2031 Without Development				
Old Ashford Road (Eastern Arm)	0.28	0.4	0.28	0.4
Old Ashford Road (Western Arm)	0.05	0.1	0.03	0.0
2031 With Development				
Old Ashford Road (Eastern Arm)	0.29	0.4	0.30	0.4
Old Ashford Road (Western Arm)	0.05	0.1	0.03	0.0

- 6.8.35 The results show that the junction will operate with a considerable level of spare capacity in all scenarios, with the highest RFC being 0.30 on the Old Ashford Road eastern arm in the PM peak.

Proposed Mitigation Option – A20/Old Ashford Road

- 6.8.36 As described above, as the traffic flows using the A20/Old Ashford Road junction increase with or without the development, a more even proportionate split between the western and eastern arms will be expected. Clearly the vast majority of left turners will continue to use the western fork, but more right turners will choose to use the eastern one. Turning out of the eastern fork should be easier for right turners than the western one as traffic at the former will not have to give-way to the ghost island traffic unlike the latter. The proposed improvement shown in **Drawing P19013-003D** will help to encourage this more even balancing of traffic and therefore makes the best use of existing infrastructure.
- 6.8.37 In order to model the improvement, as well as creating a model of the improved eastern fork, the With Development traffic flows have been adjusted so that the traffic from Old Ashford Road on the western and eastern forks evenly balance. This adjustment is shown in **Traffic Flow Diagrams 44-47 (Appendix C)**. The results of the capacity assessment are summarised in **Table 6.24**.

Table 6.24: Junction Capacity Assessment Results – A20/Old Ashford Road with Mitigation

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2024 With Development + Mitigation				
Western Fork				
Old Ashford Road	0.29	0.4	0.41	0.7
A20 Ashford Road (Western Arm)	0.08	0.1	0.11	0.1
Eastern Fork				
Old Ashford Road	0.57	1.2	0.67	1.8
A20 Ashford Road (Western Arm)	0.00	0.0	0.00	0.0
Southern Fork				
Old Ashford Road (Eastern Arm)	0.29	0.4	0.29	0.4
Old Ashford Road (Western Arm)	0.17	0.2	0.26	0.4
2031 With Development + Mitigation				
Western Fork				
Old Ashford Road	0.33	0.5	0.48	0.9
A20 Ashford Road (Western Arm)	0.11	0.1	0.15	0.2
Eastern Fork				
Old Ashford Road	0.78	2.8	0.86	4.3
A20 Ashford Road (Western Arm)	0.00	0.0	0.00	0.0
Southern Fork				
Old Ashford Road (Eastern Arm)	0.29	0.4	0.30	0.4
Old Ashford Road (Western Arm)	0.19	0.3	0.28	0.5

6.8.38 The results show that the junction with the suggested mitigation of improvements to encourage a more even balance of traffic flows at the western and eastern forks, will operate with spare capacity in all scenarios.

6.8.39 We therefore feel that this is the most suitable arrangement for the junction. We are however happy to discuss the options further with KCC.

Proposed Site Accesses

6.8.40 While there is likely to be a balance of traffic using each of the two site accesses, we have produced results on a worst-case basis whereby 100% of the development traffic uses each access. The results are summarised in **Tables 6.25 and 6.26** below.

Table 6.25: Junction Capacity Assessment Results - Proposed Eastern Access

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2031 With Development				
Proposed Eastern Access	0.09	0.1	0.08	0.1
Old Ashford Road (Western Arm)	0.01	0.0	0.01	0.0

Table 6.26: Junction Capacity Assessment Results - Proposed Western Access

Arm	AM		PM	
	RFC	Q (PCU)	RFC	Q (PCU)
2031 With Development				
Proposed Western Access	0.10	0.1	0.08	0.1
Old Ashford Road (Western Arm)	0.01	0.0	0.01	0.0

6.8.41 The results show that both accesses will operate with a considerable level of spare capacity and will therefore be suitable to serve the proposed development.

6.9 M20 Junction 8 & A20 Assessment

6.9.1 As mentioned in **Section 3**, KCC stated in their scoping response that ‘the cumulative effects of planned growth in Lenham also mean that M20 J8 and the section of the A20 between J8 and the B2163 also need to be included’.

6.9.2 **Table 6.27** provides a comparison of flows in both locations in the forecast year for the 2024 Without and 2024 With Development scenarios summarising the difference, while **Table 6.28** presents the same information for the 2031 Without and 2031 With Development scenarios.

Table 6.27: Comparison of Two-Way Traffic Flows - 2024 Without and 2024 With Development

Junction	2024 AM Peak				2024 PM Peak			
	Without Dev	With Dev	Abs Diff	% Diff	Without Dev	With Dev	Abs Diff	% Diff
1. M20 Junction 8	2838	2860	22	0.8%	2927	2955	28	1.0%
2. A20 between j/w M20 Junction and j/w B2163	2891	2927	36	1.2%	3045	3091	46	1.5%

6.9.3 Based on the flow differences in **Table 6.27**, the M20 junction 8 will experience an increase of 22 two-way trips in the AM peak and 28 two-way trips in the PM peak, equivalent to just a 0.8% and 1.0% increase respectively. The section of the A20 will experience an increase of 36 two-way trips (1.2%) in the AM peak and 46 two-way trips (1.5%) in the PM peak.

Table 6.28: Comparison of Two-Way Traffic Flows - 2031 Without and 2031 With Development

Junction	2031 AM Peak				2031 PM Peak			
	Without Dev	With Dev	Abs Diff	% Diff	Without Dev	With Dev	Abs Diff	% Diff
1. M20 Junction 8	3073	3095	22	0.7%	3153	3181	28	0.9%
2. A20 between j/w M20 Junction and j/w B2163	3231	3267	36	1.1%	3390	3436	46	1.4%

6.9.4 Similarly to **Table 6.12**, the percentage impact at each location decreases in 2031 due to the increase in traffic growth and the additional Neighbourhood Plan trips. The increase at junction 8 is less than 1% in both peaks and 1.1%-1.4% on the A20.

6.9.5 The level of increase in traffic in the two strategic locations will result in a negligible impact.

6.10 Summary

6.10.1 This section has explained the traffic forecasting methodology and capacity assessments used to determine the suitability of the proposed site access points and suitability of the surrounding highway network to accommodate the development proposal.

6.10.2 It has been demonstrated that three of the four off-site study junctions will operate with spare capacity to serve the development, with the impact of the development on these junctions being negligible.

6.10.3 The capacity assessment did however show that the western fork of the A20/Old Ashford Road junction would likely experience capacity issues in the future with or without the development. This was however based on a similar proportionate split of traffic using the western and eastern forks of the split priority as observed during the traffic surveys. In reality, the eastern fork is likely to become more popular for right turning traffic from Old Ashford Road, reaching a balance in traffic flows with the western fork. A mitigation measure has therefore been offered to encourage use of the eastern fork for right turners as suggested by the independent Stage 1 RSA, whereby the minor arm of the junction is 'squared-up' to improve the approach angle and visibility. The subsequent modelling demonstrates that the junction will operate with spare capacity with this improvement representing an efficient use of existing infrastructure. The improvement also aids the pedestrian and cycle connection proposed as part of the access strategy, particularly as it allows an uncontrolled crossing with refuge island to be provided over the A20 to allow connection to the existing footway on the northern side.

-
- 6.10.4 As part of the improvement, rumble strips and 'SLOW' markings have also been suggested on the approach to the southern give-way to help control speeds on approach to the settlement on Old Ashford Road.
- 6.10.5 With the mitigation in place, the introduction of the development traffic is unlikely to result in an *'unacceptable impact on highway safety'* and the cumulative impact of the development can certainly not be considered *'severe'* meaning that according to paragraph 109 of the NPPF, as described in **Section 2** of this report, the development should not be refused on the basis of its impact on the capacity of the surrounding road network.

7 SUMMARY AND CONCLUSIONS

7.1 Summary

- 7.1.1 The applicant is seeking outline planning permission for a proposed mixed-use development comprising 100 dwellings (40% affordable), sports pitches and a sports pavilion, on land located to the south of Old Ashford Road, Lenham, Kent. This site has been identified as a Lenham Neighbourhood Plan development site.
- 7.1.2 A review of the accident data within a study area on the wider highway network has been undertaken for the most recent five years available from KCC. There were 25 injury accidents during the latest 5-year period between 1st October 2013 and 30th September 2018. The majority of these were slight in nature. The locations and severity proportions are not unusually high based on traffic flows, link and junction types; in addition, the cause of all the accidents appear to be down to driver/human error/misjudgement.
- 7.1.3 Several of the accidents occurred at the A20/Faversham Road junction which has recently be subject to a safety improvement scheme which should hopefully reduce accident frequencies. It is therefore concluded that there are no deficiencies in the existing highway network, or existing safety issues within the vicinity of the site, that would be exacerbated by the development proposals.
- 7.1.4 The applicant is willing to provide funding for a TRO and associated gateway features to extend the 30mph speed limit on Old Ashford Road further north-east to help reduce local speeds and provide a safety benefit to all road users.
- 7.1.5 The site is proposed to be served by two priority-controlled junctions on to Old Ashford Road, with the proposed access strategy illustrated on **Drawing P19013-001G** in **Appendix F**. Both accesses have been designed in accordance with local and national design standards and have been subject to an independent Stage 1 Road Safety Audit.
- 7.1.6 A 3m wide shared cycleway will be provided along Old Ashford Road inside the northern boundary of the site, connecting to the existing footway provision west of the site and to the existing footway on the northern side of the A20 via a new uncontrolled crossing with refuge island. Pedestrian connections will also be made to the PRoW that cross the site, providing alternative walking routes and improving access to the countryside.
- 7.1.7 An assessment has been undertaken of the site's level of accessibility by sustainable modes, from which it can be concluded that realistic options exist for access to local amenities, education and employment opportunities on foot, by cycle and by public transport. It is proposed that occupiers of the development would be made aware of the options available for sustainable modes of travel through the site's Travel Plan and also through Welcome Packs provided to residents at the development. The Welcome Packs would not only highlight the location of nearby services and how

these are accessible on foot, cycle or public transport but also the distance and likely travel time to such destinations.

- 7.1.8 Junction capacity assessments have been undertaken at four key off-site junctions and the proposed site access points. The site accesses will operate with spare capacity as will three of the four off-site junctions. A mitigation scheme has been proposed at the fourth junction, that of the A20/Old Ashford Road which consists of the 'squaring-up' of the minor arm of the eastern fork in order to encourage a more even balance of traffic between the western and eastern forks of this split priority junction. Rumble strips and slow markings will be provided on approach to the southern give-way to help reduce speeds on approach to Old Ashford Road. The 'squaring-up' of the junction will also help this. The junction is forecast to operate with spare capacity with the mitigation in place. The development proposals would have an overall negligible impact on the local highway network.

7.2 Conclusion

- 7.2.1 It is concluded that the proposed development would not result in an '*unacceptable impact on highway safety*' nor have a '*severe*' impact on the operation of the highway network in terms of capacity. The impact is best described as negligible.
- 7.2.2 As the proposal complies with local and national planning policy and guidance with respect to sustainable accessibility, safety and impact on the highway network, there are no highways or transportation related reasons why planning permission should not be granted. Should the highway authority have any concerns, we are happy to consult further with them

APPENDIX A

SCOPING CORRESPONDENCE WITH KCC

This page has been
left intentionally
blank

Ben Gaze

From: Brendan.Wright@kent.gov.uk
Sent: 17 July 2019 15:53
To: David Stoddart
Subject: RE: Pre-app Request - Old Ashford Road, Lenham

Follow Up Flag: Follow up
Flag Status: Flagged

David

If the traffic surveys indicate the network peak to be 0700-0800 then that is what you should assess. You can always undertake a sensitivity test on the one junction that bucks this trend if necessary.

Your scoping note was explicit in stating that the sports facility will not be included in the application. I note that this has now changed and your proposed approach to quantifying the trip generation.

The methodology you describe for the committed developments is perhaps a little over elaborate. TAs are available for virtually all of the developments previously specified. The Neighbourhood Plan (NP) also has a supporting TA, which your work should align to as this is one of its allocated sites. I am struggling to understand your suggestion that you may disregard the link road given that it forms a key component of the NP, unless you are accounting for a scenario whereby this site comes forward ahead of the link road being completed.

Regards

Brendan Wright | Principal Transport and Development Planner | KCC Highways and Transportation | Ashford Depot | Javelin Way | Henwood Industrial Estate | Ashford | TN24 8AD | Internal: 419930 | External: 03000 419930

From: David Stoddart <D.Stoddart@primetp.co.uk>
Sent: 12 July 2019 17:30
To: Wright, Brendan - GT HTW <Brendan.Wright@kent.gov.uk>
Cc: Ben Gaze <B.Gaze@primetp.co.uk>
Subject: RE: Pre-app Request - Old Ashford Road, Lenham

Hi Brendan,

I just wanted to a few things by you.

Firstly, we've received the traffic survey results back and have calculated the peak hour for each junction, as well as the overall peak. The results are shown in the table below with the peaks highlighted yellow:

Time	J1	J2	J3	J4A	J4B	Total
0700	1468	517	1661	1520	1655	6821
0715	1404	584	1599	1484	1650	6721
0730	1372	633	1555	1446	1636	6642
0745	1323	646	1503	1398	1581	6451
0800	1311	633	1480	1384	1555	6363
0815	1313	622	1479	1407	1557	6378
0830	1256	581	1414	1357	1481	6089
0845	1194	536	1322	1305	1422	5779

0900	1114	486	1217	1237	1353	5407
Max	1468	646	1661	1520	1655	6821
1530	1256	528	1372	1359	1486	6001
1545	1370	578	1520	1482	1615	6565
1600	1427	613	1616	1573	1711	6940
1615	1479	630	1692	1634	1756	7191
1630	1520	610	1742	1673	1781	7326
1645	1513	597	1722	1693	1796	7321
1700	1504	595	1702	1680	1768	7249
1715	1434	552	1612	1614	1703	6915
1730	1344	509	1502	1508	1590	6453
Max	1520	630	1742	1693	1796	7326

Junction 1 - A20/Maidstone Road

Junction 2 - Faversham Road/Old Ashford Road/High Street/Maidstone Road

Junction 3 - A20/Faversham Road

Junction 4A - A20/Old Ashford Road (Western Junction)

Junction 4B - A20/Old Ashford Road (Eastern Junction)

As you will see, the AM peak hour is heavily influenced by the A20 with the peak hour at the A20 junctions being 0700-0800, an hour earlier than the typical resi peak of 0800-0900, which the one non-A20 junction is close to at 0745-0845. I would be grateful for your opinion on whether we should stick with 0745-0845 as the AM peak hour as per junction 2 or treat 0700-0800 as the peak and align the TRICS 0800-0900 peak trip gen hour with it?

The PM peak is more straightforward, we'll go with 1630-1730 as there is very little variation in the flows either side of this hour.

Also, I don't believe we mentioned this in our scoping note, but the sports facility will form part of the outline application in terms of land being provided for it. The facility will include a pavilion building with changing facilities, 3 x football pitches and a squash court. We intend to use the attached TRICS based trip rates for the football pitches. The sites within TRICS tend to have mainly 5-a-side pitches (with the odd 7-a-side), so we will therefore double the rates to account for the two senior pitches and one junior pitch which will generate 4 and 20 car trips in the respective AM and PM peak with the facility's busiest weekday period expected to be between 1900-2100. We don't have any trip rates for the squash courts but are happy to proceed on a worst case assumption of 4 players on the court all via single occupancy car and with potential for changeover within an hour so we will add 8 arrivals and 8 departures in the peak hours. I have attached the latest Development Framework Plan for reference.

Finally, for the consented developments, we will reference the traffic flows from their TAs/TSs or apply our distribution where flow diagrams are not available. For the local plan allocations that are also in the neighbourhood plan, we will apply the trip rates and the do minimum (no link road) distribution from the neighbourhood plan TA to them, potentially supplementing them with our distribution where appropriate. We might consider the do something (with link road) distribution if we feel it is appropriate. For other allocations within the local area, using the local mid layer super output areas as a boundary i.e. Harrietsham and Hollingbourne, we will adjust the household planning assumptions in TEMPro to match the forecast figures, TEMPro will therefore act as a proxy for local plan growth, an approach recently agreed on other sites with your colleagues in Sevenoaks and Highways England. I trust this approach is reasonable?

Kind regards

Dave

David Stoddart

**Associate Director
Prime Transport Planning**

DD: +44 (0)151 728 1864 M: +44(0) 7944 446528

www.primetp.co.uk



From: Brendan.Wright@kent.gov.uk <Brendan.Wright@kent.gov.uk>

Sent: 21 June 2019 13:44

To: David Stoddart <D.Stoddart@primetp.co.uk>

Subject: RE: Pre-app Request - Old Ashford Road, Lenham

Dave

We have accepted this kind of arrangement in the past but it is dependent on a number of factors. These will include the degree of surveillance/convenience afforded to pedestrians, the extent to which the hedge could obscure pedestrians/cyclists as they emerge to cross or join the carriageway and the proposed adoption arrangements.

The hedge would need to be moved in any event to enable visibility splays to be provided at the two proposed site access junctions.

Regards

Brendan Wright | Principal Transport and Development Planner | KCC Highways and Transportation | Ashford Depot | Javelin Way | Henwood Industrial Estate | Ashford | TN24 8AD | Internal: 419930 | External: 03000 419930

From: David Stoddart <D.Stoddart@primetp.co.uk>

Sent: 20 June 2019 11:41

To: Wright, Brendan - GT HTW <Brendan.Wright@kent.gov.uk>

Subject: RE: Pre-app Request - Old Ashford Road, Lenham

Hi Brendan,

I have had a query from the masterplanners that I'd like to quickly run by you. We are looking to provide a footway along the site frontage but there is a desire to retain the native hedgerow that fronts the site. In the interest of retaining as much of the hedgerow as possible, would KCC accept a footway (potentially shared cycleway) than runs behind the hedgerow i.e. carriageway-hedgerow-foot/cycleway in order to retain it or would you require the foot/cycleway to abut the carriageway i.e. carriageway-foot/cycleway with the hedgerow removed (it may be possible to replant it but I cannot be sure of this).

Also, just to make you aware, our Scoping Checklist suggested that access would be a reserved matter but it will actually be for detailed consideration as part of the outline application.

Kind regards

Dave

David Stoddart
**Associate Director
Prime Transport Planning**

DD: +44 (0)151 728 1864 M: +44(0) 7944 446528

www.primetp.co.uk



From: Brendan.Wright@kent.gov.uk <Brendan.Wright@kent.gov.uk>
Sent: 07 June 2019 10:36
To: David Stoddart <D.Stoddart@primetp.co.uk>
Subject: RE: Pre-app Request - Old Ashford Road, Lenham

David

Please find attached an annotated version of your scoping proposal as requested.

I trust that this assists your ongoing work but please get in touch should you have any queries.

Regards

Brendan Wright | Principal Transport and Development Planner | KCC Highways and Transportation | Ashford Depot | Javelin Way | Henwood Industrial Estate | Ashford | TN24 8AD | Internal: 419930 | External: 03000 419930

From: David Stoddart <D.Stoddart@primetp.co.uk>
Sent: 30 May 2019 17:15
To: Wright, Brendan - GT HTW <Brendan.Wright@kent.gov.uk>
Subject: RE: Pre-app Request - Old Ashford Road, Lenham

No worries, thanks Brendan.

David Stoddart
Associate Director
Prime Transport Planning

DD: +44 (0)151 728 1864 M: +44(0) 7944 446528

www.primetp.co.uk



From: Brendan.Wright@kent.gov.uk <Brendan.Wright@kent.gov.uk>
Sent: 30 May 2019 13:18
To: David Stoddart <D.Stoddart@primetp.co.uk>
Subject: RE: Pre-app Request - Old Ashford Road, Lenham

Dave

Apologies for the delay. I hope to be in a position to respond next week.

Regards

Brendan Wright | Principal Transport and Development Planner | KCC Highways and Transportation | Ashford Depot | Javelin Way | Henwood Industrial Estate | Ashford | TN24 8AD | Internal: 419930 | External: 03000 419930

From: David Stoddart <D.Stoddart@primetp.co.uk>
Sent: 28 May 2019 14:22
To: Wright, Brendan - GT HTW <Brendan.Wright@kent.gov.uk>
Subject: RE: Pre-app Request - Old Ashford Road, Lenham

Hi Brendan,

I was wondering whether you'd had the chance to review our suggested scope for the site of Old Ashford Road, Lenham. If not, I'd appreciate it if you could give me an idea of timescales as we are keen to press on with the assessment and commission traffic surveys.

Kind regards

Dave

David Stoddart
Associate Director
Prime Transport Planning

DD: +44 (0)151 728 1864 M: +44(0) 7944 446528

www.primetp.co.uk



From: David Stoddart
Sent: 02 April 2019 17:12
To: Brendan.Wright@kent.gov.uk
Subject: Pre-app Request - Old Ashford Road, Lenham

Brendan,

Following our telephone conversation a few weeks ago, please find attached a signed pre-app request form, scoping note, proposed access arrangement drawing and indicative layout for a site off Old Ashford Road, Lenham which we would like seek your pre-app advice on.

Hopefully the scoping note should be self-explanatory, I'd appreciate it if you could populate the column marked 'LHA Comments' where appropriate.

The developer is willing to work with the Parish Council in helping to deliver Neighbourhood Plan aspirations, one of which is the potential redesign of the Old Ashford Road/A20 junction in order to help reduce speeds on Old Ashford Road. I don't feel that there are any issues with the existing junction layout and development of the site coupled with an extension of the 30mph speed limit should help to reduce speeds. I would however be keen to hear your views as to whether you feel an improvement is worthwhile or if it is better left alone.

If you require any further details at this stage, please don't hesitate to contact me by phone or email. I am happy to meet with you should you prefer to discuss the site around the table or on site.

Kind regards

Dave

David Stoddart
Associate Director

D: +44 (0)151 728 1864

M: +44 (0)7944 446 528

9 Hurricane Court, Liverpool International Business Park
Estuary Boulevard, Liverpool, L24 8RL



www.primetp.co.uk



Notice of Confidentiality. This communication and the information it contains: (a) is intended solely for the person(s) or Organisation(s) named above and for no other persons or organisations and, (b) maybe confidential, legally privileged and

protected by law. Unauthorised use, copying or disclosure of any of it maybe unlawful. If you receive this communication in error, please notify us immediately, destroy any copies and delete it from your computer system.

SCOPING CHECKLIST FOR: Up to 100 dwellings on land off from Old Ashford Road, Lenham, Kent

HIGHWAY AUTHORITY: Kent County Council (KCC)

DATE PREPARED: 02/04/19

Ref	Item	Intention	LHA Comments
1	Level of planning approval sought? e.g. outline, full.	Outline with all matters. Not that access will also be a reserved matter but the indicative locations will be shown.	<i>If access is to be a reserved matter we will only comment on the principle of whether an acceptable form of access can be achieved.</i>
2	Size and description of development proposals	The development is for circa 100 dwellings with access from Old Ashford Road. Two accesses will be provided with the western access also providing access to a new sports facility beyond the south western boundary. Note the sports facility will not form part of this application and it outside of the applicant's control but the applicant is willing to facilitate access to it. Site is in emerging Lenham Neighbourhood Plan as Site no. 1 Land South of Old Ashford Road.	<i>There does not appear to be any justifiable need for two all-purpose accesses. The nearby Tanyard Farm North development, which is larger in scale, is to be served by one all-purpose access and an emergency access.</i>
3	Description of existing land uses, existing trip distribution	Agricultural land – no existing trips assumed	<i>Noted</i>
4	Does the development involve the relocation of an existing use?	No	<i>Noted</i>
5	What transport based supporting documents will be produced?	Transport Assessment and Framework Travel Plan	<i>Noted</i>
6	Are traffic surveys of the existing conditions available or required?	<p>It is proposed to undertake manual classified counts (MCC) and queue length surveys at the following junctions:</p> <ul style="list-style-type: none"> ○ Site Access (priority junction); ○ A20/Old Ashford Rd (priority junction); ○ Old Ashford Rd/High St (priority junction); ○ A20 Ashford Rd/High Street (priority junction); <p><u>Please advise if the survey locations are acceptable for the purposes of the assessment.</u></p>	<p><i>The scope of assessment will need to include the A20/Faversham Road and A20/Maidstone Road junctions. The cumulative effects of planned growth in Lenham also mean that M20 J8 and the section of the A20 between J8 and the B2163 also need to be included.</i></p> <p><i>Note that A20 Ashford Road does not have a junction with High Street</i></p>
7	Details of any other developments to be taken into account.	<p>Tanyard Farm North – 17/500357 – 145 dwellings</p> <p>Old Goods Yard – 14/500219 – 65 dwellings</p> <p>Ham Lane – 14/502973</p> <p><u>Please advise if there are any other developments that need to be taken account of.</u></p>	<p><i>The prospective sports facility if this is an intended function of the access.</i></p> <p><i>14/503411 The Paddock, Old Ashford Road, Lenham</i></p> <p><i>17/502396 East of Glebe Gardens, Old</i></p>

SCOPING CHECKLIST FOR: Up to 100 dwellings on land off from Old Ashford Road, Lenham, Kent

HIGHWAY AUTHORITY: Kent County Council (KCC)



DATE PREPARED: 02/04/19

			<p><i>Ashford Road, Lenham</i> <i>13/1823 Mayfield Nursey, Harrietsham</i> <i>14/0095 Church Road, Harrietsham</i> <i>14/0828 South of Ashford Road, Harrietsham</i> <i>17/502331 Woodcut Farm, Hollingbourne</i> <i>Chapel Farm, Lenham (Minerals and Waste land allocation)</i> <i>All sites allocated in the emerging Neighbourhood Plan (i.e. the 1,000 houses including 18/506657 West of Loder Close).</i></p>
8	Details of any adjacent highway improvement proposals by others	<u>Please advise if there are any highway improvement schemes that need to be taken account of.</u>	<p><i>The A20/Faversham Road junction has recently undergone safety improvements.</i> <i>A scheme is currently being implemented on the A20 through Harrietsham to widen footways, provide crossings and reduce the speed limit</i></p>
9	When are the critical periods for assessments?	Weekday AM and PM peaks derived from surveys mentioned above.	<i>Noted</i>
10	When would the site be fully operational?	2024 (Expected)	<i>Noted</i>
11	What are the assessment years?	<p>2019 – Base flows only</p> <p>2024 – 5 years post submission – with and w/out development</p>	<i>These are appropriate</i>
12	Traffic growth factors?	TEMPO growth for local MSOA manually adjusted with any committed development removed from planning assumptions to remove double counting. NTM adjustment applied.	<i>Noted</i>
13	How will vehicular trip generation be derived for the proposal?	Average vehicular trip rates have been utilised from the emerging Lenham Neighbourhood Plan Transport Assessment (2019) for private dwellings and are presented in the table below, together with the resulting trip generation (100 dwellings)	<i>Use of the trip rates applied in support of the Neighbourhood Plan is appropriate.</i>

SCOPING CHECKLIST FOR: Up to 100 dwellings on land off from Old Ashford Road, Lenham, Kent

HIGHWAY AUTHORITY: Kent County Council (KCC)

DATE PREPARED: 02/04/19

					Arrivals		Departures		Total		
		Time	Rate	Flow	Rate	Flow	Rate	Flow			
		08:00-09:00	0.182	18	0.361	36	0.543	54			
		17:00-18:00	0.336	34	0.197	20	0.533	53			
		Please confirm acceptance of the above trip rates for the purposes of the assessment.									
14	How will non-car mode trip generation be derived for the proposal?	Method of Travel to Work information is to be used from 2011 Census data, alongside the trips derived from the trip rates utilised from the Lenham Neighbourhood Plan TA (2019), to determine the likely number of non-car movements generated by the development.									Noted
15	Would traffic from adjacent sites be attracted to the site? Pass-by traffic?	100% newly generated trips.									Noted
16	What is the assumed trip distribution?	Trips generated by the site to be distributed in accordance with Method of to Work information derived from 2011 Census data and web based route planning software (Google Maps).									Noted
17	What is the extent of the accident study area to be considered?	Full extent of Old Ashford Road between and including its junction with the A20 and Faversham Road/High Street. <u>Please confirm acceptance of the accident study area.</u>									Also needs to include the section of A20 between the Maidstone Road and Rayners Hill junctions.
18	Capacity tests required for the proposed and following existing junctions	Formal capacity assessment proposed at the junctions indicated at Point 6 above and site access.									The A20 junctions with Faversham Road and Maidstone Road should be included. Quantification of the singular and cumulative impact on the section of the A20 between M20 J8 and B2163 and the A20 roundabout at Charing required as a minimum, with capacity testing of individual junctions to be undertaken as may be necessary.
19	Are adjacent junctions or links likely to become overloaded?	To be confirmed through capacity assessment.									Noted

SCOPING CHECKLIST FOR: Up to 100 dwellings on land off from Old Ashford Road, Lenham, Kent

HIGHWAY AUTHORITY: Kent County Council (KCC)

DATE PREPARED: 02/04/19

20	Is a new or modified highway access likely?	<p>It is proposed that the site would be served via two priority controlled access from Old Ashford Road. Whilst subject to reserved matters, both will likely accord with KCC standards for a major access road i.e. 5.5m wide carriageway and will likely connect internally. Access strategy shown indicatively on Drawing P19013-001B attached.</p> <p>Eastern access to be taken to southern boundary to potentially facilitate further development. Western access taken to southern boundary to facility sport facility access.</p> <p>Old Lenham Road potentially to be widened to 5.5m at site frontage as per Neighbourhood Plan. Old Lenham Road/A20 junction potentially to be reconfigured (see point 25).</p> <p><u>Comments welcome on possible access arrangements at an early stage</u></p>	<p><i>As per comments on item 2.</i></p> <p><i>A 5.5m carriageway width accords with the Kent Design Guide for the scale of development currently proposed. The specification may need to be revised however, in light of any clarification on what is meant by 'further development' and what form of sports facility may come forward.</i></p> <p><i>The length over which widening of Old Ashford Road is proposed will need to be clarified.</i></p>
21	What are the visibility requirements? Are those requirements met?	Based on locally observed 85 th %ile speeds as shown in Drawing P19013-001B.	<i>Speed survey will need to be presented as evidence to support the proposed visibility splays.</i>
22	What level of car parking is required?	To be agreed at Reserved Matters stage, however, local standards to be outlined in TA.	<i>Noted</i>
23	Are special provisions required for cyclists, pedestrians, those with a disability or public transport?	To be reviewed as part of the Transport Assessment. 3m wide shared cycleway to potentially be provided along one side of site accesses and a scenic walking/cycle route likely to be provided internally. 2m wide footways to tie in with existing provision on Old Ashford Road.	<p><i>The TA should identify how footways will be provided in both directions on Old Ashford Road/Ashford Road to connect with existing provision (in line with that shown in the Neighbourhood Plan).</i></p> <p><i>Connectivity to existing Public Rights of Way.</i></p> <p><i>Suitable provision should be made for cyclists. The access strategy drawing indicates that a dedicated cycle route will be included on Old Ashford Road so an understanding of where this will lead to is required. Internally within the site the need for dedicated routes will depend on the layout design and whether this maintains low</i></p>

SCOPING CHECKLIST FOR: Up to 100 dwellings on land off from Old Ashford Road, Lenham, Kent

HIGHWAY AUTHORITY: Kent County Council (KCC)

DATE PREPARED: 02/04/19

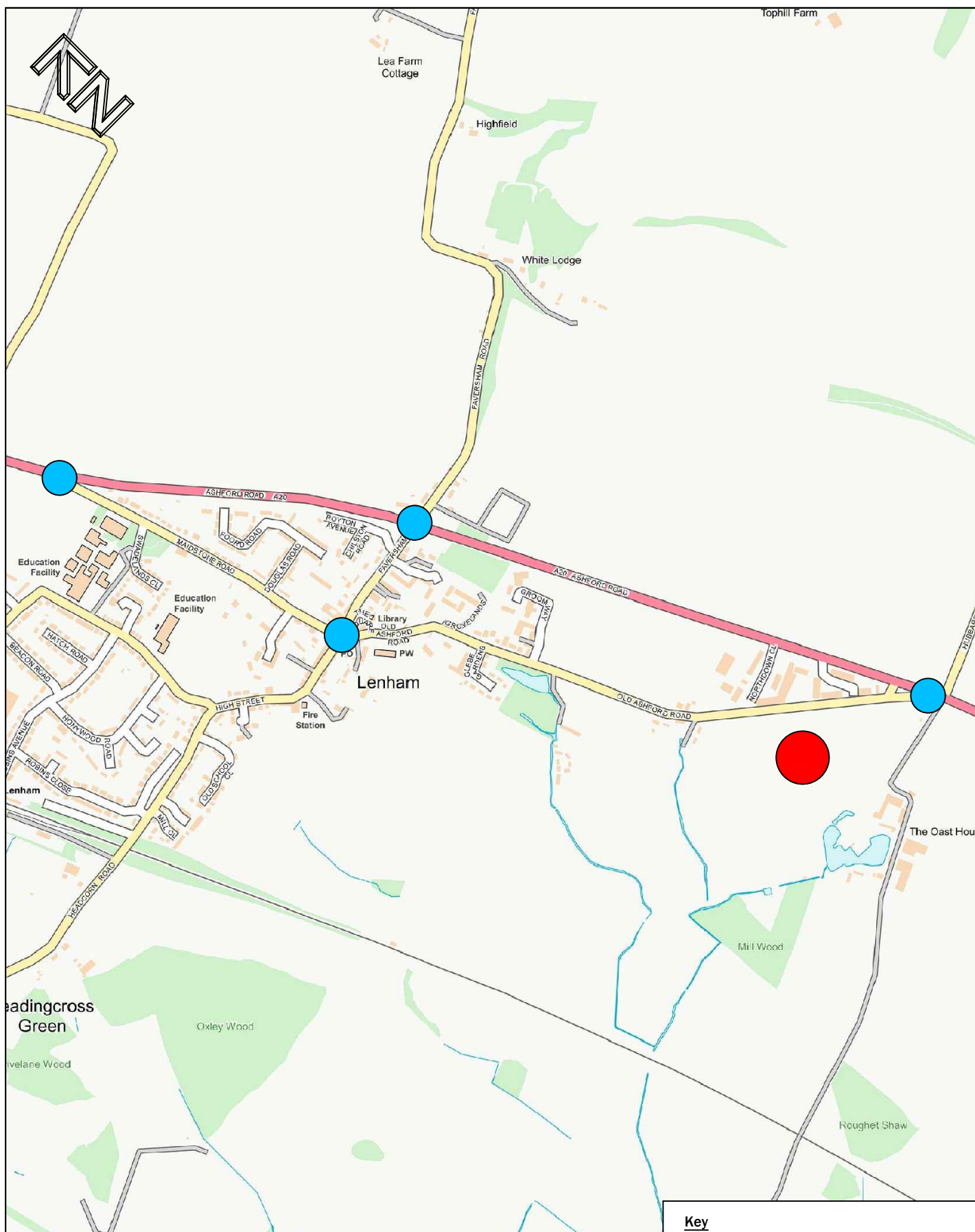
			<p><i>vehicle speeds that will enable cyclists to mix with traffic.</i></p> <p><i>Access to bus stops and the suitability of the waiting facilities should also be covered in the TA.</i></p>
24	What planning policy should the development comply with?	<ul style="list-style-type: none"> • NPPF; • MfS/MfS2; • Maidstone Borough Local Plan; • Lenham Neighbourhood Plan; and • Draft LTP4 - Kent County Council: Growth without Gridlock (2016-2031) <p><u>Please advise if any more documents should be taken into account.</u></p>	Kent Design Guide
25	Are there any other special circumstances relevant to this proposal?	<p>Neighbourhood Plan preference to reconfigure Old Ashford Road/A20 junction essentially removing eastern priority to help control speeds. Priority with ghost island right turn could be retained and left turn diverge/deceleration lane could be provided. Applicant happy to help provide this if KCC deem beneficial, alternatively existing junction arrangement could be retained. 30mph speed limit potentially to be extended further east on Old Ashford Road.</p> <p><u>Any other special circumstances? KCC to advise</u></p>	<p><i>The reconfiguration of this junction is not now proposed within the Neighbourhood Plan. The TA will nonetheless need to identify what the impacts on this junction are, both in terms of safety and capacity, and propose mitigation as necessary.</i></p> <p><i>A proposal to extend the 30mph limit on Old Ashford Road would need to be justified, having regard to the site access strategy and proposed site frontage.</i></p>

protected by law. Unauthorised use, copying or disclosure of any of it maybe unlawful. If you receive this communication in error, please notify us immediately, destroy any copies and delete it from your computer system.



APPENDIX B

FIGURES

This page has been
left intentionally
blank



Contains Ordnance Survey data (C) Crown copyright and database right (2019)
<http://www.ordnancesurvey.co.uk/docs/licences/os-opendata-licence.pdf>

Key
 SITE LOCATION
 TRAFFIC SURVEY LOCATIONS



9 Hurricane Court
 Liverpool International Business Park | Estuary Boulevard | Liverpool | L24 8RL
www.primetp.co.uk | 0151 728 1860

Project

OLD ASHFORD ROAD, LENHAM, KENT

Title

SITE LOCATION PLAN AND TRAFFIC SURVEY LOCATION

Drawn by

AM

Issue date

06 SEPT 2019

Scale(s)

NTS

Drawing No

FIGURE 1

This page has been
left intentionally
blank



Development Site

Walking Range (m)

0 - 1200

1200 - 2000

Amenities/Education/Employment



Ashmill Business Park



Bowling Club



Co-operative Food



Football Club



Lenham Community Centre



Lenham Library



Lenham Primary School



Lenham Social Club



Lenham Storage



Lenham Train Station



Lenham Village Centre



McColl's Convenience Store



Northdown Business Park



Post Office



St Mary's Church



The Len Valley Practice



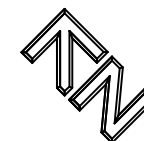
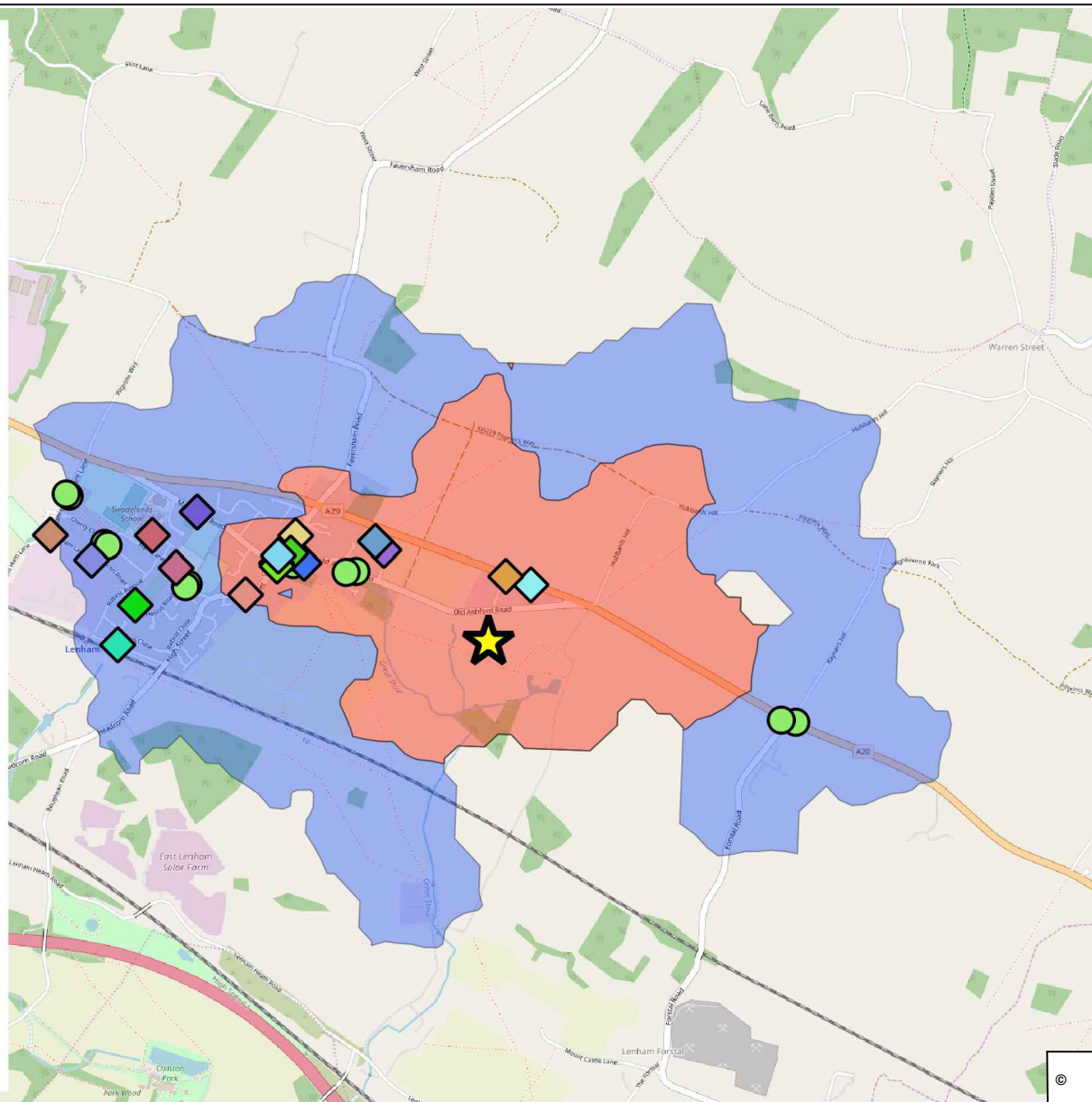
The Lenham School



Village Store



Bus Stops



© OpenStreetMap contributors

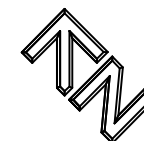
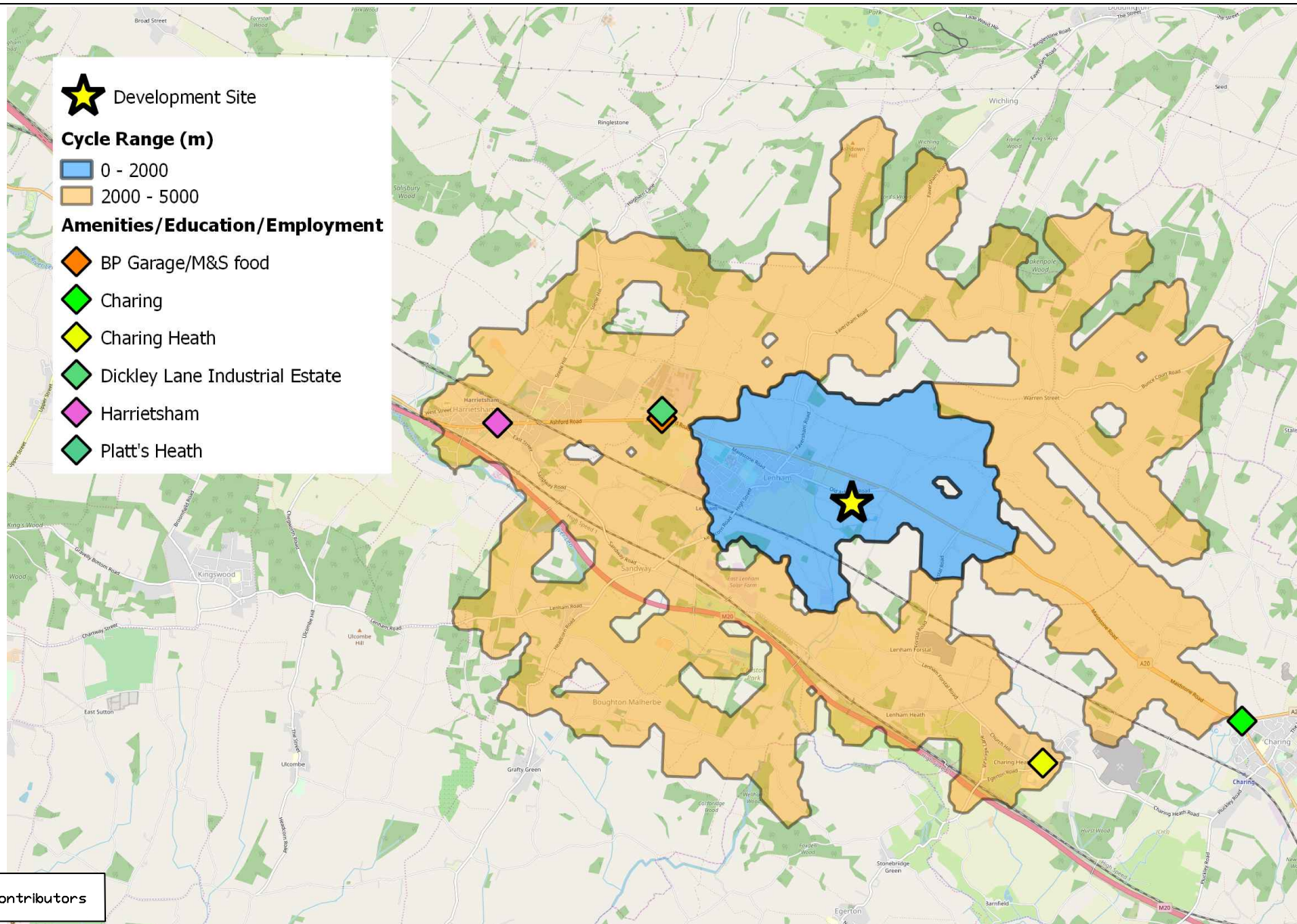


9 Hurricane Court
Liverpool International Business Park | Estuary Boulevard | Liverpool | L24 8RL
www.primetp.co.uk | 0151 728 1860

*	*	*	*
Rev	Date	By	Revision notes
Status			
FINAL			

Project		OLD ASHFORD ROAD, LENHAM, KENT	
Title		PEDESTRIAN ISOCHRONE	
Drawn by	AM	Issue date	12 SEPT 2019
Scale(s)		NTS	
Drawing No		FIGURE 2	

This page has been
left intentionally
blank



©OpenStreetMap contributors



9 Hurricane Court
Liverpool International Business Park | Estuary Boulevard | Liverpool | L24 8RL
www.primetp.co.uk | 0151 728 1860

*	*	*	*
Rev	Date	By	Revision notes
Status			
FINAL			

Project	OLD ASHFORD ROAD, LENHAM, KENT
Title	CYCLING ISOCHRONE

Drawn by AM	Issue date 12 SEPT 2019
Scale(s)	NTS
Drawing No	FIGURE 3

This page has been
left intentionally
blank

APPENDIX C

TRAFFIC FLOW DIAGRAMS

This page has been
left intentionally
blank

Traffic Flow Diagrams			
Reference	Scenario	Peak	Derivation
1	Traffic Flow Diagram 1 - 2019 Observed Flows	AM (0700-0800)	Raw Data
2	Traffic Flow Diagram 2 - 2019 Observed Flows	PM (1630-1730)	Raw Data
3	Traffic Flow Diagram 3 - 2024 Base Flows	AM (0700-0800)	1*TEMPPro
4	Traffic Flow Diagram 4 - 2024 Base Flows	PM (1630-1730)	2*TEMPPro
5	Traffic Flow Diagram 5 - Committed Development Flows	AM (0700-0800)	14/500219
6	Traffic Flow Diagram 6 - Committed Development Flows	PM (1630-1730)	14/500219
7	Traffic Flow Diagram 7 - Committed Development Flows	AM (0700-0800)	14/502973
8	Traffic Flow Diagram 8 - Committed Development Flows	PM (1630-1730)	14/502973
9	Traffic Flow Diagram 9 - Committed Development Flows	AM (0700-0800)	17/500357
10	Traffic Flow Diagram 10 - Committed Development Flows	PM (1630-1730)	17/500357
11	Traffic Flow Diagram 11 - Committed Development Flows	AM (0700-0800)	13/1823
12	Traffic Flow Diagram 12 - Committed Development Flows	PM (1630-1730)	13/1823
13	Traffic Flow Diagram 13 - Committed Development Flows	AM (0700-0800)	14/503411
14	Traffic Flow Diagram 14 - Committed Development Flows	PM (1630-1730)	14/503411
15	Traffic Flow Diagram 15 - Committed Development Flows	AM (0700-0800)	17/502396
16	Traffic Flow Diagram 16 - Committed Development Flows	PM (1630-1730)	17/502396
17	Traffic Flow Diagram 17 - Committed Development Flows	AM (0700-0800)	17/502331
18	Traffic Flow Diagram 18 - Committed Development Flows	PM (1630-1730)	17/502331
19	Traffic Flow Diagram 19 - Total Committed Development Flows	AM (0700-0800)	5+7+9+11+13+15+17
20	Traffic Flow Diagram 20 - Total Committed Development Flows	PM (1630-1730)	6+8+10+12+14+16+18
21	Traffic Flow Diagram 21 - 2024 Without Development Flows (Do Minimum)	AM (0700-0800)	3+19
22	Traffic Flow Diagram 22 - 2024 Without Development Flows (Do Minimum)	PM (1630-1730)	4+20
23	Traffic Flow Diagram 23 - Residential Development Distribution	Both	MTW Census
24	Traffic Flow Diagram 24 - Residential Development Flows	AM (0700-0800)	23*NBHP Trips
25	Traffic Flow Diagram 25 - Residential Development Flows	PM (1630-1730)	23*NBHP Trips
26	Traffic Flow Diagram 26 - Sports Ground Development Flows	AM (0700-0800)	26*TRICS
27	Traffic Flow Diagram 27 - Sports Ground Development Flows	PM (1630-1730)	27*TRICS
28	Traffic Flow Diagram 28 - Total Development Flows	AM (0700-0800)	24+28
29	Traffic Flow Diagram 29 - Total Development Flows	PM (1630-1730)	25+29
30	Traffic Flow Diagram 30 - 2024 With Development Flows (Do Minimum)	AM (0700-0800)	21+30
31	Traffic Flow Diagram 31 - 2024 With Development Flows (Do Minimum)	PM (1630-1730)	22+31
32	Traffic Flow Diagram 32 - 2031 Base Flows	AM (0700-0800)	1*TEMPPro
33	Traffic Flow Diagram 33 - 2031 Base Flows	PM (1630-1730)	2*TEMPPro
34	Traffic Flow Diagram 34 - Neighbourhood Plan Area 1 & 2 Development Flows (Do Something)	AM (0700-0800)	NBHP TA
35	Traffic Flow Diagram 35 - Neighbourhood Plan Area 1 & 2 Development Flows (Do Something)	PM (1630-1730)	NBHP TA
36	Traffic Flow Diagram 36 - Link Road Reassignment (Do Something)	AM (0700-0800)	NBHP TA
37	Traffic Flow Diagram 37 - Link Road Reassignment (Do Something)	PM (1630-1730)	NBHP TA
38	Traffic Flow Diagram 38 - 2031 Base Link Road Reassignment - Trips to be removed (Do Something)	AM (0700-0800)	32*36
39	Traffic Flow Diagram 39 - 2031 Base Link Road Reassignment - Trips to be removed (Do Something)	PM (1630-1730)	33*37
40	Traffic Flow Diagram 40 - 2031 Without Development Flows (Do Something)	AM (0700-0800)	32+19+34+38
41	Traffic Flow Diagram 41 - 2031 Without Development Flows (Do Something)	PM (1630-1730)	33+20+35+39
42	Traffic Flow Diagram 42 - 2031 With Development Flows (Do Something)	AM (0700-0800)	40+28
43	Traffic Flow Diagram 43 - 2031 With Development Flows (Do Something)	PM (1630-1730)	41+29
44	Traffic Flow Diagram 44 - 2024 With Development Flows (Do Minimum) with A20/Old Ashford Road Flow Adjustment	AM (0700-0800)	30 adjusted
45	Traffic Flow Diagram 45 - 2024 With Development Flows (Do Minimum) with A20/Old Ashford Road Flow Adjustment	PM (1630-1730)	31 adjusted
46	Traffic Flow Diagram 46 - 2031 With Development Flows (Do Something) with A20/Old Ashford Road Flow Adjustment	AM (0700-0800)	42 adjusted
47	Traffic Flow Diagram 47 - 2031 With Development Flows (Do Something) with A20/Old Ashford Road Flow Adjustment	PM (1630-1730)	43 adjusted

Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 1 - 2019 Observed Flows
Peak AM (0700-0800)

Notes: All flows are in vehicles

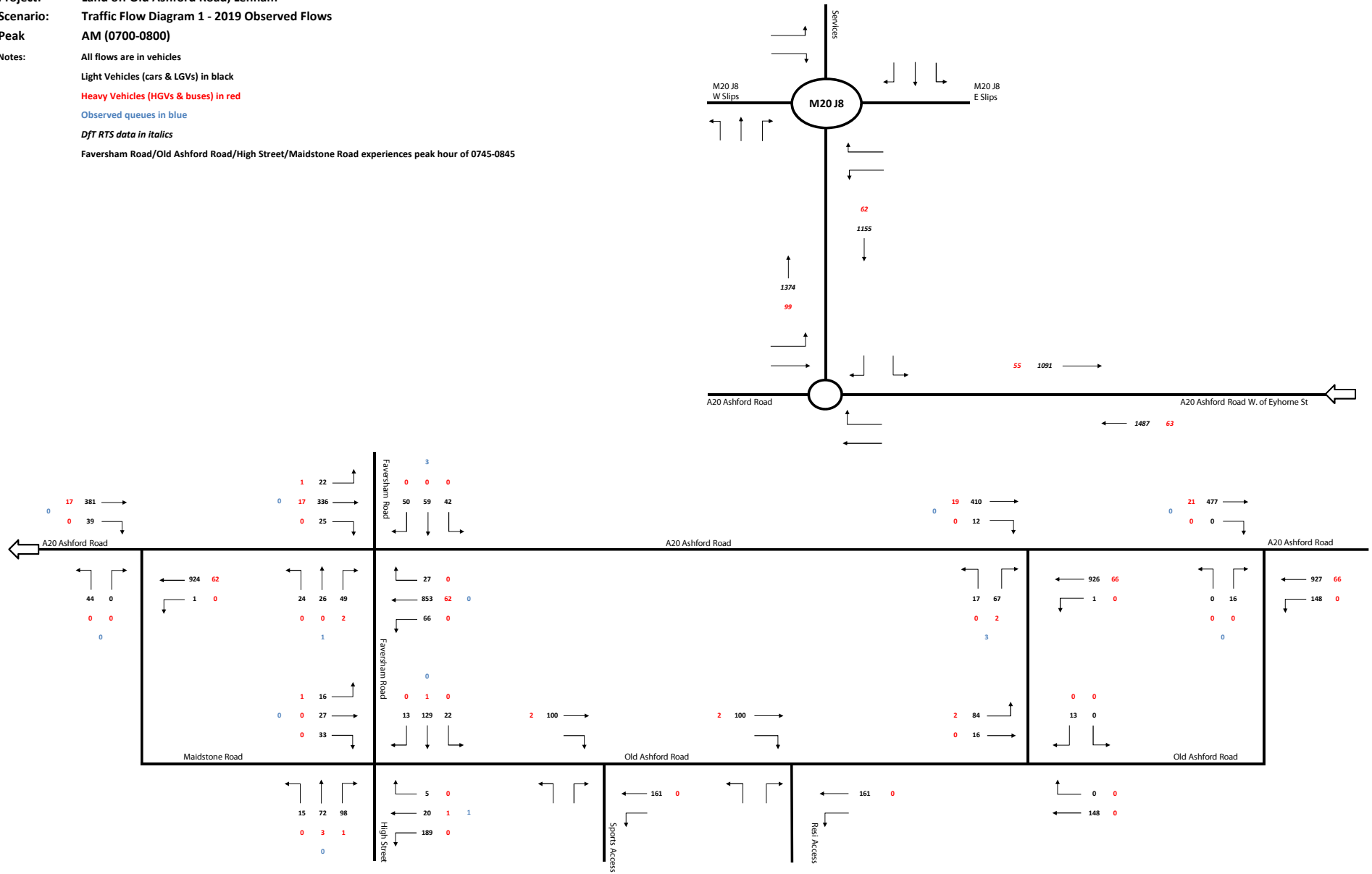
Light Vehicles (cars & LGVs) in black

Heavy Vehicles (HGVs & buses) in red

Observed queues in blue

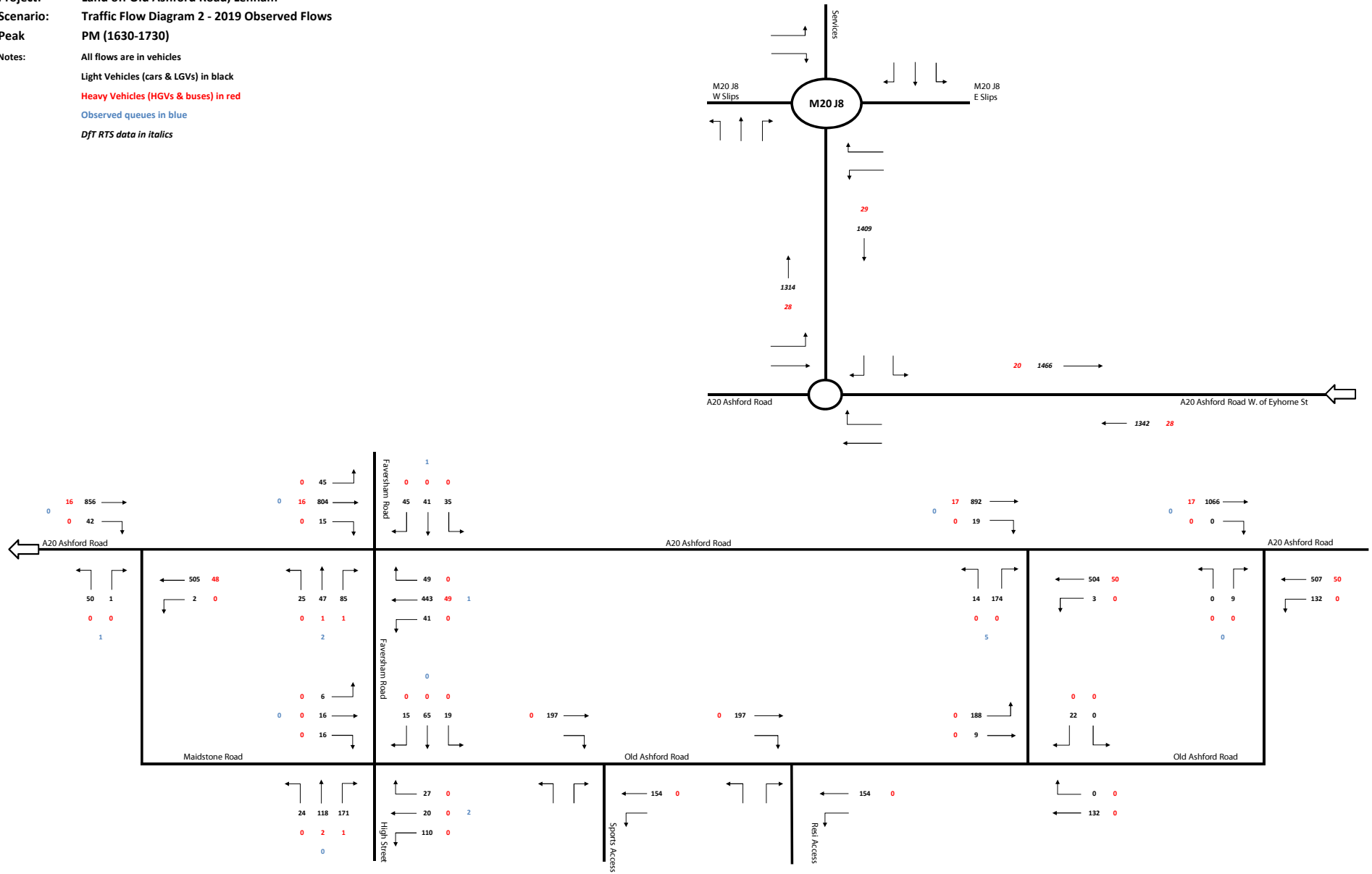
DfT RTS data in italics

Faversham Road/Old Ashford Road/High Street/Maidstone Road experiences peak hour of 0745-0845



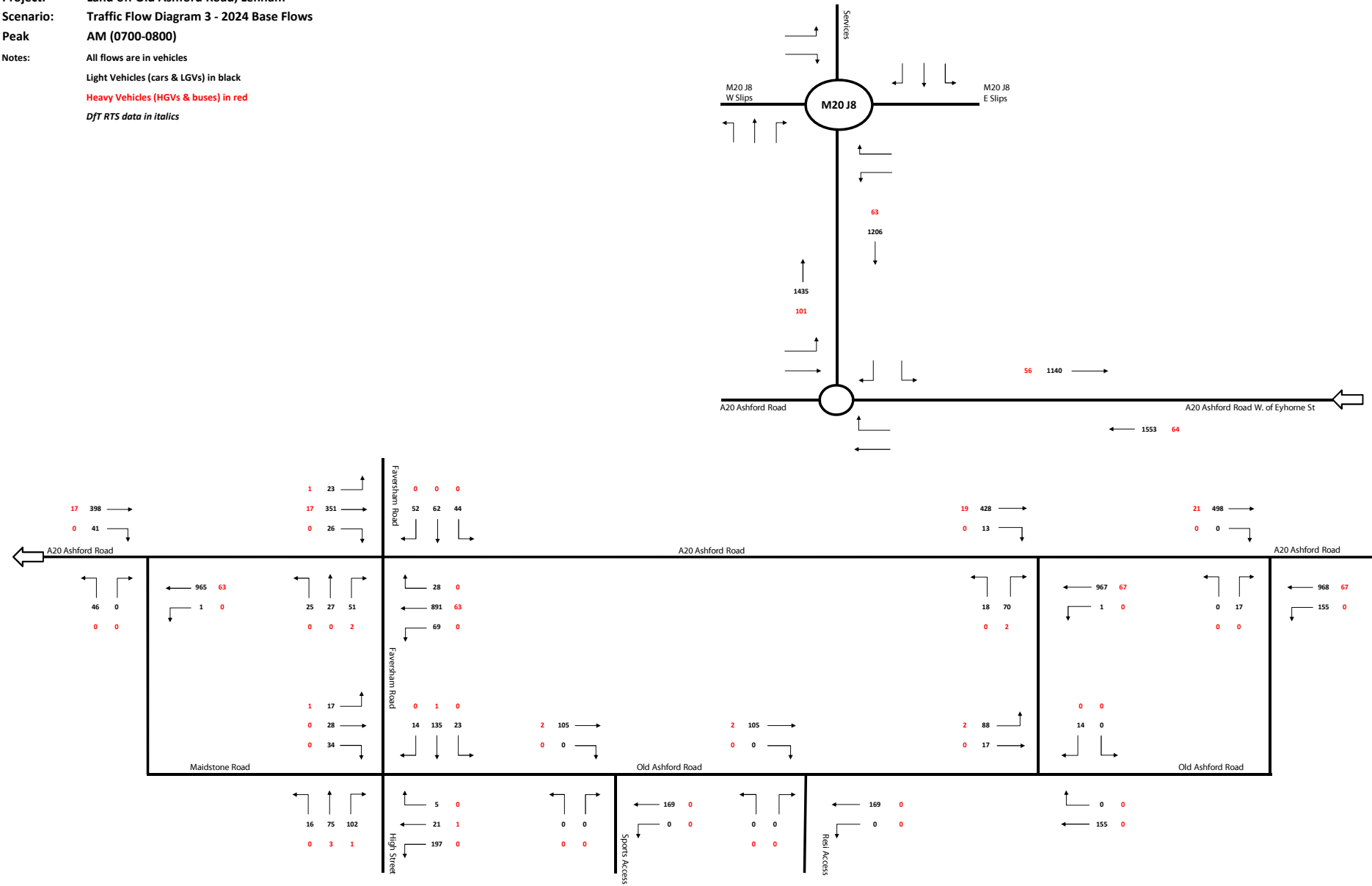
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 2 - 2019 Observed Flows
Peak PM (1630-1730)

Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red
 Observed queues in blue
 DfT RTS data in italics



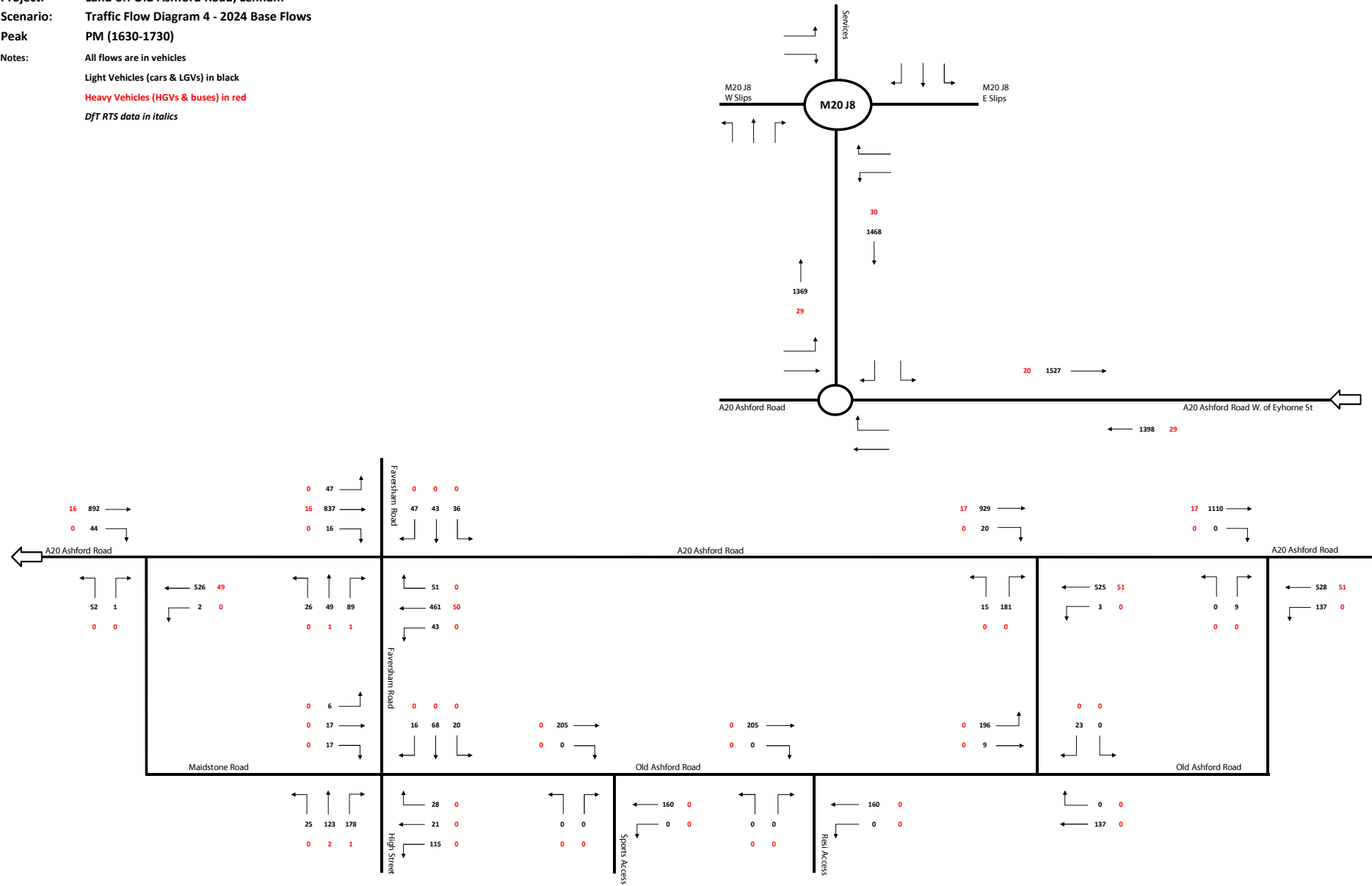
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 3 - 2024 Base Flows
Peak AM (0700-0800)

Notes: All flows are in vehicles
Light Vehicles (cars & LGVs) in black
Heavy Vehicles (HGVs & buses) in red
DfT RTS data in italics

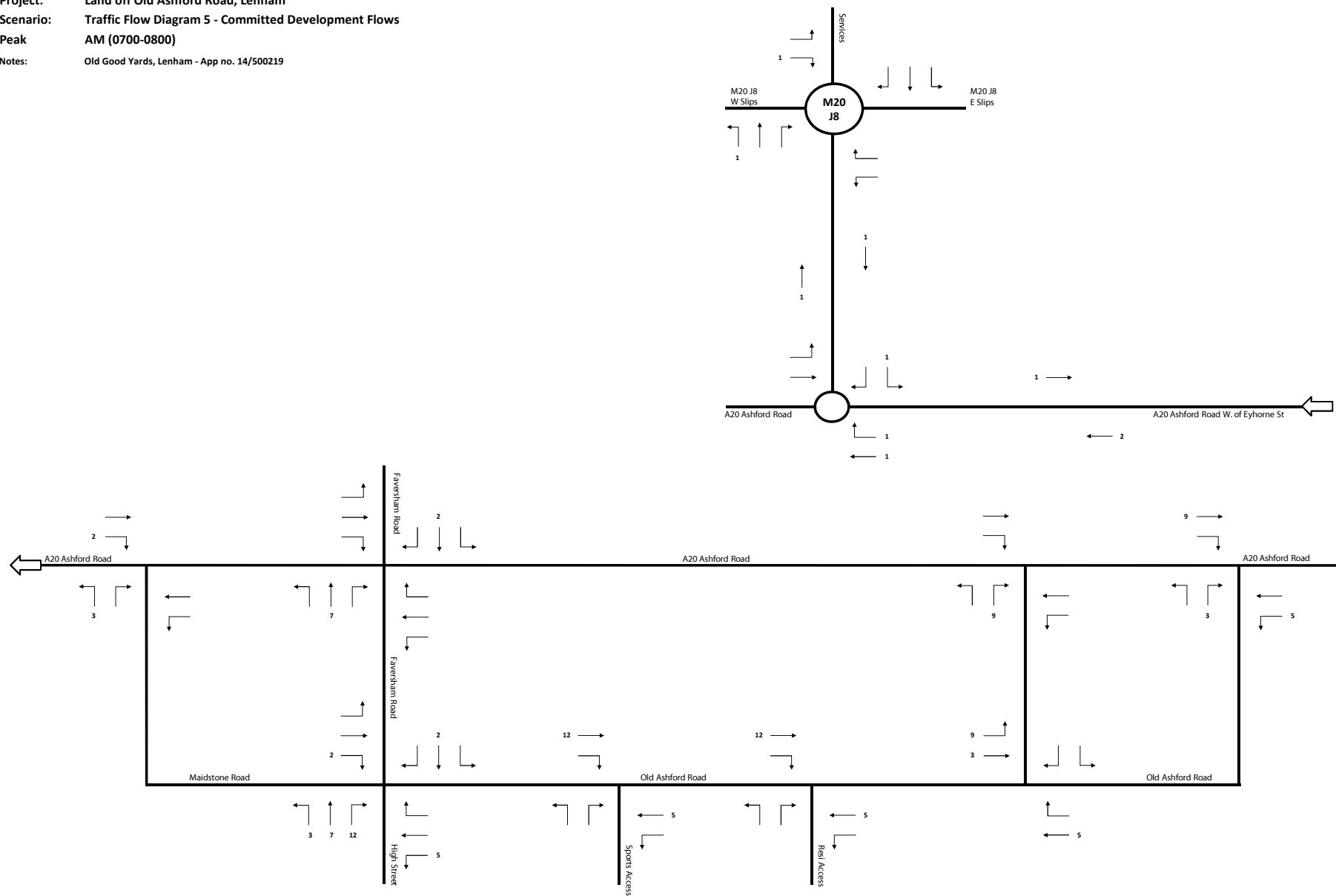


Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 4 - 2024 Base Flows
Peak PM (1630-1730)

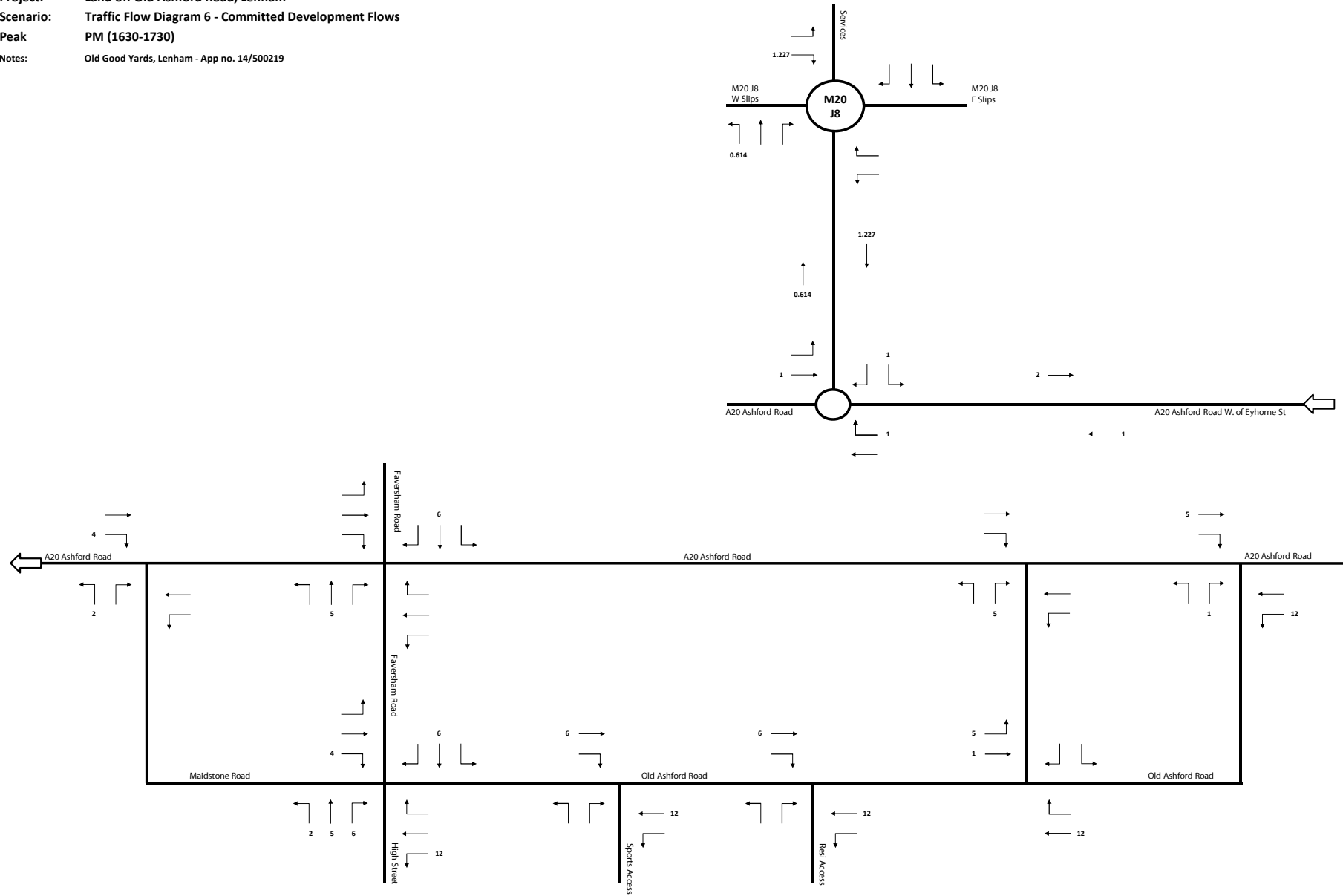
Notes: All flows are in vehicles
Light Vehicles (cars & LGVs) in black
Heavy Vehicles (HGVs & buses) in red
DfT RTS data in italics



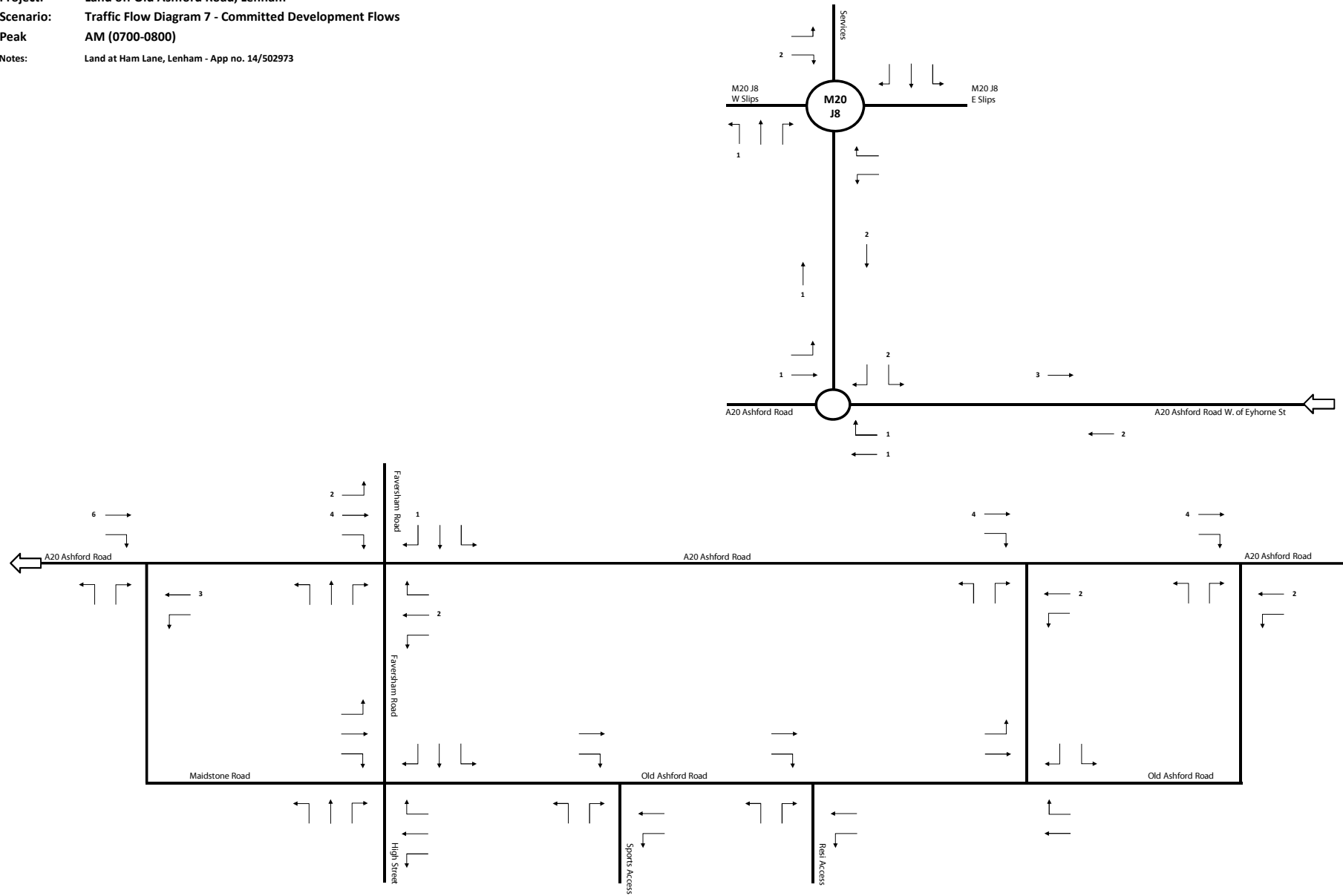
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 5 - Committed Development Flows
Peak AM (0700-0800)
Notes: Old Good Yards, Lenham - App no. 14/500219



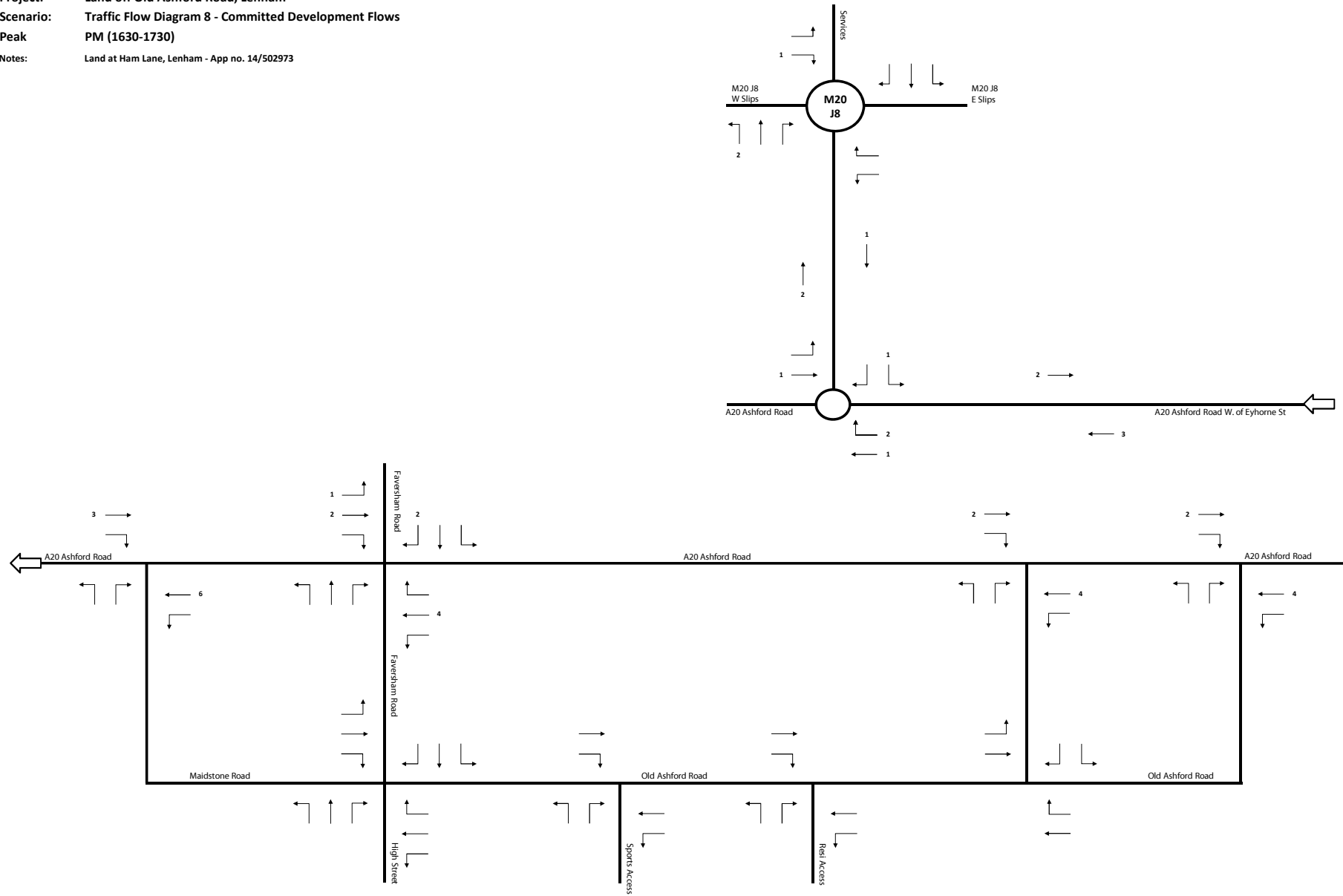
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 6 - Committed Development Flows
Peak PM (1630-1730)
Notes: Old Good Yards, Lenham - App no. 14/500219



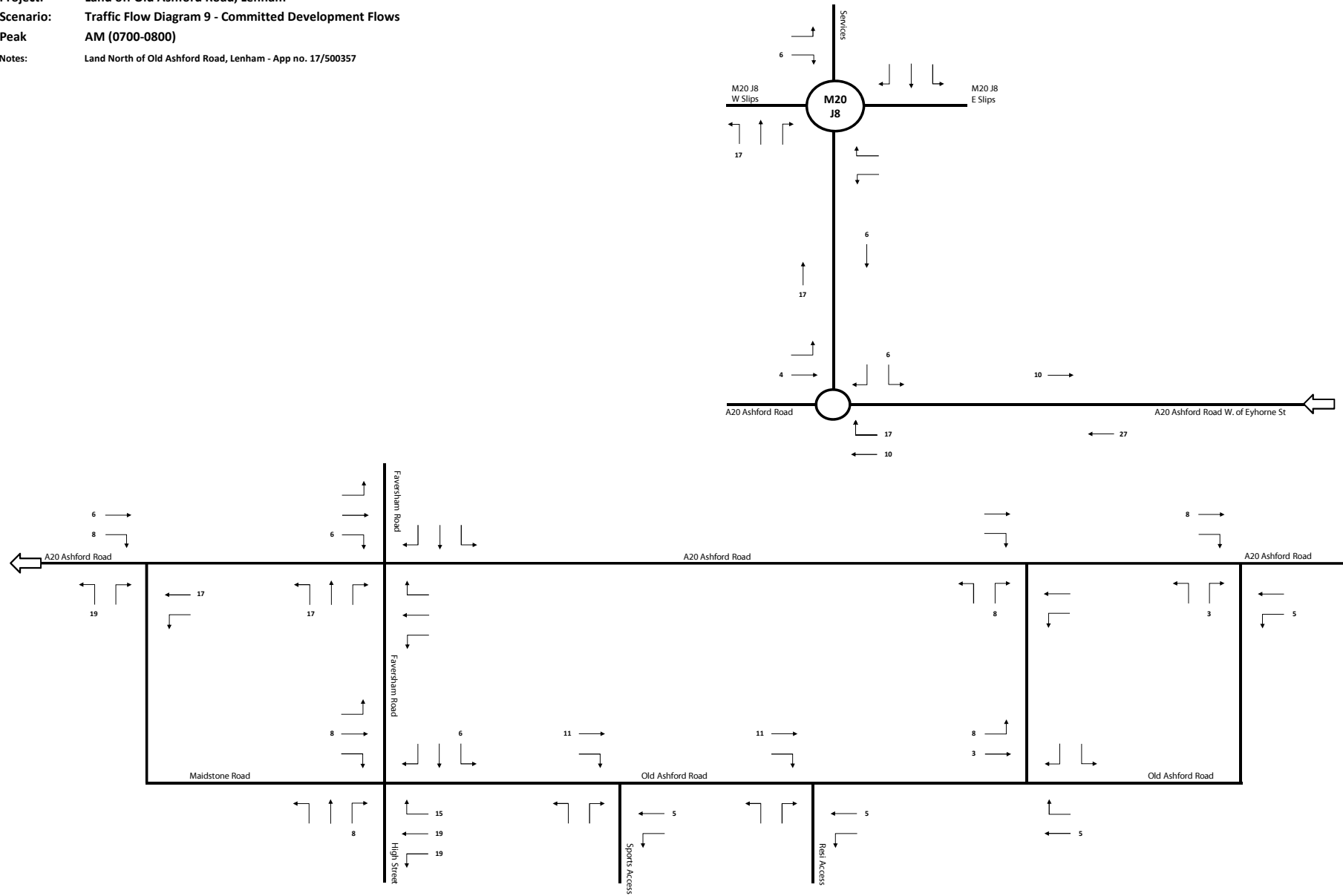
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 7 - Committed Development Flows
Peak AM (0700-0800)
Notes: Land at Ham Lane, Lenham - App no. 14/502973



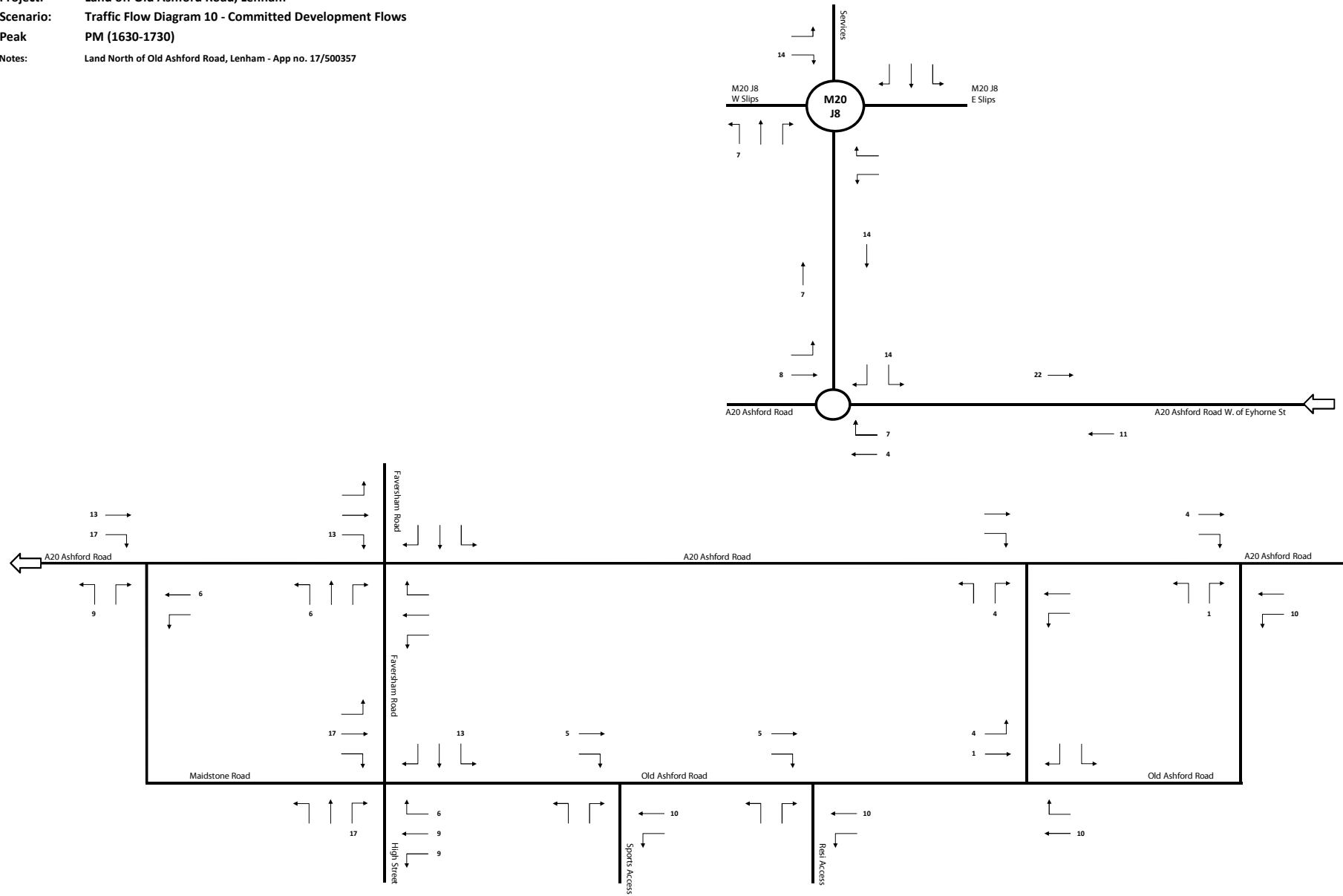
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 8 - Committed Development Flows
Peak PM (1630-1730)
Notes: Land at Ham Lane, Lenham - App no. 14/502973



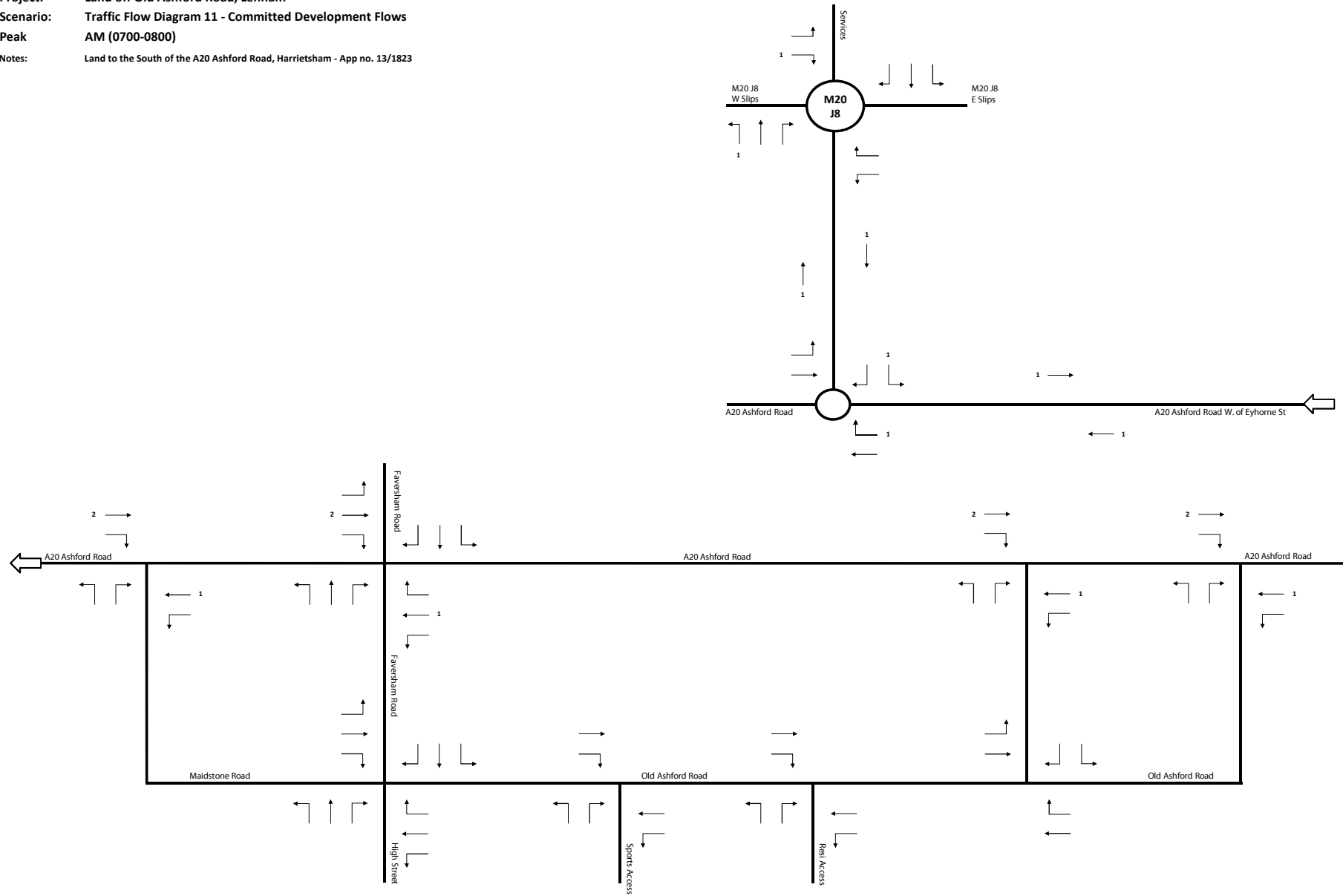
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 9 - Committed Development Flows
Peak AM (0700-0800)
Notes: Land North of Old Ashford Road, Lenham - App no. 17/500357



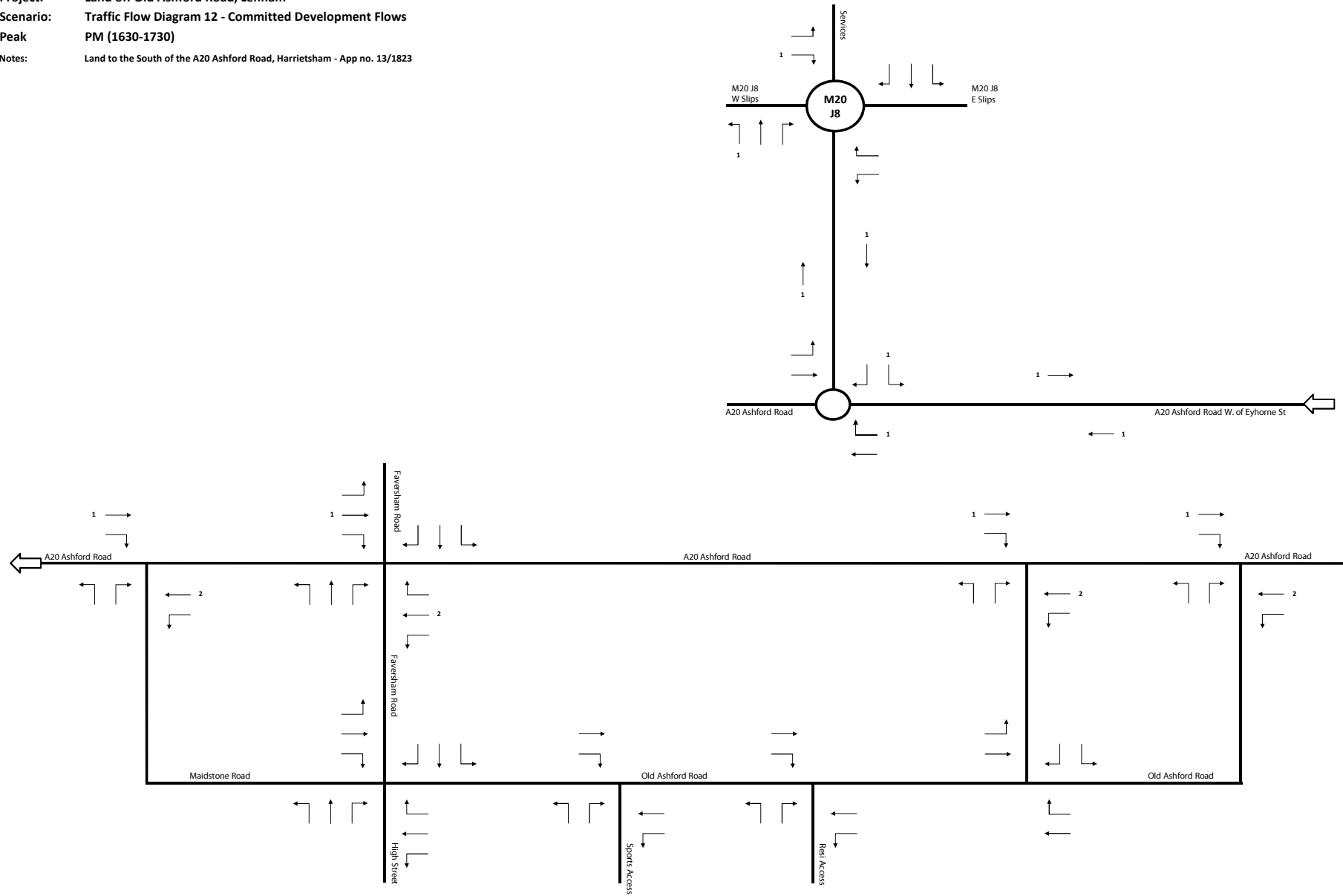
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 10 - Committed Development Flows
Peak PM (1630-1730)
Notes: Land North of Old Ashford Road, Lenham - App no. 17/500357



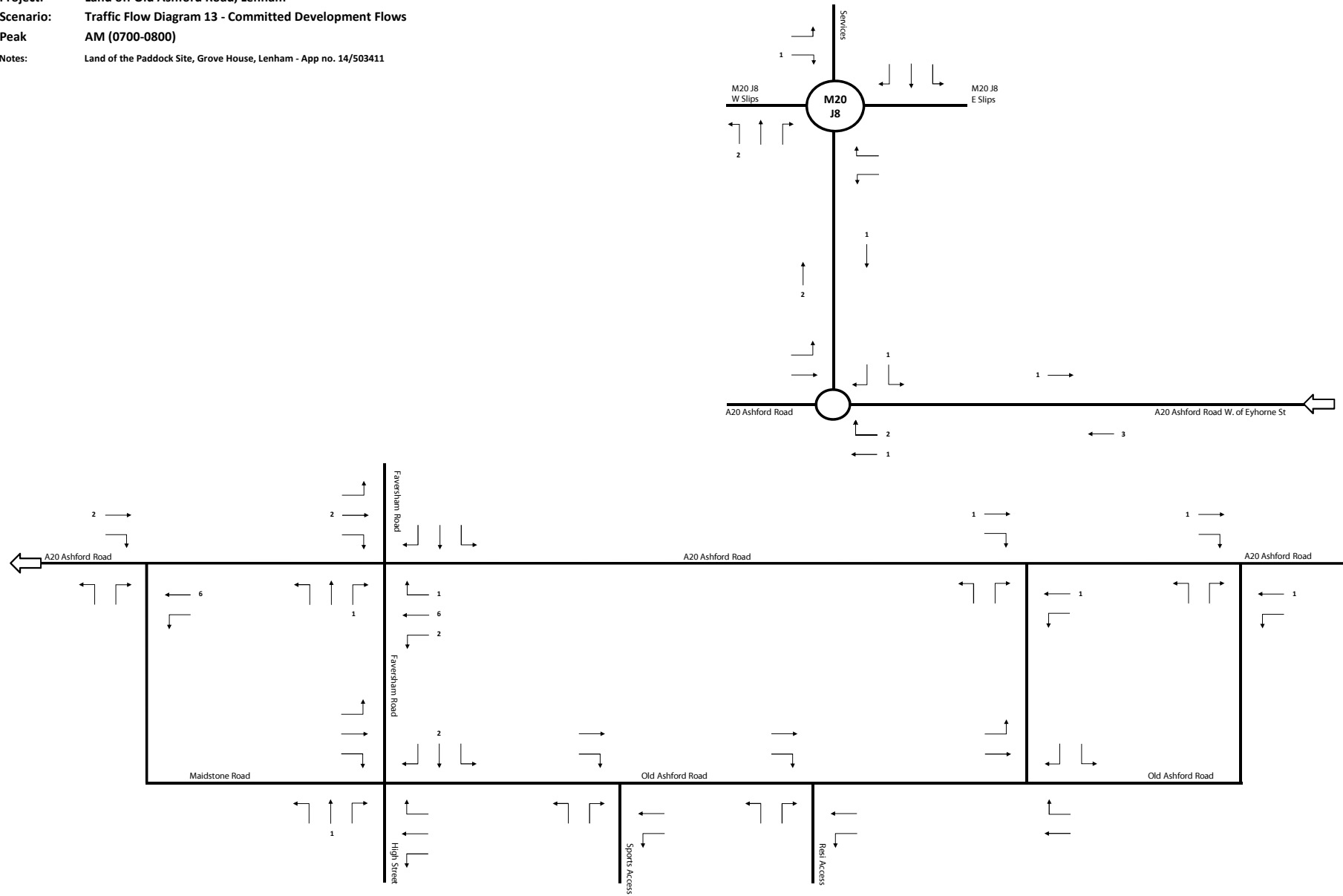
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 11 - Committed Development Flows
Peak AM (0700-0800)
Notes: Land to the South of the A20 Ashford Road, Harrietsham - App no. 13/1823



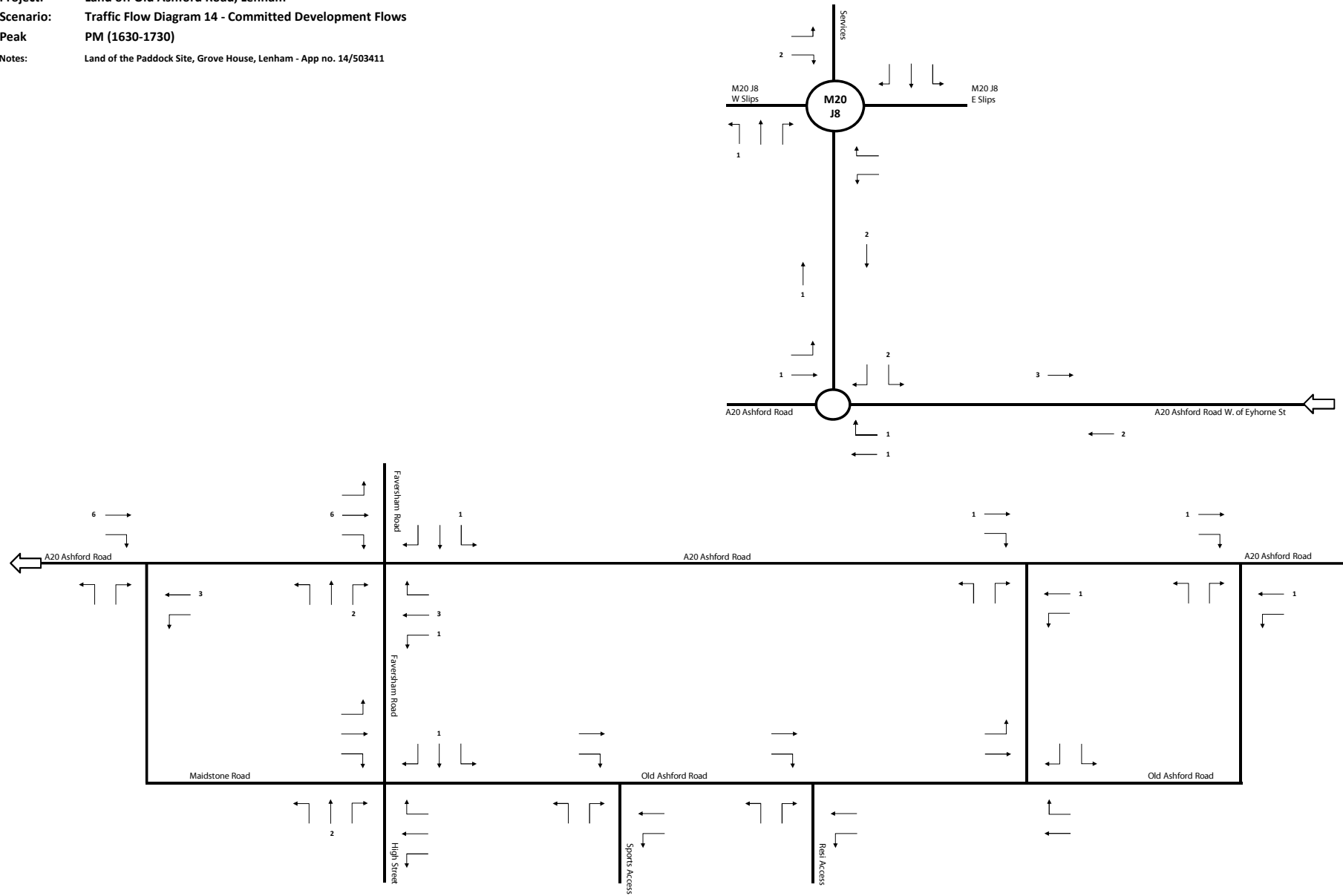
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 12 - Committed Development Flows
Peak PM (1630-1730)
Notes: Land to the South of the A20 Ashford Road, Harrietsham - App no. 13/1823



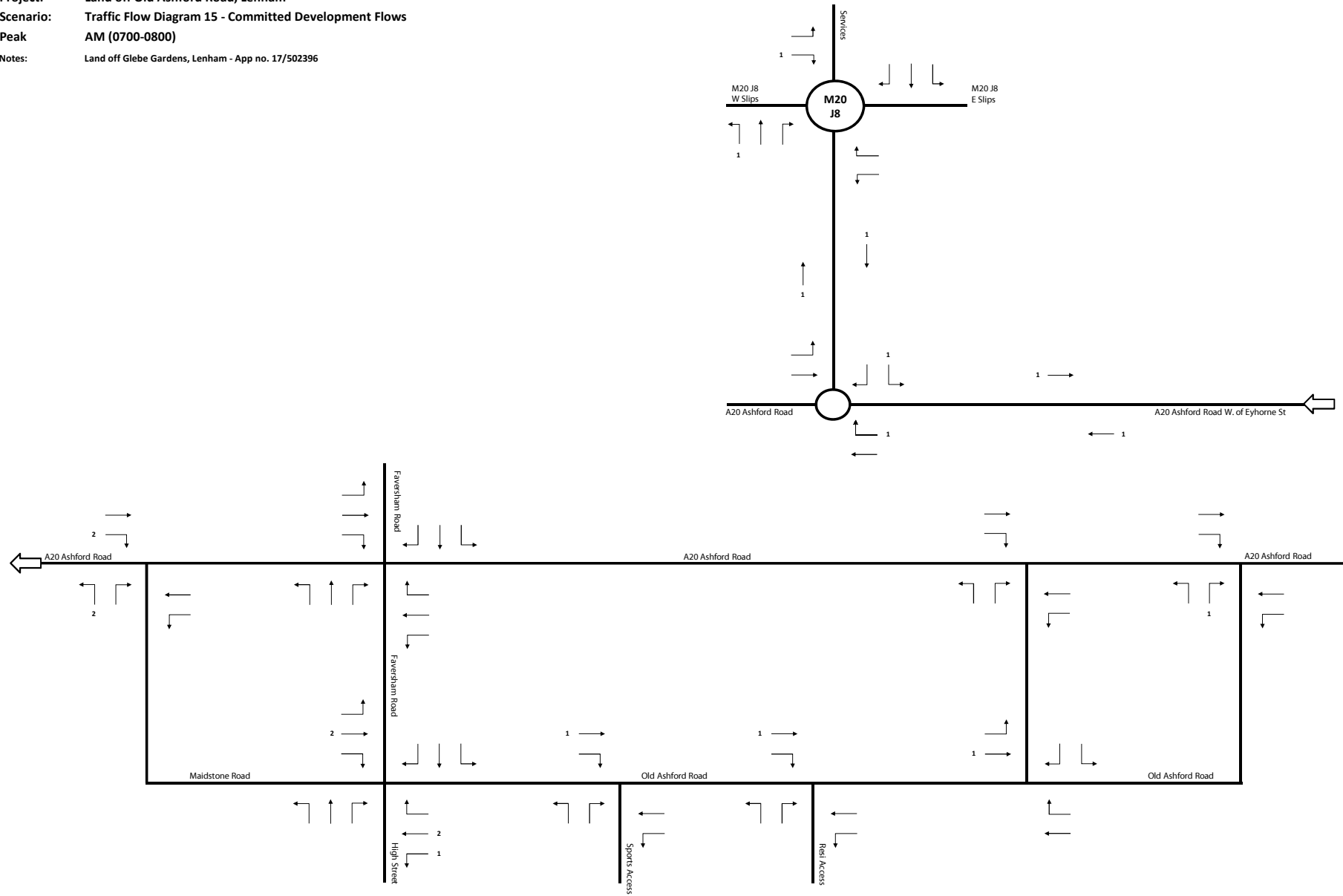
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 13 - Committed Development Flows
Peak AM (0700-0800)
Notes: Land of the Paddock Site, Grove House, Lenham - App no. 14/503411



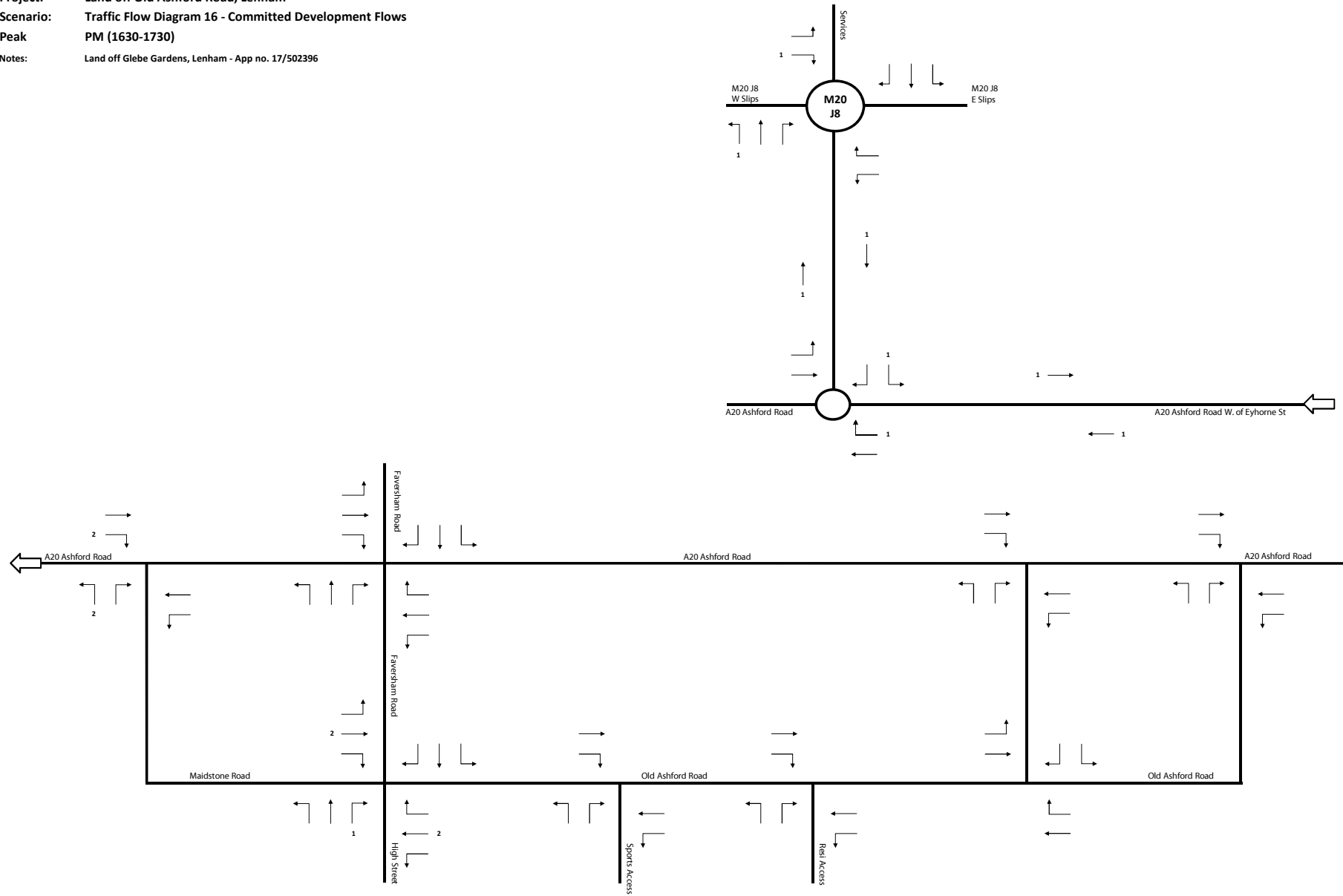
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 14 - Committed Development Flows
Peak PM (1630-1730)
Notes: Land of the Paddock Site, Grove House, Lenham - App no. 14/503411



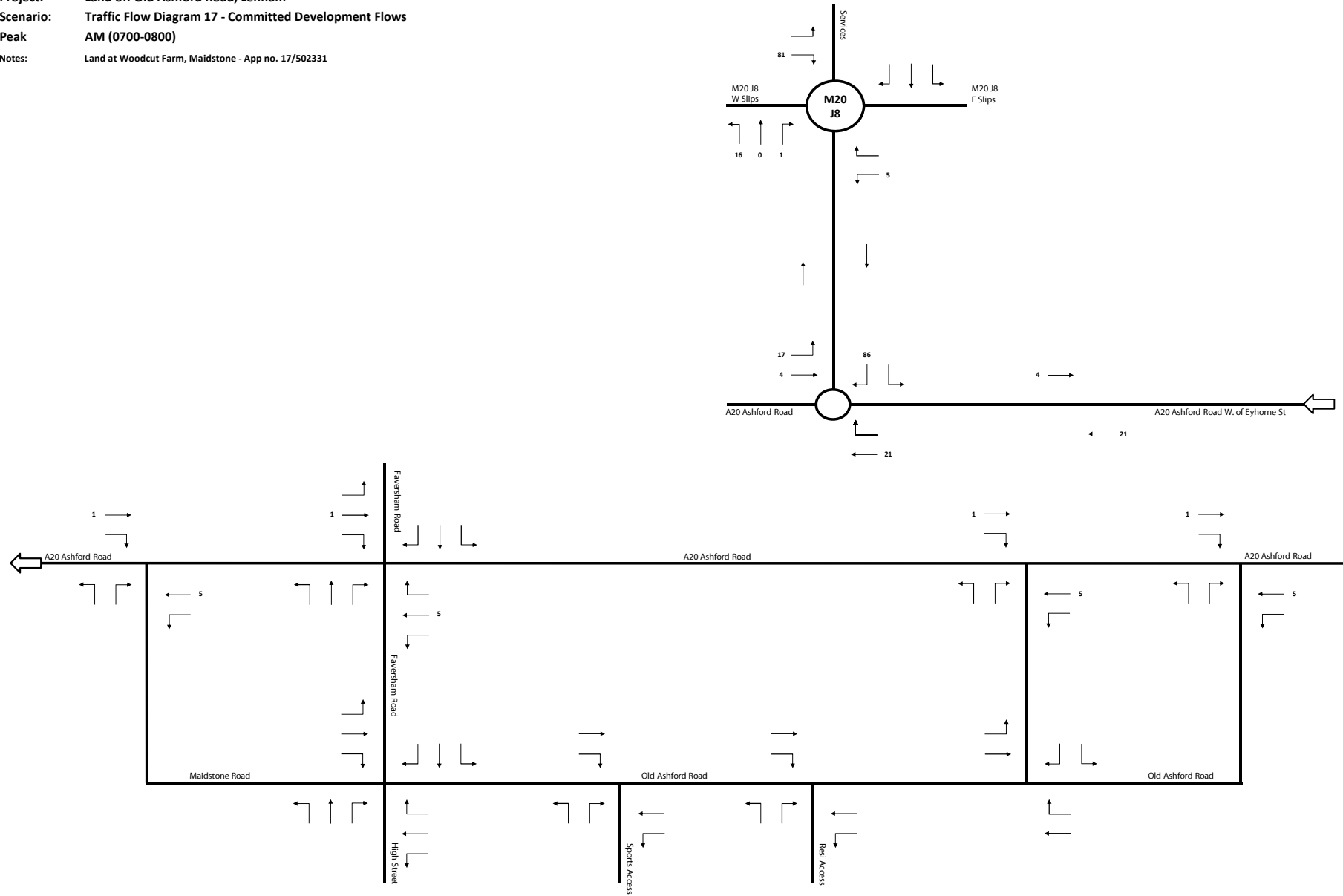
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 15 - Committed Development Flows
Peak AM (0700-0800)
Notes: Land off Glebe Gardens, Lenham - App no. 17/502396



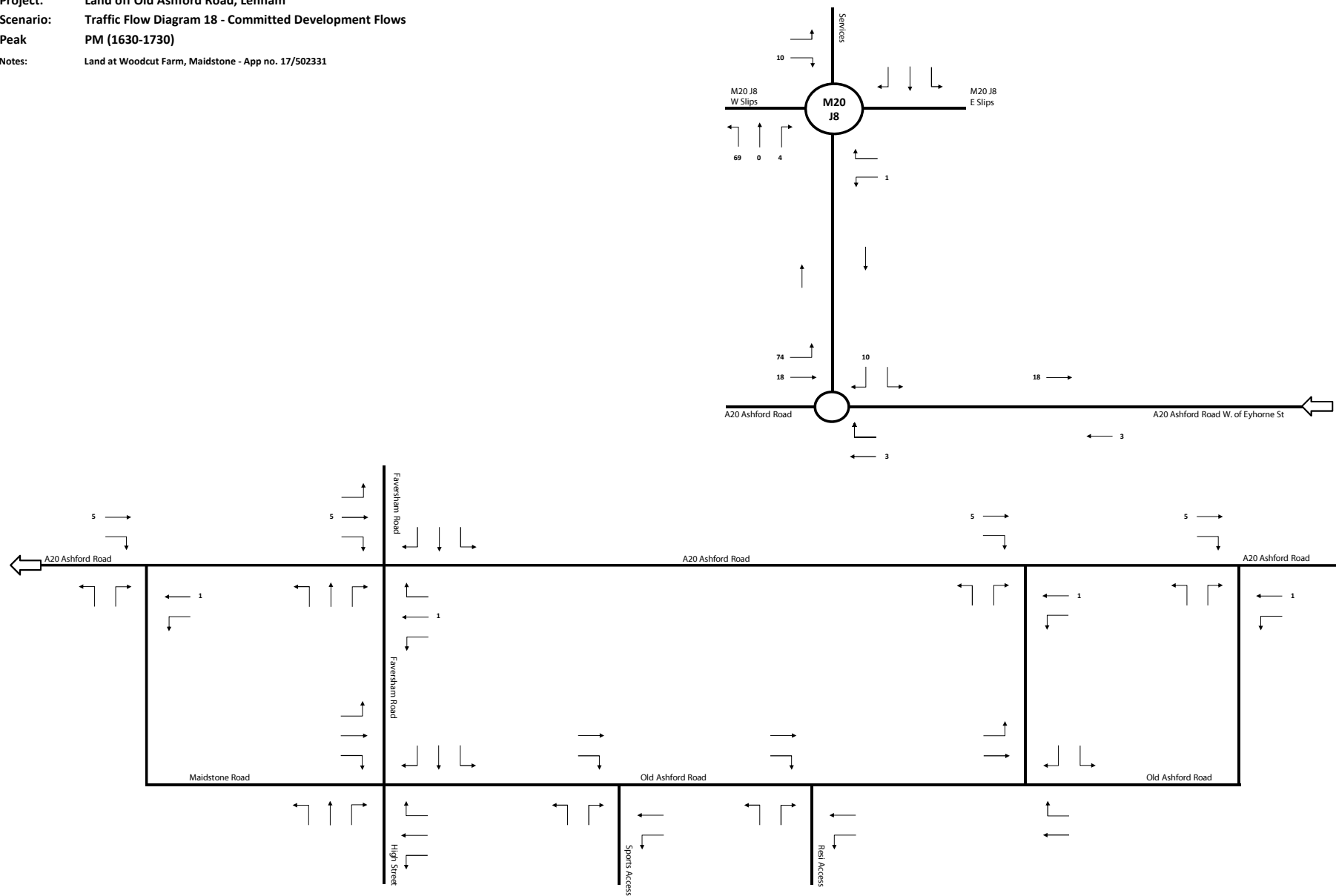
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 16 - Committed Development Flows
Peak PM (1630-1730)
Notes: Land off Glebe Gardens, Lenham - App no. 17/502396



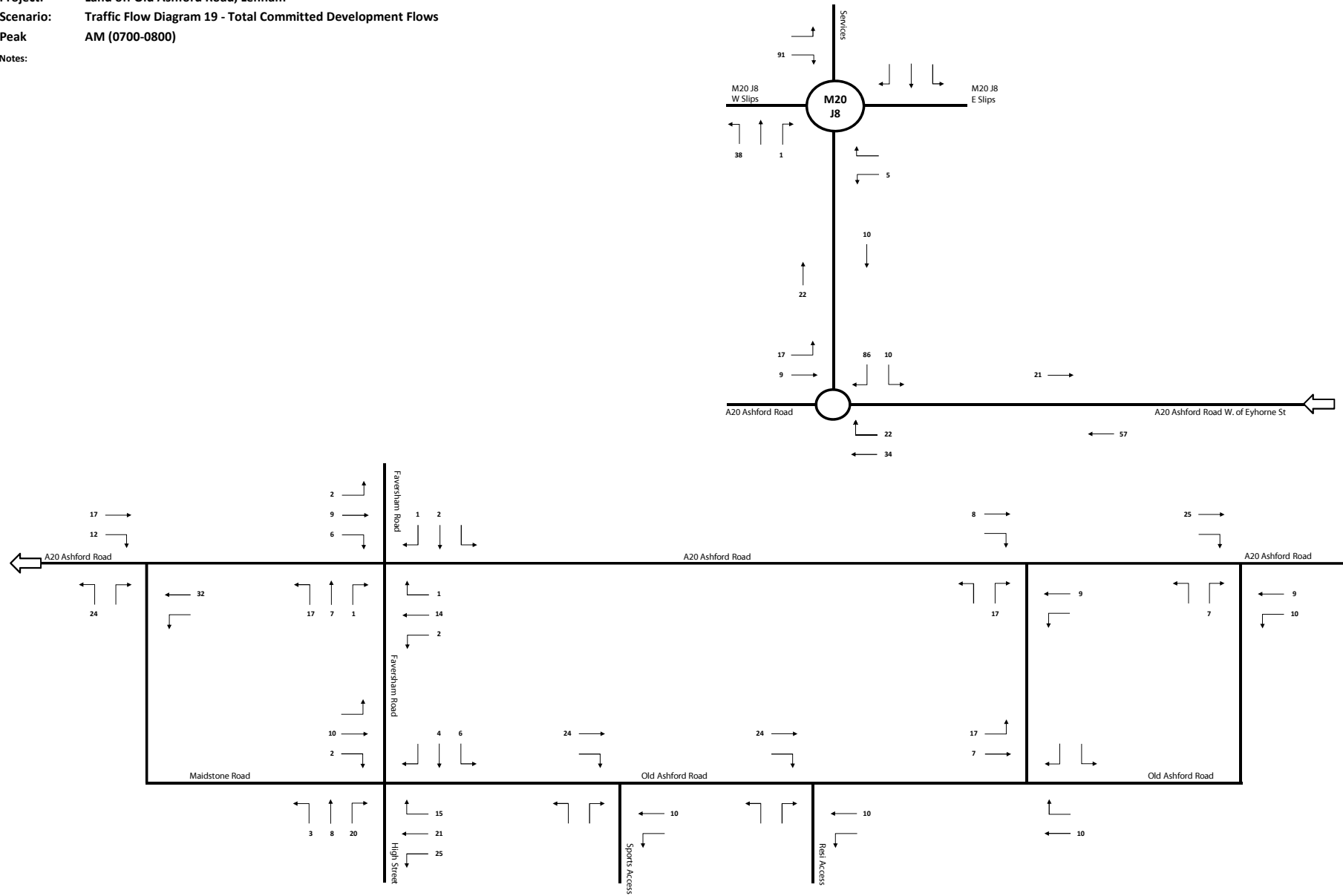
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 17 - Committed Development Flows
Peak AM (0700-0800)
Notes: Land at Woodcut Farm, Maidstone - App no. 17/502331



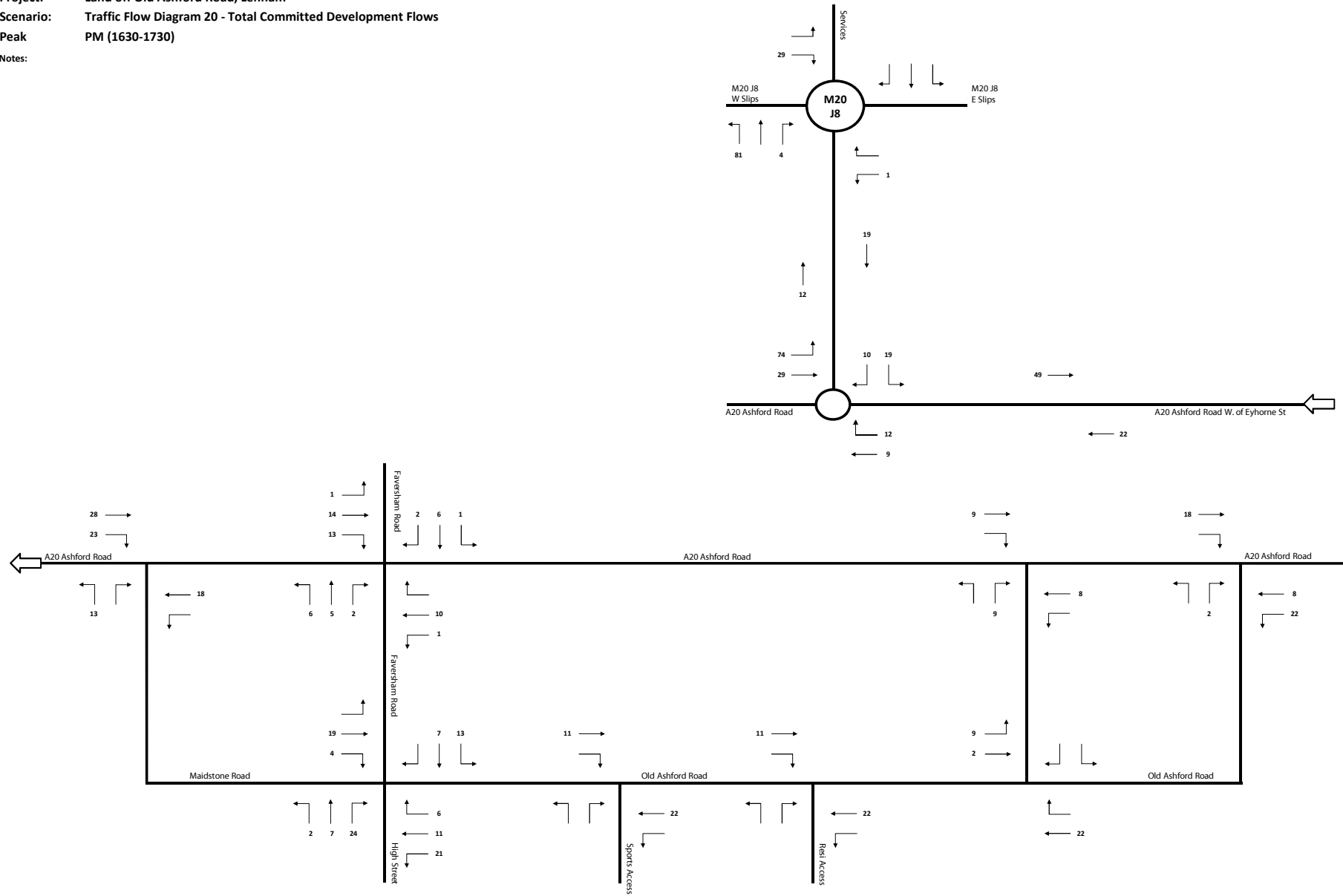
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 18 - Committed Development Flows
Peak PM (1630-1730)
Notes: Land at Woodcut Farm, Maidstone - App no. 17/502331



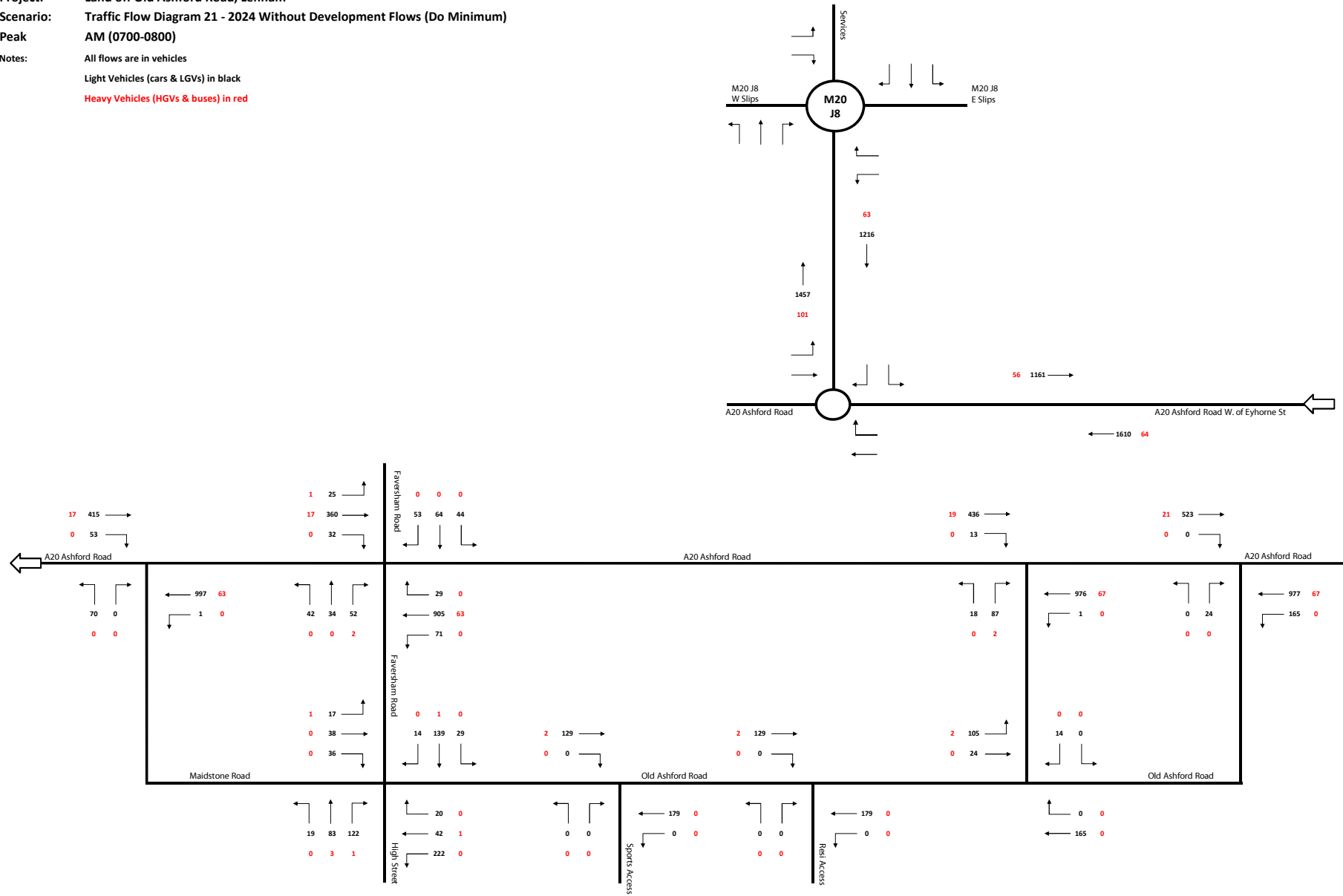
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 19 - Total Committed Development Flows
Peak AM (0700-0800)
Notes:



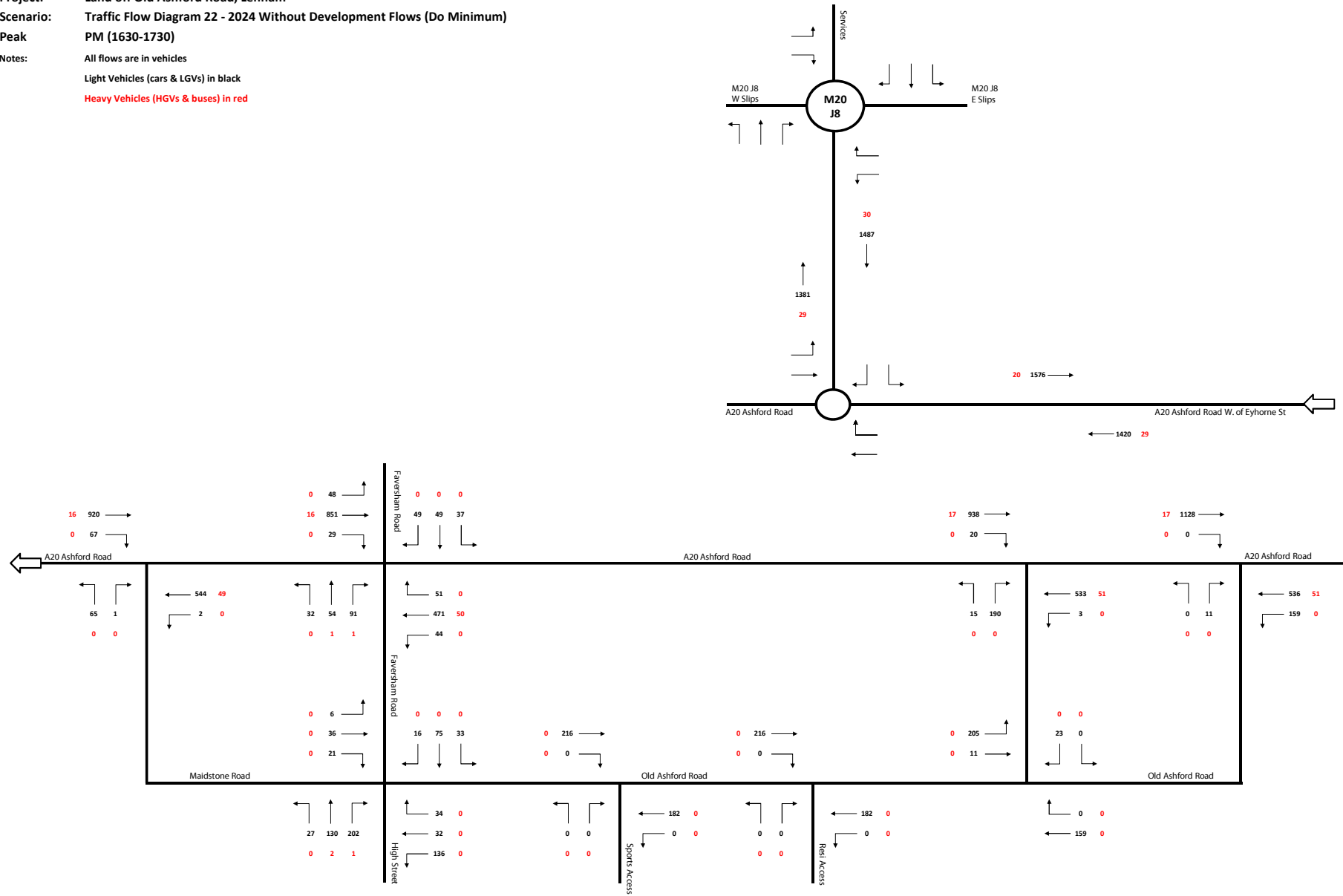
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 20 - Total Committed Development Flows
Peak PM (1630-1730)
Notes:



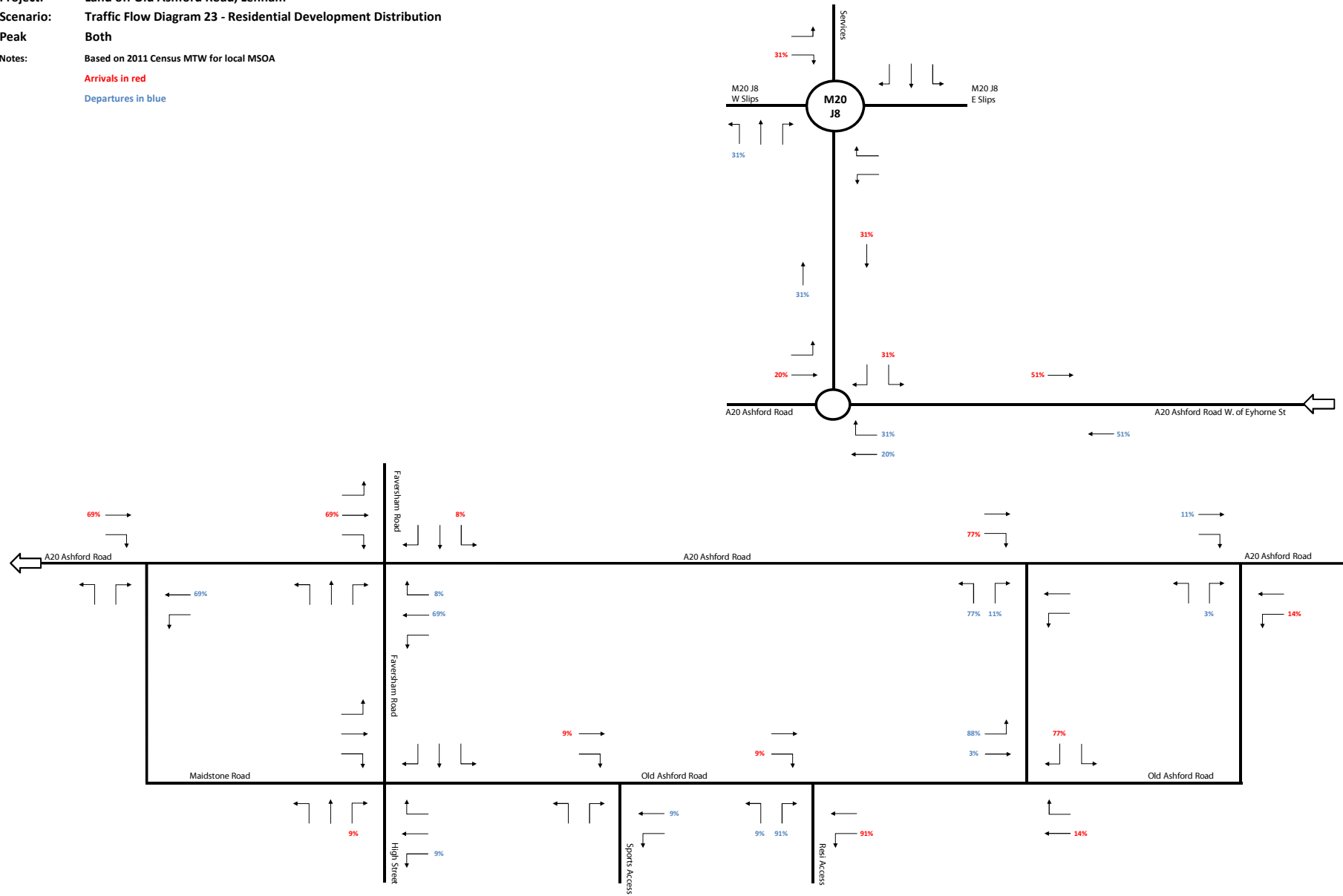
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 21 - 2024 Without Development Flows (Do Minimum)
Peak AM (0700-0800)
Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red



Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 22 - 2024 Without Development Flows (Do Minimum)
Peak PM (1630-1730)
Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red

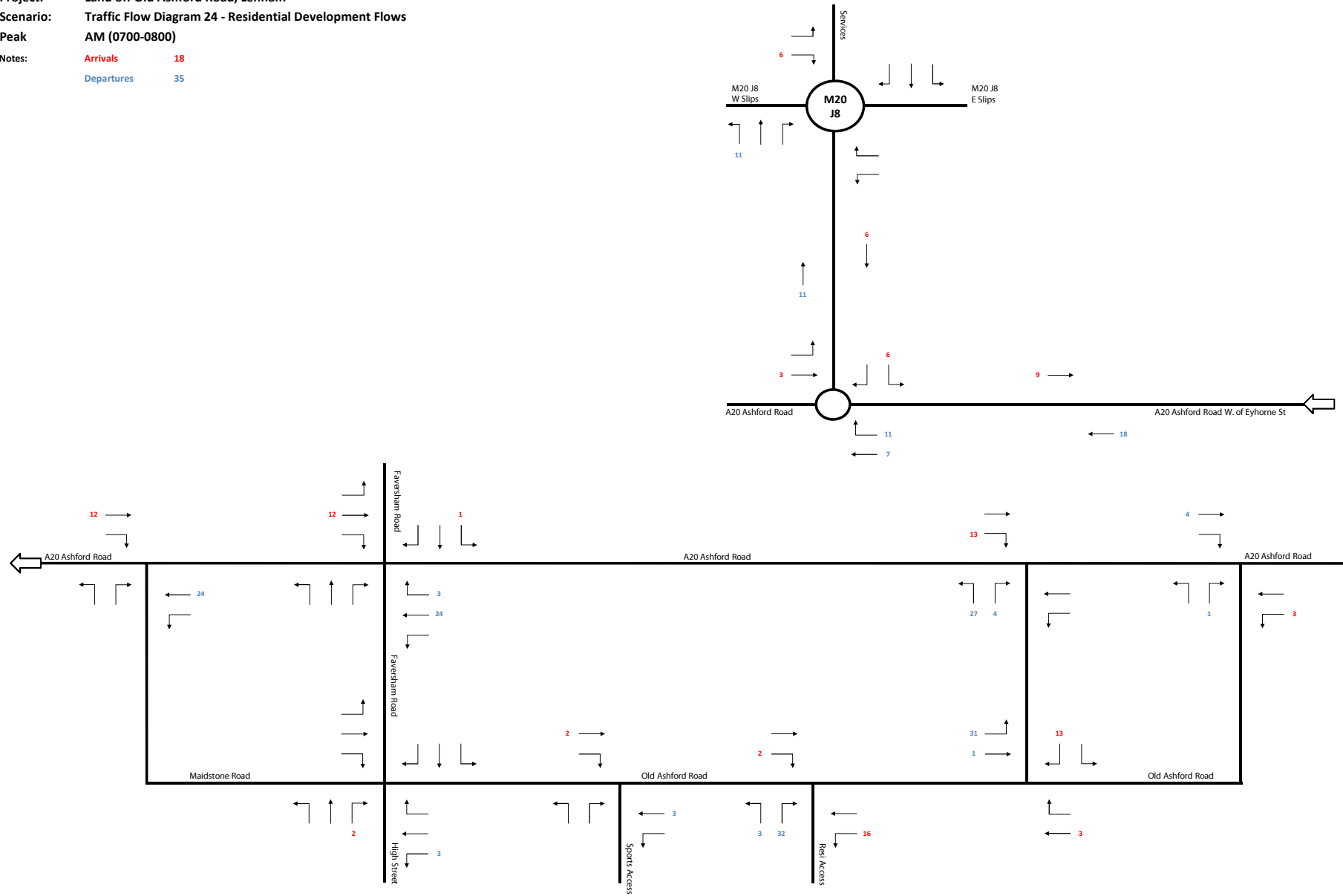


Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 23 - Residential Development Distribution
Peak: Both
Notes: Based on 2011 Census MTW for local MSA
 Arrivals in red
 Departures in blue



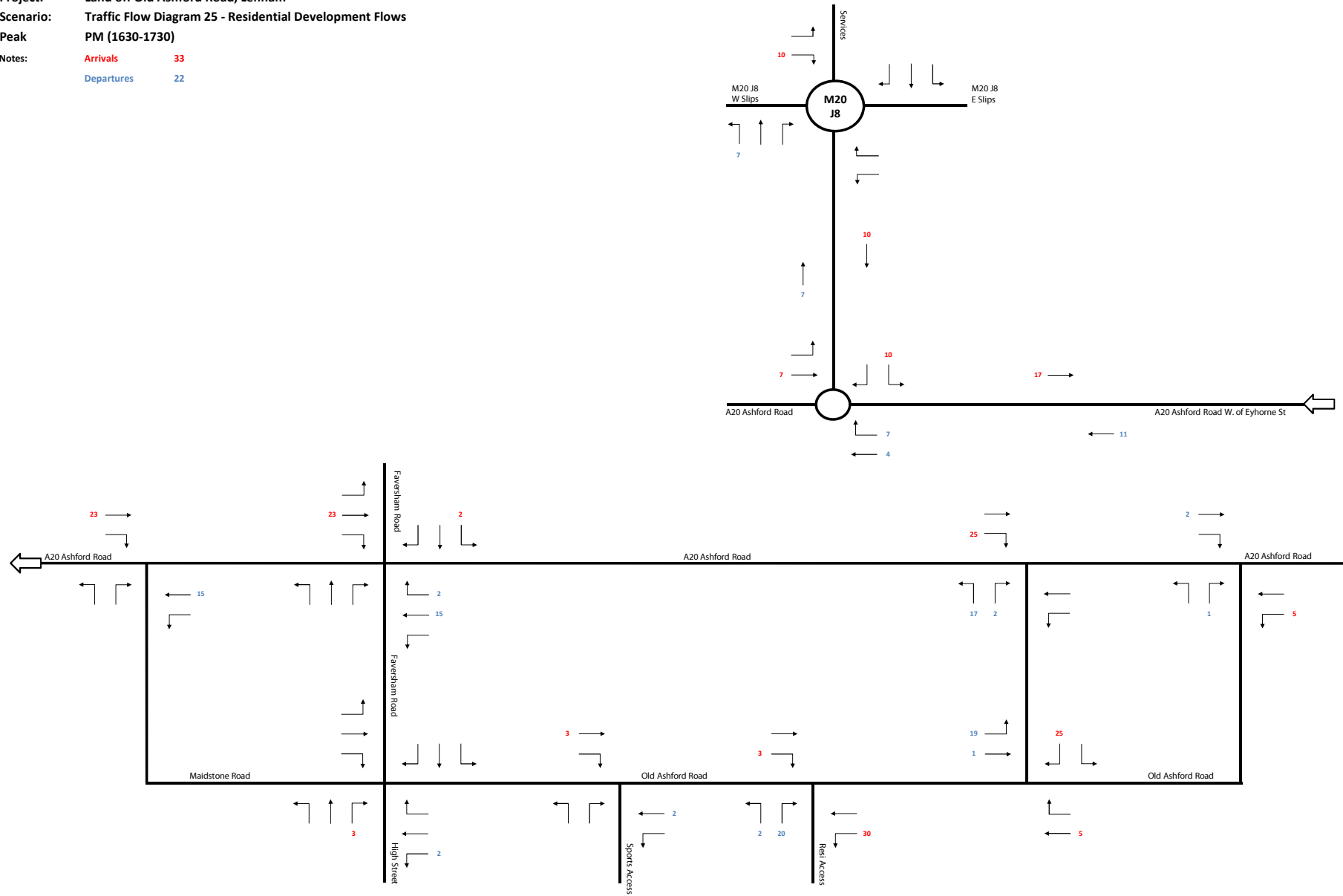
Project: Land off Old Ashford Road, Lenham
 Scenario: Traffic Flow Diagram 24 - Residential Development Flows
 Peak AM (0700-0800)

Notes: Arrivals 18
 Departures 35



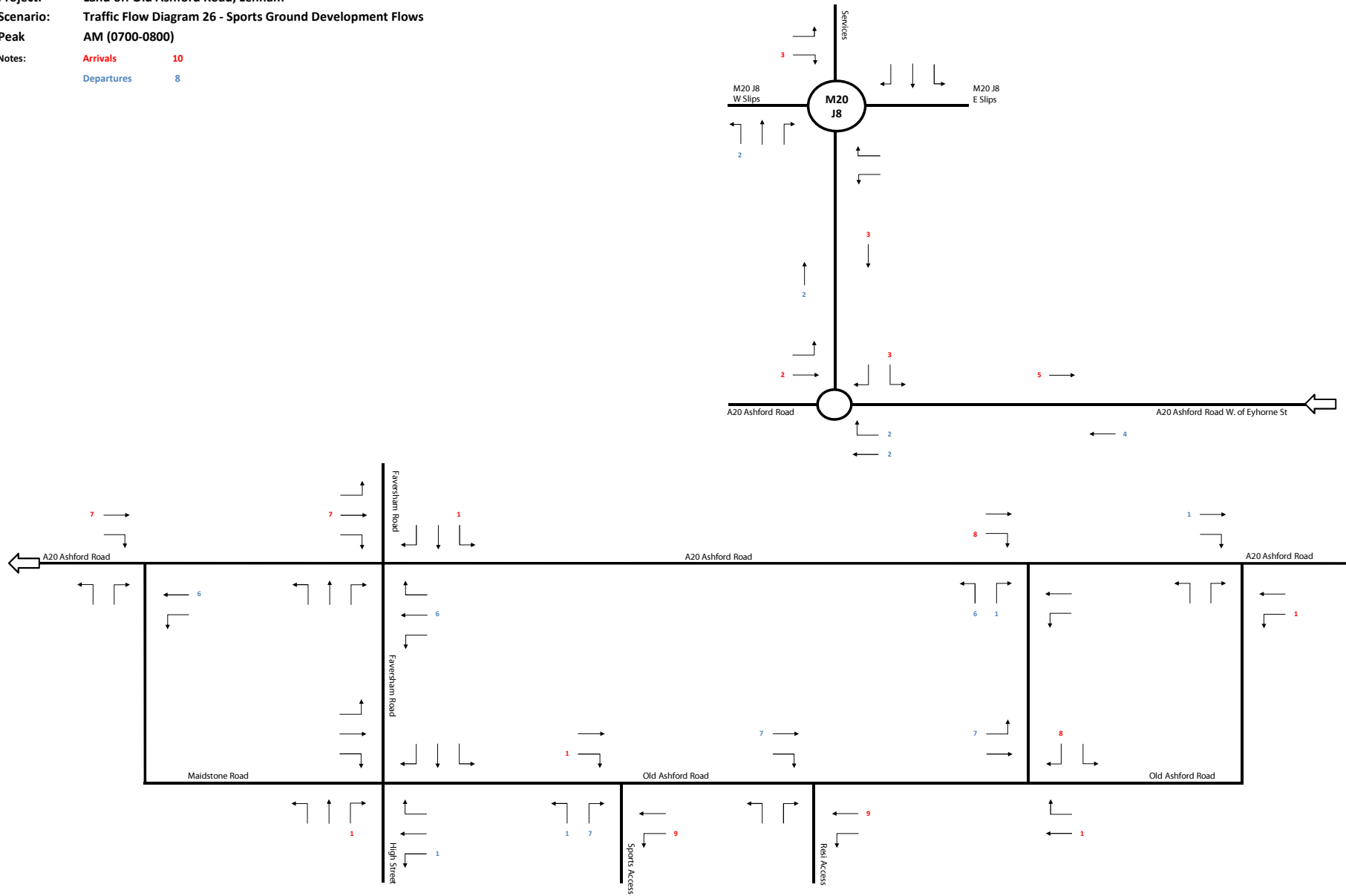
Project: Land off Old Ashford Road, Lenham
 Scenario: Traffic Flow Diagram 25 - Residential Development Flows
 Peak PM (1630-1730)

Notes: Arrivals 33
 Departures 22



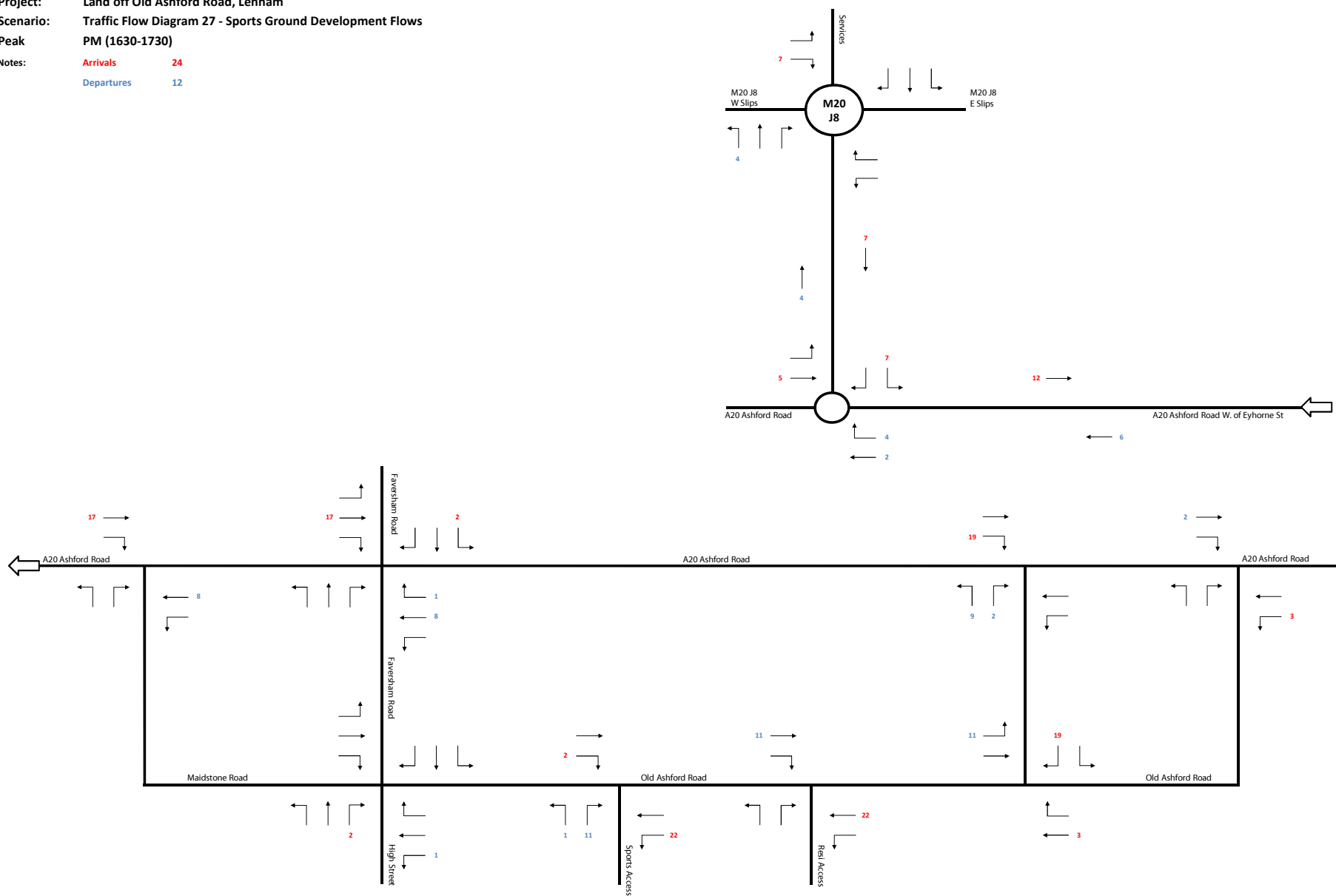
Project: Land off Old Ashford Road, Lenham
 Scenario: Traffic Flow Diagram 26 - Sports Ground Development Flows
 Peak AM (0700-0800)

Notes: Arrivals 10
 Departures 8



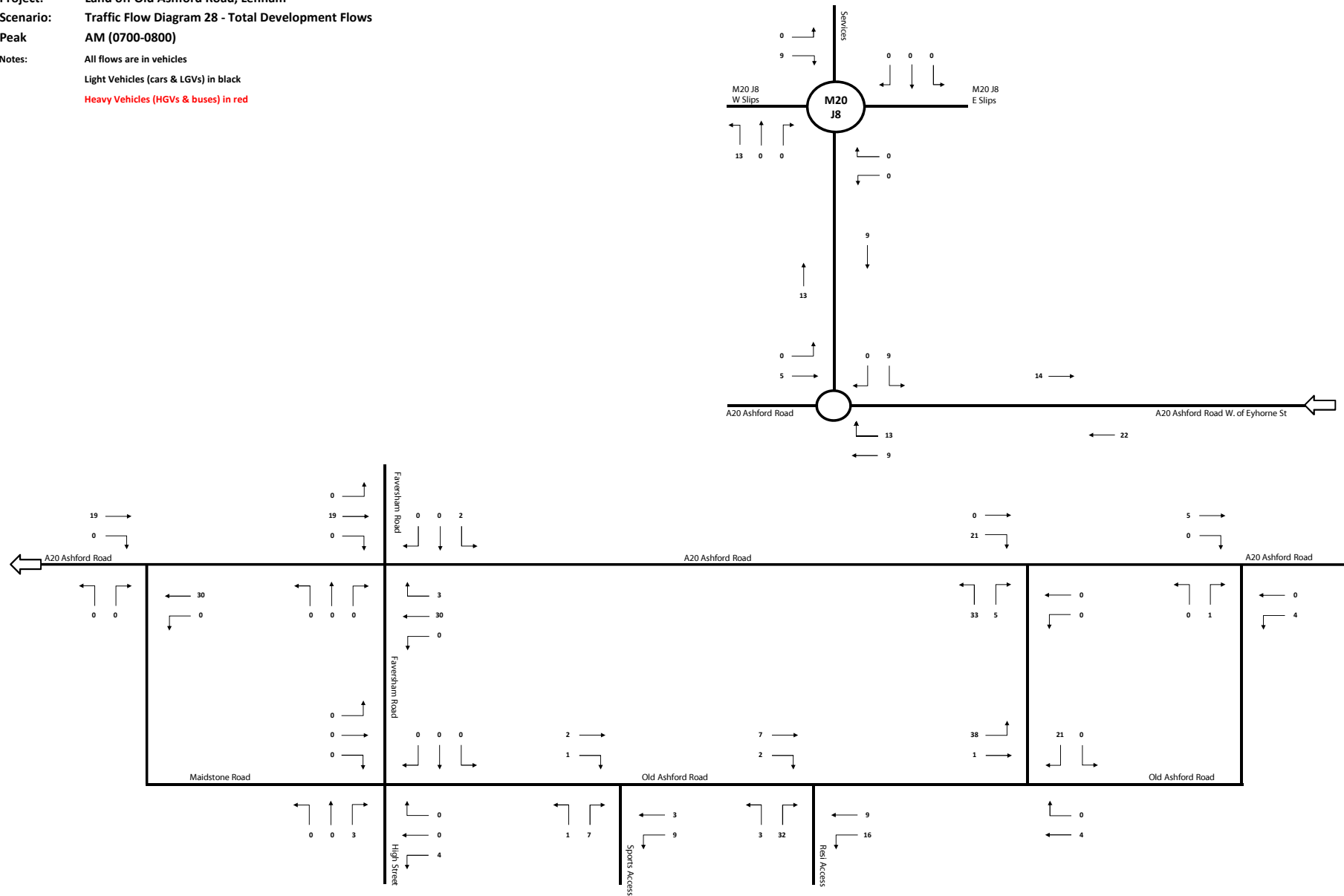
Project: Land off Old Ashford Road, Lenham
 Scenario: Traffic Flow Diagram 27 - Sports Ground Development Flows
 Peak PM (1630-1730)

Notes: Arrivals 24
 Departures 12



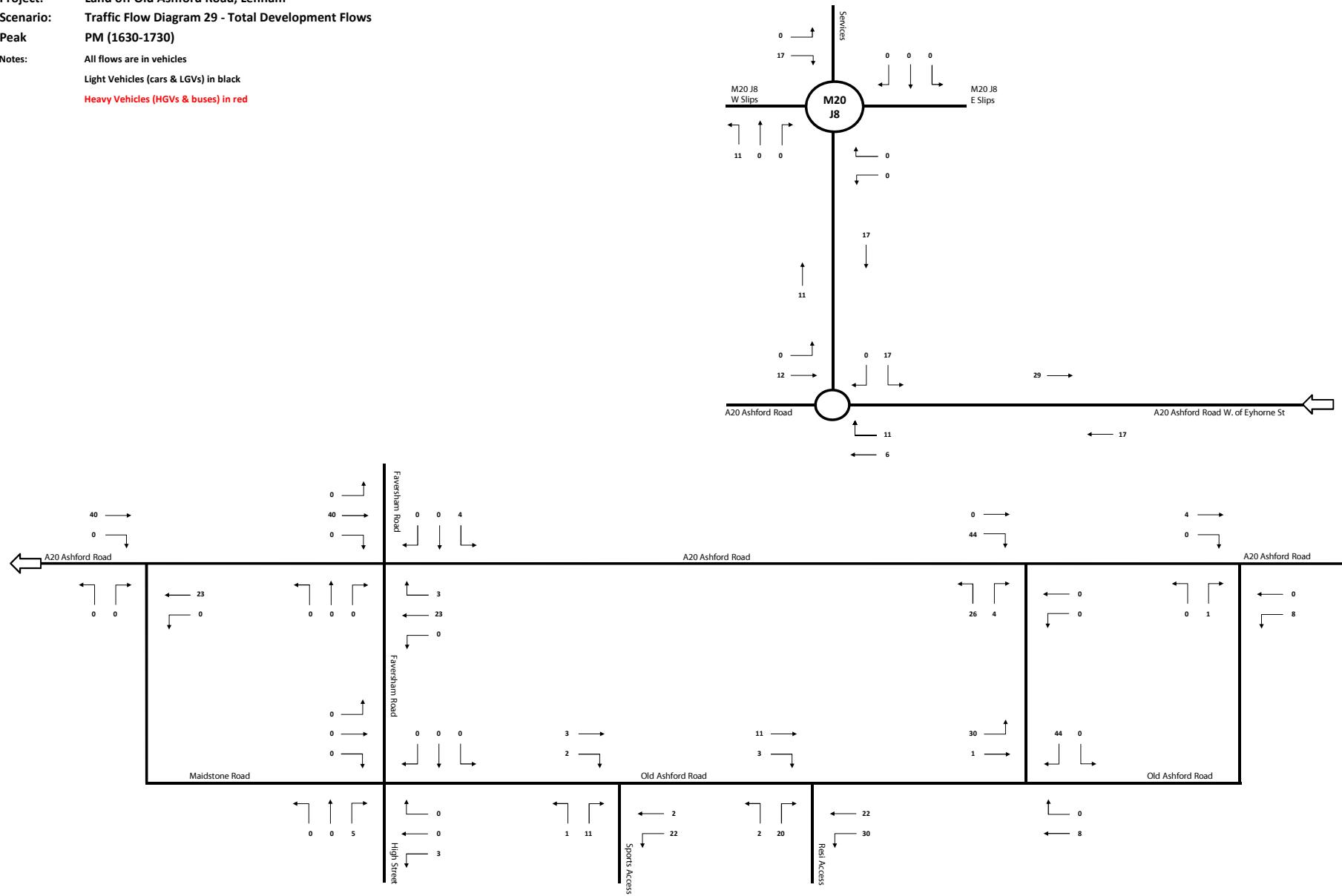
Project: Land off Old Ashford Road, Lenham
 Scenario: Traffic Flow Diagram 28 - Total Development Flows
 Peak AM (0700-0800)

Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red

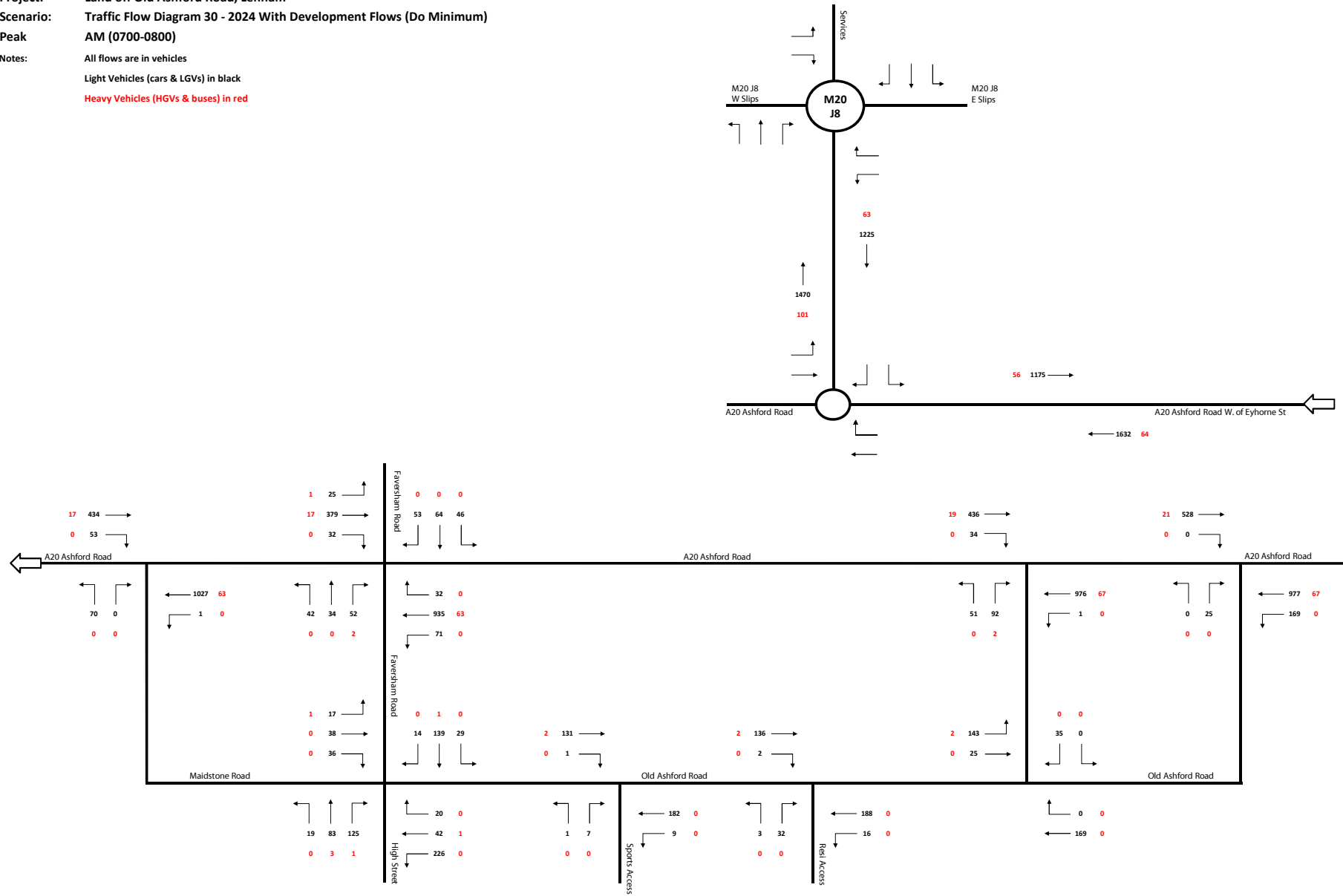


Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 29 - Total Development Flows
Peak PM (1630-1730)

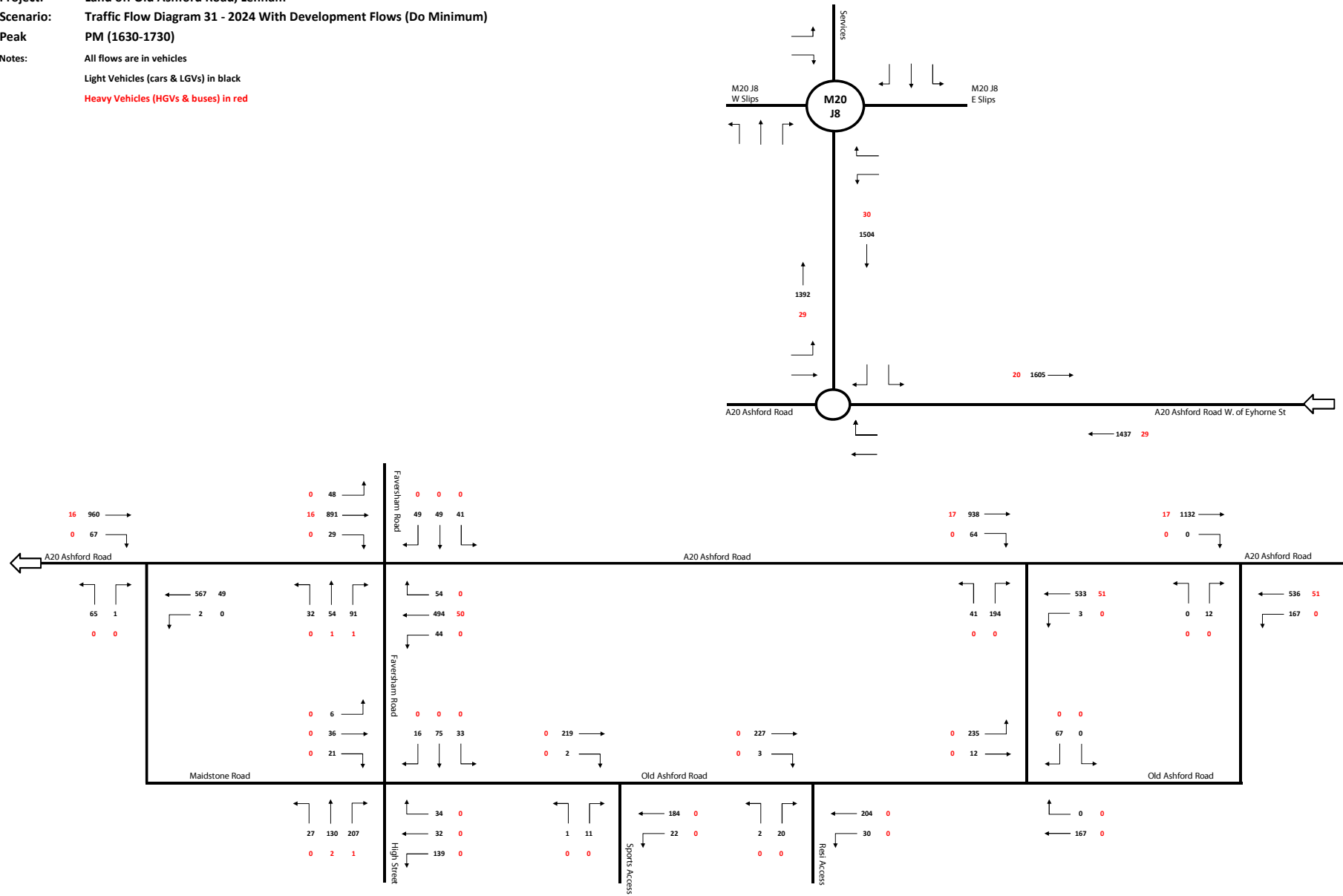
Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red



Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 30 - 2024 With Development Flows (Do Minimum)
Peak AM (0700-0800)
Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red

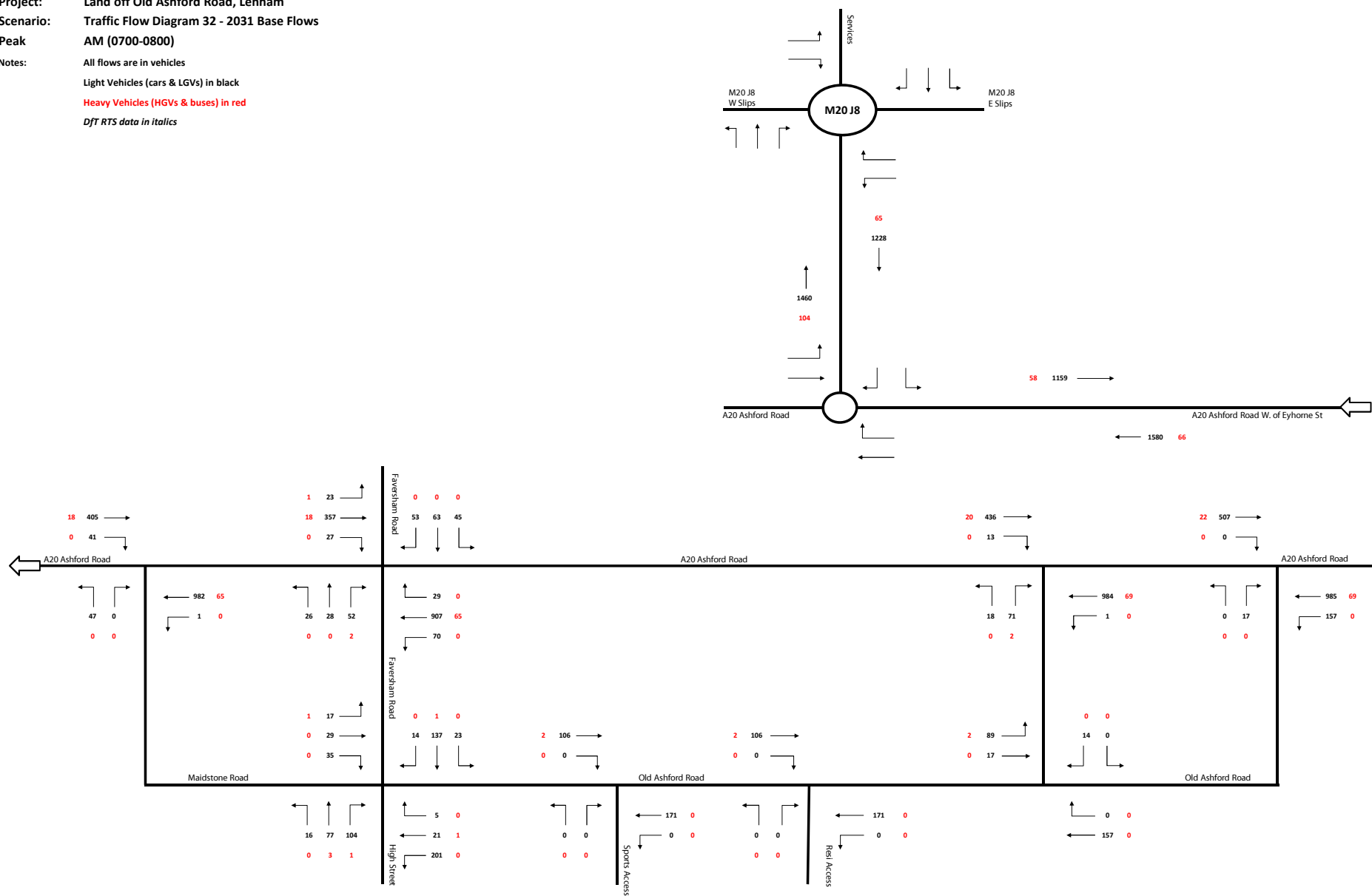


Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 31 - 2024 With Development Flows (Do Minimum)
Peak PM (1630-1730)
Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red



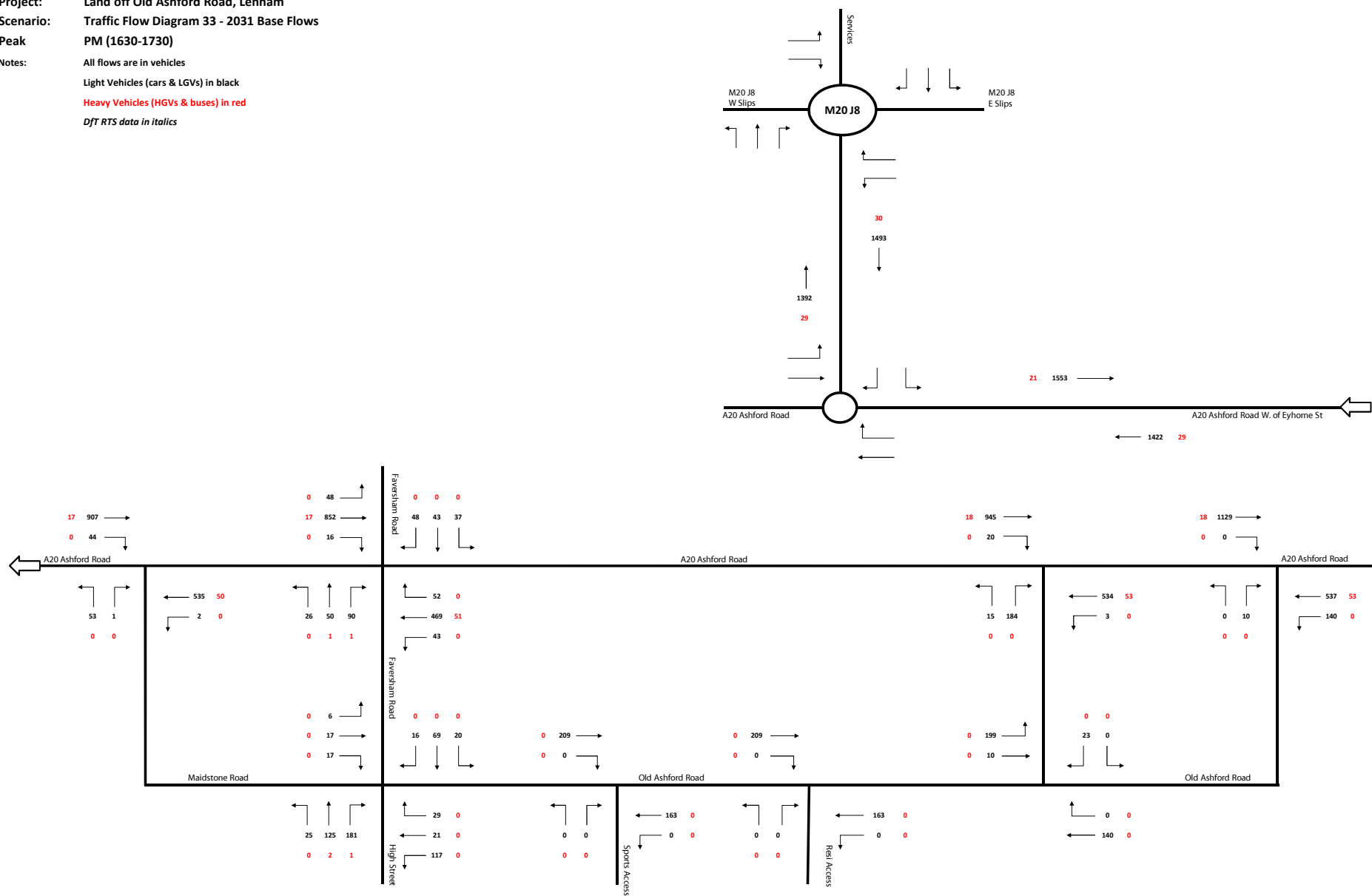
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 32 - 2031 Base Flows
Peak AM (0700-0800)

Notes: All flows are in vehicles
Light Vehicles (cars & LGVs) in black
Heavy Vehicles (HGVs & buses) in red
DfT RTS data in italics



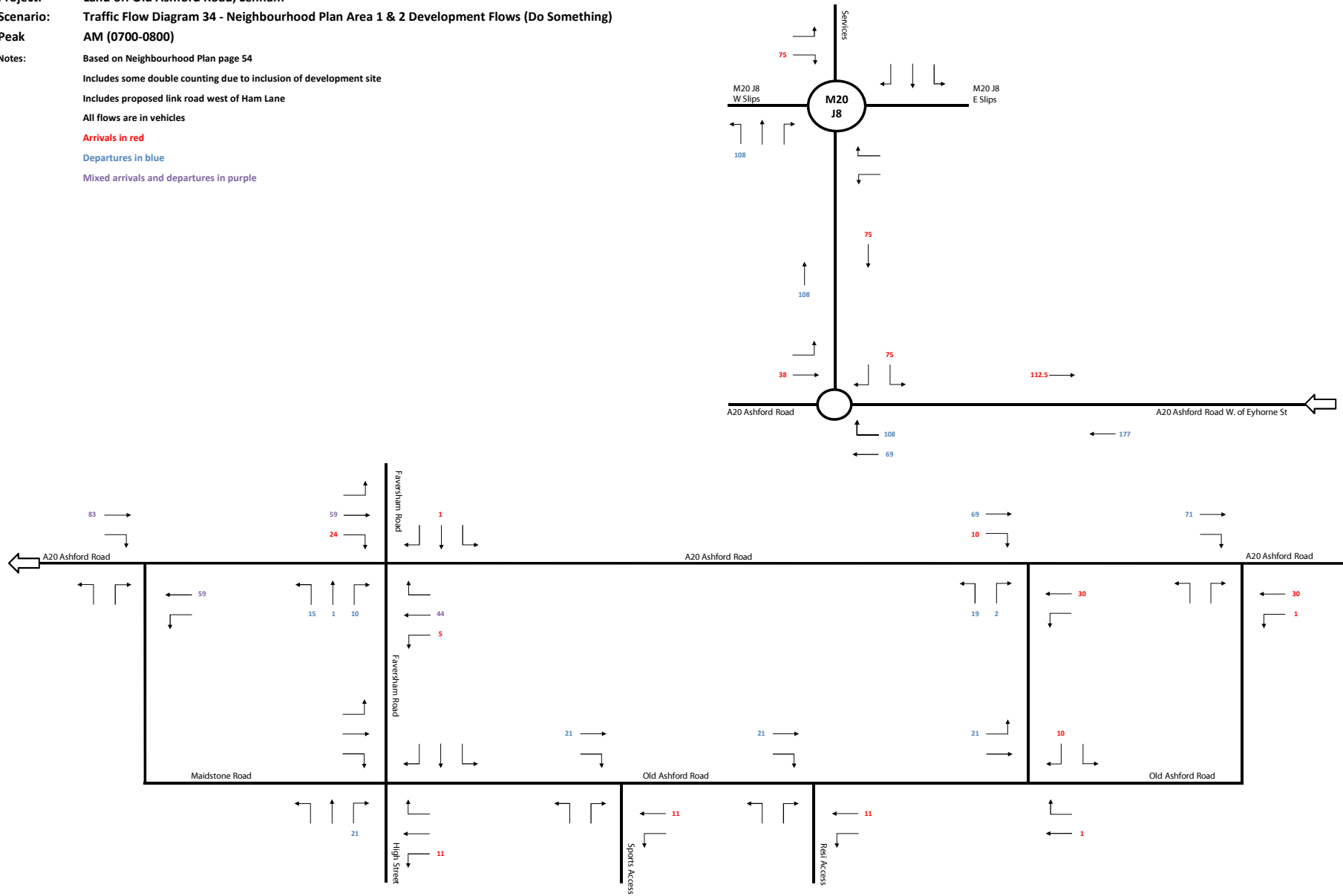
Project: Land off Old Ashford Road, Lenham
 Scenario: Traffic Flow Diagram 33 - 2031 Base Flows
 Peak PM (1630-1730)

Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red
 DfT RTS data in italics



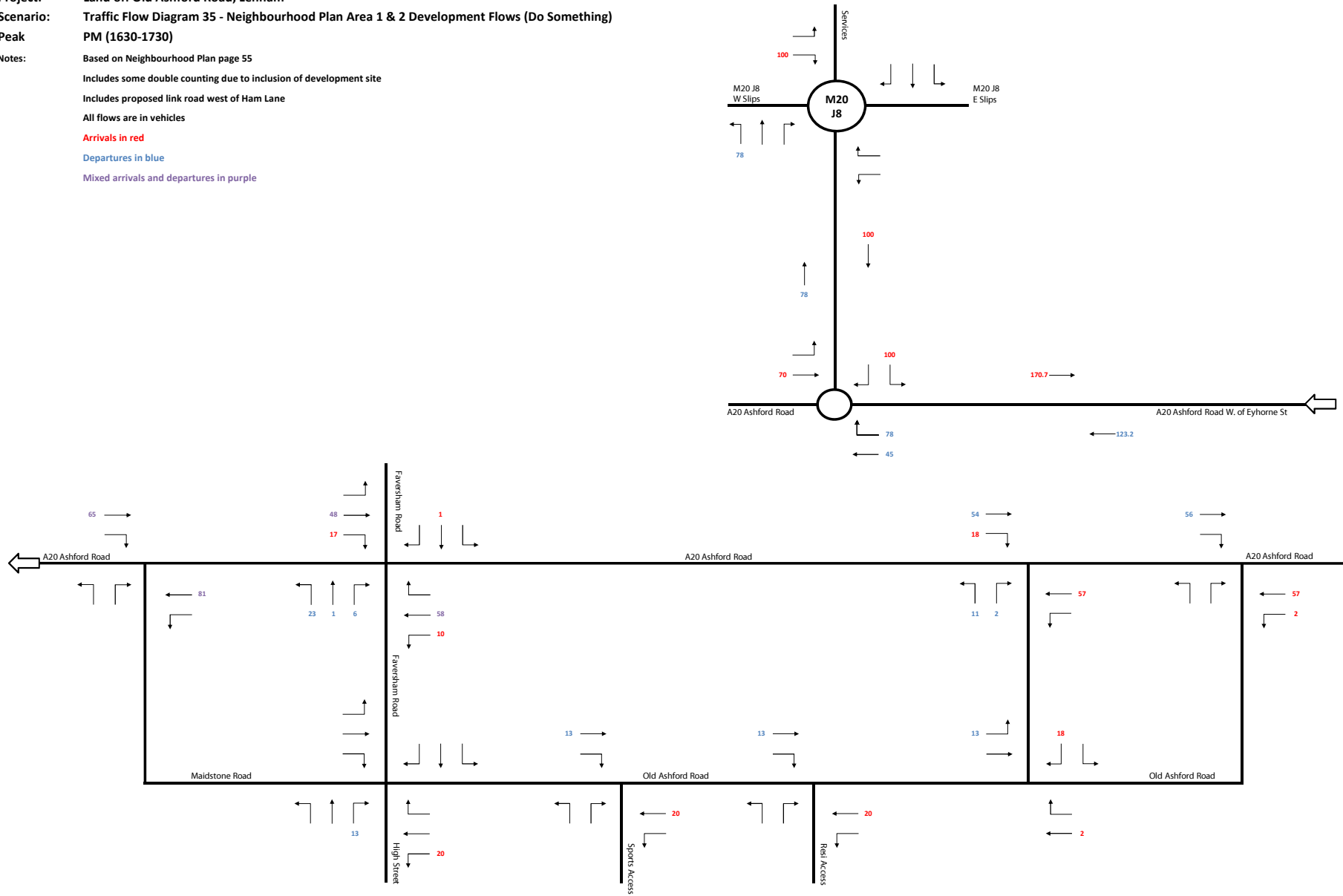
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 34 - Neighbourhood Plan Area 1 & 2 Development Flows (Do Something)
Peak AM (0700-0800)

Notes: Based on Neighbourhood Plan page 54
 Includes some double counting due to inclusion of development site
 Includes proposed link road west of Ham Lane
 All flows are in vehicles
 Arrivals in red
 Departures in blue
 Mixed arrivals and departures in purple

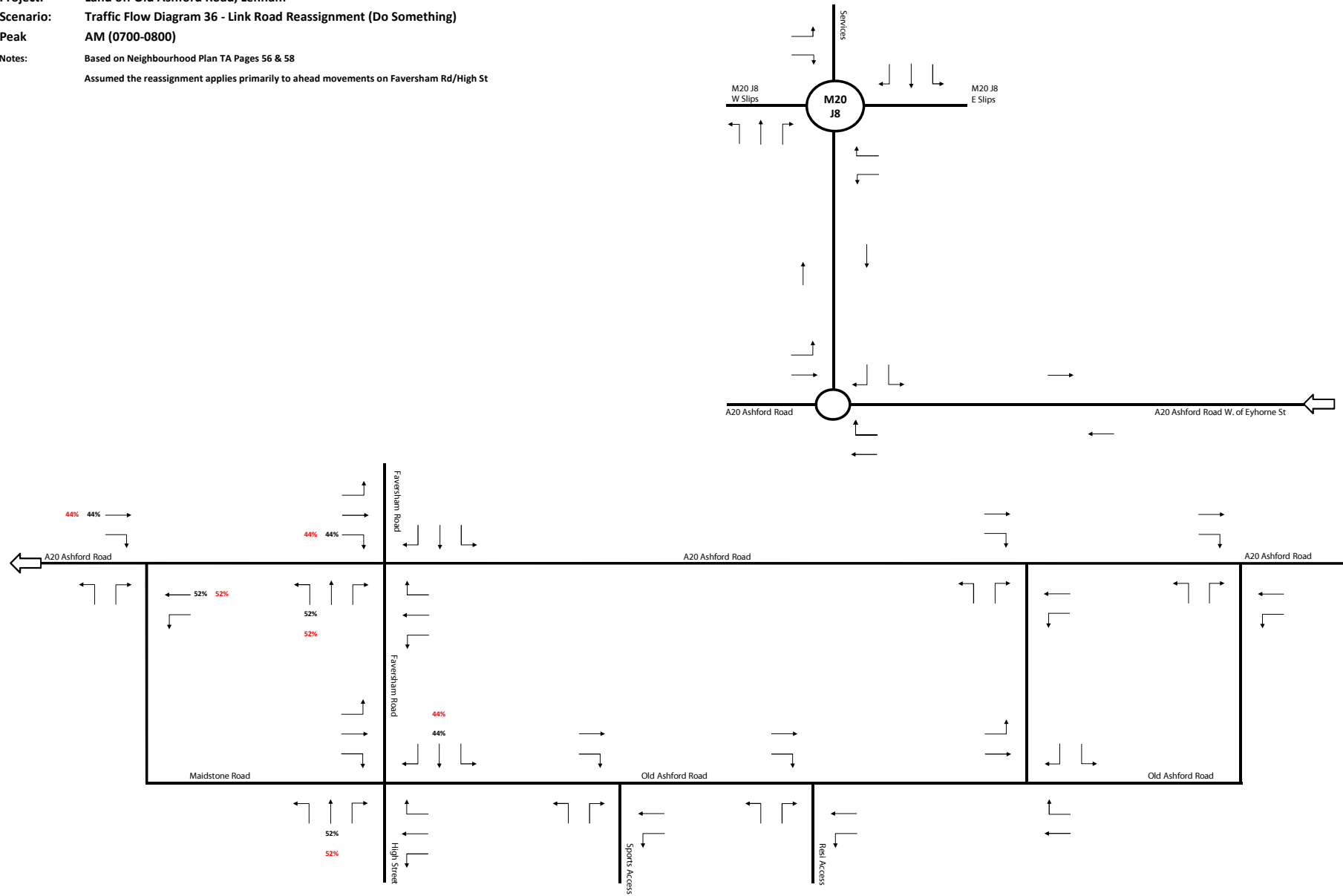


Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 35 - Neighbourhood Plan Area 1 & 2 Development Flows (Do Something)
Peak PM (1630-1730)

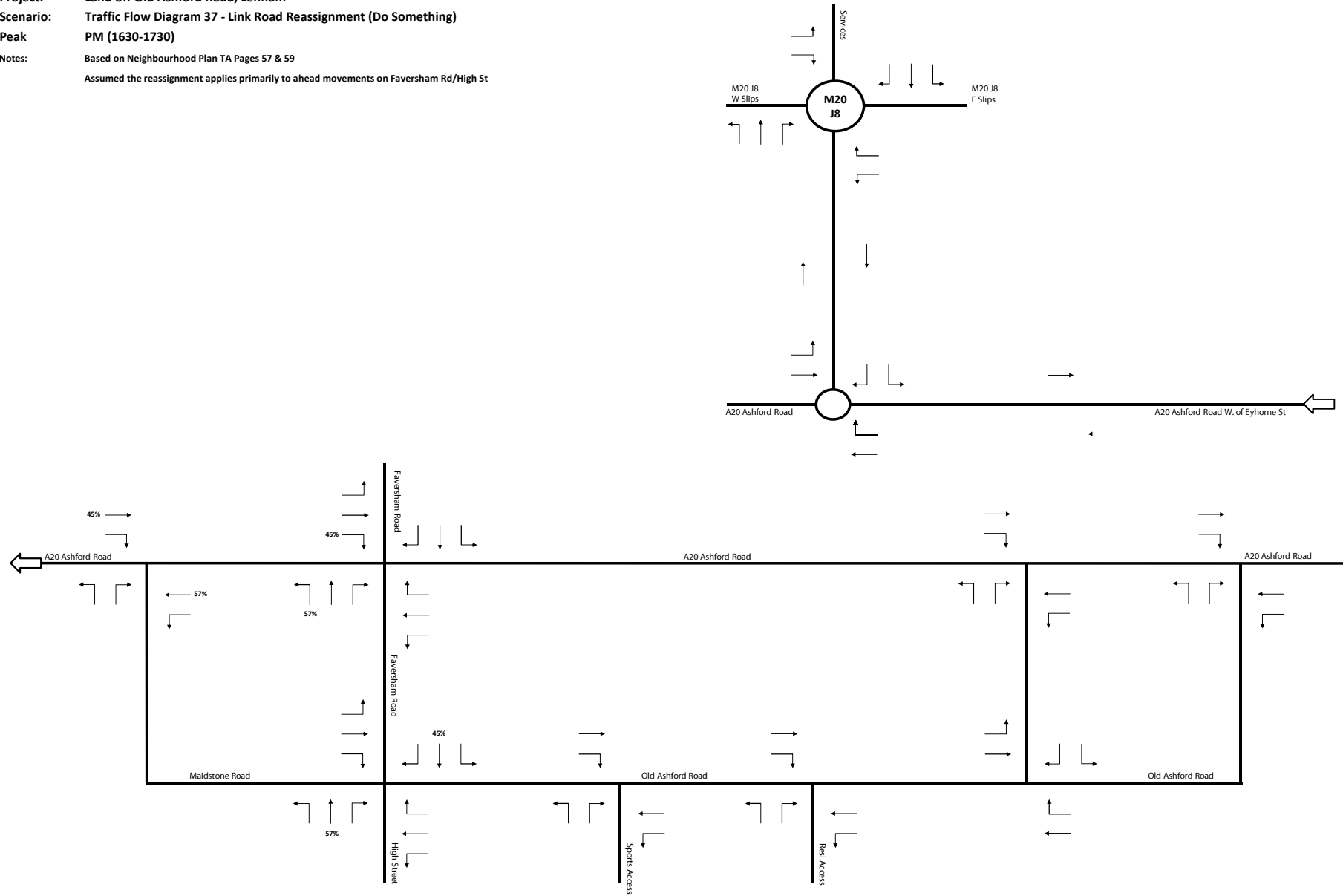
Notes: Based on Neighbourhood Plan page 55
 Includes some double counting due to inclusion of development site
 Includes proposed link road west of Ham Lane
 All flows are in vehicles
 Arrivals in red
 Departures in blue
 Mixed arrivals and departures in purple



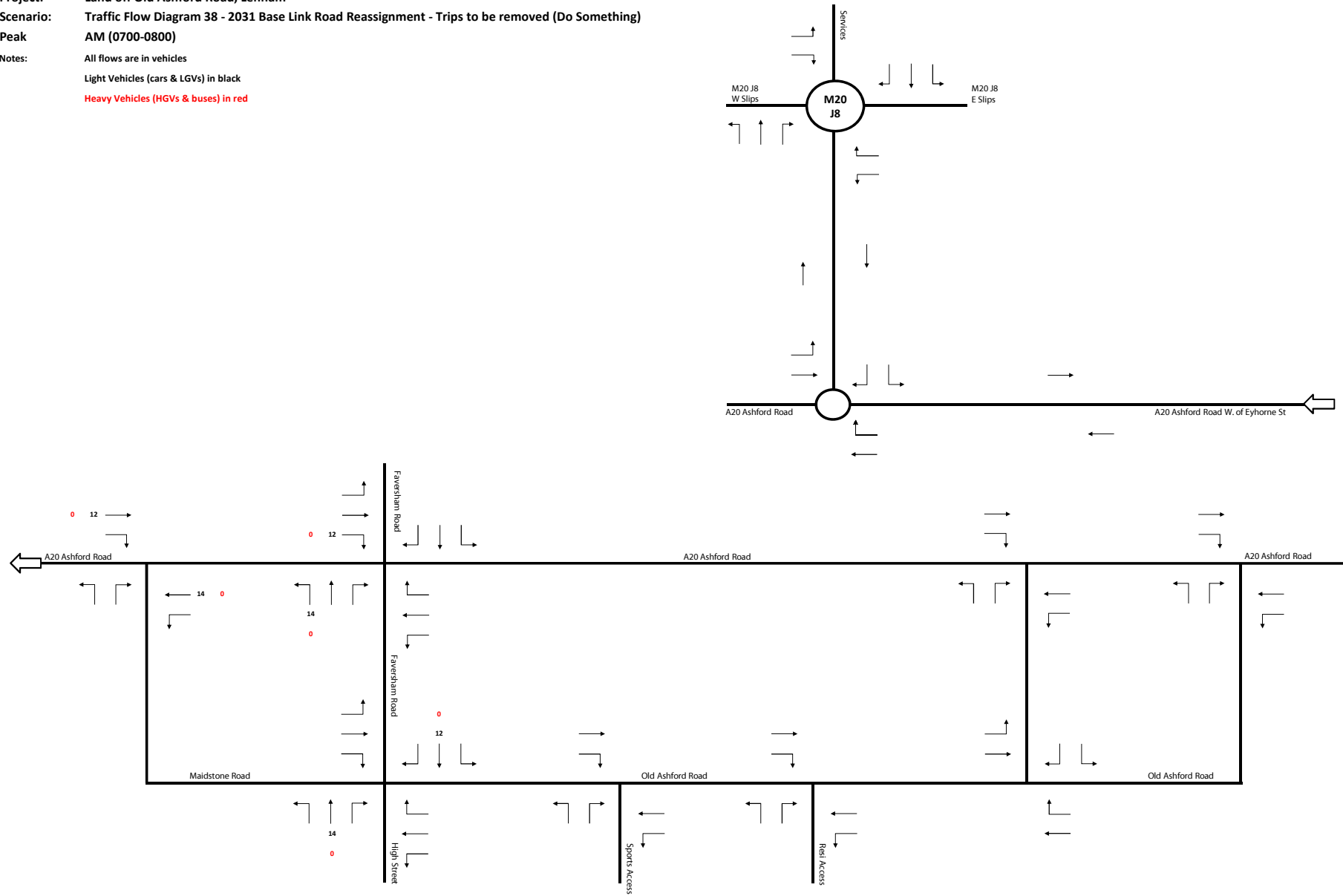
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 36 - Link Road Reassignment (Do Something)
Peak AM (0700-0800)
Notes: Based on Neighbourhood Plan TA Pages 56 & 58
 Assumed the reassignment applies primarily to ahead movements on Faversham Rd/High St



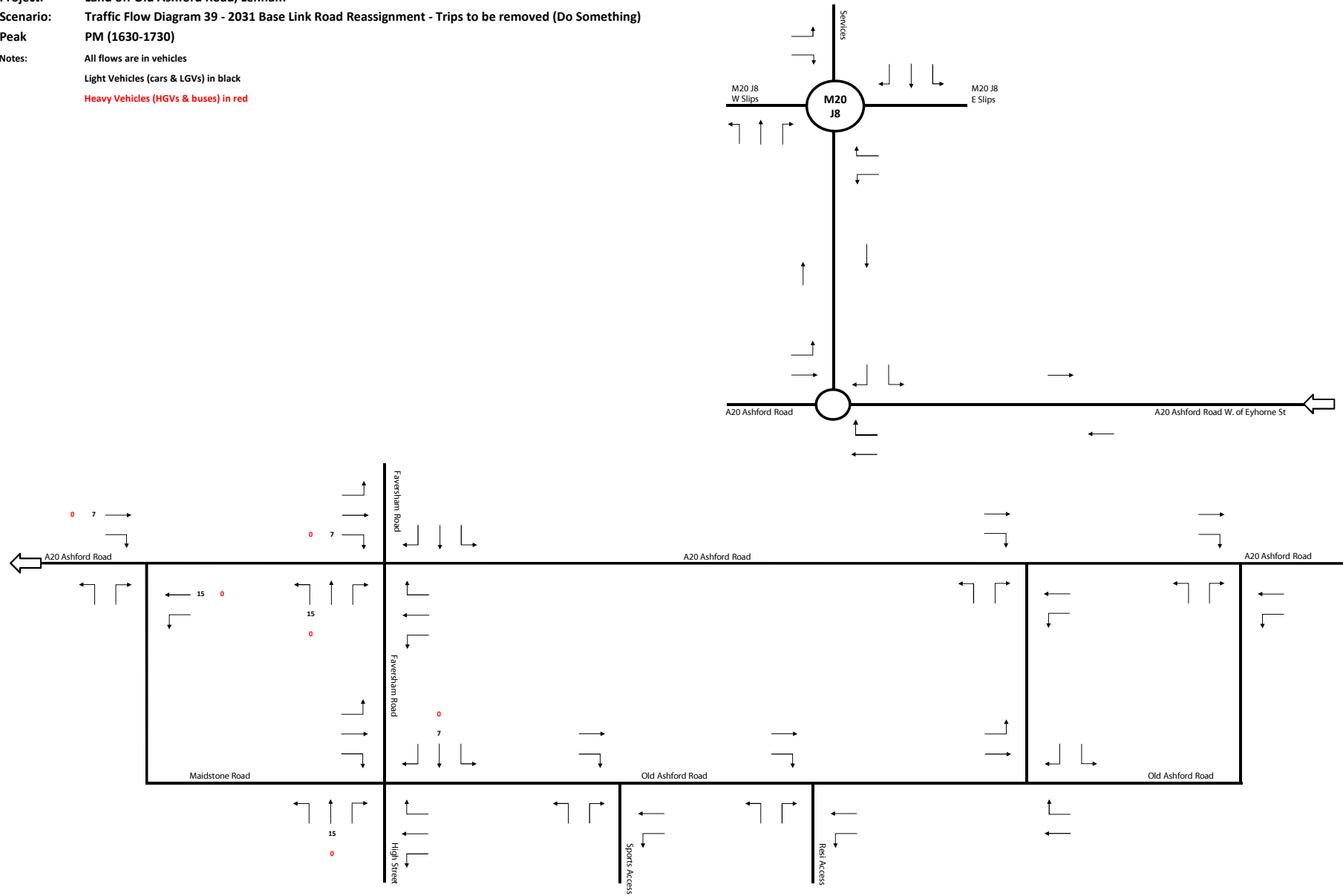
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 37 - Link Road Reassignment (Do Something)
Peak PM (1630-1730)
Notes: Based on Neighbourhood Plan TA Pages 57 & 59
 Assumed the reassignment applies primarily to ahead movements on Faversham Rd/High St



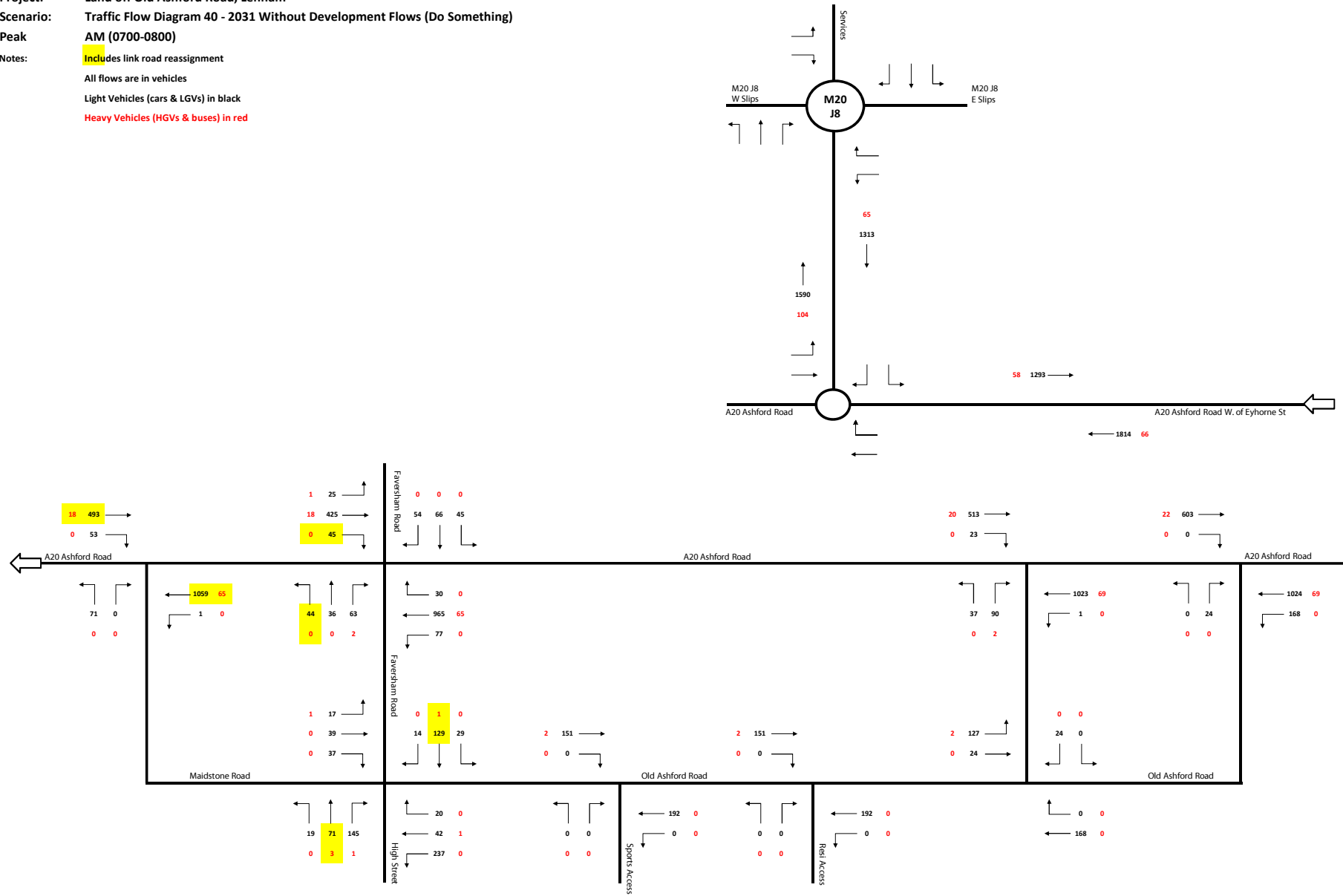
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 38 - 2031 Base Link Road Reassignment - Trips to be removed (Do Something)
Peak AM (0700-0800)
Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red



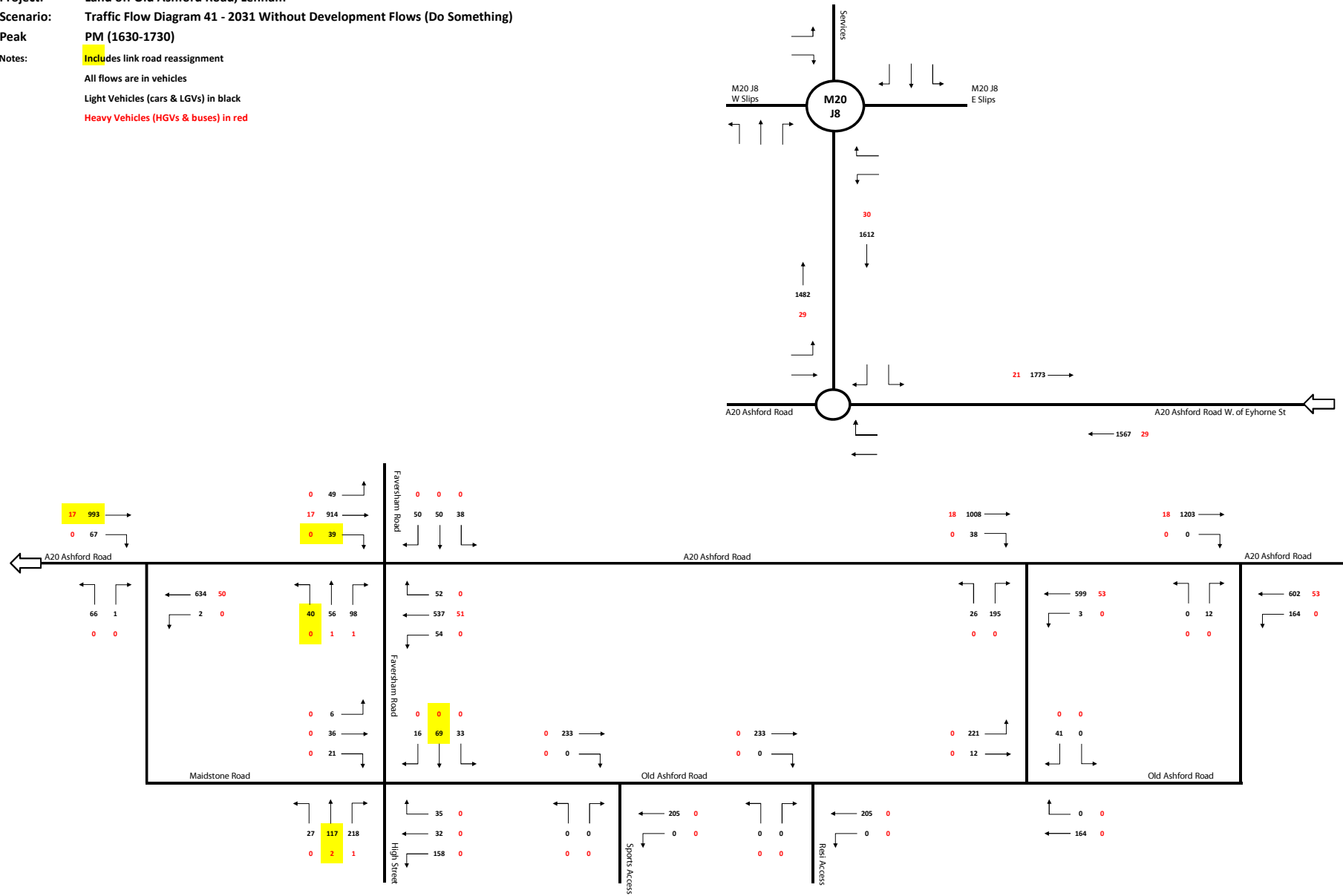
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 39 - 2031 Base Link Road Reassignment - Trips to be removed (Do Something)
Peak PM (1630-1730)
Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red



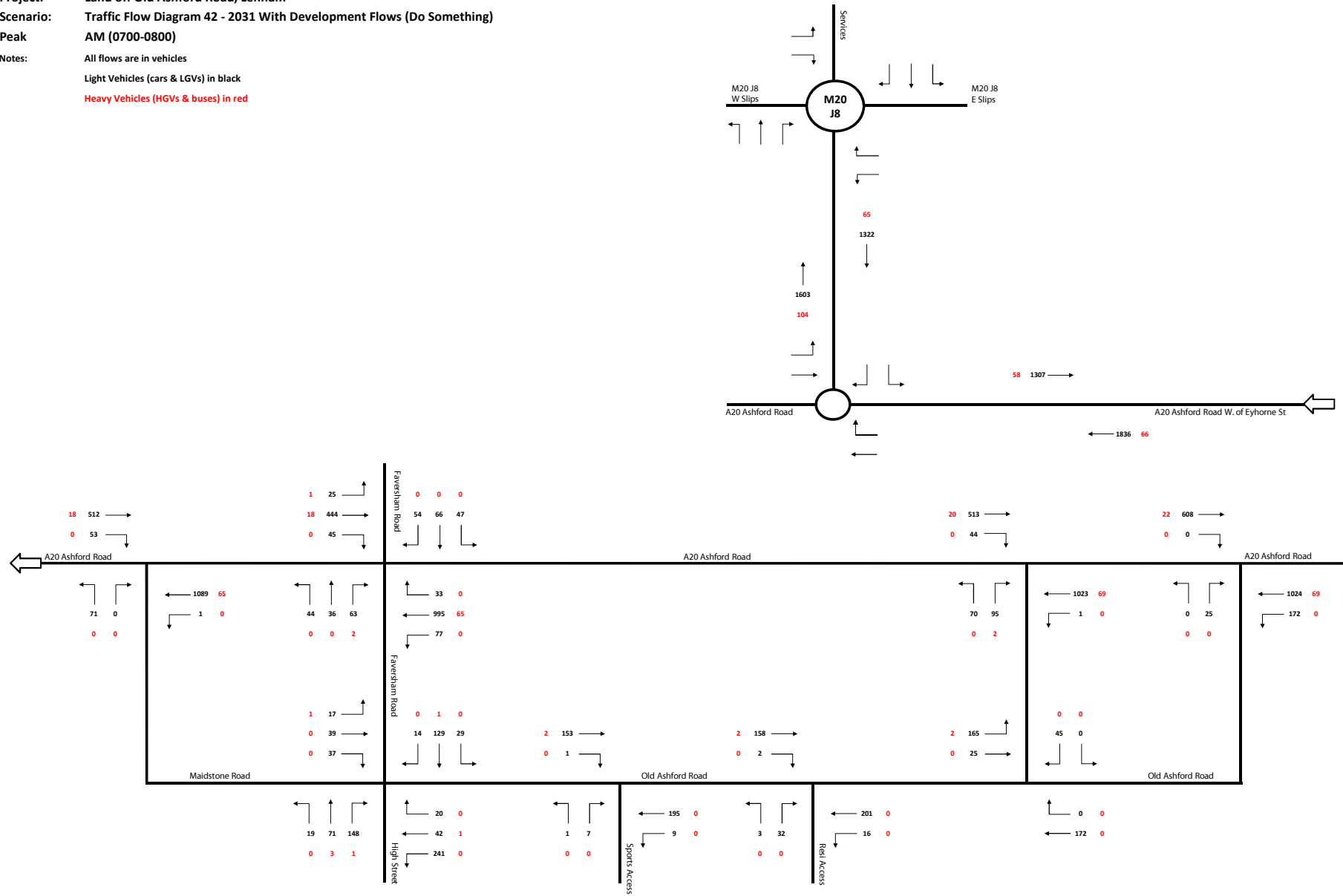
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 40 - 2031 Without Development Flows (Do Something)
Peak: AM (0700-0800)
Notes: Includes link road reassignment
 All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red



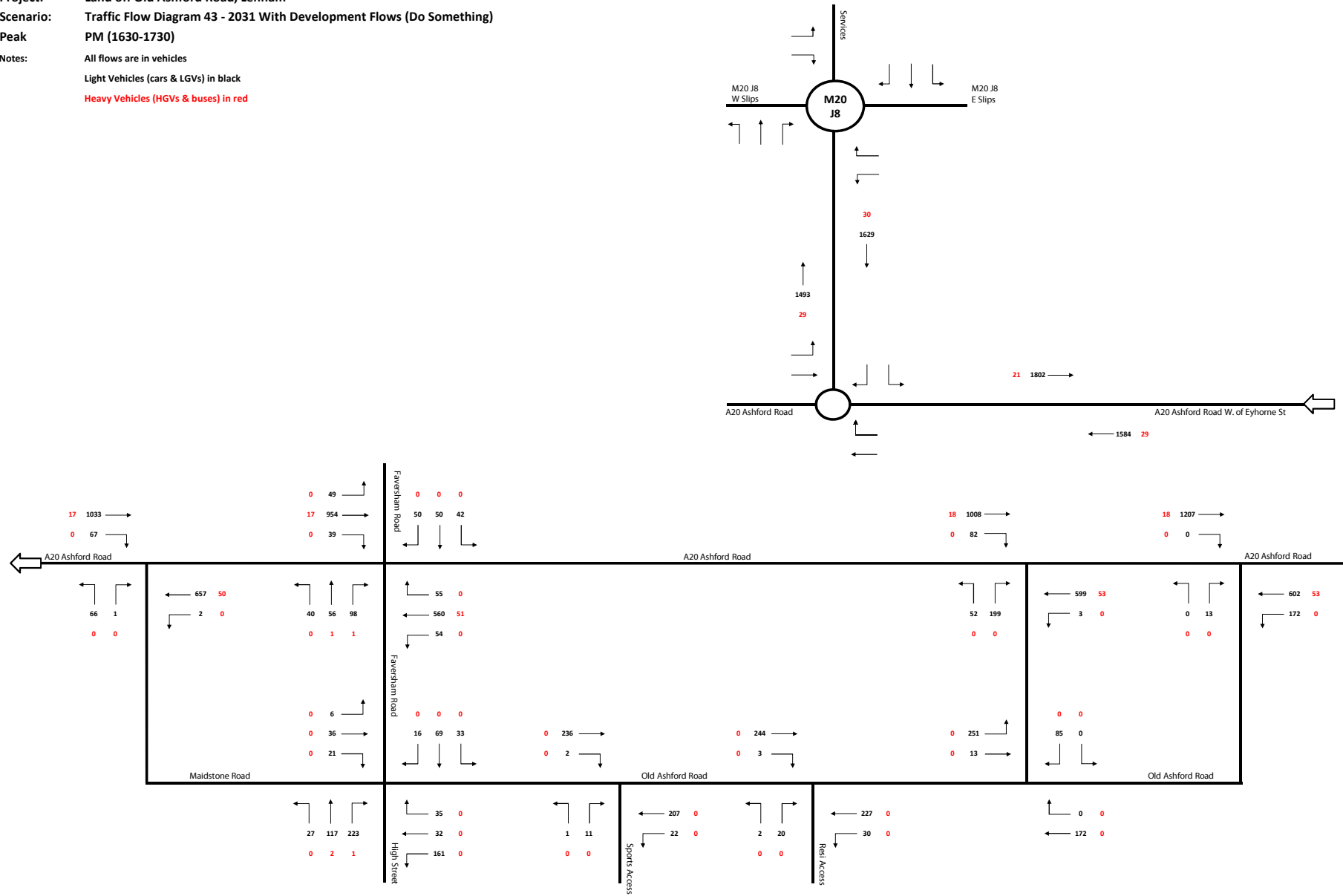
Project:	Land off Old Ashford Road, Lenham
Scenario:	Traffic Flow Diagram 41 - 2031 Without Development Flows (Do Something)
Peak	PM (1630-1730)
Notes:	<div>Includes link road reassignment</div> <div>All flows are in vehicles</div> <div>Light Vehicles (cars & LGVs) in black</div> <div>Heavy Vehicles (HGVs & buses) in red</div>



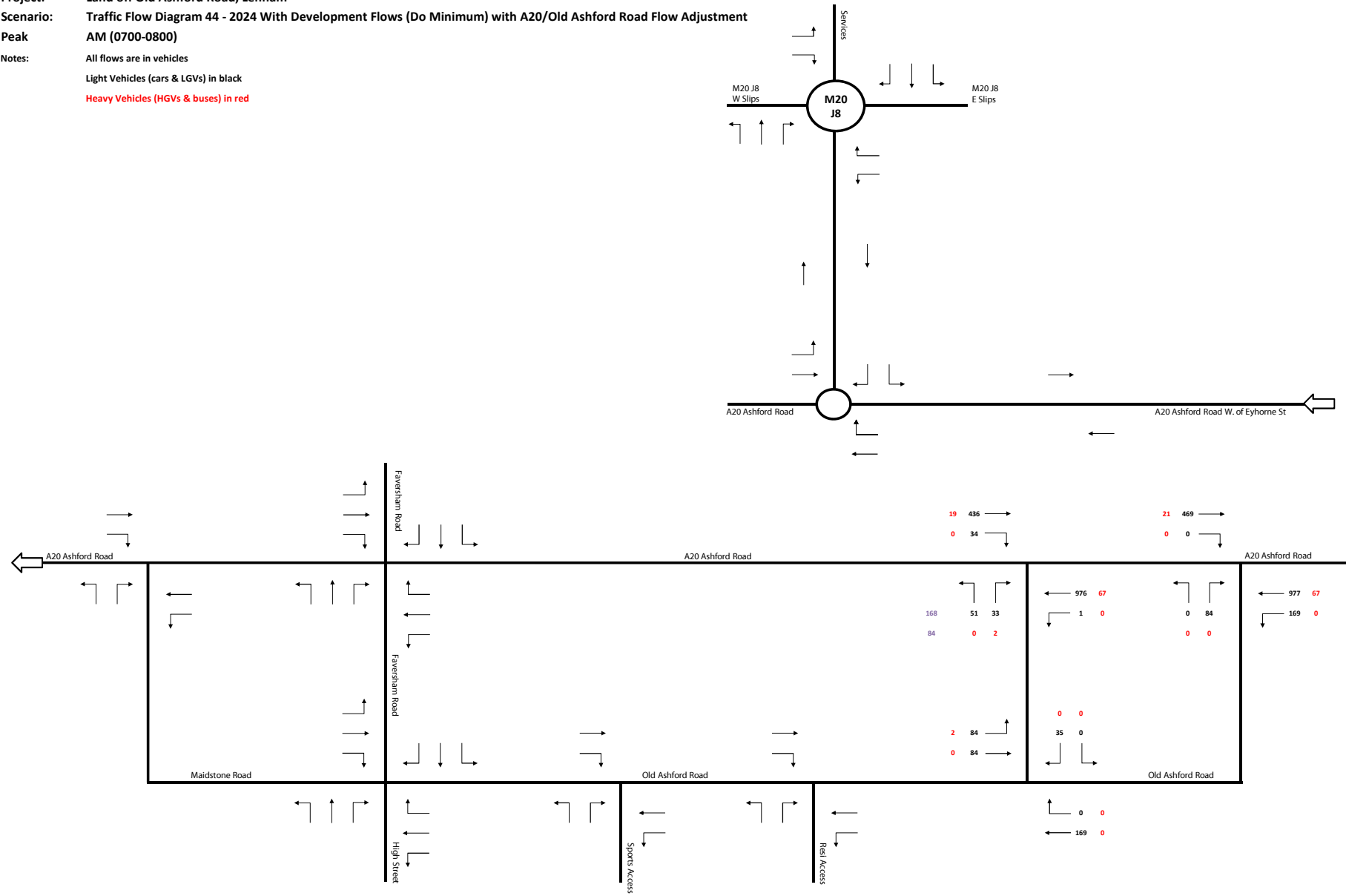
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 42 - 2031 With Development Flows (Do Something)
Peak: AM (0700-0800)
Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red



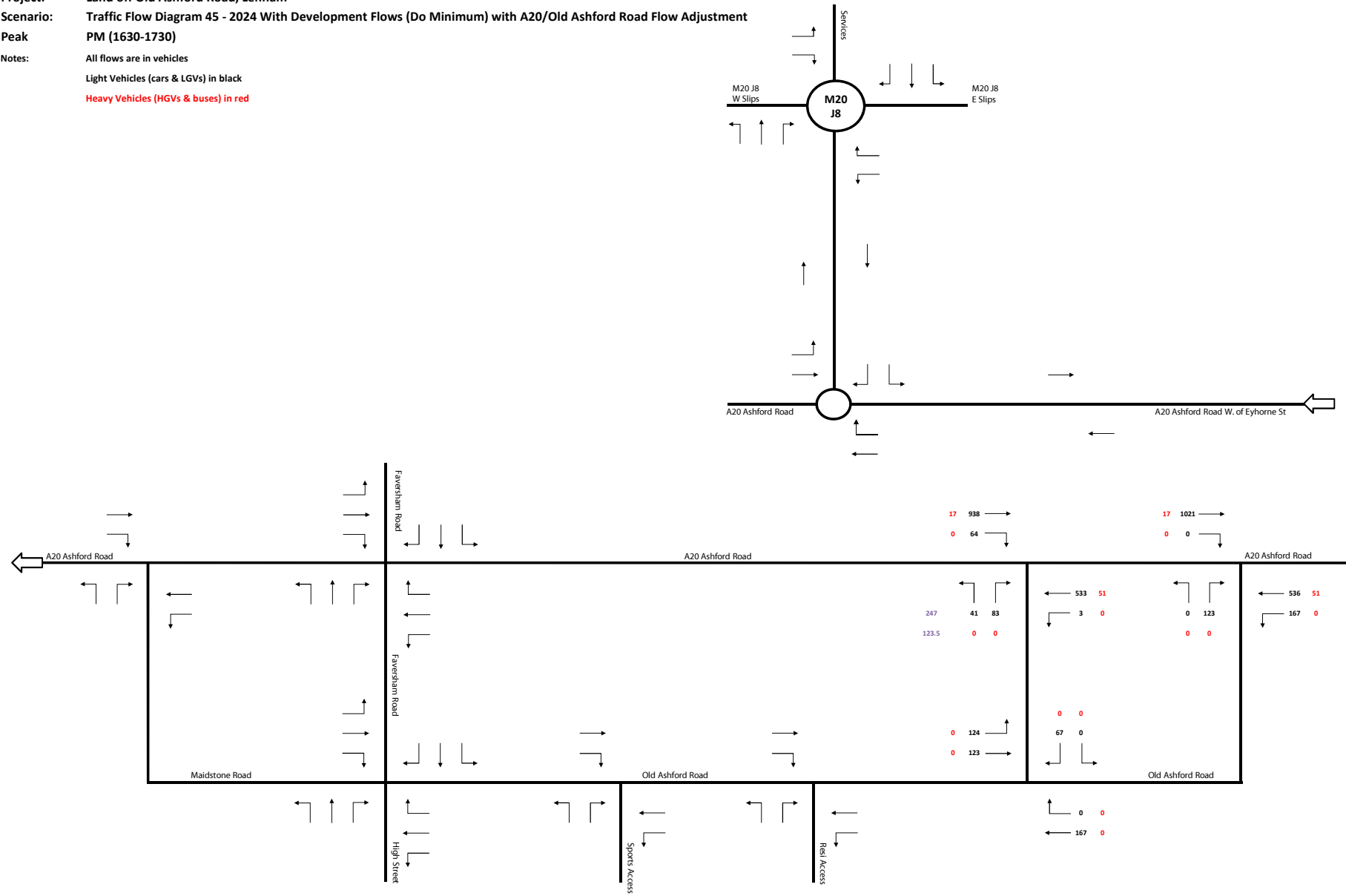
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 43 - 2031 With Development Flows (Do Something)
Peak PM (1630-1730)
Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red



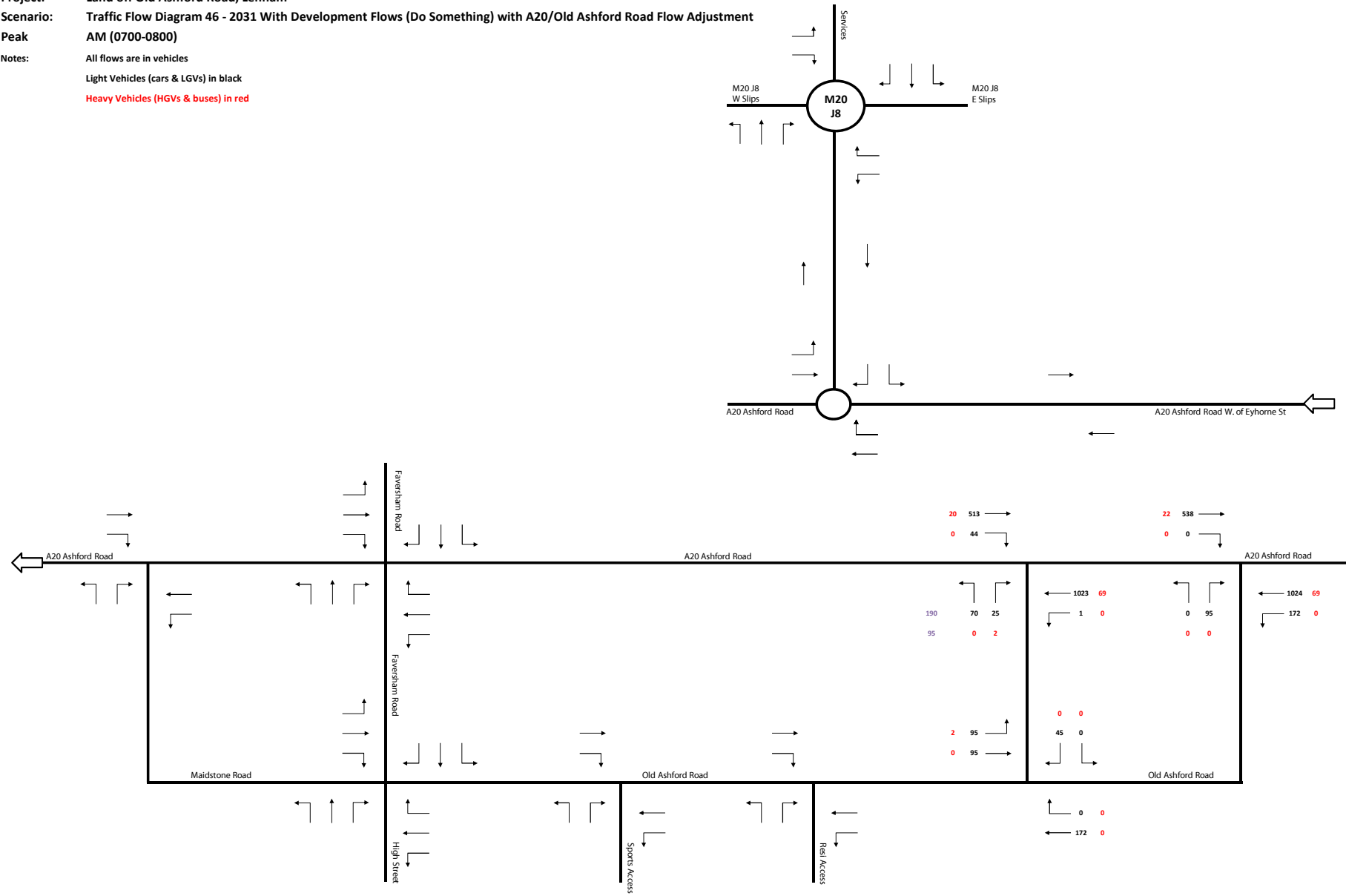
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 44 - 2024 With Development Flows (Do Minimum) with A20/Old Ashford Road Flow Adjustment
Peak AM (0700-0800)
Notes: All flows are in vehicles
Light Vehicles (cars & LGVs) in black
Heavy Vehicles (HGVs & buses) in red



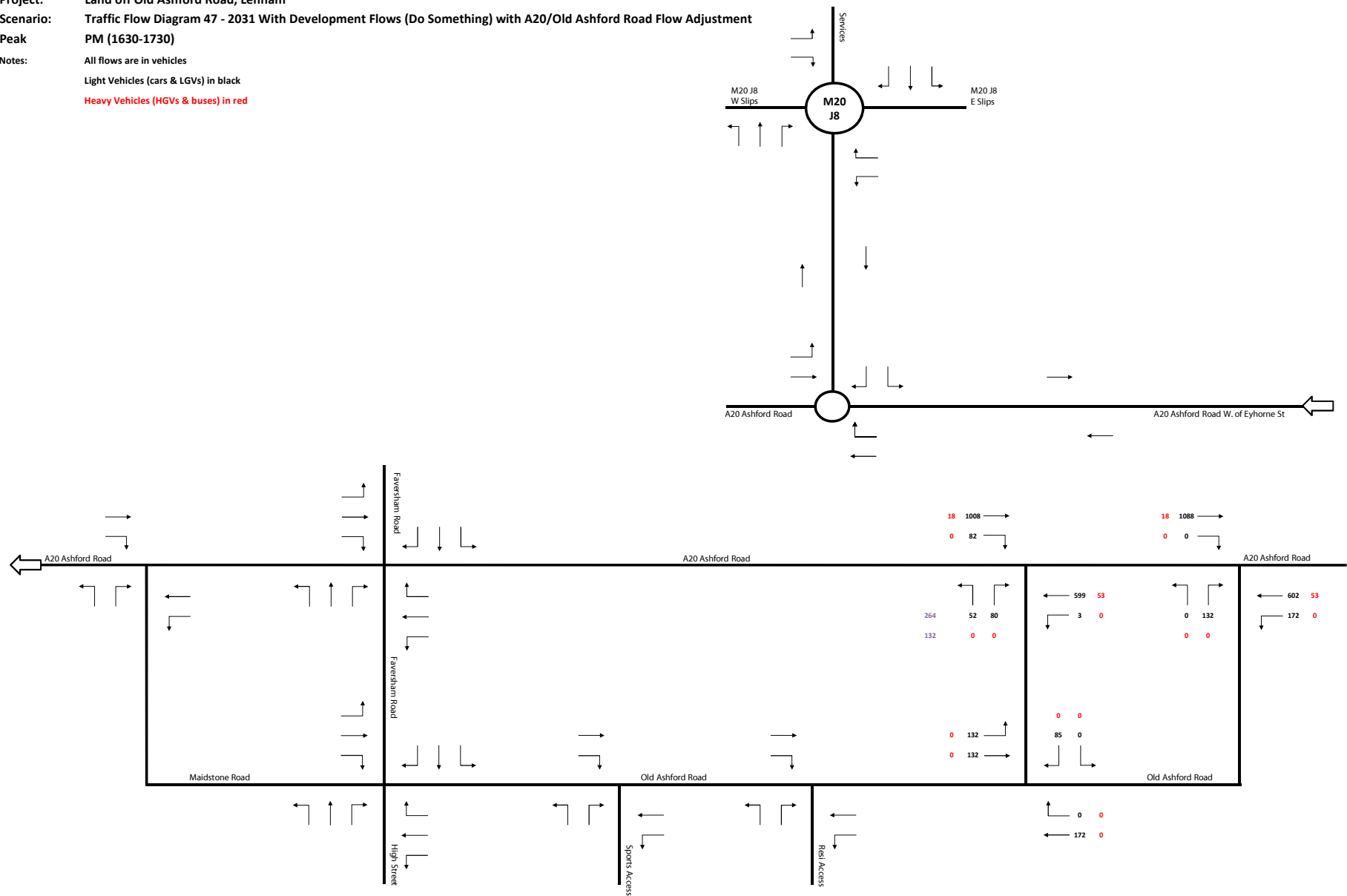
Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 45 - 2024 With Development Flows (Do Minimum) with A20/Old Ashford Road Flow Adjustment
Peak PM (1630-1730)
Notes: All flows are in vehicles
Light Vehicles (cars & LGVs) in black
Heavy Vehicles (HGVs & buses) in red



Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 46 - 2031 With Development Flows (Do Something) with A20/Old Ashford Road Flow Adjustment
Peak AM (0700-0800)
Notes: All flows are in vehicles
Light Vehicles (cars & LGVs) in black
Heavy Vehicles (HGVs & buses) in red



Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 47 - 2031 With Development Flows (Do Something) with A20/Old Ashford Road Flow Adjustment
Peak PM (1630-1730)
Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red



APPENDIX D

ATC SPEED SURVEY RESULTS

This page has been
left intentionally
blank

Lenham ATC, Old Ashford Road

Channel 1 - Eastbound

Average Speed

Week 1

Hr Ending	11/02/2019 Monday	12/02/2019 Tuesday	13/02/2019 Wednesday	14/02/2019 Thursday	15/02/2019 Friday	16/02/2019 Saturday	17/02/2019 Sunday
1	38.0	53.0	37.4	45.5	33.0	35.5	28.6
2	-	-	-	33.0	43.0	38.0	-
3	-	-	-	-	-	40.5	25.5
4	34.2	33.0	43.0	-	-	29.2	25.5
5	40.5	35.5	35.5	31.8	31.8	20.5	38.0
6	32.4	26.5	29.2	33.0	30.5	33.0	33.0
7	36.1	37.8	38.7	39.1	37.2	33.5	-
8	38.3	38.7	38.9	37.3	38.7	36.3	38.2
9	39.0	39.1	38.6	39.2	36.6	38.1	37.9
10	36.0	37.2	36.1	35.7	36.5	35.5	36.9
11	35.8	34.8	32.3	36.9	35.7	36.0	37.5
12	38.0	34.9	35.5	35.4	36.5	34.4	36.1
13	35.3	36.7	37.4	37.0	36.2	36.4	37.2
14	38.4	37.0	36.5	36.9	35.9	36.8	35.6
15	35.1	35.8	35.8	33.7	35.0	36.7	35.4
16	38.3	37.1	37.9	37.6	39.2	38.2	37.3
17	36.5	37.4	38.8	37.4	38.2	35.2	37.6
18	36.5	38.3	37.8	36.8	38.9	38.0	36.9
19	38.3	37.1	37.3	37.2	37.0	37.3	37.3
20	38.9	37.0	37.7	36.5	36.2	35.6	37.6
21	38.8	39.9	36.5	37.8	39.1	29.5	36.9
22	41.4	35.4	34.8	33.8	35.8	30.1	38.0
23	39.9	33.5	35.7	36.5	36.3	28.0	39.2
24	39.2	34.9	36.8	35.5	35.5	26.8	41.3
10-12	36.9	34.9	33.7	36.1	36.1	35.1	36.7
14-16	36.9	36.5	37.0	35.9	37.5	37.4	36.4
0-24	37.2	37.1	37.1	36.8	37.2	36.0	36.8

Average

36.9

Channel 1 - Eastbound

85th Percentile

Hr Ending	11/02/2019 Monday	12/02/2019 Tuesday	13/02/2019 Wednesday	14/02/2019 Thursday	15/02/2019 Friday	16/02/2019 Saturday	17/02/2019 Sunday
1	43.7	-	48.3	53.9	-	48.5	38.9
2	-	-	-	-	48.5	38.7	-
3	-	-	-	-	-	43.5	-
4	43.5	-	-	-	-	33.8	-
5	43.6	38.6	38.3	38.6	38.2	25.6	-
6	38.3	48.3	33.9	43.4	38.5	-	-
7	43.3	43.3	49.0	43.1	43.3	38.7	-
8	43.8	43.8	43.4	43.6	43.6	43.5	43.1
9	43.0	43.8	43.3	43.7	43.5	43.4	43.0
10	43.8	43.6	43.2	43.9	43.2	43.1	43.3
11	43.8	39.0	38.2	43.8	43.9	43.7	43.8
12	43.7	43.9	38.6	43.0	43.7	38.9	43.3
13	43.0	43.2	43.4	43.5	43.5	43.5	43.2
14	48.4	43.7	43.4	43.9	43.4	43.1	43.5
15	43.9	44.0	43.7	43.4	43.1	43.8	48.3
16	43.8	43.2	43.3	43.7	43.8	43.4	43.3
17	43.4	43.5	43.6	43.5	43.5	43.5	43.0
18	44.0	43.1	43.2	43.5	43.8	43.5	43.5
19	48.9	44.0	43.2	43.5	43.6	48.2	43.2
20	43.1	43.7	43.6	48.4	43.8	43.3	43.9
21	48.9	43.0	43.1	43.4	48.0	38.1	38.6
22	48.4	38.6	48.5	38.3	43.2	38.6	43.8
23	43.5	43.1	38.9	43.1	43.1	38.2	48.9
24	48.8	38.1	43.3	48.2	38.1	33.9	48.3
10-12	43.1	43.8	43.8	44.0	43.3	43.1	43.5
14-16	43.6	43.3	43.4	43.1	43.1	43.4	43.1
0-24	43.5	43.0	43.3	43.4	43.0	43.3	43.6

85th %ile

43.3

Lenham ATC, Old Ashford Road

Channel 2 - Westbound

Average Speed

Week 1

Hr Ending	11/02/2019 Monday	12/02/2019 Tuesday	13/02/2019 Wednesday	14/02/2019 Thursday	15/02/2019 Friday	16/02/2019 Saturday	17/02/2019 Sunday
1	38.0	46.3	48.0	37.4	44.4	48.0	36.8
2	-	-	43.0	-	-	43.0	38.0
3	-	43.0	33.0	-	43.0	5.0	29.2
4	41.3	-	43.0	48.0	48.0	33.0	-
5	41.8	45.5	53.0	43.5	35.5	28.5	33.0
6	43.4	43.4	41.9	42.3	41.8	26.8	36.8
7	37.7	42.2	39.3	41.5	39.6	40.2	38.0
8	39.9	40.0	39.7	38.7	40.0	41.3	39.8
9	39.1	39.3	39.4	38.1	37.7	37.0	37.2
10	35.7	35.9	35.4	37.1	36.6	37.2	35.0
11	35.5	37.0	35.9	35.2	35.5	35.2	33.7
12	37.6	36.3	36.6	35.3	37.0	37.0	36.1
13	37.2	35.8	35.8	36.5	35.4	36.0	36.9
14	35.6	36.9	37.3	36.4	36.4	36.9	34.3
15	36.3	35.4	36.3	36.2	37.6	34.6	38.0
16	37.0	37.0	36.5	37.9	37.7	35.5	35.8
17	36.1	38.7	39.1	36.8	37.0	37.0	36.8
18	35.3	37.4	36.8	37.2	37.0	37.1	35.5
19	37.2	36.1	35.9	34.7	36.9	33.5	38.8
20	39.7	38.3	37.4	36.2	34.7	35.7	37.8
21	42.7	39.4	40.9	39.5	37.6	31.8	38.5
22	41.8	38.3	38.2	37.4	38.6	26.1	38.0
23	41.4	39.1	41.0	37.1	36.6	30.0	35.5
24	43.0	39.0	38.4	43.0	43.0	23.8	38.6

10-12	36.6	36.7	36.3	35.3	36.2	36.3	35.0
14-16	36.7	36.3	36.4	37.2	37.6	35.0	36.7
0-24	37.5	37.7	37.5	37.0	37.2	35.9	36.3

Average	37.0
---------	------

Channel 2 - Westbound

85th Percentile

Hr Ending	11/02/2019 Monday	12/02/2019 Tuesday	13/02/2019 Wednesday	14/02/2019 Thursday	15/02/2019 Friday	16/02/2019 Saturday	17/02/2019 Sunday
1	38.4	48.7	-	43.6	49.0	-	48.2
2	-	-	-	-	-	-	38.4
3	-	-	-	-	43.2	-	33.2
4	49.0	-	48.2	-	-	-	-
5	48.1	53.4	53.8	53.0	43.4	43.9	-
6	53.9	48.5	53.2	48.4	48.3	38.9	48.6
7	43.6	48.8	44.0	48.4	43.5	43.4	38.4
8	48.3	48.5	48.1	48.3	48.1	48.1	43.4
9	43.1	43.4	43.1	44.0	43.5	44.0	48.9
10	43.5	43.5	43.8	43.8	44.0	43.8	43.6
11	38.2	43.2	43.4	43.7	43.6	43.7	43.9
12	44.0	43.6	43.5	43.4	43.9	43.4	43.5
13	43.1	43.5	43.1	43.7	43.7	43.0	43.3
14	43.0	43.7	43.1	43.3	43.4	43.2	43.9
15	43.3	43.9	43.2	43.4	43.7	43.2	43.3
16	43.5	43.4	43.0	43.4	43.1	43.5	43.3
17	43.9	43.3	43.7	43.9	43.8	43.4	43.2
18	43.5	43.3	43.5	43.1	43.7	43.1	43.3
19	43.4	43.2	43.6	43.6	43.5	43.3	48.0
20	48.8	48.5	48.2	43.3	43.2	43.6	48.7
21	48.8	48.2	48.5	43.1	43.2	38.8	48.8
22	43.7	43.6	43.7	43.2	48.3	33.5	38.3
23	48.7	43.4	48.8	43.1	43.8	38.2	43.7
24	54.0	48.9	53.4	53.4	53.1	26.4	48.4

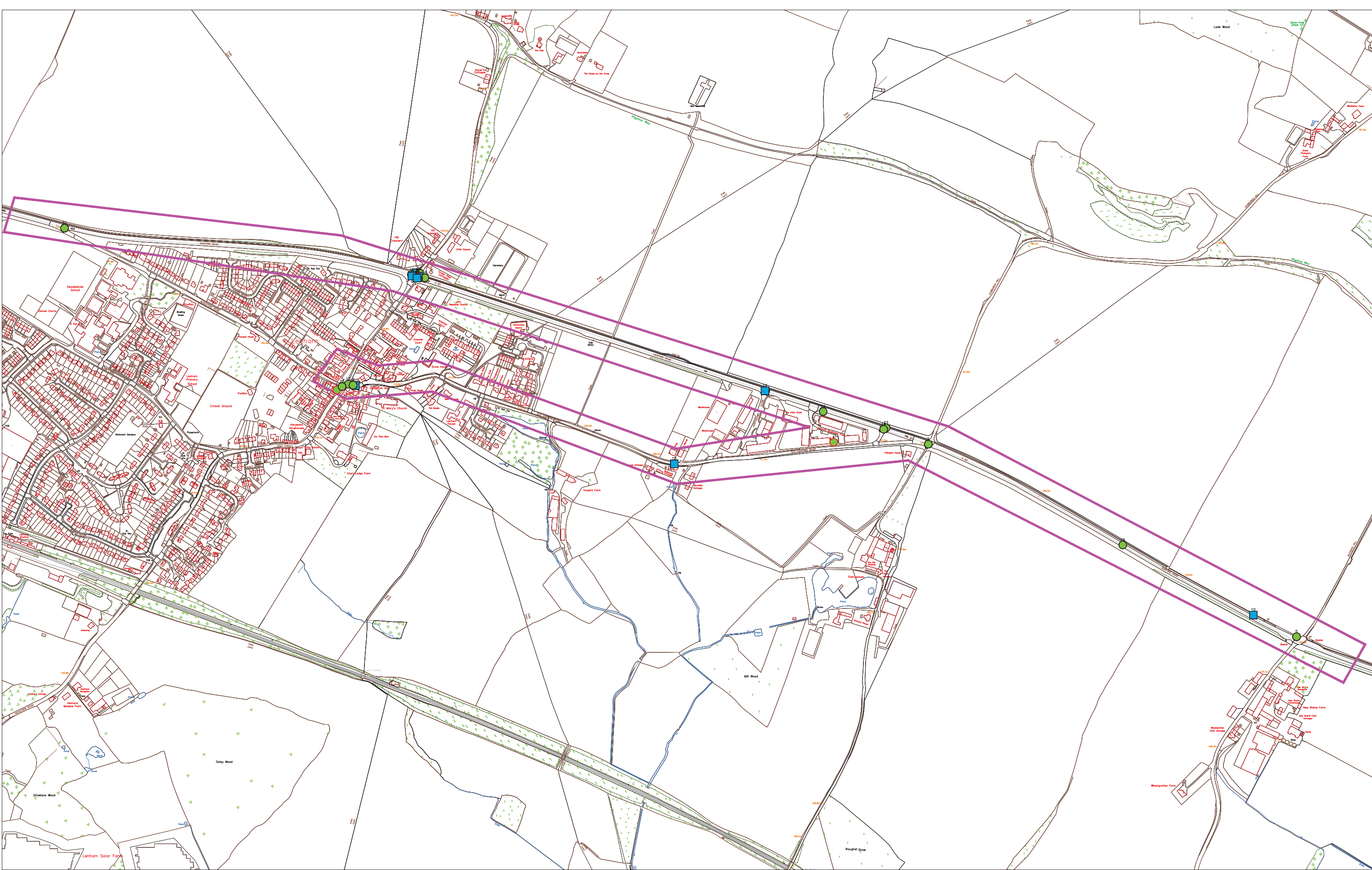
10-12	43.3	43.5	43.9	44.0	43.5	43.4	43.8
14-16	43.5	43.2	43.7	43.5	43.8	43.3	43.7
0-24	43.4	43.7	43.1	43.5	43.8	43.8	43.4

85th %ile	43.5
-----------	------

APPENDIX E

ACCIDENT PLOT

This page has been
left intentionally
blank



Location: A20 Ashford Road, Lenham

5 years personal injury crash data up to 30/09/2018

KCC Ref number: EXT/227/19

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100019238 (2015)

Crash Severity	
●	Slight
■	Serious
▲	Fatal



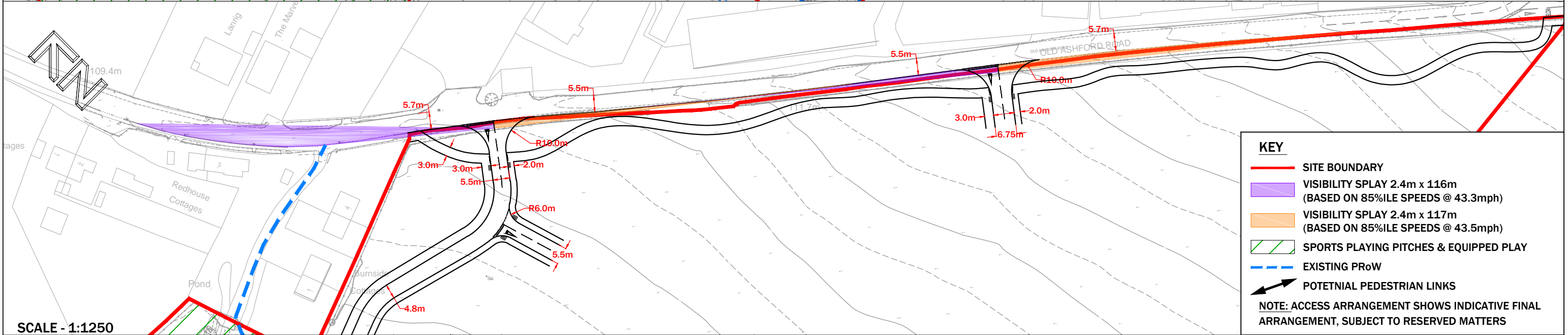
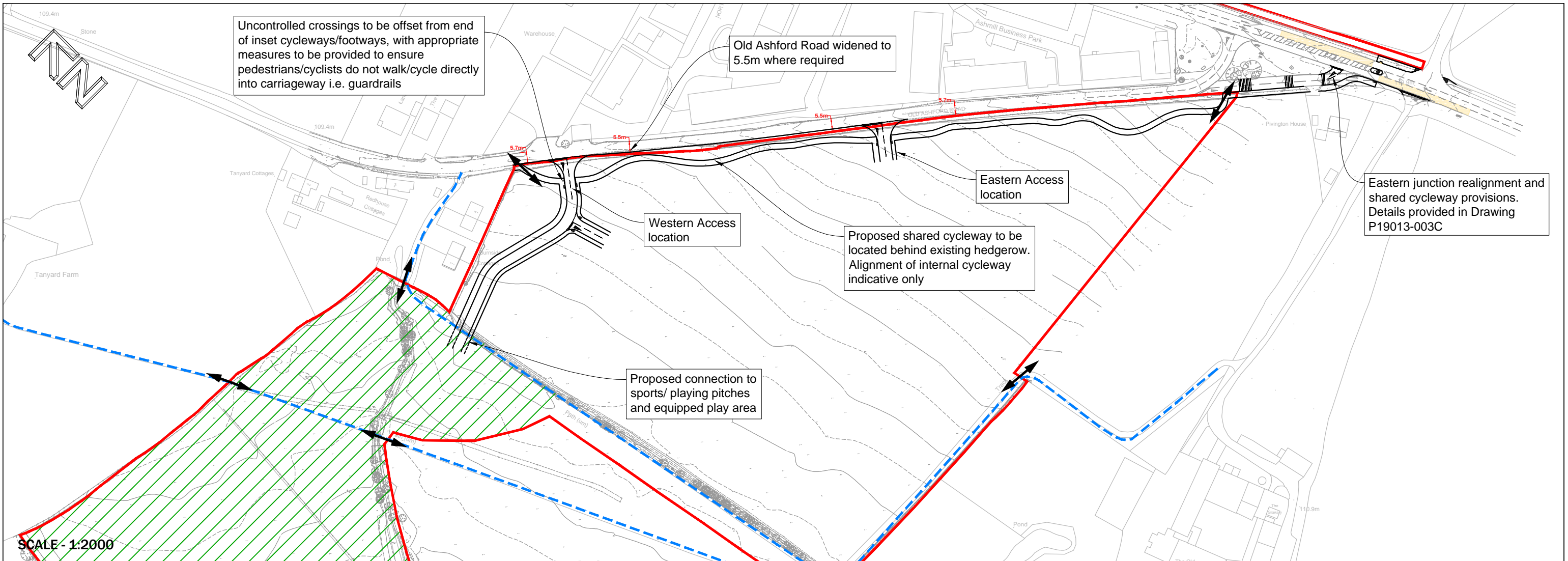
**Kent
County
Council**
kent.gov.uk


This page has been
left intentionally
blank

APPENDIX F

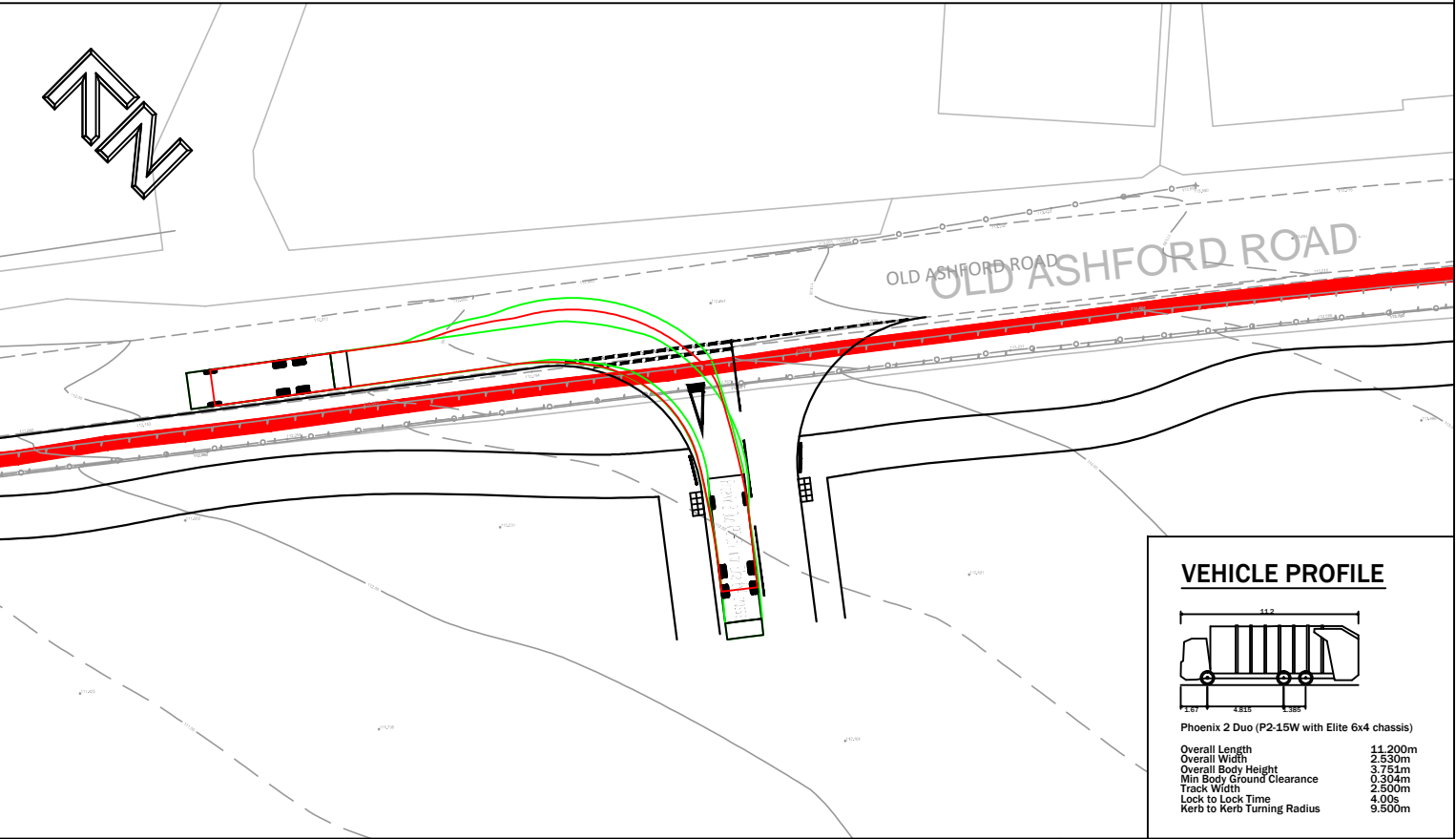
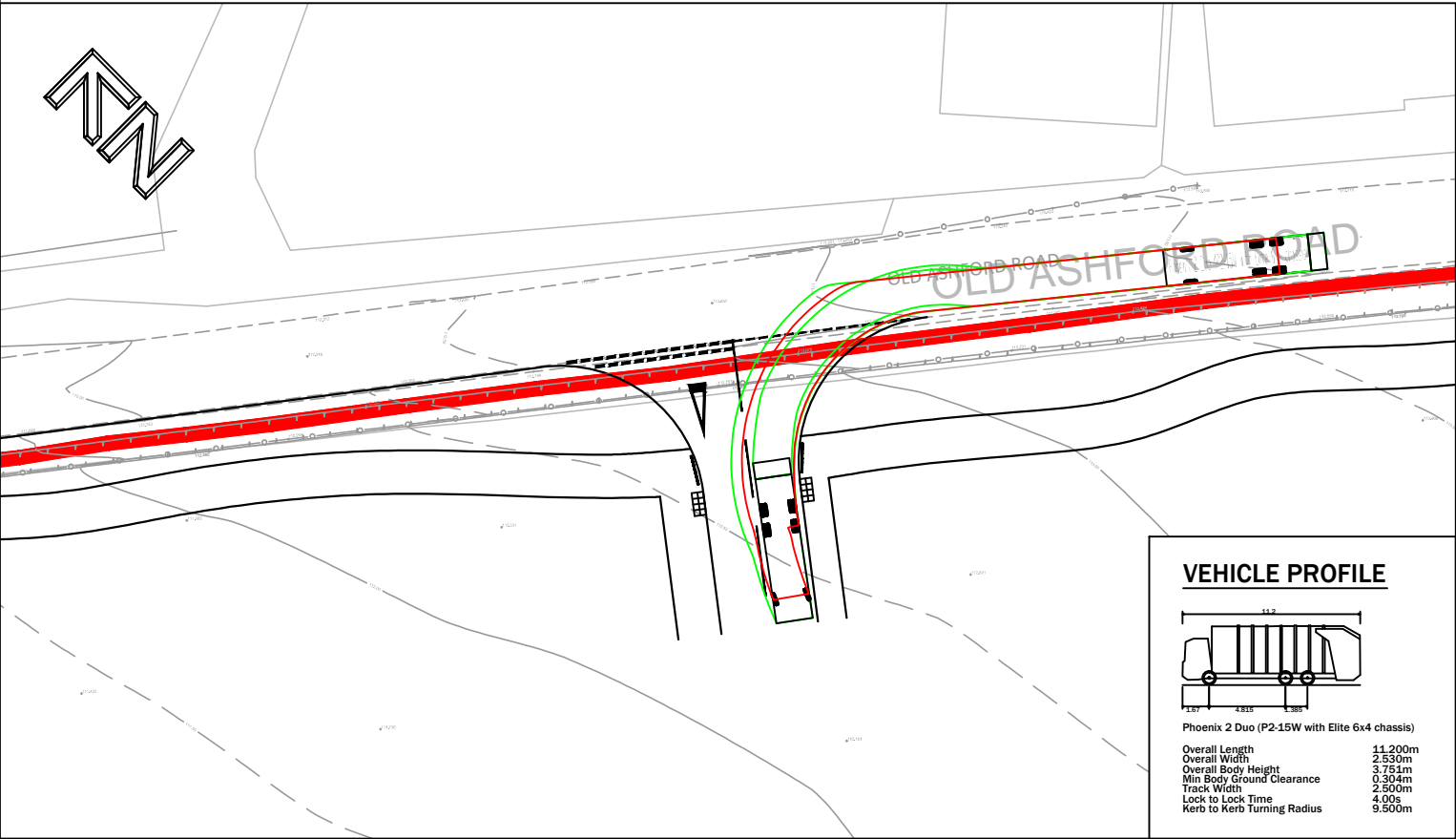
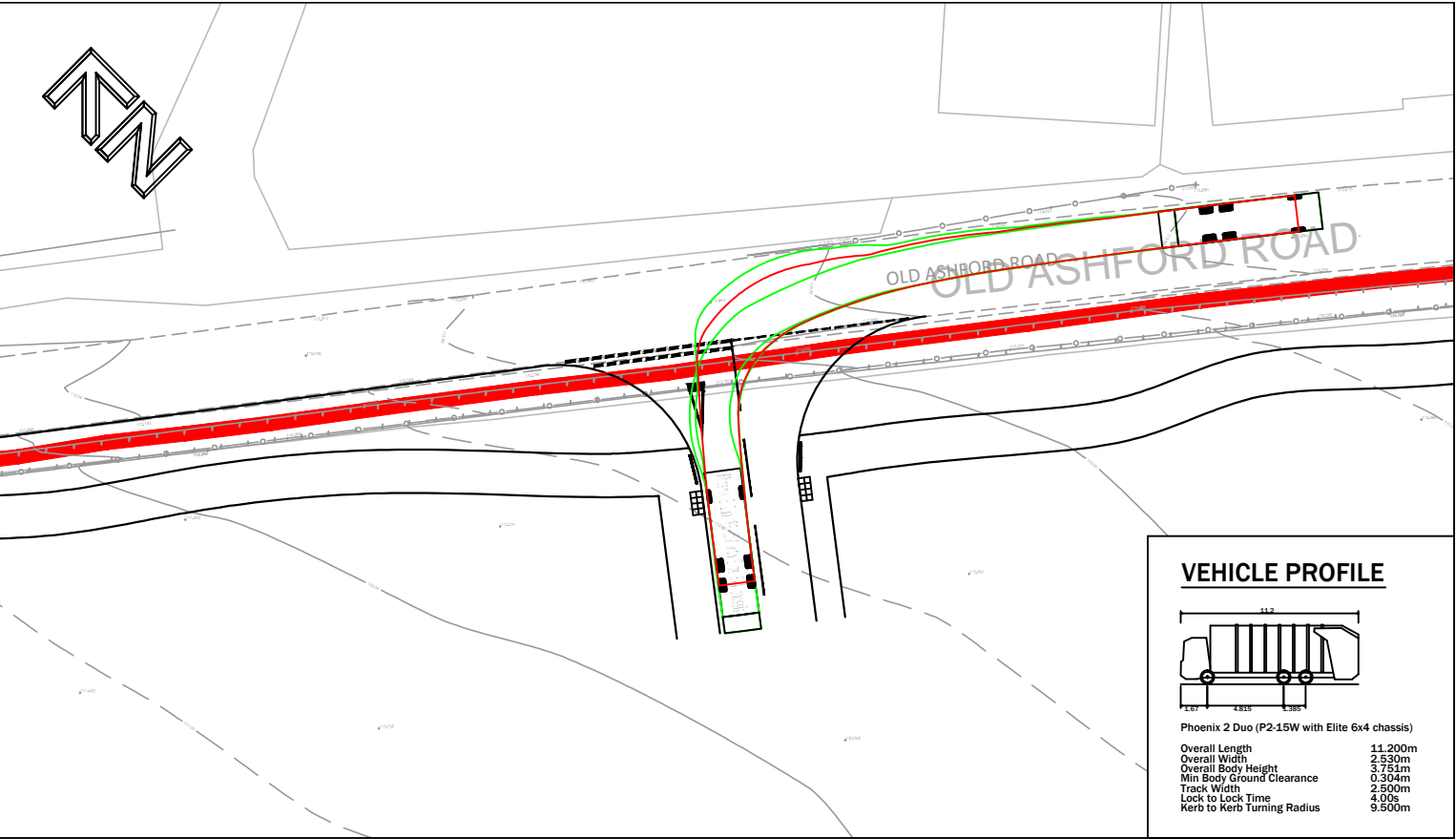
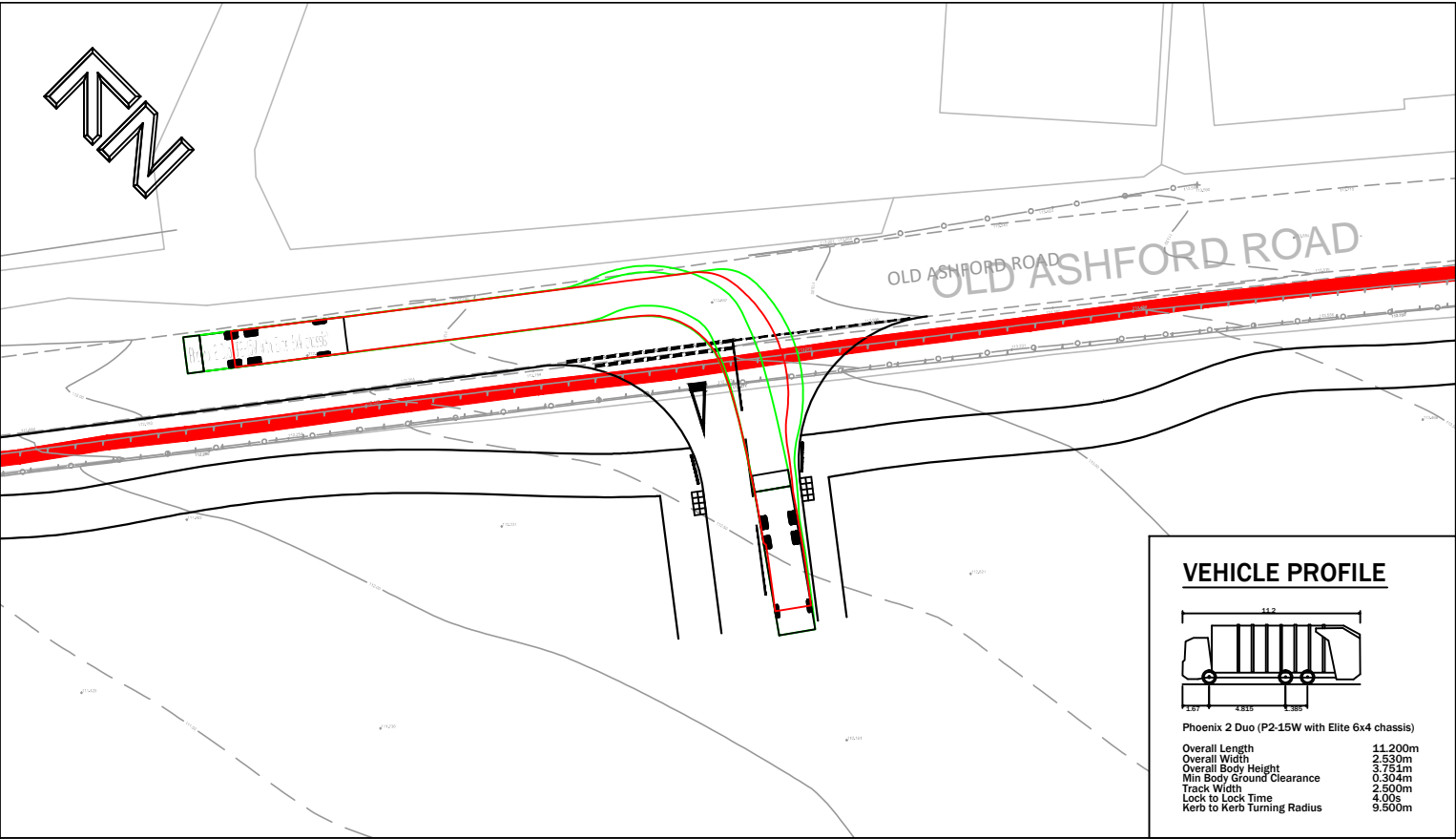
TECHNICAL DRAWINGS

This page has been
left intentionally
blank



<div><p>9 Hurricane Court Liverpool International Business Park Estuary Boulevard Liverpool L24 8RL www.primetp.co.uk 0151 728 1860</p></div>	G	26.09.19	AM	RED LINE BOUNDARY UPDATE	Project	ASHFORD OLD ROAD, LENHAM, KENT	Drawn by AM	Issue date 26 SEP 2019
	F	12.09.19	VB	CHANGES FOLLOWING SIX:TEN RSA COMMENTS				
	E	02.09.19	VB	FOOTWAY UPDATES				
	D	15.08.19	VB	FINAL PROPOSALS				
C	01.07.19	VB	UPDATES TO ACCESS WIDTH AND FOOTWAYS					
B	01.04.19	VB	UPDATED ACCESS WIDTH					
A	26.02.19	VB	NEW RED LINE BOUNDARY AND CHANGES TO ACCESSES					
Rev	Date	By	Revision notes		Title	PROPOSED ACCESS STRATEGY	Scale(s)	
Status				FINAL			1:2000 @A3 1:1250 @ A3	
							Drawing No	
							P19013-001G	

This page has been
left intentionally
blank



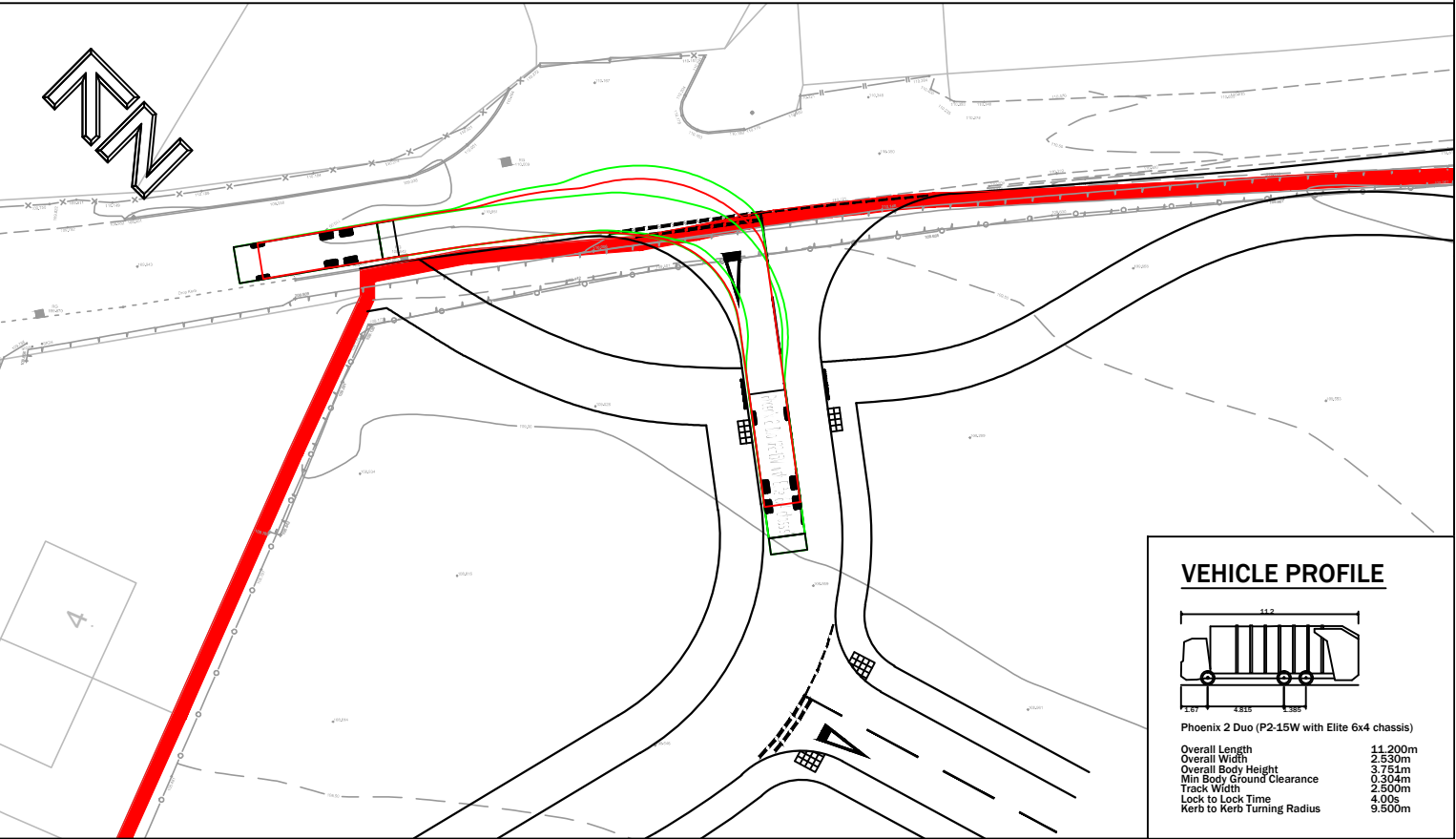
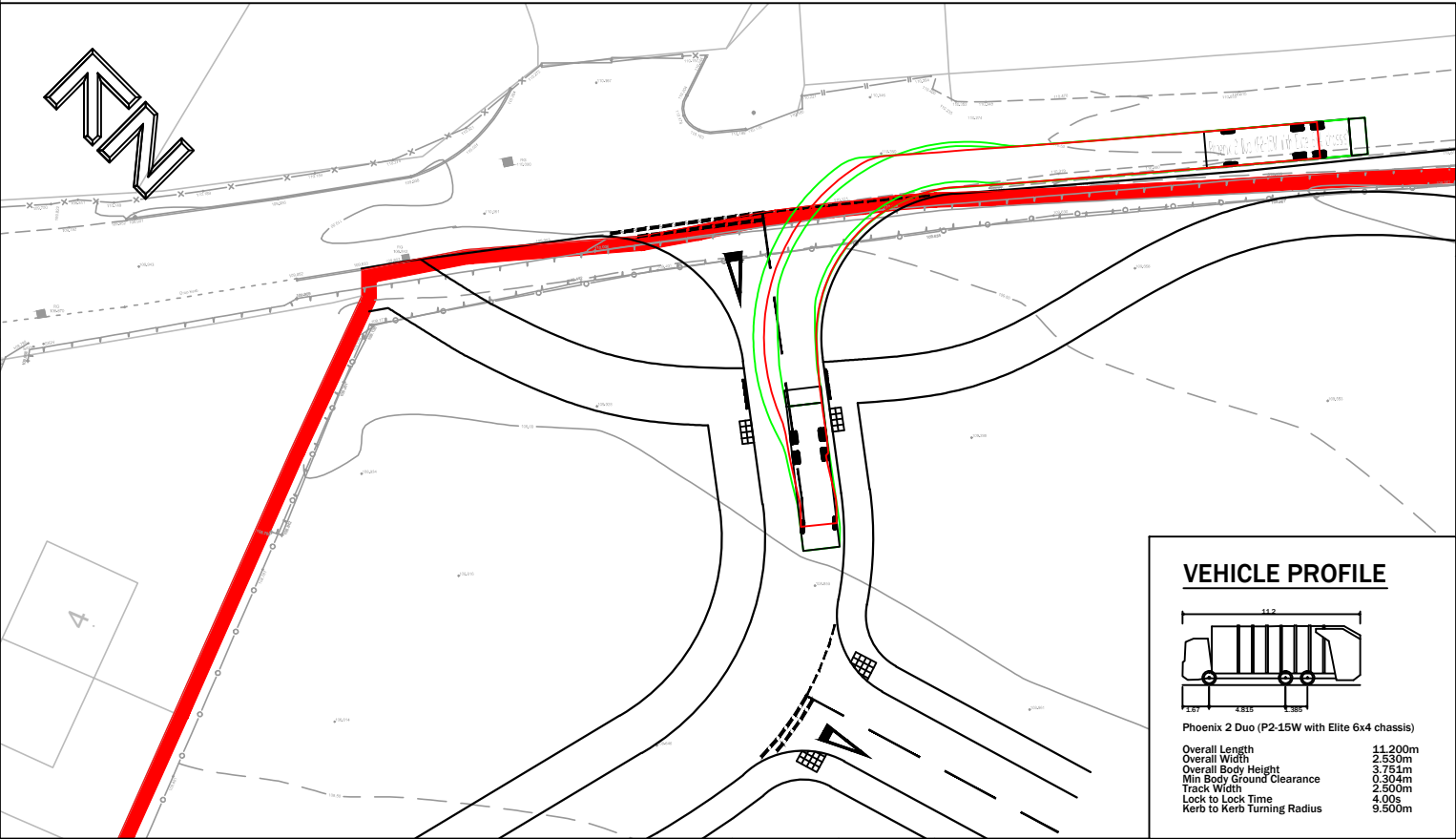
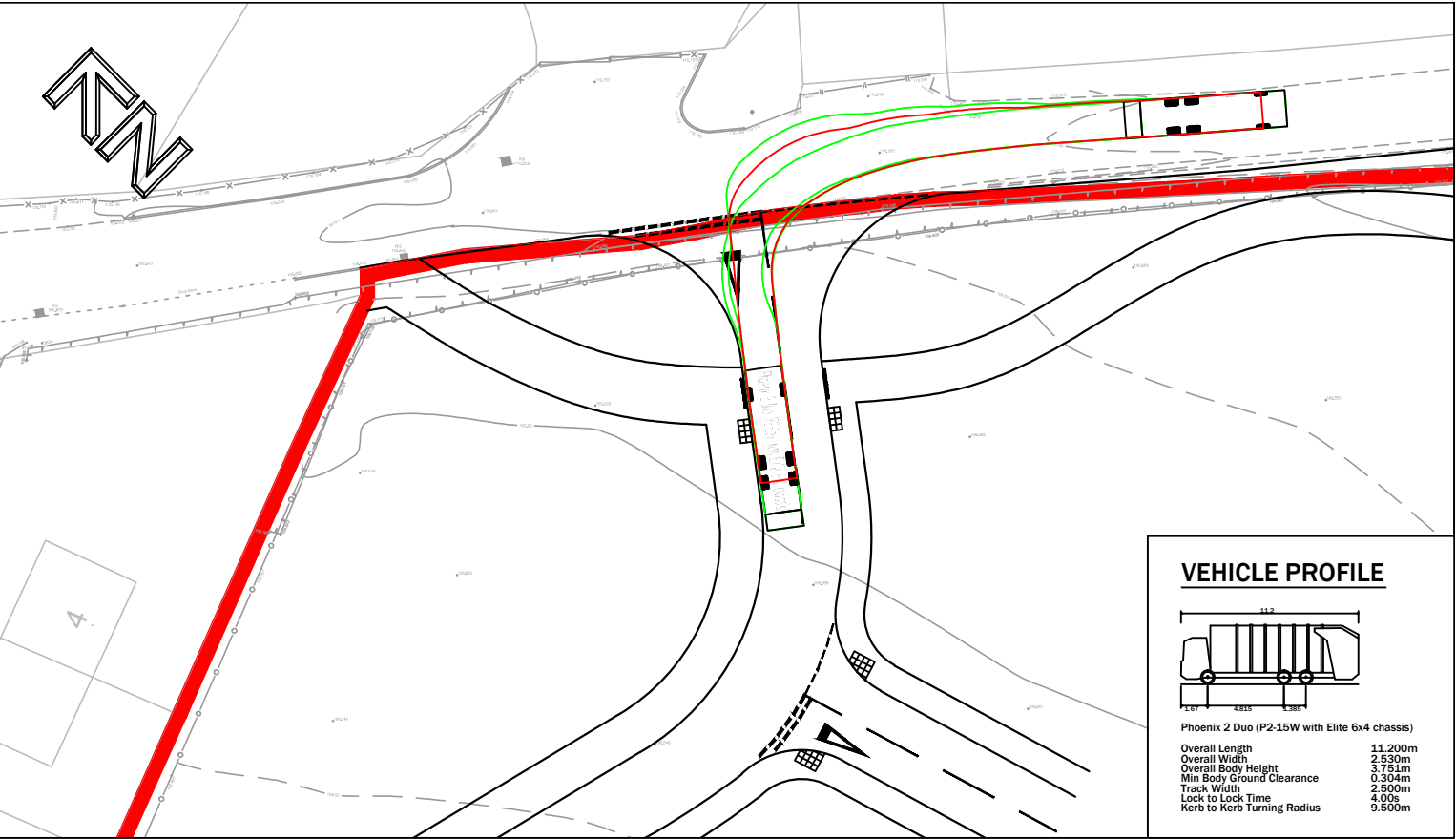
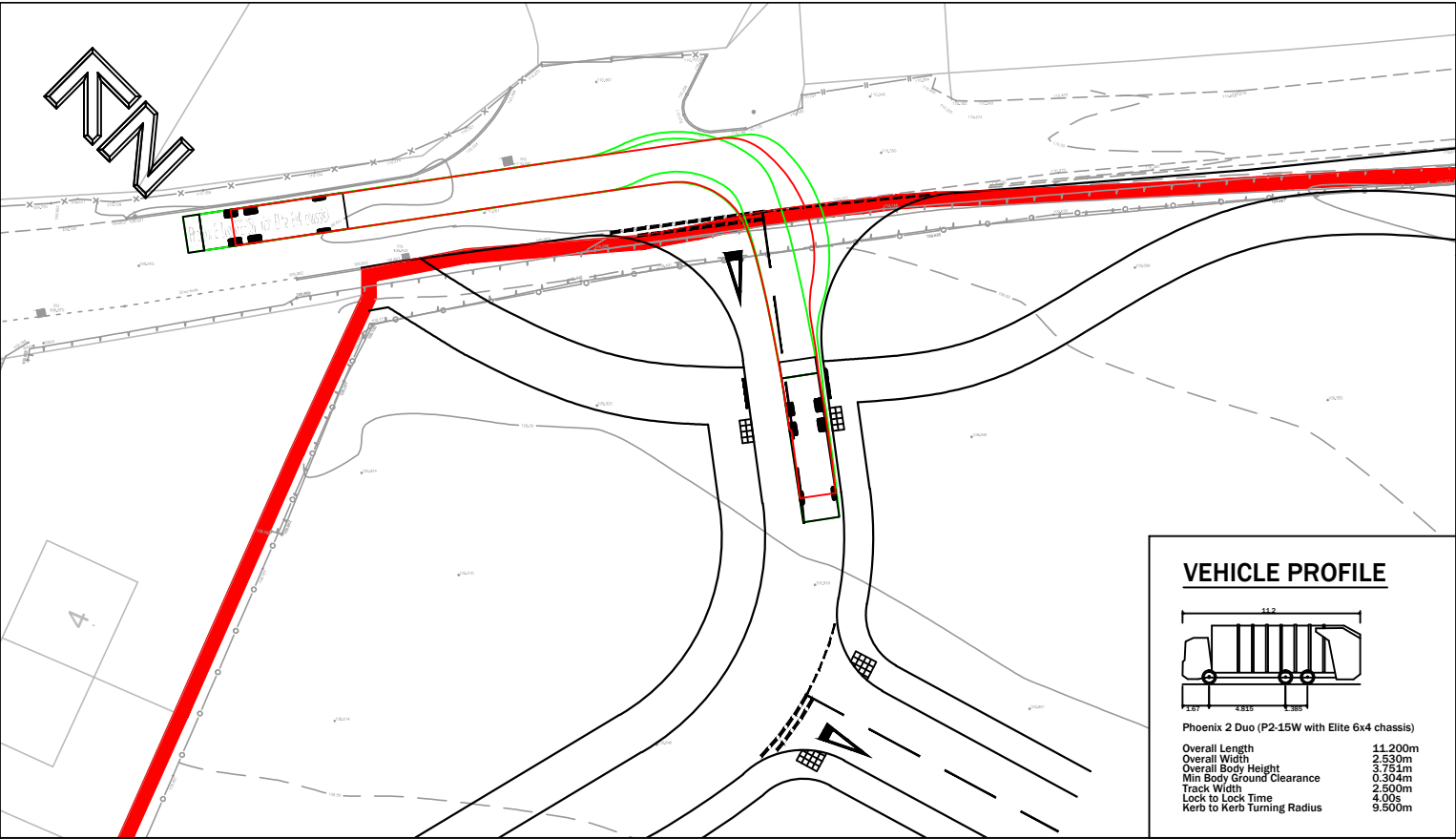
9 Hurricane Court
Liverpool International Business Park | Estuary Boulevard | Liverpool | L24 8RL
www.primetp.co.uk | 0151 728 1860


B	27.09.19	VB	RED LINE BOUNDARY UPDATE CHANGES FOLLOWING SIX:TEN RSA COMMENTS
A	12.09.19	VB	
Rev	Date	By	Revision notes
Status			
INFORMATION			

Project	ASHFORD OLD ROAD, LENHAM, KENT
Title	EASTERN ACCESS SWEEP PATH ANALYSIS - REFUSE VEHICLE

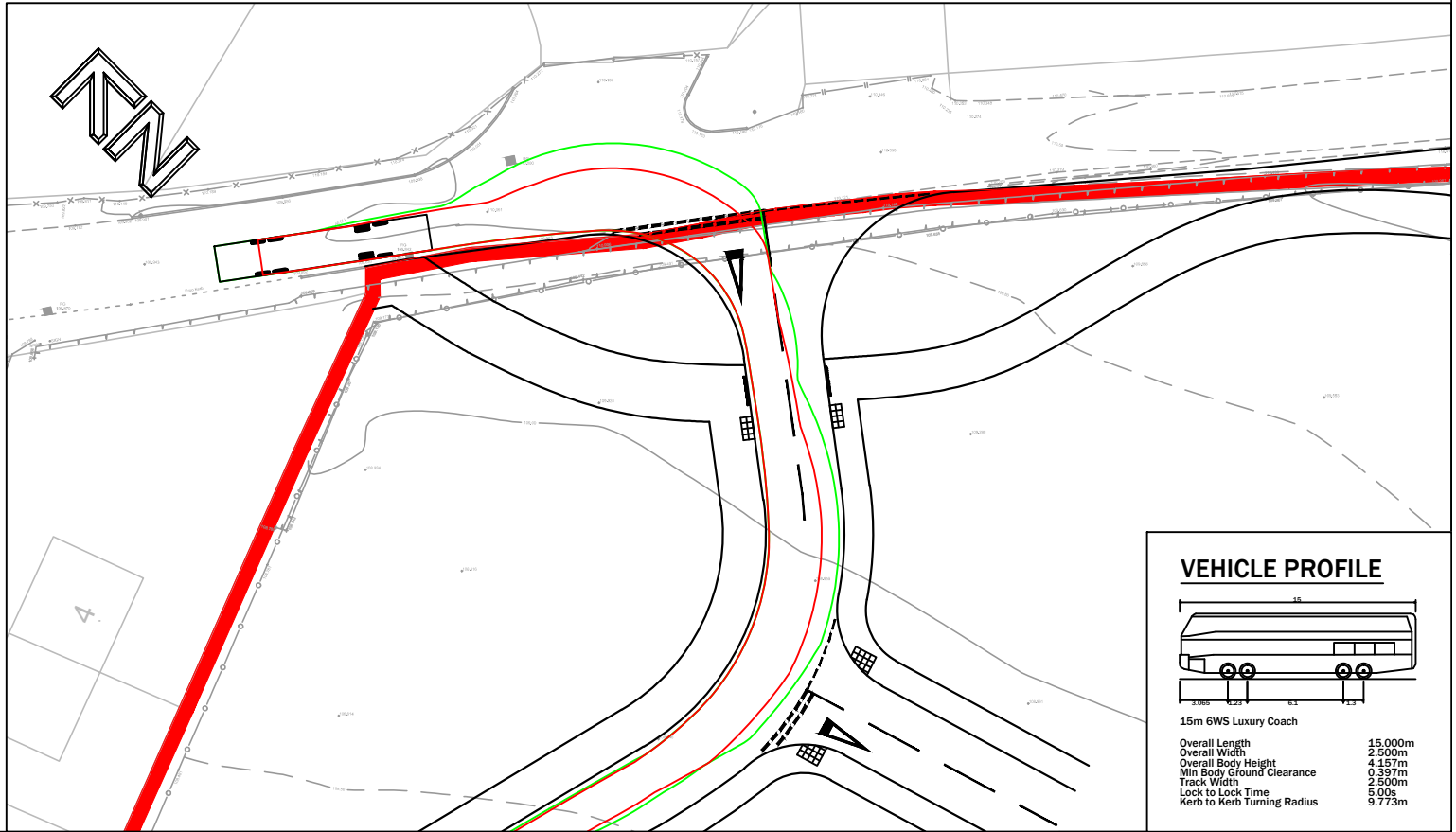
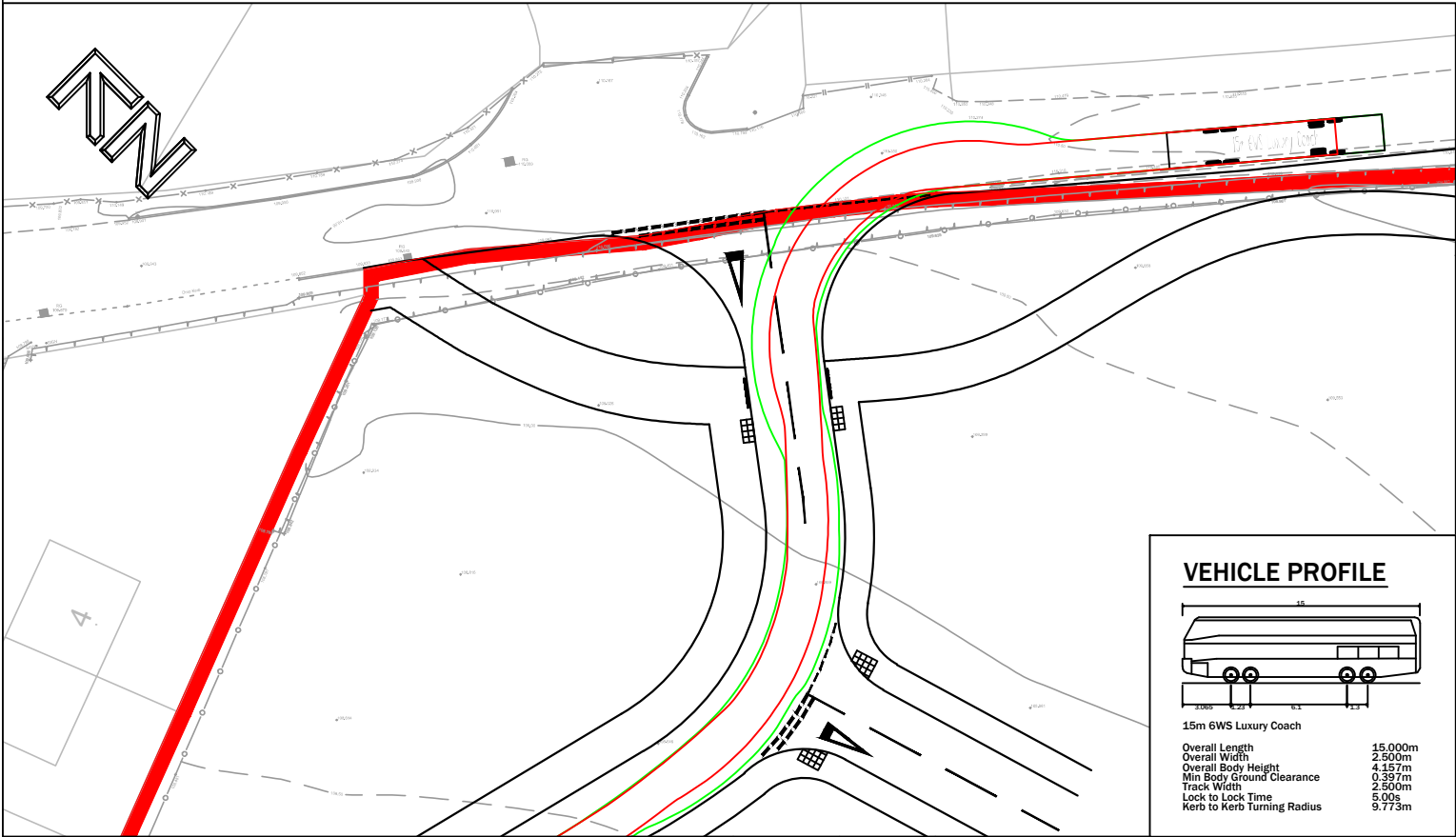
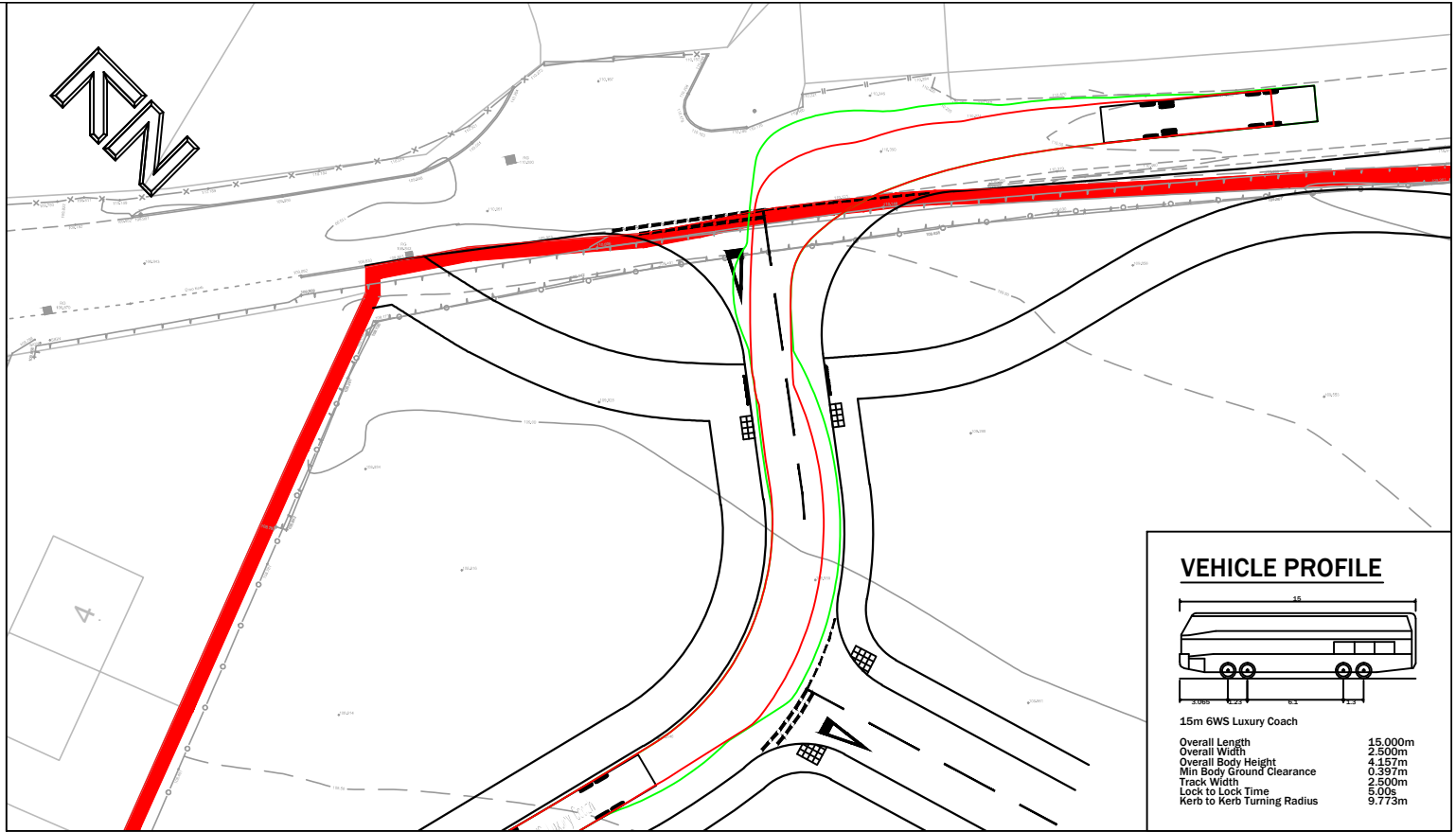
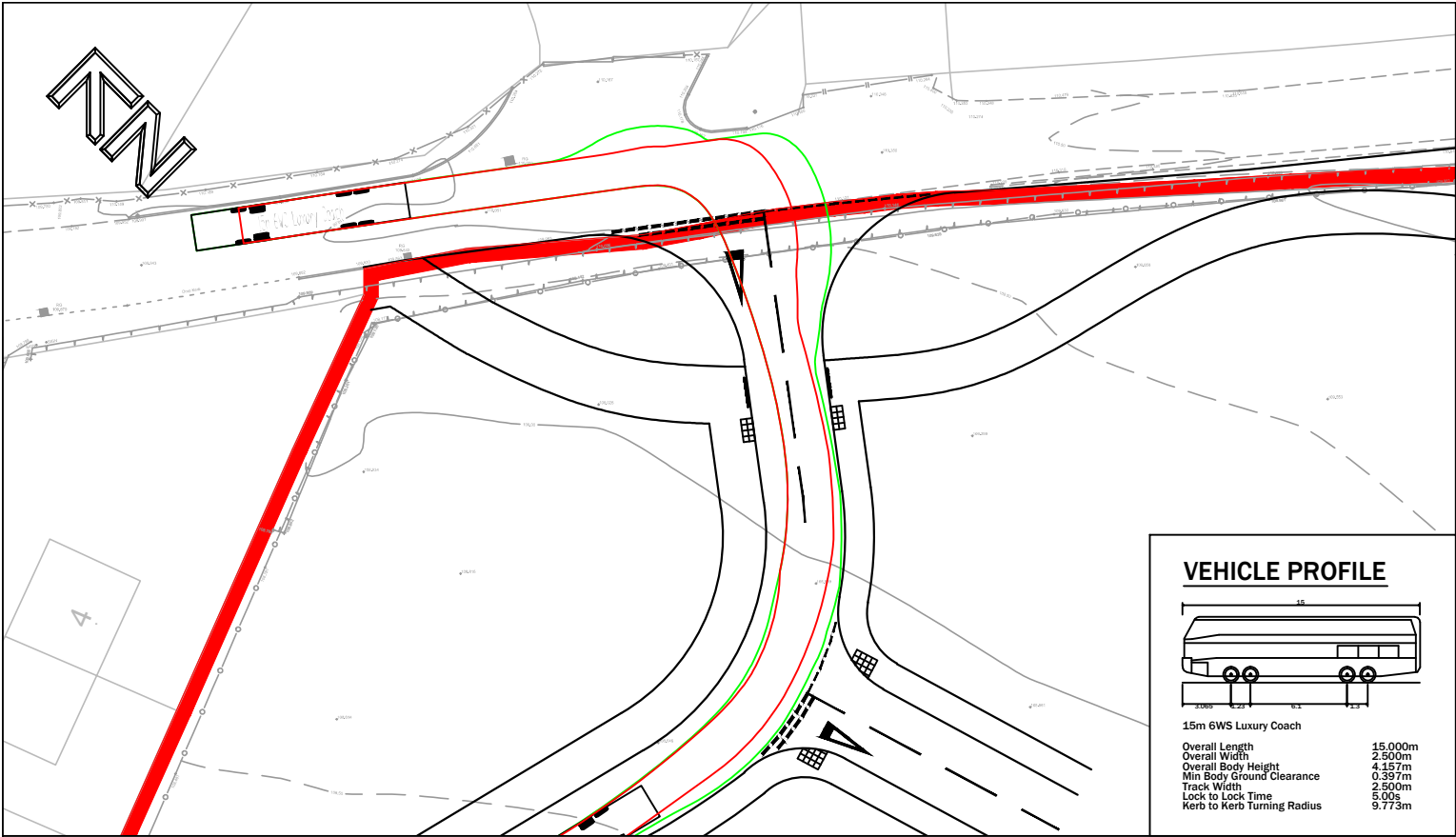
Drawn by VB	Issue date 16 AUG 2019
Scale(s) 1:500 @ A3	
Drawing No P19013-200B	

This page has been
left intentionally
blank



<div><p>9 Hurricane Court Liverpool International Business Park Estuary Boulevard Liverpool L24 8RL www.primetp.co.uk 0151 728 1860</p></div>	B	27.09.19	VB	RED LINE BOUNDARY UPDATE	Project	ASHFORD OLD ROAD, LENHAM, KENT	Drawn by VB	Issue date 16 AUG 2019
	A	12.09.19	VB	CHANGES FOLLOWING SIX:TEN RSA COMMENTS			Scale(s)	
	Rev	Date	By	Revision notes	Title	WESTERN ACCESS SWEPT PATH ANALYSIS - REFUSE VEHICLE	1:500 @ A3	
	Status						Drawing No	
INFORMATION				P19013-201B				

This page has been
left intentionally
blank



9 Hurricane Court
Liverpool International Business Park | Estuary Boulevard | Liverpool | L24 8RL
www.primetp.co.uk | 0151 728 1860

B	27.09.19	VB	RED LINE BOUNDARY UPDATE CHANGES FOLLOWING SIX:TEN RSA COMMENTS
A	12.09.19	VB	
Rev	Date	By	Revision notes
Status			

INFORMATION

Project

ASHFORD OLD ROAD, LENHAM, KENT

Title

WESTERN ACCESS SWEEP PATH ANALYSIS
- 15m COACH

Drawn by
VB

Issue date
16 AUG 2019

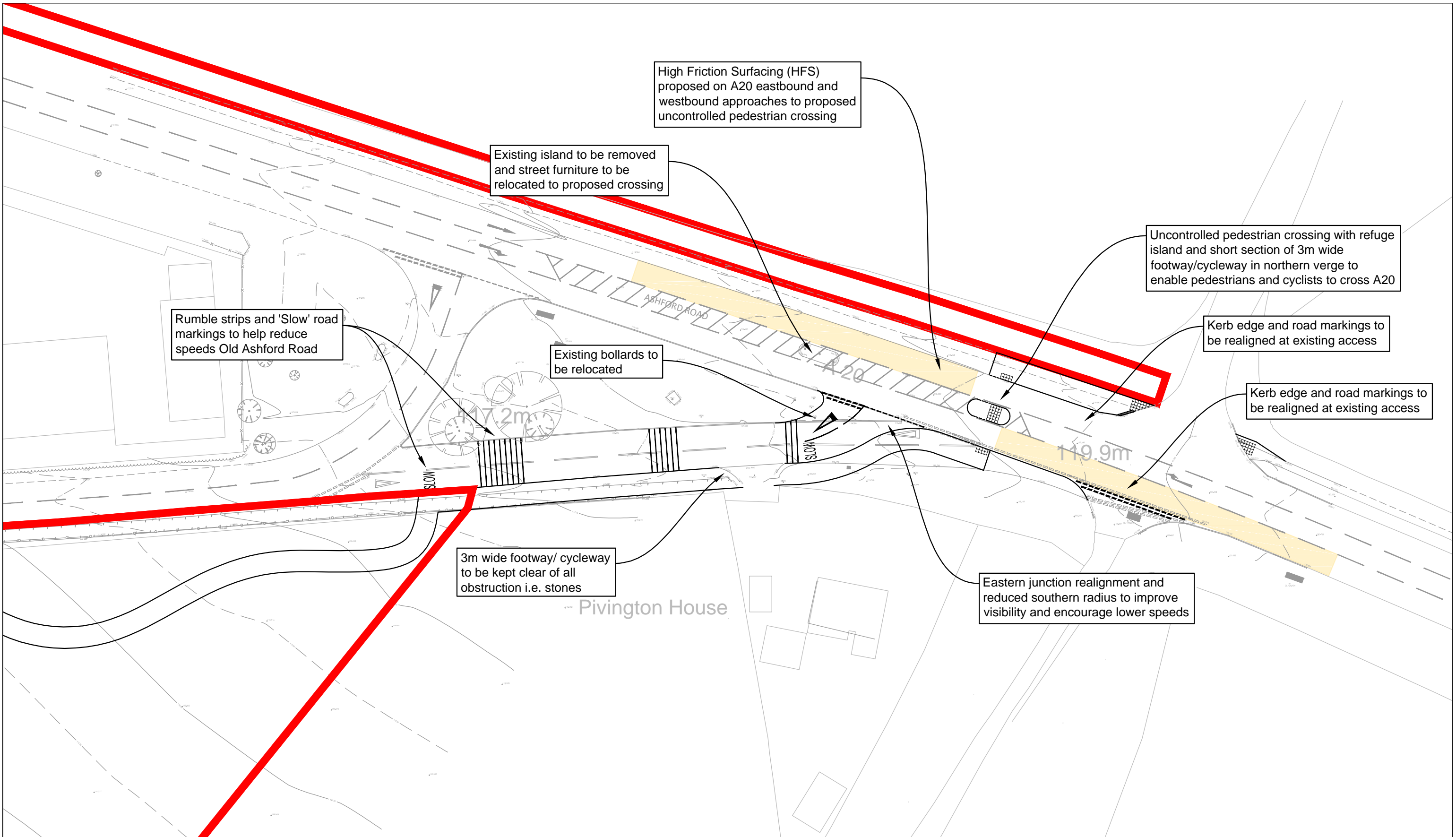
Scale(s)

1:500 @ A3

Drawing No

P19013-202B

This page has been
left intentionally
blank



9 Hurricane Court
Liverpool International Business Park | Estuary Boulevard | Liverpool | L24 8RL
www.primetp.co.uk | 0151 728 1860

D	27.09.19	VB	RED LINE BOUNDARY UPDATE
C	12.09.19	VB	CHANGES FOLLOWING SIX:TEN RSA COMMENTS
B	02.09.19	VB	FOOTWAY UPDATES
A	15.08.19	VB	GEOMETRIES REMOVED FROM DRAWING

Rev	Date	By	Revision notes
-----	------	----	----------------

Status

INFORMATION

Project

ASHFORD OLD ROAD, LENHAM, KENT

Title

POTENTIAL A20/ OLD ASHFORD ROAD MITIGATION

Drawn by
VB

Issue date
08 AUG 2019

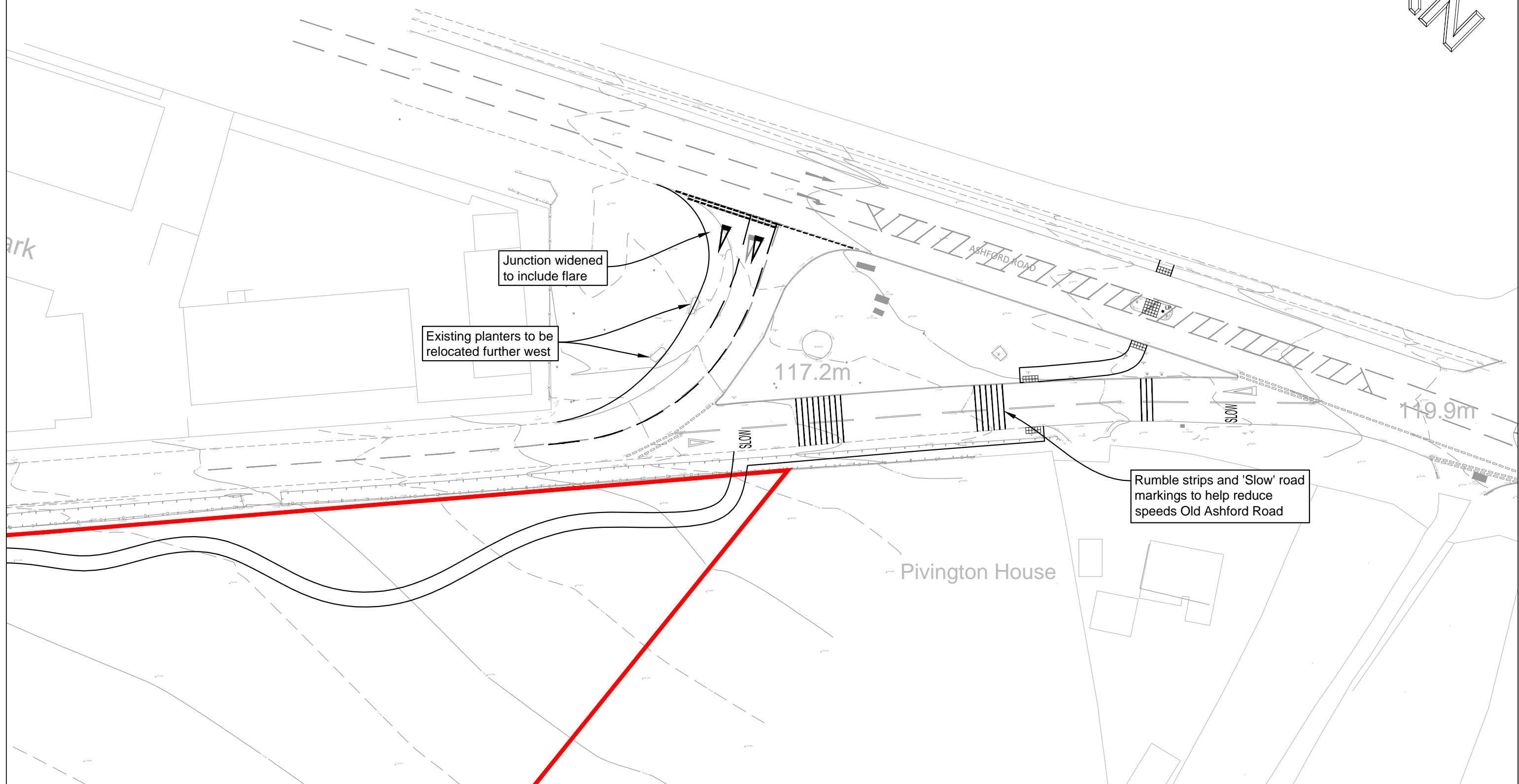
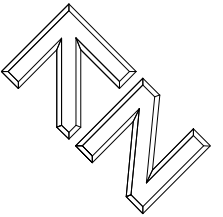
Scale(s)

1:500 @ A3

Drawing No

P19013-003D

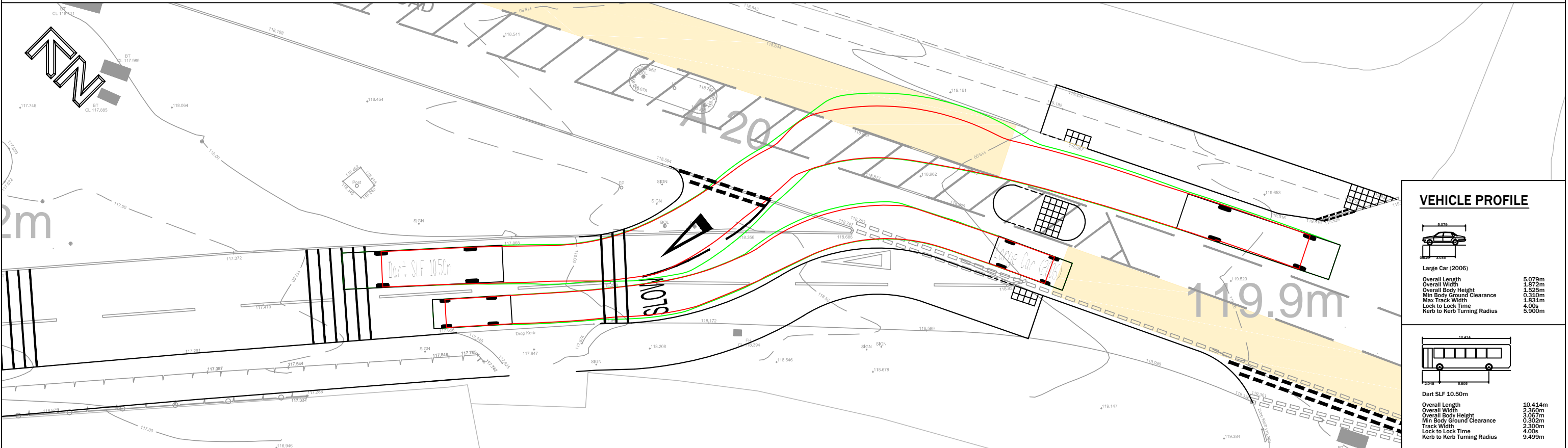
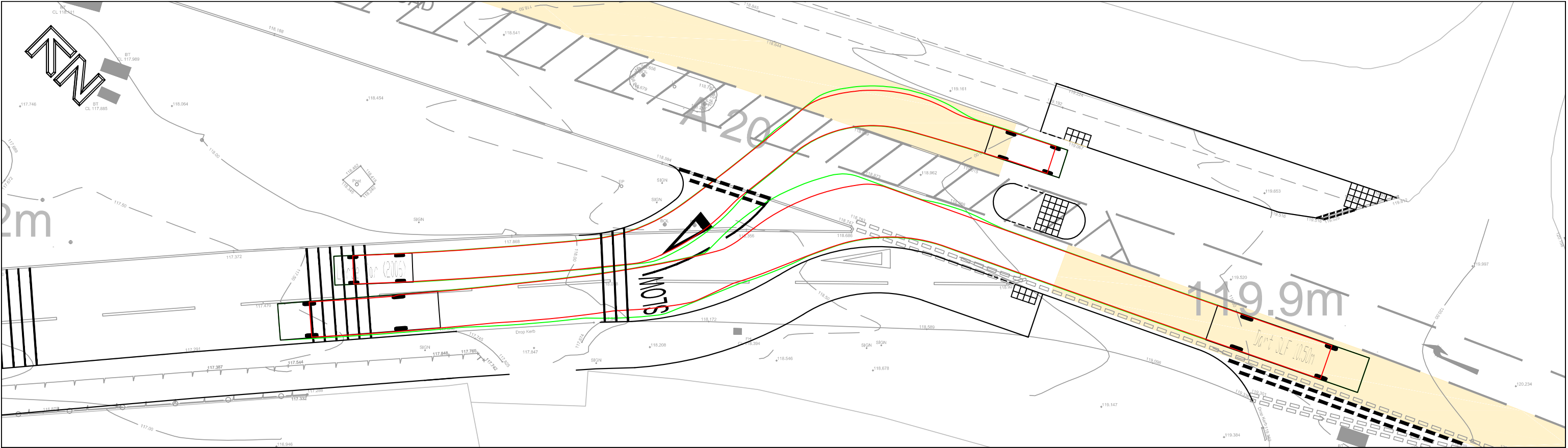
This page has been
left intentionally
blank


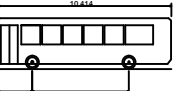



9 Hurricane Court
Liverpool International Business Park | Estuary Boulevard | Liverpool | L24 8RL
www.primetp.co.uk | 0151 728 1860

B A	02.09.19 15.08.19	VB VB	FOOTWAY UPDATES GEOMETRIES REMOVED FROM DRAWING	Project ASHFORD OLD ROAD, LENHAM, KENT	Drawn by VB	Issue date 08 AUG 2019
	Rev	Date	By		Revision notes	Scale(s) 1:500 @ A3
Status SUPERSEDED				Title POTENTIAL A20/ OLD ASHFORD ROAD MITIGATION	Drawing No P19013-003B	

This page has been
left intentionally
blank



VEHICLE PROFILE	
	
Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.330m
Max Track Width	1.831m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	5.900m
	
Dart SLF 10.50m	
Overall Length	10.414m
Overall Width	2.350m
Overall Body Height	3.067m
Min Body Ground Clearance	0.302m
Track Width	2.300m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	9.499m

<div><p>9 Hurricane Court Liverpool International Business Park Estuary Boulevard Liverpool L24 8RL www.primetp.co.uk 0151 728 1860</p></div>					Project	ASHFORD OLD ROAD, LENHAM, KENT	Drawn by VB	Issue date 16 AUG 2019
	*	*	*	*			Scale(s) 1:250 @ A3	
	Rev	Date	By	Revision notes	Title	A20/ OLD ASHFORD ROAD SWEPT PATH ANALYSIS		Drawing No P19013-203
	Status INFORMATION							

This page has been
left intentionally
blank

APPENDIX G

STAGE 1 ROAD SAFETY AUDIT

This page has been
left intentionally
blank

OLD ASHFORD ROAD, LENHAM, KENT PROPOSED ACCESS STRATEGY & JUNCTION MITIGATION

STAGE 1 ROAD SAFETY AUDIT

610/2019/137/01

10 September 2019

six:TEN Highways & Traffic Ltd
Unit 17 Lea Green Business Park
Eurolink, St Helens
Merseyside
WA9 4TR

t 0151 510 2937
m 07985 283074
e contact@610traffic.co.uk
www.610traffic.co.uk

REV	ISSUE STATUS	PREPARED BY/DATE	CHECKED BY/DATE	APPROVED BY/DATE
0	DRAFT	Jon Preston 9 September 2019	Lisa Allen 9 September 2019	
1	FINAL	Jon Preston 10 September 2019	Lisa Allen 10 September 2019	Jon Preston 10 September 2019

Disclaimer note

The client has confirmed that it is entering into the agreement under which this report is being prepared on its own behalf and not on behalf of, or for the benefit of any other party and has agreed that in any event of any claim arising out of or in connection with that agreement and/or the report itself it shall be entitled to recover from six:TEN Highways & Traffic Limited only the losses, if any, it has itself suffered.

This report therefore is for the private and confidential use of the client for whom it was prepared solely for the purposes requested by the client. It should not be reproduced in whole or in part or relied upon by any third party for any use whatsoever without the express written authority of six:TEN Highways & Traffic Limited.

CONTENTS

1.0	INTRODUCTION	2
2.0	PROPOSALS	2
3.0	PERSONAL INJURY COLLISION HISTORY	3
4.0	TRAFFIC FLOW DATA	3
5.0	DEPARTURES FROM STANDARD	3

AUDITOR'S EVALUATION

6.0	MATTERS ARISING FROM THIS STAGE 1 ROAD SAFETY AUDIT	4
-----	-----------------------------------------------------	---

APPENDICES

APPENDIX ONE

7.0	ROAD SAFETY AUDIT TEAM STATEMENT	8
-----	----------------------------------	---

APPENDIX TWO

8.0	LIST OF DRAWINGS AND DOCUMENTS PROVIDED TO THE AUDIT TEAM	9
-----	-----------------------------------------------------------	---

APPENDIX THREE

9.0	PROBLEM LOCATION PLAN	10
-----	-----------------------	----

APPENDIX FOUR

10.0	PHOTOGRAPHS	11
------	-------------	----

APPENDIX FIVE

11.0	PERSONAL INJURY COLLISION LOCATION PLAN	12
------	-----------------------------------------	----

APPENDIX SIX

12.0	TRAFFIC FLOW DATA	13
------	-------------------	----

1.0 INTRODUCTION

1.1 This report is a preliminary design Stage 1 Road Safety Audit (RSA) carried out on the proposed access strategy and junction mitigation at Old Ashford Road, Lenham, Kent at the request of Prime Transport Planning, who are Project Sponsor and have approved the audit team. The local highway authority is Kent County Council.

1.2 The RSA team, staff members from six:TEN Highways & Traffic Ltd, present at the RSA were:

Jon Preston MCIHT MSoRSA
Audit Team Leader

Lisa Allen MCIHT MSoRSA EU RSA Cert of Competence
Audit Team Member

We confirm that no member of the Audit Team has been involved with the design process.

1.3 A site visit was carried out on 9 September 2019 between 13:40 and 14:10. The weather during the site visit was overcast with a damp carriageway surface.

1.4 The RSA brief issued to the team comprised various elements listed at Appendix Two.

1.5 The terms of reference of the RSA are as described in the Design Manual for Roads and Bridges GG119 – Road Safety Audit. This standard has been used for guidance only. The RSA team has examined and reported only the road safety issues of the scheme as presented and has not examined or verified the compliance of the design to any other criteria.

1.6 All of the problems described in this report are considered by the RSA team to require action in order to improve the safety of the scheme and minimise collision occurrence. However, if any of the problems or recommendations within this Road Safety Audit report are not accepted, a copy of the signed exception report from the Overseeing Organisation should be sent to the Road Safety Audit Team Leader.

1.7 A plan showing the location of road safety problems raised in this report is included in Appendix Three.

2.0 PROPOSALS

The scheme involves the following highway works:

- The provision of two major/minor priority junctions on Old Ashford Road to provide access to a proposed residential and leisure development;
- Widening of Old Ashford Road to a minimum width of 5.5m where required;
- Proposed footway along the south side of Old Ashford Road to run behind the hedge line;
- Uncontrolled pedestrian dropped crossings with tactile paving on the proposed access roads;

- Widening of Old Ashford Road to two lanes on the eastbound approach to the junction with A20 Ashford Road;
- Rumble strips on the carriageway of Old Ashford Road near its junction with A20 Ashford Road;
- Uncontrolled pedestrian dropped crossings with tactile paving on Old Ashford Road near its junction with A20 Ashford Road; and
- Uncontrolled pedestrian dropped crossings with tactile paving on A20 Ashford Road near its junction with Old Ashford Road utilising the existing central traffic island.

3.0 PERSONAL INJURY COLLISION HISTORY

- 3.1 Personal injury collision data for the five-year period up to 30 September 2018 was provided by Kent County Council. The location plan is shown in Appendix Five.
- 3.2 There has been five recorded personal injury collisions within the vicinity of the proposed highway works during the five-year period.
- 3.3 Three collisions have occurred at the junction of A20 Ashford Road and Old Ashford Road, all three collisions were classed as slight in severity.
- 3.4 The remaining two collisions have occurred on Old Ashford Road, one classed as serious and one classed as slight in severity.

4.0 TRAFFIC FLOW AND SPEED DATA

- 4.1 Existing and forecast traffic flow data was provided to the audit team and the 2031 With Development flows are shown in Appendix Six.
- 4.2 Vehicle speed survey data was provided to the audit team which shows the existing 85th percentile speeds on Old Ashford Road are 43.3mph eastbound and 43.5mph westbound.

5.0 DEPARTURES FROM STANDARD

- 5.1 No Departures from Standard have been highlighted to the RSA team.

6.0 MATTERS ARISING FROM THIS UPDATED (STAGE 1) ROAD SAFETY AUDIT**6.1 Location: Proposed uncontrolled pedestrian crossings on new access roads****Problem****Summary: Risk of pedestrians walking directly into carriageway increasing the risk of pedestrian/vehicular collisions**

The drawings show that the proposed uncontrolled pedestrian dropped crossings on the access roads are directly at the end of the proposed inset footways. There is a risk that pedestrians reaching the end of the inset footways may walk directly into the carriageway, as they may not be fully aware of the access roads. This issue is especially apparent for child pedestrians who may be running along the inset footways. This may result in pedestrian/vehicular collisions.

Recommendation

The proposed uncontrolled pedestrian crossings on the access roads should be offset from the end of the inset footways and appropriate measures should be provided to ensure pedestrians do not walk directly into the carriageway.

6.2 Location: Proposed inset footways on Old Ashford Road**Problem****Summary: Lack of facilities for cyclists increasing risk of collisions with vehicles or pedestrians**

The drawings show that both access roads will have, what is assumed to be a 3m wide shared footway/cycleway on the approaches to Old Ashford Road, however, the proposed inset footway along Old Ashford Road only appears to be 2m wide. The lack of facilities for cyclists may result in them using the carriageway or footway, increasing the risk of collisions with passing vehicles or pedestrians respectively.

Recommendation

The proposed inset footways along Old Ashford Road should be widened to allow use for cyclists.

6.3 Location: Old Ashford Road junction with A20 Ashford Road

Problem

Summary: Two-lane layout at junction may result in increased risk of vehicular collisions at junction due to obstruction of visibility

The proposed two-lane layout at Old Ashford Road junction with A20 Ashford Road may result in vehicles which are side by side at the give way line obscuring the visibility for the other driver wishing to enter the A20 Ashford Road. This may increase the risk of vehicular collisions between those exiting Old Ashford Road and those travelling along the A20 Ashford Road.

Recommendation

The existing single lane layout at the junction of Old Ashford Road and A20 Ashford Road should remain. The acute junction to the east should be “squared up” to assist with visibility for those drivers wishing to turn right onto A20 Ashford Road. This recommendation should be read in conjunction with the recommendation in 6.4 below.

6.4 Location: Proposed uncontrolled pedestrian crossing on Old Ashford Road near the junction with A20 Ashford Road

Problem

Summary: Increased risk of pedestrian/vehicular collisions due to excessive vehicles speeds for those turning left off A20 Ashford Road

The proposed location of the uncontrolled pedestrian crossing on Old Ashford Road is relatively close to the junction with A20 Ashford Road. It was observed on site that some vehicles travel at excessive speed when turning left off A20 Ashford Road onto Old Ashford Road. This may increase the risk of collisions between pedestrians crossing Old Ashford Road and vehicles turning left off A20 Ashford Road. (Photo 10.1)

Recommendation

The proposed uncontrolled pedestrian crossing on Old Ashford Road near the junction with A20 Ashford Road should be relocated further west, however, pedestrian/driver inter-visibility will need to be considered at the proposed location. The existing kerb radius at the junction of Old Ashford Road and A20 Ashford Road should be reduced to encourage lower speeds for those turning left off A20 Ashford Road. This recommendation should be read in conjunction with the recommendation in 6.3 above.

6.5 Location: A20 Ashford Road eastbound and westbound approaches to proposed uncontrolled pedestrian crossing**Problem****Summary: Lack of High Friction Surfacing (HFS) may increase the risk of pedestrian/vehicular collisions**

It was observed on site that there is existing HFS on the A20 Ashford Road on both the eastbound and westbound approaches to the junction with Old Ashford Road, however, it does not continue up to the location of the proposed uncontrolled pedestrian crossing. A lack of HFS on the approaches to the uncontrolled pedestrian crossing may increase the risk of collisions between pedestrians crossing the A20 Ashford Road and approaching vehicles.

Recommendation

High Friction Surfacing should be proposed on the A20 eastbound and westbound approaches to the proposed uncontrolled pedestrian crossing.

6.6 Location: A20 Ashford Road southern grass verge near to proposed uncontrolled pedestrian crossing**Problem****Summary: Street furniture obscuring footway and pedestrian visibility**

It was observed on site that there is existing street furniture (traffic signs/feeder pillar) within the southern verge on the A20 Ashford Road near to the proposed uncontrolled pedestrian crossing. The traffic signs may obscure visibility for those pedestrians wishing to cross the A20 Ashford Road from south to north, increasing the risk of pedestrian/vehicular collisions. The feeder pillar, if it remains in its current location, may obstruct the footway, resulting in pedestrians colliding with it or manoeuvrability issues for those with pushchairs, wheelchairs and mobility scooters. (Photo 10.2)

Recommendation

The street furniture should be removed/relocated accordingly.

6.7 Location: A20 Ashford Road proposed footway in southern grass verge near to proposed uncontrolled pedestrian crossing

Problem

Summary: Excessive footway gradient may result in manoeuvrability issues for those with pushchairs, wheelchairs and mobility scooters

It was observed on site that the existing gradient on the southern grass verge on the A20 Ashford Road near to the proposed pedestrian crossing is relatively steep. An excessive gradient on the proposed footway at this location may create manoeuvrability issues for those with pushchairs, wheelchairs and mobility scooters. Additionally, a steep gradient may result in self-propelled wheelchairs being unable to stop at the carriageway edge when wishing to cross Old Ashford Road from north to south.

Recommendation

The gradient on the proposed footway should be such that it is not too steep for those with pushchairs, wheelchairs and mobility scooters.

APPENDIX ONE**7.0 ROAD SAFETY AUDIT TEAM STATEMENT**

We certify that the audit has been carried out generally in accordance with the requirements set out in GG119. The problems identified have been noted in this report together with associated safety improvement suggestions which we recommend should be studied for implementation.

AUDIT TEAM LEADER

Jon Preston MCIHT MSoRSA
Director
six:TEN Highways & Traffic Ltd

Signed:



Date: 10 September 2019

AUDIT TEAM MEMBER

Lisa Allen MCIHT MSoRSA EU RSA Cert of Comp.
Traffic & Road Safety Engineer
six:TEN Highways & Traffic Ltd

Signed:



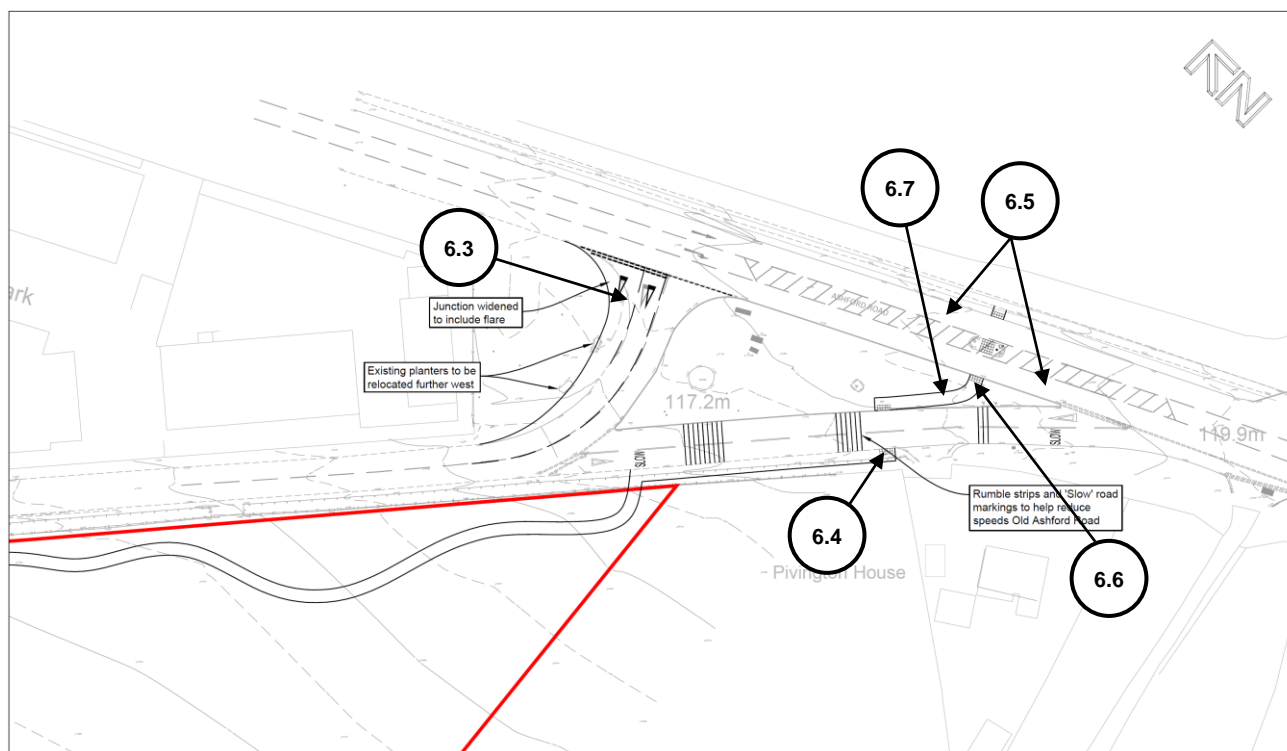
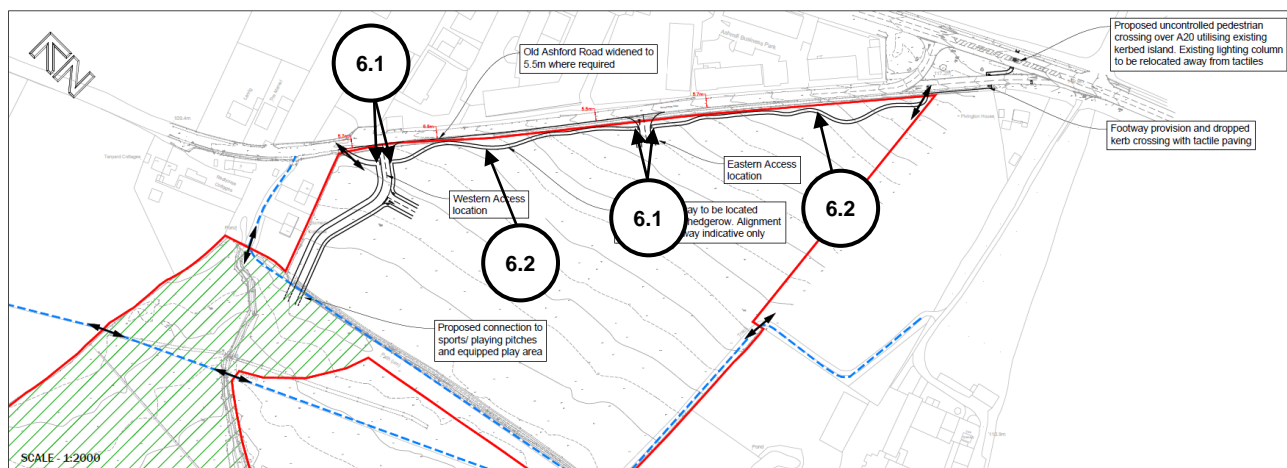
Date: 10 September 2019

APPENDIX TWO**8.0 LIST OF DRAWINGS AND DOCUMENTS PROVIDED TO THE AUDIT TEAM**

- P19013-001E Old Ashford Road Proposed Access Strategy
- P19013-003B Potential Ashford Road/Old Ashford Road Mitigation
- P19013-200 Eastern Access Swept Path Analysis (Refuse Vehicle)
- P19013-201 Western Access Swept Path Analysis (Refuse Vehicle)
- P19013-202 Western Access Swept Path Analysis (15m Coach)
- Existing and Forecast Traffic Flow data.
- Existing traffic speed data.
- Five Year Personal Injury Collision Data (Up to 30 September 2018)

APPENDIX THREE

9.0 PROBLEM LOCATION PLAN



APPENDIX FOUR

10.0 PHOTOGRAPHS



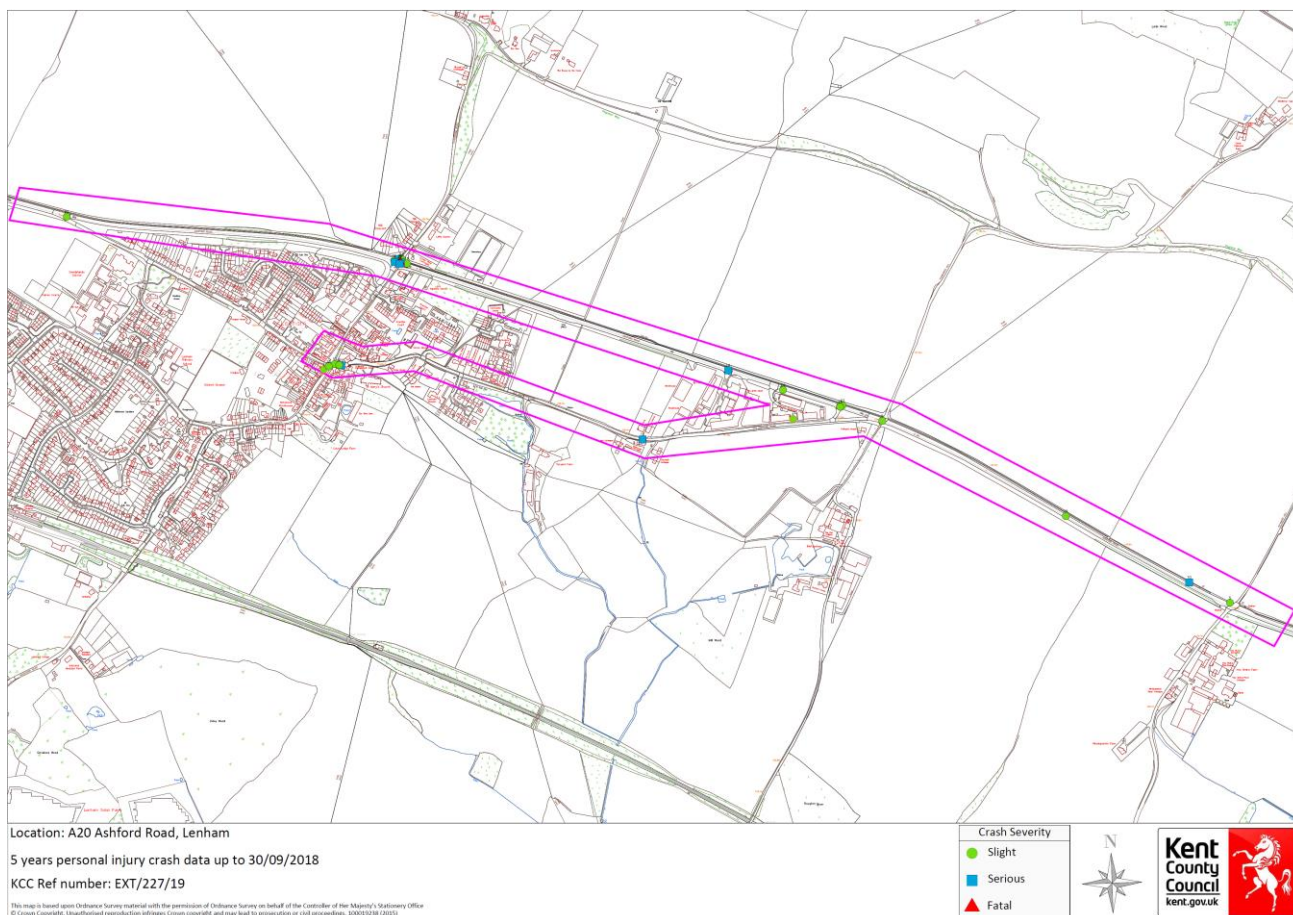
10.1 Old Ashford Road junction with A20 Ashford Road



10.2 Street furniture within verge on southern side of A20 Ashford Road

APPENDIX FIVE

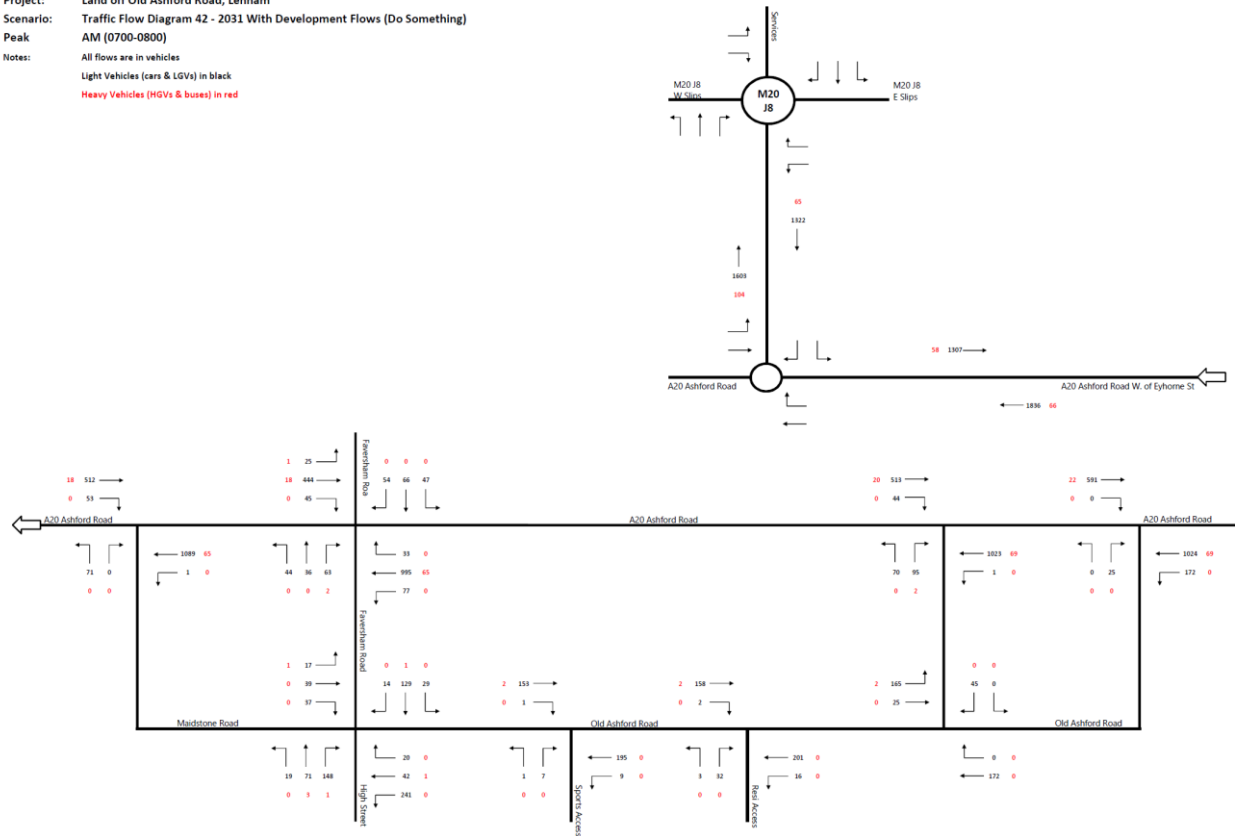
11.0 PERSONAL INJURY COLLISION LOCATION PLAN



APPENDIX SIX

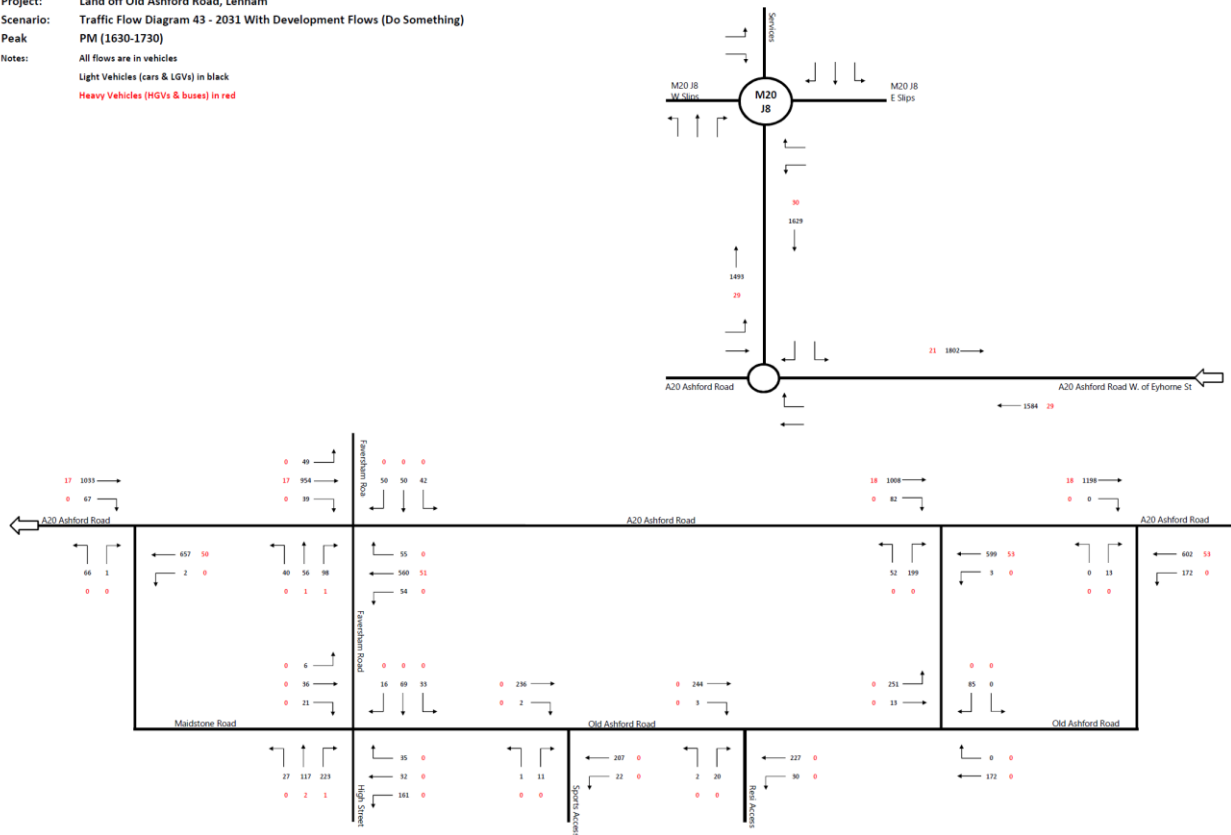
12.0 TRAFFIC FLOW DATA

Project: Land off Old Ashford Road, Lenham
 Scenario: Traffic Flow Diagram 42 - 2031 With Development Flows (Do Something)
 Peak: AM (0700-0800)
 Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red



12.1 2031 With Development Traffic Flow Data (AM peak 07:00 – 08:00)

Project: Land off Old Ashford Road, Lenham
Scenario: Traffic Flow Diagram 43 - 2031 With Development Flows (Do Something)
Peak: PM (1630-1730)
Notes: All flows are in vehicles
 Light Vehicles (cars & LGVs) in black
 Heavy Vehicles (HGVs & buses) in red



12.2 2031 With Development Traffic Flow Data (PM Peak 16:30 – 17:30)

APPENDIX H

RTF CALCULATION

This page has been
left intentionally
blank

RTF 2018 - Scenario 1: Reference Case

				Traffic - Billion Vehicle miles (bvm)							
Vehicle Type	Road Type	Country	Region	2015	2020	2025	2030	2035	2040	2045	2050
Car	Principal A	England	South East	12.5335	13.2304	13.8025	14.3351	14.8913	15.3952	15.8643	16.2928
LGV	Principal A	England	South East	2.2523	2.4531	2.5547	2.6855	2.8698	3.0542	3.2084	3.3300
HGV	Principal A	England	South East	0.4997	0.4905	0.5057	0.5150	0.5270	0.5399	0.5529	0.5655
PSV	Principal A	England	South East	0.1075	0.0968	0.0968	0.0968	0.0968	0.0968	0.0968	0.0968
Total	Principal A	England	South East	15.3930	16.2708	16.9597	17.6324	18.3849	19.0861	19.7225	20.2850

HGV									
Year	5 Year Value	5 Year Diff	Linear Diff	Increment	1 Year Value	Check	Factor		
2015	0.4997	-0.0092	-0.0018		0.4997				
2016					1	0.4979			
2017					2	0.4960			
2018					3	0.4942	2015-2019 2017-2019		
2019					4	0.4923	0.985244805 0.992568		
2020	0.4905	0.0153	0.0031	5	0.4905	0.0000			
2021					1	0.4935			
2022					2	0.4966			
2023					3	0.4996	2019-2024		
2024					4	0.5027	1.021049403		
2025	0.5057	0.0092	0.0018	5	0.5057	0.0000			
2026					1	0.5076			
2027					2	0.5094			
2028					3	0.5113			
2029					4	0.5131			
2030	0.5150	0.0120	0.0024	5	0.5150	0.0000	2019-2031		
2031					1	0.5174	1.050856834		
2032					2	0.5198			
2033					3	0.5222			
2034					4	0.5246			
2035	0.5270	0.0130	0.0026	5	0.5270	0.0000			
2036					1	0.5296			
2037					2	0.5322			
2038					3	0.5348			
2039					4	0.5374			
2040	0.5399	0.0130	0.0026	5	0.5399	0.0000			
2041					1	0.5425			
2042					2	0.5451			
2043					3	0.5477			
2044					4	0.5503			
2045	0.5529	0.0125	0.0025	5	0.5529	0.0000			
2046					1	0.5554			
2047					2	0.5579			
2048					3	0.5604			
2049					4	0.5629			
2050	0.5655				5	0.5655	0.0000		

This page has been
left intentionally
blank

APPENDIX I

LENHAM NEIGHBOURHOOD PLAN TA EXTRACTS

This page has been
left intentionally
blank

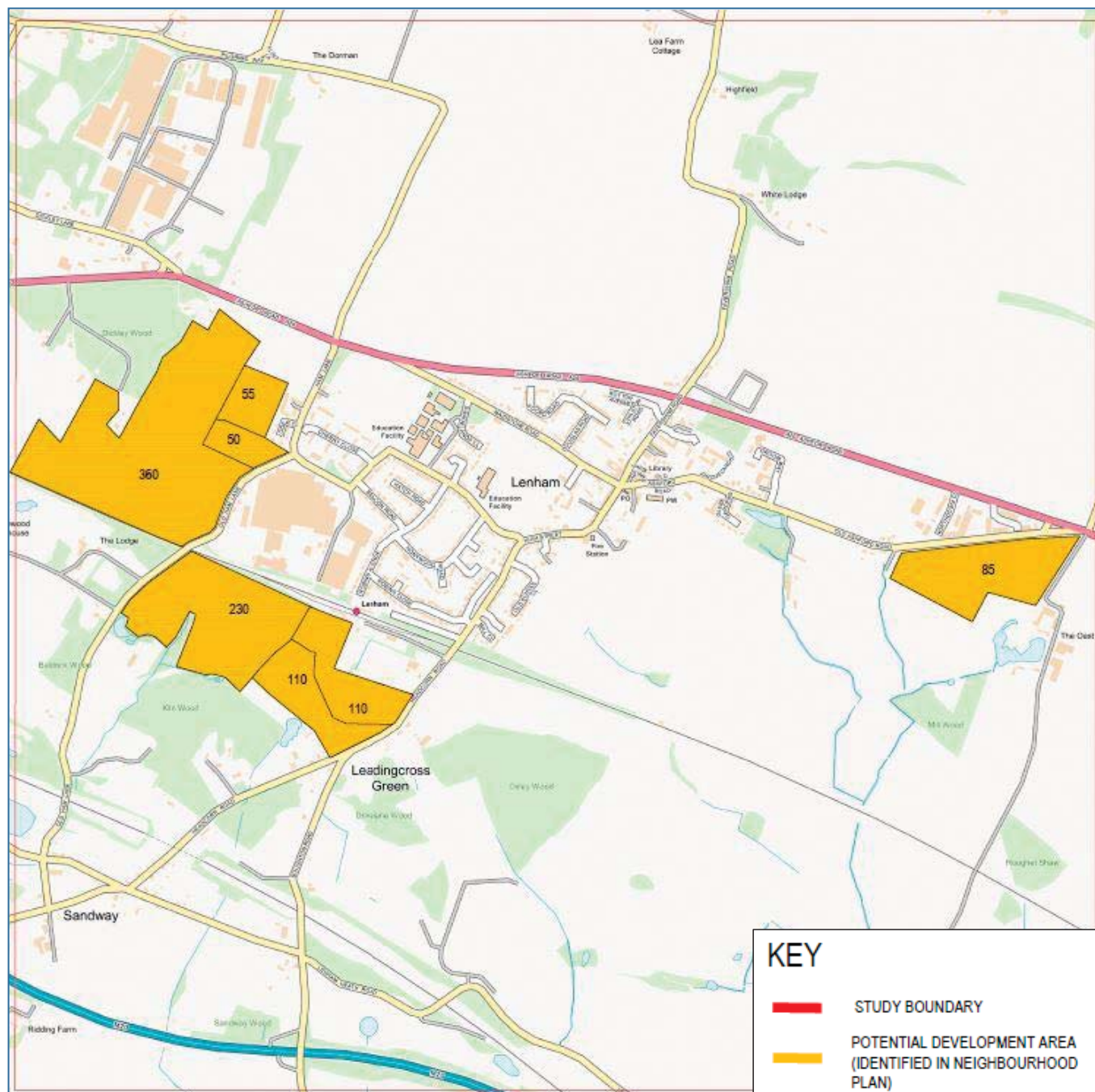
Neighbourhood Plan Proposed Developments

In order to meet the requirements of the Maidstone Local Plan, a further eight land parcels which could accommodate a total of 1000 new homes have been identified in the draft Lenham Neighbourhood Plan. These are as follows:

Site No.	Site Name	Units
1	Land South of Old Ashford Road	85
2	Land West of Headcorn Road (south)	110
3	Land East of Old Ham Lane	230
4	Land West of Headcorn Road (north)	110
5	Land West of Ham Lane	360
6	William Pitt Playing Field	50
7	Land West of Lodder Close	55
TOTAL	-	1000

The seven development sites and quantum set out above have been assessed within this Transport Assessment. For the analysis in this TA three aggregate areas will be introduced, for assessing the broad spatial strategy rather than the specifics (or apportionment) of the 7 individual sites.

In addition to the Local Plan and Lenham Neighbourhood Plan allocations, the Kent Mineral Sites Plan – Options Consultation 2017 has identified Chapel Farm in Lenham (M3) for proposed sand extraction. The site is 60.8 HA and predicted to have an output of 150,000 tonnes of sand per annum for a period of 26 years, with direct access onto the A20 Ashford Road. In order to be robust the movements along the A20 associated with the proposed site have been included as ‘committed’ development.



Traffic Generation – 1000 dwellings

In order to understand the traffic impact of the additional residential units identified within the Neighbourhood Plan a TRICS trip rate assessment has been undertaken. TRICS is a nationally recognised database of typical traffic generation parameters for different types of development. It is a standard industry tool, typically used when assessing the potential traffic generation of a proposed development.

The Maidstone Local Plan requires new development in rural areas to provide 40% affordable housing. As a result, trip rates for both private and affordable residential units have been extracted from the TRICS database.

The parameters which have been set within TRICS to extract trip generation rates for comparable sites to the proposed developments, are as follows:

- Private Residential Dwellings and Affordable Residential Dwellings
- Sites located within England (excluding Greater London), Wales and Scotland;
- Sites surveyed on a weekday;
- Sites located within Suburban Area or Neighbourhood Centre.

For the private element, the database returned average trip rates for 18 sites. However, nine of the sites were considered to be located too far from the nearest train station to be representative of the proposed sites in Lenham and were therefore removed from the assessment. For the affordable element, the database returned average trip rates for nine sites. However, five of the sites were considered to be located too far from the nearest train station to be representative of the proposed sites in Lenham and were therefore removed.

The resulting trip rates, along with the number of private and affordable units that would be provided, can be seen on the plan opposite. The TRICS output can be found in Appendix F. The trip rates are considered to reflect the likely future accessibility of Lenham as a whole to public transport, walking and cycling modes and have been agreed with KCC highway officers. Whilst some mode share variation will take place between different land parcels, such as parts of Area 2 adjacent to the rail station, those locations further to the edge of the village such as at Area 3 would offset this effect.

Based on the trip rates opposite, the development of 1000 residential units with 40% affordable, would generate approximately 530 two-way trips in the AM peak and 550 two-way trips in the PM peak.

For assessment purposes, the development sites have been split into three areas: North West, South West and East. This reflects the three distinct development areas which would be expected to show slightly different distribution characteristics. The following three pages set out the trip rates and resulting trips for each site in each of the three areas.

	08:00-09:00			17:00-18:00		
	In	Out	Two-way	In	Out	Two-way
Private Dwellings	0.182	0.361	0.543	0.336	0.197	0.533
Total (600)	109	217	326	202	118	320

	08:00-09:00			17:00-18:00		
	In	Out	Two-way	In	Out	Two-way
Affordable Dwellings	0.178	0.333	0.511	0.333	0.24	0.573
Total (400)	71	133	204	133	96	230

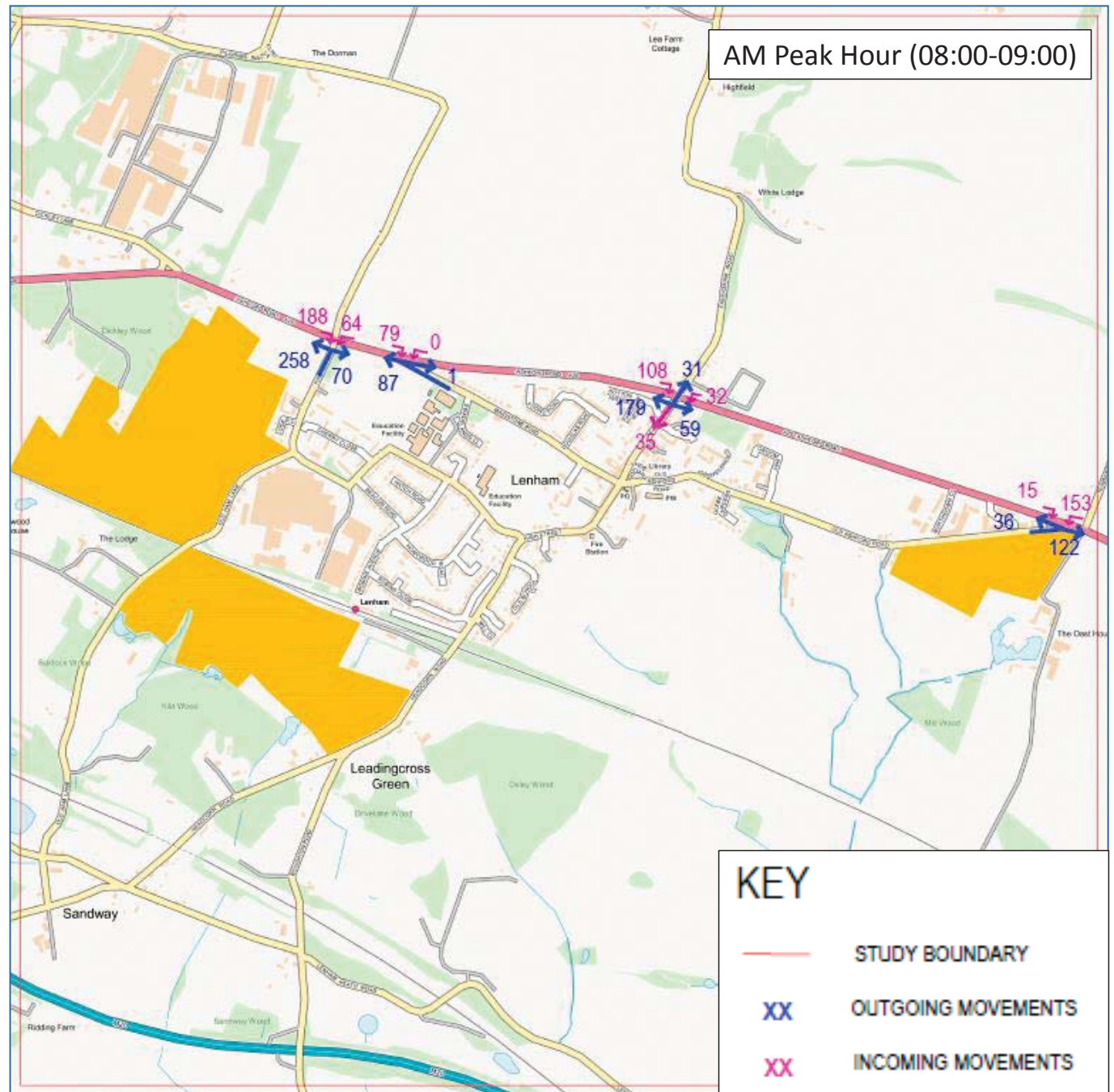
	08:00-09:00			17:00-18:00		
	In	Out	Two-way	In	Out	Two-way
Total (1000)	180	350	530	335	214	550

2031 Baseline and Development Traffic (AM) – Do Minimum

The traffic associated with the 2031 baseline and the proposed Neighbourhood Plan development during the AM peak can be seen on the plan opposite.

The plan represents the AM Do Minimum scenario.

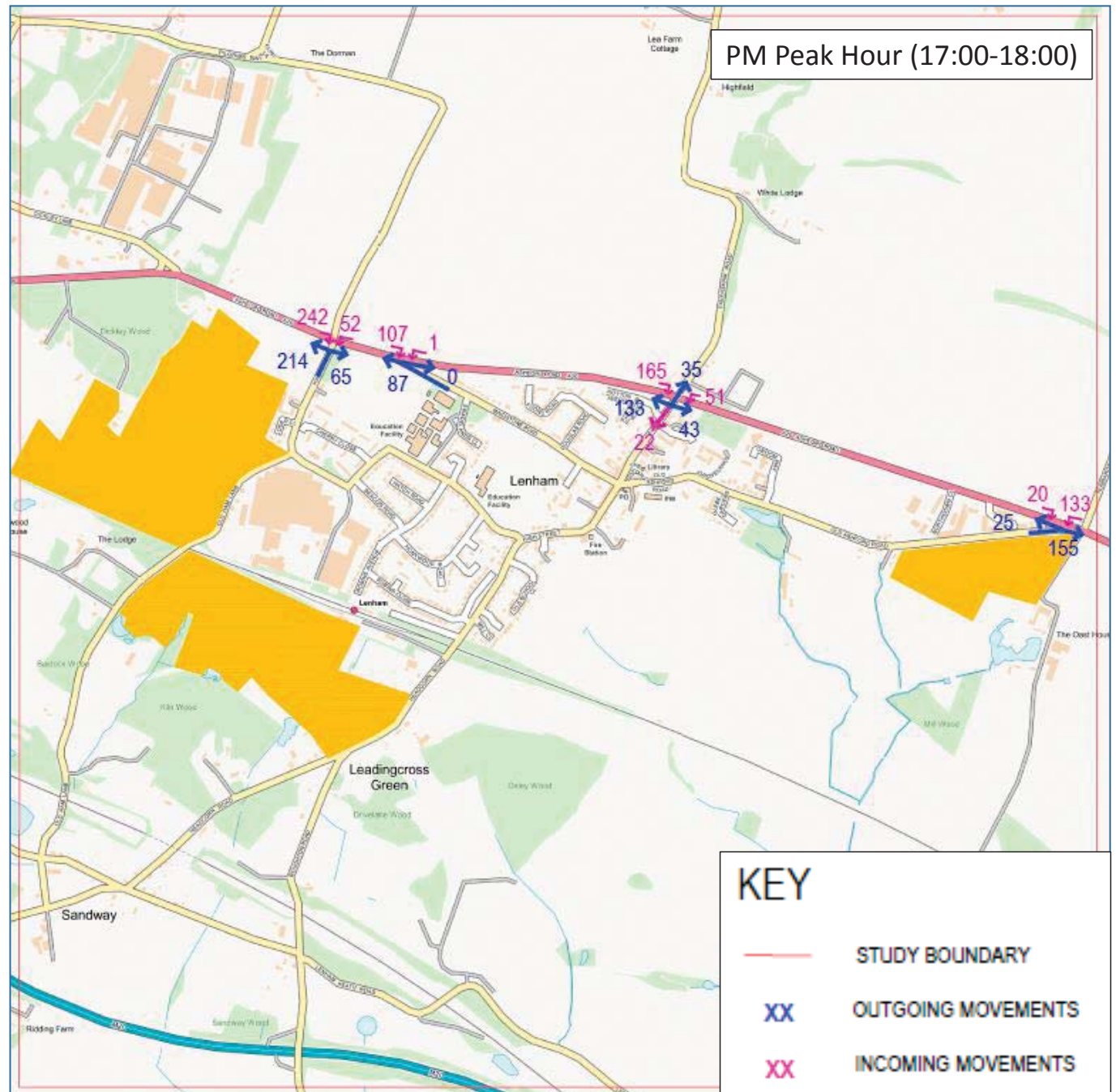
Full flow diagrams for 2031 Baseline plus development trips in both do minimum and do something scenarios can be found within Appendix I.



2031 Baseline and Development Traffic (PM) – Do Minimum

The traffic associated with the 2031 baseline and the proposed Neighbourhood Plan development during the PM peak can be seen on the plan opposite.

The plan represents the PM Do Minimum scenario.



The traffic associated with the 2031 baseline and the proposed Neighbourhood Plan development during the AM peak can be seen on the plan opposite.



The traffic associated with the 2031 baseline and the proposed Neighbourhood Plan development during the PM peak can be seen on the plan opposite.



Mode Share Targets

The Maidstone Local Plan Integrated Transport Strategy (ITS) contains mode share targets for the Maidstone Borough. These can be seen in the table opposite.

As stated earlier in this report, the mode share percentages set out within the ITS (and therefore the associated targets) are based on data that has included 'Not in employment'. As a result, the mode share targets have been adjusted, with the 'current %' revised to include the revised mode share data. The change in targets to 2021 and 2031 have remained the same. The revised targets can be seen in the table opposite.

Improvements to the existing sustainable travel options within Lenham are anticipated to help to reach the modal shift targets. However, for the targets to be reached it will be down to the developers of the sites to place the infrastructure necessary for sustainable travel choices.

It is understood from Maidstone Borough Council that the Maidstone Park and Ride study is ongoing. This should not affect Lenham development as there are a variety of alternative options for travel between Lenham and Maidstone.

ITS Targets

Target	Mode	Current %	2021 Target %	2031 Target %
1	Walking	8	10	12
2	Cycling	0.8	2	3
3	Public Transport	7.3	10	12
4	Car Driver	44.3	40	37
-	Other Modes	39.6	0	0
5	Park and Ride	Full review and act upon recommendations by 2017		
6	Electrical Charging Points		Double the number	Double the number

Targets – Excluding Not in Employment

Target	Mode	Current %	2021 Target %	2031 Target %
1	Walking	11.6	13.6	15.6
2	Cycling	1.2	2.4	3.4
3	Public Transport	10.5	13.2	15.2
4	Car Driver	64.2	59.9	56.9
-	Other Modes	12.5%	0	0
5	Park and Ride	Full review and act upon recommendations by 2017		
6	Electrical Charging Points		Double the number	Double the number

This page has been
left intentionally
blank

APPENDIX J

TRICS REPORT OUTPUTS

This page has been
left intentionally
blank

Calculation Reference: AUDIT-753001-190712-0717

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
 Category : L - FOOTBALL (5-a-side)
 VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	DV DEVON	1 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	1 days
11	SCOTLAND	
	GC GLASGOW CITY	1 days

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

Secondary Filtering selection:

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

Parameter: Number of pitches
 Actual Range: 7 to 18 (units:)
 Range Selected by User: 2 to 18 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 15/07/08 to 14/07/18

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

Selected survey days:

Tuesday	1 days
Wednesday	3 days
Friday	1 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Edge of Town	1

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

Selected Location Sub Categories:

Industrial Zone	1
Residential Zone	2
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:

D2 5 days

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

Population within 1 mile:

20,001 to 25,000 3 days
25,001 to 50,000 2 days

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

Population within 5 miles:

250,001 to 500,000 3 days
500,001 or More 2 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 2 days
1.1 to 1.5 3 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:

No 5 days

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

PTAL Rating:

No PTAL Present 5 days

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

LIST OF SITES relevant to selection parameters

1	DV-07-L-01	GOALS		DEVON
	OUTLAND ROAD			
	PLYMOUTH			
	CENTRAL PARK			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of pitches:	10		
	Survey date: WEDNESDAY	18/07/12	Survey Type: MANUAL	
2	GC-07-L-01	GOALS		GLASGOW CITY
	POLLOKSHAW ROAD			
	GLASGOW			
	STRATHBUNGO			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of pitches:	9		
	Survey date: FRIDAY	03/10/08	Survey Type: MANUAL	
3	LE-07-L-01	GOALS		LEICESTERSHIRE
	WAKERLEY ROAD			
	LEICESTER			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Number of pitches:	12		
	Survey date: TUESDAY	25/11/08	Survey Type: MANUAL	
4	WM-07-L-01	POWERLEAGUE		WEST MIDLANDS
	PARK ROAD			
	HALESOWEN			
	Edge of Town			
	Industrial Zone			
	Total Number of pitches:	7		
	Survey date: WEDNESDAY	29/11/17	Survey Type: MANUAL	
5	WY-07-L-02	GOALS		WEST YORKSHIRE
	REDCOTE LANE			
	LEEDS			
	BURLEY			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Number of pitches:	18		
	Survey date: WEDNESDAY	09/06/10	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.

PRIME Transport Planning' Hurricane Court Liverpool

Licence No: 753001

TRIP RATE for Land Use 07 - LEISURE/L - FOOTBALL (5-a-side)

VEHICLES

Calculation factor: 1 PITCH

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PITCH	Trip Rate	No. Days	Ave. PITCH	Trip Rate	No. Days	Ave. PITCH	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									
08:00 - 09:00	5	11	0.482	5	11	0.161	5	11	0.643
09:00 - 10:00	5	11	0.482	5	11	0.196	5	11	0.678
10:00 - 11:00	5	11	0.286	5	11	0.232	5	11	0.518
11:00 - 12:00	5	11	0.536	5	11	0.375	5	11	0.911
12:00 - 13:00	5	11	0.339	5	11	0.482	5	11	0.821
13:00 - 14:00	5	11	0.339	5	11	0.268	5	11	0.607
14:00 - 15:00	5	11	0.625	5	11	0.214	5	11	0.839
15:00 - 16:00	5	11	0.768	5	11	0.500	5	11	1.268
16:00 - 17:00	5	11	1.036	5	11	0.696	5	11	1.732
17:00 - 18:00	5	11	2.750	5	11	0.571	5	11	3.321
18:00 - 19:00	5	11	4.464	5	11	1.482	5	11	5.946
19:00 - 20:00	5	11	4.464	5	11	4.518	5	11	8.982
20:00 - 21:00	5	11	3.125	5	11	5.196	5	11	8.321
21:00 - 22:00	5	11	1.250	5	11	4.054	5	11	5.304
22:00 - 23:00	5	11	0.196	5	11	1.946	5	11	2.142
23:00 - 24:00	4	12	0.000	4	12	0.404	4	12	0.404
Total Rates:			21.142			21.295			42.437

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

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

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

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

Parameter summary

Trip rate parameter range selected:	7 - 18 (units:)
Survey date date range:	15/07/08 - 14/07/18
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

PRIME Transport Planning' Hurricane Court Liverpool

Licence No: 753001

TRIP RATE for Land Use 07 - LEISURE/L - FOOTBALL (5-a-side)

TAXI S

Calculation factor: 1 PITCH

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PITCH	Trip Rate	No. Days	Ave. PITCH	Trip Rate	No. Days	Ave. PITCH	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									
08:00 - 09:00	5	11	0.000	5	11	0.000	5	11	0.000
09:00 - 10:00	5	11	0.018	5	11	0.018	5	11	0.036
10:00 - 11:00	5	11	0.036	5	11	0.036	5	11	0.072
11:00 - 12:00	5	11	0.000	5	11	0.000	5	11	0.000
12:00 - 13:00	5	11	0.036	5	11	0.036	5	11	0.072
13:00 - 14:00	5	11	0.018	5	11	0.018	5	11	0.036
14:00 - 15:00	5	11	0.000	5	11	0.000	5	11	0.000
15:00 - 16:00	5	11	0.000	5	11	0.000	5	11	0.000
16:00 - 17:00	5	11	0.018	5	11	0.018	5	11	0.036
17:00 - 18:00	5	11	0.036	5	11	0.036	5	11	0.072
18:00 - 19:00	5	11	0.036	5	11	0.036	5	11	0.072
19:00 - 20:00	5	11	0.125	5	11	0.089	5	11	0.214
20:00 - 21:00	5	11	0.071	5	11	0.107	5	11	0.178
21:00 - 22:00	5	11	0.071	5	11	0.071	5	11	0.142
22:00 - 23:00	5	11	0.054	5	11	0.036	5	11	0.090
23:00 - 24:00	4	12	0.000	4	12	0.021	4	12	0.021
Total Rates:			0.519			0.522			1.041

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.

TRIP RATE for Land Use 07 - LEISURE/L - FOOTBALL (5-a-side)

OGVS

Calculation factor: 1 PITCH

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PITCH	Trip Rate	No. Days	Ave. PITCH	Trip Rate	No. Days	Ave. PITCH	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									
08:00 - 09:00	5	11	0.018	5	11	0.018	5	11	0.036
09:00 - 10:00	5	11	0.054	5	11	0.018	5	11	0.072
10:00 - 11:00	5	11	0.054	5	11	0.071	5	11	0.125
11:00 - 12:00	5	11	0.018	5	11	0.036	5	11	0.054
12:00 - 13:00	5	11	0.000	5	11	0.018	5	11	0.018
13:00 - 14:00	5	11	0.000	5	11	0.000	5	11	0.000
14:00 - 15:00	5	11	0.000	5	11	0.000	5	11	0.000
15:00 - 16:00	5	11	0.000	5	11	0.000	5	11	0.000
16:00 - 17:00	5	11	0.000	5	11	0.000	5	11	0.000
17:00 - 18:00	5	11	0.000	5	11	0.000	5	11	0.000
18:00 - 19:00	5	11	0.018	5	11	0.018	5	11	0.036
19:00 - 20:00	5	11	0.000	5	11	0.000	5	11	0.000
20:00 - 21:00	5	11	0.000	5	11	0.000	5	11	0.000
21:00 - 22:00	5	11	0.000	5	11	0.000	5	11	0.000
22:00 - 23:00	5	11	0.000	5	11	0.000	5	11	0.000
23:00 - 24:00	4	12	0.000	4	12	0.000	4	12	0.000
Total Rates:			0.162			0.179			0.341

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.

TRIP RATE for Land Use 07 - LEISURE/L - FOOTBALL (5-a-side)

PSVS

Calculation factor: 1 PITCH

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PITCH	Trip Rate	No. Days	Ave. PITCH	Trip Rate	No. Days	Ave. PITCH	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									
08:00 - 09:00	5	11	0.000	5	11	0.000	5	11	0.000
09:00 - 10:00	5	11	0.000	5	11	0.000	5	11	0.000
10:00 - 11:00	5	11	0.000	5	11	0.000	5	11	0.000
11:00 - 12:00	5	11	0.018	5	11	0.000	5	11	0.018
12:00 - 13:00	5	11	0.000	5	11	0.000	5	11	0.000
13:00 - 14:00	5	11	0.018	5	11	0.036	5	11	0.054
14:00 - 15:00	5	11	0.018	5	11	0.018	5	11	0.036
15:00 - 16:00	5	11	0.000	5	11	0.000	5	11	0.000
16:00 - 17:00	5	11	0.000	5	11	0.000	5	11	0.000
17:00 - 18:00	5	11	0.000	5	11	0.000	5	11	0.000
18:00 - 19:00	5	11	0.000	5	11	0.000	5	11	0.000
19:00 - 20:00	5	11	0.000	5	11	0.000	5	11	0.000
20:00 - 21:00	5	11	0.000	5	11	0.000	5	11	0.000
21:00 - 22:00	5	11	0.000	5	11	0.000	5	11	0.000
22:00 - 23:00	5	11	0.000	5	11	0.000	5	11	0.000
23:00 - 24:00	4	12	0.000	4	12	0.000	4	12	0.000
Total Rates:			0.054			0.054			0.108

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.

PRIME Transport Planning' Hurricane Court Liverpool

Licence No: 753001

TRIP RATE for Land Use 07 - LEISURE/L - FOOTBALL (5-a-side)

CYCLISTS

Calculation factor: 1 PITCH

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PITCH	Trip Rate	No. Days	Ave. PITCH	Trip Rate	No. Days	Ave. PITCH	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									
08:00 - 09:00	5	11	0.107	5	11	0.018	5	11	0.125
09:00 - 10:00	5	11	0.089	5	11	0.036	5	11	0.125
10:00 - 11:00	5	11	0.036	5	11	0.000	5	11	0.036
11:00 - 12:00	5	11	0.018	5	11	0.018	5	11	0.036
12:00 - 13:00	5	11	0.000	5	11	0.000	5	11	0.000
13:00 - 14:00	5	11	0.018	5	11	0.036	5	11	0.054
14:00 - 15:00	5	11	0.018	5	11	0.000	5	11	0.018
15:00 - 16:00	5	11	0.018	5	11	0.143	5	11	0.161
16:00 - 17:00	5	11	0.018	5	11	0.054	5	11	0.072
17:00 - 18:00	5	11	0.054	5	11	0.036	5	11	0.090
18:00 - 19:00	5	11	0.089	5	11	0.000	5	11	0.089
19:00 - 20:00	5	11	0.000	5	11	0.089	5	11	0.089
20:00 - 21:00	5	11	0.000	5	11	0.000	5	11	0.000
21:00 - 22:00	5	11	0.000	5	11	0.018	5	11	0.018
22:00 - 23:00	5	11	0.000	5	11	0.000	5	11	0.000
23:00 - 24:00	4	12	0.000	4	12	0.021	4	12	0.021
Total Rates:			0.465			0.469			0.934

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.

This page has been
left intentionally
blank

APPENDIX K

DISTRIBUTION CALCULATIONS

This page has been
left intentionally
blank

MSOA	Trips	MSOA Name	Local Area	Pri. Route	Pri %	Sec. Route	Sec %	Ter. Route	Ter %	Notes	Junction	A	B	Turn	C	D
E02004996	16	Ashford 001	Kennington Lees, Wye, Crundale, Godmersham	18,28	0.89%											
E02004997	29	Ashford 002	Charing, Chullock	18,28	1.61%						1 Site Access/Old Ashford Road	Left	Right			
E02004998	6	Ashford 003	Kennington, NE Ashford	18,28	0.33%						2 A20/Old Ashford Road	Left	Right			
E02004999	26	Ashford 004	NW Ashford, Eureka Park, Warren Retail Park	18,28	1.44%						3 A20/Faversham Road	Left	Ahead	Right		
E02005000	49	Ashford 005	Central Ashford	18,28	2.72%						4 A20/Maidstone Road	Ahead	Left			
E02005001	24	Ashford 006	E Ashford, Orbital Park S, WH Hospital, Ashford Business/Retail Park	18,28	1.33%						5 A20/M20 Junction 8/B					
E02005002	10	Ashford 007	W Ashford	18,28	0.55%						6 M20/NW Bound					
E02005005	4	Ashford 010	Merham, Brabourne, Brabourne Lees, Aidington	18,28	0.22%						7 Faversham Road/Old Ashford Road/High Street/Maidstone Road	Left	Ahead	Right		
E02005006	8	Ashford 011	Biddenden, High Halden, Smarden	18,28	0.44%											
E02005007	6	Ashford 012	Shadoxhurst, Woodchurch, Bethersden	18,28	0.33%											
E02005008	7	Ashford 013	Tenterden	18,28	0.39%											
E02000068	5	Bexley 004	Bexleyheath	18,2A,18,4A,5,6	0.28%											
E02000079	4	Bexley 015	Bexleyheath	18,2A,18,4A,5,6	0.22%											
E02000083	4	Bexley 019	Bexleyheath	18,2A,18,4A,5,6	0.22%											
E02000090	7	Bexley 026	Bexleyheath	18,2A,18,4A,5,6	0.39%											
E02000144	8	Bromley 018	Bromley	18,2A,18,4A,5,6	0.44%											
E02005021	9	Canterbury 012	Unit of Kent, Rough Common, Upper Harbledown	18,28	0.50%											
E02005023	6	Canterbury 014	E Canterbury, Sainsbury's, Kingsmead Leisure Centre, St Martin's Hospital	18,28	0.33%											
E02005025	17	Canterbury 016	SE Canterbury	18,28	0.94%											
E02005026	4	Canterbury 017	Perham	18,28	0.22%											
E02000001	10	City of London 001	London	18,2A,18,4A,5,6	0.55%						Route	Pri %	Sec%		Total	
E02006576	4	Crawley 002	Crawley NE	18,2A,18,4A,5,6	0.22%						1A,7A	9%	0%		9.0%	
E02006578	4	Crawley 004	Crawley central N	18,2A,18,4A,5,6	0.22%						18,2A,18,4A	8%	10%		18.0%	
E02005028	7	Dartford 001	Dartford NE, Littlebrook Power Station	18,2A,18,4A,5,6	0.39%						18,2A,18,4A,5	20%	0%		19.6%	
E02005030	9	Dartford 003	Dartford Central	18,2A,18,4A,5,6	0.50%						18,2A,18,4A,5,6	31%	0%		31.2%	
E02005033	13	Dartford 006	Bluewater, Crossways Business Park	18,2A,18,4A,5,6	0.72%						18,2A,3,C	7%	1%		7.7%	
E02005056	15	Gravesham 002	Gravesend	18,2A,18,4A,5,6	0.83%						18,28	14%	0%		14.4%	
E02000316	4	Greenwich 004	London	18,2A,18,4A,5,6	0.22%							89%	11%		100%	
E02005068	35	Maidstone 001	M20 J6, Bosley, Walderdale Woods, Deting	18,2A,18,4A,5,6	1.94%											
E02005069	16	Maidstone 002	Penenden Heath, NE Maidstone	18,2A,18,4A,5	0.89%											
E02005070	23	Maidstone 003	Allington, NW Maidstone	18,2A,18,4A,5	1.28%											
E02005071	152	Maidstone 004	Maidstone central & N	18,2A,18,4A,5	8.44%											
E02005072	27	Maidstone 005	Wile-Hospital, Vinters Park	18,2A,18,4A,5	1.50%											
E02005073	40	Maidstone 006	Maidstone central W	18,2A,18,4A,5	2.22%											
E02005074	13	Maidstone 007	Beardsted, Downswood	18,2A,18,4A,5	0.72%											
E02005075	43	Maidstone 008	Maidstone Hospital, Barming	18,2A,18,4A,5	2.39%											
E02005076	20	Maidstone 009	Tonf	18,2A,18,4A,5	1.11%											
E02005077	12	Maidstone 010	Mote Park	18,2A,18,4A,5	0.67%											
E02005078	224	Maidstone 011	Harrietsham, Lenham, Sandway, Hollingbourne	1A,7A	2.49%	18,2A,18,4A	9.94%			20% Lenham remainder Harrietsham & Hollingbourne						
E02005079	13	Maidstone 012	Boughton Monchelsea, Maidstone S	18,2A,18,4A	0.72%											
E02005080	19	Maidstone 013	Parkwood, Maidstone SE	18,2A,18,4A	1.05%											
E02005081	8	Maidstone 014	Barming Heath, East Farleigh, West Farleigh, Yalding	18,2A,18,4A,5	0.44%											
E02005082	103	Maidstone 015	Langley Heath, Parkwood W	18,2A,18,4A	5.72%											
E02005083	11	Maidstone 016	Coxheath, Loose	18,2A,18,4A	0.61%											
E02005084	52	Maidstone 017	Headcorn, Sutton Valence	1A,7A	2.89%											
E02005085	19	Maidstone 018	Marden, Collier Street, Linton, Hunton	1A,7A	1.05%											
E02005086	14	Maidstone 019	Staplehurst	1A,7A	0.78%											
E02003214	4	Medway 001	Walstead, Grain, Kingsnorth, Stoke, Allhallows	18,2A,18,4A,5,6	0.22%											
E02003317	22	Medway 004	Medway City Estate, Wainscott	18,2A,18,4A,5,6	1.22%											
E02003319	6	Medway 006	Strood Central N	18,2A,18,4A,5,6	0.33%											
E02003320	20	Medway 007	Brompton, St Marys Island	18,2A,18,4A,5,6	1.11%											
E02003324	6	Medway 011	Strood S	18,2A,18,4A,5,6	0.33%											
E02003325	6	Medway 012	Gillingham central	18,2A,18,4A,5,6	0.33%											
E02003327	5	Medway 014	Rochester central & SE	18,2A,18,4A,5,6	0.28%											
E02003328	17	Medway 015	Chatham	18,2A,18,4A,5,6	0.94%											
E02003329	11	Medway 016	Gillingham S	18,2A,18,4A,5,6	0.61%											
E02003333	4	Medway 020	Luton (Chatham SE)	18,2A,18,4A,5,6	0.22%											
E02003337	6	Medway 024	Borstal (Rochester SW)	18,2A,18,4A,5,6	0.33%											
E02003338	6	Medway 025	Rainham NE	18,2A,18,4A,5,6	0.33%											
E02003339	10	Medway 026	Rochester Airport	18,2A,18,4A,5,6	0.55%											
E02003342	4	Medway 028	Rainham	18,2A,18,4A,5,6	0.22%											
E02003343	16	Medway 030	Gillingham Business Park, Rainham W	18,2A,18,4A,5,6	0.89%											
E02003351	7	Medway 038	Walderlade E	18,2A,18,4A,5,6	0.39%											
E02005089	4	Sevenoaks 003	Swanley SW, Crockenhill	18,2A,18,4A,5,6	0.22%											
E02005090	9	Sevenoaks 012	Sevenoaks, Wildemere, Sevenoaks Weald	18,2A,18,4A,5,6	0.50%											
E02005099	5	Sevenoaks 013	Westerham, Brasted, Sundridge, Crockham Hill	18,2A,18,4A,5,6	0.28%											
E02005109	5	Shepway 008	Etchinghill, Saltwood	18,28	0.28%											
E02005110	4	Shepway 009	Lympne, Seaford, Stanford	18,28	0.22%											
E02005114	5	Shepway 013	Lydd, Lydd Airport	18,28	0.28%											
E02005115	4	Swale 001	Sheerness E	18,2A,18,4A,5,6	0.11%	18,2A,3,C	0.11%									
E02005116	7	Swale 002	Sheerness W	18,2A,18,4A,5,6	0.19%	18,2A,3,C	0.19%									
E02005119	6	Swale 005	Queensborough, Halfway Houses W, Minster SE	18,2A,18,4A,5,6	0.17%	18,2A,3,C	0.17%									
E02005120	4	Swale 006	Eastchurch, Warden, HMP Swaleside	18,2A,18,4A,5,6	0.11%	18,2A,3,C	0.11%									
E02005121	12	Swale 007	Kemsley, Ivade	18,2A,18,4A,5,6	0.33%	18,2A,3,C	0.33%									
E02005122	10	Swale 008	Newington, Lower Halstow, Upchurch, Hartlip	18,2A,3,C	0.55%											
E02005123	9	Swale 009	Sittingbourne N, Rolobing, Borden	18,2A,3,C	0.50%											
E02005124	48	Swale 010	Sittingbourne central N	18,2A,3,C	2.66%											
E02005125	9	Swale 011	Sittingbourne E & NE	18,2A,3,C	0.50%											
E02005126	6	Swale 012	Sittingbourne SW	18,2A,3,C	0.33%											
E02005127	26	Swale 013	Sittingbourne S, Tunstall, Bapchild, Bredgar	18,2A,3,C	1.44%											
E02005128	5	Swale 014	Faversham W	18,28	0.28%											
E02005129	16	Swale 015	Faversham E	18,28	0.89%											
E02005130	14	Swale 016	Teynham, Lynsted, Doddington, Painter's Forstal	18,2A,3,C	0.78%											
E02005131	4	Swale 017	Boughton Street, Staplestreet, Dunkirk, Sheldwich	18,28	0.22%											
E02003310	7	Thurrock 015	West Thurrock	18,2A,18,4A,5,6	0.39%											
E02005149	22	Tonbridge and Malling 001	Aylesford, Bluebell Hill, Burham, Eccles	18,2A,18,4A,5,6	1.22%											
E02005150	15	Tonbridge and Malling 002	Snodland	18,2A,18,4A,5,6	0.83%											
E02005151	23	Tonbridge and Malling 003	Lafield, Leybourne, New Hythe	18,2A,18,4A,5,6	1.28%											
E02005153	56	Tonbridge and Malling 005	New Hythe Business Park, Ditton, Royal British Legion Village	18,2A,18,4A,5,6	3.11%											
E02005154	7	Tonbridge and Malling 006	Borough Green, St Mary's Platt, Ightham, Wrotham, Plaxto, Shipbourne	18,2A,18,4A,5,6	0.39%											
E02005155	38	Tonbridge and Malling 007	Kings Hill Business Park, Kings Hill, Mereworth, West Peckham	18,2A,18,4A,5,6	2.11%											
E02005156	16	Tonbridge and Malling 008	Hadlow, East Peckham, Golden Green	18,2A,18,4A,5,6	0.89%											
E02005160	9	Tonbridge and Malling 012	Tonbridge N & E	18,2A,18,4A,5,6	0.50%											
E02006833	22	Tonbridge and Malling 014	West Malling, East Malling, Addington	18,2A,18,4A,5,6	1.22%											
E02000889	4	Tower Hamlets 026	London	18,2A,18,4A,5,6	0.22%											
E02000854	7	Tower Hamlets 033	London	18,2A,18,4A,5,6	0.39%											
E02005162	8	Tunbridge Wells 001	Paddock Wood	1A,7A	0.44%											
E02005164	4	Tunbridge Wells 003	High Lodge Retail Park, Southborough E, High Brooms W	18,2A,18,4A,5,6	0.22%											
E02005169	9	Tunbridge Wells 008	Royal Tunbridge Wells central	18,2A,18,4A,5,6	0.50%											
E02005172	7	Tunbridge Wells 011	Goodhurst, Hornmorden, Lamberhurst	1A,7A	0.39%											
E02005174	10	Tunbridge Wells 013	Cranbrook, Sissinghurst, Hartley	1A,7A	0.55%											
E02005175	7	Tunbridge Wells 014	Hawkhurst, Sandhurst, Benenden	1A,7A	0.39%											

This page has been
left intentionally
blank

APPENDIX L

JUNCTION CAPACITY ASSESSMENT REPORT OUTPUTS

This page has been
left intentionally
blank

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J1-A20-Maid.j9

Path: N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\6.Technical\Models

Report generation date: 06/09/2019 11:14:11

- »1 Observed 2019, AM
- »1 Observed 2019, PM
- »2 Without Development 2024, AM
- »2 Without Development 2024, PM
- »3 With Development 2024, AM
- »3 With Development 2024, PM
- »4 Without Development 2031, AM
- »4 Without Development 2031, PM
- »5 With Development 2031, AM
- »5 With Development 2031, PM

File summary

File Description

Title	A20/Maidstone Road
Location	Lenham
Site number	1
Date	26/07/2019
Version	
Status	Final
Identifier	
Client	Dean Lewis Estates
Jobnumber	P19013
Enumerator	GHClb.gaze
Description	Checked by D. Stoddart

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	06:45	08:15	15	✓
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓
D3	2 Without Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D5	3 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D7	4 Without Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓
D9	5 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

1 Observed 2019, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Maidstone Road	T-Junction	Two-way		0.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A20 Ashford Road (Eastern Arm)		Major
B	Maidstone Road		Minor
C	A20 Ashford Road (Western Arm)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A20 Ashford Road (Western Arm)	6.00		✓	3.20	150.0	✓	13.00

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 - Maidstone Road	One lane	3.00	65	35

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	516	0.094	0.238	0.149	0.339
1	B-C	646	0.099	0.250	-	-
1	C-B	733	0.284	0.284	-	-

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1049	100.000
B - Maidstone Road		ONE HOUR	✓	44	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	454	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	1	1048
	B - Maidstone Road	0	0	44
	C - A20 Ashford Road (Western Arm)	415	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	0	6
	B - Maidstone Road	0	0	0
	C - A20 Ashford Road (Western Arm)	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.14	11.66	0.2	B	40	61
C-AB	0.11	9.95	0.1	A	36	54
C-A					381	571
A-B					0.92	1
A-C					962	1442

1 Observed 2019, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Maidstone Road	T-Junction	Two-way		0.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	603	100.000
B - Maidstone Road		ONE HOUR	✓	51	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	930	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	2	601	
B - Maidstone Road	1	0	50	
C - A20 Ashford Road (Western Arm)	888	42	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	9	
B - Maidstone Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.12	8.76	0.1	A	47	70
C-AB	0.08	7.23	0.1	A	39	58
C-A					815	1222
A-B					2	3
A-C					551	827

2 Without Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Maidstone Road	T-Junction	Two-way		0.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2 Without Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1124	100.000
B - Maidstone Road		ONE HOUR	✓	70	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	502	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1123	
B - Maidstone Road	0	0	70	
C - A20 Ashford Road (Western Arm)	449	53	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Maidstone Road	0	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.23	13.88	0.3	B	64	96
C-AB	0.15	11.14	0.2	B	49	73
C-A					412	618
A-B					0.92	1
A-C					1030	1546

2 Without Development 2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Maidstone Road	T-Junction	Two-way		0.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	644	100.000
B - Maidstone Road		ONE HOUR	✓	66	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1019	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	2	642	
B - Maidstone Road	1	0	65	
C - A20 Ashford Road (Western Arm)	952	67	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	8	
B - Maidstone Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.16	9.38	0.2	A	61	91
C-AB	0.14	7.87	0.2	A	61	92
C-A					874	1310
A-B					2	3
A-C					589	884

3 With Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Maidstone Road	T-Junction	Two-way		0.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	3 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1154	100.000
B - Maidstone Road		ONE HOUR	✓	70	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	521	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1153	
B - Maidstone Road	0	0	70	
C - A20 Ashford Road (Western Arm)	468	53	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Maidstone Road	0	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.23	14.34	0.3	B	64	96
C-AB	0.16	11.48	0.2	B	49	73
C-A					429	644
A-B					0.92	1
A-C					1058	1587

3 With Development 2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Maidstone Road	T-Junction	Two-way		0.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	667	100.000
B - Maidstone Road		ONE HOUR	✓	66	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1059	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	2	665	
B - Maidstone Road	1	0	65	
C - A20 Ashford Road (Western Arm)	992	67	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	8	
B - Maidstone Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.16	9.57	0.2	A	61	91
C-AB	0.14	7.99	0.2	A	61	92
C-A					910	1365
A-B					2	3
A-C					610	915

4 Without Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Maidstone Road	T-Junction	Two-way		0.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	4 Without Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1190	100.000
B - Maidstone Road		ONE HOUR	✓	71	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	582	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1189	
B - Maidstone Road	0	0	71	
C - A20 Ashford Road (Western Arm)	529	53	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Maidstone Road	0	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.25	14.99	0.3	B	65	98
C-AB	0.16	11.90	0.2	B	49	73
C-A					485	728
A-B					0.92	1
A-C					1091	1637

4 Without Development 2031, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Maidstone Road	T-Junction	Two-way		0.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	736	100.000
B - Maidstone Road		ONE HOUR	✓	67	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1094	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	2	734	
B - Maidstone Road	1	0	66	
C - A20 Ashford Road (Western Arm)	1027	67	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	7	
B - Maidstone Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.17	10.16	0.2	B	61	92
C-AB	0.15	8.39	0.2	A	61	92
C-A					942	1414
A-B					2	3
A-C					674	1010

5 With Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Maidstone Road	T-Junction	Two-way		0.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	5 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1220	100.000
B - Maidstone Road		ONE HOUR	✓	71	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	601	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1219	
B - Maidstone Road	0	0	71	
C - A20 Ashford Road (Western Arm)	548	53	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Maidstone Road	0	0	0	
C - A20 Ashford Road (Western Arm)	3	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.25	15.53	0.3	C	65	98
C-AB	0.17	12.28	0.2	B	49	73
C-A					503	754
A-B					0.92	1
A-C					1119	1678

5 With Development 2031, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Maidstone Road	T-Junction	Two-way		0.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	759	100.000
B - Maidstone Road		ONE HOUR	✓	67	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1134	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	2	757	
B - Maidstone Road	1	0	66	
C - A20 Ashford Road (Western Arm)	1067	67	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Maidstone Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	7	
B - Maidstone Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.18	10.40	0.2	B	61	92
C-AB	0.15	8.54	0.2	A	61	92
C-A					979	1469
A-B					2	3
A-C					695	1042

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J2-Old Ashford-High-Maid-Fav.j9

Path: N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\6.Technical\Models

Report generation date: 06/09/2019 11:13:34

- »1 Observed 2019, AM
- »1 Observed 2019, PM
- »2 Without Development 2024, AM
- »2 Without Development 2024, PM
- »3 With Development 2024, AM
- »3 With Development 2024, PM
- »4 Without Development 2031, AM
- »4 Without Development 2031, PM
- »5 With Development 2031, AM
- »5 With Development 2031, PM

File summary

File Description

Title	Faversham Road/Old Ashford Road/High Street/Maidstone Road
Location	Lenham
Site number	2
Date	26/07/2019
Version	
Status	Final
Identifier	
Client	Dean Lewis Estates
Jobnumber	P19013
Enumerator	GHClb.gaze
Description	Checked by D. Stoddart

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	07:30	09:00	15	✓
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓
D3	2 Without Development 2024	AM	ONE HOUR	07:30	09:00	15	✓
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D5	3 With Development 2024	AM	ONE HOUR	07:30	09:00	15	✓
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D7	4 Without Development 2031	AM	ONE HOUR	07:30	09:00	15	✓
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓
D9	5 With Development 2031	AM	ONE HOUR	07:30	09:00	15	✓
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

1 Observed 2019, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	A - Faversham Road - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	C - High Street - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Faversham Road/Old Ashford Road/High Street/Maidstone Road	Crossroads	Two-way		6.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Faversham Road		Major
B	Old Ashford Road		Minor
C	High Street		Major
D	Maidstone Road		Minor

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)
A - Faversham Road	5.50			83.0	✓	0.00
C - High Street	5.50			56.0	✓	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 - Old Ashford Road	One lane	2.80	19	15
D - Maidstone Road	One lane	2.20	16	13

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	622	-	-	-	-	-	-	0.246	0.352	0.246	-	-	-
1	B-A	481	0.090	0.226	0.226	-	-	-	0.142	0.323	-	0.226	0.226	0.113
1	B-C	621	0.097	0.246	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	481	0.090	0.226	0.226	-	-	-	0.142	0.323	0.142	-	-	-
1	B-D, offside lane	481	0.090	0.226	0.226	-	-	-	0.142	0.323	0.142	-	-	-
1	C-B	606	0.240	0.240	0.343	-	-	-	-	-	-	-	-	-
1	D-A	581	-	-	-	-	-	-	0.230	-	0.091	-	-	-
1	D-B, nearside lane	450	0.133	0.133	0.302	-	-	-	0.212	0.212	0.084	-	-	-
1	D-B, offside lane	450	0.133	0.133	0.302	-	-	-	0.212	0.212	0.084	-	-	-
1	D-C	450	-	0.133	0.302	0.106	0.212	0.212	0.212	0.212	0.084	-	-	-

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Faversham Road		ONE HOUR	✓	166	100.000
B - Old Ashford Road		ONE HOUR	✓	216	100.000
C - High Street		ONE HOUR	✓	193	100.000
D - Maidstone Road		ONE HOUR	✓	78	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	22	131
	B - Old Ashford Road	5	0	189
	C - High Street	78	100	0
	D - Maidstone Road	18	27	33

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	0	1
	B - Old Ashford Road	0	0	5
	C - High Street	4	1	0
	D - Maidstone Road	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.43	11.62	0.8	B	198	297
A-BCD	0.03	5.60	0.0	A	15	23
A-B					20	30
A-C					117	176
D-ABC	0.22	12.17	0.3	B	72	107
C-ABD	0.21	7.31	0.3	A	107	160
C-D					11	17
C-A					59	88

1 Observed 2019, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	A - Faversham Road - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	C - High Street - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Faversham Road/Old Ashford Road/High Street/Maidstone Road	Crossroads	Two-way		6.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Faversham Road		ONE HOUR	✓	99	100.000
B - Old Ashford Road		ONE HOUR	✓	157	100.000
C - High Street		ONE HOUR	✓	319	100.000
D - Maidstone Road		ONE HOUR	✓	38	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	19	65
	B - Old Ashford Road	27	0	110
	C - High Street	122	173	0
	D - Maidstone Road	6	16	16

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	0	0	0
	B - Old Ashford Road	0	0	0	0
	C - High Street	2	1	0	0
	D - Maidstone Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.34	10.75	0.5	B	144	216
A-BCD	0.03	6.42	0.0	A	16	24
A-B					17	25
A-C					58	87
D-ABC	0.11	11.09	0.1	B	35	52
C-ABD	0.36	8.28	0.7	A	200	300
C-D					15	23
C-A					78	117

2 Without Development 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	A - Faversham Road - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	C - High Street - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Faversham Road/Old Ashford Road/High Street/Maidstone Road	Crossroads	Two-way		9.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2 Without Development 2024	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Faversham Road		ONE HOUR	✓	184	100.000
B - Old Ashford Road		ONE HOUR	✓	286	100.000
C - High Street		ONE HOUR	✓	232	100.000
D - Maidstone Road		ONE HOUR	✓	93	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	29	141	14
	B - Old Ashford Road	20	0	222	44
	C - High Street	89	124	0	19
	D - Maidstone Road	19	38	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	0	1	0
	B - Old Ashford Road	0	0	0	2
	C - High Street	3	1	0	0
	D - Maidstone Road	6	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.61	17.95	1.5	C	262	394
A-BCD	0.03	5.60	0.0	A	17	25
A-B					26	39
A-C					126	189
D-ABC	0.28	13.82	0.4	B	85	128
C-ABD	0.26	7.75	0.4	A	136	204
C-D					14	20
C-A					64	95

2 Without Development 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	A - Faversham Road - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	C - High Street - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Faversham Road/Old Ashford Road/High Street/Maidstone Road	Crossroads	Two-way		8.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Faversham Road		ONE HOUR	✓	124	100.000
B - Old Ashford Road		ONE HOUR	✓	202	100.000
C - High Street		ONE HOUR	✓	365	100.000
D - Maidstone Road		ONE HOUR	✓	63	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	33	75	16
	B - Old Ashford Road	34	0	136	32
	C - High Street	134	204	0	27
	D - Maidstone Road	6	36	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	0	0	0
	B - Old Ashford Road	0	0	0	0
	C - High Street	2	0	0	0
	D - Maidstone Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.46	13.64	0.8	B	185	278
A-BCD	0.04	6.41	0.1	A	18	27
A-B					29	44
A-C					67	100
D-ABC	0.20	13.10	0.3	B	58	87
C-ABD	0.44	9.31	0.9	A	242	362
C-D					16	23
C-A					78	117

3 With Development 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	A - Faversham Road - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	C - High Street - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Faversham Road/Old Ashford Road/High Street/Maidstone Road	Crossroads	Two-way		9.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	3 With Development 2024	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Faversham Road		ONE HOUR	✓	184	100.000
B - Old Ashford Road		ONE HOUR	✓	290	100.000
C - High Street		ONE HOUR	✓	235	100.000
D - Maidstone Road		ONE HOUR	✓	93	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	29	141	14
	B - Old Ashford Road	20	0	226	44
	C - High Street	89	127	0	19
	D - Maidstone Road	19	38	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	0	1	0
	B - Old Ashford Road	0	0	0	2
	C - High Street	3	1	0	0
	D - Maidstone Road	6	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.62	18.32	1.6	C	266	399
A-BCD	0.03	5.61	0.0	A	17	25
A-B					26	39
A-C					126	189
D-ABC	0.28	13.88	0.4	B	85	128
C-ABD	0.27	7.82	0.4	A	139	209
C-D					13	20
C-A					63	95

3 With Development 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	A - Faversham Road - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	C - High Street - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Faversham Road/Old Ashford Road/High Street/Maidstone Road	Crossroads	Two-way		8.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Faversham Road		ONE HOUR	✓	124	100.000
B - Old Ashford Road		ONE HOUR	✓	205	100.000
C - High Street		ONE HOUR	✓	370	100.000
D - Maidstone Road		ONE HOUR	✓	63	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	33	75	16
	B - Old Ashford Road	34	0	139	32
	C - High Street	134	209	0	27
	D - Maidstone Road	6	36	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	0	0	0
	B - Old Ashford Road	0	0	0	0
	C - High Street	2	0	0	0
	D - Maidstone Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.46	13.80	0.9	B	188	282
A-BCD	0.04	6.43	0.1	A	18	27
A-B					29	44
A-C					67	100
D-ABC	0.20	13.17	0.3	B	58	87
C-ABD	0.45	9.49	1.0	A	247	371
C-D					15	23
C-A					77	115

4 Without Development 2031, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	A - Faversham Road - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	C - High Street - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Faversham Road/Old Ashford Road/High Street/Maidstone Road	Crossroads	Two-way		10.66	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	4 Without Development 2031	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Faversham Road		ONE HOUR	✓	174	100.000
B - Old Ashford Road		ONE HOUR	✓	301	100.000
C - High Street		ONE HOUR	✓	243	100.000
D - Maidstone Road		ONE HOUR	✓	95	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	29	131	14
	B - Old Ashford Road	20	0	237	44
	C - High Street	77	147	0	19
	D - Maidstone Road	19	39	37	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	0	1	0
	B - Old Ashford Road	0	0	0	2
	C - High Street	4	1	0	0
	D - Maidstone Road	6	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.64	19.24	1.7	C	276	414
A-BCD	0.03	5.68	0.0	A	17	25
A-B					26	39
A-C					117	176
D-ABC	0.29	14.12	0.4	B	87	131
C-ABD	0.31	8.33	0.5	A	158	237
C-D					13	19
C-A					52	78

4 Without Development 2031, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	A - Faversham Road - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	C - High Street - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Faversham Road/Old Ashford Road/High Street/Maidstone Road	Crossroads	Two-way		9.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Faversham Road		ONE HOUR	✓	118	100.000
B - Old Ashford Road		ONE HOUR	✓	225	100.000
C - High Street		ONE HOUR	✓	368	100.000
D - Maidstone Road		ONE HOUR	✓	63	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	33	69	16
	B - Old Ashford Road	35	0	158	32
	C - High Street	121	220	0	27
	D - Maidstone Road	6	36	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	0	0	0
	B - Old Ashford Road	0	0	0	0
	C - High Street	2	0	0	0
	D - Maidstone Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.50	14.62	1.0	B	206	310
A-BCD	0.04	6.49	0.1	A	18	26
A-B					29	44
A-C					61	92
D-ABC	0.20	13.20	0.3	B	58	87
C-ABD	0.47	9.93	1.0	A	255	383
C-D					15	23
C-A					67	101

5 With Development 2031, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	A - Faversham Road - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	C - High Street - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Faversham Road/Old Ashford Road/High Street/Maidstone Road	Crossroads	Two-way		10.89	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	5 With Development 2031	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Faversham Road		ONE HOUR	✓	174	100.000
B - Old Ashford Road		ONE HOUR	✓	305	100.000
C - High Street		ONE HOUR	✓	246	100.000
D - Maidstone Road		ONE HOUR	✓	95	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	29	131	14
	B - Old Ashford Road	20	0	241	44
	C - High Street	77	150	0	19
	D - Maidstone Road	19	39	37	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	0	1	0
	B - Old Ashford Road	0	0	0	2
	C - High Street	4	1	0	0
	D - Maidstone Road	6	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.65	19.67	1.8	C	280	420
A-BCD	0.03	5.69	0.0	A	17	25
A-B					26	39
A-C					117	176
D-ABC	0.29	14.19	0.4	B	87	131
C-ABD	0.31	8.41	0.5	A	161	242
C-D					13	19
C-A					52	78

5 With Development 2031, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	A - Faversham Road - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Major arm width	C - High Street - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Faversham Road/Old Ashford Road/High Street/Maidstone Road	Crossroads	Two-way		9.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Faversham Road		ONE HOUR	✓	118	100.000
B - Old Ashford Road		ONE HOUR	✓	228	100.000
C - High Street		ONE HOUR	✓	373	100.000
D - Maidstone Road		ONE HOUR	✓	63	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	33	69	16
	B - Old Ashford Road	35	0	161	32
	C - High Street	121	225	0	27
	D - Maidstone Road	6	36	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Faversham Road	B - Old Ashford Road	C - High Street	D - Maidstone Road
From	A - Faversham Road	0	0	0	0
	B - Old Ashford Road	0	0	0	0
	C - High Street	2	0	0	0
	D - Maidstone Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.51	14.82	1.0	B	209	314
A-BCD	0.04	6.51	0.1	A	18	26
A-B					29	44
A-C					61	92
D-ABC	0.20	13.27	0.3	B	58	87
C-ABD	0.48	10.13	1.1	B	261	392
C-D					15	22
C-A					66	100

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J3-A20-Faversham.j9

Path: N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\6.Technical\Models

Report generation date: 06/09/2019 11:11:57

- »1 Observed 2019, AM
- »1 Observed 2019, PM
- »2 Without Development 2024, AM
- »2 Without Development 2024, PM
- »3 With Development 2024, AM
- »3 With Development 2024, PM
- »4 Without Development 2031, AM
- »4 Without Development 2031, PM
- »5 With Development 2031, AM
- »5 With Development 2031, PM

File summary

File Description

Title	A20/Faversham Road
Location	Lenham
Site number	3
Date	26/07/2019
Version	
Status	Final
Identifier	
Client	Dean Lewis Estates
Jobnumber	P19013
Enumerator	GHClb.gaze
Description	Checked by D. Stoddart

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	06:45	08:15	15	✓
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓
D3	2 Without Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D5	3 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D7	4 Without Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓
D9	5 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

1 Observed 2019, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		3.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A20 Ashford Road (Eastern Arm)		Major
B	Faversham Road (Southern Arm)		Minor
C	A20 Ashford Road (Western Arm)		Major
D	Faversham Road (Northern Arm)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - A20 Ashford Road (Eastern Arm)	6.50		✓	3.20	120.0	✓	4.00
C - A20 Ashford Road (Western Arm)	6.50		✓	3.20	95.0	✓	5.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Faversham Road (Southern Arm)	One lane plus flare	10.00	10.00	10.00	6.30	4.00	✓	3.00	32	36
D - Faversham Road (Northern Arm)	One lane plus flare	9.20	4.50	3.20	3.20	3.20	✓	1.00	12	21

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	713	-	-	-	-	-	-	0.270	0.386	0.270	-	-	-
1	B-A	585	0.104	0.263	0.263	-	-	-	0.166	0.376	-	0.263	0.263	0.132
1	B-C	745	0.112	0.282	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	582	0.104	0.262	0.262	-	-	-	0.165	0.375	0.165	-	-	-
1	B-D, offside lane	585	0.104	0.263	0.263	-	-	-	0.166	0.376	0.166	-	-	-
1	C-B	697	0.264	0.264	0.378	-	-	-	-	-	-	-	-	-
1	D-A	664	-	-	-	-	-	-	0.252	-	0.100	-	-	-
1	D-B, nearside lane	513	0.145	0.145	0.330	-	-	-	0.231	0.231	0.091	-	-	-
1	D-B, offside lane	513	0.145	0.145	0.330	-	-	-	0.231	0.231	0.091	-	-	-
1	D-C	513	-	0.145	0.330	0.115	0.231	0.231	0.231	0.231	0.091	-	-	-

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1070	100.000
B - Faversham Road (Southern Arm)		ONE HOUR	✓	103	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	419	100.000
D - Faversham Road (Northern Arm)		ONE HOUR	✓	151	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	66	977	27
	B - Faversham Road (Southern Arm)	53	0	24	26
	C - A20 Ashford Road (Western Arm)	370	25	0	24
	D - Faversham Road (Northern Arm)	42	59	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	0	7	0
	B - Faversham Road (Southern Arm)	4	0	0	0
	C - A20 Ashford Road (Western Arm)	5	0	0	4
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.18	16.70	0.2	C	37	55
B-AD	0.39	34.69	0.6	D	58	87
A-BCD	0.05	6.48	0.1	A	25	37
AB					61	91
AC					897	1345
D-AB	0.30	17.47	0.4	C	71	106
D-BC	0.36	25.63	0.6	D	68	102
C-ABD	0.07	10.14	0.1	B	23	34
C-D					22	33
C-A					340	509

1 Observed 2019, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		4.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	631	100.000
B - Faversham Road (Southern Arm)		ONE HOUR	✓	161	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	896	100.000
D - Faversham Road (Northern Arm)		ONE HOUR	✓	121	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	41	541	49
	B - Faversham Road (Southern Arm)	87	0	25	49
	C - A20 Ashford Road (Western Arm)	836	15	0	45
	D - Faversham Road (Northern Arm)	35	41	45	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	0	10	0
B - Faversham Road (Southern Arm)	1	0	0	2
C - A20 Ashford Road (Western Arm)	2	0	0	0
D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.25	17.98	0.3	C	53	79
B-AD	0.49	32.11	1.0	D	95	143
A-BCD	0.12	9.21	0.1	A	45	67
A-B					38	56
A-C					496	745
D-AB	0.31	23.30	0.4	C	55	83
D-B-C	0.41	39.25	0.7	E	56	84
C-ABD	0.03	7.33	0.0	A	14	21
C-D					41	62
C-A					767	1151

2 Without Development 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		5.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2 Without Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1131	100.000
B - Faversham Road (Southern Arm)		ONE HOUR	✓	132	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	453	100.000
D - Faversham Road (Northern Arm)		ONE HOUR	✓	161	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	71	1031	29
B - Faversham Road (Southern Arm)	56	0	42	34
C - A20 Ashford Road (Western Arm)	394	32	0	27
D - Faversham Road (Northern Arm)	44	64	53	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	0	7	0
B - Faversham Road (Southern Arm)	4	0	0	0
C - A20 Ashford Road (Western Arm)	5	0	0	4
D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.31	21.80	0.4	C	59	88
B-AD	0.49	48.85	0.9	E	62	94
A-BCD	0.06	6.64	0.1	A	27	40
AB					65	98
AC					946	1419
D-AB	0.37	21.93	0.6	C	76	114
D-BC	0.43	32.67	0.7	D	72	107
C-ABD	0.10	10.93	0.1	B	29	44
C-D					25	37
C-A					362	542

2 Without Development 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		7.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	666	100.000
B - Faversham Road (Southern Arm)		ONE HOUR	✓	181	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	960	100.000
D - Faversham Road (Northern Arm)		ONE HOUR	✓	135	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	44	571	51
B - Faversham Road (Southern Arm)	93	0	32	56
C - A20 Ashford Road (Western Arm)	883	29	0	48
D - Faversham Road (Northern Arm)	37	49	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	0	10	0
	B - Faversham Road (Southern Arm)	1	0	0	2
	C - A20 Ashford Road (Western Arm)	2	0	0	0
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.36	24.23	0.5	C	65	98
B-AD	0.60	46.10	1.4	E	101	152
A-BCD	0.13	9.79	0.2	A	47	70
AB					40	61
A-C					524	786
D-AB	0.47	39.89	0.8	E	63	94
D-BC	0.56	64.97	1.2	F	61	91
C-ABD	0.06	7.74	0.1	A	27	40
C-D					44	66
C-A					810	1215

3 With Development 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		5.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	3 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1164	100.000
B - Faversham Road (Southern Arm)		ONE HOUR	✓	132	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	472	100.000
D - Faversham Road (Northern Arm)		ONE HOUR	✓	163	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	71	1061	32
	B - Faversham Road (Southern Arm)	56	0	42	34
	C - A20 Ashford Road (Western Arm)	413	32	0	27
	D - Faversham Road (Northern Arm)	46	64	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	0	6	0
	B - Faversham Road (Southern Arm)	4	0	0	0
	C - A20 Ashford Road (Western Arm)	4	0	0	4
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.34	24.99	0.5	C	59	89
B-AD	0.53	59.02	1.1	F	62	93
A-BCD	0.06	6.75	0.1	A	29	44
AB					65	98
A-C					974	1460
D-AB	0.40	24.33	0.6	C	78	117
D-B-C	0.46	36.59	0.8	E	71	107
C-ABD	0.10	11.27	0.1	B	29	44
C-D					25	37
C-A					379	568

3 With Development 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		9.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	692	100.000
B - Faversham Road (Southern Arm)		ONE HOUR	✓	181	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1000	100.000
D - Faversham Road (Northern Arm)		ONE HOUR	✓	139	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	44	594	54
	B - Faversham Road (Southern Arm)	93	0	32	56
	C - A20 Ashford Road (Western Arm)	923	29	0	48
	D - Faversham Road (Northern Arm)	41	49	49	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
	A - A20 Ashford Road (Eastern Arm)	0	0	9	0
	B - Faversham Road (Southern Arm)	1	0	0	2
	C - A20 Ashford Road (Western Arm)	2	0	0	0
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.41	29.40	0.7	D	66	99
B-AD	0.65	56.89	1.7	F	100	150
A-BCD	0.14	10.21	0.2	B	50	74
A-B					40	61
A-C					545	818
D-AB	0.60	61.47	1.4	F	67	101
D-B-C	0.66	96.46	1.7	F	60	90
C-ABD	0.07	7.87	0.1	A	27	40
C-D					44	66
C-A					847	1270

4 Without Development 2031, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		10.51	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	4 Without Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1202	100.000
B - Faversham Road (Southern Arm)		ONE HOUR	✓	147	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	533	100.000
D - Faversham Road (Northern Arm)		ONE HOUR	✓	165	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
	A - A20 Ashford Road (Eastern Arm)	0	77	1095	30
	B - Faversham Road (Southern Arm)	67	0	44	36
	C - A20 Ashford Road (Western Arm)	461	45	0	27
	D - Faversham Road (Northern Arm)	45	66	54	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
	A - A20 Ashford Road (Eastern Arm)	0	0	6	0
	B - Faversham Road (Southern Arm)	3	0	0	0
	C - A20 Ashford Road (Western Arm)	4	0	0	4
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.59	58.73	1.3	F	65	97
B-AD	0.75	126.28	2.5	F	70	105
A-BCD	0.06	6.98	0.1	A	28	41
AB					71	106
A-C					1005	1507
D-AB	0.49	34.24	0.9	D	80	119
D-BC	0.54	50.82	1.1	F	72	108
C-ABD	0.14	12.23	0.2	B	41	62
C-D					25	37
C-A					423	635

4 Without Development 2031, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		21.11	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	745	100.000
B - Faversham Road (Southern Arm)		ONE HOUR	✓	198	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1036	100.000
D - Faversham Road (Northern Arm)		ONE HOUR	✓	138	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
	A - A20 Ashford Road (Eastern Arm)	0	54	639	52
	B - Faversham Road (Southern Arm)	100	0	40	58
	C - A20 Ashford Road (Western Arm)	948	39	0	49
	D - Faversham Road (Northern Arm)	38	50	50	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
	A - A20 Ashford Road (Eastern Arm)	0	0	9	0
	B - Faversham Road (Southern Arm)	1	0	0	2
	C - A20 Ashford Road (Western Arm)	2	0	0	0
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.65	62.89	1.6	F	77	115
B-AD	0.79	102.03	3.0	F	105	157
A-BCD	0.14	10.50	0.2	B	48	72
A-B					50	74
A-C					586	880
D-AB	0.94	179.06	4.3	F	67	100
D-B-C	0.90	212.59	3.6	F	60	90
C-ABD	0.09	8.35	0.1	A	36	54
C-D					45	67
C-A					870	1305

5 With Development 2031, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		17.02	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	5 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1235	100.000
B - Faversham Road (Southern Arm)		ONE HOUR	✓	147	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	552	100.000
D - Faversham Road (Northern Arm)		ONE HOUR	✓	167	100.000

Origin-Destination Data

Demand (PCU/hr)

From		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
	A - A20 Ashford Road (Eastern Arm)	0	77	1125	33
	B - Faversham Road (Southern Arm)	67	0	44	36
	C - A20 Ashford Road (Western Arm)	480	45	0	27
	D - Faversham Road (Northern Arm)	47	66	54	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	0	6	0
B - Faversham Road (Southern Arm)	3	0	0	0
C - A20 Ashford Road (Western Arm)	4	0	0	4
D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.94	163.82	4.0	F	66	98
B-AD	0.88	192.75	3.8	F	69	104
A-BCD	0.07	7.10	0.1	A	30	45
A-B					71	106
A-C					1032	1548
D-AB	0.55	42.57	1.2	E	82	123
D-B-C	0.59	62.87	1.3	F	71	107
C-ABD	0.15	12.66	0.2	B	41	62
C-D					25	37
C-A					440	661

5 With Development 2031, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		36.95	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	771	100.000
B - Faversham Road (Southern Arm)		ONE HOUR	✓	198	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1076	100.000
D - Faversham Road (Northern Arm)		ONE HOUR	✓	142	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	54	662	55
B - Faversham Road (Southern Arm)	100	0	40	58
C - A20 Ashford Road (Western Arm)	988	39	0	49
D - Faversham Road (Northern Arm)	42	50	50	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	0	8	0
B - Faversham Road (Southern Arm)	1	0	0	2
C - A20 Ashford Road (Western Arm)	2	0	0	0
D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.96	158.73	4.7	F	79	118
B-AD	0.92	166.19	4.9	F	103	155
A-BCD	0.16	10.98	0.2	B	50	76
A-B					50	74
A-C					607	911
D-AB	1.13	314.84	9.0	F	72	109
D-B-C	1.08	360.79	6.1	F	58	87
C-ABD	0.09	8.51	0.1	A	36	54
C-D					45	67
C-A					907	1360

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J3-A20-Faversham (FLAT).j9

Path: N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\6.Technical\Models

Report generation date: 06/09/2019 11:12:56

- »1 Observed 2019, AM
- »1 Observed 2019, PM
- »2 Without Development 2024, AM
- »2 Without Development 2024, PM
- »3 With Development 2024, AM
- »3 With Development 2024, PM
- »4 Without Development 2031, AM
- »4 Without Development 2031, PM
- »5 With Development 2031, AM
- »5 With Development 2031, PM

File summary

File Description

Title	A20/Faversham Road
Location	Lenham
Site number	3
Date	26/07/2019
Version	
Status	Final
Identifier	
Client	Dean Lewis Estates
Jobnumber	P19013
Enumerator	GHClb.gaze
Description	Checked by D. Stoddart

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

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)	Run automatically
D1	1 Observed 2019	AM	FLAT	07:00	08:00	60	15	✓
D2	1 Observed 2019	PM	FLAT	16:30	17:30	60	15	✓
D3	2 Without Development 2024	AM	FLAT	07:00	08:00	60	15	✓
D4	2 Without Development 2024	PM	FLAT	16:30	17:30	60	15	✓
D5	3 With Development 2024	AM	FLAT	07:00	08:00	60	15	✓
D6	3 With Development 2024	PM	FLAT	16:30	17:30	60	15	✓
D7	4 Without Development 2031	AM	FLAT	07:00	08:00	60	15	✓
D8	4 Without Development 2031	PM	FLAT	16:30	17:30	60	15	✓
D9	5 With Development 2031	AM	FLAT	07:00	08:00	60	15	✓
D10	5 With Development 2031	PM	FLAT	16:30	17:30	60	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

1 Observed 2019, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		2.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A20 Ashford Road (Eastern Arm)		Major
B	Faversham Road (Southern Arm)		Minor
C	A20 Ashford Road (Western Arm)		Major
D	Faversham Road (Northern Arm)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - A20 Ashford Road (Eastern Arm)	6.50		✓	3.20	120.0	✓	4.00
C - A20 Ashford Road (Western Arm)	6.50		✓	3.20	95.0	✓	5.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Faversham Road (Southern Arm)	One lane plus flare	10.00	10.00	10.00	6.30	4.00	✓	3.00	32	36
D - Faversham Road (Northern Arm)	One lane plus flare	9.20	4.50	3.20	3.20	3.20	✓	1.00	12	21

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	713	-	-	-	-	-	-	0.270	0.386	0.270	-	-	-
1	B-A	585	0.104	0.263	0.263	-	-	-	0.166	0.376	-	0.263	0.263	0.132
1	B-C	745	0.112	0.282	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	582	0.104	0.262	0.262	-	-	-	0.165	0.375	0.165	-	-	-
1	B-D, offside lane	585	0.104	0.263	0.263	-	-	-	0.166	0.376	0.166	-	-	-
1	C-B	697	0.264	0.264	0.378	-	-	-	-	-	-	-	-	-
1	D-A	664	-	-	-	-	-	-	0.252	-	0.100	-	-	-
1	D-B, nearside lane	513	0.145	0.145	0.330	-	-	-	0.231	0.231	0.091	-	-	-
1	D-B, offside lane	513	0.145	0.145	0.330	-	-	-	0.231	0.231	0.091	-	-	-
1	D-C	513	-	0.145	0.330	0.115	0.231	0.231	0.231	0.231	0.091	-	-	-

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

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)	Run automatically
D1	1 Observed 2019	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1070	100.000
B - Faversham Road (Southern Arm)		FLAT	✓	103	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	419	100.000
D - Faversham Road (Northern Arm)		FLAT	✓	151	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	66	977	27
	B - Faversham Road (Southern Arm)	53	0	24	26
	C - A20 Ashford Road (Western Arm)	370	25	0	24
	D - Faversham Road (Northern Arm)	42	59	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	0	7	0
	B - Faversham Road (Southern Arm)	4	0	0	0
	C - A20 Ashford Road (Western Arm)	5	0	0	4
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.13	13.45	0.2	B	40	40
B-AD	0.29	24.73	0.4	C	63	63
A-BCD	0.05	6.31	0.0	A	27	27
A-B					66	66
A-C					977	977
D-AB	0.23	14.20	0.3	B	77	77
D-B-C	0.30	20.52	0.4	C	74	74
C-ABD	0.06	9.31	0.1	A	25	25
C-D					24	24
C-A					370	370

1 Observed 2019, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		3.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D2	1 Observed 2019	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	631	100.000
B - Faversham Road (Southern Arm)		FLAT	✓	161	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	896	100.000
D - Faversham Road (Northern Arm)		FLAT	✓	121	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	41	541	49
	B - Faversham Road (Southern Arm)	87	0	25	49
	C - A20 Ashford Road (Western Arm)	836	15	0	45
	D - Faversham Road (Northern Arm)	35	41	45	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	0	10	0
B - Faversham Road (Southern Arm)	1	0	0	2
C - A20 Ashford Road (Western Arm)	2	0	0	0
D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.18	14.22	0.2	B	58	58
B-AD	0.40	23.53	0.7	C	103	103
A-BCD	0.10	8.56	0.1	A	49	49
A-B					41	41
A-C					541	541
D-AB	0.22	17.08	0.3	C	60	60
D-B-C	0.32	27.43	0.5	D	61	61
C-ABD	0.03	7.06	0.0	A	15	15
C-D					45	45
C-A					836	836

2 Without Development 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		3.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D3	2 Without Development 2024	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1131	100.000
B - Faversham Road (Southern Arm)		FLAT	✓	132	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	453	100.000
D - Faversham Road (Northern Arm)		FLAT	✓	161	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	71	1031	29
B - Faversham Road (Southern Arm)	56	0	42	34
C - A20 Ashford Road (Western Arm)	394	32	0	27
D - Faversham Road (Northern Arm)	44	64	53	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	0	7	0
B - Faversham Road (Southern Arm)	4	0	0	0
C - A20 Ashford Road (Western Arm)	5	0	0	4
D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.22	15.65	0.3	C	64	64
B-AD	0.36	30.60	0.6	D	68	68
A-BCD	0.05	6.45	0.1	A	29	29
AB					71	71
AC					1031	1031
D-AB	0.28	16.39	0.4	C	84	84
D-BC	0.34	24.16	0.5	C	77	77
C-ABD	0.08	9.91	0.1	A	32	32
C-D					27	27
C-A					394	394

2 Without Development 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		4.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D4	2 Without Development 2024	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	666	100.000
B - Faversham Road (Southern Arm)		FLAT	✓	181	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	960	100.000
D - Faversham Road (Northern Arm)		FLAT	✓	135	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	44	571	51
B - Faversham Road (Southern Arm)	93	0	32	56
C - A20 Ashford Road (Western Arm)	883	29	0	48
D - Faversham Road (Northern Arm)	37	49	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	0	10	0
	B - Faversham Road (Southern Arm)	1	0	0	2
	C - A20 Ashford Road (Western Arm)	2	0	0	0
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.25	16.73	0.3	C	72	72
B-AD	0.47	29.71	0.9	D	109	109
A-BCD	0.11	9.01	0.1	A	51	51
AB					44	44
A-C					571	571
D-AB	0.30	22.19	0.4	C	69	69
D-BC	0.40	35.86	0.6	E	66	66
C-ABD	0.06	7.40	0.1	A	29	29
C-D					48	48
C-A					883	883

3 With Development 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		3.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D5	3 With Development 2024	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1164	100.000
B - Faversham Road (Southern Arm)		FLAT	✓	132	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	472	100.000
D - Faversham Road (Northern Arm)		FLAT	✓	163	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	71	1061	32
	B - Faversham Road (Southern Arm)	56	0	42	34
	C - A20 Ashford Road (Western Arm)	413	32	0	27
	D - Faversham Road (Northern Arm)	46	64	53	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	0	6	0
	B - Faversham Road (Southern Arm)	4	0	0	0
	C - A20 Ashford Road (Western Arm)	4	0	0	4
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.23	16.74	0.3	C	65	65
B-AD	0.38	34.00	0.6	D	67	67
A-BCD	0.05	6.54	0.1	A	32	32
AB					71	71
A-C					1061	1061
D-AB	0.29	17.35	0.4	C	86	86
D-B-C	0.36	25.93	0.5	D	77	77
C-ABD	0.08	10.17	0.1	B	32	32
C-D					27	27
C-A					413	413

3 With Development 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		5.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D6	3 With Development 2024	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	692	100.000
B - Faversham Road (Southern Arm)		FLAT	✓	181	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	1000	100.000
D - Faversham Road (Northern Arm)		FLAT	✓	139	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	44	594	54
	B - Faversham Road (Southern Arm)	93	0	32	56
	C - A20 Ashford Road (Western Arm)	923	29	0	48
	D - Faversham Road (Northern Arm)	41	49	49	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	0	9	0
B - Faversham Road (Southern Arm)	1	0	0	2
C - A20 Ashford Road (Western Arm)	2	0	0	0
D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.27	18.29	0.4	C	72	72
B-AD	0.50	33.48	1.0	D	109	109
A-BCD	0.12	9.33	0.1	A	54	54
AB					44	44
A-C					594	594
D-AB	0.34	25.31	0.5	D	74	74
D-BC	0.43	42.00	0.7	E	65	65
C-ABD	0.06	7.51	0.1	A	29	29
C-D					48	48
C-A					923	923

4 Without Development 2031, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		4.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D7	4 Without Development 2031	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1202	100.000
B - Faversham Road (Southern Arm)		FLAT	✓	147	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	533	100.000
D - Faversham Road (Northern Arm)		FLAT	✓	165	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	77	1095	30
B - Faversham Road (Southern Arm)	67	0	44	36
C - A20 Ashford Road (Western Arm)	461	45	0	27
D - Faversham Road (Northern Arm)	45	66	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	0	6	0
	B - Faversham Road (Southern Arm)	3	0	0	0
	C - A20 Ashford Road (Western Arm)	4	0	0	4
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.29	21.18	0.4	C	70	70
B-AD	0.50	48.52	1.0	E	77	77
A-BCD	0.05	6.74	0.1	A	30	30
AB					77	77
A-C					1095	1095
D-AB	0.33	20.64	0.5	C	87	87
D-BC	0.40	31.08	0.7	D	78	78
C-ABD	0.12	10.87	0.1	B	45	45
C-D					27	27
C-A					461	461

4 Without Development 2031, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		6.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D8	4 Without Development 2031	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	745	100.000
B - Faversham Road (Southern Arm)		FLAT	✓	198	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	1036	100.000
D - Faversham Road (Northern Arm)		FLAT	✓	138	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	54	639	52
	B - Faversham Road (Southern Arm)	100	0	40	58
	C - A20 Ashford Road (Western Arm)	948	39	0	49
	D - Faversham Road (Northern Arm)	38	50	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	0	9	0
	B - Faversham Road (Southern Arm)	1	0	0	2
	C - A20 Ashford Road (Western Arm)	2	0	0	0
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.34	22.52	0.5	C	84	84
B-AD	0.58	44.13	1.4	E	114	114
A-BCD	0.12	9.55	0.1	A	52	52
AB					54	54
A-C					639	639
D-AB	0.39	32.09	0.6	D	73	73
D-B-C	0.50	54.10	1.0	F	65	65
C-ABD	0.08	7.90	0.1	A	39	39
C-D					49	49
C-A					948	948

5 With Development 2031, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		5.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D9	5 With Development 2031	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1235	100.000
B - Faversham Road (Southern Arm)		FLAT	✓	147	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	552	100.000
D - Faversham Road (Northern Arm)		FLAT	✓	167	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	77	1125	33
	B - Faversham Road (Southern Arm)	67	0	44	36
	C - A20 Ashford Road (Western Arm)	480	45	0	27
	D - Faversham Road (Northern Arm)	47	66	54	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	0	6	0
	B - Faversham Road (Southern Arm)	3	0	0	0
	C - A20 Ashford Road (Western Arm)	4	0	0	4
	D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.32	23.94	0.5	C	71	71
B-AD	0.54	57.64	1.2	F	76	76
A-BCD	0.06	6.85	0.1	A	33	33
AB					77	77
AC					1125	1125
D-AB	0.36	22.45	0.6	C	90	90
D-BC	0.42	34.20	0.7	D	77	77
C-ABD	0.12	11.17	0.1	B	45	45
C-D					27	27
C-A					480	480

5 With Development 2031, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	D - Faversham Road (Northern Arm) - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20/Faversham Road	Crossroads	Two-way		7.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D10	5 With Development 2031	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	771	100.000
B - Faversham Road (Southern Arm)		FLAT	✓	198	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	1076	100.000
D - Faversham Road (Northern Arm)		FLAT	✓	142	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
From	A - A20 Ashford Road (Eastern Arm)	0	54	662	55
	B - Faversham Road (Southern Arm)	100	0	40	58
	C - A20 Ashford Road (Western Arm)	988	39	0	49
	D - Faversham Road (Northern Arm)	42	50	50	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Faversham Road (Southern Arm)	C - A20 Ashford Road (Western Arm)	D - Faversham Road (Northern Arm)
A - A20 Ashford Road (Eastern Arm)	0	0	8	0
B - Faversham Road (Southern Arm)	1	0	0	2
C - A20 Ashford Road (Western Arm)	2	0	0	0
D - Faversham Road (Northern Arm)	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.39	26.43	0.6	D	86	86
B-AD	0.62	53.02	1.6	F	112	112
A-BCD	0.13	9.92	0.2	A	55	55
A-B					54	54
A-C					662	662
D-AB	0.48	41.91	0.9	E	78	78
D-B-C	0.56	71.12	1.2	F	64	64
C-ABD	0.08	8.03	0.1	A	39	39
C-D					49	49
C-A					988	988

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J4a-A20-Old Ashford (Western).j9

Path: N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\6.Technical\Models

Report generation date: 06/09/2019 11:17:09

- »1 Observed 2019, AM
- »1 Observed 2019, PM
- »2 Without Development 2024, AM
- »2 Without Development 2024, PM
- »3 With Development 2024, AM
- »3 With Development 2024, PM
- »4 Without Development 2031, AM
- »4 Without Development 2031, PM
- »5 With Development 2031, AM
- »5 With Development 2031, PM

File summary

File Description

Title	A20 Ashford Road/Old Ashford Road (Western)
Location	Lenham
Site number	4a
Date	26/07/2019
Version	
Status	Final
Identifier	
Client	Dean Lewis Estates
Jobnumber	P19013
Enumerator	GHClb.gaze
Description	Checked by D. Stoddart

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	06:45	08:15	15	✓
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓
D3	2 Without Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D5	3 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D7	4 Without Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓
D9	5 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

1 Observed 2019, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		1.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A20 Ashford Road (Eastern Arm)		Major
B	Old Ashford Road		Minor
C	A20 Ashford Road (Western Arm)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A20 Ashford Road (Western Arm)	6.65		✓	3.20	150.0	✓	13.00

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 - Old Ashford Road	One lane	3.50	163	116

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	621	0.110	0.278	0.175	0.397
1	B-C	732	0.109	0.276	-	-
1	C-B	733	0.276	0.276	-	-

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1059	100.000
B - Old Ashford Road		ONE HOUR	✓	88	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	460	100.000

Origin-Destination Data

Demand (PCU/hr)

	To
From	
A - A20 Ashford Road (Eastern Arm)	0
B - Old Ashford Road	71
C - A20 Ashford Road (Western Arm)	448

Vehicle Mix

Heavy Vehicle Percentages

	To
From	
A - A20 Ashford Road (Eastern Arm)	0
B - Old Ashford Road	3
C - A20 Ashford Road (Western Arm)	4

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.43	28.12	0.7	D	81	121
C-AB	0.03	9.05	0.0	A	11	17
C-A					411	617
A-B					0.92	1
AC					971	1456

1 Observed 2019, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		6.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	607	100.000
B - Old Ashford Road		ONE HOUR	✓	188	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	945	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)
A - A20 Ashford Road (Eastern Arm)		0	3	604
B - Old Ashford Road		174	0	14
C - A20 Ashford Road (Western Arm)		926	19	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)
A - A20 Ashford Road (Eastern Arm)		0	0	9
B - Old Ashford Road		0	0	0
C - A20 Ashford Road (Western Arm)		2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.80	63.19	3.4	F	173	259
C-AB	0.04	6.82	0.0	A	17	26
C-A					850	1275
A-B					3	4
A-C					554	831

2 Without Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		2.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2 Without Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1111	100.000
B - Old Ashford Road		ONE HOUR	✓	109	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	487	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1110	
B - Old Ashford Road	91	0	18	
C - A20 Ashford Road (Western Arm)	474	13	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	2	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.59	44.14	1.4	E	100	150
C-AB	0.04	9.45	0.0	A	12	18
C-A					435	652
A-B					0.92	1
A-C					1019	1528

2 Without Development 2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		13.87	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	638	100.000
B - Old Ashford Road		ONE HOUR	✓	205	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	992	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	635	
B - Old Ashford Road	190	0	15	
C - A20 Ashford Road (Western Arm)	972	20	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	9	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.94	123.51	7.3	F	188	282
C-AB	0.04	6.96	0.0	A	18	28
C-A					892	1338
A-B					3	4
A-C					583	874

3 With Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		5.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	3 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1111	100.000
B - Old Ashford Road		ONE HOUR	✓	147	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	508	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1110	
B - Old Ashford Road	96	0	51	
C - A20 Ashford Road (Western Arm)	474	34	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	2	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.75	62.84	2.6	F	135	202
C-AB	0.09	10.06	0.1	B	31	47
C-A					435	652
A-B					0.92	1
A-C					1019	1528

3 With Development 2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		30.36	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	638	100.000
B - Old Ashford Road		ONE HOUR	✓	235	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1036	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	635	
B - Old Ashford Road	194	0	41	
C - A20 Ashford Road (Western Arm)	972	64	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	9	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	1.10	244.52	18.1	F	216	323
C-AB	0.13	7.68	0.1	A	59	88
C-A					892	1338
A-B					3	4
A-C					583	874

4 Without Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		6.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	4 Without Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1162	100.000
B - Old Ashford Road		ONE HOUR	✓	131	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	576	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1161	
B - Old Ashford Road	94	0	37	
C - A20 Ashford Road (Western Arm)	553	23	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	2	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.80	90.10	3.3	F	120	180
C-AB	0.07	10.15	0.1	B	21	32
C-A					507	761
A-B					0.92	1
A-C					1065	1598

4 Without Development 2031, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		39.33	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	708	100.000
B - Old Ashford Road		ONE HOUR	✓	221	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1082	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	705	
B - Old Ashford Road	195	0	26	
C - A20 Ashford Road (Western Arm)	1044	38	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	8	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	1.20	356.55	25.2	F	203	304
C-AB	0.08	7.56	0.1	A	35	52
C-A					958	1437
A-B					3	4
A-C					647	970

5 With Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		15.19	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	5 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1162	100.000
B - Old Ashford Road		ONE HOUR	✓	169	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	597	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1161	
B - Old Ashford Road	99	0	70	
C - A20 Ashford Road (Western Arm)	553	44	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	2	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.98	170.51	8.6	F	155	233
C-AB	0.13	10.86	0.1	B	40	61
C-A					507	761
A-B					0.92	1
A-C					1065	1598

5 With Development 2031, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		69.95	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	708	100.000
B - Old Ashford Road		ONE HOUR	✓	251	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1126	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	705	
B - Old Ashford Road	199	0	52	
C - A20 Ashford Road (Western Arm)	1044	82	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	8	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	1.42	578.28	44.7	F	230	345
C-AB	0.17	8.42	0.2	A	75	113
C-A					958	1437
A-B					3	4
A-C					647	970

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J4a-A20-Old Ashford (Western) (FLAT).j9

Path: N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\6.Technical\Models

Report generation date: 06/09/2019 11:16:35

- »1 Observed 2019, AM
- »1 Observed 2019, PM
- »2 Without Development 2024, AM
- »2 Without Development 2024, PM
- »3 With Development 2024, AM
- »3 With Development 2024, PM
- »4 Without Development 2031, AM
- »4 Without Development 2031, PM
- »5 With Development 2031, AM
- »5 With Development 2031, PM

File summary

File Description

Title	A20 Ashford Road/Old Ashford Road (Western)
Location	Lenham
Site number	4a
Date	26/07/2019
Version	
Status	Final
Identifier	
Client	Dean Lewis Estates
Jobnumber	P19013
Enumerator	GHClb.gaze
Description	Checked by D. Stoddart

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

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)	Run automatically
D1	1 Observed 2019	AM	FLAT	07:00	08:00	60	15	✓
D2	1 Observed 2019	PM	FLAT	16:30	17:30	60	15	✓
D3	2 Without Development 2024	AM	FLAT	07:00	08:00	60	15	✓
D4	2 Without Development 2024	PM	FLAT	16:30	17:30	60	15	✓
D5	3 With Development 2024	AM	FLAT	07:00	08:00	60	15	✓
D6	3 With Development 2024	PM	FLAT	16:30	17:30	60	15	✓
D7	4 Without Development 2031	AM	FLAT	07:00	08:00	60	15	✓
D8	4 Without Development 2031	PM	FLAT	16:30	17:30	60	15	✓
D9	5 With Development 2031	AM	FLAT	07:00	08:00	60	15	✓
D10	5 With Development 2031	PM	FLAT	16:30	17:30	60	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

1 Observed 2019, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		1.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A20 Ashford Road (Eastern Arm)		Major
B	Old Ashford Road		Minor
C	A20 Ashford Road (Western Arm)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A20 Ashford Road (Western Arm)	6.65		✓	3.20	150.0	✓	13.00

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 - Old Ashford Road	One lane	3.50	163	116

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	621	0.110	0.278	0.175	0.397
1	B-C	732	0.109	0.276	-	-
1	C-B	733	0.276	0.276	-	-

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

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)	Run automatically
D1	1 Observed 2019	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1059	100.000
B - Old Ashford Road		FLAT	✓	88	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	460	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)
	A - A20 Ashford Road (Eastern Arm)	0	1	1058
	B - Old Ashford Road	71	0	17
	C - A20 Ashford Road (Western Arm)	448	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)
	A - A20 Ashford Road (Eastern Arm)	0	0	7
	B - Old Ashford Road	3	0	0
	C - A20 Ashford Road (Western Arm)	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.33	20.60	0.5	C	88	88
C-AB	0.03	8.40	0.0	A	12	12
C-A					448	448
A-B					1	1
A-C					1058	1058

1 Observed 2019, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		3.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
DZ	1 Observed 2019	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	607	100.000
B - Old Ashford Road		FLAT	✓	188	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	945	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	604	
B - Old Ashford Road	174	0	14	
C - A20 Ashford Road (Western Arm)	926	19	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	9	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.64	33.76	1.7	D	188	188
C-AB	0.03	6.59	0.0	A	19	19
C-A					926	926
A-B					3	3
A-C					604	604

2 Without Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		1.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D3	2 Without Development 2024	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1111	100.000
B - Old Ashford Road		FLAT	✓	109	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	487	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1110	
B - Old Ashford Road	91	0	18	
C - A20 Ashford Road (Western Arm)	474	13	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	2	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.45	27.26	0.8	D	109	109
C-AB	0.03	8.71	0.0	A	13	13
C-A					474	474
A-B					1	1
A-C					1110	1110

2 Without Development 2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		5.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D4	2 Without Development 2024	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	638	100.000
B - Old Ashford Road		FLAT	✓	205	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	992	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	635	
B - Old Ashford Road	190	0	15	
C - A20 Ashford Road (Western Arm)	972	20	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	9	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.74	49.37	2.7	E	205	205
C-AB	0.04	6.71	0.0	A	20	20
C-A					972	972
A-B					3	3
A-C					635	635

3 With Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		2.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D5	3 With Development 2024	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1111	100.000
B - Old Ashford Road		FLAT	✓	147	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	508	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)
	A - A20 Ashford Road (Eastern Arm)	0	1	1110
	B - Old Ashford Road	96	0	51
	C - A20 Ashford Road (Western Arm)	474	34	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)
	A - A20 Ashford Road (Eastern Arm)	0	0	6
	B - Old Ashford Road	2	0	0
	C - A20 Ashford Road (Western Arm)	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.56	32.09	1.3	D	147	147
C-AB	0.08	9.18	0.1	A	34	34
C-A					474	474
A-B					1	1
A-C					1110	1110

3 With Development 2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		10.40	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D6	3 With Development 2024	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	638	100.000
B - Old Ashford Road		FLAT	✓	235	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	1036	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	635	
B - Old Ashford Road	194	0	41	
C - A20 Ashford Road (Western Arm)	972	64	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	9	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.85	82.51	5.1	F	235	235
C-AB	0.11	7.30	0.1	A	64	64
C-A					972	972
A-B					3	3
A-C					635	635

4 Without Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		2.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D7	4 Without Development 2031	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1162	100.000
B - Old Ashford Road		FLAT	✓	131	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	576	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1161	
B - Old Ashford Road	94	0	37	
C - A20 Ashford Road (Western Arm)	553	23	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	2	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.58	38.16	1.4	E	131	131
C-AB	0.06	9.25	0.1	A	23	23
C-A					553	553
A-B					1	1
A-C					1161	1161

4 Without Development 2031, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		13.91	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D8	4 Without Development 2031	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	708	100.000
B - Old Ashford Road		FLAT	✓	221	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	1082	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	705	
B - Old Ashford Road	195	0	26	
C - A20 Ashford Road (Western Arm)	1044	38	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	8	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.91	125.32	7.2	F	221	221
C-AB	0.07	7.21	0.1	A	38	38
C-A					1044	1044
A-B					3	3
A-C					705	705

5 With Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		4.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D9	5 With Development 2031	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1162	100.000
B - Old Ashford Road		FLAT	✓	169	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	597	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1161	
B - Old Ashford Road	99	0	70	
C - A20 Ashford Road (Western Arm)	553	44	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	2	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.71	51.66	2.3	F	169	169
C-AB	0.11	9.78	0.1	A	44	44
C-A					553	553
A-B					1	1
A-C					1161	1161

5 With Development 2031, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		39.53	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D10	5 With Development 2031	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	708	100.000
B - Old Ashford Road		FLAT	✓	251	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	1126	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	705	
B - Old Ashford Road	199	0	52	
C - A20 Ashford Road (Western Arm)	1044	82	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	8	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	1.05	325.76	21.8	F	251	251
C-AB	0.15	7.90	0.2	A	82	82
C-A					1044	1044
A-B					3	3
A-C					705	705

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J4a-A20-Old Ashford (Western) (FLAT) Mit.j9

Path: N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\6.Technical\Models

Report generation date: 06/09/2019 11:19:08

- »1 Observed 2019, AM
- »1 Observed 2019, PM
- »2 Without Development 2024, AM
- »2 Without Development 2024, PM
- »3 With Development 2024, AM
- »3 With Development 2024, PM
- »4 Without Development 2031, AM
- »4 Without Development 2031, PM
- »5 With Development 2031, AM
- »5 With Development 2031, PM

File summary

File Description

Title	A20 Ashford Road/Old Ashford Road (Western)
Location	Lenham
Site number	4a
Date	26/07/2019
Version	
Status	Final
Identifier	
Client	Dean Lewis Estates
Jobnumber	P19013
Enumerator	GHClb.gaze
Description	Checked by D. Stoddart

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

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)	Run automatically
D1	1 Observed 2019	AM	FLAT	07:00	08:00	60	15	✓
D2	1 Observed 2019	PM	FLAT	16:30	17:30	60	15	✓
D3	2 Without Development 2024	AM	FLAT	07:00	08:00	60	15	✓
D4	2 Without Development 2024	PM	FLAT	16:30	17:30	60	15	✓
D5	3 With Development 2024	AM	FLAT	07:00	08:00	60	15	✓
D6	3 With Development 2024	PM	FLAT	16:30	17:30	60	15	✓
D7	4 Without Development 2031	AM	FLAT	07:00	08:00	60	15	✓
D8	4 Without Development 2031	PM	FLAT	16:30	17:30	60	15	✓
D9	5 With Development 2031	AM	FLAT	07:00	08:00	60	15	✓
D10	5 With Development 2031	PM	FLAT	16:30	17:30	60	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

1 Observed 2019, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		0.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A20 Ashford Road (Eastern Arm)		Major
B	Old Ashford Road		Minor
C	A20 Ashford Road (Western Arm)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A20 Ashford Road (Western Arm)	6.65		✓	3.20	150.0	✓	13.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Old Ashford Road	One lane plus flare	10.00	8.15	6.85	6.70	6.34		2.00	163	116

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	710	0.126	0.317	0.200	0.453
1	B-C	670	0.100	0.252	-	-
1	C-B	733	0.276	0.276	-	-

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

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)	Run automatically
D1	1 Observed 2019	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1059	100.000
B - Old Ashford Road		FLAT	✓	88	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	460	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)
From				
	A - A20 Ashford Road (Eastern Arm)	0	1	1058
	B - Old Ashford Road	71	0	17
	C - A20 Ashford Road (Western Arm)	448	12	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)
From				
	A - A20 Ashford Road (Eastern Arm)	0	0	7
	B - Old Ashford Road	3	0	0
	C - A20 Ashford Road (Western Arm)	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	10.05	0.0	B	17	17
B-A	0.25	17.84	0.3	C	71	71
C-AB	0.03	8.40	0.0	A	12	12
C-A					448	448
A-B					1	1
A-C					1058	1058

1 Observed 2019, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		2.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
DZ	1 Observed 2019	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	607	100.000
B - Old Ashford Road		FLAT	✓	188	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	945	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	604	
B - Old Ashford Road	174	0	14	
C - A20 Ashford Road (Western Arm)	926	19	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	9	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	9.16	0.0	A	14	14
B-A	0.54	24.00	1.1	C	174	174
C-AB	0.03	6.59	0.0	A	19	19
C-A					926	926
A-B					3	3
A-C					604	604

2 Without Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		1.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D3	2 Without Development 2024	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1111	100.000
B - Old Ashford Road		FLAT	✓	109	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	487	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1110	
B - Old Ashford Road	91	0	18	
C - A20 Ashford Road (Western Arm)	474	13	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	2	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	10.88	0.1	B	18	18
B-A	0.35	22.24	0.6	C	91	91
C-AB	0.03	8.71	0.0	A	13	13
C-A					474	474
A-B					1	1
A-C					1110	1110

2 Without Development 2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		3.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D4	2 Without Development 2024	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	638	100.000
B - Old Ashford Road		FLAT	✓	205	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	992	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	635	
B - Old Ashford Road	190	0	15	
C - A20 Ashford Road (Western Arm)	972	20	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	9	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.04	10.52	0.0	B	15	15
B-A	0.62	31.39	1.6	D	190	190
C-AB	0.04	6.71	0.0	A	20	20
C-A					972	972
A-B					3	3
A-C					635	635

3 With Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		1.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D5	3 With Development 2024	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1111	100.000
B - Old Ashford Road		FLAT	✓	147	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	508	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1110	
B - Old Ashford Road	96	0	51	
C - A20 Ashford Road (Western Arm)	474	34	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	2	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.14	11.81	0.2	B	51	51
B-A	0.40	25.76	0.7	D	96	96
C-AB	0.08	9.18	0.1	A	34	34
C-A					474	474
A-B					1	1
A-C					1110	1110

3 With Development 2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		4.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D6	3 With Development 2024	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	638	100.000
B - Old Ashford Road		FLAT	✓	235	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	1036	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	635	
B - Old Ashford Road	194	0	41	
C - A20 Ashford Road (Western Arm)	972	64	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	9	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.13	12.65	0.1	B	41	41
B-A	0.68	39.71	2.1	E	194	194
C-AB	0.11	7.30	0.1	A	64	64
C-A					972	972
A-B					3	3
A-C					635	635

4 Without Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		1.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D7	4 Without Development 2031	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1162	100.000
B - Old Ashford Road		FLAT	✓	131	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	576	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1161	
B - Old Ashford Road	94	0	37	
C - A20 Ashford Road (Western Arm)	553	23	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	2	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.11	12.34	0.1	B	37	37
B-A	0.43	29.77	0.8	D	94	94
C-AB	0.06	9.25	0.1	A	23	23
C-A					553	553
A-B					1	1
A-C					1161	1161

4 Without Development 2031, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		5.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D8	4 Without Development 2031	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	708	100.000
B - Old Ashford Road		FLAT	✓	221	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	1082	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	705	
B - Old Ashford Road	195	0	26	
C - A20 Ashford Road (Western Arm)	1044	38	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	8	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.10	16.08	0.1	C	26	26
B-A	0.75	54.82	2.9	F	195	195
C-AB	0.07	7.21	0.1	A	38	38
C-A					1044	1044
A-B					3	3
A-C					705	705

5 With Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		2.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D9	5 With Development 2031	AM	FLAT	07:00	08:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	1162	100.000
B - Old Ashford Road		FLAT	✓	169	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	597	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	1	1161	
B - Old Ashford Road	99	0	70	
C - A20 Ashford Road (Western Arm)	553	44	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	2	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.21	13.70	0.3	B	70	70
B-A	0.50	37.15	1.0	E	99	99
C-AB	0.11	9.78	0.1	A	44	44
C-A					553	553
A-B					1	1
A-C					1161	1161

5 With Development 2031, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Western)	T-Junction	Two-way		9.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

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)	Run automatically
D10	5 With Development 2031	PM	FLAT	16:30	17:30	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		FLAT	✓	708	100.000
B - Old Ashford Road		FLAT	✓	251	100.000
C - A20 Ashford Road (Western Arm)		FLAT	✓	1126	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	3	705	
B - Old Ashford Road	199	0	52	
C - A20 Ashford Road (Western Arm)	1044	82	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	8	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.31	31.75	0.4	D	52	52
B-A	0.83	84.29	4.4	F	199	199
C-AB	0.15	7.90	0.2	A	82	82
C-A					1044	1044
A-B					3	3
A-C					705	705

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J4b-A20-Old Ashford (Eastern).j9

Path: N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\6.Technical\Models

Report generation date: 06/09/2019 11:17:44

- »1 Observed 2019, AM
- »1 Observed 2019, PM
- »2 Without Development 2024, AM
- »2 Without Development 2024, PM
- »3 With Development 2024, AM
- »3 With Development 2024, PM
- »4 Without Development 2031, AM
- »4 Without Development 2031, PM
- »5 With Development 2031, AM
- »5 With Development 2031, PM

File summary

File Description

Title	A20 Ashford Road/Old Ashford Road (Eastern)
Location	Lenham
Site number	4b
Date	26/07/2019
Version	
Status	Final
Identifier	
Client	Dean Lewis Estates
Jobnumber	P19013
Enumerator	GHClb.gaze
Description	Checked by D. Stoddart

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	06:45	08:15	15	✓
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓
D3	2 Without Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D5	3 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D7	4 Without Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓
D9	5 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

1 Observed 2019, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Eastern)	T-Junction	Two-way		0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A20 Ashford Road (Eastern Arm)		Major
B	Old Ashford Road		Minor
C	A20 Ashford Road (Western Arm)		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 - A20 Ashford Road (Western Arm)	6.00			190.0	✓	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 - Old Ashford Road	One lane	3.25	54	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	541	0.098	0.249	0.157	0.355
1	B-C	681	0.104	0.264	-	-
1	C-B	684	0.265	0.265	-	-

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1207	100.000
B - Old Ashford Road		ONE HOUR	✓	16	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	519	100.000

Origin-Destination Data

Demand (PCU/hr)

	To
From	
A - A20 Ashford Road (Eastern Arm)	0
B - Old Ashford Road	148
C - A20 Ashford Road (Western Arm)	519

Vehicle Mix

Heavy Vehicle Percentages

	To
From	
A - A20 Ashford Road (Eastern Arm)	0
B - Old Ashford Road	0
C - A20 Ashford Road (Western Arm)	4

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.12	28.28	0.1	D	15	22
C-AB	0.00	0.00	0.0	A	0	0
C-A					476	714
A-B					136	204
AC					972	1458

1 Observed 2019, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Eastern)	T-Junction	Two-way		0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	739	100.000
B - Old Ashford Road		ONE HOUR	✓	9	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1100	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)
A - A20 Ashford Road (Eastern Arm)		0	132	607
B - Old Ashford Road		9	0	0
C - A20 Ashford Road (Western Arm)		1100	0	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)
A - A20 Ashford Road (Eastern Arm)		0	0	9
B - Old Ashford Road		0	0	0
C - A20 Ashford Road (Western Arm)		2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	22.44	0.1	C	8	12
C-AB	0.00	0.00	0.0	A	0	0
C-A					1009	1514
A-B					121	182
A-C					557	835

2 Without Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Eastern)	T-Junction	Two-way		0.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2 Without Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1276	100.000
B - Old Ashford Road		ONE HOUR	✓	24	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	548	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	165	1111	
B - Old Ashford Road	24	0	0	
C - A20 Ashford Road (Western Arm)	548	0	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.21	36.94	0.3	E	22	33
C-AB	0.00	0.00	0.0	A	0	0
C-A					503	754
A-B					151	227
A-C					1019	1529

2 Without Development 2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Eastern)	T-Junction	Two-way		0.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	797	100.000
B - Old Ashford Road		ONE HOUR	✓	11	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1153	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	159	638	
B - Old Ashford Road	11	0	0	
C - A20 Ashford Road (Western Arm)	1153	0	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	9	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	26.15	0.1	D	10	15
C-AB	0.00	0.00	0.0	A	0	0
C-A					1058	1587
A-B					146	219
A-C					585	878

3 With Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Eastern)	T-Junction	Two-way		0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	3 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1280	100.000
B - Old Ashford Road		ONE HOUR	✓	25	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	553	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	169	1111	
B - Old Ashford Road	25	0	0	
C - A20 Ashford Road (Western Arm)	553	0	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.22	37.86	0.3	E	23	34
C-AB	0.00	0.00	0.0	A	0	0
C-A					507	761
A-B					155	233
A-C					1019	1529

3 With Development 2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Eastern)	T-Junction	Two-way		0.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	805	100.000
B - Old Ashford Road		ONE HOUR	✓	12	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1157	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	167	638	
B - Old Ashford Road	12	0	0	
C - A20 Ashford Road (Western Arm)	1157	0	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	9	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	1	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	26.67	0.1	D	11	17
C-AB	0.00	0.00	0.0	A	0	0
C-A					1062	1593
A-B					153	230
A-C					585	878

4 Without Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Eastern)	T-Junction	Two-way		0.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	4 Without Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1330	100.000
B - Old Ashford Road		ONE HOUR	✓	24	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	630	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	168	1162	
B - Old Ashford Road	24	0	0	
C - A20 Ashford Road (Western Arm)	630	0	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.28	52.08	0.4	F	22	33
C-AB	0.00	0.00	0.0	A	0	0
C-A					578	867
A-B					154	231
A-C					1066	1599

4 Without Development 2031, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Eastern)	T-Junction	Two-way		0.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	872	100.000
B - Old Ashford Road		ONE HOUR	✓	12	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1230	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	164	708	
B - Old Ashford Road	12	0	0	
C - A20 Ashford Road (Western Arm)	1230	0	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	8	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	1	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	34.75	0.1	D	11	17
C-AB	0.00	0.00	0.0	A	0	0
C-A					1129	1693
A-B					150	226
A-C					650	975

5 With Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Eastern)	T-Junction	Two-way		0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	5 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	1334	100.000
B - Old Ashford Road		ONE HOUR	✓	25	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	172	1162	
B - Old Ashford Road	25	0	0	
C - A20 Ashford Road (Western Arm)	635	0	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	6	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	4	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.29	53.93	0.4	F	23	34
C-AB	0.00	0.00	0.0	A	0	0
C-A					583	874
A-B					158	237
A-C					1066	1599

5 With Development 2031, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A20 Ashford Road/Old Ashford Road (Eastern)	T-Junction	Two-way		0.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A20 Ashford Road (Eastern Arm)		ONE HOUR	✓	880	100.000
B - Old Ashford Road		ONE HOUR	✓	13	100.000
C - A20 Ashford Road (Western Arm)		ONE HOUR	✓	1234	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	172	708	
B - Old Ashford Road	13	0	0	
C - A20 Ashford Road (Western Arm)	1234	0	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A20 Ashford Road (Eastern Arm)	B - Old Ashford Road	C - A20 Ashford Road (Western Arm)	
A - A20 Ashford Road (Eastern Arm)	0	0	8	
B - Old Ashford Road	0	0	0	
C - A20 Ashford Road (Western Arm)	1	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.12	35.67	0.1	E	12	18
C-AB	0.00	0.00	0.0	A	0	0
C-A					1132	1699
A-B					158	237
A-C					650	975

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J4c-Old Ashford-Old Ashford.j9

Path: N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\6.Technical\Models

Report generation date: 06/09/2019 11:18:30

- »1 Observed 2019, AM
- »1 Observed 2019, PM
- »2 Without Development 2024, AM
- »2 Without Development 2024, PM
- »3 With Development 2024, AM
- »3 With Development 2024, PM
- »4 Without Development 2031, AM
- »4 Without Development 2031, PM
- »5 With Development 2031, AM
- »5 With Development 2031, PM

File summary

File Description

Title	Old Ashford Road/Old Ashford Road
Location	Lenham
Site number	4c
Date	26/07/2019
Version	
Status	Final
Identifier	
Client	Dean Lewis Estates
Jobnumber	P19013
Enumerator	GHClb.gaze
Description	Checked by D. Stoddart

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	06:45	08:15	15	✓
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓
D3	2 Without Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D5	3 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D7	4 Without Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓
D9	5 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

1 Observed 2019, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Old Ashford Road/Old Ashford Road	T-Junction	Two-way		4.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Old Ashford Road (Northern Arm)		Major
B	Old Ashford Road (Eastern Arm)		Minor
C	Old Ashford Road (Western Arm)		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 - Old Ashford Road (Western Arm)	6.50			30.0	✓	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 - Old Ashford Road (Eastern Arm)	One lane	3.25	155	28

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	555	0.099	0.250	0.157	0.357
1	B-C	658	0.099	0.249	-	-
1	C-B	591	0.224	0.224	-	-

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 Observed 2019	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Northern Arm)		ONE HOUR	✓	13	100.000
B - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	148	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	104	100.000

Origin-Destination Data

Demand (PCU/hr)

	To
From	
A - Old Ashford Road (Northern Arm)	0
B - Old Ashford Road (Eastern Arm)	0
C - Old Ashford Road (Western Arm)	88

Vehicle Mix

Heavy Vehicle Percentages

	To
From	
A - Old Ashford Road (Northern Arm)	0
B - Old Ashford Road (Eastern Arm)	0
C - Old Ashford Road (Western Arm)	2

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.25	7.33	0.3	A	136	204
C-AB	0.03	5.82	0.0	A	17	25
C-A					79	118
A-B					0	0
AC					12	18

1 Observed 2019, 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	Old Ashford Road/Old Ashford Road	T-Junction	Two-way		2.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	1 Observed 2019	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Northern Arm)		ONE HOUR	✓	22	100.000
B - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	132	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	197	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
A - Old Ashford Road (Northern Arm)		0	0	22
B - Old Ashford Road (Eastern Arm)		0	0	132
C - Old Ashford Road (Western Arm)		188	9	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
A - Old Ashford Road (Northern Arm)		0	0	0
B - Old Ashford Road (Eastern Arm)		0	0	0
C - Old Ashford Road (Western Arm)		0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.22	7.11	0.3	A	121	182
C-AB	0.02	5.34	0.0	A	11	17
C-A					170	255
A-B					0	0
A-C					20	30

2 Without Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Old Ashford Road/Old Ashford Road	T-Junction	Two-way		4.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2 Without Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Northern Arm)		ONE HOUR	✓	14	100.000
B - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	165	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	133	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
A - Old Ashford Road (Northern Arm)		0	0	14
B - Old Ashford Road (Eastern Arm)		0	0	165
C - Old Ashford Road (Western Arm)		109	24	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
A - Old Ashford Road (Northern Arm)		0	0	0
B - Old Ashford Road (Eastern Arm)		0	0	0
C - Old Ashford Road (Western Arm)		2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.28	7.62	0.4	A	151	227
C-AB	0.05	5.79	0.1	A	26	39
C-A					96	144
A-B					0	0
A-C					13	19

2 Without Development 2024, 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	Old Ashford Road/Old Ashford Road	T-Junction	Two-way		3.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2 Without Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Northern Arm)		ONE HOUR	✓	23	100.000
B - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	159	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	216	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
	A - Old Ashford Road (Northern Arm)	0	0	23
	B - Old Ashford Road (Eastern Arm)	0	0	159
	C - Old Ashford Road (Western Arm)	205	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
	A - Old Ashford Road (Northern Arm)	0	0	0
	B - Old Ashford Road (Eastern Arm)	0	0	0
	C - Old Ashford Road (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.27	7.56	0.4	A	146	219
C-AB	0.02	5.29	0.0	A	14	21
C-A					184	277
A-B					0	0
A-C					21	32

3 With Development 2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Old Ashford Road/Old Ashford Road	T-Junction	Two-way		3.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	3 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Northern Arm)		ONE HOUR	✓	35	100.000
B - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	169	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	172	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
A - Old Ashford Road (Northern Arm)		0	0	35
B - Old Ashford Road (Eastern Arm)		0	0	169
C - Old Ashford Road (Western Arm)		147	25	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
A - Old Ashford Road (Northern Arm)		0	0	0
B - Old Ashford Road (Eastern Arm)		0	0	0
C - Old Ashford Road (Western Arm)		1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.29	7.79	0.4	A	155	233
C-AB	0.05	5.66	0.1	A	29	43
C-A					129	193
A-B					0	0
A-C					32	48

3 With Development 2024, 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	Old Ashford Road/Old Ashford Road	T-Junction	Two-way		2.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	3 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Northern Arm)		ONE HOUR	✓	67	100.000
B - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	167	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	247	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Northern Arm)	0	0	67
	B - Old Ashford Road (Eastern Arm)	0	0	167
	C - Old Ashford Road (Western Arm)	235	12	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Northern Arm)	0	0	0
	B - Old Ashford Road (Eastern Arm)	0	0	0
	C - Old Ashford Road (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.29	7.90	0.4	A	153	230
C-AB	0.03	5.23	0.0	A	16	24
C-A					211	316
A-B					0	0
A-C					61	92

4 Without Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Old Ashford Road/Old Ashford Road	T-Junction	Two-way		4.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	4 Without Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Northern Arm)		ONE HOUR	✓	24	100.000
B - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	168	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	155	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
	A - Old Ashford Road (Northern Arm)	0	0	24
	B - Old Ashford Road (Eastern Arm)	0	0	168
	C - Old Ashford Road (Western Arm)	131	24	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
	A - Old Ashford Road (Northern Arm)	0	0	0
	B - Old Ashford Road (Eastern Arm)	0	0	0
	C - Old Ashford Road (Western Arm)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.28	7.72	0.4	A	154	231
C-AB	0.05	5.71	0.1	A	27	41
C-A					115	173
A-B					0	0
A-C					22	33

4 Without Development 2031, 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	Old Ashford Road/Old Ashford Road	T-Junction	Two-way		3.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	4 Without Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Northern Arm)		ONE HOUR	✓	41	100.000
B - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	164	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	233	100.000

Origin-Destination Data

Demand (PCU/hr)

	To		
	A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
From			
A - Old Ashford Road (Northern Arm)	0	0	41
B - Old Ashford Road (Eastern Arm)	0	0	164
C - Old Ashford Road (Western Arm)	221	12	0

Vehicle Mix

Heavy Vehicle Percentages

	To		
	A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
From			
A - Old Ashford Road (Northern Arm)	0	0	0
B - Old Ashford Road (Eastern Arm)	0	0	0
C - Old Ashford Road (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.28	7.73	0.4	A	150	226
C-AB	0.03	5.26	0.0	A	15	23
C-A					198	297
A-B					0	0
A-C					38	56

5 With Development 2031, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Old Ashford Road/Old Ashford Road	T-Junction	Two-way		3.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	5 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Northern Arm)		ONE HOUR	✓	45	100.000
B - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	172	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	194	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
	A - Old Ashford Road (Northern Arm)	0	0	45
	B - Old Ashford Road (Eastern Arm)	0	0	172
	C - Old Ashford Road (Western Arm)	169	25	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
	A - Old Ashford Road (Northern Arm)	0	0	0
	B - Old Ashford Road (Eastern Arm)	0	0	0
	C - Old Ashford Road (Western Arm)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.29	7.90	0.4	A	158	237
C-AB	0.05	5.59	0.1	A	30	45
C-A					148	222
A-B					0	0
A-C					41	62

5 With Development 2031, 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	Old Ashford Road/Old Ashford Road	T-Junction	Two-way		2.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	5 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Northern Arm)		ONE HOUR	✓	85	100.000
B - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	172	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	264	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Northern Arm)	0	0	85
	B - Old Ashford Road (Eastern Arm)	0	0	172
	C - Old Ashford Road (Western Arm)	251	13	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Old Ashford Road (Northern Arm)	B - Old Ashford Road (Eastern Arm)	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Northern Arm)	0	0	0
	B - Old Ashford Road (Eastern Arm)	0	0	0
	C - Old Ashford Road (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.30	8.09	0.4	A	158	237
C-AB	0.03	5.20	0.0	A	18	26
C-A					225	337
A-B					0	0
A-C					78	117

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J5-Resi-Old Ashford.j9
Path: N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\6.Technical\Models
Report generation date: 06/09/2019 11:16:01

- »1 With Development 2024, AM
- »1 With Development 2024, PM
- »2 With Development 2031, AM
- »2 With Development 2031, PM

File summary

File Description

Title	Old Ashford Road/Resi Access
Location	Lenham
Site number	5
Date	26/07/2019
Version	
Status	Final
Identifier	
Client	Dean Lewis Estates
Jobnumber	P19013
Enumerator	GHClb.gaze
Description	Checked by D. Stoddart

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D2	1 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D3	2 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D4	2 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

1 With Development 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Old Ashford Road (Western Arm) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Old Ashford Road/Resi Access	T-Junction	Two-way		1.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Old Ashford Road (Eastern Arm)		Major
B	Resi Access		Minor
C	Old Ashford Road (Western Arm)		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 - Old Ashford Road (Western Arm)	5.50			160.0	✓	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 - Resi Access	One lane	3.38	20	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	512	0.095	0.241	0.152	0.344
1	B-C	660	0.103	0.261	-	-
1	C-B	667	0.264	0.264	-	-

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	213	100.000
B - Resi Access		ONE HOUR	✓	43	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	143	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Old Ashford Road (Eastern Arm)	B - Resi Access	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Eastern Arm)	0	25	188
	B - Resi Access	39	0	4
	C - Old Ashford Road (Western Arm)	140	3	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Old Ashford Road (Eastern Arm)	B - Resi Access	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Eastern Arm)	0	0	0
	B - Resi Access	0	0	0
	C - Old Ashford Road (Western Arm)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	9.01	0.1	A	39	59
C-AB	0.01	5.23	0.0	A	3	5
C-A					128	192
A-B					23	34
A-C					173	259

1 With Development 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Old Ashford Road (Western Arm) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
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	Old Ashford Road/Resi Access	T-Junction	Two-way		0.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	1 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	256	100.000
B - Resi Access		ONE HOUR	✓	34	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	232	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Old Ashford Road (Eastern Arm)	B - Resi Access	C - Old Ashford Road (Western Arm)
	A - Old Ashford Road (Eastern Arm)	0	52	204
	B - Resi Access	31	0	3
	C - Old Ashford Road (Western Arm)	227	5	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Old Ashford Road (Eastern Arm)	B - Resi Access	C - Old Ashford Road (Western Arm)
	A - Old Ashford Road (Eastern Arm)	0	0	0
	B - Resi Access	0	0	0
	C - Old Ashford Road (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	9.30	0.1	A	31	47
C-AB	0.01	4.98	0.0	A	6	10
C-A					206	310
A-B					48	72
A-C					187	281

2 With Development 2031, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Old Ashford Road (Western Arm) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Old Ashford Road/Resi Access	T-Junction	Two-way		0.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	226	100.000
B - Resi Access		ONE HOUR	✓	43	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	165	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Old Ashford Road (Eastern Arm)	B - Resi Access	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Eastern Arm)	0	25	201
	B - Resi Access	39	0	4
	C - Old Ashford Road (Western Arm)	162	3	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Old Ashford Road (Eastern Arm)	B - Resi Access	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Eastern Arm)	0	0	0
	B - Resi Access	0	0	0
	C - Old Ashford Road (Western Arm)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	9.17	0.1	A	39	59
C-AB	0.01	5.16	0.0	A	4	5
C-A					148	222
A-B					23	34
A-C					184	277

2 With Development 2031, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Old Ashford Road (Western Arm) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
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	Old Ashford Road/Resi Access	T-Junction	Two-way		0.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	279	100.000
B - Resi Access		ONE HOUR	✓	34	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	249	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Old Ashford Road (Eastern Arm)	B - Resi Access	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Eastern Arm)	0	52	227
	B - Resi Access	31	0	3
	C - Old Ashford Road (Western Arm)	244	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Old Ashford Road (Eastern Arm)	B - Resi Access	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Eastern Arm)	0	0	0
	B - Resi Access	0	0	0
	C - Old Ashford Road (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	9.52	0.1	A	31	47
C-AB	0.01	4.95	0.0	A	7	10
C-A					222	333
A-B					48	72
A-C					208	312

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.0.6896 © Copyright TRL Limited, 2018
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: J6-Sports-Old Ashford.j9

Path: N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\6.Technical\Models

Report generation date: 06/09/2019 11:15:28

- »1 With Development 2024, AM
- »1 With Development 2024, PM
- »2 With Development 2031, AM
- »2 With Development 2031, PM

File summary

File Description

Title	Old Ashford Road/Sports Access
Location	Lenham
Site number	6
Date	26/07/2019
Version	
Status	Final
Identifier	
Client	Dean Lewis Estates
Jobnumber	P19013
Enumerator	GHClb.gaze
Description	Checked by D. Stoddart

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓
D2	1 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓
D3	2 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓
D4	2 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

1 With Development 2024, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Old Ashford Road (Western Arm) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Old Ashford Road/Sports Access	T-Junction	Two-way		1.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Old Ashford Road (Eastern Arm)		Major
B	Sports Access		Minor
C	Old Ashford Road (Western Arm)		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 - Old Ashford Road (Western Arm)	5.50			250.0	✓	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 - Sports Access	One lane	2.75	20	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	482	0.090	0.227	0.143	0.324
1	B-C	621	0.097	0.246	-	-
1	C-B	719	0.285	0.285	-	-

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	1 With Development 2024	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	207	100.000
B - Sports Access		ONE HOUR	✓	43	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	138	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Old Ashford Road (Eastern Arm)	B - Sports Access	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Eastern Arm)	0	25	182
	B - Sports Access	39	0	4
	C - Old Ashford Road (Western Arm)	135	3	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Old Ashford Road (Eastern Arm)	B - Sports Access	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Eastern Arm)	0	0	0
	B - Sports Access	0	0	0
	C - Old Ashford Road (Western Arm)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	9.60	0.1	A	39	59
C-AB	0.01	4.91	0.0	A	3	5
C-A					123	185
A-B					23	34
A-C					167	251

1 With Development 2024, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Old Ashford Road (Western Arm) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
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	Old Ashford Road/Sports Access	T-Junction	Two-way		0.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	1 With Development 2024	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	236	100.000
B - Sports Access		ONE HOUR	✓	34	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	224	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Old Ashford Road (Eastern Arm)	B - Sports Access	C - Old Ashford Road (Western Arm)
	A - Old Ashford Road (Eastern Arm)	0	52	184
	B - Sports Access	31	0	3
	C - Old Ashford Road (Western Arm)	219	5	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Old Ashford Road (Eastern Arm)	B - Sports Access	C - Old Ashford Road (Western Arm)
	A - Old Ashford Road (Eastern Arm)	0	0	0
	B - Sports Access	0	0	0
	C - Old Ashford Road (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	9.79	0.1	A	31	47
C-AB	0.01	4.69	0.0	A	6	9
C-A					199	299
A-B					48	72
A-C					169	253

2 With Development 2031, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Old Ashford Road (Western Arm) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Old Ashford Road/Sports Access	T-Junction	Two-way		1.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2 With Development 2031	AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	220	100.000
B - Sports Access		ONE HOUR	✓	43	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	160	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
	A - Old Ashford Road (Eastern Arm)	B - Sports Access	C - Old Ashford Road (Western Arm)	
A - Old Ashford Road (Eastern Arm)	0	25	195	
B - Sports Access	39	0	4	
C - Old Ashford Road (Western Arm)	157	3	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - Old Ashford Road (Eastern Arm)	B - Sports Access	C - Old Ashford Road (Western Arm)	
A - Old Ashford Road (Eastern Arm)	0	0	0	
B - Sports Access	0	0	0	
C - Old Ashford Road (Western Arm)	1	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.11	9.77	0.1	A	39	59
C-AB	0.01	4.86	0.0	A	3	5
C-A					143	215
A-B					23	34
A-C					179	268

2 With Development 2031, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Old Ashford Road (Western Arm) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
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	Old Ashford Road/Sports Access	T-Junction	Two-way		0.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2 With Development 2031	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Old Ashford Road (Eastern Arm)		ONE HOUR	✓	259	100.000
B - Sports Access		ONE HOUR	✓	34	100.000
C - Old Ashford Road (Western Arm)		ONE HOUR	✓	241	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Old Ashford Road (Eastern Arm)	B - Sports Access	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Eastern Arm)	0	52	207
	B - Sports Access	31	0	3
	C - Old Ashford Road (Western Arm)	236	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Old Ashford Road (Eastern Arm)	B - Sports Access	C - Old Ashford Road (Western Arm)
From	A - Old Ashford Road (Eastern Arm)	0	0	0
	B - Sports Access	0	0	0
	C - Old Ashford Road (Western Arm)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	10.02	0.1	B	31	47
C-AB	0.01	4.67	0.0	A	6	10
C-A					215	322
A-B					48	72
A-C					190	285