

Client:
Richborough

Project:
**Land South of Longfield Road
Meopham**

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T25526
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Transport Assessment

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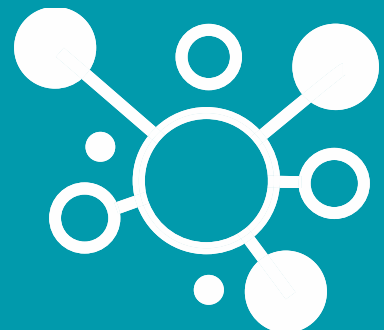


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1.0 Introduction

Background

- 1.1 Hub Transport Planning Ltd has been commissioned by Richborough to provide transport advice for a proposed residential development on land south of Longfield Road, Meopham, Kent.
- 1.2 The proposed development is for up to 120 dwellings and has been submitted as part of an outline planning application with all matters reserved except for details of access to the site. Approval is sought for the principal means of vehicular access from Longfield Road, and all other matters are reserved. The site location is shown on **Figure 1.1**.
- 1.3 An interim Transport Assessment (TA) was submitted to support the planning application whilst discussions continued with Kent County Council (KCC) as the Local Highway Authority (LHA) and their consultant progressed with the agreed strategic modelling work. This TA includes the local junction modelling based on the traffic data from the Gravesham Transport Model (GTM) and the geographic scope agreed with KCC for junction assessments.
- 1.4 The TA also addresses other comments received on the interim TA that were not related to the modelling work.

Structure and Purpose of the Report

- 1.5 This TA and accompanying Travel Plan (TP) sets out the predicted traffic and transport impacts of the proposed development for various forecast scenarios and where appropriate includes proposed mitigation measures.
- 1.6 The accompanying TP sets out a series of measures intended to encourage and promote the use of active and sustainable travel measures early in the occupation of the development.
- 1.7 Following this introduction, the report is set out as follows:
 - Section 2.0 – Planning Context;
 - Section 3.0 – Planning Policy and Guidance;
 - Section 4.0 – Background Information;
 - Section 5.0 – Sustainable Travel;
 - Section 6.0 – Development Proposals;
 - Section 7.0 – Traffic Generation, Distribution and Assignment;
 - Section 9.0 – Summary and Conclusion.

Limitations of the Report

- 1.8 This report has been undertaken at the request of Richborough, thus should not be entrusted to any third party without written permission from Hub Transport Planning Ltd. However, should any information contained within this report be used by any unauthorised third party, it is done so entirely at their own risk and shall not be the responsibility of Hub Transport Planning Ltd.

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- 1.9 This report has been compiled using data from several external sources (such as TRICS and public transport information); these sources are considered trustworthy and therefore the data provided is considered accurate and relevant at the time of preparing this report.

2.0 Planning Context

Background

- 2.1 At the time of writing, Richborough are also preparing a planning application for a proposed residential development of up to 350 dwellings on land east of Wrotham Road (Planning Ref: 20250992), to the east of the proposed development, also supported by Hub.
- 2.2 Whilst both proposals are being progressed as separate planning applications, at the request of the LHA, this TA considers the potential cumulative impacts of the land east of Wrotham Road proposals as a sensitivity assessment, recognising that the land east of Wrotham Road has no planning status.
- 2.3 On that basis, both planning applications will consider future scenarios where the other development comes forward (subject to planning permission), on a similar timescale and each will consider the other as a committed development as part of a sensitivity assessment.

Pre-Application Engagement

- 2.4 Hub produced a Transport Assessment Scoping Report (TASR) for KCC in May 2025, outlining the principles for the proposed development and the proposed methodology for assessment.
- 2.5 KCC provided a response to the TASR on 17/06/2025 (Document Ref: PAP/2025/24). The key comments are summarised below with the full response included at **Appendix A**.
 - Unknown whether Gravesham Borough Council (GBC) has adopted the new KCC parking standards (Jan 2025). They currently use the standards in SPG4.
 - Cycle facilities should be provided in accordance with LTN 1/20 and any bus priority measures are in line with LTN 1/24. Any departure from these standards should be justified.
 - Consideration should be given to whether people are likely to drive to Ebbsfleet station for the highspeed line to St Pancras of southeast Kent.
 - Confirm bus journey times to key local facilities and whether they serve Meopham and Ebbsfleet railway stations.
 - Explore potential to improve bus service provision, and ideally a public transport strategy should be formed with other emerging sites within the area to ensure the site does not prohibit future development.
 - Provide information on major employment sites.
 - Provide a Walking and Cycling Audit of the routes to/from key local facilities. Any improvements to existing routes should be provided on a scaled plan so that they can be condition to any planning permission granted.
 - Requested that the access is moved 10m to the west from dwelling number 32 where vehicles were observed to park on the concrete verge.
 - Consideration should be given to a proposed crossing point prior to the existing zebra crossing.
 - Review of visibility splays in line with DMRB given its location in the national speed limit zone.
 - Proposals to be accompanied by a Stage 1 Road Safety Audit report and designers' response.

- Further consideration needs to be given to on-site parking proposals for Camer Parade/local schools to discourage further driving.
- Trip distribution and modelling should be undertaken in line with the GTM.
- Whilst the application is outline, the principles of the site in regard to parking should be set out in the TA.

2.6 A pre-application meeting was undertaken with KCC on 26/06/2025. Key supplemental points to those raised in the initial pre-application response are summarised below, with the agreed minutes from the meeting also provided at **Appendix A**.

- Proposals should be based on a 'vision-led' approach as opposed to a 'predict and provide' approach in accordance with the latest National Planning Policy Framework.
- Make reference to both the SPG4 parking standards, and new KCC standards.
- Emphasised the importance of engaging with applicants/consultants from forthcoming local developments to create an aligned approach to off-site mitigation works and contributions.

Interim Transport Assessment

2.7 An interim TA was submitted to KCC in September 2025 whilst strategic modelling work was being agreed and carried out by KCC's consultant, Jacobs.

2.8 Comments were received from KCC on the interim TA on 03/12/2025 and this response is included at **Appendix B**. These are summarised below other than comments relating to traffic modelling work given that is superseded anyway by this updated TA.

- Sustainability: Limited public transport provision, lack of safe and direct walking and cycling routes, and insufficient infrastructure to support modal shift away from private car use.
- Access and Safety: Existing speeds exceed limits; proposals for speed reduction and emergency access are incomplete. Off-site improvements to Longfield Road and the A227 are required.
- Public Transport: Bus services are infrequent and lack peak-time commuting options.
- Walking and Cycling: The application currently conflicts with NPPF requirements for sustainable transport and Gravesham Design Code principles.
- Further Information Required: Details on emergency access, off-site improvements, financial contributions, parking management and modelling results.

2.9 Most recently, having been through the modelling process with KCC and Jacobs, and having received the relevant peak hour turning count forecasts, this updated TA provides peak hour junction capacity modelling and consideration of any necessary mitigation.

2.10 KCC's public transport team has provided a note which sets out the level of contribution expected to deliver suitable bus improvements to serve the A227 corridor and support forthcoming development in the area. This is discussed later in this report.

2.11 Active Travel England (ATE) provided standing advice for the proposed development, only, however they did provide a full response to the adjacent Wrotham Road proposals. These comments are, in part, also applicable to the proposed development; however, they are largely reflected within KCC's response to the interim TA and the KCC comments are therefore referenced directly as opposed to the ATE comments.

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- 2.12 A response was received from National Highways (NH Ref:25/13746) on the interim TA on 26th February 2026 who recommended that planning permission not be granted for a specific period. The comments are summarised as follows and included in detail at **Appendix C**:
- Requested that distribution and flows were presented prior to assessment and noted that the Wrotham Road/A2 junction is sensitive to flow changes.
 - Agree committed development with the LPA and provide the information to NH for review.
 - Full details of TEMPro factors derived.
 - Until trip generation, distribution and assignment are agreed, they are unable to confirm the need for, or extent of SRN assessment required.
 - Likely to recommend a Construction Environmental Management Plan (CEMP) be secured via planning condition.
- 2.13 Following receipt of the model output data, this was provided to NH on 08/04/2026 to receive comments. At the time of writing, no comments have been received.

3.0 Planning Policy and Guidance

Introduction

- 3.1 A review of key, national and local policy and guidance that is relevant to the proposed development has been undertaken and is presented within this chapter.

National Planning Policy Framework

- 3.2 The latest National Planning Policy Framework (NPPF) was published in December 2024 and sets out the Government's planning policies and how these are expected to be applied.
- 3.3 The most relevant paragraphs to the proposed development are 109, 112, 115, 116, 117 and 118, which are detailed in **Table 1**.

Table 1: Relevant paragraphs from the NPPF

Paragraph Ref	Description
109	Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places. This should involve: - making transport considerations an important part of early engagement with local communities; - ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places. - understanding and addressing the potential impacts of development on transport networks; - realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated; - identifying and pursuing opportunities to promote walking, cycling and public transport use; and - identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains.
112	If setting local parking standards for residential and non-residential development, policies should take into account: - the accessibility of the development; - the type, mix and use of development; - the availability of and opportunities for public transport; - local car ownership levels; and - the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.
115	In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that: - sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location; - safe and suitable access to the site can be achieved for all users; - the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and - any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach.

Paragraph Ref	Description
116	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, following mitigation, would be severe, taking into account all reasonable future scenarios.
117	Within this context [related to paragraph 116], applications for development should: • 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; • address the needs of people with disabilities and reduced mobility in relation to all modes of transport; • 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; • allow for the efficient delivery of goods, and access by service and emergency vehicles; and • be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.
118	All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored.

3.4 This report is consistent with the statutory obligations outlined within the NPPF. This assessment considers how residents will be able to access the site safely and sets out the existing opportunities around the site to travel via alternative modes to the private car.

3.5 Notwithstanding this, the assessment also considers the level of vehicular trips to the site, and the potential level of impact this could have on the local highway network.

KCC Local Transport Plan

3.6 KCC's Local Transport Plan (LTP5), adopted in December 2024, sets out the strategic long-term vision for transport and accessibility within the county over the plan period (2024-2037).

3.7 The LTP5 document focuses on the following ambitions:

"We want to improve the health, wellbeing, and economic prosperity of lives in Kent by delivering a safe, reliable, efficient and affordable transport network across the county and as an international gateway..."

"We will do this by delivering emission-free travel by getting dedicated infrastructure to electrify vehicles, increase public transport use and make walking and cycling attractive."

3.8 The key transportation and highway policies that are most applicable to the proposed development are outlined in **Table 2**.

Table 2: Relevant paragraphs and policies from Kent Local Transport Plan 5

Policy Ref	Description
Policy Objective 2	A) Achieve a fall over time in the volume of people killed or very seriously injured on KCC's managed road network, working towards the trajectory set by Vision Zero for 2050. Outcome: Deliver our Vision Zero road safety strategy through all the work that we do.

Policy Ref	Description
Policy Objective 5	B) Reduce the amount of forecast future congestion and crowding on highways and public transport that is associated with demand from development by securing funding and delivery of our Local Transport Plan. Outcome: Deliver a transport network that is quick to recover from disruptions and future-proofed for growth and innovation, aiming for an infrastructure-first approach to reduce the risk of highway and public transport congestion due to development.
Policy Objective 8	A) We will aim to obtain further funding to deliver the outcomes our Bus Services Improvement Plan (or its successor) beyond its current horizon of 2024/25. We will ensure that our Local Transport Plan proposals are clearly evidenced in terms of their contribution towards achieving our Bus Service Improvement Plan. Outcome: A growing public transport system supported by dedicated infrastructure to attract increased ridership, helping operators to invest in and provide better services.
Policy Objective 9	A) We will aim to deliver walking and cycling improvements at prioritised locations in Kent to increase activity levels and support Kent's diverse economy, presented in a Kent Cycling and Walking Infrastructure Plan. Outcome: Health, air quality, public transport use, congestion and the prosperity of Kent's high streets and communities will be improved by supporting increasing numbers of people to use a growing network of dedicated walking and cycling routes.

KCC Design Guide

- 3.9 The KCC Design Guide (HDG), adopted in 2006, is the leading guidance document for highways design in Kent for new developments.
- 3.10 Considering the proposals are for outline permission, except for details of access, the design guide has been used to inform the access arrangements, detailed and referenced to later in this report.
- 3.11 Further use of (and reference to) the HDG will be undertaken as the proposals evolve to the detailed planning stage. The final proposals will be designed in accordance with the technical specifications presented in the HDG, including but not limited to, internal road layout, and serving and delivery arrangements.

KCC Parking Standards

- 3.12 The KCC Parking Standards document was formally adopted in January 2025 and replaces the previously used standards adopted in 2006.
- 3.13 The guidance sets out the parking standards for new developments in Kent and seeks to balance the need to provide an appropriate parking provision, ensure the safe operation of the local highway and encourage sustainable travel.
- 3.14 It is not yet clear whether Gravesham Borough Council (GBC) has adopted the new parking standards, or whether they continue to utilise the superseded KCC standards from 2006.
- 3.15 Considering this, and from pre-application discussions with KCC, both documents will be reviewed as part of this TA to set out the principles for parking on site, however it is considered likely that the Gravesham standards will be used for assessment.
- 3.16 The detailed schedule of accommodation remains to be detailed as part of a reserved matters planning application. Once the detailed scheduled of accommodation is known, as well as the formal parking standards adopted by GBC, the finalised level and type of parking will be provided.

Gravesham Local Plan Core Strategy

- 3.17 The GBC Local Plan Core Strategy was formally adopted in September 2014 and sets out the long-term spatial vision for the Borough during its plan period (April 2011-March 2028).
- 3.18 The document outlines the strategic objectives for the borough based on the characteristics of the area and the key issues to be addressed.
- 3.19 Whilst the Local Plan Core Strategy is an overarching spatial document, it does include policies relating to transport.
- 3.20 The key policies relating to transport that are considered within this report are summarised in **Table 3**.

Table 3: Relevant paragraphs and policies from Gravesham Local Plan Core Strategy

Policy Ref	Description
Policy CS11 - Transport	New developments should mitigate their impact on the highway and public transport networks as required. As appropriate, transport assessments and travel plans should be provided and implemented to ensure the delivery of travel choice and sustainable opportunities for travel.
	Sufficient parking in new development will be provided in accordance with adopted parking standards which reflect the availability of alternative means of transport and accessibility to services and facilities.
	The council will support proposals which improve public transport provision and facilities in the Borough.
	The Council will seek improvements to walking and cycling facilities and networks in the Borough including provision in new development as appropriate.

Gravesham Local Cycle and Walking Infrastructure Plan (LCWIP)

- 3.21 The Gravesham LCWIP, formally adopted in November 2022, identifies and prioritises investment for new infrastructure to support and encourage people to walk and cycle.
- 3.22 The LCWIP identifies infrastructure for a short, medium and long terms horizon to meet the active travel objectives of Gravesham.
- 3.23 The LCWIP identified the following schemes within the vicinity of the site.
- Route 6 – Higham – Meopham via Cobham and Sole Street: Primarily identified as a Leisure connection which utilises a number of rural routes and existing PRow routes. The route commences in Meopham via Wrotham Road near to the junction with Norwood Lane.
- 3.24 It is acknowledged within the LCWIP that the route is inherently constrained by narrow rural roads with no existing infrastructure and unsurfaced PRowS, and therefore several alignments are proposed.
- 3.25 As part of this TA, consideration is given to how future users of the site could either link to the route, or whether contributions can be provided to help progress the LCWIP proposals.

4.0 Background Information

Site Location

- 4.1 The site is situated c.7.5km to the south of Gravesend (as the crow flies), on land south of Longfield Road, Meopham and is bounded by Longfield Road to the north, education establishments to the east, and agricultural land to the south and west.

Local Highway Network

A227 Wrotham Road

- 4.2 The A227 Wrotham Road is a single carriageway road and provides a strategic function by connecting to the M20 at Junction 2 in the south, and the A2 and Gravesend in the north. More locally, Wrotham Road provides access to a variety of land uses including residential and commercial properties.
- 4.3 Wrotham Road is c.8.0m wide with footways present on either side of the carriageway. Footways are of variable widths along its length; however, they are generally c.2.0m wide within the vicinity of the site.
- 4.4 Pedestrians are facilitated crossing over Wrotham Road to the south of the junction with Longfield Road via a dropped kerb facility and pedestrian refuge area in the middle of the carriageway.
- 4.5 Wrotham Road forms a priority junction with the B260 Longfield Road as well as Camer Parade. The junction benefits from the provision of a ghost-island right turn lane on Wrotham Road southbound which measures c.50m in length.
- 4.6 A 30mph speed limit is in operation along Wrotham Road directly adjacent the site. It is also noted that a central reserve strip has been installed in recent years adjacent Camer Parade prior to the ghost-island right turn.
- 4.7 Traffic Regulation Orders (TROs) in the form of double yellow lines are marked on either side of Wrotham Road along the entire length of the site frontage and signed as 'No stopping at any time on verge or footway'. This is likely to discourage stopping and parking associated with school drop off and pick up periods for schools on Longfield Road, and for people accessing local facilities on Camer Parade.

B260 Longfield Road

- 4.8 Longfield Road is a single carriageway road with a c.6.0m width, along with c.1.5m-2.0m footways either side, which reduces to a provision of one footway on the southern side of the carriageway once it becomes more rural.
- 4.9 The B260 provides a continuous connection to Dartford in the northwest. Within the vicinity of the site, Longfield Road, operates a 30mph speed limit to the east before transitioning into a 60mph speed limit to the west. Along its length, it provides direct access to Meopham Community Academy, a pre-school and the National Autistic Society Helen Allison School, as well as several residential dwellings.
- 4.10 Many of the dwellings between Meopham Community Academy and the Helen Allison School do not have designated off-street parking facilities, meaning residents rely on on-street parking availability.
- 4.11 'No Stopping' TROs are situated outside of the schools within the vicinity of their accesses, on the westbound side of Longfield Road. This prohibits vehicles stopping, waiting and parking between the periods of 08:00-

09:30 and 14:30-16:00, coinciding with the school drop-off and pick-up times. Double yellow lines are also provided on the eastbound side of the carriageway outside of Meopham Community Academy.

- 4.12 There is a zebra crossing facility adjacent Meopham Community Academy to facilitate pedestrian crossing. It is noted that a dropped kerb facility has previously been provided over Longfield Road at the junction with Wrotham Road, however this has now been removed, with guard rail installed to guide pedestrians towards the zebra crossing.

Green Lane

- 4.13 Green Lane forms a priority T-Junction with Wrotham Road immediately north of the site and provides a primarily local function by providing access to nearby rural settlements.
- 4.14 The junction benefits from the provision of a ghost-island right turn lane for vehicles traveling northbound on Wrotham Road and turning right to Green Lane. The carriageway is c.8.0m in width with a footway of variable width situated on its northern side.
- 4.15 Green Lane is limited to a 30mph speed limit within the vicinity of the site, before transitioning to national speed limit (60mph for cars) further east.
- 4.16 At the junction with Wrotham Road, Green Lane is signed as 'Unsuitable for Heavy Goods Vehicles'.

Huntingfield Road

- 4.17 Huntingfield Road is a residential access road connecting Longfield Road at its southern extent, between Meopham Community Academy and the Helen Allison School, to Wrotham Road at its eastern extent.
- 4.18 The carriageway measures c.5.0m in width with footways c.1.5-2.0m in width either side to facilitate pedestrian access.
- 4.19 Huntingfield Road provides access to several residential properties along its length, the majority of which benefit from off-street parking facilities.

School Close

- 4.20 School Close is a minor access way leading to a cul-de-sac of several bungalows and is solely accessible for vehicles from Longfield Road. The carriageway measures c.4.5m in width and contains c.2.0m footways either side.
- 4.21 The entirety of School Close has double yellow lines marked on either side of the carriageway, likely to discourage parking associated with school pick up and drop off at the local schools and parking associated with the shops situated directly adjacent on Longfield Road. Wooden bollards are also present to discourage parking on the verges adjacent the carriageway.
- 4.22 A dedicated footway connection is provided from School Close at its northern extent to the local facilities provided on Camer Parade.
- 4.23 At the northern end of School Close, a turning head is provided in the form of a roundabout and gives access to Camer Parade car park which serves the local facilities on Camer Parade. On-site observations estimate that there is capacity in the region of 20 vehicles, although there are no marked bays.

- 4.24 Camer Parade itself has designated parking bays that are signed as a maximum 2-hour stay Mon-Sat 08:00-18:30pm with no return within 1 hour. On-site observations estimate that there is capacity in the region of 28 vehicles.

On Site Observations

- 4.25 Engagement was undertaken with the Parish Council during the initial site promotion phase in 2019 and 2020. From this, concerns were raised regarding local traffic and parking issues associated within the school pick-up and drop-off periods on local roads, as well as on Camer Parade.
- 4.26 A site visit was undertaken of local roads surrounding the site, as well as the schools located on Longfield Road on 5th March and 6th March 2025, with a view to observing the existing situation on the highway network.

Pre and Post School Pick-up and Drop-off

- 4.27 According to their websites, the start and finish times for the schools on Longfield Road are between 08:45-08:50 and 15:00-15:15, respectively. To understand local parking accumulation on surrounding roads associated with school pick-up and drop-off, a spot parking survey was undertaken which accounted for the school gates opening and closing prior to and following the start and finish times.
- 4.28 **Table 4** and **Table 5** summarise the parking accumulation during the school drop-off and pick-up periods, respectively. The surveys were undertaken along a circular route at 15-minute intervals.

Table 4: School Drop-Off Parking Accumulation (08:00-09:15)

Road	Time periods observed				
	08:00-08:15	08:15-08:30	08:30-08:45	08:45-09:00	09:00-09:15
Wrotham Road	0	6	8	20	4
Longfield Road	12	13	25	16	12
School Close (dropping off)	0	1	2	7	0
Camer Car Park (off School Close)	10	10	13	20	12
Huntingfield Road (NB/SB)	7	7	18	16	9
Huntingfield Road (EB/WB)	7	8	8	11	6
Camer Parade	18	18	21	22	20
Total	54	63	95	112	63

Table 5: School Pick-Up Parking Accumulation (14:30-15:45)

Road	Time periods observed				
	14:30-14:45	14:45-15:00	15:00-15:15	15:15-15:30	15:30-15:45
Wrotham Road	3	10	30	3	1
Longfield Road	13	14	26	19	15
School Close	0	0	6	5	1
Camer Car Park (off School Close)	18	18	16	16	12
Huntingfield Road (NB/SB)	13	15	19	17	11
Huntingfield Road (EB/WB)	7	7	8	9	9

Road	Time periods observed				
	14:30-14:45	14:45-15:00	15:00-15:15	15:15-15:30	15:30-15:45
Camer Parade	26	26	23	20	19
Total	80	90	128	89	68

- 4.29 Obviously, the spot parking survey demonstrates that across the school drop-off and pick-up periods, parking on the local road network and parking areas increases closer to the school start/finish times before dropping back to a 'typical' level.
- 4.30 Parking accumulation was observed to be more intense on roads closer to the schools, as would be expected. It was observed that vehicles that park closer to the school dwell for a much shorter period than those parked further away, which again would be expected given the shorter walking distance.

Local Highway Network Operation

- 4.31 It was observed that parking accumulation on Wrotham Road occurs predominantly south of the junction with Longfield Road on the northbound side of the carriageway. Most of the parking is largely attributed to school pick-up and drop-off with parents observed to be walking between the school and their vehicles.
- 4.32 The majority of Wrotham Road south of Longfield Road is marked with single yellow lines; however, it was observed that vehicles were also parking unlawfully on the double-yellow lined section closer to the junction with Longfield Road, both partially and fully on the verge which contravenes the TROs currently in place.
- 4.33 On Longfield Road, inconsiderate kerbside parking was observed further west near to the Helen Allison school, past the existing TROs adjacent the school access. This severely restricts the useable width of the footway for pedestrians and pedestrians with pushchairs.
- 4.34 However, some vehicles were also observed to be stopping in front of the schools either very briefly or for up to five minutes which contravenes the TROs currently in place. In some instances, this was on either side of the carriageway (including partial kerbside parking) which made it difficult for both pedestrian access and for vehicles on the main carriageway to manoeuvre.
- 4.35 Despite the TROs in place on School Close, vehicles were observed to be parking and dropping children off on the double yellow lines on the southbound side of the carriageway, as well as on the mini-roundabout circulatory. Some vehicles were observed to dwell for up to five minutes which seemed to cause some issues for vehicles accessing/egressing Camer Car Park.
- 4.36 Vehicles were observed to mainly be parking on Huntingfield Road on the northbound side of the carriageway close to the junction with Longfield Road and in some instances within the bellmouth.

Highway Safety

- 4.37 A review of Personal Injury Accident Data (PIA) on the local highway network surrounding the site has been undertaken using data obtained directly from KCC for the most recent five years of available data from October 2019 to September 2024.
- 4.38 The PIA data is summarised in **Table 6** and included at **Appendix D**.

Table 6: Personal Injury Accident Data (Oct 2019 – Sep 2024)

Year	Slight	Serious	Fatal	Total
Longfield Road	1	1	0	2
Wrotham Road / Longfield Road / Camer Parade access	3	1	0	4
Wrotham Road / Camer Parade exit	1	1	0	2
Wrotham Road / Green Lane	0	1	0	1
Green Lane / Tradescant Drive	1	0	0	1
Total	6	4	0	10

Wrotham Road / Longfield Road / Camer Parade Access

- 4.39 There is a cluster of four PIAs at the Wrotham Road/Longfield Road junction and Wrotham Road/Camer Parade access junction. Three PIAs have been classified as 'Slight', and one has been classified as 'Serious'.
- 4.40 According to the PIA report, PIA 4 was as a result of a driver hitting an object on the left side of their vehicle which caused the driver to oversteer when correcting and driving into the railing on the pedestrian refuge on Wrotham Road. Conditions were described as 'Dry' and 'Fine' which indicates that the PIA was not necessarily as a result of the existing highway arrangement or external conditions.
- 4.41 Additionally, PIA 5, which was recorded in December 2019, was as a result of a speeding vehicle heading northbound on Wrotham Road, with the driver of the other vehicle failing to give way turning left from Longfield Road.
- 4.42 PIA 3 and 6 were as a result of drivers failing to give way when egressing from Longfield Road to a cyclist and vehicle, respectively, traveling northbound on Wrotham Road. These both occurred in 2020 and 2019, respectively.

Wrotham Road / Camer Parade exit

- 4.43 PIA 7 and 9 were as a result of vehicles egressing Camer Parade to turn right and failing to give way to vehicles heading southbound on Wrotham Road. Both PIAs occurred in 2019 and 2020.
- 4.44 It should be noted that PIA 8 occurred at 08:39 during the peak school drop-off period, although no further information is available within the report to suggest it was related to vehicles associated with the schools.

Longfield Road

- 4.45 Two PIAs have been recorded on Longfield Road, one classified as 'Slight' and one classified as 'Serious'.
- 4.46 PIA 1 occurred as a result of a parked vehicle pulling out into the central carriageway colliding with a vehicle heading westbound on Longfield Road. PIA 2 was as a result of failing to stop when egressing Huntingfield Road and colliding with a vehicle on Longfield Road. Both accidents occurred outside of the school drop-off and pick-up periods.

Summary

- 4.47 Whilst all PIAs are regrettable, the volume and pattern of accidents observed does not suggest any particular inherent highway safety issue and does not give any undue cause for concern.

5.0 Sustainable Travel

Accessibility by Active Travel

Accessibility by Walking

- 5.1 Walking and cycling provide important alternatives to cars and should also be encouraged to form part of longer trips via public transport. The Chartered Institute of Highways and Transportation (CIHT) has prepared several guidance documents that provide advice for sustainable travel infrastructure provision within new developments. The suggested walking distances to key facilities (e.g. healthcare, shops) are presented in **Table 7**.

Table 7: Suggested Walking Distances (CIHT Guidelines)

	Town Centre (m)	Commuting/Schools/ Sightseeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

- 5.2 In addition to the CIHT guidance, MfS and the National Design Guide (2021) states that 'walkable neighbourhoods' are typically characterised by having a range of facilities within 10 minutes (up to about 800m) walking distance of residential areas which may be accessed comfortably on foot.
- 5.3 MfS also states that the 800m walking distance is not an upper limit and references the former Planning Policy Note 13: Transport (PPG13) guidance in respect of walking replacing short car trips, particularly those under 2km.
- 5.4 Table NTS0303 from the 2023 National Travel Survey (released August 2024) indicates that the national average walking trip distance in 2023 was 0.7 miles or 1.12km.
- 5.5 The 2023 National Travel Survey (Table NTS0308) also shows that walking was the most frequent mode used for short trips, with 81% of trips under one mile (1.6km) being completed by foot in 2023, which is very similar to 2022 (83%) and 2021 (82%).

Local Facilities and Accessibility

- 5.6 Footways are present on either side of Longfield Road to the east of the site, connecting to local facilities on Camer Parade, with a zebra crossing facility located near to the junction with Wrotham Road.
- 5.7 Wrotham Road contains footways either side of the carriageway, as previously discussed, with crossing facilities provided in the form of a dropped kerb facility with pedestrian refuge to the south of the junction with Longfield Road, and a recently installed dropped kerb crossover adjacent the Camer Parade egress.
- 5.8 To the north, footways generally measuring c.2.0m and above are provided either side of the carriageway towards Meopham railway station, with multiple dropped kerb facilities and pedestrian refuges along its length to facilitate crossing.
- 5.9 The walking distances from the site are presented in **Figure 5.1** which accounts for local footways and crossing facilities as well as the Public Rights of Way (PRoW) network within the vicinity of the site, including promoted walking routes such as along Camer Road and through Camer Park.

5.10 The walking distances are inclusive of the distance from the developable area of the site to all of the proposed access points.

5.11 The local facilities situated within the vicinity of the site are presented in **Figure 5.2** and summarised in **Table 8**.

Table 8: Local Facilities

Local Facility (Figure Reference)	Distance
Community Facilities	
St John the Baptist (C1)	800m
St Pauls Catholic Church (C2)	900m
Meopham Library (C3)	1.5km
Meopham Station Post Office (C4)	1.7km
Meopham Village Hall (C5)	1.8km
Southdown Shaw Allotments (C6)	2.3km
Meopham Green Baptist Church (C7)	2.3km
Education	
Helen Allison School (E1)	400m
Meopham Community Academy (E2)	550m
Meopham Secondary School (E3)	1.3km
Employment	
Bowes Industrial Centre (EMP1)	2.3km
Gravesend Town Centre (EMP2)	7.9km
Healthcare	
Meopham Medical Centre (H1)	1.3km
Meopham Pharmacy (H2)	1.7km
Meopham Dental Care (H3)	2.3km
Leisure	
Judsons Recreation Ground (L1)	1.2km
Camer Park Country Park (L2)	1.3km
Meopham Leisure Centre (L3)	1.5km
The Lab Performance UK (L4)	1.6km
Frank Mulley Combat Academy (L5)	1.6km
Royal Hounds Dog Park (L6)	2.0km
Meopham Cricket Club (L7)	2.1km
Retail	
Meopham Tandoori (R1)	600m
McCoy's Fish Shop (R2)	600m
Costa Coffee (R3)	600m
Café Lounge (R4)	600m
The Salon (R5)	650m
Meopham Shish Grill and Restaurant (R6)	650m
Tesco Express (R7)	650m

Local Facility (Figure Reference)	Distance
Sir Male Grooming (Barber Shop) (R8)	700m
Bartellas Mediterranean Restaurant (R9)	1.2km
George Inn Public House (R10)	1.0km
Valeries Sandwich and Coffee Shop (R11)	1.7km
Morrisons Daily (R12)	1.7km
Railway Tavern Public House (R13)	1.7km
The Cricketers Inn (R14)	1.8km
Minel Meze & Grill Restaurant / Bar (R15)	2.0km

- 5.12 Collectively, **Figure 5.1** and **Figure 5.2** demonstrate that there is a large variety of local facilities that are likely to be used on a day-to-day basis by future residents of the site that are all reachable within the preferred maximum 2.0km walking distance.
- 5.13 Notably, there are a significant number of facilities situated on Camer Parade east of the site, and along Wrotham Road and Longfield Road, all within an 800m, and 1.2km walking distance of the developable area of the site.
- 5.14 Within their response, KCC stated:
- "It would be useful to understand where major employment centres are in relation to the site, and how access to them can be achieved by sustainable modes"*
- 5.15 Whilst there are a number of datasets that outline where people are traveling to, i.e. Census Method of Travel to Work, there is a limitation on being able to identify the specific employment locations within the datasets lower than the Major Super Output Area level (MSOA).
- 5.16 Census 2011 Method of Travel to Work at the MSOA level indicates that the top five destinations people travel to work using all methods of travel from the MSOA Gravesham 012 is Gravesend, Dartford, Westminster (City of London, Medway (i.e. Rochester, Chatham), and Sevenoaks.
- 5.17 As is demonstrated later in this section, public transport opportunities are available to travel to each of these areas, from the site.

Accessibility by Cycling

- 5.18 There is potential for short car trips to be substituted for cycle trips, and for longer trips to be substituted by a combination of cycle and public transport trips.
- 5.19 The CIHT Planning for Cycling document (2014) states that "The majority of cycling trips are for short distances, with 80% being less than five miles and with 40% being less than two miles. However, the majority of trips by all modes are also short distances (67% are less than five miles, and 38% are less than two miles); therefore, the bicycle is a potential mode for many of these trips (DfT, 2014a)."
- 5.20 The Department for Transportation (DfT) Cycling and Walking Investment Strategy (2017) also refers to the threshold of five miles (or 8km), stating that "two out of every three personal trips are within five miles – an achievable distance to cycle for most people, with many shorter journeys also suitable for walking."

- 5.21 The second Cycling and Walking Investment Strategy published DfT in 2022 does not specifically reference the statement in Paragraph 5.20, however one of the main objectives is to increase the percentage of short journeys (i.e. those under five miles) in towns and cities that are walked or cycled from 41% in 2018/19 to 46% in 2025.
- 5.22 The 2023 National Travel Survey also shows that the average cycle trip distance (for all purposes) was three miles (or 4.8km). Therefore, it is reasonable to consider cycling as a viable mode of travel for distances up to 8km.
- 5.23 The site is situated c.5.0km to the south of National Cycle Network (NCN) Route 177 which provides an east-west traffic-free route to Gravesend via NCN Route 1 and to Stroud.
- 5.24 As previously noted, Gravesham LCWIP cycle route 6 is situated to the north of the site on Wrotham Road/Norwood Lane. This route is proposed to link Meopham and Higham via Cobham and Sole Street.
- 5.25 The cycling distances from the site are presented within **Figure 5.3** and are inclusive of the distance from the developable area of the site to all proposed access points. This also includes the proximity of the site to promoted NCN routes and identified LCWIP schemes.
- 5.26 This shows that cyclists can reach key locations such as Gravesend, which provides a large variety of facilities typical of a large town centre.
- 5.27 Although there is no designated cycle infrastructure within the vicinity of the site, given the 30mph speed limit between the site and surrounding facilities, it is considered that the local network is generally suitable for cyclists of all abilities, although it is acknowledged that some routes may be catered towards more experienced cyclists.

Walking and Cycling Audit

- 5.28 A Local Transport Note (LTN) 1/20 route audit has been undertaken using an adaption of the assessment framework provided in Appendix A of LTN 1/20. The scope of the route audit was:
- Route 1 – Wrotham Road between Green Lane and Longfield Road (Incl. Camer Parade).
 - Route 2 – Longfield Road between Wrotham Road and National Autistic Society Helen Alison School.
 - Route 3 – Wrotham Road between Green Lane and Station Road.
 - Route 4 – Wrotham Road between Longfield Road and Ifield Road.
- 5.29 In LTN 1/20, a route comprises “street checks” (on road) and “path checks” (off-road). Therefore, in this instance, all routes are considered as “street checks” given off-road facilities such as footways follow a road, and are not completely segregated, they have interactions with motor vehicles at junctions.
- 5.30 Where bus stops are not present along a route, these have been removed from the total score and the score has been recorded as a “-” in the full assessment.
- 5.31 Whilst the audit provides a scoring system, there is no set threshold for what determines a ‘good’ route or a ‘bad’ route as this is often relative to the context of the site. The tool acts as a framework to identify any potential off-site measures to improve active travel within an area and as part of a development proposal.
- 5.32 A summary of the route audit is provided in **Table 9** with the full assessment provided at **Appendix E**.

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Table 9: LTN 1/20 Route Audit

Key Requirement	Score	Key Comments
Route 1: Wrotham Road between Green Lane and Longfield Road (Incl. Camer Parade)		
Accessibility	7	- Gradient is less than 3%. - Tactile paving is available but not entirely compliant with Guidance i.e. on Camer Parade where two tactiles are not provided on dropped kerbs. - Cyclists are required to wait behind buses with limited overtaking opportunities given the central reserve strip on Wrotham Road. - Toilet facilities provided within local cafe and shops.
Comfort	3	- Consistent, good quality surface material along Wrotham Road. - Inconsistent footway surfacing on footways along Wrotham Road and on Camer Parade.
Directness	7	- Route follows road and is very direct. - Pedestrians and cyclists give way at minor arm junctions; however, delay is low.
Attractiveness	3	- No wayfinding signs, places to rest and shelter, and no cycle parking available. - Route is partially lit along Camer Parade. - There are no shared use cycle tracks.
Cohesion	3	- No transitions are provided for cyclists as there is currently no designated cycle infrastructure. - Infrastructure provision for pedestrians is generally consistent but could be improved with regards to widths.
Overall Score	25	
Route 2: Longfield Road between Wrotham Road and National Autistic Society Helen Alison School		
Accessibility	4	- Gradient is between 3-5%. - Tactiles provided across Huntingfield Road, however no dropped kerb crossover is provided from southern footway prior to section of vehicles observed to be parking half-on/half-off the kerb which impedes wheelchair users and prams.
Comfort	2	Sections of good quality surface material on Longfield Road but not for the entire route.
Directness	7	- Route follows road and is very direct. - Pedestrians and cyclists give way at the Longfield Road/Wrotham Road junction (pedestrians facilitated by pedestrian refuge); Delay is likely to be low for pedestrians whilst cyclists are generally likely to have similar delay to motor vehicles.
Attractiveness	3	- No wayfinding signs, places to rest and shelter, and no cycle parking available. - Route is partially lit, although could be improved.
Cohesion	3	- No transitions are provided for cyclists as there is currently no designated cycle infrastructure. - Infrastructure provision is generally consistent, but the location of parked vehicles could require some users to cross the road prematurely without the presence of a dropped kerb crossover.
Overall Score	19	

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Key Requirement	Score	Key Comments
Route 3: Wrotham Road between Green Lane and Meopham railway station		
Accessibility	8	- Gradient is less than 3%. - Some tactiles provided although there are some locations where they are not provided at dropped kerbs, such as Pine Rise at the junction with Wrotham Road. - Bus stops situated within laybys help to reduce cyclist delay. - No step-free access to Platform 2 at Meopham railway station. - Toilets provided at Meopham railway station.
Comfort	3	Consistent, good quality surface material along Wrotham Road.
Directness	8	- Route follows road and is very direct. - Pedestrians and cyclists give way at minor arm junctions; however, delay is low.
Attractiveness	4	- No wayfinding signs, places to rest and shelter. - Some cycle parking available at Meopham railway station that is sheltered. - Route is partially lit along sections of Wrotham Road and on Station Road.
Cohesion	3	- No transitions are provided for cyclists as there is currently no designated cycle infrastructure. - Infrastructure provision is generally consistent.
Overall Score	26	
Route 4: Wrotham Road between Longfield Road and Ifield Road		
Accessibility	5	- Gradient is less than 3%. - Some tactiles provided. Width of footways in some locations could impede wheelchair access such as adjacent The George Inn.
Comfort	3	- Consistent, good quality surface material along Wrotham Road for cyclists. - Footway surface conditions on footways on western side of Wrotham Road are inconsistent.
Directness	7	- Route follows road and is very direct. - Pedestrians and cyclists give way at minor arm junctions. - Crossing locations are generally sparse although signalised crossing is provided adjacent Meopham School. Delay is likely to be low for pedestrians.
Attractiveness	2	- No wayfinding signs, places to rest and shelter. - Long sections of Wrotham Road are not lit.
Cohesion	2	- No transitions are provided for cyclists as there is currently no designated cycle infrastructure. - Infrastructure provision is generally consistent.
Overall Score	19	

5.33 Based on the audit, the following aspects of local routes identified as the most appropriate to improve are:

- Signage towards interchanges and facilities; and,

- Improvement of crossing facilities towards local facilities.

- 5.34 These have been identified on the basis of likely residents of the site using this infrastructure, and the general benefit to existing residents of the local area. These aspects deliver the largest improvements in a manner which is proportional with the impact of the proposed development, supporting the genuine modal choice for all and reducing private car dependency.
- 5.35 Proposed measures to improve active travel from the site are detailed within **Section 6.0**.

Accessibility by Bus

- 5.36 The closest bus stops to the site are situated along Wrotham Road to the east of the primary access, c.500m from the developable area of the site.
- 5.37 Pedestrians are facilitated crossing over Wrotham Road to the southbound bus stop by a dropped kerb pedestrian crossing with a guarded pedestrian refuge.
- 5.38 **Table 10** presents the nearest local bus stops and their level of service. Bus service frequency has been taken from bustimes.org.

Table 10: Local Bus Services

Bus Stop (code)	Route (Operator)	Frequency (approx.)		
		Mon – Fri	Sat	Sun
Wrotham Road Northbound (kntapmga)	306 – Vigo – Gravesend (1st Bus Stops Ltd)	Two services per day (08:28, 15:49)	No Service	No Service
	308 – Sevenoaks – Gravesend (Redroute Buses)	Seven services per day (10:09, 11:34, 13:04, 14:34, 16:38, 17:36, 18:36)	Seven services per day (08:33, 10:04, 11:34, 13:04, 15:04, 16:36, 18:36)	No Service
	416 – Meopham – Gravesend (Redroute Buses)	Five services per day (07:18, 09:31, 11:01, 12:26, 16:36)	Three services per day (08:06, 11:01, 15:21)	No Service
Wrotham Road Southbound (kntapmdt)	306 – Gravesend – Vigo (Redroute Buses)	Two services per day (07:54, 15:18)	No Service	No Service
	308 – Gravesend – Sevenoaks (Redroute Buses)	Seven services per day (07:06, 09:35, 11:05, 12:35, 14:25, 17:07, 18:07)	Six services per day (09:35, 11:05, 12:35, 14:35, 16:08, 18:08)	No Service
	416 – Gravesend – Meopham (Redroute Buses)	Four Services per day (10:53, 12:18, 14:38, 16:18)	Two services per day (10:53, 15:13)	No Service

- 5.39 **Table 10** shows that there are several local bus services providing connections to Meopham railway station and into Gravesend and local surrounding villages.
- 5.40 As requested by KCC, it can be confirmed that the 306, 308 and 416 bus services provide access to Meopham railway station, calling at Wrotham Road (north of New Road) adjacent Station Road. Both northbound and southbound bus stops comprise of bus shelters, and flag and pole signs.

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- 5.41 In total, there are four services around the peak hours, two during the morning, and two during the afternoon across both bus stops.
- 5.42 As requested by KCC, journey times via bus to key destinations along the routes are summarised as follows:
- Meopham to Gravesend – 23 Minutes (via 308)
 - Meopham to Sevenoaks – 56 Minutes (via 308)
 - Meopham to Vigo – 15 Minutes (via 306)
- 5.43 In total, there are eight dedicated bus services providing connections to local schools, including but not limited to, Dartford Boys Grammar School, Wilmington Grammar School for Girls, Meopham Secondary School and Wrotham School.

Accessibility by Rail

- 5.44 Meopham railway station is situated within the preferred maximum 2.0km walking distance from the site, and within a 5.0km cycle distance.
- 5.45 The station provides 167 vehicle parking spaces (6 accessible) and 20 cycle parking spaces (stands).
- 5.46 **Table 11** presents the key direct rail services from Meopham railway station and their frequency. Rail service frequency has been taken from [Trainline](#).

Table 11: Meopham Railway Station Services

Destination (Key stops)	Average Frequency	Approx. Journey Time	First and Last Direct Services					
			Monday to Friday		Saturday		Sunday	
			Departures	Arrivals*	Departures	Arrivals*	Departures	Arrivals*
London Victoria (Longfield, Bromley South)	2 per hour (Mon – Sat)	0 Hours, 56 Minutes (Maximum)	First Service: 05:20	First Service: 00:40	First Service: 00:13	First Service: 00:10	First Service: 07:02	First Service: 00:40
	2 per hour (Sun)		Last Service: 23:40	Last Service: 23:40	Last Service: 23:47	Last Service: 23:42	Last Service: 23:32	Last Service: 23:40
Gillingham (Kent) (Sole Street, Rochester, Chatham)	2 per hour (Mon-Sat)	0 Hours, 19 Minutes (Maximum)	First Service: 06:31	First Service: 05:00	First Service: 00:13	First Service: 05:00	First Service: 00:29	First Service: 06:46
	2 per hour (Sun)		Last Service: 23:43	Last Service: 23:20	Last Service: 23:43	Last Service: 23:28	Last Service: 23:59	Last Service: 23:11
Dover Priory (Rochester, Gillingham)	1 per hour (Mon-Sat)	1 Hour, 31 Minutes (Maximum)	First Service: 06:31	First Service: 07:45	First Service: 06:29	First Service: 05:12**	First Service: 09:00	First Service: 06:50
	1 per hour (Sun)		Last Service: 22:43	Last Service: 17:48	Last Service: 22:43	Last Service: 22:17**	Last Service: 22:00	Last Service: 21:50

*Arrival services are the departure times to Meopham from destination.

**Connection service shown. No direct service to Meopham from Dover Priory on Saturdays and Sundays.

- 5.47 **Table 11** shows that there are regular rail services to key regional and national destinations including London and Gillingham, therefore offering future residents of the site opportunities to commute sustainably over longer distances.

- 5.48 KCC requested that a review of other local stations such as Sole Street and Ebbsfleet should be undertaken to determine whether future residents may use these stations as opposed to Meopham should alternative destinations be accessible.

Sole Street

- 5.49 Sole Street railway station is situated c.1.8km to the east of the site (as the crow flies) via Green Lane and Camer Road. There are no pedestrian or cycle facilities along Camer Road to connect to Sole Street.
- 5.50 The station provides 61 vehicle parking spaces (3 accessible) and no cycle parking spaces.
- 5.51 Sole Street provides access to the same frequency of services and range of destination as Meopham as they both operate on the same rail line. It is therefore more likely that residents will travel from Meopham given the closer proximity and better walking and cycling connection.

Ebbsfleet International

- 5.52 Ebbsfleet International railway station is situated c.7.8km to the north of the site (as the crow flies), with an approximate 27 minute cycle ride and a c.12-18-minute car drive.
- 5.53 The station provides a total of 4,945 car parking spaces (84 accessible) across four car parks and a further 280 car parking spaces (6 accessible) within a 'Premium' car park. The station also contains 44 cycle parking spaces (stands).
- 5.54 Parking is charged at a rate of £10.20 per day, or £1,367.20 per year according to the [National Rail](#) website.
- 5.55 **Table 12** presents the key direct rail services from Ebbsfleet International railway station and their frequency. Rail service frequency has been taken from [Trainline](#).

Table 12: Ebbsfleet Railway Station Services

Destination (Key stops)	Average Frequency	Approx. Journey Time	First and Last Direct Services					
			Monday to Friday		Saturday		Sunday	
			Departures	Arrivals*	Departures	Arrivals*	Departures	Arrivals*
London St Pancras International (Stratford International)	4 per hour (Mon – Sat) 3 per hour (Sun)	0 Hours, 20 Minutes (Maximum)	First Service: 05:29 Last Service: 23:35	First Service: 06:20 Last Service: 00:12**	First Service: 05:59 Last Service: 23:35	First Service: 06:40 Last Service: 00:12**	First Service: 07:50 Last Service: 22:59	First Service: 08:20 Last Service: 23:40
Ramsgate (Gravesend, Stood, Gillingham, Faversham, Margate)	3 per hour (Mon-Sat) 1 per hour (Sun)	1 Hour, 32 Minutes (Maximum)	First Service: 06:56 Last Service: 23:59	First Service: 04:55 Last Service: 22:08	First Service: 06:59 Last Service: 23:59	First Service: 06:02 Last Service: 22:08	First Service: 08:59 Last Service: 22:59	First Service: 07:05 Last Service: 22:02
Margate (Ashford International, Canterbury West, Ramsgate, Broadstairs)	3 per hour (Mon-Sat) 1-2 per hour (Sun)	1 Hour, 21 Minutes (Maximum)	First Service: 06:56 Last Service: 23:58	First Service: 05:25 Last Service: 21:49	First Service: 06:59 Last Service: 23:59	First Service: 05:49 Last Service: 21:49	First Service: 08:59 Last Service: 22:59	First Service: 07:49 Last Service: 21:49

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Destination (Key stops)	Average Frequency	Approx. Journey Time	First and Last Direct Services					
			Monday to Friday		Saturday		Sunday	
			Departures	Arrivals*	Departures	Arrivals*	Departures	Arrivals*
Faversham (Strood, Gillingham)	2 per hour (Mon-Sat)	0 Hours, 51 Minutes (Maximum)	First Service: 06:39	First Service: 05:00	First Service: 07:39	First Service: 05:32	First Service: 08:39	First Service: 07:00
	1 per hour (Sun)		Last Service: 00:18**	Last Service: 22:00	Last Service: 00:09**	Last Service: 22:00	Last Service: 23:39	Last Service: 22:00

*Arrival services are the departure times to Ebbsfleet from destination.

**Final service operates the following morning.

- 5.56 **Table 13** presents a comparison between journey times via rail should residents choose to drive to Ebbsfleet International, or should residents choose to walk to Meopham.
- 5.57 Journey times have been taken from Google Maps route planner to arrive at each destination prior to 09:00 during a typical weekday to represent a representative commuting journey time.
- 5.58 All journey times from Meopham are inclusive of walk time and connections via other stations.

Table 13: Meopham and Ebbsfleet Journey Time Comparison

Destination	Approx. Journey Time Via Ebbsfleet	Approx. Journey Time Via Meopham	Difference
London St Pancras International	Drive: 12-18 Minutes Rail Journey Time: 20-Minutes Total Journey Time: 32-38 Minute	Walk: 18-Minutes Rail Journey Time: 1 Hour, 6-Minutes Total Journey Time: 1 Hour, 24-Minutes	+46 Minutes
Ramsgate	Drive: 12-18 Minutes Rail Journey Time: 1 Hour, 32 Minutes Total Journey Time: 1 Hour, 42-50 Minutes	Walk: 18-Minutes Rail Journey Time: 1 Hour, 37-Minutes Total Journey Time: 1 Hour, 55-Minutes	+5 Minutes
Margate	Drive: 12-18 Minutes Rail Journey Time: 1 Hour, 21 Minutes Total Journey Time: 1 Hour, 33-39 Minutes	Walk: 18-Minutes Rail Journey Time: 1 Hour, 23-Minutes Total Journey Time: 1 Hour, 41-Minutes	+2 Minutes
Faversham	Drive: 12-18 Minutes Rail Journey Time: 51 Minutes Total Journey Time: 1 Hour, 1-7 Minutes	Walk: 18-Minutes Rail Journey Time: 52-Minutes Total Journey Time: 1 Hour, 10-Minutes	+3 Minutes

- 5.59 From the analysis, other than London St Pancras International railway station, journey times to all destinations are similar regardless of whether users decide to drive to Ebbsfleet or walk to Meopham and catch connecting services. Journey times from Meopham will be lower than what is shown if future residents choose to cycle.
- 5.60 It should be iterated that Meopham provides direct rail services to London Victoria, which is situated within Westminster, City of London, which was identified as one of the top five employment areas for people residing within the area.
- 5.61 Unless future residents specifically require access to the area around London St Pancras railway station, it is likely that residents will use Meopham railway station instead of Ebbsfleet for the majority of railway journeys, especially for journeys into major employment areas such as within London, or Gravesend.
- 5.62 Parking charges at Ebbsfleet as well as fuel costs are likely to be considered by future residents when planning their journey. These costs would be avoided should residents choose to walk/cycle to Meopham.

Summary

- 5.63 This access appraisal demonstrates that there are several local facilities that can, and are likely, to be used on a day-to-day basis by local residents that can be accessed by active travel modes within recommended walking and cycling distances.
- 5.64 Additionally, there are local public transport opportunities for future residents to travel further afield to key regional and national destinations such as Gravesend, Gillingham and London, sustainably.
- 5.65 A walking and cycling audit has been undertaken that has identified several off-site measures that can potentially be implemented to improve the uptake of active travel to local facilities and public transport interchanges. These are detailed later in this report.

6.0 Development Proposals

Residential Development

- 6.1 The forthcoming outline planning application is for up to 120 residential dwellings with all matters reserved except for details of access.
- 6.2 The development framework plan is presented at **Appendix F**.

Vehicular Access

- 6.3 Primary vehicular access is proposed to be taken from Longfield Road to the north of the site via a priority access.
- 6.4 KCC's design guide – 'Step 3: Designing for movement' document, sets out the relevant design parameters for new development access roads. The proposals for 120 dwellings are within the criteria set out within KCC's guidance for a 'Major Access Road' which is typically designed to serve between 50 and 300 dwellings from just a single point of access and emergency link.
- 6.5 On that basis, it is proposed that the primary vehicular access is provided in accordance with a 'Major Access Road'.
- 6.6 The design parameters for such a road are:
- Preferably has two points of access or is a loop with a short connection to a single point of access and a secondary emergency access link.
 - A typical carriageway width of 5.5m with a typical footway width of 1.8m.
 - Junction visibility of 45m from a 2.4m setback.
- 6.7 The proposed access will have a 5.5m carriageway width, 6m kerbed radii, and 2.0m footways either side tying into existing footways on Longfield Road.
- 6.8 It was confirmed by KCC during pre-application engagement that the proposed access arrangement is considered suitable given the scale of the proposals (note comments below on emergency access provision).
- 6.9 The proposed site access is presented in **Drawing T25526.001**. The Highway Boundary extent is included at **Appendix G**.
- 6.10 An RSA1 and designers' response has been undertaken, as requested by KCC, and is included at **Appendix H**.
- 6.11 An emergency access has also been provided as requested by KCC and is presented in **Drawing T25526.001**.
- 6.12 Some minor amendments have been made since the RSA1 was undertaken following comments received from KCC on the interim TA, which include the relocation of the tactile crossover within the site access bellmouth.

Vehicular Access Location

- 6.13 The Kent Design Guide, 'Making It Happen' document states on page 8:

"Where a residential road joins a distributor road, a road width of 5.5m should be maintained for at least 20m from the junction, with footways provided on both sides of the non-priority road. No other access or road junction should be provided within the 20m distance".

- 6.14 The proposals include footways on either side of the access, and the junction is situated c.170m west of the Longfield Road/Huntingfield Road junction. This is considered to be in accordance with the KCC Design Guide.

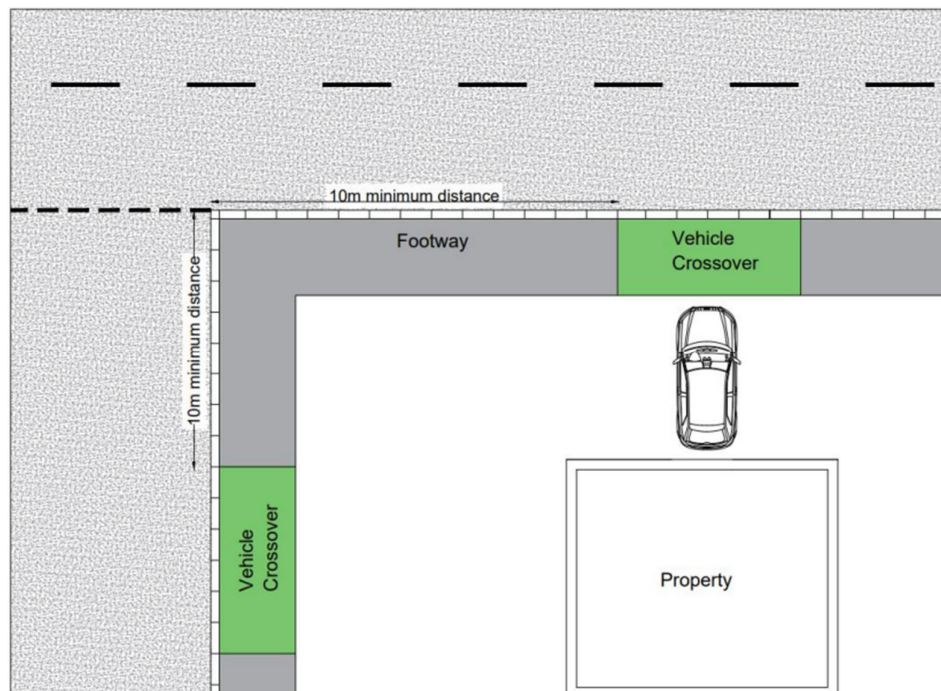
- 6.15 KCC stated within their pre-application response:

"Whilst no driveways are located within the vicinity of the proposed access (on the opposite side of Longfield Road), it was noted during the site visit that vehicles park on the concrete verge areas. It is therefore requested that the access is a minimum 10m from the steps outside number 32, in line with KCC vehicle crossover guidance."

- 6.16 The KCC guidance document 'Dropped Kerb Application Guidance' (April 2025) states within section 5:

"If the location of the proposed crossing is closer than 10 metres to a road junction and creates a major hazard, the application will be refused."

- 6.17 The guidance indicates that this is only applicable for driveways on the same side of the access junction as indicated on the extract below.



- 6.18 Nevertheless, given the location of parked vehicles, the proposed access junction has been moved 10m to the west of number 32, as requested by KCC, so as not to obstruct the operation of the proposed access/local highway.

Swept Path Analysis

- 6.19 A swept path analysis of the largest likely vehicle to require access to the site on a regular basis, a refuse vehicle, has been undertaken.
- 6.20 The analysis demonstrates that vehicles of this nature can access and egress the site safely, in a forward gear.
- 6.21 The swept path analysis is presented in **Drawing T25526.002**.
- 6.22 In addition, a swept path analysis of a fire tender has been undertaken through the emergency access and is presented in **Drawing T25526.004**.

Visibility Splay Assessment

- 6.23 Visibility splays from the access junction are provided within **Drawing T25526.001** and are informed by 85th percentile speeds recorded as part of a seven-day Automatic Traffic Count (ATC) on Wrotham Road within the vicinity of the site access.
- 6.24 The visibility splays have been calculated using the Manual for Streets (MfS) visibility calculator and 85th percentile speeds/traffic volumes from the ATC. The 85th percentile speeds recorded are as follows:
- Eastbound: 43mph (69kph)
 - Westbound: 44mph (71kph)
- 6.25 It is noted that during their pre-application response, KCC stated the following:
- “The visibility splays have been based on the 85th percentile speeds recorded by an ATC, which were approximately 43-44mph in each direction. The splays have been calculated using MfS. However, MfS only provides guidance for speeds up to 37mph. Visibility splays should be calculated using DMRB. If the access is located within the ‘derestricted’ limited, then the Y distance would need to be in line with a 60mph road, which is significantly longer than the 77m shown.”*
- 6.26 Adjustments to the visibility splays have been made following comments raised by KCC. However, given the proposed junction is situated at a transition, the use of observed 85th percentile speeds are considered more appropriate than being based on the signposted 60mph speed limit.
- 6.27 Manual for Streets visibility splay calculator allows for parameters to be used for vehicle speeds above 37mph (60kph) and in accordance with relevant DMRB parameters (i.e. reaction time, deceleration length etc.). These calculations are presented within paragraph 10.1.13 of MfS2. These results indicate the requirement for splays measuring 2.4m x 116m to the west, and 2.4m x 123m to the east.
- 6.28 Nevertheless, visibility splays have also been provided in accordance with DMRB for the recorded 85th percentile speeds (120m based on a 70kph design speed) to demonstrate that this can also be achieved.
- 6.29 The visibility splay calculations based on observed speeds are provided at **Appendix I**.

Pedestrian and Cycling Access

- 6.30 Pedestrian access will be provided from the primary vehicular access point with internal footways tying into the surrounding footway network.
- 6.31 The proposals include the retention of the existing PRow on site (ref: NS253) which continues offsite from the southeast corner and traverses east across the northern edge of the adjacent fields to Wrotham Road to the east of the site.
- 6.32 KCC also stated:
"Whilst the site access plans show a 2m footway being provided, as stated above, the proposals tie into existing footways which are unlikely to be wide enough to meet the standards."
- 6.33 Whilst it is acknowledged that part of the off-site footway network is less than an ideal width, third-party land considerations do not allow for widening of the southern footway on Longfield Road to the east of the site.

Parking Proposals

- 6.34 Although the schedule of accommodation remains to be detailed as part of a full planning application, the principles for on-site parking have been considered within this report.
- 6.35 As part of the pre-application process, it was agreed with KCC that the SPG4 standards should be used, alongside a comparison with the new KCC standards.
- 6.36 The parking standards from both documents for use class C3 Dwellings are summarised in **Table 14**. The parking standards under the new KCC guidance is based on a residential development situated within a 'Suburban' area.

Table 14: Parking Standards Comparison – C3 Dwellings

Parking Type	Parking Requirements			
	No. Bedrooms	KCC Parking Standards (2006) (SPG4)	No. Bedrooms	KCC Parking Standards (2025)
Car Parking	1 bedroom 2 and 3 bedrooms 4+ bedrooms	1 space per dwelling 2 spaces per dwelling 3 spaces per dwelling	1 and 2 bedrooms 3 bedrooms 4+ bedrooms	1 space per unit 2 spaces per unit* 2 spaces per unit**
Cycle Parking	All Dwellings	1 space per bedroom	All Dwellings	1 space per bedroom

*Allocation of one space per unit possible.

**Allocation of both spaces possible.

- 6.37 **Table 14** demonstrates that there is a greater flexibility under the new parking standards to not only provide a lower number of vehicle parking spaces, but also in terms of how they are allocated either within curtilage or unallocated on local roads within the site.
- 6.38 The vehicular parking requirements will align with the standards presented within SPG4; however, it is recommended that this is reviewed as part of the reserved matters planning application should GBC adopt the latest KCC parking standards, or otherwise.

Cycle Parking

6.39 The standards for cycle parking remain consistent between both documents with 1 space per bedroom (including flats and maisonettes). On that basis, cycle parking at the proposed development will align with the following standards:

- Cycle parking provision will be provided within the curtilage of a dwelling, including secure rear gardens. Garages will be of a suitable size to accommodate the required cycle parking provision.
- A secure, sheltered, communal parking facility will be provided should suitable provision not be provided within the curtilage of a dwelling. This will include spaces for adapted bikes (approx. 5%), electric vehicle charging, and visitor parking.

Electric Vehicle Parking

6.40 Given the advances in Electric Vehicle (EV) parking requirements since the production of the superseded standards, no mention of EV parking was previously included.

6.41 It is envisaged that the proposed development will utilise the current guidance and principles presented within the new KCC parking standards. This includes:

- Each dwelling with on-plot parking will provide an electric vehicle charging-point within proximity to the parking space.
- Where communal residential parking areas are present, a mix of 'active' charging spaces with charging infrastructure in place from occupation, and 'passive' charging spaces with wiring and ducting in place for future conversion.

Proposed Mitigation Measures

6.42 In addition to the proposals, the following additional measures are proposed based on comments raised by KCC as well the results of the Walking and Cycling Audit.

6.43 KCC stated that they are aware of forthcoming proposals within the area and recommended that contact is made with the applicants/consultants to discuss potential off-site mitigation measures to ensure they align, where possible.

6.44 It is not realistic for the Applicant to engage with all site promoters in the area and there can be no certainty of those developments coming forward through the application process. The Applicant presents a package of proposed mitigation measures for this proposed development to be assessed on their own merits but also recognises that the authorities are seeking to promote improve bus facilities along Wrotham Road and that the development should provide an appropriate financial contribution to these measures.

Public Transport

6.45 KCC's public transport team provided a note in January 2026 to developers within the surrounding area, setting out the required contributions towards an improve bus strategy along the A227 corridor to support future development.

6.46 The note determines that the existing level of bus services are insufficient to support proposals within the area and are therefore unlikely to encourage modal shift.

6.47 Specifically, they state:

"It has been established that for any of the current or pending planning applications to be supported then they would either individually or collectively need to release funding that would support the following minimum service levels.

- *Monday to Saturday – half hourly bus services connecting the development sites with Gravesend, operating between the hours of 0600 and 2300.*
- *Sunday – hourly bus service connecting the development sites with Gravesend, operating between the hours of 0900 and 1700."*

6.48 The provision of this minimum level of service is estimated at costing £760,000 per annum or £3.8m in total to sustain this level of service for five years (excl. inflation). This is formed of the following:

- £250,000 per annum to sustain the existing (306/308) service at current frequency;
- £300,000 per annum to double the frequency of the service providing a 30 minute frequency;
- £60,000 per annum to provide evening journeys operating Mondays to Saturdays;
- £50,000 per annum would enable the service to operate on Sundays;
- £100,000 per annum for every additional school capacity vehicle that were needed to service additional demand.

6.49 The full note is provided at **Appendix J**.

6.50 Following review of the note, the client is content to provide a proportionate contribution towards the delivery of bus service improvements in line with that requested by the KCC public transport team.

6.51 In addition, contributions towards a 6-month season ticket will be provided to each household upon initial occupation to promote the use of local bus services and help develop a culture of sustainable travel from the outset.

Active Travel

6.52 Following comments raised by KCC, it is proposed that a dropped kerb crossover is provided adjacent the National Autistic Society Helen Allison School to allow pedestrians to access the footways on the northern side of Longfield Road. This allows for pedestrians to avoid the vehicles observed to temporarily park partially on the southern kerbside to the east of the school which reduces the useable width of the footway.

6.53 In addition, KCC also stated in their response to the interim TA:

"There is concern that the existing footway leading towards Wrotham Road is not to standard width and is reduced further by vehicles parking on the footway. The proposed crossing of Longfield Road would permit residents to walk on the northern side of the carriageway to access Camer Parade. However, those travelling towards the schools would need to remain on the southern side and this is concerning".

6.54 Alternative options were considered to reduce kerbside parking such as TROs, however this is more likely to move the issue elsewhere in the area given local properties do not have off-street parking facilities.

6.55 The potential for an additional dropped kerb crossover closer to Meopham Community Academy to cross pedestrians back over Longfield Road to avoid the section of kerbside parking, was explored. However, a suitable location could not be identified given the guard railing on the southern side of Longfield Road to the east of the kerbside parking, and dropped kerbs on the northern side of the carriageway to facilitate access to driveways.

- 6.56 Following the Walking and Cycling Audit, the following mitigation measures are proposed to assist with and potentially encourage active travel:
- Provision of additional cycle parking stands at Meopham railway station to make cycling a more attractive method of travel to the station. At this stage we envisage up to 10 additional cycle parking stands will be funded which increases the existing capacity (20 stands) by 50%.
 - Following the walking and cycling audit, a proportionate contribution towards improved lighting along the A227 corridor is proposed to improve the attractiveness of the route for pedestrians and cyclists. We expect a contribution to be secured as part of any approval with details to be submitted at a later date.
- 6.57 It is noted that in their response to the interim TA, KCC stated:
- “No improvements are proposed to the A227 between the site and Meopham Station, or the site and Meopham Secondary School. These routes have narrow footways, intermittent lighting and no cycle facilities.”*
- 6.58 Whilst there are some inconsistencies in footways widths along the routes, as highlighted within the route audit, the routes are not considered to be narrow and unwalkable for the majority of pedestrian users, especially when considering the use of footways on either side of the carriageway.
- 6.59 Notwithstanding this and the contributions suggested above, the client is committed to providing contributions towards enhancing local bus service provision which will create a frequent, sustainable connection to both Meopham Railway Station and Meopham Secondary School which will be attractive for new residents.
- 6.60 If a suitable scheme is available that collectively benefits all forthcoming local developments, then a proportionate contribution can be made towards such a scheme.

Speed Mitigation

- 6.61 Given the results of the ATC survey, measures are proposed to encourage lower vehicle speeds on approach to the site access junction which could reduce the requirement for longer visibility splays, and also increase road user safety, especially for local residents and schools to the east of the site.
- 6.62 Proposed measures include:
- Promotion of a traffic regulation order (TRO) for an extension of the 30mph zone to the west of the site.
 - A gateway entry feature in the current 60mph speed zone to make drivers aware they are entering a lower speed limit zone.
 - Vehicle activated speed signs within the 30mph zone to remind drivers if they exceed the speed limit. Albeit, KCC has stated in their interim TA response that this could be removed in the future due to maintenance liability.
- 6.63 It should be noted that measures such as these were suggested within the RSA1. The proposed speed mitigation measures are presented in **Drawing T25526.001**.

LCWIP Connection

- 6.64 Contributions are proposed to progress the LCWIP route 6, which runs from Wrotham Road to Norwood Lane to the northeast of the site.
- 6.65 Cyclists would be able to access the route via Transdescant Drive and this would offer a quieter route towards Meopham railway station, should cyclists wish to do so. Cyclists would be advised to dismount at the end of Transdescant Drive to continue through an alley which connects to Norwood Lane (Rowan Close).
- 6.66 This would provide a quiet route for cyclists away from Wrotham Road to connect to route 6, and to access Meopham railway station, should cyclists wish to do so.
- 6.67 KCC stated within their response to the interim TA:
"Due to the lack of cycle infrastructure and lighting on the A227, the applicant proposes to direct cyclists to Transdescant Drive and Norwood Lane. The suitability of this route is questionable given that it is a 200m diversion from the A227, is not lit, and includes a PROW (public footpath) that prohibits cycle access. Requiring cyclists to dismount would be impractical and discriminatory, particularly for disabled cyclists who may struggle to do this."
- 6.68 Signing of residents towards Transdescant Drive (LCWIP Route 6) has been proposed as it is considered to be a safe and suitable alternative to providing a dedicated facility along the A227 which would be costly and disproportionate to the scale of the proposals
- 6.69 It is debatable that cyclists dismounting for a c.30m section would be impractical or unreasonable for the majority of users who are likely to prefer a safer and quieter route compared to using the A227 in its current form.
- 6.70 It should be reiterated that this route is within the LCWIP, and a contribution is proposed to help further develop the route either in its current form or with potential enhancements. We politely request that KCC suggest a proportionate contribution towards this.
- 6.71 Alternatively, if a suitable scheme is currently available along the A227, then a proportionate contribution can be made, noting that several other forthcoming developments are likely to benefit from this and would also be expected to contribute.
- 6.72 Again, the client is committed to providing contributions towards enhancing local bus service provision which will create a frequent, sustainable connection along the A227 corridor.

Travel Plan Measures

- 6.73 As previously stated, a TP has been produced in support of this TA to encourage uptake of sustainable transport modes. The following potential measures are proposed as part of the TP:
- Public transport seasons tickets for 6 months.
 - Parcel lockers (drop-off/pick-up).
 - Public transport timetable and route information.
 - Active Travel events and promotion.

- 6.74 The purpose of the TP will be to promote the sustainable transport options within and around the site to encourage sustainable travel from initial occupation.

Signage

- 6.75 Contributions towards additional signage are proposed along the length of Longfield Road/Wrotham Road between the site and Meopham railway station.
- 6.76 It was identified as part of the Walking and Cycling Audit that no existing signage to the station is present along the route, however this could encourage existing residents and future residents of the site to walk/cycle to the station as part of a multi-modal journey.

Parking

- 6.77 Following the on-site observations which indicate an existing issue of unlawful and inconsiderate parking, and its subsequent impact on the local highway network, it is proposed that parking will be provided within the site close to the site frontage.
- 6.78 Whilst this was also an issue raised by the local Parish Councils, KCC stated that ideally the site should not be encouraging additional driving as less parking could discourage car travel.
- 6.79 Additionally, KCC stated within the pre-application meeting that school-drop off/pick-up only occurs for a temporary period of the day, although parking could be useful for the adjacent Helen Alison National Autistic Society Helen Allison School.
- 6.80 All parking will be unallocated for use by local residents and the school. Local residents with no off-street parking facilities could benefit from this and it could potentially reduce kerbside parking on Longfield Road and subsequent obstruction of the footway between both the Helen Allison National Autistic Society School and Meopham Community Academy.

Lighting

- 6.81 KCC stated in their response to the interim TA that:
"...access is not a reserved matter and therefore the lighting proposals for access to the site, raised in the audit and designers response, must form part of this Outline application".
- 6.82 The provision of a lighting strategy as part of the access proposal is a detailed design matter and therefore is expected to be conditioned as part of the planning application and to be provided at a later date.

7.0 Trip Generation, Distribution and Assignment

Background

- 7.1 As previously stated, KCC have requested the use of the GTM which will distribute and assign the proposed development traffic.
- 7.2 The initial TA for the development relied upon traffic count data collected at and around the proposal site whilst the requested traffic forecasts from the GTM were produced by KCC's transport consultant, Jacobs.
- 7.3 That data is now available and junction capacity tests have been rerun on the basis of the turning count data derived from the GTM. The rerun models therefore supersede the initial results presented as part of the interim TA.

Model Runs

- 7.4 The following scenarios have been agreed and tested within the model, with AM (08:00-09:00) & PM (17:00-18:00) turning count outputs produced. The references to Site 2 and Site 1 refer to the proposal site (120 dwellings) and the proposed development off Wrotham Road (350 dwellings – a live application: Planning Ref: 20250992), respectively.

Table 15: GTM Model Scenario Tested

ID	Scenario	Details
Scenario 0	2019 Base Model	Enhancement at local area
Scenario 1	2042 Local Plan	Gally Hill Closed + Local Plan Sites without proposed sites (Site 1 -Land East of Wrotham Road , Site 2 -Land South of Longfield Road)
Scenario 2	2042 Local Plan with Site 1	Gally Hill Closed + Local Plan Sites + Site 1 - Land East of Wrotham Road
Scenario 3	2042 Local Plan with Site 2	Gally Hill Closed + Local Plan Sites + Site 2 - Land South of Longfield Road
Scenario 4	2042 Local Plan with Site 1 + Site 2	Gally Hill Closed + Local Plan Sites + proposed sites (Site 1 - Land East of Wrotham Road , Site 2 - Land South of Longfield Road)
Scenario 5	2032 Reference Case	Gally Hill Closed + TEMPRo Growth (no Local Plan sites)
Scenario 6	2032 Reference Case + Site 1	Gally Hill Closed + TEMPRo Growth (no Local Plan sites) + Site 1
Scenario 7	2032 Reference Case + Site 2	Gally Hill Closed + TEMPRo Growth (no Local Plan sites) + Site 2
Scenario 8	2032 Reference Case + Site1 + Site 2	Gally Hill Closed + TEMPRo Growth (no Local Plan sites) + Site 1 + Site 2

- 7.5 Jacobs requested committed development lists from Gravesham Borough Council but did not receive a response. On that basis, it was agreed with KCC that TEMPro factors would instead be used for the 2032 Reference Case scenario so as not to cause delay of the modelling process.
- 7.6 The 2042 Local Plan scenario includes all known allocated sites within the Gravesham area at the time the modelling was commissioned/started.
- 7.7 To create a robust assessment, a base model enhancement was undertaken to identify any discrepancies between the observed data and model flows by Jacobs.
- 7.8 All scenarios have been run under the assumption that Gally Hill is closed to through traffic. It was confirmed by Jacobs that this is within Gravesham and outside of the study area and the impact on the local highway network near to the site is likely to be minimal.
- 7.9 For the purposes of this TA the Local Plan and Reference Case scenarios that include just Site 1 (land east of Wrotham Road) are not relevant and are therefore not included.
- 7.10 For presentation purposes within the junction models, the 2032 Reference Case scenarios are presented before the 2042 Local Plan scenarios.

Traffic Generation

- 7.11 This report considers a proposed development of up to 120 residential dwellings.
- 7.12 The TRICS 7.11.4 database has been used to determine the potential vehicle trip generation for the proposed development. The output is provided at **Appendix K** of this report and summarised in **Table 16**.
- 7.13 The following parameters have been used within the TRICS assessment:
- Land Use – Residential, Houses Privately Owned.
 - Regions – United Kingdom (Excl. Greater London and Ireland).
 - Unit Range – 100-140 (Selected Average: 121).
 - Date Range – 01/01/2016 – 23/05/2024.
 - Locations – Suburban Area, Edge of Town.
 - Surveys undertaken during the Covid-19 pandemic were removed.

Table 16: TRICS Trip Generation Assessment – 120 Dwellings

Peak Period	Trip Rate (per dwelling)		Vehicle Trips (120 dwellings)		Total
	In	Out	In	Out	
AM	0.156	0.355	19	43	62
PM	0.332	0.187	40	22	62

N.B. Figures subject to rounding.

- 7.14 The trip generation summarised in **Table 16** indicates that the proposed development is forecast to generate 62 two-way vehicular trips in the AM peak, and 62 two-way vehicle trips in the PM peak.

Distribution and Assignment

- 7.15 The updated distribution of traffic within the GTM has been based on the existing distribution of traffic from agreed nearby residential zones in that model.
- 7.16 The updated assignment of development traffic has been undertaken on the basis of the parameters contained within the GTM, as agreed with KCC. This considers the future scenarios in which committed development and allocated local plan sites come forward which could impact on queueing and delay across the network and hence influence journey times and routes choices across the network.

8.0 Traffic Impact and Capacity Assessments

Traffic Impact

- 8.1 KCC provided initial traffic model runs that indicated how development traffic would assign to the network and therefore the likely traffic impact upon any particular junction.
- 8.2 A level of peak hour impact of more than 30 development trips (two-way) at any junction was agreed as a suitable threshold for requiring capacity assessments. On this basis, the following junctions were identified as requiring junction capacity analysis:
- Junction 1 - Longfield Road/Site Access
 - Junction 2 - Wrotham Road/Longfield Road
 - Junction 3 - Wrotham Road/Green Lane
 - Junction 4 - Wrotham Road/Huntingfield Road
 - Junction 5 – Wrotham Road/Lewis Road
 - Junction 6 - Wrotham Road/Istead Rise
 - Junction 7 – Wrotham Road/Station Road
 - Junction 8 - Wrotham Road/A2 (Double Roundabout)
 - Junction 9 – Green Lane/Norwood Lane
 - Junction 10 - Sole Street/The Street/Jeskyns Road
 - Junction 11 - Longfield Road/Huntingfield Road
 - Junction 12 – Main Road/Manor Road
 - Junction 13 – Main Road/Nurstead Lane
- 8.3 Due to the strategic nature of the model, not all links are coded in detail and therefore some minor junctions are not included within the modelled turning flows.
- 8.4 For example, following review of the Wrotham Road/Station Road junction, it was confirmed by Jacobs that the zone which covers this area (Zone 107508) assumes that traffic loads onto the network from Nursery Road/Orchard Drive. On that basis, the outputs do not provide turning flows to/from Station Road within any of the model scenarios during the peak periods.
- 8.5 On that basis, the Wrotham Road/Station Road junction has been omitted from assessment given the junction model would assume that both northbound and southbound traffic on Wrotham Road would not be blocked by turning vehicles into Station Road and hence would show no delay or queuing.
- 8.6 The junction numbering has therefore been amended accordingly within the subsequent junction assessments.
- 8.7 The raw turning flows received from Jacobs for each junction across all scenarios has been summarised within Network Flow Diagrams presented at **Appendix L**.

Sensitivity Assessment

- 8.8 As previously stated, the proposed development (Site 2) and land east of Wrotham Road (Site 1) may progress through the relevant planning stages at similar timescales and, subject to approval, are likely to open at the same time.
- 8.9 The Wrotham Road proposal is not a committed development; however, it has been considered for sensitivity assessment purposes.
- 8.10 It should be emphasised that neither development is reliant on the other coming forward and therefore the development should be considered on its own merits, albeit the sensitivity assessment gives an indication of potential cumulative impact should the Wrotham Road proposals come forward.

Assessment Scenarios

- 8.11 To create a robust assessment, the following assessment scenarios have been tested within the junction models:
- 2032 Reference Case (Assumed Opening Year)
 - 2032 Reference Case + Development
 - 2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)
 - 2042 Local Plan
 - 2042 Local Plan + Development
 - 2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)
- 8.12 The tests including Site 1 must be considered as sensitivity assessment for the purposes of this report.

Junction Assessment

- 8.13 All junction assessments have been undertaken using the Junctions 11 software for priority and roundabout junctions.
- 8.14 The junction measurements have been based on Topographical survey mapping within the AutoCAD software where available. Otherwise, junction measurements are based on measurements using Ordnance Survey mapping, also within AutoCAD software.
- 8.15 The junction measurements are presented in **Drawing T25526.003**.

Junction 1 - Longfield Road/Site 2 Access

- 8.16 The Longfield Road/Site 2 access has been modelled using the PICADY module of Junctions 11.
- 8.17 The model results are summarised in **Table 17** with the full model outputs provided at **Appendix M**.

Table 17: Longfield Road/Site 2 Access PCADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case + Site 2						
Site Access	0.09	0	7	0.05	0	7
Wrotham Road	0.02	0	5	0.04	0	6
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Site Access	0.09	0	8	0.05	0	7
Wrotham Road	0.02	0	5	0.04	0	6
2042 Local Plan + Site 2						
Site Access	0.10	0	8	0.05	0	7
Wrotham Road	0.02	0	6	0.04	0	6
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)						
Site Access	0.10	0	8	0.05	0	7
Wrotham Road	0.02	0	6	0.04	0	6

8.18 **Table 17** demonstrates that the site access is forecast to operate with plenty of spare capacity, and with minimal queuing and delay across all scenarios and peak periods.

Junction 2 - Wrotham Road/Longfield Road

8.19 The Wrotham Road/Longfield Road junction has been modelled using the PICADY module of Junctions 11 for priority T-Junctions.

8.20 The model results are summarised in **Table 18** with the full model outputs provided at **Appendix M**.

Table 18: Wrotham Road/Longfield Road PICADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case						
Longfield Road (Left-Turn)	0.12	0	13	0.07	0	10
Longfield Road (Right - Turn)	0.61	2	35	0.44	1	26
Wrotham Road (N) (Right-Turn)	0.11	0	8	0.09	0	9
2032 Reference Case + Site 2						
Longfield Road (Left-Turn)	0.15	0	14	0.07	0	11
Longfield Road (Right - Turn)	0.65	2	39	0.46	1	26
Wrotham Road (N) (Right-Turn)	0.12	0	8	0.09	0	9
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Longfield Road (Left-Turn)	0.15	0	14	0.06	0	11
Longfield Road (Right - Turn)	0.66	2	41	0.49	1	29
Wrotham Road (N) (Right-Turn)	0.14	0	9	0.11	0	9

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2042 Local Plan						
Longfield Road (Left-Turn)	0.21	0	23	0.02	0	15
Longfield Road (Right - Turn)	0.77	3	68	0.65	2	47
Wrotham Road (N) (Right-Turn)	0.20	0	10	0.11	0	10
2042 Local Plan + Site 2						
Longfield Road (Left-Turn)	0.29	0	32	0.03	0	16
Longfield Road (Right - Turn)	0.82	4	79	0.68	2	51
Wrotham Road (N) (Right-Turn)	0.21	0	10	0.12	0	10
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)						
Longfield Road (Left-Turn)	0.36	1	40	0.07	0	23
Longfield Road (Right - Turn)	0.84	4	88	0.76	3	67
Wrotham Road (N) (Right-Turn)	0.23	0	10	0.13	0	10

- 8.21 **Table 18** demonstrates that the Wrotham Road/Longfield Road junction is forecast to operate within practical capacity across all 2032 Reference Case scenarios during both peak periods.
- 8.22 The addition of development traffic creates a minimal impact on junction operation, with minor increases in delay on Longfield Road in the AM and PM peaks. Similarly, queueing remains constant during both peak periods.
- 8.23 The sensitivity assessment also demonstrates that the junction is forecast to operate within practical capacity during both peak periods, with minimal increases in delay in both peak periods. The model also forecasts that there will be no change in queueing during either peak period.
- 8.24 The junction is forecast to still operate within practical capacity during the 2042 Local Plan scenario, albeit with a reduction in overall junction capacity compared the 2032 Reference Case scenario. The junction operates with higher delay across both peak periods, at 68 seconds and 47 seconds on Longfield Road, respectively. Queueing, however, remains largely similar.
- 8.25 The addition of development traffic results in only a minimal level of impact, increasing delay by 11 seconds to 79 seconds in the AM peak and by 4 seconds in the PM peak to 51 seconds. Increases in queueing are negligible with an increase of just 1 PCU on Longfield Road during the AM peak.
- 8.26 Within the sensitivity assessment, the junction reaches an RFC of 0.84 on Longfield Road during the AM peak. The junction experiences an increase in delay of 20 seconds on Longfield Road during both the AM and PM peak periods with an increase in queueing of 1 PCU.
- 8.27 Considering the above, the proposed development in isolation is forecast to have a minimal impact on the operation of the Wrotham Road/Longfield Road junction. Even allowing for traffic related to the potential Wrotham Road proposals (Site 1), the impact at this junction is considered minimal.
- 8.28 Given the junction does not exceed any capacity threshold during any of the assessment scenarios or peak periods, no mitigation is proposed at this junction.

Junction 3 - Wrotham Road/Green Lane

8.29 The Wrotham Road/Green Lane junction has been modelled using the PICADY module of Junctions 11.

8.30 The model results are summarised in **Table 19** with the full model outputs provided at **Appendix M**.

Table 19: Wrotham Road/Green Lane PICADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case						
Green Lane (Left-Turn)	0.44	1	12	0.27	0	9
Green Lane (Right-Turn)	0.12	0	18	0.09	0	20
Wrotham Road (N) (Right-Turn)	0.30	0	8	0.50	1	11
2032 Reference Case + Site 2						
Green Lane (Left-Turn)	0.44	1	12	0.28	0	9
Green Lane (Right-Turn)	0.12	0	18	0.09	0	20
Wrotham Road (N) (Right-Turn)	0.30	1	9	0.49	1	11
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Green Lane (Left-Turn)	0.48	1	13	0.35	1	10
Green Lane (Right-Turn)	0.13	0	20	0.10	0	22
Wrotham Road (N) (Right-Turn)	0.37	1	9	0.51	1	11
2042 Local Plan						
Green Lane (Left-Turn)	1.32	46	542	0.38	1	12
Green Lane (Right-Turn)	1.31	34	550	0.45	1	33
Wrotham Road (N) (Right-Turn)	0.37	1	10	0.53	1	12
2042 Local Plan + Site 2						
Green Lane (Left-Turn)	1.32	45	531	0.39	1	12
Green Lane (Right-Turn)	1.30	33	540	0.44	1	33
Wrotham Road (N) (Right-Turn)	0.37	1	10	0.53	1	12
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)						
Green Lane (Left-Turn)	1.39	54	636	0.47	1	15
Green Lane (Right-Turn)	1.37	35	641	0.50	1	41
Wrotham Road (N) (Right-Turn)	0.44	1	10	0.55	2	12

8.31 **Table 19** demonstrates that the Wrotham Road/Green Lane junction is forecast to operate within practical capacity across all 2032 Reference Case scenarios.

8.32 The addition of proposed development traffic in the 2032 Reference Case scenario creates no changes to the results in the AM peak period and actually causes a slight reduction in RFC on Wrotham Road to 0.49 in the PM peak period. There is no change to queueing and delay during either peak period. This demonstrates that the proposed development will not cause a perceptible impact on the operation of the junction in the 2032 Reference Case scenario.

- 8.33 The sensitivity analysis forecasts that the addition of Site 1 traffic will change little in the 2032 Reference Case scenario. The forecast changes are not considered to be significant and there will be no perceptible impact on the operation of the junction.
- 8.34 Within the 2042 Local Plan scenario, the junction is forecast to operate well over capacity. From review of the turning flow movements, there is a general increase in vehicles turning into/out of Green Lane, however the most significant increase is in right turn movements from Green Lane to Wrotham Road north which are required to give-way to three lanes of traffic (including the ghost-island right turn). This will in turn cause blockage for vehicles wanting turn left from the junction, creating queueing and delay.
- 8.35 It should be noted that there is a negligible improvement to junction operation in the AM peak with the addition of the development traffic, likely due to some rerouting assumed within the model. This results in a decrease in delay by 10 seconds on Green Lane and a reduction of 1 PCU queue.
- 8.36 The sensitivity analysis forecasts that the additional traffic from Site 1 will increase delay by 101 seconds, and queueing by 1 PCU in the AM peak. It is common for junction models, such as in Junction 11, to become more sensitive to change in traffic flows once they exceed theoretical capacity and become more saturated, leading them to forecast unrealistic increases in delay such as these. Therefore, the results should be treated with caution.
- 8.37 It is clear from the results from the 2042 Local Plan scenarios indicate that the GTM model is forecasting a significant traffic impact at this junction as a result of a Local Plan allocation to the east of the junction. However, the impact of the proposed development does not create the significant impact and it is for that particular Local Plan development to mitigate its impact at this location. On that basis, no mitigation of this junction is proposed.

Junction 4 - Wrotham Road/ Huntingfield Road

- 8.38 The Wrotham Road/Huntingfield Road junction has been modelled using the PICADY module of Junctions 11.
- 8.39 The model results are summarised in **Table 20** with the full model outputs provided at **Appendix M**.

Table 20: Wrotham Road/Huntingfield Road PICADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case						
Huntingfield Road	0.25	0	12	0.20	0	13
Wrotham Road (N) (Right-Turn)	0.09	0	8	0.08	0	7
2032 Reference Case + Site 2						
Huntingfield Road	0.25	0	12	0.21	0	13
Wrotham Road (N) (Right-Turn)	0.09	0	8	0.08	0	7
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Huntingfield Road	0.27	0	12	0.24	0	15
Wrotham Road (N) (Right-Turn)	0.09	0	8	0.08	0	8
2042 Local Plan						
Huntingfield Road	0.37	1	16	0.32	1	17

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
Wrotham Road (N) (Right-Turn)	0.11	0	9	0.09	0	8
2042 Local Plan + Site 2						
Huntingfield Road	0.36	1	16	0.33	1	17
Wrotham Road (N) (Right-Turn)	0.11	0	8	0.09	0	8
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)						
Huntingfield Road	0.37	1	16	0.35	1	18
Wrotham Road (N) (Right-Turn)	0.11	0	9	0.09	0	8

8.40 **Table 20** demonstrates that the Wrotham Road/Huntingfield Road junction is forecast to operate within practical capacity with minimal queueing and delay across all assessment scenarios and peak periods.

8.41 Notably, the addition of the proposed development traffic causes an imperceptible impact on junction operation in both the 2032 Reference Case and 2042 Local Plan scenarios, with minimal changes to RFC, queueing and delay.

Junction 5 - Wrotham Road/Lewis Road

8.42 The Wrotham Road/Lewis Road junction has been modelled using the PICADY module of Junctions 11. The model results are summarised in **Table 21** with the full model outputs provided at **Appendix M**.

Table 21: Wrotham Road/Lewis Road PICADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case						
Lewis Road	0.73	3	39	0.73	3	38
Wrotham Road (N) (Right-Turn)	0.22	0	11	0.36	1	12
2032 Reference Case + Site 2						
Lewis Road	0.74	3	40	0.74	3	40
Wrotham Road (N) (Right-Turn)	0.22	0	11	0.36	1	12
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Lewis Road	0.77	3	46	0.82	4	57
Wrotham Road (N) (Right-Turn)	0.22	1	11	0.37	1	12
2042 Local Plan						
Lewis Road	1.22	39	370	1.06	17	195
Wrotham Road (N) (Right-Turn)	0.32	1	13	0.53	1	17
2042 Local Plan + Site 2						
Lewis Road	1.21	38	360	1.08	20	219
Wrotham Road (N) (Right-Turn)	0.32	1	13	0.53	1	17
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)						

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
Lewis Road	1.27	44	429	1.15	27	290
Wrotham Road (N) (Right-Turn)	0.32	1	14	0.53	1	17

- 8.43 **Table 21** demonstrates that the Wrotham Road/Lewis Road junction is forecast to operate within practical capacity within all 2032 Reference Case scenarios.
- 8.44 The additional development traffic creates a negligible impact on the operation of the junction, creating an additional 1 second delay and 2 second delay in the AM and PM peak periods, respectively, on Lewis Road. Similarly, there is only an increase in queuing of 1 PCU in the PM peak period.
- 8.45 The addition of traffic from Site 1 traffic within the sensitivity assessment is forecast to create an increase in delay of 6 seconds in the AM peak period and 17 seconds in the PM peak period. There is only an increase in queuing of 1 PCU on Wrotham Road in the AM peak period, and 1 PCU on Lewis Road in the PM peak period. This is considered to be a negligible impact.
- 8.46 The junction is forecast to operate over capacity within all 2042 Local Plan scenarios on the Lewis Road approach. This is largely due to the increase in flows on Wrotham Road as a result of 2042 Local Plan traffic considered within the GTM model which is restricting vehicles from egressing Lewis Road.
- 8.47 The results show that the proposed development will create a negligible impact on the operation of the junction, with slight reductions in delay of 10 seconds and queueing by 1 PCU on Lewis Road in the AM peak period. There is an increase in delay of 24 seconds and increase in queueing of 3 PCUs in the PM peak period. This is not considered to be an unacceptable impact on junction operation.
- 8.48 The sensitivity analysis forecasts that the additional traffic from Site 1 will increase delay by 61 seconds and queueing by 6 PCUs in the AM peak. In the PM peak, the sensitivity assessment will create an increase in delay by 71 seconds delay, and queueing by 7 PCUs. As previously stated, it is common for junction models, such as in Junction 11, to become more sensitive to change in traffic flows once they exceed practical capacity and become more saturated, leading them to forecast unrealistic increases in delay such as these.
- 8.49 The largest impact at the junction is associated with traffic from sites included within the 2042 Local Plan. The proposed development does not create a significant impact on the operation of the junction and therefore no mitigation is proposed.

Junction 6 - Wrotham Road/Istead Rise

- 8.50 The Wrotham Road/Istead Rise junction has been modelled using the PICADY module of Junctions 11.
- 8.51 The model results are summarised in **Table 22** with the full model outputs provided at **Appendix M**.

Table 22: Wrotham Road/Istead Rise PICADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case						
Istead Rise (Left-Turn)	0.50	1	18	0.45	1	15
Istead Rise (Right-Turn)	0.35	1	33	0.25	0	33
Wrotham Road (N) (Right-Turn)	0.33	1	13	0.53	1	17
2032 Reference Case + Site 2						
Istead Rise (Left-Turn)	0.50	1	18	0.46	1	15
Istead Rise (Right-Turn)	0.36	1	33	0.27	0	34
Wrotham Road (N) (Right-Turn)	0.33	1	12	0.53	1	17
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Istead Rise (Left-Turn)	0.52	1	20	0.46	1	15
Istead Rise (Right-Turn)	0.39	1	38	0.25	0	37
Wrotham Road (N) (Right-Turn)	0.33	1	13	0.54	1	17
2042 Local Plan						
Istead Rise (Left-Turn)	1.01	10	147	0.69	2	36
Istead Rise (Right-Turn)	0.93	4	248	0.63	1	114
Wrotham Road (N) (Right-Turn)	0.41	1	16	0.61	2	21
2042 Local Plan + Site 2						
Istead Rise (Left-Turn)	1.02	11	157	0.69	2	37
Istead Rise (Right-Turn)	0.94	4	259	0.63	1	118
Wrotham Road (N) (Right-Turn)	0.41	1	16	0.61	2	21
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)						
Istead Rise (Left-Turn)	1.10	16	218	0.77	3	51
Istead Rise (Right-Turn)	1.03	5	315	0.72	2	159
Wrotham Road (N) (Right-Turn)	0.41	1	17	0.61	2	22

- 8.52 **Table 22** demonstrates that the Wrotham Road/Istead Rise junction is forecast to operate well within practical capacity during the 2032 Reference Case scenarios.
- 8.53 The impact of the proposed development traffic is negligible, with no changes to queueing or delay in the AM peak period, and an increase of only 1 second in the PM peak period on Istead Rise.
- 8.54 Similarly, there is minimal impact in the sensitivity assessment with the addition of the Site 1 traffic. On Istead Rise, there is an increase in delay of 5 seconds and 3 seconds in the AM and PM peak periods, respectively, however there are no changes to queueing.
- 8.55 Within the 2042 Local Plan scenarios, the junction is forecast to operate slightly beyond capacity in the AM peak period, with the Istead Rise approach reaching an RFC of 1.01.

- 8.56 The addition of the proposed development traffic creates a negligible impact on the junction with minimal increases in delay of 11 seconds and 4 seconds in the AM and PM peak, respectively, on Istead Rise. There is also minimal changes in queueing with just a 1 PCU increase on Istead Rise in the AM peak.
- 8.57 Within the sensitivity assessment, there is an increase in delay of 71 seconds and increase in queueing of 6 PCUs on Istead Rise in the AM peak. In the PM peak, there is also an increase in delay of 45 seconds and increase in queueing of 1 PCU in the PM peak on Istead Rise.
- 8.58 Given the junction is forecast to operate over capacity without development traffic in the AM peak within the 2042 Local Plan scenario and given the impact of the proposed development on the operation of the junction is negligible, no mitigation is proposed.

Junction 7 - Wrotham Road/A2 (Double Roundabout)

- 8.59 The Wrotham Road/A2 (Double Roundabout) junction has been modelled using the ARCADY module of Junctions 11 for priority roundabouts.
- 8.60 The model has been set up as a linked roundabout to assess the relationship between the northern and southern roundabout, and to determine any potential impact on the internal link arms.
- 8.61 The A2 off-slips at both roundabouts have been modelled as entry only (flows entering the circulatory), and the A2 on-slips have been modelled as exit only (flows exiting the circulatory).
- 8.62 It is also understood that an approved scheme has been developed for the junction to improve its operational capability. As previously discussed, contact has been made with National Highways to obtain further information of the proposed scheme, however at the time of writing, no response has been received.
- 8.63 The model results are summarised in **Table 23** with the full model outputs provided at **Appendix M**.

Table 23: Wrotham Road/A2 ARCADY Results

Junction (No.)	Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
		RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case							
Northern Roundabout (1)	Wrotham Road (S) Internal Link	0.40	1	2	0.47	1	3
	A2 (W) Off-Slip	0.55	1	4	0.76	3	8
	Wrotham Road (N)	1.14	144	230	1.13	133	211
Southern Roundabout (2)	A2 (E) Off-Slip	0.38	1	6	0.46	1	7
	Wrotham Road (S)	1.04	36	109	0.80	4	14
	Wrotham Road (N) Internal Link	0.63	2	4	0.55	1	3
2032 Reference Case + Site 2							
Northern Roundabout (1)	Wrotham Road (S) Internal Link	0.39	1	2	0.47	1	3
	A2 (W) Off-Slip	0.56	1	4	0.77	3	8
	Wrotham Road (N)	1.14	149	241	1.13	133	211
Southern Roundabout (2)	A2 (E) Off-Slip	0.37	1	6	0.45	1	7
	Wrotham Road (S)	1.04	38	114	0.80	4	14
	Wrotham Road (N) Internal Link	0.64	2	4	0.56	1	3

Junction (No.)	Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
		RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)							
Northern Roundabout (1)	Wrotham Road (S) Internal Link	0.38	1	2	0.47	1	3
	A2 (W) Off-Slip	0.57	1	4	0.78	4	9
	Wrotham Road (N)	1.14	144	233	1.14	139	227
Southern Roundabout (2)	A2 (E) Off-Slip	0.37	1	6	0.45	1	7
	Wrotham Road (S)	1.07	51	143	0.81	4	15
	Wrotham Road (N) Internal Link	0.64	2	4	0.57	1	3
2042 Local Plan							
Northern Roundabout (1)	Wrotham Road (S) Internal Link	0.34	1	2	0.45	1	3
	A2 (W) Off-Slip	0.58	1	4	0.83	5	11
	Wrotham Road (N)	1.13	132	210	1.14	127	211
Southern Roundabout (2)	A2 (E) Off-Slip	0.37	1	7	0.44	1	7
	Wrotham Road (S)	1.25	149	451	0.89	7	24
	Wrotham Road (N) Internal Link	0.66	2	4	0.59	1	4
2042 Local Plan + Site 2							
Northern Roundabout (1)	Wrotham Road (S) Internal Link	0.34	1	2	0.46	1	3
	A2 (W) Off-Slip	0.58	1	4	0.82	4	10
	Wrotham Road (N)	1.13	133	212	1.13	123	204
Southern Roundabout (2)	A2 (E) Off-Slip	0.37	1	7	0.44	1	6
	Wrotham Road (S)	1.24	149	447	0.89	7	24
	Wrotham Road (N) Internal Link	0.66	2	4	0.58	1	4
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)							
Northern Roundabout (1)	Wrotham Road (S) Internal Link	0.35	1	2	0.46	1	3
	A2 (W) Off-Slip	0.58	1	4	0.83	5	11
	Wrotham Road (N)	1.13	130	206	1.13	118	198
Southern Roundabout (2)	A2 (E) Off-Slip	0.37	1	7	0.44	1	7
	Wrotham Road (S)	1.26	162	489	0.90	8	25
	Wrotham Road (N) Internal Link	0.66	2	4	0.59	1	4

- 8.64 **Table 23** demonstrates that the Wrotham Road/A2 junction is forecast to operate over capacity in the 2032 Reference Case scenarios across both peak periods.
- 8.65 Within the 2032 Reference Case AM peak, the Wrotham Road northern approach to the northern roundabout is forecast to operate with a delay of 230 seconds and queue of 144 PCUs. Similarly, the Wrotham Road southern approach to the southern roundabout is forecast to operate with a delay of 109 seconds and queue of 36 PCUs.
- 8.66 The junction is also forecast to operate over capacity in the PM peak with the Wrotham Road northern approach to the northern roundabout is forecast to operate with a 211 second delay and queue of 133 PCUs.

- 8.67 However, the proposed development is forecast to create minimal impact on the operation of the junction in the 2032 Reference Case scenario across both peak periods. For example, the proposed development increases delay by 11 seconds and queueing by 5 PCUs in the AM peak on the Wrotham Road northern approach to the northern roundabout. In addition, the Wrotham Road southern approach to the southern roundabout is only forecast to increase delay by 5 seconds and queueing by 2 PCUs.
- 8.68 Similarly, the proposed development flows create negligible changes to the operation of the junction in the 2032 Reference Case scenario PM peak.
- 8.69 The sensitivity assessment with Site 1 traffic also creates a negligible impact with minimal changes to queueing and delay.
- 8.70 Within the 2042 Local Plan scenario, the junction operates over capacity with similar operation to the 2032 Reference Case scenario.
- 8.71 Again, the proposed development and sensitivity assessment create negligible impacts with slight improvements on some arms within both the AM and PM peak periods, possibly as a result of the model rerouting some traffic.
- 8.72 It should be noted that none of the off-slips operate over capacity and delay and queueing is minimal across all scenarios and peak periods. Similarly, the internal links between the two roundabouts do not operate with any significant queueing and delay.
- 8.73 Again, it should be reiterated that the junction model becomes more sensitive to change in traffic flows once it exceeds theoretical capacity and becomes more saturated, leading the model to overestimate forecast increases in queues and delays.
- 8.74 Notwithstanding the results of the modelling for the junction, the proposed improvement at the junction is likely to improve junction performance once operational. We shall revisit junction capacity analysis when details are available.

Junction 8 - Camer Road/Norwood Lane

- 8.75 The Camer Road/Norwood Lane junction has been modelled using the PICADY module of Junctions 11.
- 8.76 It was confirmed by Jacobs that Norwood Lane is closed to through traffic as a result of a scheme that is modelled in the 2042 Local Plan scenario. Subsequently, this means there are no flows to/from Norwood Lane from Camer Road in the 2042 Local Plan scenarios. On that basis, these have been omitted from the assessment.
- 8.77 The model results are summarised in **Table 24** with the full model outputs provided at **Appendix M**.

Table 24: Camer Road/Norwood Lane PICADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case						
Norwood Lane	0.03	0	7	0.05	0	7
Camer Road (E) (Right-Turn)	0.12	0	5	0.06	0	6

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case + Site 2						
Norwood Lane	0.03	0	7	0.05	0	7
Camer Road (E) (Right-Turn)	0.12	0	5	0.06	0	6
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Norwood Lane	0.03	0	7	0.05	0	7
Camer Road (E) (Right-Turn)	0.13	0	5	0.06	0	5

8.78 **Table 24** demonstrates that the Camer Road/Norwood Lane junction is forecast to operate well within practical capacity with minimal queueing and delay within the 2032 Reference Case scenario.

8.79 The addition of the proposed development traffic does not create an impact on this junction during either peak period. Similarly, there is a negligible change to capacity results within the sensitivity assessment during either peak period.

Junction 9 - Sole Street/The Street/Jeskyns Road

8.80 The Sole Street/The Street/Jeskyns Road junction has been modelled using the PICADY module of Junctions 11.

8.81 The model results are summarised in **Table 25** with the full model outputs provided at **Appendix M**.

Table 25: Sole Street/The Street/Jeskyns Road PICADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case						
Sole Street (Left-Turn)	0.41	1	11	0.44	1	13
Sole Street (Right-Turn)	0.47	1	19	0.65	2	29
Jeskyns Road (N) (Right-Turn)	0.60	2	15	0.62	2	16
2032 Reference Case + Site 2						
Sole Street (Left-Turn)	0.41	1	11	0.45	1	14
Sole Street (Right-Turn)	0.48	1	20	0.66	2	30
Jeskyns Road (N) (Right-Turn)	0.61	2	16	0.63	2	16
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Sole Street (Left-Turn)	0.46	1	12	0.48	1	15
Sole Street (Right-Turn)	0.54	1	22	0.69	2	33
Jeskyns Road (N) (Right-Turn)	0.63	2	17	0.67	2	18
2042 Local Plan						
Sole Street (Left-Turn)	0.82	4	42	0.86	4	62
Sole Street (Right-Turn)	0.84	4	65	0.90	6	91
Jeskyns Road (N) (Right-Turn)	0.74	3	23	0.90	7	49

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2042 Local Plan + Site 2						
Sole Street (Left-Turn)	0.84	4	45	0.86	5	63
Sole Street (Right-Turn)	0.85	4	69	0.90	6	92
Jeskyns Road (N) (Right-Turn)	0.74	3	23	0.90	7	50
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)						
Sole Street (Left-Turn)	0.97	10	93	0.98	8	106
Sole Street (Right-Turn)	0.95	8	113	0.95	8	116
Jeskyns Road (N) (Right-Turn)	0.76	3	25	0.92	8	58

- 8.82 **Table 25** demonstrates that the Sole Street/The Street junction is forecast to operate within practical capacity during the 2032 Reference Case scenarios during both peak periods.
- 8.83 The proposed development creates an imperceptible impact on the operation of the junction during this scenario with an increase in delay of 1 second on Sole Street and Jeskyns Road in the AM peak period and 1 second on Sole Street in the PM peak period.
- 8.84 The addition of the Site 1 traffic also has a minimal impact on queueing and delay, with a 2 and 3 second increase in delay within the AM and PM peaks, respectively. There is also no increase in queueing on any approach in either peak period.
- 8.85 The junction exceeds 0.85 RFC in the 2042 Local Plan scenario in the PM peak period, reaching an RFC of 0.90 on Sole Street and Jeskyns Road.
- 8.86 From review of the turning flow data, there is a significant increase in flows at the junction as a result of local plan traffic, especially in right-turners from Jeskyns Road which is likely restricting right-turn movements from Sole Street, causing increases in queues and delays.
- 8.87 However, the proposed development traffic creates a negligible increase in queueing and delay during the 2042 Local Plan scenario, increasing delay by 4 seconds on Sole Street in the AM peak period, and by 1 second in the PM peak period. This is not a significant impact.
- 8.88 The sensitivity assessment shows that the junction will still operate within acceptable limits, albeit with an increase of 48 second delay and 6 PCU queue in the AM peak period and increase of 43 second delay and 3 PCU queue in the PM peak period.
- 8.89 The development traffic has a negligible of minimal impact on junction capacity in all scenarios and therefore no mitigation is proposed at this location.

Junction 10 - Longfield Road/Huntingfield Road

- 8.90 The Longfield Road/Huntingfield Road junction has been modelled using the PICADY module of Junctions 11.
- 8.91 The model results are summarised in **Table 26** with the full model outputs provided at **Appendix M**.

Table 26: Longfield Road/Huntingfield Road PICADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case						
Huntingfield Road	0.08	0	8	0.15	0	8
Longfield Road (E) (Right-Turn)	0.08	0	5	0.10	0	5
2032 Reference Case + Site 2						
Huntingfield Road	0.08	0	8	0.15	0	8
Longfield Road (E) (Right-Turn)	0.09	0	5	0.10	0	5
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Huntingfield Road	0.08	0	8	0.16	0	8
Longfield Road (E) (Right-Turn)	0.09	0	5	0.10	0	5
2042 Local Plan						
Huntingfield Road	0.16	0	9	0.20	0	9
Longfield Road (E) (Right-Turn)	0.11	0	5	0.16	0	6
2042 Local Plan + Site 2						
Huntingfield Road	0.16	0	9	0.21	0	9
Longfield Road (E) (Right-Turn)	0.11	0	5	0.16	0	6
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)						
Huntingfield Road	0.16	0	9	0.21	0	9
Longfield Road (E) (Right-Turn)	0.11	0	5	0.16	0	6

- 8.92 **Table 26** demonstrates that the Longfield Road/Huntingfield Road junction is forecast to operate well within practical capacity with minimal queueing and delay across all assessment scenarios and peak periods.
- 8.93 The addition of the proposed development traffic creates an imperceptible impact on this junction in both the 2032 Reference Case scenarios and 2042 Local Plan scenarios.
- 8.94 Similarly, there is a negligible impact in the sensitivity assessment on junction capacity across all scenarios and peak periods.

Junction 11 - Main Road/Manor Road

- 8.95 The Main Road/Manor Road junction has been modelled using the PICADY module of Junctions 11.
- 8.96 The model results are summarised in **Table 27** with the full model outputs provided at **Appendix M**.

Table 27: Main Road/Manor Road PICADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case						
Manor Road	0.13	0	8	0.15	0	8

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
Main Road (W) (Right-Turn)	0.04	0	5	0.01	0	6
2032 Reference Case + Site 2						
Manor Road	0.14	0	8	0.15	0	8
Main Road (W) (Right-Turn)	0.04	0	5	0.01	0	6
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Manor Road	0.16	0	8	0.15	0	8
Main Road (W) (Right-Turn)	0.04	0	5	0.01	0	6
2042 Local Plan						
Manor Road	0.15	0	9	0.18	0	8
Main Road (W) (Right-Turn)	0.07	0	6	0.01	0	6
2042 Local Plan + Site 2						
Manor Road	0.16	0	9	0.18	0	8
Main Road (W) (Right-Turn)	0.07	0	6	0.01	0	6
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)						
Manor Road	0.16	0	9	0.18	0	8
Main Road (W) (Right-Turn)	0.07	0	6	0.01	0	6

- 8.97 **Table 27** demonstrates that the Main Road/Manor Road junction is forecast to operate well within practical capacity with minimal queueing and delay across all assessment scenarios and peak periods.
- 8.98 The addition of the proposed development traffic creates an imperceptible impact on this junction in both the 2032 Reference Case scenarios and 2042 Local Plan scenarios.
- 8.99 Similarly, there is a negligible impact in the sensitivity assessment, with minimal changes to queueing and delay, across all scenarios and peak periods.

Junction 12 - Main Road/Nurstead Lane

- 8.100 The Main Road/Nurstead Lane junction has been modelled using the PICADY module of Junctions 11.
- 8.101 For the purpose of this assessment, the junction has been modelled using separate PICADY assessments for the eastern and western arms of Nurstead Lane with Main Road following review of the turning flows obtained from the strategic model.
- 8.102 From review of the turning flows, the model assumes that any vehicles accessing/egressing Nurstead Lane from/to Main Road East will use the eastern junction, and any vehicles accessing/egressing Nurstead Lane from/to Main Road West will use the western junction.
- 8.103 This indicates that each arm of Nurstead Lane is likely to be used as standalone junctions depending on where vehicles are traveling to/from, and it is therefore considered appropriate to model them separately to represent this.

8.104 The model results are summarised in **Table 28** and **Table 29** with the full model outputs provided at **Appendix M**.

Table 28: Main Road/Nurstead Lane (East) PICADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case						
Nurstead Lane East	0.03	0	6	0.01	0	6
Main Road (E) (Right-Turn)	0.07	0	6	0.05	0	6
2032 Reference Case + Site 2						
Nurstead Lane East	0.03	0	6	0.01	0	6
Main Road (E) (Right-Turn)	0.08	0	6	0.05	0	6
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Nurstead Lane East	0.03	0	6	0.01	0	6
Main Road (E) (Right-Turn)	0.10	0	6	0.05	0	6
2042 Local Plan						
Nurstead Lane East	0.05	0	6	0.01	0	6
Main Road (E) (Right-Turn)	0.08	0	5	0.07	0	5
2042 Local Plan + Site 2						
Nurstead Lane East	0.05	0	6	0.01	0	6
Main Road (E) (Right-Turn)	0.08	0	5	0.07	0	5
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)						
Nurstead Lane East	0.05	0	6	0.01	0	6
Main Road (E) (Right-Turn)	0.08	0	5	0.08	0	6

Table 29: Main Road/Nurstead Lane (West) PICADY Results

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
2032 Reference Case						
Nurstead Lane West (Left-Turn)	0.00	0	0	0.00	0	0
Nurstead Lane East (Right-Turn)	0.04	0	8	0.04	0	7
Main Road (E) (Right-Turn)	0.00	0	0	0.00	0	0
2032 Reference Case + Site 2						
Nurstead Lane West (Left-Turn)	0.00	0	0	0.00	0	0
Nurstead Lane East (Right-Turn)	0.03	0	8	0.04	0	7
Main Road (E) (Right-Turn)	0.00	0	0	0.00	0	0
2032 Reference Case + Site 2 + Site 1 (Sensitivity Assessment)						
Nurstead Lane West (Left-Turn)	0.00	0	0	0.00	0	0
Nurstead Lane East (Right-Turn)	0.04	0	8	0.04	0	7

Approach	AM Peak 08:00 – 09:00			PM Peak 17:00-18:00		
	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)
Main Road (E) (Right-Turn)	0.00	0	0	0.00	0	0
2042 Local Plan						
Nurstead Lane West (Left-Turn)	0.00	0	0	0.00	0	0
Nurstead Lane East (Right-Turn)	0.06	0	9	0.05	0	8
Main Road (E) (Right-Turn)	0.00	0	0	0.00	0	0
2042 Local Plan + Site 2						
Nurstead Lane West (Left-Turn)	0.00	0	0	0.00	0	0
Nurstead Lane East (Right-Turn)	0.06	0	9	0.05	0	8
Main Road (E) (Right-Turn)	0.00	0	0	0.00	0	0
2042 Local Plan + Site 2 + Site 1 (Sensitivity Assessment)						
Nurstead Lane West (Left-Turn)	0.00	0	0	0.00	0	0
Nurstead Lane East (Right-Turn)	0.06	0	9	0.05	0	8
Main Road (E) (Right-Turn)	0.00	0	0	0.00	0	0

- 8.105 **Table 28** and **Table 29** demonstrate that the Main Road/Nurstead Lane junctions are forecast to operate well within practical capacity with minimal queueing and delay across all assessment scenarios and peak periods.
- 8.106 The addition of the proposed development traffic creates an imperceptible impact on this junction in both the 2032 Reference Case scenarios and 2042 Local Plan scenarios.
- 8.107 Similarly, there is a negligible cumulative impact with the sensitivity assessment, with minimal changes to queueing and delay, across all scenarios and peak periods.
- 8.108 Notably, there are no results for the Main Road arm at the western junction across any scenarios or peak periods given there are no right turners to block ahead traffic. As previously stated, the model assumes the right turners coming from the east on Main Road to Nurstead Lane will use the eastern junction.

Summary

- 8.109 As demonstrated by the modelling work, the proposed development will have no more than a minimal impact across all junctions on the highway network. Certainly, the proposed development and traffic growth will not result in a severe cumulative impact on any of the off-site junctions modelled across any scenario or peak period.
- 8.110 Those junctions that are forecast to operate over capacity mainly do so as a result of 2042 Local Plan traffic and not as a result of the proposed development traffic.
- 8.111 Given the limited traffic impact of the development proposal the proposed development will not have an unacceptable impact on highway safety.
- 8.112 On that basis, it is not considered necessary to provide mitigation to offset the minimal/negligible impact of the proposals.

9.0 Summary and Conclusion

- 9.1 Hub Transport Planning Ltd has been commissioned by Richborough to provide transport advice for a proposed residential development on land south of Longfield Road, Meopham.
- 9.2 This Transport Assessment has been prepared to support an outline planning application for up to 120 residential dwellings.
- 9.3 The site is situated close to facilities that are likely to be used by residents on a day-to-day basis within suitable walking and cycling distances. For trips further afield, residents are able to travel to key regional and national destinations by public transport, with Meopham railway station offering a relatively frequent services towards Gravesend and London Victoria.
- 9.4 A review of Personal Injury Accident Data (PIA) on the local highway network demonstrates that 10 PIAs have been recorded across the study area within the most recent five years of available data from October 2019 to September 2024. Whilst all PIAs are regrettable, the volume and pattern of accidents observed does not suggest any inherent highway safety issue and does not give any undue cause for concern.
- 9.5 The primary vehicular access will be taken from Longfield Road to the north of the site via a priority junction. The access comprises a 6m kerbed radii and 5.5m carriageway width.
- 9.6 Several transport mitigation measures have been proposed in response to comments raised by KCC as part of pre-application engagement and as part of the interim TA. The include active travel improvements to increase the uptake of walking and cycling from initial occupation and also s106 contributions, pooled with those from other planned developments in the area, to support the improvement of bus services through Meopham.
- 9.7 The proposed development is forecast to generate 62 two-way vehicle trips in the AM and PM peak hours, about one vehicle per minute.
- 9.8 Modelling work has been undertaken of local junctions using turning flow data provided from the GTM for a 2032 Reference Case scenario, and 2042 Local Plan scenario. A sensitivity assessment was also undertaken should both the proposed development and land east of Wrotham Road come forward simultaneously.
- 9.9 The impact of the development traffic at any of the off-site junctions considered has been demonstrated to be negligible or minimal.

Conclusion

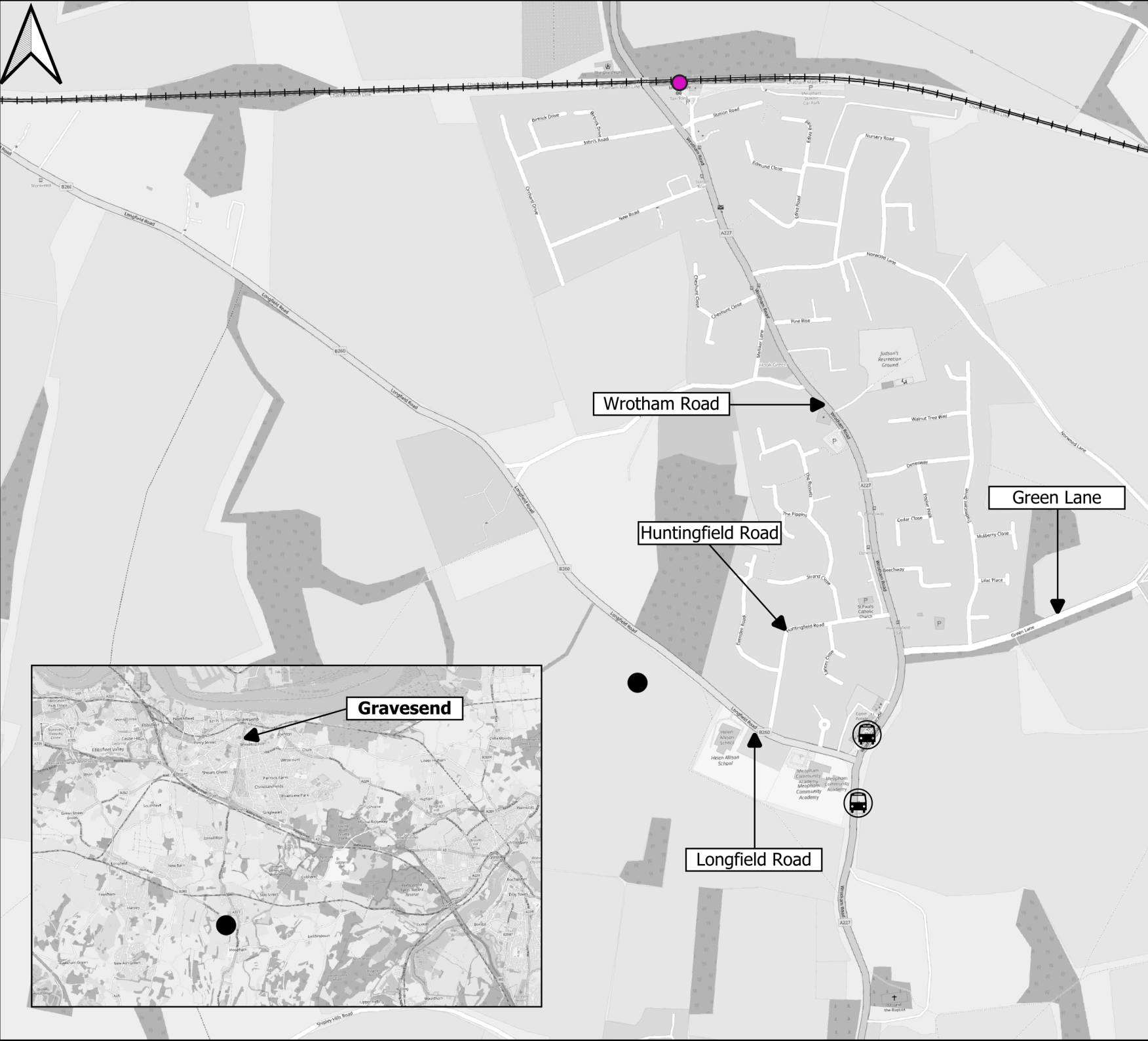
- 9.10 The NPPF Paragraph 116 states that:
“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual impact on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios.”
- 9.11 The assessment work undertaken and detailed in this report demonstrates that, in NPPF terms, the residual cumulative impacts on the road network will not be severe, taking into account all reasonable scenarios, and there would not be an unacceptable impact on highway safety.

T25526

Land South of Longfield Road, Meopham

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Figures



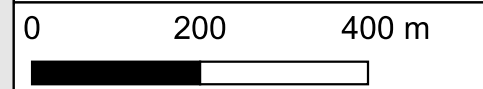
- # Legend
- Site Location
 - 🚌 Bus Stop
 - Railway Station
 - ++ Railway Network

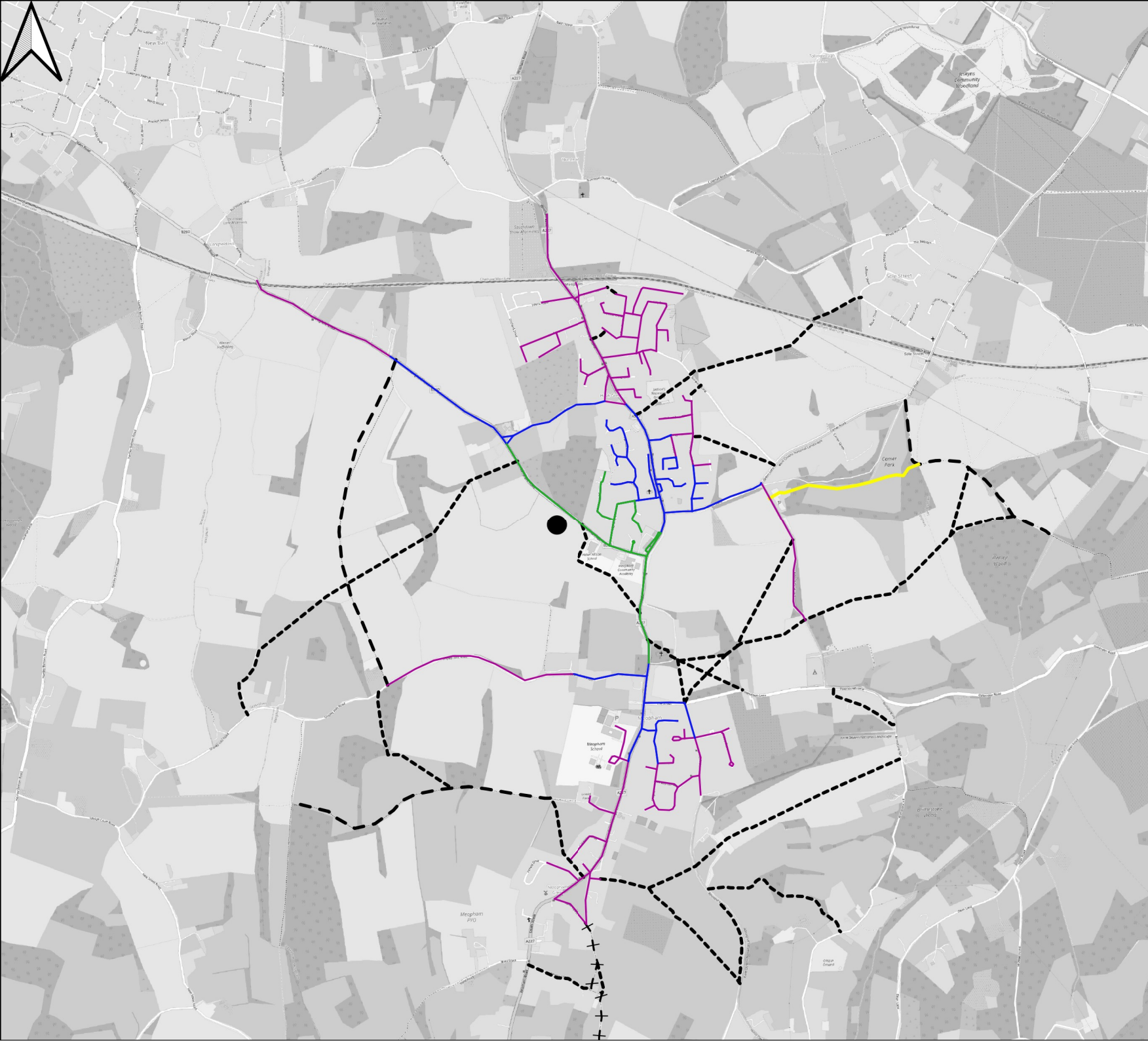
Figure 1.1 - Site Location

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Legend

● Site Location

Walking Distances

— 800m

— 1.2km

— 2.0km

PRoW

++ Byway open to all traffic

-- Public Bridleway

--- Public Footpath

— Promoted Route

Figure 5.1 - Walking Distances

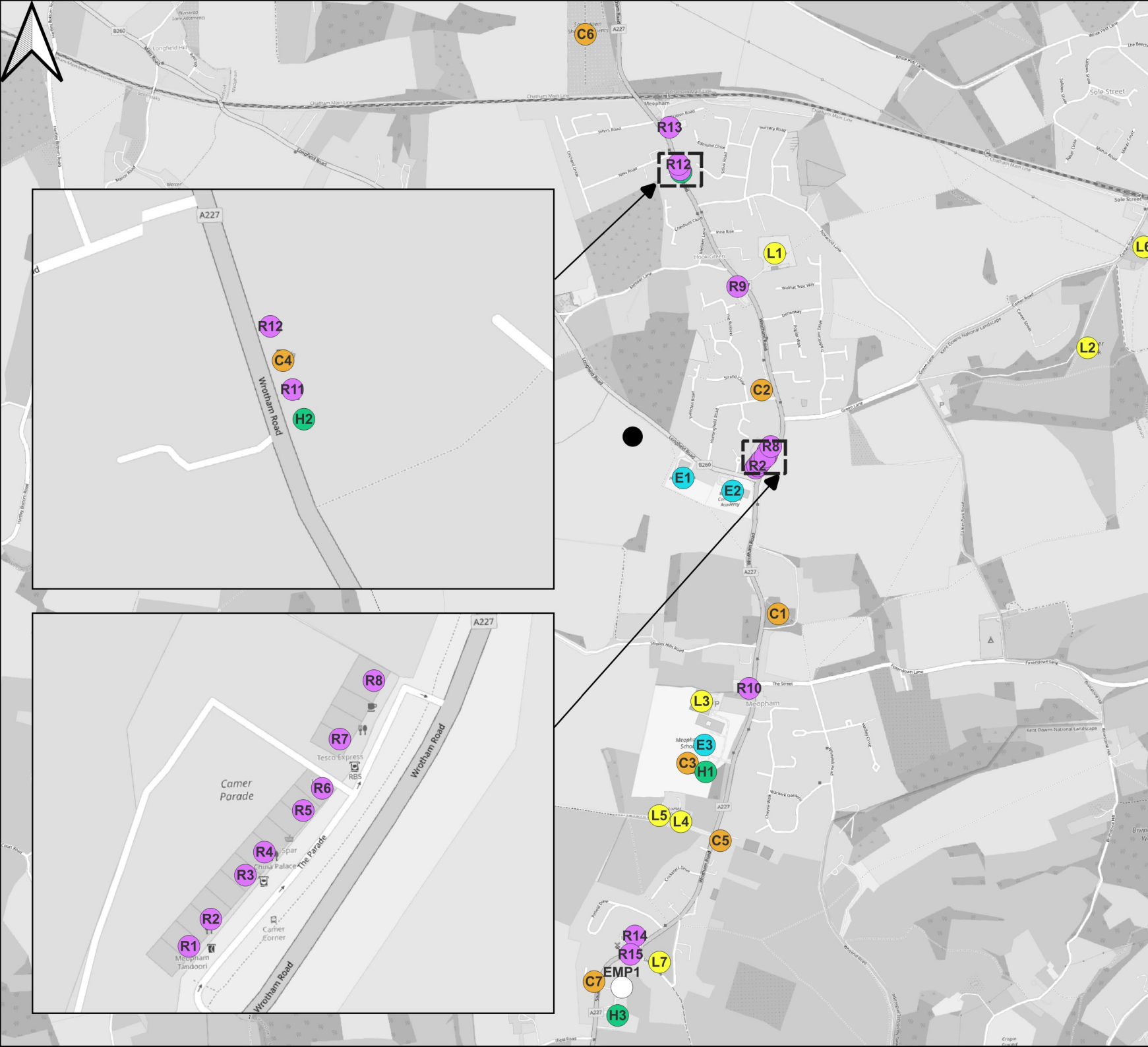
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0 0.5 1 km





Legend

● Site Location

Local Facilities

● Community

● Education

○ Employment

● Healthcare

● Leisure

● Retail

Figure 5.2 - Local Facilities

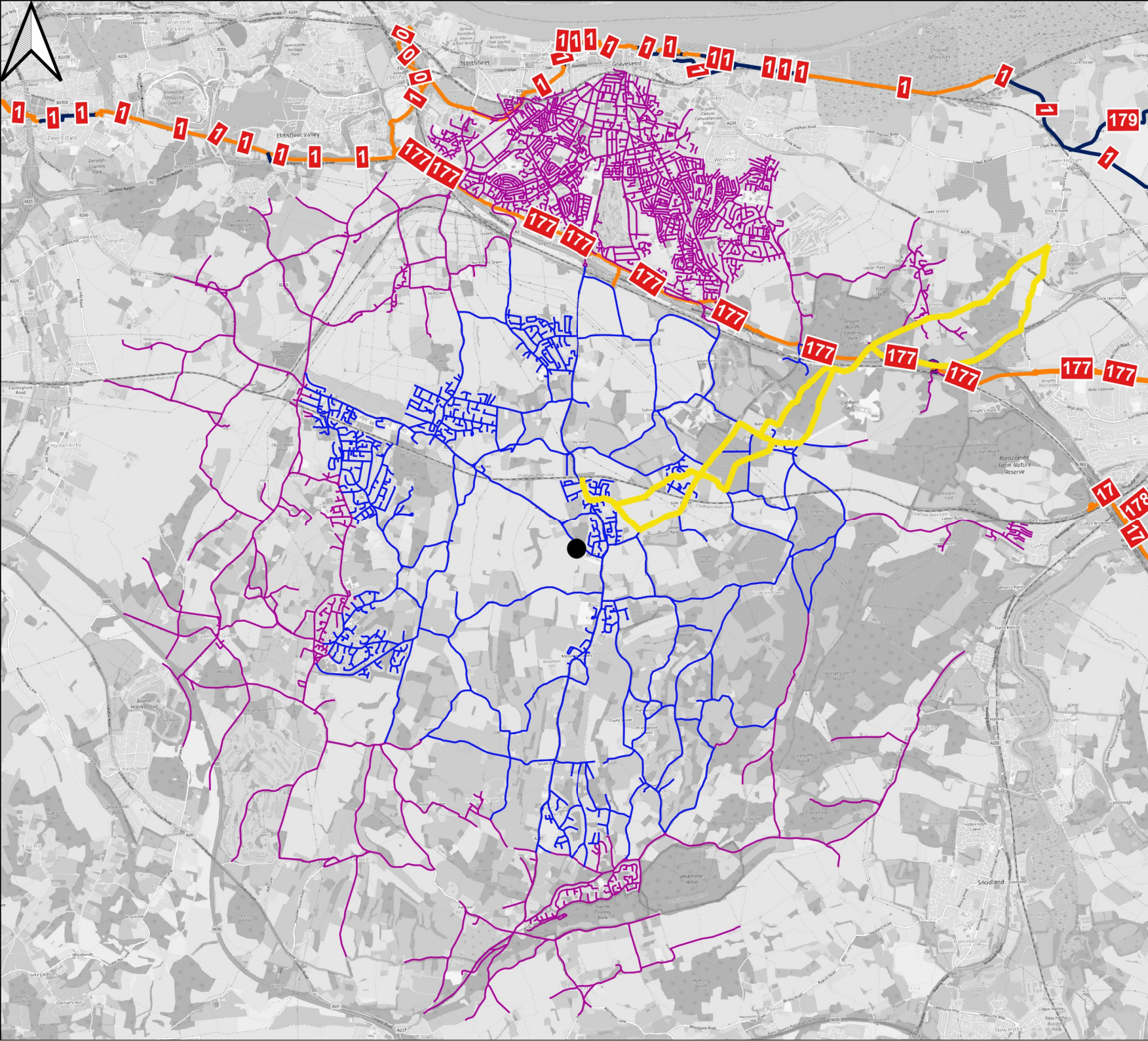
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0 400 800 m





Legend

- Site Location
- Cycling Distances
 - 5.0km
 - 8.0km
 - LCWIP Routes
- National Cycle Network
 - On-Road Route on NCN
 - Traffic-Free Route on NCN

Figure 5.3 - Cycling Distances

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0 1.5 3 km





Legend

● Site Location

ATE Assessment Routes

Route 1

Route 2

Route 3

Route 4

Figure 5.4 - ATE Audited Routes

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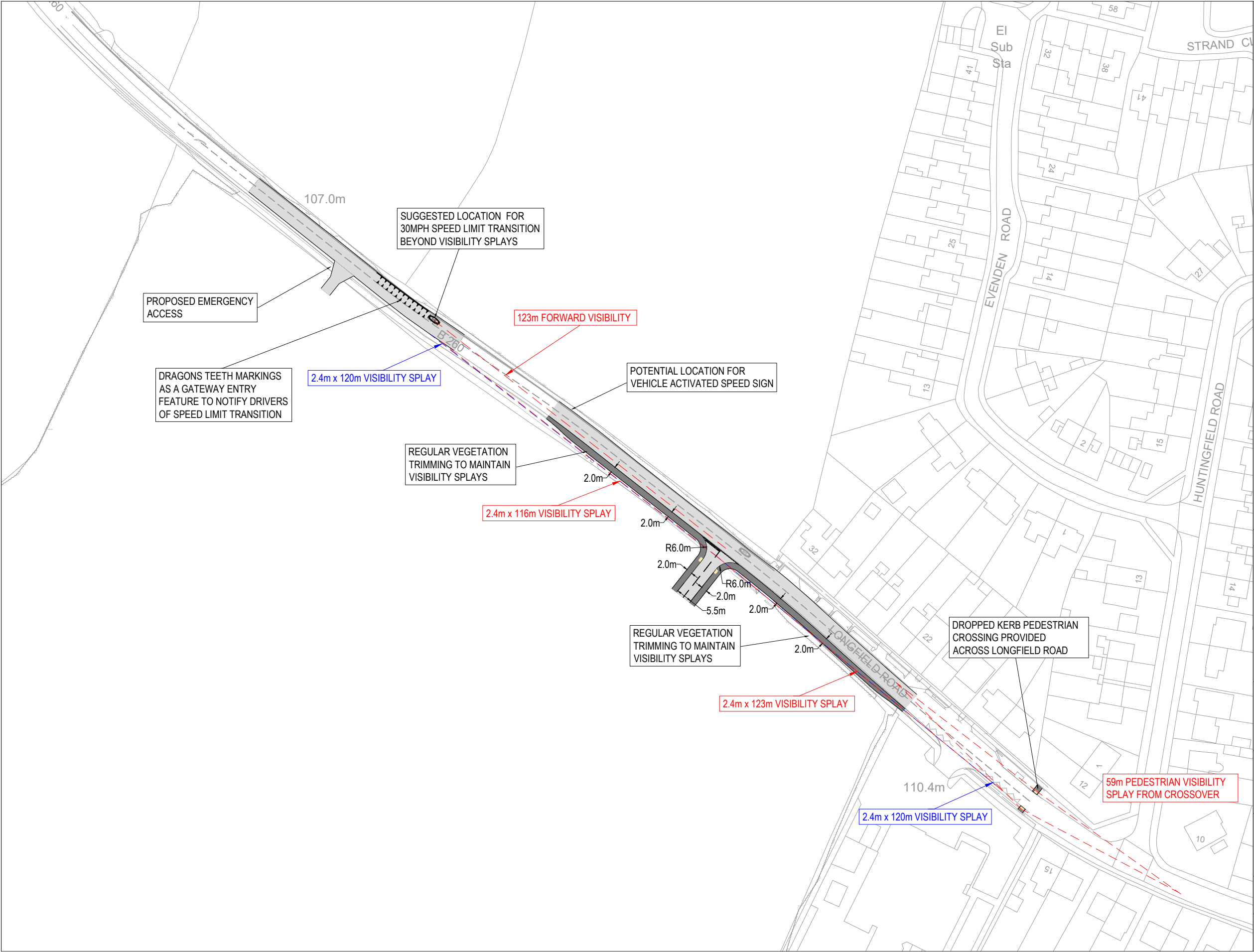
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0 400 800 m



T25526
Land South of Longfield Road, Meopham

Drawings



1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.
3. MFS VISIBILITY SPLAY IN RED CALCULATED FOR SPEEDS ABOVE 60KPH (TABLE 10.1.13).
4. DMRB VISIBILITY SPLAY IN BLUE FOR SPEED OF 40MPH (70KPH).

E	UPDATED FOLLOWING COMMENTS RECEIVED FROM KCC IN INTERIM TA RESPONSE.	23.04.26	MJ	GM
D	UPDATED FOLLOWING COMMENTS RAISED WITHIN STAGE 1 RSA.	11.09.25	MJ	GM
C	ADDITION OF DMRB VISIBILITY SPLAYS	28.08.25	MJ	GM
B	JUNCTION POSITION MOVED AND VISIBILITY SPLAYS EXTENDED. CROSSING POINT MOVED TO BELLMOUTH AND ADDITION CROSSING PROVIDED OVER LONGFIELD ROAD.	17.07.25	MJ	GM
A	UPDATED WITH TOPOGRAPHICAL SURVEY	15.05.25	MJ	GM

REV	DESCRIPTION	DATE	BY	AUTH
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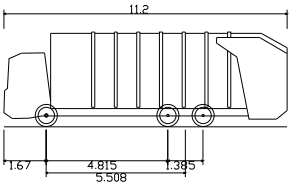
PROJECT
LONGFIELD ROAD, MEOPHAM

TITLE
PROPOSED SITE ACCESS WITH VISIBILITY SPLAYS

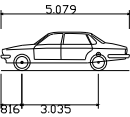
DRAWN MJ	AUTHORISED GM	SCALE 1:1250	SHEET SIZE A3	DATE 15.05.25
PROJECT NO. T25526		DRAWING NO. 001		REV E



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Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)
Overall Length 11.200m
Overall Width 1.67m
Overall Body Height 4.815m
Min Body Ground Clearance 5.508m
Track Width 1.385m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 9.500m



Large Car (2006)
Overall Length 5.079m
Overall Width 1.816m
Overall Body Height 1.525m
Min Body Ground Clearance 0.816m
Max Track Width 3.035m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 5.900m

D	UPDATED FOLLOWING COMMENTS RECEIVED FROM KCC IN INTERIM TA RESPONSE.	23.04.26	MJ	GM
C	UPDATED FOLLOWING COMMENTS RAISED WITHIN STAGE 1 RSA.	11.09.25	MJ	GM
B	JUNCTION POSITION MOVED AND VISIBILITY SPLAYS EXTENDED. CROSSING POINT MOVED TO BELLMOUTH AND ADDITION CROSSING PROVIDED OVER LONGFIELD ROAD.	17.07.25	MJ	GM
A	UPDATED WITH TOPOGRAPHICAL SURVEY	15.05.25	MJ	GM

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PROJECT
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TITLE
PROPOSED SITE ACCESS WITH
SWEPT PATH ANALYSIS

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MJ	GM	1:500	A3	15.05.25
PROJECT NO. T25526		DRAWING NO. 002		REV D



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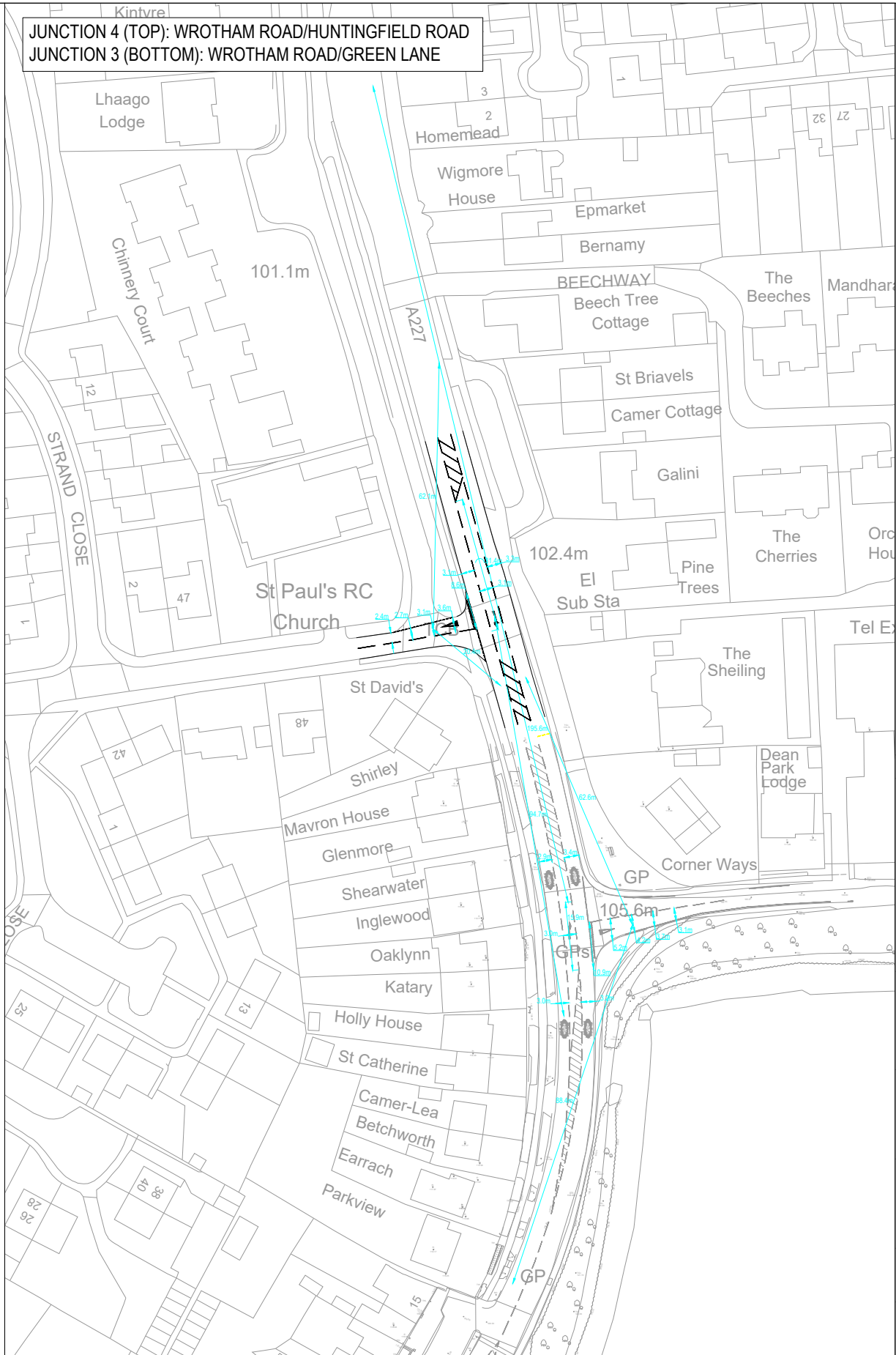
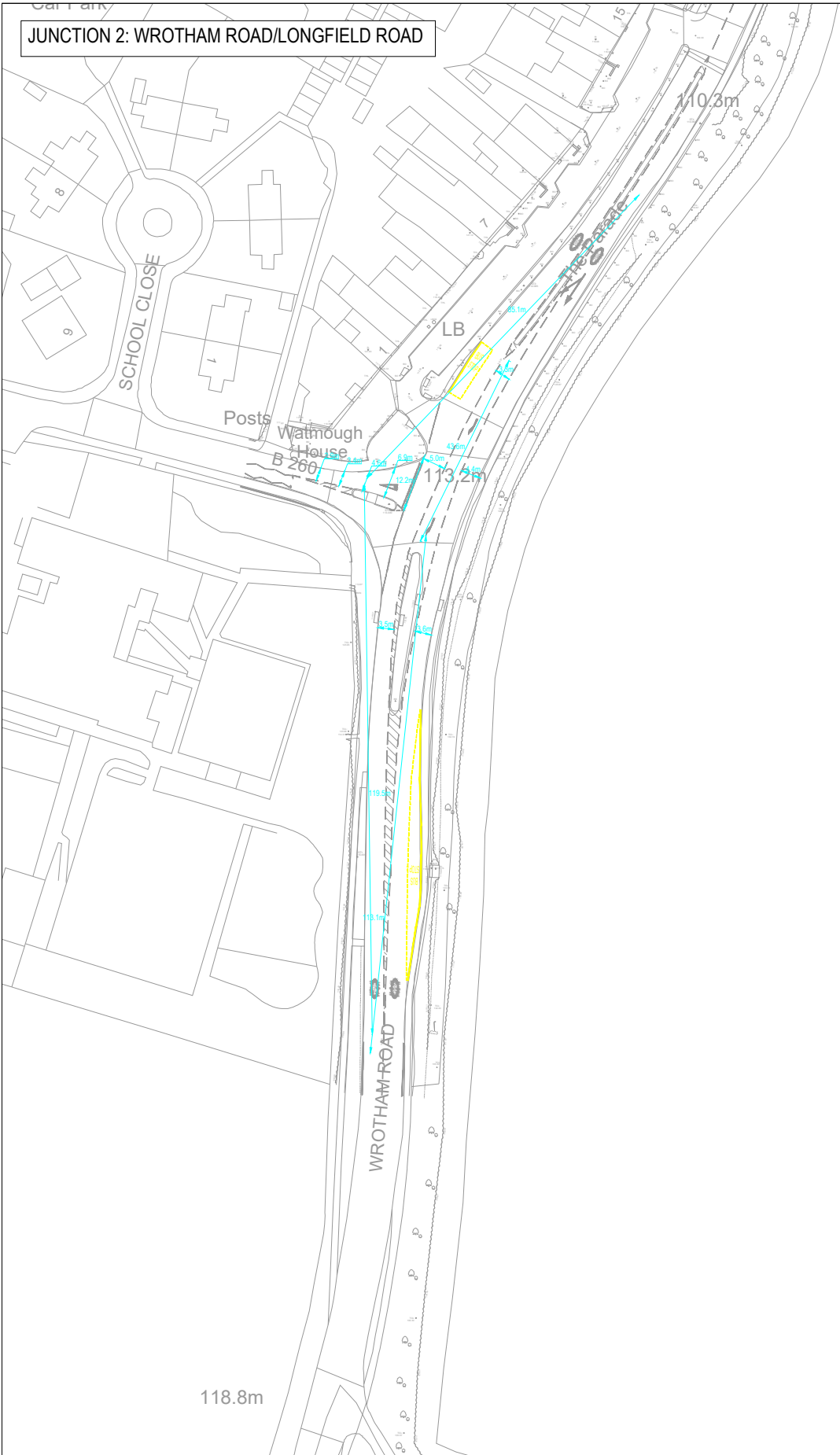
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PROJECT
LONGFIELD ROAD, MEOPHAM

TITLE
**JUNCTION MEASUREMENTS
JUNCTION 1**

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PROJECT NO. T25526		DRAWING NO. 003.01		REV -



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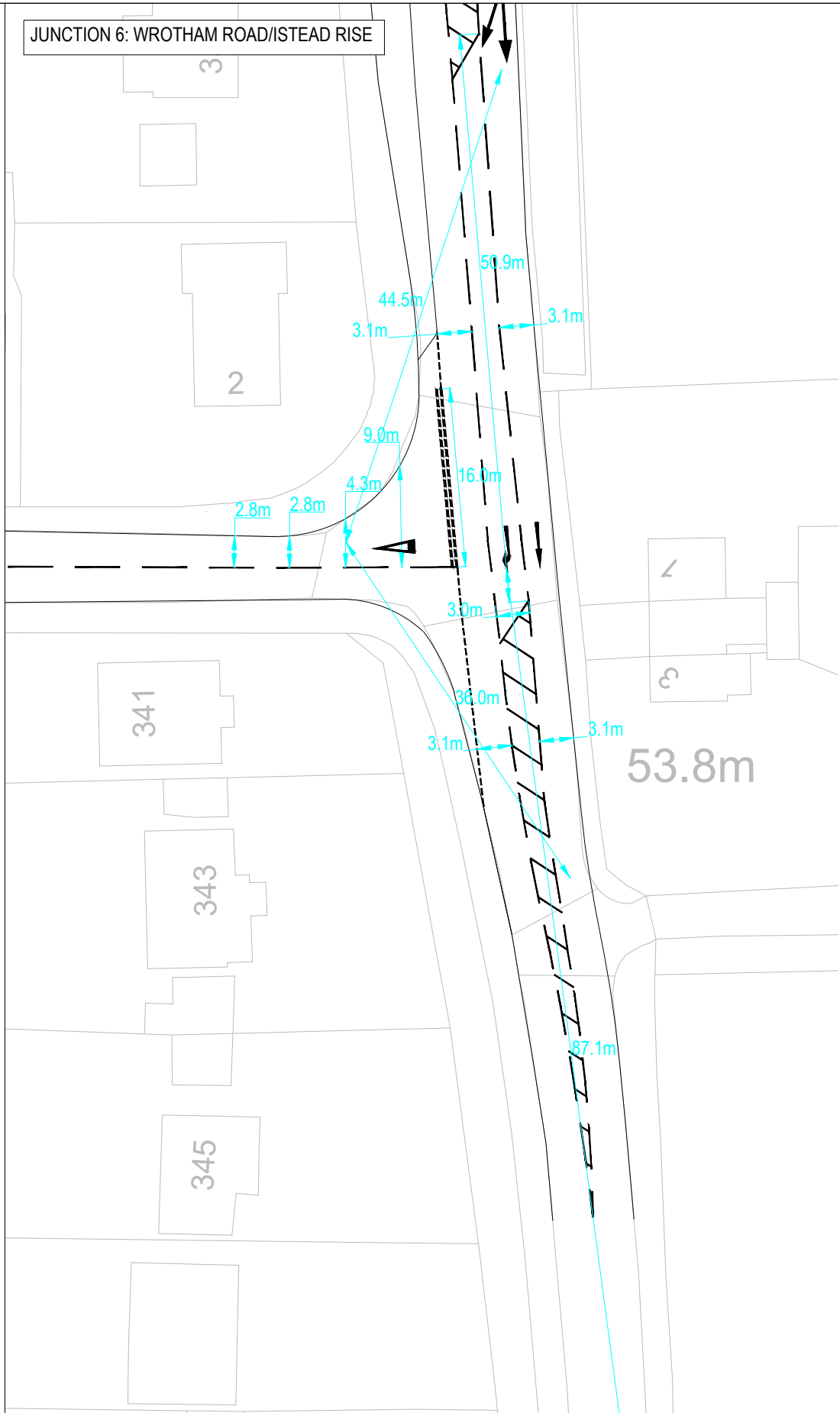
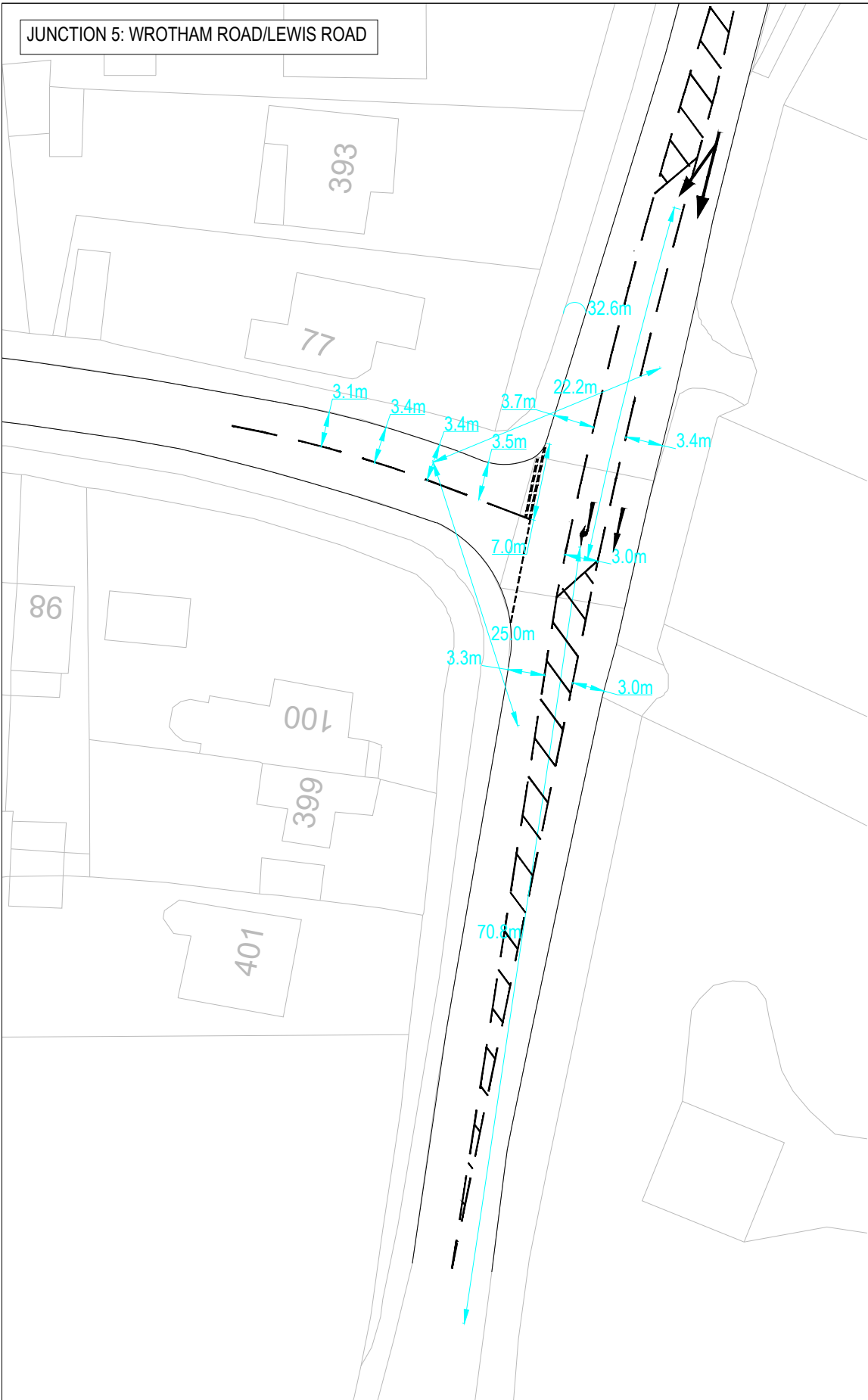
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PROJECT
LONGFIELD ROAD, MEOPHAM

TITLE
JUNCTION MEASUREMENTS
JUNCTIONS 2-4

DRAWN	AUTHORISED	SCALE	SHEET SIZE	DATE
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PROJECT NO. T25526		DRAWING NO. 003.02		REV -



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TITLE
JUNCTION MEASUREMENTS
JUNCTIONS 5/6

DRAWN	AUTHORISED	SCALE	SHEET SIZE	DATE
MJ	GM	1:500	A3	23.04.26

PROJECT NO.	DRAWING NO.	REV
T25526	003.03	-

Technical drawing of Junction 7: Wrotham Road/A2 (Northern RBT). The drawing shows a roundabout with a central circle of 60.2m diameter. Wrotham Road approaches from the top, turning right into the roundabout. A2 approaches from the bottom, turning left into the roundabout. Dimensions include radii (R25.5m, R18.1m, R17.1m, R202.5m), offsets (4.8m, 8.3m, 5.4m, 7.1m, 7.2m, 8.3m), and angles (22°11', 24°11', 27°11'). Other labels include 'CR', 'Ward Bay', 'Def', and 'Post'.

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PROJECT
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TITLE	JUNCTION MEASUREMENTS JUNCTION 7
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DRAWN MJ	AUTHORISED GM	SCALE 1:1000	SHEET SIZE A3	DATE 23.04.26
PROJECT NO. T25526		DRAWING NO. 003.04		REV -

PROJECT NO. T25526	DRAWING NO. 003.04	REV -
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JUNCTION 10: LONGFIELD ROAD/HUNTINGFIELD ROAD

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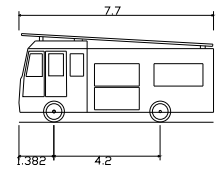
TITLE
**JUNCTION MEASUREMENTS
JUNCTION 10**

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PROJECT NO. T25526		DRAWING NO. 003.06		REV -





1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.



Dennis Sabre Fire Tender (LWB)	
Overall Length	7.700m
Overall Width	4.200m
Overall Body Height	1.382m
Min Body Ground Clearance	0.397m
Track Width	1.380m
Lock to lock time	5.00s
Kerb to Kerb Turning Radius	7.400m

REV	DESCRIPTION	DATE	BY	AUTH
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CLIENT
RICHBOROUGH

PROJECT
LONGFIELD ROAD, MEOPHAM

TITLE
PROPOSED EMERGENCY ACCESS
WITH SWEEP PATH ANALYSIS

DRAWN	AUTHORISED	SCALE	SHEET SIZE	DATE
MJ	GM	1:500	A3	23.04.26
PROJECT NO. T25526		DRAWING NO. 004		REV -