TRAVEL PLAN

Land off Old Ashford Road, Lenham, Kent

Client: Dean Lewis Estates Ltd

Document Control		
Job Number	P19013	
Document Version	Final Revision A	
File Reference	N:\Projects 2019\P19013 - Old Ashford Road, Lenham, Kent\7.Reports\TP	
Date	September 2019	
Client	Dean Lewis Estates Ltd	
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APPENDICES AVAILABE IN TRANSPORT ASSESSMENT

1 INTRODUCTION

1.1 Purpose of the Report

1.1.1 This Residential Travel Plan (TP) has been prepared to accompany a Hybrid planning application for a proposed mixed-use development comprising 100 dwellings (40% affordable), sports pitches and a sports pavilion on land located to the south of Old Ashford Road, Lenham, Kent. The Hybrid application is seeking Outline planning permission with all matters reserved except for access for the residential element and a Full application for change of use of land for public sport, play and recreation. This site has been identified as a Lenham Neighbourhood Plan development site.

1.1.2 This report should not be read as a definitive document, but as the first stage of the TP process which will continue and evolve over time with input from the house builder(s) that will ultimately develop the site, future residents of the site and Kent County Council (KCC). This TP represents a commitment by Dean Lewis Estates Ltd (DLE) to ensure that the proposed development is accessible by sustainable modes of transport and every effort will be made to ensure that opportunities to encourage the use of these sustainable modes, particularly walking, cycling and public transport, will be promoted.

1.1.3 The document has been prepared in accordance with the Government's Planning Practice Guidance: Transport evidence bases in plan making (October 2014) and Travel plans, transport assessments and statements in decision-taking (March 2014) as well as the Department for Transport's (DfT) Guidance on Transport Assessment (GTA) (March 2007). It considers the accessibility of the site and safety for all modes of travel but specifically walking, cycling and public transport.

1.1.4 This document has been prepared alongside a Transport Assessment (TA) for the development proposal. As many highway and transportation details are pertinent to both documents, there is some repetition between the two and several of the TA Appendices are referenced in this document.

1.1.5 The suggestions and recommendations contained herein have been drawn based on information available and obtained in advance of the planning submission to which this report relates.

1.1.6 Reasonable checks have been carried out on any third-party information used in the preparation of this report but, nonetheless, Prime Transport Planning accepts no liability for the accuracy or otherwise of this data.

1.1.7 Third party rights are excluded for the use of information contained within this report.

1.2 Scope of Report

1.2.1 Following this introduction, the remainder of this report is structured as follows:

- **Section 2** describes the relevant local and national TP policy and guidance and presents the objectives of this TP;

- **Section 3** describes the existing situation in terms of the site and local highway network;
- **Section 4** details the development proposal including the access strategy;
- **Section 5** details access to the site by sustainable modes of transport which includes walking, cycling and public transport;
- **Section 6** set outs the trip generation for the site and discusses the targets of this TP;
- **Section 7** describes the measures to be employed to achieve the targets set; and
- **Section 8** discusses the management of the TP and describes how it will be monitored and reviewed.

2 TRANSPORT POLICY AND GUIDANCE

2.1 Introduction

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

2.2 National Planning Policy Framework

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

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

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

2.2.3 The document offers guidance for planning policies including:

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

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

> *'…it should be ensured that:*
>
> *a) appropriate opportunities to promote sustainable transport modes can be – or have been - taken up, given the type of development and its location;*
>
> *b) safe and suitable access to the site can be achieved for all users; and*
>
> *c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.'*

2.2.5 In determining planning applications, paragraph 109 states that:

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

2.2.6 Paragraph 110 continues:

> *'Within this context, applications for development should:*
>
> *a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second - so far as possible - to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
>
> *b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
>
> *c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
>
> *d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
>
> *e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.'*

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

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

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

2.2.10 Section 8 of NPPF *Promoting healthy and safe communities* closely aligns with several of the principles of Travel Plans.

2.2.11 Paragraph 91 calls for developments to:

> *'…achieve healthy, inclusive and safe places which:*

a) promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;

b) are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas; and

c) enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.'

2.2.12 Paragraph 96 highlights the importance of access to open spaces as well as opportunities for sport and physical activity in the context of the health and well-being of communities. Paragraph 98 continues to include the importance of access to and the enhancement of public rights of way.

2.3 Planning Practice Guidance

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

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

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

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

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

- assess the existing situation and likely generation of trips over time by all modes and the impact on the locality in economic, social and environmental terms;
- assess the opportunities to support a pattern of development that, where reasonable to do so, facilitates the use of sustainable modes of transport;

- highlight and promote opportunities to reduce the need for travel where appropriate;
- identify opportunities to prioritise the use of alternative modes in both existing and new development locations if appropriate;
- consider the cumulative impacts of existing and proposed development on transport networks;
- assess the quality and capacity of transport infrastructure and its ability to meet forecast demands; and
- identify the short, medium and long-term transport proposals across all modes'.

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

2.4 Manual for Streets

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

2.4.2 The focus of MfS is to demonstrate the:

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

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

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

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

2.5 Kent County Council Transport Plan 2016-2031

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

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

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

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

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

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

- ***Outcome 1: Economic Growth and Minimised Congestion***
  Policy: Deliver resilient transport infrastructure and schemes that reduce congestion and improve journey time reliability to enable economic growth and appropriate development.
- ***Outcome 2: Affordable and Accessible Door-to-Door Journeys***
  Policy: Promote affordable, accessible and connected transport to enable access for all to jobs, education, health and other services.
- ***Outcome 3: Safer Travel***
  Policy: Provide a safer road, footway and cycleway network to reduce the likelihood of casualties and encourage other transport providers to improve safety on their networks.
- ***Outcome 4: Enhanced Environment***
  Policy: Deliver schemes to reduce the environmental footprint of transport and enhance the historic and natural environment.
- ***Outcome 5: Better Health and Wellbeing***
  Policy: Provide and promote active travel choices for all members of the community to encourage good health and wellbeing, and implement measures to improve local air quality.'

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

2.6 Maidstone Borough Local Plan 2011-2031

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

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

> *'Deliver modal shift through managing demand on the transport network through enhanced public transport and the continued Park and Ride services and walking and cycling improvements;*
>
> *Deliver strategic and public transport links to and from Maidstone, including increased bus service frequency along the radial routes into the town centre and its railway stations, particularly in the morning and evening peak travel times;*
>
> *Work with service providers to improve bus links to the rural service centres and larger villages, including route options and frequency.'*

2.7 Maidstone Integrated Transport Strategy 2011-2031

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

2.7.2 The vision underlines five key strategic objectives:

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

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

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

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

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

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

Maidstone Walking and Cycling Strategy 2016

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

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

2.8 Lenham Neighbourhood Plan - Transport Assessment 2019

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

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

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

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

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

2.9 The Kent Design Guide

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

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

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

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

2.10 Summary

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

3 EXISTING SITUATION

3.1 Site Description

3.1.1 The application site is currently undeveloped and in agricultural use. It is located to the east of the centre of the village of Lenham.

3.1.2 Old Ashford Road forms the northern boundary of the site, while Burnside Cottages form the western boundary. Farmland and open countryside form the site's eastern and southern boundaries.

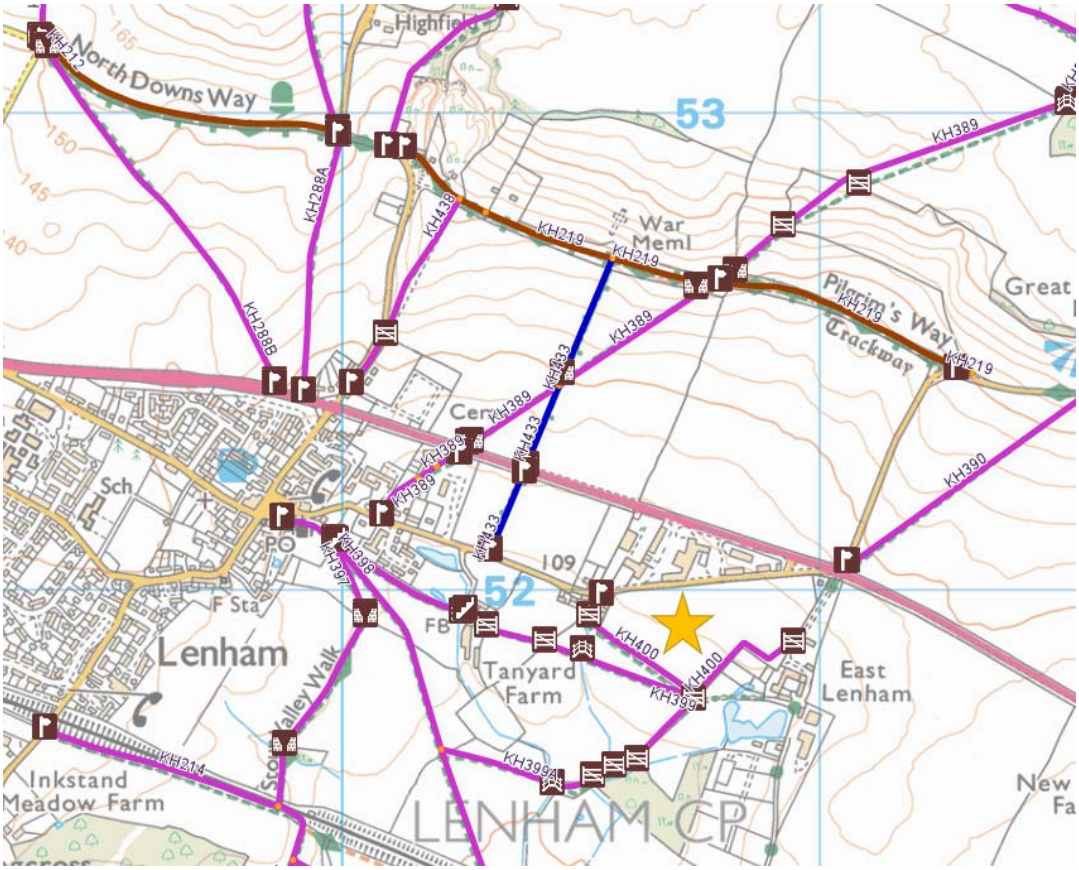
3.1.3 Lenham is a market village in Kent situated circa 15km to the south-east of Maidstone and circa 15km to the north-west of Ashford. More locally, Lenham is situated circa 5km to the north-west of the village of Charing. The location of the site, in the context of Lenham and the local highway network, is illustrated in **Figure 1** in **Appendix B** of the **TA**.

3.2 Local Walking and Cycling Network

3.2.1 **Image 3.1** below shows the Public Rights of Way (PRoW) network within the vicinity of the site, this being an extract of KCC's online mapping system. The site is highlighted by the yellow star and the PRoW footpaths are highlighted in purple, restricted byways in blue and byways in brown.

3.2.2 It can be seen from a review of **Image 3.1** that there is a fairly extensive PRoW network in the vicinity of the proposed development. PRoW footpath KH400 runs alongside the southern and eastern boundaries of the site, which provides a connection to the village centre to the west via PRoW footpath KH399 and to KH398 which forms part of the Stour Valley Walk. Restricted byway KH433 runs from Old Ashford Road to byway (open to all traffic) KH219 which forms part of the North Downs Way National Trail and National Cycle Network Route 17 that runs from Rochester via Maidstone and Ashford to the South coast between Folkestone and Lydd. Cycling is permitted along both the local byway and restricted byway.

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



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

3.3 Local Highway Network

3.3.1 As stated earlier in this section, Old Ashford Road forms the northern boundary of the site, with this frontage measuring circa 380m in length. Circa 50m to the west of the site's north eastern corner, a somewhat rural gated access is provided.

3.3.2 Old Ashford Road is a two-way single carriageway, which provides a connection into the centre of Lenham to the west and the A20 to the east. Adjacent to the site frontage, it has a width of circa 6.0m.

3.3.3 There are no footways provided in either verge along the site frontage, with a circa 2.0m wide footway commencing in the southern verge at the site's north western corner. This footway provides a continuous connection into the centre of Lenham.

3.3.4 Along the site frontage in its entirety, the road is subject to national speed limit (60mph), with it becoming 30mph circa 300m to the west of the site's north western corner. The speed limit change is delineated through the provision of speed limit signs on both sides of the carriageway. No street lighting is provided along the site frontage, with such provision commencing within the 30mph speed limit zone.

3.3.5 The nearest bus stops are provided on Old Ashford Road to the west of the site, adjacent to Glebe Gardens. Further information regarding the bus stops and their associated services is provided in **Section 5** of this report.

3.3.6 The A20 is a regional distributor road which provides a connection to Maidstone and Ashford to the north west and south east respectively, while also providing access on to the M20. The A20 runs to the north of Lenham, acting as a bypass for through movements. Ghost islands are provided for right turns onto the local roads that lead to the village.

3.3.7 The A20 and Old Ashford Road form junction with Faversham Road which is known as High Street in the village centre and Headcorn Road to the south. As the names suggest, it provides a north-south route to the two settlements while more locally forms the village High Street containing shops and other amenities.

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4 DEVELOPMENT PROPOSAL

4.1 Development Description

4.1.1 The Hybrid application comprises of Outline application (all matters reserved except for access) for up to 100 dwellings with associated works and infrastructure and Full application for change of use of land for public sport, play and recreation, on land located to the south of Old Ashford Road, Lenham, Kent. This site has been identified as a Lenham Neighbourhood Plan development site.

4.1.2 The residential element will include 40% affordable dwellings while the sports facility will include two senior football pitches, one junior pitch and a sports pavilion building containing changing facilities with toilets along with room for a squash court. It should be noted by KCC that the application for the change of use of land for sports and recreational use will deal with the matter for the principle of land use only. The layout of this element including the car park and associated buildings and structures will be the subject of an appropriately worded planning condition that will require submission of the details of any buildings or any engineering works.

4.1.3 A Development Framework Plan (DFP) has been produced by FPCR and forms part of the supporting documentation for the planning application. It is not included within this document as it has the potential to be revised up to the point of submission and therefore to avoid conflicting and superseded layouts being submitted within the various planning documents, it is omitted from this report. The planning documents should be available via the LPA's planning portal.

4.1.4 The DFP shows that the site is to be accessed via two priority-controlled junctions located on Old Ashford Road. The eastern access will primarily serve the residential element; the western access will primarily serve the sports facility. The western priority-controlled junction will connect with the existing footway provision on Old Ashford Road while a shared cycleway/footway will run along the northern boundary of the site in order to retain as much of the hedgerow between the site and Old Ashford Road as possible.

4.2 Access Strategy

Vehicular Access

4.2.1 The site will be served by two priority-controlled junctions, both of which will be located on Old Ashford Road, which itself will be widened to a minimum width of 5.5m across the site frontage.

4.2.2 The eastern vehicular access will comprise a 6.75m wide carriageway with 10m corner radii, a 3m wide shared cycleway on the western side and a 2m wide footway on the eastern side, in accordance with KCC's standard for a local distributor road.

4.2.3 The western vehicular access will comprise a 5.5m wide carriageway stepping down to 4.8m as it passes closer to the sports facility, 10m corner radii, a 3m wide shared cycleway on the western side and a 2m wide footway on the eastern side.

4.2.4 It is anticipated that an internal connection between the two accesses will be provided.

4.2.5 **Drawing P19013-001G** in **Appendix F of the TA** illustrates the proposed access strategy.

Pedestrian and Cycle Access

4.2.6 Pedestrian and cycle access to the site will be provided at the north-west and north-east corners of the site on to Old Ashford Road, which will both be connected via a proposed internal foot/cycle way. As stated above, the new footway along Old Ashford Road, a requirement of the Neighbourhood Plan, will be set-back behind the existing hedgerow in order to retain as much vegetation as possible and to create a safe and pleasant pedestrian/cycle environment segregated from the Old Ashford Road carriageway. A similar arrangement has been proposed as part of the application on land north of Old Ashford Road (17/500357/HYBRID).

4.2.7 The footway/cycleway will continue east to the eastern fork of the A20/Old Ashford Road which will be realigned as detailed in **Section 6.8 of the TA**. An uncontrolled crossing with refuge island wide enough for pedestrians and cyclists to use will then be provided across the A20 to the existing footway provision on the northern side. This northern footway will be widened to 3m up to Hubbards Hill, with the lightly trafficked road providing cycle connection to NCN Route 17 (North Downs Way). Tactile paving and localised footway widening will be provided to aid the crossing of Hubbards Hill for pedestrians.

4.2.8 It is noted that the footway on the southern side of Old Ashford Road to the west of the site is narrowed by overgrown vegetation. It is the responsibility of the landowners to regularly cut-back this vegetation and the responsibility of the local highway authority to enforce this. Removal of this overgrown vegetation will help to create a wider, safer walking route for pedestrians.

4.2.9 Additional pedestrian connections will be provided to the local PRoW footpaths where they enter/exit the site in order to maximise the site's permeability by this sustainable mode of travel and to encourage access to the countryside in line with NPPF guidance. The footway/cycleway improvements will offer considerable benefit to existing local residents as well as future residents of the site.

4.3 Summary

4.3.1 As described in this section, the development proposals, particularly the vehicular access, will conform to national and local policy guidance. The design of the access roads will conform to the standards in the KDG and MfS.

4.3.2 The footway and cycleway improvements offer a considerable improvement which will be of benefit to existing and future residents. The shared cycleway provision along Old Ashford Road inside and along the site frontage up to Hubbards Hill will provide a safe and pleasant route for journeys on foot and by bicycle, helping to integrate the development site and this area of Old Ashford Road into the existing infrastructure provision.

4.3.3 The design reflects the MfS principles of inclusive design, shifting from focusing on designing for motor vehicles to designing streets around the needs of pedestrians, cyclists and public transport users, controlling speeds, not overdesigning and creating permeable streets. These principles in turn help the site to conform to NPPF guidance, as seen within paragraph 110 in giving priority to pedestrian and cycle movements and considering the *'needs of people with disabilities',* as well as paragraph 108 in creating *'safe and suitable access to the site'* and paragraph 118 by providing improved access to the countryside.

4.3.4 The design also reflects Outcome 3 of LTP4, Policy SP23 of the Maidstone Borough Local Plan, the strategic objectives of the Maidstone Integrated Transport Strategy and the aspirations of the Parish Council set out in the Lenham Neighbourhood Plan.

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5 ACCESS BY SUSTAINABLE MODES

5.1 Introduction to Sustainable Modes of Transport

5.1.1 National and local transport planning policy centres on the importance of sustainable development, meaning that new developments should be located in areas where there is access to sustainable modes of travel, or where sustainable modes of travel can be introduced. These sustainable modes include walking, cycling, public transport, car sharing and use of low emission vehicles (electric/hybrid).

5.1.2 Walking, cycling and public transport are commonly regarded to be the most sustainable modes of transportation. This section of the report will describe how accessible the site is by these modes.

5.2 Access on Foot

5.2.1 The site is located to the east of the centre of the village of Lenham, which itself has a well-established network of pedestrian infrastructure in the form of good quality footways and street lighting.

5.2.2 The development site is proposed to take access from Old Ashford Road in the form of two priority-controlled junctions. A hedgerow currently exists along the site frontage. In the interest of preserving as much of this vegetation as possible, a shared cycleway/footway will run behind this hedgerow, facilitating eastern and western pedestrian movements. The western priority-controlled junction will meet and adjoin to the existing footway provision on Old Ashford Road west of the site. New crossing facilities will be provided over the A20 to the east of the site.

5.2.3 As established in **Section 3.2** of this report, a number of PRoW are located in proximity to the development site. The proposed connections to these PRoW help to enhance the accessibility of the development to the surrounding area, including the village centre and the countryside.

5.2.4 Research has indicated that acceptable walking distances depend on a number of factors, including the quality of the development, the type of amenity offered, the surrounding area and other local facilities. The Chartered Institution of Highways and Transportation (CIHT) document entitled *Providing for Journeys on Foot* (2000) suggests walking distances which are relevant to this application. These distances are shown in **Table 5.1**.

Table 5.1: Suggested Acceptable Walking Distances

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

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

5.2.5 In order to highlight the site's accessibility on foot, an indicative walking isochrone has been produced using the Geographic Information System (GIS) software Visography TRACC. **Figure 2** in **Appendix B** of the **TA** represents the site's walking catchment with the CIHT's *'Preferred Maximum'* distances of 1200m and 2000m for local service and commuting/school trips respectively illustrated.

5.2.6 To provide an accurate representation of the future highway and PRoW network, the site's proposed vehicular access points have been manually added to the network used for the isochrone. The accessibility distance is based on an origin/destination point in the approximate centre of the portion of the site to be developed for housing.

5.2.7 **Table 5.2** below summarises the distance and the typical time it would take to walk from the centre of the site to the local amenities and centres of employment and education identified in **Figure 2** of **Appendix B** in the **TA** via the road/footway network. It provides a comparison against those distances recommended in the CIHT's *Providing for Journeys on Foot*. The time it takes is based on a walking speed of 4.8kph which corresponds with the TRACC default, which itself is based on advice in the DfT document *Transport Connectivity Travel Time Indicators: Guidance Notes*.

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

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

5.2.8 The results in **Table 5.2** show that Ashmill Business Park and Northdown Business Park, which provide employment opportunities for future residents of the site, can be reached within an acceptable walking distance for commuting trips (1000m), while the Len Valley Practice and Lenham Community Centre can be reached within an acceptable walking distance for local service trips (800m). Many amenities and services such as St Mary's Church, Lenham library, a post office, the village store, a Co-operative foodstore and Lenham social club, as well as Lenham village centre which provides a further array of additional amenities, can be reached within the preferred maximum walking distance for local service strips (1200m). A bowling club, a McColl's convenience store, Lenham train station, Lenham Storage and Lenham Football Club can all be reached within 26 minutes by foot. In relation to educational establishments, Lenham Primary School and the Lenham School can both be reached within the preferred maximum walking distance for school trips (2000m). The proposed sport facility will be located in close proximity to the residential element.

5.2.9 The nearest pair of bus stops to the development site are located to the west of the site on Old Ashford Road, adjacent to its junction with Glebe Garden. Both bus stops are within a 10-minute walk from the site and can be accessed by the existing footways provided along Old Ashford Road. The applicant is willing to provide funding for an additional pair of bus stops at the site frontage on Old Ashford Road in order to encourage travel by this sustainable mode.

5.2.10 Given the evidence presented in **Figure 2** of **Appendix B** in the **TA** and **Table 5.2**, walking can be considered a realistic and viable method of travel indicating that the site's location is accessible via this sustainable mode.

5.3 Access by Cycle

5.3.1 The shared cycleway provision as part of the development proposals will help encourage cycling locally, providing a safe and largely traffic-free connection between the site and NCN Route 17.

5.3.2 It is widely recognised that cycling can offer an attractive alternative to short car trips, particularly those under 5km, but also as part of longer journeys by public transport.

5.3.3 The DfT's Local Transport Note 2/08 Cycle Infrastructure Design states that:

> *'The road is the most basic (and important) cycling facility available, and the preferred way of providing for cyclists is to create conditions on the carriageway where cyclists are content to use it, particularly in urban areas.'*

5.3.4 A cycling isochrone showing the site's catchment has also been produced using TRACC and is shown as **Figure 3** in **Appendix B** of the **TA**. The figure illustrates 2000m and 5000m catchment ranges which equate to 10-minute and 25-minute journey times respectively which are based on the somewhat conservative or leisurely cycle speed of 12kph. Anecdotally, commuting cyclists are generally thought

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

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

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

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

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

5.3.7 An examination of **Table 5.3** shows that a BP Garage/M&S foodstore and Dickley Lane Industrial Estate can both be reached within a 9-minute cycle time. The settlements of Platt's Heath, Harrietsham, Charing Heath and Charing can all be cycled within a 20-minute cycling time. Each of these settlement areas provide their own employment/educational opportunities and amenities as well as providing a good catchment of potential users of the sports facility.

5.3.8 Given the evidence presented in **Figure 3** of **Appendix B** of the **TA** and **Table 5.3**, cycling can be considered a realistic and viable method of travel indicating that the site's location is accessible via this sustainable mode.

5.3.9 Clearly the site location and the surrounding infrastructure will mean that travel on foot and by cycle will be realistic and convenient modes of travel for future residents of the site and users of the sports facility. The potential numbers of walking and cycling trips that the site will generate will be discussed in **Section 6** of this report, but clearly the scale of the site is not such that it will disadvantage existing pedestrians and cyclists.

5.4 Access by Local Bus Services

5.4.1 As **Table 5.2** shows, the 'Opposite Glebe Gardens' and 'Adjacent Glebe Gardens' bus stops can be reached within a circa 8-minute walking time. The local footway network provides a convenient connection to these bus stops. Both bus stops comprise flag and timetable bus information as well as painted bus cages.

5.4.2 The applicant is however willing to provide funding towards a new pair of bus stops which will be expected to provide access to the same services as the existing Glebe Gardens stops as detailed in **Table 5.4** below. It is expected that the new stops will be *Disability Discrimination Act* (1995) compliant stops with raised boarding areas, timetable information and potentially with shelter and seating.

5.4.3 Copies of the timetable information (correct at the time of writing) are available on request while the most up-to-date timetables are available from: http://www.traveline.info.

Table 5.4: Summary of Key Bus Services

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

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

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

5.5 Rail

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

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

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

5.6 Summary

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

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

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

5.6.4 A key theme of national and local transport planning policy is that development should be located where the need to travel will be limited and the use of sustainable transport modes can be promoted. As detailed in **Section 2** of this report, the NPPF states the developments need to *'create places that are safe, secure and attractive'* and that priority should be given *'first to pedestrian and cycle movements'*.

5.6.5 It can be concluded that the proposed development accords to this NPPF guidance as well as the principles of Paragraph 108 in terms of promoting opportunities for sustainable travel and it is located and designed to give priority to pedestrian, cycle and public transport movements.

5.6.6 The development proposals also accord with a number of local policies and guidance including Outcomes 2, 4 and 5 of LTP4, Policy SP23 of the Maidstone Borough Local Plan and the strategic objectives of the Maidstone Integrated Transport Strategy.

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6 TARGETS

6.1 Introduction

6.1.1 In order for TP measures to be successfully adopted, it is important to set achievable but challenging targets that can be monitored and reviewed at regular intervals. It is difficult to set targets at this stage as they need to be based on the actual travel characteristics of the site which will not be known until a baseline travel survey has been arranged following an agreeable level of occupation. It is expected that the house builder behind the future Reserved Matters application will arrange this baseline survey. However, as the applicant has a commitment to sustainable travel and the TP process, some initial targets can be set based on those of the Lenham Neighbourhood Plan TA.

6.2 Trip Generation

Residential Dwellings

6.2.1 As the proposed development has been identified as a Lenham Neighbourhood Plan site, the TRICS derived trip rates presented on page 43 of the Lenham Neighbourhood Plan TA (**Appendix I** of the **TA**) have been utilised. This was agreed with KCC Highways during scoping discussions.

6.2.2 As mentioned in **Section 4** of this report, the proposed development will provide 60% private and 40% affordable housing.

6.2.3 The trip rates and resulting trip generation is presented in the tables below.

Table 6.1: Peak Hour Trip Rates and Trip Generation for 60 Private Dwellings

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

Table 6.2: Peak Hour Trip Rates and Trip Generation for 40 Affordable Dwellings

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

Table 6.3: Trip Generation for Total Residential Development (100 Dwellings)

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

6.2.4 As **Table 6.3** above shows, the residential element of the site is likely to generate 53 two-way trips in the AM peak hour and 55 two-way trips in the PM peak hour. These figures are equivalent to less than one new trip per minute in the peak hours at the site access before dissipating across the highway network. The trip totals in the other weekday hours and at the weekend are expected to be less than this. The residential peak hours have been applied to the observed network peak hours in order to provide a robust assessment.

Sports Pitches & Sports Pavilion

6.2.5 In order to determine the traffic generation associated with the proposed sports pitches, the TRICS 7.6.1 database has been used. This industry-standard database contains traffic generation surveys of numerous sites of various land use types across the UK and Eire.

6.2.6 The most suitable land use within TRICS is 5-a-side football, however an adjustment has been made to take into account the senior and junior pitches. A summary of the key selections applied in order to derive the sample is as follows:

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

6.2.7 The above selections returned a sample of 5 sites. The full reports of the TRICS data and selection process are included in **Appendix J** of the **TA**.

6.2.8 The derived trip rates were then applied to the 3 football pitches resulting in the trip generation. The trip rates and resultant network peak hour trip generation of the site is shown in **Table 6.4** in below.

Table 6.4: Peak Hour TRICS Derived Average Trip Rates and Trip Generation for 3 Football Pitches

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

6.2.9 All of the sites in the TRICS sample comprised predominantly 5-a-side sports centre facilities ('Goals' & 'Powerleague'). Typically, a 5-a-side football match consists of a total of 14 players (including 2 substitutes per team). If all 3 football pitches would operate as 5-a-side football pitches, this would result in a total of 42 players. As previously stated in this report, the proposed development will comprise two senior pitches and one junior pitch (under 14s), all of which will operate as 11-a-side

football pitches. Typically, an 11-a-side football match consists of a total of 28 players (including 3 substitutes per team). As such, the 3 football pitches are expected to consist of a total of 84 players when all in operation at the same time, double that of three 5-a-side pitches. Based on the preceding calculations, the trip generation presented in **Table 6.4** above has been doubled.

6.2.10 In addition, the squash court will result in a maximum of 4 players, resulting in up to 8 two-way trips, which have also been added on to the trip generation presented in **Table 6.4**. It should however be noted that the squash court may also be used by just two players and may not actually generate trips in the network peak hours, however the worst-case has been included in the assessment. The final trip generation associated with the sports pitches and sports pavilion is presented in **Table 6.5** below. It should be noted that the peak periods of the sports facilities will be 18:00 - 21:00 during the week and weekend late mornings and afternoons, therefore these peaks do not fully align with the network and residential peaks.

Table 6.5: Peak Hour Trip Generation for the Proposed Sports Pitches and Sports Pavilion

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

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

Total Proposed Development

6.2.12 **Table 6.6** below presents the combined vehicular trip generation associated with the 100 dwellings and sports pavilion.

Table 6.6: Peak Hour Trip Generation for the Proposed 100 dwellings, Sports Pitches and Sports Pavilion

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

6.2.13 As **Table 6.6** shows, the proposed development is estimated to generate in the region of 71 and 91 two-way trips in the AM and PM network peak hours respectively, with the higher figure equivalent to around 3 new trips every 2 minutes i.e. 1.5 trips per minute at the site accesses before dissipating.

In order to provide a robust assessment, no trip internalisation has been applied i.e. residential development traffic visiting the sports facility and vice versa.

6.3 Person Trip Rates

6.3.1 The number of non-car trips likely to be generated by the residential element of the site has been forecast using the existing proportions for the local area presented on page 82 of the Lenham Neighbourhood Plan (**Appendix I** of the **TA**), which were derived from the Maidstone ITS.

6.3.2 The non-car proportion of 35.8% was divided by the car driver proportion of 64.2%, creating a factor of 55.8%. This factor was applied to the car trips listed above to create the non-car trips which were then spread across the non-car modal splits as details in **Table 6.7**.

Table 6.7: Forecast Multimodal Person Trips

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

6.3.3 Based on the results in **Table 6.7**, the site is estimated to generate 111 and 142 total people trips in the AM and PM peaks respectively. Following driving a car being the most frequent method of travel likely to be used by residents of the site, walking will account for around 13 and 16 trips in the respective AM and PM peaks. Travelling by public transport (bus or train) will account for 12 and 15 trips in each peak, while cyclists will each account for 1 to 2 trips in each peak hour. Travel by other modes will collectively account for around 14 and 18 trips in the respective peak hours, we assume that these trips will primarily be car passenger trips.

6.4 Modal Shift Targets

6.4.1 In line with national travel plan guidance, targets should be SMART (Specific, Measurable, Achievable, Realistic and Time-bound). At this stage in the TP process, the most suitable way to set targets will be to suggest a reduction in car or van driver trips with an increase in trips on foot, bike, bus, train and as a passenger in a car or van trips.

6.4.2 The Lenham Neighbourhood Plan TA has suggested Travel Plan targets based on those of the Maidstone ITS report. These targets are based upon the year 2021. It is acknowledged that the development would be unlikely to be fully built-out by 2021, however these mode share proportions

could still serve as an indicate target base, to be revised following travel surveys to be undertaken at an agreeable level of occupation with KCC. These initial targets are outlined below in **Table 6.8**.

Table 6.8: Modal Split Targets for Five Years Post Full Occupation

Mode	Modal Split	Target (NP 2021)
Walking	11.6%	**13.6%**
Cycling	1.2%	**2.4%**
Public Transport	10.5%	**13.2%**
Car Driver	64.2%	**59.9%**
Other Modes	12.5%	**10.9%**
Total	**100.0%**	**100.0%**

6.4.3 **Table 6.8** presents the targets of 13.6% of trips to be made on foot, 13.2% to be made by public transport and 2.4% by cycling. Other modes of transport are targeted to make up 10.9% of trips, with a reduction in driving a car to 59.9%. It is hoped that the TP co-ordinator, to be discussed in the next section, will arrange a travel survey following full occupation of the development, with repeat surveys every five-years to assess whether the targets have been achieved, then new targets can be established. Timescales can also be set for further surveys and targets.

6.4.4 It is recommended that the initial targets are adjusted based on the baseline travel survey as this will provide more accurate, up-to-date and site-specific travel patterns rather than using area wide ITS targets.

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7 MEASURES

7.1 Introduction

7.1.1 It is important that TP measures are appropriate for the development and have realistic potential to influence the increased uptake of sustainable modes of transportation. It is also important that they can influence people in the short, medium and long term.

7.1.2 Not only should the measures be realistic but it is important that resources are made available to help achieve them. Therefore, the roles and responsibilities of all parties involved, particularly the eventual travel plan co-ordinator for the site, should be presented, discussed and agreed at the earliest opportunity.

7.1.3 This section will present potential measures to help achieve the targets set in **Section 6**. Some of these measures will be collective and apply to all modes of sustainable transport while others will be specific to each mode.

7.2 Reducing the Need to Travel

7.2.1 **Section 5** of this TP has described how the site is well-located in terms of being within walking and cycling distance to local amenities. It also demonstrated how bus services may provide viable and convenient modes of travel for a range of journey types. Furthermore, the site's access strategy, particularly with regards to its permeability for pedestrians, maximises the potential for the attractiveness of travel via sustainable modes by providing convenient connections along natural desire lines. The site will also offer a section of public open space which itself will become a new local amenity.

7.2.2 **Sections 4 and 5** have stated that the existing and proposed local highway network is/will be conducive to walking and cycling trips, with well-lit footways and scenic PRoWs for pedestrians. New footway will be provided along Old Ashford Road as part of the development proposals that will connect with the existing provision to the west and that along the A20 to the east.

7.2.3 Development of the dwellings could also see an increase in working from home given improvements in home telecommunications, such as broadband and video calling, and information technology, including cloud computing and the increase in '.com' industries. The house builder may incorporate home working facilities into the properties. Anecdotally, more employers, often through adoption of their own TPs, are allowing increasing numbers of staff to work from home. Increasing the number of people working from home has not been included in the TP modal split target described in **Section 6** but increasing the ability to do so can help to reduce the number of car trips generated by the development.

7.2.4 In addition, the emergence of home deliveries from large supermarkets and online retailers has the potential to further reduce the need for travel. There is an opportunity for the house builder to promote these alternatives and raise awareness of the potential time, cost and environmental savings of home deliveries, both in relation to the large supermarket chains including Sainsbury's, Asda, Tesco, Morrisons and Waitrose, as well as online retailers such as Ocado and Amazon. Many of these retailers allow purchases to be delivered on a specific day and some between a specific time window to ensure that someone is home to accept the delivery. Alternative delivery addresses and locations can also often be specified.

7.3 Welcome Packs

7.3.1 Welcome packs will be provided for each new residence upon first occupation and will be produced by the house builder with input from KCC. These packs will be essential to educating and informing future residents of both the sustainable transport modes available to them and the benefits they can have for them and their families including time and cost savings, supporting a healthy lifestyle and minimising their carbon footprint. They are therefore essential to the promotion of what this TP aims to achieve. Typically, the content of such welcome packs include:

- Introduction to the TP concept dealing with objectives and benefits;
- Educational literature on the health benefits of walking and cycling and the environmental benefits of sustainable modes of transport;
- Maps highlighting local walking and cycling routes and catchment plans indicating typical walking and cycling times to key destinations;
- Public transport route maps and timetables; and
- Details of the TP co-ordinator.

7.4 Other Methods of Awareness Raising and Marketing

7.4.1 Aside from welcome packs, there are other effective ways to raise the awareness of and market the benefits of sustainable travel including:

- Personalised travel planning for families and individuals, often arranged by the TP Co-ordinator;
- Establishment of local sustainable transport forums or groups where issues can be shared and solutions discussed. This could be at physical meeting or by using social media with website such as *Twitter*, *Facebook* and *Nextdoor* having mass appeal and membership, yet having localised content and discussion groups*;*
- Set-up of travel notice boards in communal areas displaying information such as lists of sustainable travel websites, local taxi services and car clubs; and
- Promotion of events such as *National Bike Week* and *Living Street's* series of walking events including *Walk to Work Week* and *Walk to School Week*.

7.5 Measures to Encourage Walking

7.5.1 Walking is considered to be the most sustainable and accessible mode of travel. It also has the benefit of zero carbon emissions and significant health benefits, with doctors recommending 150 minutes of activity per week to keep your body healthy and prevent illness including heart disease, cancer and diabetes (www.nhs.uk). The 150 minutes could be achieved by walking for 30 minutes per day, five days a week (www.walkingforhealth.org.uk). Furthermore, recent research from the University of Cambridge has discovered that just a brisk 20 minute walk each day, burning between 90 and 110 calories, could reduce the risk of premature death by between 16-30% for inactive individuals (http://www.cam.ac.uk/research/news/lack-of-exercise-responsible-for-twice-as-many-deaths-as-obesity).

7.5.2 Potential measures to encourage walking include the following:

- Raise awareness of the health benefits of walking for all ages of people of fair health, emphasising how it is a cost-effective alternative to other exercise methods such as gym membership and does not involve a considerable change to people's day-to-day lifestyles;
- Promote the local walking routes available (through welcome packs and notice boards) including off-road PRoWs;
- Ensure the clear signage of pedestrian routes within and adjacent to the site;
- Provision of personal safety alarms to enhance safety; and
- Promotion of a 'walking buddy' scheme (through welcome packs, notice boards and social media).

7.6 Measures to Promote Cycling

7.6.1 Like walking, cycling is sustainable and accessible. It has the benefits of zero carbon emissions and has significant health benefits.

7.6.2 The NHS website (http://www.nhs.uk/Livewell/fitness/Pages/Cycling.aspx) outlines the health benefits of cycling stating that *'the best way to build your cardiovascular fitness on the bike is to ride for at least 150 minutes every* week' which, like walking could be broken down into 30 minutes five days a week. The website also states that cycling is the third most popular recreational activity in the UK and makes the pertinent point that it has broad appeal with young and old, the able-bodied and people with disabilities who can all enjoy cycling with the right equipment. It is expected that the house builder will include provision for cycle storage for each dwelling. Potential measures to encourage cycling include the following:

- Raise awareness of the health benefits of cycling for all ages of people with fair health, again emphasising how it is a cost-effective alternative to other exercise methods and promoting the 'fun' element of cycling;

- Promote the local cycling routes available and cycle storage facilities at key destinations such as in district centres (through welcome packs and notice boards);
- Promotion of events such as *National Bike Week* (www.bikeweek.org.uk);
- Promotion of a Bicycle User Group (BUG) (through welcome packs, notice boards and social media) which could include cycle proficiency courses; and
- Discounts on cycles and cycle accessories as mentioned earlier.

7.7 Measures to Encourage Public Transport

7.7.1 Public transport use and accessibility is an important element of TPs. Bus and rail transport can often be effective options for many trip types, particularly mid to long distance journeys. **Section 5** of this report has demonstrated that bus travel should be a suitable and convenient mode of transport for some residents of the site. The applicant is also willing to fund a new pair of bus stops on Old Ashford Road at the site frontage.

7.7.2 The key measure to promote bus use will be through the provision of route and timetable information in welcome packs, on notice boards and at the stops themselves. Discount tickets or other fare incentives, as mentioned above, could be provided in welcome packs for a period of time.

7.8 Measures to Reduce Single Occupancy Car Trips

7.8.1 Car/lift sharing can be an effective way to reduce single occupancy car trips. These trips can often be arranged between friends and neighbours or by using lift sharing websites including the following:

- BlaBlaCar (www.blablacar.com);
- Liftshare (https://liftshare.com/uk); and
- GoCarShare (http://gocarshare.com).

7.8.2 The Liftshare websites enable users to register and search for lifts in their area. Users typically have to be over 18 years of age but do not always have to have driving licences (as passengers). KCC works with Liftshare on the *Kent and Medway Journey Share* scheme (https://liftshare.com/uk/community/kmjourneyshare) which is free to use. Websites such as these can be promoted through welcome packs, notice boards and social media.

7.8.3 Residents could also manage their own lift sharing as many residents will travel to destinations within close proximity of each other such as Maidstone and Ashford. This could be managed through a residents' committee or by the travel plan co-ordinator.

7.9 Measures to Encourage Low Emission Vehicle Use

7.9.1 It has been well publicised in the national media in recent years that car manufacturers are actively investing in low emission technologies such as electric hybrid engines and fully electric engines. The purchase prices of such low emission technologies are becoming more in line with standard petrol

and diesel engine vehicles, with some manufacturers setting targets to fully switch to electric vehicle or hybrid production only.

7.9.2 To encourage the use of electric vehicles the applicant is willing to accept a condition requiring the housebuilder(s) to provide sufficient electrical infrastructure to facilitate electric vehicle charging ports to be installed on the site.

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8 MANAGEMENT, MONITORING AND REVIEW

8.1 Management

8.1.1 The overall responsibility for the TP will initially lie with the developer behind the potential Reserved Matters application from the first construction of the development to a 'trigger point' to be agreed with KCC. Following this, the TP will become the responsibility of a TP co-ordinator, site management company or residents' association.

8.2 Appointment of a Travel Plan Co-ordinator

8.2.1 It is envisaged that the developer behind the Reserved Matters application will appoint a Travel Plan Co-ordinator (TPC) prior to construction. The TPC will inherit the day-to-day responsibility for ensuring that the TP is regularly monitored, reviewed, updated and evolved. They will be tasked with implementing and marketing the TP measures, monitoring the uptake of the measures by arranging travel surveys at regular intervals to be agreed with KCC, assessing whether targets have been met, reviewing and updating the targets based on survey results and liaising with KCC and public transport operators.

8.3 Monitoring and Review

8.3.1 It is important that the TP is monitored at regular intervals to assess its success and help to evolve it. It is envisaged that the developer behind the Reserved Matters application will commit to monitor the TP at regular intervals over a period of time and will most likely be post 100% occupation.

8.3.2 The TP will need to be reviewed at regular intervals after monitoring is complete. The review should remove any unsuccessful incentives and replace them with measures that will help to achieve the TP targets. If the TP is shown to be underachieving, a remedial strategy will need to be outlined which should consider measures to address any failing aspects of the TP. Any changes to the TP will need to be made in agreement with KCC.

8.4 Interim Action Plan

8.4.1 As part of the present Outline planning application, an interim action plan is proposed, to detail the actions likely to be undertaken following the sale of the site to a house builder. It should however be noted that this is only indicative at this Outline stage as the end housebuilder is likely to offer its own action plan at the Reserved Matters stage as part of a Full Travel Plan which may provide more detailed information on the TP actions and measures.

Table 8.1: Interim Action Plan

Stage	Action	Responsibility
Reserved Matters	Provide a Full Travel Plan following consultation with KCC	House builder
Detailed Design	Site layout design to prioritise accessibility by sustainable modes and provide cycle storage	House builder
Completion of 1st phase of dwelling construction	Market the benefit of the site in terms of accessibility by non-car modes to potential buyers	Travel Plan Coordinator/ Sales Agent
3 months prior to occupation	Appoint Travel Plan Coordinator (TPC) and inform KCC of contact details	House builder
	Prepare home welcome packs and arrange printing	Travel Plan Coordinator
Occupation of dwellings	Arrange for welcome packs to be presented to new owners with keys to dwellings	Travel Plan Coordinator
	Provide sustainable travel vouchers on request and collate information on feedback forms	Travel Plan Coordinator
After 50% occupation	Undertake household travel survey and collate and report results to KCC	Travel Plan Coordinator
Annually for five years	Repeat travel surveys and if targets not met provide further sustainable travel vouchers and personal travel planning advice	Travel Plan Coordinator