Lower Thames Crossing

6.3 Environmental Statement Appendices Appendix 7.11 – Traffic and Noise Effects on the Kent Downs Area of Outstanding Natural Beauty

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Appendix 7.11 – Traffic and Noise Effects on the Kent Downs Area of Outstanding Natural Beauty

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1 Introduction

1.1 Background

1.1.1 The assessment in this appendix has been undertaken to address comments in the Planning Inspectorate for England (PINS) Scoping Opinion, including the Sevenoaks District Council Scoping Report response regarding traffic impacts on roads within the Kent Downs Area of Outstanding Natural Beauty (AONB), expressed as follows:

'Indirect impacts will need to include an assessment of the changes on the local road network and junction arrangements as a result of the proposals in terms of traffic, noise and disturbance. From the point of view of the North [Correction: Kent] *Downs AONB as a whole this scheme has potential implications for a much wider area which will be clarified by the transport modelling.'*

1.1.2 The Scoping Opinion also refers to the potential effects of heavy goods vehicles on the tranquillity and visual amenity at three specific locations outside the 'application boundary', which for the purposes of this Project are defined by the Order Limits:

1.1.3 *'In addition to the potential direct and indirect impacts to the AONB and its setting within the application boundary, the EIA should fully consider the potential visual and tranquillity impacts that may result along the A2/M2 corridor, the A249 Detling Hill and the A229 Bluebell Hill. These routes are likely to see a significant increase in traffic flow, particularly heavy-duty vehicles, travelling to and from the channel ports as a result of the Lower Thames Crossing, as Detling and Bluebell Hills (which cross the Kent Downs AONB in an approximately north/south direction) are the main links from the A2/M2 to the M20.'*

1.2 Project description

1.2.1 The A122 Lower Thames Crossing (the Project) would provide a connection between the A2 and M2 in Kent and the M25 south of junction 29, crossing under the River Thames through a tunnel. The Project route is presented in Plate 1.1.

1.2.2 The A122 would be approximately 23km long, 4.25km of which would be in tunnel. On the south side of the River Thames, the Project route would link the tunnel to the A2 and M2. On the north side, it would link to the A13, M25 junction 29 and the M25 south of junction 29. The tunnel portals would be located to the east of the village of Chalk on the south of the River Thames and to the west of East Tilbury on the north side.

1.2.3 Junctions are proposed at the following locations:

a. New junction with the A2 to the south-east of Gravesend

b. Modified junction with the A13/A1089 in Thurrock

c. New junction with the M25 between junctions 29 and 30

1.2.4 To align with National Policy Statement for National Networks (Department for Transport, 2014) policy and to help the Project meet the Scheme Objectives, it is proposed that road user charges would be levied in line with the Dartford Crossing. Vehicles would be charged for using the new tunnel.

1.2.5 The Project route would be three lanes in both directions, except for:

a. link roads

b. stretches of the carriageway through junctions

c. the southbound carriageway from the M25 to the junction with the A13/A1089, which would be two lanes

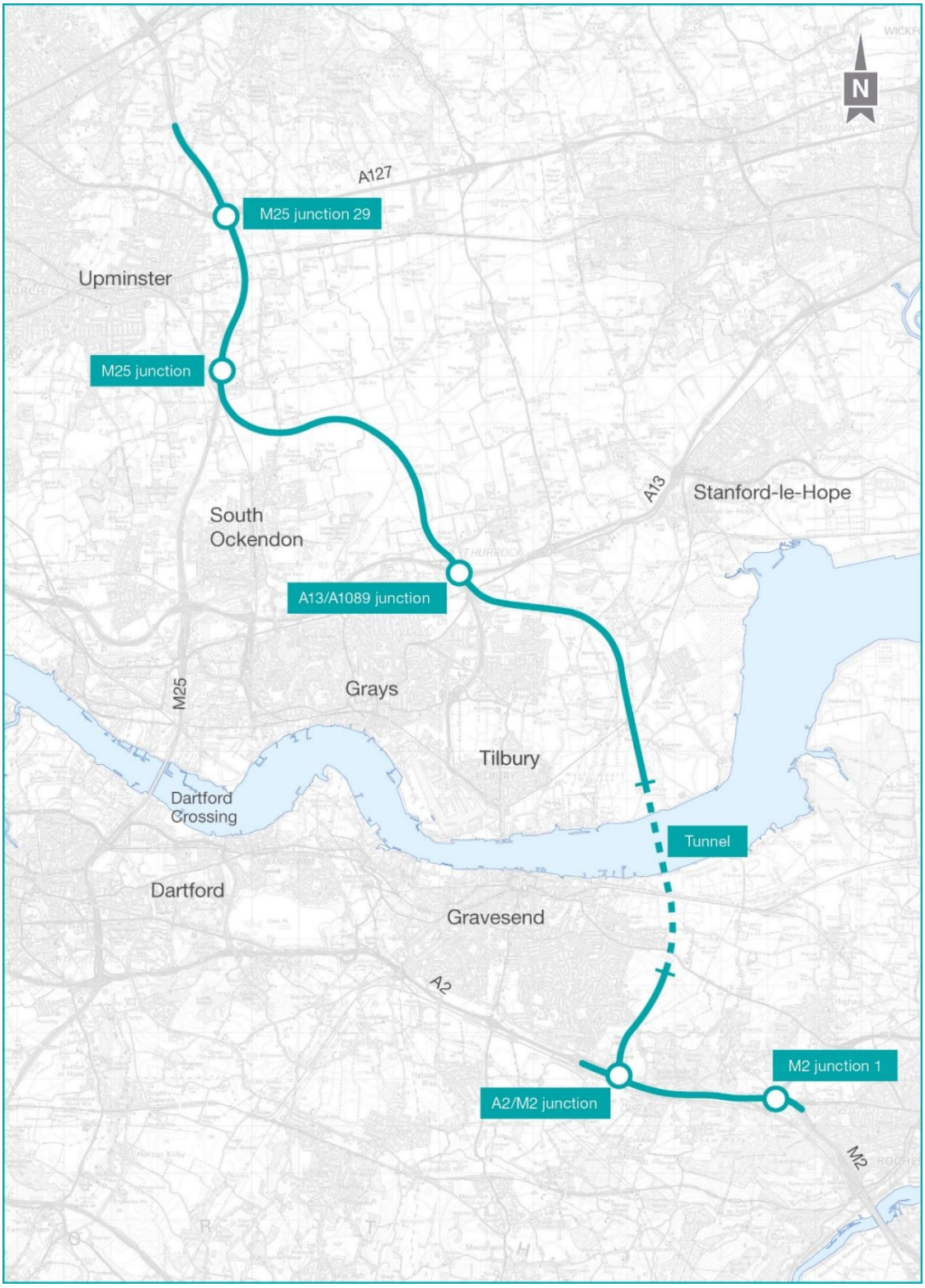
1.2.6 In common with most A-roads, the A122 would operate with no hard shoulder but would feature a 1m hard strip on either side of the carriageway. It would also feature technology including stopped vehicle and incident detection, lane control, variable speed limits and electronic signage and signalling. The A122 design outside the tunnel would include emergency areas. The tunnel would include a range of enhanced systems and response measures instead of emergency areas.

1.2.7 The A122 would be classified as an ‘all-purpose trunk road’ with green signs. For safety reasons, walkers, cyclists, horse riders (WCH) and slow-moving vehicles would be prohibited from using it.

1.2.8 The Project would include adjustment to a number of local roads. There would also be changes to a number of Public Rights of Way, used by walkers, cyclists and horse riders. Construction of the Project would also require the installation and diversion of a number of utilities, including gas pipelines, overhead electricity powerlines and underground electricity cables, as well as water supplies and telecommunications assets and associated infrastructure.

1.2.9 The Project has been developed to avoid or minimise significant effects on the environment. The measures adopted include landscaping, noise mitigation, green bridges, floodplain compensation, new areas of ecological habitat and two new parks.

Plate 1.1 Lower Thames Crossing route



1.3 Policy context

1.3.1 AONBs are designated in England by the UK Government for the purpose of ensuring that the special qualities of the finest landscapes in England and Wales are conserved and enhanced. Section 82 of The Countryside and Rights of Way Act 2000 confirms that the primary purpose of an AONB designation is to conserve and enhance the natural beauty of the area and secure their permanent protection against development that would damage their special qualities.

1.3.2 The National Policy Statement for National Networks (Department for Transport, December 2014, Paragraph 5.146) sets out the requirements for an applicant's assessment:

'The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include any noise and light pollution effects, including on local amenity, tranquillity and nature conservation'.

2 Assessment methodology

2.1 Scope of the assessment

2.1.1 A full Landscape and Visual Impact Assessment (LVIA) is provided in Chapter 7 Landscape and visual (Application Document 6.1) of the Environmental Statement. The LVIA in Chapter 7 considers the direct and indirect effects of the Project on landscape character and visual amenity within a study area defined through consultation with key stakeholders, including the relevant local planning authorities. For further detail on how the study area for the core LVIA was defined, reference should be made to Chapter 7.

2.1.2 The Chapter 7 (Application Document 6.1) assessment of the effects on landscape character includes a high-level assessment of the effects on tranquillity. The LVIA study area includes the M2/A2 corridor between M2 junction 1 (the M2/A2/A289 interchange) to the east and Gravesend to the west. The assessment this appendix does not therefore repeat the findings of that assessment. Instead, the focus of this assessment is on the effects on noise and visual disturbance within the wider AONB, that would result from the predicted changes in traffic flows and the effects on relative tranquillity.

2.1.3 The assessment in Appendix 7.11 considers the effects of the Project on existing traffic flows and the resulting changes in noise levels within the AONB as a whole. The assessment also broadly considers how the predicted changes in traffic flows and noise levels are likely to affect the existing relative tranquillity of the AONB, through audio and visual perception.

2.1.4 The assessment includes consideration of the potential effects on views and tranquillity at the following locations, in response to the PINS Scoping Opinion:

a. A2/M2 corridor (considered in Chapter 7 Landscape and Visual (Application Document 6.1), west of M2 junction 1 (A289 interchange).

b. A249 Detling Hill, Detling, north-east of Maidstone

c. A229 Bluebell Hill, Blue Bell Hill, south-west of Chatham

2.1.5 The assessment considers changes to traffic flows during the 11 construction traffic modelling phases 2025 and 2030 and two stages of operation at 2030 (opening year) and 2045 (design year).

2.2 Consultation

2.2.1 At a meeting with the Kent Downs AONB Unit and Natural England on 9 October 2019, it was requested that the assessment of the road network experiencing changes within the AONB should include minor roads as well as the strategic road network, the latter being considered less susceptible to change due to the notable existing vehicle flows.

2.2.2 It was agreed that tranquillity and dramatic views are the most relevant special components, characteristics and qualities of the AONB to consider when assessing the effects of changes in traffic flows.

2.2.3 In discussion with the AONB Unit and Natural England it was acknowledged that an increased number of vehicles may not necessarily constitute an effect on the special components, characteristics and qualities of the AONB, given the nature of the existing road network and associated traffic. As such it was agreed that scoping thresholds should be based on the degree of predicted change on the existing road network and the susceptibility to change.

2.2.4 As scoping thresholds for the predicted level of changes in traffic flows are not defined in guidance, it was agreed that professional judgement should be used in combination with stakeholder engagement to define an appropriate assessment methodology.

2.2.5 During a further meeting in February 2020, a request for consideration of changes to traffic flows during the construction phase was made by the Kent Down AONB Unit, which has therefore been included in this assessment.

2.2.6 Since the meetings held with the AONB Unit and Natural England in October 2019 and February 2020, the Project's approach to presenting predicted changes in traffic flows has been refined. The methodology for this assessment has therefore been updated to reflect this.

2.2.7 At a follow up meeting to discuss the revised methodology on 22 June 2022, it was confirmed by representatives of AONB Unit and Natural England that they considered the revised methodology acceptable in principle.

2.3 Study area

2.3.1 The study area for this assessment encompasses the whole of the Kent Downs AONB to address the PINS Scoping Opinion comment, as explained in the introduction to this appendix. The study area extends 3km beyond the AONB boundary to consider any potential effects on the AONB and its setting.

2.4 Method of establishing baseline conditions

Traffic baseline

2.4.1 The Project's transport model has been used to provide the traffic baseline. Details of how the Project's transport model has been built are set out in the Combined Modelling and Appraisal Report (Application Document 7.7).

2.4.2 The baseline has been taken from the Do-Minimum scenario; where the Project does not exist, in both 2030 (the opening year) and 2045 (the design year).

2.4.3 The construction assessment is based upon the 2030 Do-Minimum scenario; more details of which are set out in the Transport Assessment (Application Document 7.9).

2.4.4 The transport model uses an industry standard approach, in which the capacity of each part of the road network is given as the number of Passenger Car Units (PCUs) that can use each road link in the transport model each hour:

a. Cars and vans are defined as 1 PCU

b. HGVs are considered to be equivalent to 2.5 PCUs, because they take up more road space

2.4.5 For the purposes of this assessment, the number of PCUs refers to the total number of vehicles, including HGVs. However, the numbers of HGVs are also considered specifically in relation to visual disturbance. This is because HGVs are more likely to have greater effects than cars or vans.

Noise baseline

2.4.6 The baseline noise conditions have been established through the surveys undertaken for the Chapter 12 Noise and vibration [Application Document 6.1] of this Environmental Statement. The survey methodology is reported within Appendix 12.5 Baseline Noise Survey Information [Application Document 6.3].

Landscape and visual baseline

2.4.7 The special components, characteristics and qualities of the AONB are defined in the Kent Downs AONB Management Plan 2021-2026 (Kent Downs AONB Unit, May 2021, section 1.2), adopted September 2021.

2.4.8 Following consultation with the Kent Downs AONB Unit and Natural England, a series of scoping thresholds were defined using professional judgement, based on the numbers of predicted Passenger Car Units (PCUs) and Heavy Goods Vehicles (HGVs). The resulting thresholds are set out in Table 2.1. Further explanation on the basis for scoping roads in or out of this assessment is provided in the introduction to the assessment of likely effects at Section 4.3.

2.4.9 For the purposes of this assessment, main roads are considered to be motorways and ‘A’ roads and minor roads are considered to be ‘B’ roads and all other public roads open to vehicular traffic.

Table 2.1 Scoping thresholds – Predicted changes to traffic flows during construction and operation

Road type	-49 to +50 PCUs -5 to +5 HGVs	+51 to +250 PCUs +6 to +25 HGVs	+251 to +500 PCUs +26 to +50 HGVs	500 and greater PCUs +50 and greater HGVs
Main road: PCUs	Scoped out	Scoped in if over 40% increase	Scoped in	Scoped in
Minor road: PCUs	Scoped out	Scoped in if 40% increase or over	Scoped in	Scoped in
Main road: HGVs	Scoped out	Scoped out	Scoped out	Scoped in
Minor road: HGVs	Scoped out	Scoped in if 40% increase or over	Scoped in	Scoped in

2.4.10 A desk-based baseline assessment of the existing landscape context and road corridor character was undertaken for the affected roads meeting the scoping criteria for assessment, with data used including Ordnance Survey mapping and aerial photography. This included an assessment of the degree of visual enclosure to each road corridor, influencing the extent to which changes in predicted traffic flows are likely to be discernible from the AONB.

Tranquillity baseline

2.4.11 In 2006, CPRE (previously known as The Campaign to Protect Rural England) commissioned a project to map tranquillity on a national scale (published in 2007). The CPRE Tranquillity Map of England provides a data source for existing tranquillity.

2.5 Method of assessment

Traffic assessment

2.5.1 The methodology used to forecast the changes to traffic flows which have been used to inform this assessment of traffic and noise effects on the Kent Downs AONB is set out in the Traffic Forecasts Non-Technical Summary (Application Document 7.8) with the full technical details set out in the Combined Modelling and Appraisal Report (Application Document 7.7).

Noise assessment

2.5.2 This appendix incorporates an assessment of road traffic noise within the AONB.

2.5.3 The study area for the noise assessment has been defined based upon the guidance contained within DMRB LA 111. This study area includes all roads in the Project's transport model that are within the AONB and a 600m offset from the AONB.

Operational daytime road traffic noise prediction

2.5.4 Operational road traffic noise effects have been assessed in accordance with the methodology outlined in DMRB LA 111, implementing the calculation methodology of the CRTN (Department for Transport and Welsh Office, 1988).

2.5.5 In order to calculate the dB $L_{A10\ 18\ hour}$ noise level, the prediction method takes into account factors such as the 18-hour Annual Average Weekday Traffic Flow (AAWT), composition (Heavy Goods Vehicle (HGV) percentage), vehicle speed, the alignment of the road, the road surface, the nature of the intervening ground cover between the road and receptors and reflections from building facades. The AAWT traffic data is required for a noise assessment in accordance with DMRB LA 111. This L_{A10} noise index has been found to correlate well with annoyance from traffic, and the 18-hour period is used as daytime to correspond with that used in the Noise Insulation Regulations 1975.

2.5.6 The prediction of road traffic noise has been undertaken using the commercially available, proprietary noise mapping software IMMI, which is validated to implement the CRTN calculation methodology.

Operational daytime road traffic noise assessment

2.5.7 The following comparisons have been made of the predicted 18-hour daytime road traffic noise levels (06:00 to 24:00).

During Construction

2.5.8 In the construction scenarios set out below, the term Do-Minimum is in the absence of the Project being constructed, and the Do-Something scenarios

include the construction of the Project. Each of the years outlined have been derived by converting the Project's construction traffic modelling phases (detailed in Table 4.1) into calendar years as follows:

a. Do-Minimum scenario in 2025 against Do-Something scenario in 2025

b. Do-Minimum scenario in 2026 against Do-Something scenario in 2026

c. Do-Minimum scenario in 2027 against Do-Something scenario in 2027

d. Do-Minimum scenario in 2028 against Do-Something scenario in 2028

e. Do-Minimum scenario in 2029 against Do-Something scenario in 2029

f. Do-Minimum scenario in 2030 against Do-Something scenario in 2030

During Operation

2.5.9 In the operational scenarios, the term Do-Minimum is in the absence of the Project, and the Do Something scenarios include the Project as follows:

a. Do-Minimum scenario in the opening year (DMOY - 2030) against Do-Something scenario in the opening year (DSOY - 2030)

b. Do-Minimum scenario in the opening year (DMOY - 2030) against Do-Something scenario in the design year (DSDY - 2045)

Road traffic noise impact criteria

2.5.10 A change in road traffic noise of 1 dB(A) in the short term (that is, when a project is opened) is the smallest that is considered perceptible. In the long term (15 years after opening), a 3 dB(A) change is the smallest that is considered perceptible. The magnitude of impact should, therefore, be considered different in the short term and long term.

2.5.11 DMRB LA 111 provides a classification for the magnitude of change in road traffic noise on both the short term and long term as presented in Table 2.2 and Table 2.3.

Table 2.2 Classification of magnitude of noise impact – Short Term

Short-term magnitude	Change in road traffic noise level
No change	0 dB
Negligible	> 0dB and < 1dB
Minor	≥ 1dB and < 3dB
Moderate	≥ 3dB and < 5dB
Major	≥ 5dB

Table 2.3 Classification of magnitude of noise impact – Long Term

Long-term magnitude	Change in road traffic noise level
No change	0 dB
Negligible	> 0dB and < 3dB
Minor	≥ 3dB and < 5dB
Moderate	≥ 5dB and < 10dB
Major	≥ 10dB

Visual assessment

2.5.12 Having defined the degree of existing visual enclosure, including landscape context and road corridor character, the predicted change to traffic flows in terms of both numerical and percentage change was then considered in relation to the existing baseline conditions, to conclude on the likelihood of a notable visual disturbance being experienced from the surrounding AONB.

Tranquillity assessment

2.5.13 The Guidelines for Landscape and Visual Impact Assessment (Landscape Institute and Institute of Environmental Management and Assessment, 2013) (GLVIA3) glossary provides the following definition of tranquillity:

'A state of calm and quietude associated with peace, considered to be a significant asset to the landscape'.

The Campaign to Protect Rural England (CPRE) defines tranquillity in their publication, Saving Tranquil Places (October 2006) as 'the quality of calm experienced in places with mainly natural features and activities, free from disturbance from manmade ones'.

Guidance

2.5.14 The Landscape Institute Technical Information Note 'Tranquillity – An Overview' (Landscape Institute, 2017) discusses what is understood by tranquillity in the landscape profession. The note concludes that *'there is no objective guidance on the subject or a consistent application of approach'.'*

2.5.15 The Landscape Institute technical note states that *'two of the most important factors relating to non-tranquillity,* [are] *numbers of vehicles on main roads and traffic noise.'*

Assessment

2.5.16 The assessment presented in this appendix therefore considers the effects on tranquillity based on the predicted changes to traffic flows and the resulting effects on noise and visual disturbance.

2.5.17 The tranquillity assessment in this appendix is focussed on the locations where the Project's transport model predicts changes in traffic flows above the scoping threshold (subsequently referred to in this assessment as the 'affected roads'). The assessment mainly considers increases in traffic flows, rather than reductions.

2.6 Determining significance

Traffic flow changes

2.6.1 The forecast changes in traffic are produced as follows:

a. For the construction phase by comparing the flows from the Project's transport model between the without construction scenario and the with construction scenario for each construction traffic modelling phase

b. For the operational phase comparing the do something traffic flows (where the Project is operational) to the do minimum traffic flows (where the Project is not open or under construction) from the Project's transport model

2.6.2 In each case, changes in flow that are between a reduction of -50 PCUs and an increase of 50 PCUs and a reduction of -5 HGVs and an increase of 5 HGVs are shown in grey in the change in flow figures, and changes in traffic of this same scale have been excluded from the percentage change analysis. This is because predicted changes in traffic flows of this order are not considered significant.

Road traffic noise effects

2.6.3 For the purposes of this assessment, a magnitude of noise change of Moderate or Major is considered to be a significant effect. However, the following factors are also considered in determining the final significance of effect:

a. The change in noise in the long term

b. The context of the noise

c. The character of the area

Relative tranquillity

2.6.4 There is no recognised methodology for determining the significance of effects on tranquillity; Therefore, this assessment only provides a description of the likely changes to relative tranquillity and does not assign significance levels.

2.7 Assumptions and limitations

2.7.1 As stated above, there is no recognised methodology for determining the significance of changes in traffic flows or the effects on relative tranquillity, this assessment provides a narrative description of the predicted effects.

2.7.2 No site visit has been undertaken for the assessment in this appendix. The noise data provided for this assessment has relied on computer modelling and it is considered that a site visit would not have added to the accuracy of this data. Similarly, no specific site survey has been undertaken for the assessment of visual disturbance in this appendix, however, the desk-based appraisal is considered appropriate for the nature of the assessment.

3 Baseline conditions

3.1 Existing traffic flows

3.1.1 The Project's transport model has a base year of 2016. This is reported within the Combined Modelling and Appraisal Report - Appendix B - the Transport Model Package (Application Document 7.7).

3.2 Existing noise levels

3.2.1 The results from the noise surveys undertaken for the Project are reported within Appendix 12.5 Baseline Noise Survey Information (Application Document 6.3).

3.2.2 The survey results indicate that existing noise levels are high when close to existing highway or railway corridors. These include the M2/A2 corridor in the north part of the AONB, in the vicinity of the Project. In such locations, the existing noise level is around 70dB L_{Aeq} and dominated by road or rail traffic.

3.2.3 Away from these dominant noise sources and further into the AONB, the existing noise level is lower at around 45 to 50dB L_{Aeq}. In these areas there is typically no dominant noise source, although traffic using the M2/A2 could be audible especially with a wind from the north or north-east.

3.2.4 Close to other roads within the AONB, for example Halfpence Lane, existing noise levels are higher but these noise sources are localised and do not extend far into the AONB.

3.3 Existing landscape context

Introduction

3.3.1 The special components, characteristics and qualities are set out in the Kent Downs AONB Management Plan 2021-2026 (Kent Downs AONB Unit, May 2021), adopted in September 2021; Those of relevance to this assessment comprise:

a. Tranquillity and remoteness: 'Much of the AONB provides surprisingly tranquil and remote countryside – offering dark night skies, space, beauty and peace. Simply seeing a natural landscape, hearing birdsong, seeing and hearing the sea, watching stars at night or 'bathing' in woodland are important perceptual qualities of the AONB.'

b. Dramatic landform and views: 'The Kent Downs dramatic and diverse topography is based on the underlying geology. Key features comprise impressive south-facing steep slopes (scarps) of chalk and greensand; scalloped and hidden dry valleys, especially valued where they have a downland character; expansive plateaux; broad, steep-sided river valleys, and the dramatic, wild and iconic white cliffs and foreshore. Breath-taking, long-distance panoramas are offered, often across open countryside,

estuaries and the sea from the scarp, cliffs and plateaux. The dip slope dry valleys and river valleys provide more intimate and enclosed vistas.'

3.3.2 The Kent Downs AONB Management Plan 2021-2026 defines the typical landform features and context of dramatic views that are considered to be of special value but does not identify the specific locations where these components, characteristics and qualities occur.

Affected roads

3.3.3 This section provides an appraisal of the existing landscape context and road corridor character for each road or section of road scoped into this assessment. The affected road network is shown in Figure 7.20.1 and Figure 7.20.2.

M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Existing landscape context

3.3.4 The M2 motorway borders the northern boundary of the AONB between M2 junction 1 (the M2/A2/A289 interchange) and Faversham. To the south of Canterbury, between Bridge and Lydden, the A2 is within the AONB.

3.3.5 Shorne Woods Country Park lies approximately 0.5km to the west of M2 junction 1 (the M2/A2/A289 interchange) and a short distance to the south of the interchange, Ranscombe Farm Country Park adjoins the M2 to the west. Cobham Hall Grade II* Registered Park and Garden adjoins M2 junction 1 (the M2/A2/A289 interchange).

3.3.6 The North Downs Way crosses the River Medway on the M2 Medway Bridges, alongside the eastbound carriageway for a distance of over 1km. The long distance footpath crosses the A2 north of the river on the A228 overbridge and to the south of the river via an underpass on Wouldham Road. The North Downs Way also follows a route roughly parallel and to the east of the A2 between Patrixbourne and Womenswold.

3.3.7 There is also an extensive network of footpaths in the surrounding area, many of which cross the M2 and A2 corridors. National Cycle Network Route (NCRN) 17, NCRN 177 and NCRN 178 cross or follow the M2 corridor between the interchange and M2 junction 3. NCRN 17 also crosses the A2 corridor in the vicinity of Bridge and Patrixbourne.

Road corridor character

3.3.8 The M2 corridor between M2 junction 1 (the M2/A2/A289 interchange) and M2 junction 3 runs broadly parallel with the HS1 railway line to the south and is enclosed by a combination of dense woodland and urban development in Rochester and Chatham to the north.

3.3.9 Between M2 junction 3 and junction 5, approximately half of the M2 route is typically enclosed by a combination of dense woodland and urban development in Chatham and Gillingham. To the east of Gillingham and Faversham the adjoining landscape becomes more open in character, although roadside tree belts line much of the motorway corridor along the southern highway boundary with the AONB.

3.3.10 Between Bridge and Lydden the A2 route is generally enclosed by dense woodland and roadside tree belts. Occasional low hedgerows and fences along short sections of the route are typical of the more open character of the AONB.

A229 between Maidstone and the M2

Existing landscape context

3.3.11 The A229 dual carriageway crosses a narrow part of the linear AONB from broadly north to south and passes close to the AONB boundary to the south.

3.3.12 The North Downs Way follows the north part of the A229 to the west, at times adjoining the dual carriageway, crossing the dual carriageway just north of the outskirts of Maidstone. The NCRN 17 follows the A229 between Maidstone and the M2, crossing the A229 at three locations.

Road corridor character

3.3.13 The A229 corridor between Maidstone and the M2 is typically enclosed by a combination of dense woodland, roadside planting and urban development at Blue Bell Hill to the north and the outskirts of Maidstone to the south. The A229 road corridor becomes briefly more open between the outskirts of Maidstone and the North Downs Way.

A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange)

Existing landscape context

3.3.14 Beyond M2 junction 1 (the M2/A2/A289 interchange), which partially lies within the AONB, the westward continuation of the A2 lies outside the AONB.

Road corridor character

3.3.15 The landscape within the AONB adjoining the A2/M2/A289 interchange is densely wooded with roadside tree belts enclosing the eastbound and westbound A2 slip roads to the east of the interchange.

3.3.16 Outside the AONB, the A2 corridor between Strood and the A2/M2/A289 interchange is typically enclosed by adjoining urban development and or roadside trees.

A228 between the M20 and M2

Existing landscape context

3.3.17 The A228 dual carriageway route lies outside the AONB, however, it adjoins the AONB boundary to the north at Cuxton where the AONB is separated by the River Medway and to the south at Lunsford near the M20 junction 4. Elsewhere, the A228 passes up to 2km from the AONB boundary.

3.3.18 Leybourne Lakes Country Park adjoins a short section of the A228 to the east at Lunsford, where it also adjoins the AONB bordering the A228 to the west.

3.3.19 The North Downs Way follows a route just north of Cuxton and uses the A228 overbridge to cross the M2.

Road corridor character

The A228 corridor between the M20 and the M2 is typically enclosed by roadside tree belts and adjoining urban development, including the boundary with Leybourne Lakes Country Park and urban development at Lunsford, Snodland, Halling and Cuxton. However, the A228 corridor is briefly open to the north of Snodland which is its furthest point from the AONB and to the south near its junction with the M20.

A289 between the M2 and the B2000

Existing landscape context

3.3.20 Beyond M2 junction 1 (the M2/A2/A289 interchange), which partially lies within the AONB, the westward continuation of the A2 lies outside the AONB.

3.3.21 Great Crabbles Wood, which is crossed by multiple footpaths, adjoins the A289 near the A2/M2/A289 interchange. Shorne Woods Country Park, lies to the west of M2 junction 1 (the A2/M2/A289 interchange) within the AONB. Two PRoW follow routes parallel with the A289.

Road corridor character

3.3.22 Between the A2/M2/A289 interchange and the A226 the landscape adjoining the A289 is generally enclosed by a combination of tree belts and dense woodland.

Rochester Road between Aylesford and A229

Existing landscape context

3.3.23 Between Aylesford and the A229, Rochester Road is a single carriageway road which is located outside the AONB, with the exception of the northern end approaching the A229.

3.3.24 The North Downs Way / Pilgrims Way crosses Rochester Road in the vicinity of the A229, continuing to the west along the southern boundary of the AONB. The Medway Valley Walk crosses the River Medway within Aylesford, close to the southern end of Rochester Road with the junction of High Street. There is a network of footpaths within the surrounding area, a number of which connect with Rochester Road

Road corridor character

3.3.25 Within Aylesford, Rochester Road is generally enclosed by adjoining buildings. North of Aylesford the landscape becomes rural and more open in character with occasional buildings adjoining the road. Tall hedgerows along this section partially enclose the road corridor. Occasional low hedgerows and fences along short sections of the road are typical of the more open character of the AONB. Within the AONB, in the vicinity of the A229, woodland and tall hedgerows generally enclose Rochester Road.

Trottiscliffe Road / Taylors Lane / Addington Lane / Vigo Hill through Trottiscliffe between the A20 and A227

Existing landscape context

3.3.26 To the north of the M20, the single carriageway minor road route is located within the AONB. The Trottiscliffe Road crosses the M20 via an overbridge.

3.3.27 The North Downs Way crosses Vigo Hill south-east of Vigo village at the junction with the A227 and the Pilgrim's Way crosses the eastern end of Vigo Hill. The Wealdway crosses Trottiscliffe Road just north of the M20. There is a network of footpaths within the surrounding area, three of which connect with or cross the minor road.

Road corridor character

3.3.28 South of the M20, adjoining urban development and woodland generally enclose the route. To the north of the M20, the minor road is initially generally enclosed by roadside vegetation, including vegetation screening nearby mineral extraction sites to the south. Slightly further north the landscape becomes more open although roadside hedgerows largely enclose the road.

3.3.29 The continuation of the route is enclosed by residential buildings in Trottiscliffe. North of the village, the route is largely enclosed by adjoining woodland and roadside hedgerows, with the exception of a more open section just north of Trottiscliffe.

Forstal Road between Aylesford and the A229

Existing landscape context

3.3.30 Forstal Road is a single carriageway road which is located approximately 500m outside the AONB at its nearest point.

3.3.31 The Medway Valley Walk crosses the River Medway within Aylesford, to the west of Forstal Road. There is a limited network of footpaths within the surrounding area, some of which connect with Forstal Road. Cobtree Manor Park, a public park, adjoins Forstal Road to the north, adjacent to a large industrial estate.

Road corridor character

3.3.32 Forstal Road is generally enclosed by adjoining industrial development, roadside trees, outlying woodland and the parkland landscape of Cobtree Manor Park.

Jeskyns Road west of Cobham

Existing landscape context

3.3.33 The single carriageway minor road lies outside the AONB, the boundary is defined to the east by Sole Street. Jeskyns Community Woodland adjoins Jeskyns Road to the north and south. Informal footpath routes within the community woodland cross Jeskyns Road in two locations.

Road corridor character

3.3.34 The adjoining community woodland landscape has a partially open aspect to Jeskyns Road, although roadside hedgerows enclose much of the road.

Thong Lane.

Existing landscape context

3.3.35 Thong Lane adjoins the western boundary of the AONB and Shorne Woods Country Park between the A2 and Thong village. There is a network of footpaths within the surrounding area, seven of which connect with or cross the minor road, including the Time Ball and Telegraph Trail and Darnley Trail which follow Thong Lane for a short section north of the A2.

Road corridor character

3.3.36 Between the A2 and Gravesend, tall hedgerows, adjoining woodland, including that within the country park and buildings in Thong village, largely enclose Thong Lane. However, there is a more open aspect south of Thong village.

3.3.37 Thong Lane borders the eastern urban edge of Gravesend, with the western side of Thong Lane adjoining a golf course, Cascades Leisure Centre and housing to the north of the leisure centre.

M25 between Oxted and Swanley

Existing landscape context

3.3.38 To the south of the interchange with the M20, the M25 generally skirts the western margin of the AONB to just north of the interchange with the M26. To the west of the M25/M26 interchange, the M25 continues westwards within the west part of the AONB towards Oxted.

3.3.39 Lullingstone Country Park lies to the north-east of M25 junction 4.

3.3.40 Greensand Way and Vanguard Way long distance paths cross the M25 in three locations between Oxted and Westerham. Vanguard Way follows the M25 for a short section. The Pilgrims Way / North Downs Way crosses the M25 north of junction 5. The Darent Valley Path crosses the M25 south of junction 2.

Road corridor character

3.3.41 Between Oxted and junction 5 with the M26 approximately half of the M25 route is typically enclosed by a combination of tree belts along the motorway corridor and dense woodland. Approaching the M25 junction 5 from the west, the adjoining landscape becomes more open in character and tree belts are not continuous along the southern highway boundary.

3.3.42 Between M25 junction 5 with the M26 and M25 junction 4, tree belts along the motorway boundary and dense woodland generally continue to enclose the motorway corridor. Between junction 4 and Swanley, the landscape becomes more open in character, although roadside tree belts line much of the motorway corridor along the eastern and western highway boundaries.

3.3.43 Between junction 3 and junction 2, east of Swanley, tree belts along the motorway boundary generally continue to enclose the motorway corridor, which

is also mostly in shallow cutting, apart from a short section north of junction 3 where there is a break in the tree belts the road corridor is more open.

Boxley Road / The Street / Pilgrim's Way / Lidsing Road passing through Boxley between the M20 and M2

Existing landscape context

3.3.44 The single carriageway minor road is located in the AONB between the M20 and the M2. The minor road crosses the M20 north of Maidstone, the HS1 railway line and the M2 south of Walderslade on overbridges.

3.3.45 North of Boxley, Lidsing Road climbs the steep wooded scarp at Boxley Wood. The North Downs Way and the Pilgrim's Way cross the minor road route to the north and south of Boxley Wood respectively. There is a network of footpaths within the surrounding area, a number of which connect with or cross the minor road.

Road corridor character

3.3.46 Between the M20 and Boxley Wood, settlement including Boxley, roadside hedgerows and adjoining woodland enclose much of the route. However, a slightly more open aspect coincides with short sections of managed roadside hedgerows. In addition, where Pilgrim's Way begins to climb the wooded scarp of Boxley Wood, there are currently panoramic views to the south. These panoramic views are likely to be obscured or partially obscured when the adjoining plantation establishes and matures.

Brewers Road / The Ridgeway / Peartree Lane, north of the A2

Existing landscape context

3.3.47 The single carriageway minor road route comprises Brewers Road, The Ridgeway and Peartree Lane. Brewers Road and The Ridgeway are located within the north part of the AONB. Peartree Lane lies outside of the AONB.

3.3.48 Brewers Road lies within the northern margin of Cobham Hall Registered Park and Garden. A PRoW passes close to Brewers Road within the Registered Park and Garden.

3.3.49 Shorne Woods Country Park and Brewers Wood adjoin Brewers Road and much of The Ridgeway. Great Crabbles Wood adjoins Peartree Lane. There is a network of footpaths, within the surrounding area, six of which connect with or cross the minor road network and include the Darnley Way which follows Brewers Road for a short section north of the A2 and the Time Ball and Telegraph Trail which follows Peartree Lane for a short section. NCRN 177 follows Brewers Road for a short section north of the A2.

Road corridor character

3.3.50 Between the A2 and the village of Shorne Ridgeway the minor road route is enclosed by dense woodland. Between Shorne Ridgeway and the A226 Gravesend Road, linear settlement and woodland within Great Crabbles Wood encloses much of the route, with only glimpses of traffic from Cobham Hall Registered Park and Garden from Brewers Road bridge.

Shorne Ifield Road, west of Shorne

Existing landscape context

3.3.51 The affected section of Shorne Ifield Road forms a short section of the AONB northern boundary, close to the northern margin of Shorne Woods Country Park.

3.3.52 There is a network of footpaths within the surrounding area, six of which connect with Shorne Ifield Road, providing access to the AONB and Shorne Woods Country Park.

Road corridor character

3.3.53 Between Shorne and Thong Lane, Shorne Ifield Road is enclosed on its southern boundary by dense woodland, including Brummelhill Wood and tall hedgerows, except in the vicinity of the junction with Thong Lane, where there are open vistas south to Shorne Woods Country Park within the AONB.

3.3.54 The landscape becomes more open northwards from Shorne Ifield Road, however, tall hedgerows enclose much of the route with occasional vistas through gaps in the roadside hedgerow. Elevated locations within Brummelhill Wood and Randall Heath within the AONB allow some glimpsed views through woodland to Shorne Ifield Road and Thong Lane.

Tanyard Hill / The Street / Forge Lane passing through Shorne

Existing landscape context

3.3.55 The minor road route through Shorne Ridgeway and Shorne comprises Tanyard Hill, The Street and Forge Lane. The single carriageway roads are located outside the AONB, although the southern end of Tanyard Hill adjoins the northern AONB boundary.

3.3.56 There is a network of footpaths within the surrounding area, one of which connects with the minor road route.

Road corridor character

3.3.57 Between The Ridgeway and the A226 Gravesend Road, the route is enclosed by dense woodland and the settlements of Shorne Ridgeway and Shorne. East of Shorne Ridgeway and north of Shorne the landscape becomes slightly more open, however, the roadside hedgerow and hedgerows in adjoining fields limit views of Tanyard Hill. The lower part of Forge Lane is slightly more visible from the surrounding landscape.

Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham

Existing landscape context

3.3.58 The minor road route comprises Cobhambury Road, Warren Road and Bush Road. These single carriageway minor roads are located within the AONB.

3.3.59 Cobham Park Registered Park and Garden lies approximately 0.6km north of Warren Road and the northern end of Cobhambury Road adjoins the south-east boundary of the park and garden at Cobham. Ranscombe Farm Country Park lies approximately 0.2km north of Bush Road at its nearest point. There is a

network of footpaths within the surrounding area, six of which connect with or cross the minor road route, including the North Downs Way which crosses Bush Road at Cuxton.

Road corridor character

3.3.60 Between Cuxton and Cobham, the minor road route follows a broad valley adjoined by large scale open fields, with woodland occupying higher ground, including those within Cobham Park Registered Park and Garden Ranscombe Farm Country Park. Occasional tall hedgerows and woodland line the route, although there are views to and from much of the route with glimpsed views to the minor road route from the edges of the Cobham Hall Registered Park and Garden Park and Ranscombe Farm Country Park. Cobhambury Road can be seen in the context of dramatic AONB views from elevated ground to the south-east of Cobham. Linear settlement within Cuxton encloses most of Bush Road.

Warren Road, south of Blue Bell Hill

Existing landscape context

3.3.61 The minor road single carriageway is located within the AONB, broadly parallel to the A229, which lies to the west.

3.3.62 There is a network of footpaths within the surrounding area, five of which connect with or cross the minor road, including the Pilgrim's Way at the junction of Warren Road with Lower Warren Road.

Road corridor character

3.3.63 The minor road route typically passes dense woodland and some linear settlement, that together with roadside hedgerows enclose much of the route.

M20 between junction 3 and junction 4

Existing landscape context

3.3.64 The M20 borders the southern boundary of the AONB between the M26 interchange at junction 3 and the A228 at junction 4.

3.3.65 The Leybourne Lakes Country Park lies to the north-east of junction 4 and the A228. There is a network of footpaths, three of which cross the M20 including the Weald Way long distance path which crosses the M20 at junction 3, to the north-west of Addington.

Road corridor character

3.3.66 Between junction 3 and junction 4 the route is generally enclosed to the north and south by a combination of tree belts and woodland along the motorway corridor, which is in cutting for much of the route.

A226 between Gravesend and Rochester

Existing landscape context

3.3.67 The A226 is a single lane approximately 1.3km to the north of AONB.

3.3.68 Within the affected section between Forge Lane north of Shorne and Thong Lane, Gravesend, there is a network of footpaths in the surrounding area, three

of which cross or connect with the A226. A Sustrans (custodians of the National Cycle Network, a UK-wide network of traffic-free paths) cycle route follows a route along the A226 carriageway.

Road corridor character

3.3.69 The affected route is generally enclosed by a tall hedgerow and occasional linear development along its southern road boundary, as well as the urban area of Chalk, Gravesend. The adjoining landscape to the north is typically open in character and comprises large fields with occasional low hedgerows, however, glimpses of traffic from the AONB would only be gained through breaks in the hedgerow for farm access.

The Street / Halfpence Lane, Cobham

Existing landscape context

3.3.70 The minor road route through Cobham is a single carriageway road, located within the AONB.

3.3.71 To the east, Cobham Hall Registered Park and Garden adjoins the junction of The Street with Halfpence Lane. To the west, Jeskyns Community Woodland adjoins the junction of The Street with Sole Street. There is a network of footpaths within the surrounding area, five of which connect with or cross The Street.

Road corridor character

3.3.72 Between Halfpence Lane to the east and Jeskyns Road to the west The Street is enclosed by linear development, mature trees and tree belts at Cobham. Halfpence lane is enclosed by tall hedgerows and linear development in the vicinity of Cobham.

Green Lane / Camer Road / Sole Street between Cobham and Hook Green

Existing landscape context

3.3.73 The single carriageway minor road route comprises Green Lane, Camer Road and Sole Street. Sole Street adjoins the western boundary of the AONB. The route passes through the Sole Street settlement to the north of the Rochester to Swanley railway line.

3.3.74 A short boundary of Camer Park Country Park adjoins Camer Road to the south. Jeskyns Community Woodland lies close to the northern end of Sole Street. The Wealdway long distance path follows Camer Road for a short distance south of the Sole Street settlement. There is also a network of footpaths within the surrounding area, several of which connect with or cross the minor road route.

Road corridor character

3.3.75 Between Hook Green and Cobham the minor road route with the landscape is typically flat, comprising large open fields, orchards, tree belts, with occasional woodlands and the former parkland of Camer Park Country Park. The settlements of Hook Green and Sole Street enclose parts of the minor road route. South of the Sole Street settlement, tall hedgerows and tree groups

within Camer Park Country Park line the route, although there are views to and from much of this part of the route, including views of traffic from the edge of Camer Park Country Park. To the north of the Sole Street settlement, large commercial orchards adjoin both sides of the minor road, which together with the tall roadside hedgerow to the north provide filtered enclosure to the road corridor.

Ford Lane / Taylors Lane / Vigo Hill through Trottiscliffe between the A20 and A227

Existing landscape context

3.3.76 To the north of the M20, the single carriageway minor road route is located within the AONB. Ford Lane crosses the M26 via an underpass and the M20 via an overbridge.

3.3.77 The North Downs Way crosses Vigo Hill south-east of Vigo village at the junction with the A227 and the Pilgrim's Way crosses the eastern end of Vigo Hill. The Wealdway crosses Ford Lane just south of the M26. There is a network of footpaths within the surrounding area, five of which connect with or cross the minor road.

Road corridor character

3.3.78 South of the M20, adjoining development, woodland and tree belts along the M26, generally enclose the route. To the north of the M20, the Ford Lane is initially generally enclosed by adjoining woodland. Slightly further north the landscape becomes more open to the west, although woodland roadside hedgerows largely enclose the road to the east.

3.3.79 The continuation of the route is enclosed by residential buildings in Trottiscliffe. North of the village, Taylors Lane and Vigo Hill are largely enclosed by adjoining woodland and roadside hedgerows, with the exception of a more open section just north of Trottiscliffe.

New Court Road between Peters Village and Burham

Existing landscape context

3.3.80 The single carriageway minor road is separated from the AONB by the village of Burham, however, the eastern end of New Court Road adjoins the western boundary of the AONB at the junction with Rochester Road.

3.3.81 The Medway Valley Walk follows New Court Road for a short section near the River Medway south of Peters Village. There is a network of footpaths within the surrounding area, four of which connect with or cross the minor road.

Road corridor character

3.3.82 New Court Road is typically located within a large scale, open landscape, on the upper slopes of the Medway Valley. The open landscape provides expansive views to and from New Court Road.

Chatham Road, Kit's Coty

Existing landscape context

3.3.83 The single carriageway minor road is located within the AONB.

3.3.84 The North Downs Way briefly follows Chatham Road at Kit's Coty. There is a network of other footpaths within the surrounding area, although none connect with or cross the minor road. The NCRN 17 follows Chatham Road in the vicinity of Kit's Coty.

Road corridor character

3.3.85 Chatham Road is typically enclosed by tree belts and woodland.

Affected settlements

Affected settlements

3.3.86 Settlements adjoining affected roads often prevent views of traffic from the surrounding AONB; However, there is also potential for the relative tranquillity within such settlements to be affected by increased traffic on minor roads where change would be most apparent. The extent of visual disturbance caused by through traffic within settlements is dependent on the nature of the road corridor. For example, a road with some degree of separation from footpaths or residential areas may result in less visual disturbance. Settlements within the AONB, or partially within the AONB, where there would be predicted increases in traffic on minor roads, above the scoping threshold, comprise:

a. Boxley

b. Shorne Ridgeway

c. Sole Street

d. Trottiscliffe

Boxley

Existing settlement context

3.3.87 Boxley is located within the AONB and includes Boxley Conservation Area.

Settlement character adjoining affected road

3.3.88 The Street is the main throughfare through Boxley village between Boxley Road to the south and Pilgrim's Way to the north. The Street is lined by a short section of housing with a generally open aspect towards the road, and by large residential properties with a partially open aspect filtered by mature trees and tree belts.

Shorne Ridgeway

Existing settlement context

3.3.89 Shorne Ridgeway straddles the AONB boundary along The Ridgeway. The Ridgeway is flanked by housing and a playing field to the south, within the AONB. Chestnut Green Conservation Area lies within Shorne Ridgeway and is

partly within the AONB. Shorne Woods Country Park lies to the west of Shorne Ridgeway.

Settlement character adjoining affected road

3.3.90 The Ridgeway forms the east/west throughfare through Shorne Ridgeway. Housing typically lines both sides of The Ridgeway, with generally open aspects to the road.

Sole Street

Existing settlement context adjoining affected road

3.3.91 Sole Street settlement adjoins the western boundary of the AONB, with only a small part of the settlement extending into the AONB on the east side of Sole Street.

Settlement character adjoining affected road

3.3.92 Sole Street forms the north/south throughfare through the Sole Street settlement. Housing of varying density typically lines both sides of Sole Street, with a combination of open aspects and aspects partially filtered by mature garden vegetation.

Trottiscliffe

Existing settlement context

3.3.93 Trottiscliffe lies wholly within the AONB and incorporates Trottiscliffe Conservation Area.

Settlement character adjoining affected road

3.3.94 The Street is the main throughfare through Trottiscliffe between Taylors Lane to the north and Ford Lane and Addington Lane to the south. Housing typically lines both sides of The Street and short sections of Ford Lane and Addington Lane with a combination of open aspects to the road, aspects that are partially filtered by mature garden vegetation and aspects enclosed by tall garden hedgerows.

Cobham

Existing settlement context

3.3.95 Cobham is located within the AONB and includes Cobham Village Conservation Area and several Grade II, Grade II* and Grade 1 listed buildings.

Settlement character

3.3.96 The Street is the main throughfare through Cobham village between Halfpence Lane to the east and Sole Street to the west. Housing typically lines both sides of The Street between Halfpence Lane and the Grade 1 listed St. Mary Magdalene Church with open aspects to The Street. To the west, The Street is lined by fewer houses, and aspects are generally partially filtered by mature trees and tree belts.

3.4 Existing tranquillity

1.1.2 Existing tranquillity is shown on Figure 7.21.3 Existing Tranquillity within the Kent Downs AONB, from the CPRE Tranquillity Map of England.

3.4.1 Figure 7.21.3 shows places that are ‘disturbed’ and ‘undisturbed’ by noise and visual intrusion from urban areas (towns and cities) and other major infrastructure such as roads and railways.

3.4.2 Within the AONB the most tranquil areas are typically within more rural locations away from urban areas and main road corridors, with the least tranquil locations nearer developed areas due to the associated traffic noise and visual disturbance.

4 Assessment of likely effects

4.1 Traffic effects

Construction phase

4.1.1 Figure 7.20.1 shows the predicted changes in traffic flows (do minimum scenario against the do something scenario) for all traffic (expressed in PCUs) and HGVs for each of 11 construction traffic modelling phases between 2025 and 2030. The maps show the predicted changes for the AM peak, inter peak and PM peak. Table 4.1 shows the start and end dates, together with the duration of each construction phase.

Table 4.1 Construction phases for PCUs and HGVs

Phase	Start	End	Duration (months)
1	01/01/2025	31/08/2025	8
2	01/09/2025	28/02/2026	6
3	01/03/2026	31/05/2026	3
4	01/06/2026	31/10/2026	5
5	01/11/2026	31/03/2027	5
6	01/04/2027	31/08/2027	5
7	01/09/2027	31/03/2028	7
8	01/04/2028	30/11/2028	8
9	01/12/2028	31/03/2029	4
10	01/04/2029	31/07/2029	4
11	01/08/2029	31/12/2030	17

Construction phase

4.1.2 Traffic effects are listed in the following annexes at the end of this appendix.

a. Annex A.1: Traffic effects – Construction phase

b. Annex A.2: Traffic effects – Construction phase – HGVs

c. Annex A.3: Traffic effects – Opening year 2030

d. Annex A.4: Traffic effects – Opening year 2030 – HGVs

e. Annex A.5: Traffic effects – Design year 2045

f. Annex A.6: Traffic effects – Design year 2045 – HGVs

4.2 Noise effects

Construction phase

4.2.1 Noise difference contours for predicted changes in noise levels due to construction traffic (as opposed to construction activities) during the construction phase are shown in Figure 7.21.1 for the years 2025 to 2030.

4.2.2 In 2025 and 2026 there would be no change/ negligible change in noise levels across the whole of the AONB during construction.

4.2.3 In 2027, there would be a moderate to minor beneficial change in noise levels along the M2/A2 corridor, with a largely moderate adverse change along Warren Road / Cobhambury Road / Bush Road between Cuxton and Cobham to the south of Cobham Park Registered Park and Garden. However, between Cobham and the A2, there would be a largely moderate beneficial change along Halfpence Lane and a minor beneficial change along The Street through Cobham. There would be no change/ negligible change in noise levels across the rest of the AONB during construction.

4.2.4 In 2028, there would continue to be a moderate to minor beneficial change in noise levels along the M2/A2 corridor, with a major adverse change along Warren Road / Cobhambury Road / Bush Road between Cuxton and Cobham to the south of Cobham Park Registered Park and Garden. However, between Cobham and the A2, there would be a major beneficial change along Halfpence Lane and a minor beneficial change along The Street through Cobham. There would be no change/ negligible change in noise levels across the rest of the AONB during construction.

4.2.5 In 2029, there would be a minor beneficial change in noise levels along the M2/A2 corridor, with a minor adverse change along Warren Road / Cobhambury Road / Bush Road between Cuxton and Cobham to the south of Cobham Park Registered Park and Garden. However, there would be a minor beneficial change along the minor road between Cobham and the A2 and along the minor road through Cobham. There would be no change/ negligible change in noise levels across the rest of the AONB during construction.

4.2.6 In 2030, there would be a minor adverse change in noise levels along Warren Road / Cobhambury Road / Bush Road between Cuxton and Cobham to the south of Cobham Park Registered Park and Garden. However, there would be a minor beneficial change along Halfpence Lane between Cobham and the A2 and along The Street through Cobham. There would be no change/ negligible change in noise levels across the rest of the AONB during construction.

Operation phase

4.2.7 Noise difference contours for predicted changes in noise levels during operation are shown in Figure 7.21.2 for the opening year (2030) and design year (2045).

Opening year 2030

4.2.8 In the opening year, there would be a largely minor beneficial change in noise levels along the M2/A2 corridor, with a small pocket of moderate to major beneficial change close to the proposed M2/A2/A122 Lower Thames Crossing junction. There would be a minor adverse change along Warren Road /

Cobhambury Road / Bush Road between Cuxton and Cobham to the south of Cobham Park Registered Park and Garden. However, there would be a minor beneficial change along Halfpence Lane between Cobham and the A2.

4.2.9 Along the A228 corridor to the north-east and south-west of Cuxton, there would be two small pockets of moderate adverse change. To the south-east, there would be some small pockets of minor adverse change along the A229 between M20 junction 6 and Blue Bell Hill in the vicinity of the M2. To the south-west, there would be some areas of minor beneficial change along the M20 corridor crossing the AONB between Addington and West Kingsdown. There would be no change/ negligible change in noise levels across the rest of the AONB in the opening year.

Design year 2045

4.2.10 By 2045, there would be no change/ negligible change in noise levels across the whole of the AONB, with the exception of a small pocket of minor to moderate beneficial change in noise levels along the M2/A2 corridor close to the proposed M2/A2/LTC junction.

4.3 Visual disturbance

Scoping criteria

4.3.1 Visual effects are more likely to be discernible on minor roads with less capacity to accommodate increased flows and where relative change (percentage increase) is greatest. Increased traffic flows of up to 250 PCUs per hour (an approximate frequency of four additional PCUs per minute) on main roads and where the percentage change does not exceed 40% are not considered to be material in terms of visual disturbance and have not therefore been considered further in this assessment. However, where there are predicted changes of 40% or over on minor roads, predicted increases of up to 250 PCUs are also assessed.

4.3.2 Increased traffic flows of up to 50 HGVs per hour (an approximate frequency of one additional HGV per minute) on main roads / motorways and where the percentage change does not exceed 40% are not considered to be material in terms of visual disturbance and have not therefore been considered further in this assessment. However, where there are predicted changes of 40% or over on minor roads, predicted increases of up to 50 HGVs are also assessed.

4.3.3 Reference should be made to Table 2.1, setting out the scoping matrix for further details on scoping based on predicted increases to traffic numbers and percentages.

4.3.4 In addition, the predicted increases in traffic flows on some roads are unlikely to increase visual disturbance to a degree that the tranquillity of the AONB or its setting would be affected. Roads have therefore also been scoped out of the assessment of visual disturbance where predicted increases to traffic flows are unlikely to result in increased visual disturbance to the AONB or its setting in the following scenarios:

a. Increased traffic flows on roads outside the AONB but within the setting of the AONB, that are unlikely to be discernible from the AONB

b. Increased traffic flows on roads largely encompassed by urban areas that are therefore unlikely to affect the tranquillity of the AONB

c. Increased traffic flows on roads in excess of 1km from the AONB (unless traffic is likely to be a prominent feature in views from the AONB)

d. Very localised increases in traffic flows of over 40%, along very short sections of road up to approximately 100 metres) have not been assessed, as these are considered unlikely to result in a notable visual disturbance from the AONB.

4.3.5 Using the above scoping criteria for roads is unlikely to result in increased visual disturbance to the AONB or its setting, the following roads have been scoped out of the assessment of visual disturbance:

Main roads

a. A20 within Maidstone

b. A20 / A25 between Borough Green and the A227

c. A278 within Wigmore, north of the M2

d. A278 Hoath Way between the M2 and A2

Minor roads

e. B258 between Crockenhill and Swanley centre

f. B260 between A227 and New Barn

g. B2010 between the A2 and B2000, north of Strood

h. Boxley Road / Beechen Bank Road / Maidstone Road / A2045 Walderslade Road, Walderslade north of the M2

i. Borough Green Road, Borough Green

j. Coldharbour Road between the A227 and Hall Road / Earl Road

k. Knowle Road, Wouldham

l. Lunsford Lane / Gighill Lane / New Hythe Lane between the A20 and M20 in Larkfield

m. Maidstone Road within Wigmore, north of the M2

n. Roads within Swanley settlement

o. Henhurst Road/ Hever Court Road junction with A2

p. Springwell Road within Gravesend, north of the A2

q. Valley Drive / Hever Court Road / Ifield Way / Miskin Way within Gravesend, north of the A2

Construction phase

4.3.6 Figure 7.20.1 shows the predicted changes in traffic flows on affected roads during each of the 11 construction traffic modelling phases between 2025 and 2030. The roads where either reductions or increases in traffic flows are predicted are set out in Annex A.1: Traffic effects – Construction phase.

4.3.7 The predicted changes vary according to whether AM peak, inter-peak and PM peak. The assessment of visual disturbance as a result of traffic changes during the construction phase has considered the greatest increases which are forecast to occur during the AM peak in phases 1, 2, 3, 4, 5, 10 and 11, and in the PM peak in phases 6, 7, 8 and 9. The forecast changes are shown as a series of maps within Figure 7.20.1 with page numbers for each of the assessed construction phases as referenced below.

Phase 1

4.3.8 Figure 7.20.1 (pages 1 and 2) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.9 During phase 1 of construction, the highest predicted increases in traffic flows would be during the AM peak. The highest predicted increases in traffic flows (where the percentage change in traffic flows would be 40% or over) would occur on minor roads during the AM peak. These comprise a short section of Brewers Road in the vicinity of the A2, a short section of Thong Lane and along Tanyard Hill, The Street and Forge Lane.

4.3.10 Changes during the inter peak and PM peak would be no greater than the AM peak, with the exception of Jeskyns Road where there would be an increase in traffic of over 40% during the PM peak.

4.3.11 Further analysis of predicted increases on main roads and minor roads are set out below for the AM peak (except where stated):

AM peak, except where stated

A2 between Brewers Road bridge and Gravesend

4.3.12 An assessment of the likely landscape and visual effects of the Project along this section of the A2 corridor during construction, is provided in Chapter 7 of the Environmental Statement (ES).

AONB

Brewers Road, The Ridgeway, Peartree Lane north of the A2

Predicted change in traffic flows

4.3.13 An increase of up to 500 PCUs, which would be an increase of over 40%, is predicted along a short section of Brewers Road to the south of the A2, during the AM and PM peak. This would broadly equate to an approximate frequency of eight additional PCUs per minute.

Visual effects

4.3.14 Limited vegetation removal to facilitate construction of a new route for WCH connecting with Brewers Road, that forms part of the Project, would open up a narrow vista to traffic on Brewers Road in the vicinity of HS1 overbridge.

However, the extent of this view within the Registered Park and Garden would be very localised, as wider views are prevented by topography. As proposed mitigation planting establishes, the existing enclosure of the road corridor would gradually be restored.

4.3.15 Given the very short section of Brewers Road that would be visible, the localised extent of view, the limited time of day when an increase in vehicle flows is predicted and the proposed Project mitigation, it is concluded that there are not likely to be any notable visual effects.

Thong Lane

Predicted change in traffic flows

4.3.16 An increase of up to 250 PCUs is predicted along a short section of Thong Lane, to the south of Leander Drive, which would be an increase in traffic of over 40% during the AM peak.

Visual effects

4.3.17 Given the degree of enclosure along much of Thong Lane, including the wooded character along Thong Lane at its closest point to the AONB, it is concluded that there are not likely to be any notable visual effects.

Adjoining AONB

Tanyard Hill, The Street, Forge Lane – passing through Shorne

Predicted change in traffic flows

4.3.18 An increase of up to 250 PCUs is predicted along Tanyard Hill, The Street and Forge Lane which is an increased traffic flow of over 40% during the AM peak.

Visual effects

4.3.19 Given the degree of enclosure along much of the road corridor, the developed character of the adjoining AONB, it is concluded that there are not likely to be any notable visual effects.

Jeskyns Road, west of Cobham

Predicted change in traffic flows

4.3.20 An increase of up to 250 PCUs is predicted along Jeskyns Road which is an increased traffic flow of over 40% during the PM peak.

Visual effects

4.3.21 Given the trees and woodland on the edge of the AONB to the east, there would be very limited views of traffic from within the AONB and it is therefore concluded that there would be no notable visual effects from the AONB.

Phase 2

4.3.22 Figure 7.20.1 (pages 13 and 14) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.23 During phase 2 of construction, the highest predicted increases in traffic flows would be during the AM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur on

minor roads during the AM peak. These comprise a short section of Thong Lane and along Tanyard Hill, The Street and Forge Lane at Shorne.

4.3.24 Changes during the inter peak and PM peak would be no greater than the AM peak.

4.3.25 The predicted increases in traffic flows during Phase 2 of construction are similar to those predicted during Phase 1 and are therefore not repeated.

Phase 3

4.3.26 Figure 7.20.1 (pages 25 and 26) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.27 During phase 3 of construction, the highest predicted increases in traffic flows for the AONB would be during the AM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur on minor roads during the AM peak. These comprise a short section of Brewers Road in the vicinity of the A2 and Tanyard Hill, The Street and Forge Lane.

4.3.28 The predicted increases in traffic flows during Phase 3 of construction are similar to those predicted during Phase 1 and are not therefore repeated.

4.3.29 Changes during the inter peak and PM peak would be no greater than the AM peak, with the exception of the following:

a. Thong Lane where there would be an increase in traffic flows of over 40% during the inter peak which is similar to increases during Phase 1, with notable visual disturbance likely, and therefore is not repeated.

Phase 4

4.3.30 Figure 7.20.1 (pages 25 and 26) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.31 During phase 4 of construction, the highest predicted increases in traffic flows would be during the AM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur on minor roads during the AM peak. These comprise a short section of Brewers Road in the vicinity of the A2 and along Tanyard Hill, The Street and Forge Lane.

4.3.32 The predicted increases in traffic flows during Phase 4 of construction are similar to those predicted during Phase 1 and are not therefore repeated.

4.3.33 During the inter peak and PM peak predicted increases in traffic flows would be no greater than the AM peak.

Phase 5

4.3.34 Figure 7.20.1 (pages 49 and 50) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.35 During phase 5 of construction, the highest predicted increases in traffic flows would be during the AM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur on minor roads during the AM peak. These comprise Brewers Road, The

Ridgeway and Peartree Lane; Cobhambury Road, Warren Road and Bush Road, and Tanyard Hill, The Street and Forge Lane.

4.3.36 The predicted increases in traffic flows during Phase 5 of construction are similar to those predicted during Phase 1, and are not therefore repeated. The main exception is a section of The Ridgeway and Peartree Lane, north of Brewers Lane, and Cobhambury Road, Warren Road and Bush Road minor road route, for which an assessment is set out below.

4.3.37 Changes during the inter peak and PM peak would be no greater than the AM peak, with the exception of the following:

a. Jeskyns Road where there would be an increase in traffic flows of over 40% during the inter peak and PM peak. The predicted increases in traffic flows during Phase 5 are similar to those predicted during Phase 1, and are not therefore repeated.

AM peak, except where stated

AONB

Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham

Predicted change in traffic flows

4.3.38 An increase of up to 250 PCUs is predicted along Cobhambury Road, Warren Road and Bush Road which is an increased traffic flow of over 40%.

Visual effects

4.3.39 Given that the minor road route is within the AONB with predicted traffic increases of over 40% with views available from the surrounding landscape including dramatic views from elevated ground south-east of Cobham, there would be notable visual effects from the AONB as a result of predicted changes to traffic flows along the minor road route.

Brewers Road, The Ridgeway, Peartree Lane - north of the A2

Predicted change in traffic flows

4.3.40 An increase of up to 50 PCUs is predicted along the minor road route which is an increase of up to 40% along a short section of Brewers Road in the vicinity of the A2 and an increase of over 40% along a short section of The Ridgeway and along Peartree Lane, however, this would only occur during the AM peak.

Visual effects

4.3.41 Given the degree of enclosure from settlements and vegetation within the AONB along the south side of Peartree Lane and woodland along Brewers Lane, there would be very limited views of traffic from within the AONB, therefore there would be no notable visual effects.

Phase 6

4.3.42 Figure 7.20.1 (pages 69 and 70) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.43 During phase 6 of construction, the highest predicted increases in traffic flows would be during the PM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur on both main roads and minor roads during the PM peak. These comprise the A226 between Gravesend and Rochester, Shorne Ifield Road and Jeskyns Road.

4.3.44 The predicted increases in traffic flows along Jeskyns Road during Phase 6 of construction are similar to those predicted during phase 1, and are not therefore repeated. The main exception is A226 between Gravesend and Rochester and Shorne Ifield Road for which an assessment is set out below.

4.3.45 During the AM peak and inter peak predicted increases in traffic flows would be no greater than the PM peak, with the exception of the following:

a. Cobhambury Road, Warren Road and Bush Road where there would be an increase up to 250 PCUs which is an increase of over 40% during the AM peak. The predicted increases in traffic flows are similar to those predicted during phase 5 of construction, with a notable visual disturbance likely.

b. Tanyard Hill, The Street and Forge Lane where there would be an increase of up to 250 PCUs which is over 40% during the AM peak which are similar to those predicted during phase 1, and are not therefore repeated.

4.3.46 Further analysis of predicted increases on main roads and minor roads are set out below:

PM peak, except where stated

Adjoining AONB

A226 between Gravesend and Rochester

Predicted change in traffic flows

4.3.47 The worst-case predicted change would occur eastbound along the A226 between Forge Lane and Thong Lane, where there would be an increase of up to 500 PCUs per hour which is an increase over 40%. On the remaining sections of the A226, there would only be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.48 Given the distance of the A226 from the AONB and the degree of enclosure along the A226 road corridor, it is concluded that there are not likely to be any notable visual effects on the AONB.

AONB

Shorne Ifield Road west of Shorne

Predicted change in traffic flows

4.3.49 An increase of up to 250 PCUs is predicted along Shorne Ifield Road which is an increased traffic flow of over 40%, however, this would only occur during the PM peak.

Visual effects

4.3.50 Given the degree of enclosure along much of the road corridor and the wooded character along Shorne Ifield Road at its boundary with the AONB, it is concluded that there are not likely to be any notable visual effects.

Phase 7

4.3.51 Figure 7.20.1 (pages 81 and 82) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.52 During phase 7, the highest predicted increases in traffic flows would be during the PM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur on minor roads during the PM peak. These comprise Shorne Ifield Road and Jeskyns Road.

4.3.53 The predicted increases in traffic flows along Shorne Ifield Road during phase 7 of construction are similar to those predicted during phase 6 and are not therefore repeated. The predicted increases along Jeskyns Road during phase 7 are similar to those predicted during phase 1, and are not therefore repeated.

4.3.54 During the AM peak and inter peak predicted increases in traffic flows would be no greater than the PM peak, with the exception of the following:

a. A226 between Gravesend and Rochester where there would be an increase of over 40% during the inter peak. The predicted increases in traffic flows during phase 7 of construction are similar to those predicted during phase 6, and are not therefore repeated.

b. Cobhambury Road, Warren Road and Bush Road where there would be an increase up to 250 PCUs which is an increase of over 40% during the AM peak. The predicted increases in traffic flows are similar to those predicted during phase 5, with a notable visual disturbance likely.

c. Tanyard Hill, The Street and Forge Lane where there would be an increase of over 40% during the AM. The predicted increases in traffic flows during Phase 7 of construction are similar to those predicted during Phase 1, and are not therefore repeated.

Phase 8

4.3.55 Figure 7.20.1 (pages 93 and 94) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.1 During phase 8 of construction, the highest predicted increases in traffic flows would be during the PM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur on both main roads and minor roads during the PM peak. These comprise the M20 between junction 3 and junction 4, Shorne Ifield Road; Cobhambury Road, Warren Road and Bush Road and along Jeskyns Road.

4.3.2 The predicted increases in traffic flows along Shorne Ifield Road during phase 8 of construction are similar to those predicted during phase 6 and are not therefore repeated. The predicted increases along Jeskyns Road during phase

8 are similar to those predicted during phase 1 and are not therefore repeated. The predicted increases in traffic flows along Cobhambury Road, Warren Road and Bush Road during Phase 8 are similar to those predicted during phase 5, with a notable visual disturbance likely.

4.3.3 During the AM peak and inter peak predicted increases in traffic flows would be no greater than the PM peak, with the exception of the following:

a. A226 between Gravesend and Rochester where there would be an increase of over 40% during the inter peak. The predicted increases in traffic flows during phase 8 of construction are similar to those predicted during phase 6, and are not therefore repeated.

b. Tanyard Hill, The Street and Forge Lane where there would be an increase of over 40% during the AM peak. The predicted increases in traffic flows during phase 8 of construction are similar to those predicted during phase 1, and are not therefore repeated.

Phase 9

4.3.4 Figure 7.20.1 (pages 105 and 106) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.5 During phase 9, the highest predicted increases in traffic flows would be during the PM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur on minor roads during the PM peak. These comprise Brewers Road, The Ridgeway and Peartree Lane; Cobhambury Road, Warren Road and Bush Road, Tanyard Hill, The Street and Forge Lane and along Jeskyns Road.

4.3.6 The predicted increases in traffic flows along Tanyard Hill, The Street and Forge Lane and Jeskyns Road during Phase 9 of construction are similar to those predicted during phase 1, and are not therefore repeated.

4.3.7 The predicted increases in traffic flows along Cobhambury Road, Warren Road and Bush Road during phase 9 of construction are similar to those predicted during phase 5, with a notable visual disturbance likely.

4.3.8 During the AM peak and inter peak there would be no notable exceptions.

Phase 10

4.3.9 Figure 7.20.1 (pages 109 and 110), shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.10 During phase 10, the highest predicted increases in traffic flows would be during the AM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur on minor roads during the AM peak. These comprise Brewers Road, The Ridgeway and Peartree Lane; Cobhambury Road, Warren Road and Bush Road, and Tanyard Hill, The Street and Forge Lane.

4.3.11 The predicted increases in traffic flows along Tanyard Hill, The Street and Forge Lane during phase 10 are similar to those predicted during phase 1, of construction and are not therefore repeated.

4.3.12 The predicted increases in traffic flows along Brewers Road, The Ridgeway, Peartree during phase 10 are similar to those predicted during phase 5, and are not therefore repeated.

4.3.13 The predicted increases in traffic flows along Cobhambury Road, Warren Road and Bush Road during phase 10 of construction are similar to those predicted during phase 5, with a notable visual disturbance likely.

4.3.14 During the inter peak and PM peak there would be no notable exceptions.

Phase 11

4.3.15 Figure 7.20.1 (pages 121 and 122) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.16 During phase 11, the highest predicted increases in traffic flows would be during the AM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur on minor roads during the AM peak. These comprise Cobhambury Road, Warren Road and Bush Road; Tanyard Hill, The Street and Forge Lane and Jeskyns Road.

4.3.17 The predicted increases in traffic flows along Tanyard Hill, The Street and Forge Lane and Jeskyns Road during phase 11 of construction are similar to those predicted during phase 1, and are not therefore repeated.

4.3.18 The predicted increases in traffic flows along Cobhambury Road, Warren Road and Bush Road during phase 11 of construction are similar to those predicted during Phase 5, with a notable visual disturbance likely.

4.3.19 During the inter peak and PM peak there would be no notable exceptions.

Construction phase – HGVs

4.3.20 Figure 7.20.1 shows the predicted changes in HGV flows on affected roads during 11 phases of Project construction between 2025 and 2030. The roads where either reductions or increases in traffic flows are predicted are set out in Annex A.2: Traffic effects – Construction phase - HGVs.

4.3.21 The predicted changes vary according whether they are in the AM peak, inter-peak or PM peak. The assessment of visual disturbance for HGVs during the construction phase has considered the greatest increases in traffic flows and therefore the worst-case to occur during the AM peak for phases 2, 3, 4 and 5, and during the PM for Phase 1, 6, 7, 8 and 9. During Phase 10 and 11, no roads fall within the scoping threshold criteria for this assessment during the AM, inter or PM peak.

4.3.22 The maps for the HGVs are shown as a series of pages within Figure 7.20.1 with page numbers for each of the assessed construction phases referenced below.

Phase 1

4.3.23 Figure 7.20.1 (pages 3 and 4) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.24 During phase 1 of construction, no roads fall within the scoping threshold criteria for this assessment during the AM, inter or PM peak.

Phase 2

4.3.25 Figure 7.20.1 (pages 15 and 16) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.26 During phase 2 of construction, the highest predicted increases in traffic flows would be during the AM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur during the AM peak along a short section of Brewers Road south of the A2.

4.3.27 During the inter peak and PM peak predicted increases in traffic flows would be no greater than the AM peak.

4.3.28 Further analysis of predicted increases on minor roads are set out below:

AONB

Brewers Road, The Ridgeway, Peartree Lane, north of the A2

Predicted change in traffic flows

4.3.29 An increase of up to 25 HGVs is predicted along Brewers Road, to the south of the A2, during the AM peak which is an increase of over 40%.

Visual effects

4.3.30 Limited vegetation removal to facilitate construction of a new route for WCH connecting with Brewers Road, that forms part of the Project, would open up a narrow vista to traffic on Brewers Road in the vicinity of the HS1 overbridge. However, the extent of this view within the Registered Park and Garden would be very localised, as wider views are prevented by topography. As proposed mitigation planting establishes, the existing enclosure of the road corridor would gradually be restored.

4.3.31 Given the very short section of Brewers Road that would be visible, the localised extent of view and the proposed mitigation planting, it is concluded that there are not likely to be any notable visual effects.

Phase 3

4.3.32 Figure 7.20.1 (pages 27 and 28) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.33 During phase 3 of construction, the highest predicted increases in traffic flows would be during the AM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur during the AM peak along a short section of Brewers Road south of the A2.

4.3.34 The predicted increases in traffic flows along Brewers Road during phase 3 are similar to those predicted during Phase 2 and are not therefore repeated.

4.3.35 During the inter peak and PM peak predicted increases in traffic flows would be no greater than the AM peak.

Phase 4

4.3.36 Figure 7.20.1 (pages 39 and 40) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.37 During phase 4 of construction, the highest predicted increases in traffic flows would be during the AM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur during the AM peak along a short section of Brewers Road south of the A2.

4.3.38 The predicted increases in traffic flows along Brewers Road during phase 4 similar to those predicted during phase 2 and are not therefore repeated.

4.3.39 During the inter peak and PM peak predicted increases in traffic flows would be no greater than the AM peak.

Phase 5

4.3.40 Figure 7.20.1 (pages 51 and 52) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.41 During phase 5 of construction, the highest predicted increases in traffic flows would be during the AM peak. The highest predicted increases in traffic flows (that meet the scoping threshold criteria set out in Table 2.1) would occur during the AM peak along a short section of Brewers Road south of the A2.

4.3.42 The predicted increases in traffic flows along Brewers Road during phase 5 similar to those predicted during phase 2 and are not therefore repeated.

4.3.43 During the inter peak and PM peak predicted increases in traffic flows would be no greater than the AM peak.

Phase 6

4.3.44 Figure 7.20.1 (pages 67 and 68) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.45 During phase 6 of construction, no roads fall within the scoping threshold criteria for this assessment during the AM, inter or PM peak.

Phase 7

4.3.46 Figure 7.20.1 (pages 79 and 80) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.47 During phase 7 of construction, no roads fall within the scoping threshold criteria for this assessment during the AM, inter or PM peak.

Phase 8

4.3.48 Figure 7.20.1 (pages 91 and 92) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.49 During phase 8 of construction, no roads fall within the scoping threshold criteria for this assessment during the AM, inter or PM peak.

Phase 9

4.3.50 Figure 7.20.1 (pages 103 and 104) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.51 During phase 9 of construction, no roads fall within the scoping threshold criteria for this assessment during the AM, inter or PM peak.

Phase 10

4.3.52 Figure 7.20.1 (pages 111 and 112) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.53 During phase 10 of construction, no roads fall within the scoping threshold criteria for this assessment during the AM, inter or PM peak.

Phase 11

4.3.54 Figure 7.20.1 (pages 123 and 124) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.55 During phase 11 of construction, no roads fall within the scoping threshold criteria for this assessment during the AM, inter or PM peak.

Construction phase – settlements

4.3.56 The main potential for visual disturbance arising from predicted increases in traffic flows through settlements during construction is set out below.

Shorne Ridgeway

Predicted change in effects

4.3.57 Increases of between 51 and 500 PCUs, which are increases of 40% or over, are predicted along a short section of The Ridgeway during the AM peak and PM peak in phases 5, 9 and 10 of construction. By contrast, there would be a reduction in traffic flow during the AM, inter and PM of up to -40% from phase 6 to phase 8.

Visual effects

4.3.58 Given the predicted traffic increases of 40% or over during phases 5, 9 and 10, notable visual effects could be experienced during either the AM peak or PM peak from properties adjoining The Ridgeway and public spaces due to predicted changes to traffic flows within Shorne Ridgeway. However, reductions in traffic flows of up to -40% during phases 6 and 8 would be likely to lead to a corresponding reduction in visual disturbance.

Opening year 2030

4.3.59 Figure 7.20.2 shows the predicted changes in traffic flows for the opening year 2030. The roads where either reductions or increases in traffic flows are predicted are set out in Annex A.3: Traffic effects – Opening year 2030.

AM peak

4.3.60 Figure 7.20.2 (pages 1 and 2) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.61 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur on the A228 between the M20 and M2, on the A2 westbound between Strood and M2 junction 1 (the M2/A2/A289 interchange), on the A289 westbound between the M2 and the A226, on the A229 northbound between Maidstone and the M2 and on the M2 westbound between M2 junction 1 (the M2/A2/A289 interchange) and Dover.

4.3.62 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur on Rochester Road between Aylesford and the A229, on Trottiscliffe Road, Taylors Lane, Addington Lane, Vigo Hill through Trottiscliffe, on Forstal Road between Aylesford and the A229 and on Jeskyns Road west of Cobham.

4.3.63 Further analysis of predicted increases on main roads and minor roads is set out below:

AONB

M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Predicted change in traffic flows

4.3.64 The greatest predicted change along the M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover would occur between the interchange and M2 junction 3 to the east. Along this stretch, there would be an increase of over 1,001 PCUs per hour (or over approximately 17 additional cars per minute) along the westbound carriageway. Between M2 junction 4 and junction 5 there would be an increase in traffic flows of up to 1,000 PCUs. On the remaining sections of the M2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.65 Given the degree of enclosure along the M2 corridor, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows between M2 junction 1 (the M2/A2/A289 interchange) and M2 junction 3.

A229 between Maidstone and M2

Predicted change in traffic flows

4.3.66 The worst-case predicted change along the A229 between Maidstone and M2 would occur along the northbound carriageway, where there would be an increase of up to 1,000 PCUs per hour. On the remaining sections of the A229, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.67 Given the degree of enclosure along the A229 corridor and the capacity of the dual carriageway to accommodate additional traffic, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows between Maidstone and the M2.

A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange)

Predicted change in traffic flows

4.3.68 The greatest predicted change along the A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) would occur along the westbound carriageway where there would be an increase of up to 500 PCUs per hour, excluding a short section of the A2/M2 westbound on-slip to the A2 where there would be an increase of up to 1,000 PCUs. On the remaining sections of this stretch of the A2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.69 Given the wooded context of M2 junction 1 (the A2/M2/A289 interchange) and degree of enclosure along the A2 corridor, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows between Strood and M2 junction 1 (the M2/A2/A289 interchange).

Adjoining AONB

A228 between the M20 and M2

Predicted change in traffic flows

4.3.70 The greatest predicted change along the A228 between the M20 and M2 would occur along the northbound carriageway, where there would be an increase of up to 500 PCUs per hour. On the remaining sections of the A228, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.71 Given the distance of much of the A228 from the AONB, the degree of enclosure along the A228 road corridor, the extent and density of adjoining development, and the capacity of the dual carriageway to accommodate additional traffic, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows along the A228 between the M20 and M2.

A289 between the M2 and the B2000

Predicted change in traffic flows

4.3.72 The greatest predicted change on the A289 would be between M2 junction 1 (the M2/A2/A289 interchange) and the junction with the A226, Gravesend Road where there would be an increase in traffic flows of up to 500 PCUs on the westbound carriageway. On the remaining sections of the A289, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.73 Given the degree of enclosure along the A289 corridor, the capacity of the dual carriageway to accommodate additional traffic and the close proximity of urban development approaching the B2000 junction with the A289, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows along the A289 between the M2 junction 1 (the A2/M2/A289 interchange) and the B2000.

Additional analysis for minor roads

4.3.74 In addition, where there are predicted changes of 40% or over on minor roads, which are considered to be potentially more susceptible to change than more main roads, analysis of predicted increases up to and over 250 PCUs is also set out below for the AM peak.

AONB

Rochester Road between Aylesford and A229

Predicted change in traffic flows

4.3.75 The predicted change along Rochester Road between Aylesford and A229 would be an increase of up to 250 PCUs per hour which is an increased traffic flow of between 20% and 40%.

Visual effects

4.3.76 Given the degree of enclosure of the A229 within the AONB, and the distance of much of the route from the AONB, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows along Rochester Road between Aylesford and A229.

Trottiscliffe Road / Taylors Lane / Addington Lane / Vigo Hill through Trottiscliffe between the A20 and A227

Predicted change in traffic flows

4.3.77 Along the minor roads which form a continuous route between the A20 and the A227 through Trottiscliffe there would be an increase of up to 250 PCUs per hour which is an increased traffic flow of between 20% and 40%.

Visual effects

4.3.78 Given that the predicted traffic increases are between 20% and 40% during the AM peak, notable visual effects could be experienced from locations along footpaths and the surrounding minor roads within the AONB as a result of predicted changes to traffic flows along the minor road. However, such effects would be very localised and occur within a limited part of the day.

Adjoining AONB

Forstal Road, between Aylesford and the A229

Predicted change in traffic flows

4.3.79 Along Forstal Road between Aylesford and A229 there would be an increase of up to 250 PCUs per hour which is an increased traffic flow of over 40%.

Visual effects

4.3.80 Given the distance of much of Forstal Road from the AONB and the degree of enclosure along the road corridor, it is concluded that there would be no visual effects from the AONB as a result of predicted changes to traffic flows along Forstal Road between Aylesford and A229.

Jeskyns Road west of Cobham

Predicted change in traffic flows

4.3.81 The greatest predicted change along Jeskyns Road would occur along a short section between The Street in Cobham and Henhurst Road where there would be an increase of up to 250 PCUs per hour which is an increased traffic flow of over 40%. However, there would be a reduction of 40% along The Street.

Visual effects

4.3.82 Given the degree of enclosure from intervening vegetation east of Jeskyns Road, there would be very limited views of traffic from within the AONB, therefore there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows along the minor road.

Inter peak

4.3.83 Figure 7.20.2 (pages 5 and 6) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.84 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur on a short section of the A228 between Maidstone and M2, on the A229 northbound between Maidstone and the M2 and between M2 junction 1 and junction 3 westbound.

4.3.85 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur on along Rochester Road between Aylesford and the A229 and along the Jeskyns Road west of Cobham.

4.3.86 Further analysis of predicted increases on main roads and minor roads is set out below:

AONB

M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Predicted change in traffic flows

4.3.87 The greatest predicted change would be between M2 junction 1 (the M2/A2/A289 interchange) and junction 3, where there would be an increase of over 1,001 PCUs per hour along the westbound carriageway of the M2 and an increase of up to 1000 PCUs along the eastbound carriageway.

Visual effects

4.3.88 Given the degree of enclosure along the M2 corridor between M2 junction 1 (the M2/A2/A289 interchange) and junction 3, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows.

A229 between Maidstone and M2

Predicted change in traffic flows

4.3.89 There would be an increase of up to 1,000 PCUs per hour along the northbound carriageway and an increase of up to 500 PCUs per hour along a short section of the southbound carriageway between M2 junction 3 and the junction with Rochester Road to the south. On the remaining sections of the A229, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.90 Given the degree of enclosure along the A229 corridor and the capacity of the dual carriageway to accommodate additional traffic, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows along the A229 between Maidstone and the M2.

Adjoining AONB

A228 between the M20 and M2

Predicted change in traffic flows

4.3.91 There would be an increase of up to 500 PCUs per hour along a short section of the northbound carriageway east of Cuxton to M2 junction 2. On the remaining sections of the A228, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.92 The predicted increases in inter peak traffic flows along the A228 between the M20 and the M2 are less than those predicted during the AM peak and therefore as for the AM peak, there would also be no notable visual effects from the AONB.

Additional analysis for minor roads

4.3.93 In addition, where there are predicted changes of 40% or over on minor roads, which are considered to be potentially more susceptible to change than more main roads, analysis of predicted increases over 250 PCUs is also set out below for the inter peak.

AONB

Rochester Road between Aylesford and A229

Predicted change in traffic flows

4.3.94 The predicted change along Rochester Road between Aylesford and A229 would be an increase of up to 250 PCUs per hour which is an increased traffic flow of between 20% and 40%.

Visual effects

4.3.95 Given the degree of enclosure along Rochester Road and the distance of much of the route from the AONB, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows along Rochester Road between Aylesford and A229.

Adjoining AONB

Jeskyns Road west of Cobham

Predicted change in traffic flows

4.3.96 The greatest predicted change along Jeskyns Road would occur along short section between The Street in Cobham and Henhurst Road where there would be an increase of up to 250 PCUs per hour which is an increased traffic flow of over 40%.

Visual effects

4.3.97 The predicted increases in inter peak traffic flows along Jeskyns Road are similar to those predicted during the AM peak and therefore as for the AM peak, there would also be no notable visual effects from the AONB.

PM peak

4.3.98 Figure 7.20.2 (pages 9 and 10) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.99 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur on a short section of the A226 between Rochester and Gravesend.

4.3.100 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur on Boxley Road, The Street, Pilgrim's Way and Lidsing Road, along Rochester Road. There are predicted increases of between 10% and 40% along Jeskyns Road and along a short section of Thong Lane.

4.3.101 Further analysis of predicted increases on main roads and minor roads is set out below:

AONB

M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Predicted change in traffic flows

4.3.102 During the PM peak the greatest predicted change would be along the eastbound carriageway of the M2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 and along the westbound carriageway between junction 2 and junction 1 (the M2/A2/1289 interchange), where there would be an increase in traffic flows of over 1,001 PCUs per hour.

4.3.103 Between M2 junction 2 and junction 3, there would be an increase of up to 1,000 PCUs per hour along the westbound carriageway. Between M2 junction 3 and junction 4, there would be an increase of up to 500 PCUs along the eastbound carriageway. On the remaining sections of the M2 between M2 junction 1 (the M2/A2/1289 interchange) and Dover, the predicted increase in traffic flows does not exceed up to 250 PCUs.

Visual effects

4.3.104 Given the degree of enclosure along the M2 corridor between M2 junction 1 (the M2/A2/A289 interchange) and junction 4, where the largest increases in traffic flows are predicted, and the capacity of the motorway to accommodate additional traffic, it is concluded that there would be no notable visual effects from the AONB as a result of the predicted changes.

A229 between Maidstone and the M2

Predicted change in traffic flows

4.3.105 During the PM peak, there would be an increase of up to 500 PCUs per hour along the northbound carriageway and along a short section of the southbound carriageway south of M2 junction 3. On the remaining sections of the A229, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.106 Given the overall reduction in PCUs during the PM peak compared to the AM peak and inter peak there would continue to be no notable visual effects from

the AONB as a result of predicted changes to traffic flows between the A229 between Maidstone and the M2.

A2 eastbound between Strood and M2 junction 1 (the M2/A2/A289 interchange)

Predicted change in traffic flows

4.3.107 The greatest predicted change along the A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) would occur along the eastbound carriageway and on a short section of the A2/M2 westbound on-slip where there would be an increase of up to 500 PCUs. On the remaining sections of the A2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.108 Given the separation of much of the A2 from the AONB, the degree of enclosure along the A2 road corridor, the extent and density of adjoining development, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows between Strood and M2 junction 1 (the M2/A2/A289 interchange).

Additional analysis for minor roads

4.3.109 In addition, where there are predicted changes of 40% or over on minor roads, which are considered to be potentially more susceptible to change than more main roads, analysis of predicted increases over 250 PCUs is also set out below for the PM peak.

AONB

Thong Lane between the A2 and the A226.

Predicted change in traffic flows

4.3.110 The greatest predicted change would occur northbound along Thong Lane between the A2 and the A226 where there would be an increase of up to 250 PCUs per hour which is an increased traffic flow of over 40%. By contrast, there is a predicted reduction in southbound traffic flows along Thong Lane during the PM peak.

Visual effects

4.3.111 Given the degree of enclosure along much of the road corridor and the wooded character along Thong Lane at its closest point to the AONB, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows on Thong Lane.

Adjoining AONB

Jeskyns Road west of Cobham

Predicted change in traffic flows

4.3.112 The greatest predicted change along Jeskyns Road would occur along short section between The Street in Cobham and Henhurst Road where there would be an increase of up to 250 PCUs per hour which is an increased traffic flow of over 40%.

Visual effects

4.3.113 The predicted increases in inter peak traffic flows along Jeskyns Road are similar to those predicted during the AM peak and therefore as for the AM peak, there would also be no notable visual effects from the AONB.

Opening year 2030 – HGVs

4.3.114 Figure 7.20.2 shows the predicted changes in traffic flows for the opening year 2030. The roads where either reductions or increases in traffic flows are predicted are set out in Annex A.4: Traffic effects – Opening year 2030 - HGVs.

AM peak

4.3.115 Figure 7.20.2 (pages 3 and 4) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.116 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along the M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3, along the A228 between the M20 and M2, along the A229 in the vicinity of M2 junction 3 and to the south of junction 3.

4.3.117 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur on along Rochester Road, along Warren Road, south of Blue Bell Hill, along Green Lane, Camer Road and Sole Street, along Ford Lane and along Jeskyns Road.

4.3.118 Further analysis of predicted increases on main roads and minor roads is set out below:

AONB

M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Predicted change in traffic flows

4.3.119 The greatest predicted change along the M2 would occur in the vicinity of M2 junction 1 (the M2/A2/A289 interchange) where there would be an increase of over 100 vehicles per hour. Along the westbound carriageway between M2 junction 1 (the M2/A2/A289 interchange) and M2 junction 3, there would be an increase of up to 100 HGVs per hour.

4.3.120 On the remaining sections of the M2, there would only be an increase in traffic flows of up to 50 HGVs per hour. Beyond M2 junction 3, there would be an increase of up to 5 HGVs as far as Dover.

Visual effects

4.3.121 Given the degree of enclosure along the M2 road corridor and the capacity of the motorway to accommodate additional traffic, it is concluded that there are not likely to be any notable visual effects from the AONB as a result of increased HGV traffic.

A229 between Maidstone and the M2

Predicted change in traffic flows

4.3.122 The greatest predicted change along the A229 would occur in the vicinity of M2 junction 3 where there would be an increase of over 100 HGVs per hour. Further south, there would be an increase of up to 100 HGVs per hour along the northbound carriageway.

4.3.123 On the remaining sections of the A229, there would be an increase in traffic flows of up to 25 HGVs per hour.

Visual effects

4.3.124 Given the degree of enclosure along the A229 road corridor and the capacity of the dual carriageway to accommodate additional traffic, it is concluded that there are not likely to be any notable visual effects from the AONB as a result of increased HGV traffic.

Adjoining AONB

A228 between the M20 and M2

Predicted change in traffic flows

4.3.125 The greatest predicted change along the A228 between the M20 and M2 would occur along much of the northbound and southbound carriageways, where there would be an increase of up to 100 HGVs per hour. On the remaining sections of the A228, there would be an increase in traffic flows of up to 50 HGVs.

Visual effects

4.3.126 Given the distance of much of the A228 from the AONB, the degree of enclosure along the A228 road corridor, the extent and density of adjoining development, and the capacity of the dual carriageway to accommodate additional traffic, it is concluded that there are not likely to be any notable visual effects from the AONB.

Additional analysis for minor roads

4.3.127 In addition, where there are predicted changes of 40% or over on minor roads, which are considered to be potentially more susceptible to change than main roads, analysis of predicted increases over 5 HGVs is also set out below for the AM peak.

AONB

Rochester Road between Aylesford and A229

Predicted change in traffic flows

4.3.128 The predicted change along Rochester Road would be an increase of up to 50 HGVs per hour. However, the predicted increase of up to 25 HGVs per hour along the northbound carriageway would constitute an increased traffic flow of over 40%.

Visual effects

4.3.129 Given the degree of enclosure along Rochester Road and the separation and distance of much of the route from the AONB, it is concluded that there are not likely to be any notable visual effects from the AONB.

Warren Road, south of Blue Bell Hill

Predicted change in traffic flows

4.3.130 An increase of up to 25 HGVs per hour is predicted along Warren Road which is an increased traffic flow of over 40%.

Visual effects

4.3.131 Given the degree of enclosure along much of the road corridor, the wooded character surrounding Warren Road, it is concluded that there are not likely to be any notable visual effects from the AONB.

Ford Lane / Taylors Lane / Vigo Hill through Trottiscliffe between the A20 and A227`

Predicted change in traffic flows

4.3.132 The greatest predicted change would occur along Ford Lane where there would be an increase of up to 25 HGVs per hour which is an increased traffic flow of over 40%.

Visual effects

4.3.133 Given the short section of Ford Lane that would be visible and the localised extent of view it is concluded that there are not likely to be any notable visual effects.

Green Lane / Camer Road / Sole Street between Cobham and Hook Green

Predicted change in traffic flows

4.3.134 The greatest predicted change along the minor road route would occur where there would be an increased traffic flow of over 40% along a short section of Green Lane at the junction with the A227 and along Sole Street at the junction with The Street and Jeskyns Road. However, there would be an increased traffic flow of 25 HGVs per hour.

Visual effects

4.3.135 Given the localised extent of the increased traffic flows and the level of enclosure, it is concluded that there are not likely to be any notable visual effects.

Adjoining AONB

Jeskyns Road west of Cobham

Predicted change in traffic flows

4.3.136 The greatest predicted change along Jeskyns Road would be an increase of up to 25 HGVs per hour which is an increased traffic flow of over 40%. However, there would be a reduction of 40% along the continuation of the route to the east on The Street.

Visual effects

4.3.137 Given the trees and woodland on the edge of the AONB to the east, there would be very limited views of traffic from within the AONB and it is therefore concluded that there are not likely to be any notable visual effects from the AONB.

Inter peak

4.3.138 Figure 7.20.2 (pages 7 and 8) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.139 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along the M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3, along the A228 between the M20 and M2, and along the A229 in the vicinity of M2 junction 3.

4.3.140 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur on along Rochester Road, along two sections of Green Lane, Camer Road and Sole Street, along Ford Lane and along Jeskyns Road.

4.3.141 The predicted increases in HGV flows during 2030 are similar to those predicted during the AM peak in 2030 and are not therefore repeated.

PM peak

4.3.142 Figure 7.20.2 (pages 11 and 12) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.143 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along the M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 and along the A229 between Maidstone and the M2.

4.3.144 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along Rochester Road and along New Court Road between Peters Village and Burham.

4.3.145 The predicted increases in HGV flows during the 2030 PM peak are similar to those predicted during the AM peak in 2030 and are not therefore repeated. The main exception is New Court Road, for which an assessment is set out below.

Adjoining AONB

New Court Road between Peters Village and Burham

Predicted change in traffic flows

4.3.146 There would be an increase of up to 25 HGVs per hour along New Court Road which is an increased traffic flow of over 40%.

Visual effects

4.3.147 Given the distance from the AONB and the extent of the intervening settlement of Burham, it is concluded that there are not likely to be any notable visual effects.

Opening year 2030 – settlements

4.3.148 The main potential for visual disturbance arising from predicted increases in traffic flows through settlements during operation 2030 is set out below.

Sole Street

Predicted change in effects

4.3.149 An increase of up to 25 HGVs, which is an increased traffic flow of over 40%, is predicted during the AM peak and inter peak in 2030.

Visual effects

4.3.150 Given the predicted traffic increases of over 40% during the AM peak and inter peak in 2030, notable visual effects could be experienced from adjoining properties and public spaces as a result of predicted changes to traffic flows within Sole Street.

Trottiscliffe

Predicted change in effects

4.3.151 An increase of up to 250 PCUs, which is an increased traffic flow of up to 40%, is predicted along a short section of Addington Lane within the southern part of Trottiscliffe during the AM peak in 2030.

4.3.152 An increase of up to 25 HGVs, which is an increased traffic flow of over 40%, is predicted along a short section of Ford Lane within the southern part of Trottiscliffe during the AM peak and inter peak in 2030.

Visual effects

4.3.153 Given the predicted traffic increases of over 40% during the AM peak in 2030 along The Street and an increase in HGVs of over 40% along Ford Lane during the AM peak and inter peak in 2030 and 2045, notable visual effects could be experienced from adjoining properties and public spaces as a result of predicted changes to traffic flows within Trottiscliffe. However, the increased traffic flows along Ford Lane would only affect a small part of Trottiscliffe.

Design year 2045

4.3.154 Figure 7.20.2 shows the predicted changes in traffic flows for the opening year 2045. The roads where either reductions or increases in traffic flows are predicted are set out in Annex A.5: Traffic effects – Design year 2045

AM peak

4.3.155 Figure 7.20.2 (pages 13 and 14) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.156 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along the A228 between the M20 and M2, along the A289 between the A2 and the A226, along the A229 between Maidstone and the M2 and along the A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) and along the M2 between junction 1 to junction 3.

4.3.157 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along the Rochester Road between Aylesford and A229, along Forstal Road between Aylesford and the A229 and along Jeskyns Road west of Cobham.

4.3.158 Further analysis of predicted increases on main roads and minor roads is set out below:

AONB

M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Predicted change in traffic flows

4.3.159 The greatest predicted change along the M2 would occur on the westbound carriageway between M2 junction 1 (the M2/A2/A289 interchange) and M2 junction 3 where there would be an increase of over 1,001 PCUs per hour. There would also be an increase in traffic flows of up to 1,000 PCUs along the eastbound carriageway between M2 junction 1 (the M2/A2/A289 interchange) and junction 3.

4.3.160 Along the eastbound carriageway between M2 junction 3 and junction 5 there would be an increase in traffic flows of up to 500 PCUs. On the remaining sections of the M2/A2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.161 Given the degree of enclosure along the M2 road corridor and the capacity of the motorway to accommodate additional traffic, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows along the M2/A2, between M2 junction 1 (the M2/A2/A289 interchange) and Dover.

A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange)

Predicted change in traffic flows

4.3.162 The greatest predicted change along the A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) would occur along the westbound carriageway, where there would be an increase of between 500 PCUs and 1000 PCUs per hour, excluding a very short section of the A2/M2 westbound on-slip where there would be an increase of over 1000 PCUs.

4.3.163 On the remaining sections of the A2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.164 Given the distance of much of the A2 from the AONB, the degree of enclosure along the A2 road corridor, the extent and density of adjoining development, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows between Strood and M2 junction 1 (the M2/A2/A289 interchange).

A229 between Maidstone and M2

Predicted change in traffic flows

4.3.165 The greatest predicted change along the A229 between Maidstone and M2 would occur along the northbound carriageway, where there would be an increase of up to 1,000 PCUs per hour. On the southbound carriageway of the A229, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.166 Given the degree of enclosure along the A229 road corridor and the capacity of the dual carriageway to accommodate additional traffic, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows between Maidstone and the M2.

Adjoining AONB

A228 between the M20 and M2

Predicted change in traffic flows

4.3.167 The greatest predicted change along the A228 between the M20 and M2 would occur along the northbound carriageway, where there would be an increase of up to 500 PCUs per hour.

4.3.168 On the remaining sections of the A2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.169 Given the distance of much of the A228 from the AONB, the degree of enclosure along the A228 corridor, the extent and density of adjoining development and the capacity of the dual carriageway to accommodate additional traffic, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows between the M20 and the M2.

A289 between the M2 and the A226

Predicted change in traffic flows

4.3.170 The greatest predicted change on the A289 would be between M2 junction 1 (the M2/A2/A289 interchange) and the junction with the A226 where there would be an increase in traffic flows of up to 500 PCUs on the westbound carriageway.

4.3.171 On the remaining sections of the A289, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.172 Given the degree of enclosure along the A289 road corridor, the capacity of the dual carriageway to accommodate additional traffic and the extent and density of adjoining development, it is concluded that there would be no notable visual effects from the nearby AONB as a result of predicted changes to traffic flows along the A289 between the M2 and A226.

Additional analysis for minor roads

4.3.173 In addition, where there are predicted changes of 40% or over on minor roads, which are considered to be potentially more susceptible to change than more main roads, analysis of predicted increases over 250 PCUs is also set out below for the AM peak.

AONB

Rochester Road between Aylesford and A229

Predicted change in traffic flows

4.3.174 The predicted change along Rochester Road between Aylesford and A229 would would be an increase of up to 250 PCUs per hour which is an increased traffic flow of between 20% and 40%.

Visual effects

4.3.175 Given the degree of enclosure along Rochester Road, and the distance of much of the route from the AONB, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows along Rochester Road between Aylesford and A229.

Adjoining AONB

Forstal Road between Aylesford and the A229

Predicted change in traffic flows

4.3.176 The greatest predicted change along Forstal Road between Aylesford and A229 would occur along the westbound carriageway where there would be an increase of up to 250 PCUs per hour which is an increased traffic flow of over 40%.

Visual effects

4.3.177 Given the distance and separation of Forstal Road from the AONB, the degree of enclosure along the minor road corridor and adjoining development, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows along Forstal Road between Aylesford and A229.

Jeskyns Road west of Cobham

Predicted change in traffic flows

4.3.178 There would be an increase of up to 250 PCUs per hour along Jeskyns Road, which is an increased traffic flow of over 40%.

Visual effects

4.3.179 The predicted increases in AM peak traffic flows along Jeskyns Road are similar to those predicted during the 2030 AM peak and therefore there would also be no notable visual effects from the AONB.

Inter peak

4.3.180 Figure 7.20.2 (pages 17 and 18) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.181 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along a short section of the M25 in the vicinity of junction 3, along the A229 between Maidstone and the M2 and along the M2 in the vicinity of junction 3.

4.3.182 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along Rochester Road between Aylesford and A229, and along Jeskyns Road west of Cobham.

4.3.183 Further analysis of predicted increases on main roads and minor roads is set out below:

AONB

M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Predicted change in traffic flows

4.3.184 Traffic flows on the westbound and eastbound carriageways of the M2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 5 are predicted to be similar to those for the AM peak.

4.3.185 On all other sections of the M2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover, there would be a decrease in traffic flows of up to 250 PCUs, compared to the AM peak.

Visual effects

4.3.186 Given the overall reduction of sections of the M2 corridor affected by increases of traffic flows over 250 PCUs compared with the AM peak, there would continue to be no notable visual effects from the AONB as a result of predicted changes to traffic flows on the M2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 5 during the Inter peak.

A229 between Maidstone and M2

Predicted change in traffic flows

4.3.187 The greatest predicted change along the A229 between Maidstone and the M2 would occur along the northbound carriageway in the vicinity of Blue Bell Hill, south of M2 junction 3 where there would be an increase of over 1,000 PCUs. South of Blue Bell Hill, there would be an increase of up to 1000 PCUs on the northbound carriageway between the M20 and Blue Bell Hill.

4.3.188 On the remaining sections of the A229 between Maidstone and the M2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.189 Given the degree of enclosure along the A229 road corridor and the capacity of the dual carriageway to accommodate additional traffic, it is concluded that there would also be no notable visual effects from the AONB as a result of predicted changes to traffic flows between Maidstone and the M2.

M25 between Oxted and Swanley

Predicted change in traffic flows

4.3.190 The greatest predicted change on the M25 between Oxted and Swanley would be between junction 3 and junction 4 northbound, and a short section north of junction 3 southbound, where there would be an increase in traffic flows of up to 500 PCUs. There would also be an increase in traffic flows of up to 1,000 PCUs on a short section of the northbound carriageway north of junction 3.

4.3.191 On the remaining sections of the M25, there would either be a decrease in traffic flows or there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.192 Given the degree of enclosure along most of the M25 corridor and the capacity of the motorway to accommodate additional traffic, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows between junction 3 and junction 4 or the small section of motorway north of junction 3.

A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange)

Predicted change in traffic flows

4.3.193 The greatest predicted change along the A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) would occur along the westbound carriageway on the A2/M2 westbound on-slip at M2 junction 1 (the M2/A2/A289 interchange) where there would be an increase of up to 500 per hour. On the remaining sections of the A2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.194 Given the degree of enclosure along the A2 corridor and the capacity of the dual carriageway to accommodate additional traffic, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows between Strood and M2 junction 1 (the M2/A2/A289 interchange).

Additional analysis for minor roads

4.3.195 In addition, where there are predicted changes of 40% or over on minor roads, which are considered to be potentially more susceptible to change than more main roads, analysis of predicted increases over 250 PCUs is also set out below for the inter peak.

AONB

Rochester Road between Aylesford and A229

Predicted change in traffic flows

4.3.196 The predicted change along Rochester Road between Aylesford and the A229 would be an increase of up to 250 PCUs per hour which is an increased traffic flow of between 20% and 40%.

Visual effects

4.3.197 Given the degree of enclosure along Rochester Road, and the distance of much of the route from the AONB, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows along Rochester Road between Aylesford and the A229.

Adjoining AONB

Jeskyns Road west of Cobham

Predicted change in traffic flows

4.3.198 The greatest predicted change along Jeskyns Road would occur along short section where there would be an increase of up to 250 PCUs per hour which is an increased traffic flow of over 40%.

Visual effects

4.3.199 The predicted increases in inter peak traffic flows along Jeskyns Road would be similar to those predicted during the 2030 AM peak and therefore there would also be no notable visual effects from the AONB.

PM peak

4.3.200 Figure 7.20.2 (pages 21 and 22) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.201 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur on the M25 between in the vicinity of junction 3 and junction 4, along a section of the A2 between Strood, at M2 junction 1 (the M2/A2/A289 interchange) and on the A229 between Maidstone and the M2 and the M2 in the vicinity of M2 junction 1 (the M2/A2/A289 interchange).

4.3.202 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along the Rochester Road between Aylesford and A229, along Boxley Road and The Street south of Boxley, along Brewers Road, The Ridgeway and Peartree Lane, and along Thong Lane, and along the Jeskyns Road west of Cobham.

4.3.203 Further analysis of predicted increases on main roads and minor roads is set out below:

AONB

M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Predicted change in traffic flows

4.3.204 The greatest predicted change along the M2 would occur on a short section of the eastbound and westbound carriageways south of M2 junction 1 (the M2/A2/A289 interchange) where there would be an increase of over 1,000 PCUs per hour. There would also be an increase of up to 1,000 PCUs per hour along the westbound and eastbound carriageways south of M2 junction 1 (the M2/A2/A289 interchange) to junction 3, with an increase of up to 500 PCUs along the westbound carriageway between junction 3 and junction 5.

4.3.205 On the remaining sections of the M2/A2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.206 Given the overall reduction in PCUs during the PM peak compared to the AM peak and inter peak, there would also be no notable visual effects from the AONB as a result of predicted changes to traffic flows between M2 junction 1 (the M2/A2/A289 interchange) and M2 junction 5.

A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange)

Predicted change in traffic flows

4.3.207 The greatest predicted change along the A2 would occur along a short section of the A2/M2 westbound on-slip where there would be an increase of up to 1,000 PCUs per hour, and along the A2/M2 eastbound off-slip and along a short section of the A2 eastbound where there would be an increase of up to 500 PCUs.

4.3.208 On the remaining sections of the A2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.209 Given the degree of enclosure along the A2 road corridor, the extent and density of adjoining development and the capacity of the dual carriageway to accommodate additional traffic, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows between Strood and M2 junction 1 (the M2/A2/A289 interchange).

M25 between Oxted and Swanley

Predicted change in traffic flows

4.3.210 The greatest predicted change on the M25 would be on the westbound carriageway between junction 3 and junction 4 and along a small section north of junction 3 where there would be an increase in traffic flows of up to 500 PCUs. On the remaining sections of the M25 there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.211 Given the degree of enclosure along most of the M25 road corridor and the capacity of the motorway to accommodate additional traffic, it is concluded that there would also be no notable visual effects from the AONB as a result of predicted changes to traffic flows between M25 junction 3 and junction 4 or the small section of motorway north of junction 3.

A229 between Maidstone and M2

Predicted change in traffic flows

4.3.212 There would be an increase of up to 500 PCUs per hour along the northbound carriageway. Along the southbound carriageway of the A229, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.213 Given the overall reduction in PCUs during the PM peak compared to the AM peak and inter peak, there would also be no notable visual effects from the AONB as a result of predicted changes to traffic flows between Maidstone and M2.

Additional analysis for minor roads

4.3.214 In addition, where there are predicted changes of 40% or over on minor roads, which are considered to be potentially more susceptible to change than more main roads, analysis of predicted increases over 250 PCUs is also set out below for the PM peak.

AONB

Boxley Road / The Street / Pilgrim's Way / Lidsing Road passing through Boxley between the M20 and M2

Predicted change in traffic flows

4.3.215 The greatest predicted change would occur along Boxley Road and The Street, to the south of Boxley and along Pilgrim's Way, to the north of Boxley, where there would be an increase of up to 250 PCUs per hour which is an increased traffic flow of between 20% and 40%. The predicted change along part of Lidsing Road to the north of Boxley would be up to 250 PCUs which is an increase of between -10% and +10% and has therefore been scoped out.

Visual effects

4.3.216 Given that the minor road route is within the AONB with predicted traffic increases of between 20% and 40% during the PM peak, notable visual effects could be experienced from locations along footpaths and the surrounding minor roads within the AONB of open sections of the minor road route as a result of predicted changes to traffic flows along the minor road. However, such effects would be very localised and occur within a limited part of the day.

Brewers Road, The Ridgeway and Peartree Lane, north of the A2

Predicted change in traffic flows

4.3.217 There would be a predicted increase of up to 250 PCUs per hour which is an increased traffic flow of between 20% and 40% on Brewers Road and The Ridgeway and over 40% on Peartree Lane.

Visual effects

4.3.218 Given the degree of enclosure along Brewers Road and The Ridgeway within the AONB, the adjoining development and roadside vegetation along Peartree Lane outside the AONB, it is concluded that there would be no notable visual effects from the AONB

Adjoining AONB

Thong Lane

Predicted change in traffic flows

4.3.219 The greatest predicted change along Thong Lane between the A2 and the A229 would occur along the northbound carriageway where there would be an increase of up to 250 PCUs per hour which is an increased traffic flow of over 40%.

Visual effects

4.3.220 Given the degree of enclosure along the road corridor, the extent and density of adjoining development, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows on Thong Lane.

Jeskyns Road, west of Cobham

Predicted change in traffic flows

4.3.221 The greatest predicted change along Jeskyns Road would be an increase of up to 250 PCUs per hour which is an increased traffic flow of over 40%.

Visual effects

4.3.222 The predicted increases in PM peak traffic flows along Jeskyns Road are similar to those predicted during the AM peak 2030 and therefore as for the AM peak 2030, there would also be no notable visual effects from the nearby AONB.

Design year 2045 – HGVs

4.3.223 Figure 7.20.2 shows the predicted changes in traffic flows for the design year 2045. The roads where either reductions or increases in traffic flows are predicted are set out in Annex A.6: Traffic effects – Design year 2045 – HGVs.

AM peak

4.3.224 Figure 7.20.2 (pages 15 and 16) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.225 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along the M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3, along the A228 between the M20 and M2, along the A229 between Maidstone and the M2 and along the A229 in the vicinity of M2 junction 3.

4.3.226 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along Chatham Road, Kit's Coty, along Rochester Road, along Warren Road, south of Blue Bell Hill, along Ford Lane, along two sections of Green Lane, Camer Road and Sole Street and along Jeskyns Road.

4.3.227 The predicted increases in HGV flows during the AM peak in 2045 are similar to those predicted during the 2030 AM peak and are not therefore repeated. The main exception is Chatham Road, for which an assessment is set out below.

AONB

Chatham Road, Kit's Coty

Predicted change in traffic flows

4.3.228 An increase of up to 100 vehicles per hour is predicted along Chatham Road which is an increased traffic flow of over between -10% and +10%.

Visual effects

4.3.229 Given the degree of enclosure along much of the road corridor and the limited time when there would be increased traffic flows, it is concluded that there are not likely to be any notable visual effects from the AONB.

Inter peak

4.3.230 Figure 7.20.2 (pages 19 and 20) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.231 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along the A228 between the M20 and M2, along the M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 and along the A229 between the M20 and M2.

4.3.232 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along Chatham Road, Kit's Coty, and Forstal Road, Aylesford, along Rochester Road, along Halfpence Lane and The Street, along Ford Lane, along two sections of Green Lane, Camer Road and Sole Street, and along Jeskyns Road.

4.3.233 The predicted increases in HGV flows during 2045 are similar to those predicted during the AM peak in 2030 and are not therefore repeated, except along Chatham Road where the predicted change is similar to the AM peak in 2045.

4.3.234 The main exception is along The Street and Halfpence Lane, Cobham and Forstal Road, Aylesford for which an assessment is set out below.

AONB

The Street / Halfpence Lane, Cobham

4.3.235 An increase of up to 25 HGVs which is an increased traffic flow of over 40% is predicted along The Street and a very short section of Halfpence Lane during the inter peak.

Visual effects

4.3.236 Given the degree of enclosure from residential properties within Cobham and adjoining trees and tall hedgerows, there would be no notable visual effects from the AONB.

Adjoining AONB

Forstal Road, between Aylesford and the A229

Predicted change in traffic flows

4.3.237 The predicted change would be an increase of up to 50 HGVs per hour which is an increased traffic flow of up to 10%.

Visual effects

4.3.238 Given the distance and separation of Forstal Road from the AONB, the degree of enclosure along the minor road corridor and adjoining development, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows.

PM peak

4.3.239 Figure 7.20.2 (pages 23 and 24) shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.240 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along the M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3, along sections of the A228 and along the A229 between the M20 and M2.

4.3.241 The highest predicted increases in traffic flows on minor roads (that meet the scoping threshold criteria set out in Table 2.1) would occur along Rochester Road and along New Court Road.

4.3.242 The predicted increases in HGV flows in 2045 would be similar to those predicted during the 2030 AM peak and are not therefore repeated. The main exceptions are Chatham Road, Kit's Cody, for which the predicted increase during the 2045 PM peak would be similar to those during the 2045 AM peak and also New Court Road, for which predicted increases in HGV flows during 2045 would be similar to those predicted during the 2030 PM peak.

Future year 2045 – settlements

4.3.243 The main potential for visual disturbance arising from predicted increases in traffic flows through settlements during operation in 2045 would be broadly similar to that described above for 2030 and is not therefore repeated below. The main exception is traffic through Boxley as follows.

Boxley

Predicted change in effects

4.3.244 An increase of up to 250 PCUs, which is an increase of between 20% and 40% is predicted along The Street through Boxley during the 2045 PM peak.

Visual effects

4.3.245 Given the predicted traffic increases of up to 40%, notable visual effects could be experienced during the PM peak from adjoining properties and public spaces as a result of predicted changes to traffic flows within Boxley.

Shorne Ridgeway

Predicted change in effects

4.3.246 An increase of up to 250 PCUs, which is an increase of over 40%, is predicted along The Ridgeway through Shorne Ridgeway during the 2045 PM peak.

Visual effects

4.3.247 Given the predicted traffic increases of over 40%, notable visual effects could be experienced during the PM peak from adjoining properties and public spaces due to predicted changes to traffic flows within Shorne Ridgeway.

Sole Street

Predicted change in effects

4.3.248 An increase of up to 25 HGVs, which is an increased traffic flow of over 40%, is predicted during the AM peak and inter peak in 2045.

Visual effects

4.3.249 Given the predicted traffic increases of over 40% during the AM peak and inter peak in 2045, notable visual effects could be experienced from adjoining properties and public spaces as a result of predicted changes to traffic flows within Sole Street.

Trottiscliffe

Predicted change in effects

4.3.250 An increase of up to 25 HGVs, which is an increased traffic flow of over 40%, is predicted along a short section of Ford Lane within the southern part of Trottiscliffe during the AM peak and inter peak in 2045.

Visual effects

4.3.251 Given the predicted increase in HGVs of over 40% along Ford Lane during the AM peak and inter peak in 2045, notable visual effects could be experienced from adjoining properties and public spaces as a result of predicted changes to traffic flows within Trottiscliffe. However, the increased traffic flows along Ford Lane would only affect a small part of Trottiscliffe.

4.4 Tranquillity effects

Noise

4.4.1 During construction, the only significant adverse changes in noise levels within the AONB as a result of changes in traffic flows due to the Project would occur along the minor road route of Cobhambury Road, Warren Road and Bush Road between Cuxton and Cobham in 2027 and 2028.

1.1.3 During operation year 2030, there would be two small pockets of significant adverse change in noise level along the A228 corridor on the edge of the AONB to the north-east and south-west of Cuxton. There would be no other no significant adverse change in noise levels within the AONB as a result of changes in traffic flows due to the Project.

4.4.2 During operation year 2045, there would be no significant adverse change in noise levels within the AONB as a result of changes in traffic flows due to the Project.

Visual disturbance

4.4.3 During construction, notable visual disturbance within the AONB as a result of increases in traffic flows due to the Project would occur along the minor road route of Cobhambury Road, Warren Road and Bush Road between Cuxton and Cobham. This would occur in construction phases 5, 6, 7, 8, 9, 10 and 11, affecting views from the surrounding AONB with existing views of these roads.

4.4.4 There is not likely to be any notable visual disturbance from increased HGV traffic on minor roads during any phase of construction.

4.4.5 In settlements within the AONB, there is potential for some visual disturbance in Shorne Ridgeway, adjoining The Ridgeway, during phases 5, 9, 10 and 11 of construction.

4.4.6 During operation in the opening year of 2030, the only notable visual disturbance within the AONB as a result of increases in traffic flows due to the Project would occur along the minor road route between the A20 and A227, comprising Trottiscliffe Road, Taylors Lane, Addington Lane and Vigo Hill.

4.4.7 There is not likely to be any notable visual disturbance from increased HGV traffic on minor roads during the opening year.

4.4.8 In settlements within the AONB, there is potential for some visual disturbance in Shorne Ridgeway, adjoining The Ridgeway, Sole Street adjoining the road of eh same name, Sole Street, and Trottiscliffe adjoining The Street, Ford Lane and Addington Lane.

4.4.9 By the design year, 2045, the only notable visual disturbance within the AONB as a result of increases in traffic flows due to the Project would occur along the minor road route between the M20 and M2 motorways, comprising Boxley Road, The Street, Pilgrim's Way and Lidsing Road.

4.4.10 There is not likely to be any notable visual disturbance from increased HGV traffic on minor roads during the operation design year.

4.4.11 In settlements within the AONB, there is potential for some visual disturbance in Shorne Ridgeway, adjoining Peartree Lane, Sole Street adjoining Sole Street, Trottiscliffe adjoining Ford Lane and Boxley adjoining The Street.

Conclusions

4.4.12 Existing relative tranquillity within the AONB would be adversely affected by noise and visual disturbance caused by increased traffic flows. However, adverse effects on tranquillity would be limited to a small number of locations in the vicinity of affected roads. The extent to which existing tranquillity would be affected by a combination of noise and visual disturbance is even less, as set out below.

Construction phase

4.4.13 During construction, existing relative tranquillity would be adversely affected by both noise and visual disturbance along the minor road route of Cobhambury

Road, Warren Road and Bush Road between Cuxton and Cobham in 2027 and 2028.

Operation phase

4.4.14 During operation, there would be no combined effects on tranquillity from both noise and visual disturbance.

5 Mitigation

5.1 Construction

5.1.1 The outline Traffic Management Plan for Construction (oTMPfC) (Application Document 7.14) has been produced in response to PINS feedback to provide an outline framework that would be applied for the design, management and communication of construction traffic management, road space booking and transport logistics. The oTMPfC, which has been developed following technical engagement with key stakeholders (namely local highway authorities), provides a framework of principles and mechanisms that inform how detailed secondary consent traffic management plans will be developed.

5.1.2 The Contractors for the Project will be required to produce Traffic Management Plans (TMP) for construction, which must be substantially in accordance with the oTMPfC, before commencing works. TMPs will need to be submitted to and approved by the Secretary of State (SoS) before any part of the authorised development can commence. When developing TMPs, the Contractor must consult with the relevant authorities, including Kent County Council and Gravesham Borough Council.

5.1.3 Establishing access routes to the works has been an iterative process, involving stakeholders and changes to design. The key principle during development was to avoid or reduce as far as reasonably practicable the use of the Local Road Network for construction traffic. To reduce the impact on local road users, traffic management measures would be left in situ for the shortest duration that is reasonably practicable. Exact diversion routes would be subject to engagement with the relevant authorities during the development of the TMP, working to mitigate the potential for vehicles to use unofficial diversion routes. In addition, the Project will apply construction HGV bans on The Street through Cobham, Thong Lane and Brewers Road, within the Kent Downs AONB.

5.1.4 The outline Materials Handling Plan (oMHP) (Application Document 6.3, ES Appendix 2.2, Annex B) presents the outline strategy for handling construction materials required for the construction of the project, including the handling of excavated materials and the delivery of large and/or frequent materials defined as bulk deliveries. It also includes the approach by which the Project intends to reduce the impact of construction-related movements, including HGVs, on the road network. Contractors would be required to produce further MHPs before commencing works in accordance with Requirement 4 of the draft Development Consent Order (DCO) (Application Document 3.1, Schedule 2, Part 1). These documents would be submitted to and approved by the Secretary of State before the relevant part of the authorised development could commence.

5.1.5 The Framework Construction Travel Plan (FCTP) (Application Document 7.13) sets out a framework for the implementation of travel planning for the movement of personnel to and from the construction worksites, construction compounds and Utility Logistics Hubs (ULH) during the construction phase of all works related to the Project.

5.1.6 The key aim of the FCTP is to minimise adverse local disruption or traffic impacts on the highway network from worker and visitor travel to and from

construction worksites, construction compounds and ULHs, by reducing the number of single-occupancy vehicle trips and encouraging the uptake of sustainable and active modes of travel.

5.2 Operation

5.2.1 As set out in the Wider Network Impacts Management and Monitoring Plan (WNIMMP) (Application Document 7.12), National Highways is proposing to monitor the impacts of the Project on traffic on the local and strategic road networks during the operational period. This is secured under Requirement 14 of the draft DCO (Application Document 3.1). Before the tunnel is open for traffic, National Highways must submit written details of an operational traffic impact monitoring scheme substantially in accordance with the WNIMMP, for approval by the Secretary of State following consultation with the local highway authorities and bodies listed in the WNIMMP document. The approved scheme must be implemented by National Highways unless otherwise agreed with the Secretary of State.

5.2.2 Traffic monitoring reports would be produced at one-year and five years post-opening, which is considered appropriate to present the observed traffic patterns over time. This is currently expected to take place in 2031 and 2035, respectively. National Highways has identified a number of locations to be included within the traffic impact monitoring scheme, submitted for approval to the Secretary of State under Requirement 14 of Schedule 2 to the draft DCO. Identified locations within the AONB include:

a. M2/A2/A122 Lower Thames Crossing junction

b. M2 junction 1 (A2/M2/A289)

c. M2 junction 2 (M2/A228)

d. A229 between M2 junction 3 (Blue Bell Hill) and M20

5.2.3 Additional monitoring locations proposed through local highway authority engagement would be considered against criteria that include:

a. The forecast changes to traffic flows, and the volume/capacity ratio as set out in the Transport Assessment (Application Document 7.9)

b. The impact of any local and regional developments on traffic flows at that location

5.2.4 There would be no significant adverse change in noise levels within the AONB as a result of the Project during operation and therefore no mitigation is proposed. Although a small number of locations have been identified where there is the potential for notable visual disturbance, there are practicable limitations to mitigation that can be proposed as part of the Project. Limitations to providing mitigation for visual disturbance include the absence of land for measures such as screen planting within the Order Limits. Furthermore, the provision of screen planting, for example, along affected road corridors may not always be appropriate to the existing landscape character and may obscure

attractive views from the road for those travelling through the AONB or visitors to the AONB.

5.2.5 Other measures, such as the diversion of traffic away from sensitive locations, such as roads through settlements within the AONB, or weight restrictions to exclude non Project related HGVs are outside the scope of the Project and may not necessarily be practicable. Furthermore, the potential use of traffic calming measures, for example, through AONB settlements may actually contribute to visual disturbance through the introduction of uncharacteristic highway infrastructure.

6 Summary

6.1 Traffic effects

6.1.1 In addition to predicted increases to traffic flows on roads within the AONB, there are also reductions in traffic flows predicted on some roads.

6.1.2 The predicted changes are shown on a series of traffic maps in Figure 7.20.1 and Figure 7.20.2, illustrating both numerical and percentage change for the 11 construction traffic modelling phases between 2025 and 2030 and for the opening year 2030 and design year 2045 during operation.

6.1.3 The greatest predicted increases in traffic flows would typically occur during the AM peak and sometimes the PM peak during both construction and operation of the Project.

6.2 Noise effects

Construction

6.2.1 There would be no change or negligible change in noise levels across the whole of the AONB in the first two years of the construction phase of the Project. During the following three years of the construction phase, there would be no significant change in noise levels across most of the AONB. Significant changes would occur in 2027 and 2028, when there would be a moderate beneficial change in noise levels along the M2/A2 corridor within the AONB and a moderate and major beneficial change along Halfpence Lane between Cobham and the A2 respectively. By contrast, there would be a moderate and major adverse change along the minor road route of Cobhambury Road, Warren Road and Bush Road between Cuxton and Cobham, to the south of Cobham Park Registered Park and Garden in year 2027 and 2028 respectively. There would be no significant changes in noise levels in year 2029 and 2030.

Operation

6.2.2 In the opening year, the only significant adverse change in noise levels within the AONB as a result of the Project would be two small pockets of moderate adverse change along the A228 corridor to the north-east and south-west of Cuxton. There would also be a small pocket of moderate to major beneficial change along the M2/A2 corridor close to the proposed M2/A2/A122 Lower Thames Crossing junction. This is due to road alignment changes and use of low noise road surfacing for the proposed junction.

6.2.3 By 2045, there would be no significant change in noise levels resulting from the Project across the whole of the AONB, except for a small pocket of moderate beneficial change in noise levels along the M2/A2 corridor close to the proposed M2/A2/A122 Lower Thames Crossing junction.

6.3 Visual disturbance

Affected roads

6.3.1 The level of additional visual disturbance from predicted increases in traffic flows that is likely to result from the Project is relative to the existing volume of traffic, which already affects views from the AONB.

6.3.2 Due to existing traffic flows on main roads within the AONB, the degree of visual enclosure to road corridors and visual screening, there would be no notable visual disturbance in views from the AONB, resulting from the predicted increases in traffic flows on main roads within the AONB or its setting.

6.3.3 There would be greater potential for visual disturbance from increased traffic flows on minor roads, given the typical context and scale of such roads and the typically lower volumes of existing traffic compared with main roads. The potential for notable visual disturbance has been identified on a few minor roads, during some phases of construction and during operation as set out below.

6.3.4 During construction, the potential for notable visual disturbance has been identified from increased traffic on the minor road route between Cobham and Cuxton, comprising Cobhambury Road, Warren Road and Bush Road. This would occur in construction traffic modelling phases 5, 6, 7, 8, 9, 10 and 11, affecting views from the surrounding AONB with existing views of these roads, including dramatic views from elevated ground south-east of Cobham. Key visual receptor locations include Cobham Park Registered Park and Garden and Ranscombe Country Park, where there are glimpsed views to the minor road route, and the local footpath network, six of which join or cross the minor road route including the North Downs Way.

6.3.5 It is not likely that there would be any notable visual disturbance from increased HGV traffic on minor roads during any phase of construction. This is because HGV traffic is more likely to be concentrated on main roads and mitigation measures would be put in place to avoid or reduce as far as reasonably practicable the use of the Local Road Network for construction traffic.

6.3.6 During operation, the potential for notable visual disturbance in the opening year, 2030, has been identified from increased traffic on the minor road route between the A20 and A227, comprising Trottiscliffe Road, Taylors Lane, Addington Lane and Vigo Hill, affecting views from the surrounding AONB. Key visual receptor locations include the North Downs Way, Pilgrim's Way and The Wealdway, and three local footpaths, which cross or connect the minor road route.

6.3.7 By the design year, 2045, the potential for notable visual disturbance has been identified from increased traffic on the minor road route between the M20 and M2 motorways, comprising Boxley Road, The Street, Pilgrim's Way and Lidsing Road, affecting views from the surrounding AONB. Key visual receptor locations include the North Downs Way and the Pilgrim's Way and also a number of footpaths that cross or connect with the minor road route.

6.3.8 There would not likely be any notable visual disturbance from increased HGV traffic on minor roads during operation, either in the opening year or design

year. This is because HGV traffic is more likely to be concentrated on main road routes.

Affected settlements

6.3.9 During construction, the potential for notable visual disturbance has been identified from increased traffic within Shorne Ridgeway during phases 5, 9 and 10 of construction.

During operation, the potential for notable visual disturbance has been identified from increased traffic within Shorne Ridgeway, Sole Street and Trottiscliffe in the 2030 opening year and 2045 design year. In the design year, the potential for notable visual disturbance has also been identified from increased traffic within Boxley.

6.4 Tranquillity

6.4.1 The predicted reductions and increases in traffic flows have the potential to increase or reduce existing relative tranquillity within the Kent Downs AONB, one of the special components, characteristics and qualities set out in the Kent Downs AONB Management Plan. Changes to tranquillity could result from noise effects and visual disturbance, either in combination or alone and would be focussed along existing road corridors.

6.4.2 The main adverse effects on existing relative tranquillity within the AONB during construction, would occur within the vicinity of the following minor road route and settlement:

a. Cobhambury Road, Warren Road and Bush Road between Cuxton and Cobham due to noise effects in 2027 and 2028 and visual disturbance in phases 5, 6, 7, 8, 9, 10 and 11 and partially featured in dramatic AONB views, one of the special components, characteristics and qualities set out in the Kent Downs AONB Management Plan

b. Shorne Ridgeway due to visual disturbance in phases 5, 9, 10 and 11 of construction

6.4.3 The main adverse effects on existing relative tranquillity within the AONB during operation in the opening year (2030), would occur within the vicinity of the following roads and settlements:

a. Trottiscliffe Road, Taylors Lane, Addington Lane and Vigo Hill between the A20 and A227 due to visual disturbance

b. Shorne Ridgeway, Sole Street and Trottiscliffe, due to visual disturbance

c. A228 corridor to the north-east and south-west of Cuxton due to noise effects

6.4.4 The main adverse effects on existing relative tranquillity within the AONB during operation in the design year (2045), would occur within the vicinity of the following minor road route and settlements:

a. Boxley Road, The Street, Pilgrim's Way and Lidsing Road between the M20 and M2 motorways due to visual disturbance

b. Shorne Ridgeway, Sole Street, Trottiscliffe and Boxley, due to visual disturbance

6.4.5 No notable effects on tranquillity have been identified as a result of changes in traffic flows along the two roads referred to in the PINS Scoping Opinion, the A249 at Detling Hill and the A229 at Blue Bell Hill.

6.4.6 As well as increases in traffic flows, reductions in traffic flows are predicted on a number of main roads and minor roads throughout the AONB. These reductions would have a beneficial effect on existing relative tranquillity, with beneficial effects on noise also predicted in limited locations.

Cumulative effects

6.4.7 Although increases in traffic flows are predicted on many roads across the AONB, traffic on affected roads is generally not seen in conjunction with that on other affected roads. Furthermore, there would be no notable noise effects or visual disturbance on most affected roads. The potential for cumulative effects is therefore minimal and there would be no notable cumulative effects on tranquillity within the AONB.

References

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Glossary

Term	Abbreviation	Explanation
Application Document		In the context of the Project, a document submitted to the Planning Inspectorate as part of the application for development consent.
Construction		Activity on and/or offsite required to implement the Project. The construction phase is considered to commence with the first activity on site (e.g., creation of site access), and ends with demobilisation.
Design Manual for Roads and Bridges	**DMRB**	A comprehensive manual containing requirements, advice and other published documents relating to works on motorway and all-purpose trunk roads for which one of the Overseeing Organisations (National Highways, Transport Scotland, the Welsh Government or the Department for Regional Development (Northern Ireland)) is highway authority. For the A122 Lower Thames Crossing the Overseeing Organisation is National Highways.
Development Consent Order	**DCO**	Means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects (NSIP) under the Planning Act 2008.
Development Consent Order application	**DCO application**	The Project Application Documents, collectively known as the 'DCO application'.
Environmental Statement	**ES**	A document produced to support an application for development consent that is subject to Environmental Impact Assessment (EIA), which sets out the likely impacts on the environment arising from the proposed development.
National Highways		A UK government-owned company with responsibility for managing the motorways and main roads in England. Formerly known as Highways England.
Main road		For the purposes of this assessment, a main road has been defined as a motorway, e.g., M2 or A road, e.g., A2.
Operation		Describes the operational phase of a completed development and is considered to commence at the end of the construction phase, after demobilisation.
Order Limits		The outermost extent of the Project, indicated on the Plans by a red line. This is the Limit of Land to be Acquired or Used (LLAU) by the Project. This is the area in which the DCO would apply.
Passenger Car Units	**PCU**	A Passenger Car Unit (PCU) is a measure used for traffic modelling purposes. Different vehicles are assigned different values, according to the space they take up. The capacity of each part of a road network is given as the number of PCUs that can use each road link in the Project transport model each hour: a. Cars and vans are defined as 1 PCU. b. HGVs are considered to be equivalent to 2.5 PCUs, because they take up more road space.
Planning Act 2008		The primary legislation that establishes the legal framework for applying for, examining and determining Development Consent Order applications for Nationally Significant Infrastructure Projects.

Term	Abbreviation	Explanation
Project road		The new A122 trunk road, the improved A2 trunk road, and the improved M25 and M2 special roads, as defined in Parts 1 and 2, Schedule 5 (Classification of Roads) in the draft DCO (Application Document 3.1).
Project route		The horizontal and vertical alignment taken by the Project road.
The tunnel		Proposed 4.25km (2.5 miles) road tunnel beneath the River Thames, comprising two bores, one for northbound traffic and one for southbound traffic. Cross-passages connecting each bore would be provided for emergency incident response and tunnel user evacuation. Tunnel portal structures would accommodate service buildings for control operations, mechanical and electrical equipment, drainage and maintenance operations. Emergency access and vehicle turn-around facilities would also be provided at the tunnel portals.

Annex A Traffic effects – Construction phase – Passenger Car Units

A.1.1 Figure 7.20.1 shows the predicted changes in traffic flows for the construction phases for PCUs at AM peak, Inter peak and PM peak. The predicted reductions and increases in traffic flows, within and adjoining the AONB, are set out below. Only predicted increases above 50 PCUs are listed below.

Phase 1: 01/01/2025 to 31/08/2025

AM peak

A.1.2 There would be no reductions in traffic flows during the AM peak.

A.1.3 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +250 PCUs between M2 junction 1 (the M2/A2/A289 interchange) and junction 3) (-10% to +10%)

ii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +250 PCUs) (between 10% and 40%, over 40% along a short section)

iii. Thong Lane between the A2 and the A226, Gravesend (up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A226 between Rochester and Gravesend (up to +250 PCUs) (-10% to +10%)

ii. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs) (over 40%)

Inter peak

A.1.4 There would be no reductions in traffic flows during the inter peak.

A.1.5 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +250 PCUs between M2 junction 1 (the M2/A2/A289 interchange) and junction 3) (-10% to +10%) AONB

ii. Thong Lane between the A2 and the A226, Gravesend (up to +250 PCUs) (over 40%)

PM peak

A.1.6 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. Halfpence Lane / The Street, Cobham (reduction)

A.1.7 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +250 PCUs between M2 junction 1 (the M2/A2/A289 interchange) and junction 3) (-10% to +10%)

ii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +50 PCUs, +500 PCUs along a short section) (-20% to +10%, over 40% along a short section)

iii. Thong Lane between the A2 and the A226, Gravesend (up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A226 between Rochester and Gravesend (up to +250 PCUs) (+10% to +20%)

ii. Jeskyns Road west of Cobham (up to +250 PCUs) (over 40%)

iii. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs) (over 40%)

Phase 2: 01/09/2025 to 28/02/2026

AM peak

A.1.8 Reductions in traffic flows during the AM peak are shown on the following roads:

a. Adjoining AONB

i. A289 westbound between the A2 and the A226 (reduction)

ii. A226 between Gravesend and Rochester (reduction)

A.1.9 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +250 PCUs between M2 junction 1 (the M2/A2/A289 interchange) and junction 3) (-10% to +10%)

ii. A229 between Maidstone and M2 (up to +250 PCUs) (-10% to +10%)

iii. Thong Lane between the A2 and the A226, Gravesend (up to +250 PCUs) (-10% to +40%, over 40% along a short section)

b. Adjoining AONB

i. A289 eastbound between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

ii. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs) (over 40%)

Inter peak

A.1.10 Reductions in traffic flows during the inter peak are shown on the following roads:

a. Adjoining AONB

i. A289 westbound between the A2 and the A226 (reduction)

A.1.11 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. Thong Lane between the A2 and the A226, Gravesend (up to +250 PCUs) (-10% to +40%, over 40% along a short section)

b. Adjoining AONB

i. A289 eastbound between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

ii. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs) (over 40%)

PM peak

A.1.12 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 westbound between M2 junction 1 (the M2/A2/A289 interchange) and junction 5 (reduction)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (reduction)

A.1.13 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 eastbound between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +250 PCUs between M2 junction 1 (the M2/A2/A289 interchange) and junction 3) (-10% to +10%)

ii. M20 between Swanley and Bearsted (up to +250 PCUs) (-10% to +10%)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +250 PCUs) (-10% to +10%)

iv. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +250 PCUs) (-10% to +10%, over 40% along a short section)

v. Thong Lane between the A2 and the A226, Gravesend (up to +250 PCUs) (-10% to +40%, over 40% along a short section)

b. Adjoining AONB

i. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs) (-20% to +40%)

Phase 3: 01/03/2026 to 31/05/2026

AM peak

A.1.14 Reductions in traffic flows during the AM peak are shown on the following roads:

a. Adjoining AONB

i. A2 westbound between in the vicinity of M2 junction 1 (the M2/A2/A289 interchange) (reduction)

ii. A226 between Gravesend and Rochester (reduction)

A.1.15 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +250 PCUs between M2 junction 1 (the M2/A2/A289 interchange) and junction 3) (-10% to +10%)

ii. M20 between the M26 and Bearsted (up to +250 PCUs) (-10% to +10%)

iii. M25 between Oxted and Swanley (up to +250 PCUs) (-10% to +10%)

iv. M26 between the M25 and M20 (up to +250 PCUs) (-10% to +10%)

v. A229 between Maidstone and M2 (up to +250 PCUs) (-10% to +10%)

vi. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +250 PCUs) (-10% to +40%)

b. Adjoining AONB

i. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

ii. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs) (over 40%)

Inter peak

A.1.16 Reductions in traffic flows during the inter peak are shown on the following roads:

a. Adjoining AONB

i. A226 between Gravesend and Rochester (reduction)

A.1.17 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. Thong Lane between the A2 and the A226, Gravesend (up to +250 PCUs) (-10% to +40%, over 40% along a short section)

b. Adjoining AONB

i. A289 eastbound between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

PM peak

A.1.18 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 westbound between M2 junction 1 (the M2/A2/A289 interchange) and junction 5 (reduction)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (reduction)

A.1.19 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 eastbound between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +250 PCUs between M2 junction 1 (the M2/A2/A289 interchange) and junction 3) (-10% to +10%)

ii. M20 between Swanley and Bearsted (up to +250 PCUs) (-10% to +10%)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +250 PCUs) (-10% to +10%)

iv. Thong Lane between the A2 and the A226, Gravesend (up to +250 PCUs) (+10% to +20%)

Phase 4: 01/06/2026 to 31/10/2026

AM peak

A.1.20 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +250 PCUs between M2 junction 1 (the M2/A2/A289 interchange) and junction 3) (-10% to +10%)

ii. M20 between the M26 and Bearsted (up to +250 PCUs) (-10% to +10%)

iii. M25 between Oxted and Swanley (up to +250 PCUs in places) (-10% to +10%)

iv. M26 between the M25 and M20 (up to +250 PCUs) (-10% to +10%)

v. A229 between Maidstone and M2 (up to +250 PCUs) (-10% to +10%)

vi. Brewers Road / The Ridgeway / Peartree Lane (up to +250 PCUs) (-10% to +40%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+10% to +10%)

ii. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs) (over 40%)

Inter peak

A.1.21 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. Thong Lane between the A2 and the A226, Gravesend (up to +250 PCUs) (-10% to +40%)

ii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +250 PCUs) (-20% to +40%)

b. Adjoining AONB

i. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs) (over 40%)

PM peak

A.1.22 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 westbound between M2 junction 1 (the M2/A2/A289 interchange) and junction 5 (reduction)

b. Adjoining AONB

A.1.23 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 eastbound between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +250 PCUs between M2 junction 1 (the M2/A2/A289 interchange) and junction 3) (-10% to +10%)

ii. M20 between Swanley and Bearsted (up to +250 PCUs) (-10% to +10%)

iii. Thong Lane between the A2 and the A226, Gravesend (up to +250 PCUs) (+20% to +40% in places)

Phase 5: 01/11/2026 to 31/03/2027

AM peak

A.1.24 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

   i. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

   i. Thong Lane between the A2 and the A226, Gravesend (reduction)

A.1.25 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

   i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +250 PCUs between M2 junction 1 (the M2/A2/A289 interchange) and junction 3) (-10% to +10%)

   ii. M20 between the M26 and Bearsted (up to +250 PCUs) (-10% to +10%)

   iii. M25 between Oxted and Swanley (up to +250 PCUs in places) (-10% to +10%)

   iv. M26 between the M25 and M20 (up to +250 PCUs) (-10% to +10%)

   v. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +250 PCUs) (+20% to +40% along a short section of The Ridgeway and along Peartree Lane)

   vi. Thong Lane between the A2 and the A226, Gravesend (up to +250 PCUs southbound in a single location) (-10% to +10%)

   vii. Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham (Up to +250 PCUs) (over 40%)

b. Adjoining AONB

   i. A226 between Gravesend and Rochester (up to +250 PCUs) (+20% to +40%)

   ii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

   iii. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs) (over 40%)

Inter peak

A.1.26 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase over 40% along a very short section)

A.1.27 Increases in traffic flows during the inter peak are shown on the following roads:

a. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+10% to +20%)

ii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

iii. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

iv. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

PM peak

A.1.28 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 westbound between M2 junction 1 (the M2/A2/A289 interchange) and junction 5 (reduction)

ii. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane northbound between the A2 and the A226, Gravesend (reduction)

A.1.29 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 eastbound between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +250 PCUs between M2 junction 1 (the M2/A2/A289 interchange) and junction 3) (-10% to +10%)

ii. M20 between Swanley and Bearsted (up to +250 PCUs) (-10% to +10%)

iii. Thong Lane southbound between the A2 and the A226, Gravesend (up to +250 PCUs) (+20% to +40%, over 40% along a very short section in the vicinity of the A226)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (-10% to +10%)

ii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

iii. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

iv. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

Phase 6: 01/04/2026 to 31/08/2027

AM peak

A.1.30 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (reduction)

iii. Halfpence Lane / The Street, Cobham (reduction)

iv. Green Lane / Camer Road / Sole Street, between Cobham and Hook Green (reduction)

v. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction)

A.1.31 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Bearsted (up to +250 PCUs) (-10% to +10%)

ii. M25 between Oxted and the M26 (up to +250 PCUs) (-10% to +10%)

iii. M26 between the M25 and M20 (up to +250 PCUs) (-10% to +10%)

iv. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +250 PCUs in places) (-10% to +10%)

v. Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham (Up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+20% to +40%)

ii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

iii. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs) (over 40%)

Inter peak

A.1.32 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A20 between Canterbury and Dover (reduction)

iii. A229 between Maidstone and the M2 (reduction)

iv. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (reduction)

v. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction)

A.1.33 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Maidstone (up to +250 PCUs) (-10% to +10%)

ii. M20/A20 between Ashford and Dover (up to +250 PCUs) (-10% to +10%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+10% to +20%, over 40% in places)

ii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

iii. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

iv. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

PM peak

A.1.34 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 5 (reduction)

ii. M25 between junction 4 and junction 5 (reduction)

iii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (reduction)

iv. Halfpence Lane / The Street, Cobham (reduction)

v. Green Lane / Camer Road / Sole Street, between Cobham and Hook Green (reduction)

b. Adjoining AONB

i. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (reduction)

ii. Thong Lane northbound between the A2 and the A226, Gravesend (reduction, excluding an increase over 40% along a very short section)

A.1.35 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Bearsted (up to +250 PCUs, up to 500 PCUs on a short section between junction 3 and junction 4) (-10% to +10%)

ii. Shorne Ifield Road west of Shorne (up to +250 PCUs) (over 40%)

iii. Trottiscliffe Road / Taylors Lane / Addington Lane / Vigo Hill through Trottiscliffe between the A20 and A227 (Up to +250 PCUs) (+10% to +20%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+20% to +40%, over 40% on a short section)

ii. A228 between the M20 and M2 (Up to 250 PCUs) (up to 20% on a very short section)

iii. A229 between Maidstone and M2 (Up to 250 PCUs) (10% to 20%)

iv. A289 between the A2 and the A226 (up to +250 PCUs) (+10% to +20%, up to 40% on a short section)

v. Wrotham Road, passing through Hook Green (up to +250 PCUs) (+10% to +20%)

vi. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

vii. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

Phase 7: 01/09/2027 to 31/03/2028

AM peak

A.1.36 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (reduction)

iii. Halfpence Lane / The Street, Cobham (reduction)

iv. Green Lane / Camer Road / Sole Street, between Cobham and Hook Green (reduction)

v. Brewers Road / The Ridgeway / Peartree Lane westbound, north of the A2 (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction)

A.1.37 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Bearsted (up to +250 PCUs) (-10% to +10%, excluding an increase up to 20% between junction 3 and junction 4)

ii. M25 between Oxted and the M26 (up to +250 PCUs) (-10% to +10%)

iii. M26 between the M25 and M20 (up to +250 PCUs) (below -40%, over 40% along a very short section)

iv. Brewers Road / The Ridgeway / Peartree Lane eastbound, north of the A2 (up to +250 PCUs in places) (-40% to +10%)

v. Shorne Ifield Road west of Shorne (up to +250 PCUs) (over 40%)

vi. Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham (Up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+20% to +40%)

ii. A228 between the M20 and M2 (Up to 250 PCUs) (up to 20% on a short section)

iii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

iv. Tanyard Hill / The Street / Forge Lane northwards passing through Shorne (up to +250 PCUs) (over 40%)

Inter peak

A.1.38 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. M20 between Swanley and Maidstone (reduction)

iii. A2 between M2 junction 1 (the M2/A2/A289 interchange) and Strood (reduction)

iv. A229 between Maidstone and the M2 (reduction)

v. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction)

A.1.39 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Maidstone (up to +250 PCUs) (-10% to +10%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+10% to +20%, over 40% in places)

PM peak

A.1.40 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 5 (reduction)

ii. M25 between junction 4 and junction 5 (reduction)

iii. A2 between Canterbury and Dover (reduction)

iv. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (reduction)

v. Halfpence Lane / The Street, Cobham (reduction)

vi. Green Lane / Camer Road / Sole Street, between Cobham and Hook Green (reduction)

b. Adjoining AONB

i. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (reduction)

ii. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase over 40% along a very short section)

A.1.41 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Bearsted (up to +250 PCUs) (-10% to +10%)

ii. M25 between Oxted and the M26 (up to +250) (-10% to +10%)

iii. M26 between the M25 and M20 (up to +250 PCUs) (-10% to +10%)

iv. M20/A20 between Ashford and Dover (up to +250) (-10% to +10%, up to 20% on a short section near Folkestone)

v. Shorne Ifield Road west of Shorne (up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+20% to +40%)

ii. A229 between Maidstone and M2 (Up to 250 PCUs) (+10% to +20%)

iii. A289 between the A2 and the A226 (up to +250 PCUs) (-40% to +20%,)

iv. Wrotham Road, passing through Hook Green (up to +250 PCUs) (-10% to +10%)

v. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

vi. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

Phase 8: 01/04/2028 to 30/11/2028

AM peak

A.1.42 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (reduction)

iii. Halfpence Lane / The Street, Cobham (reduction)

iv. Green Lane / Camer Road / Sole Street, between Cobham and Hook Green (reduction)

v. Brewers Road / The Ridgeway / Peartree Lane westbound, north of the A2 (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction)

A.1.43 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Bearsted (up to +250 PCUs) (-10% to +10%)

ii. M25 between Oxted and the M26 (up to +250 PCUs) (-10% to +10%)

iii. M26 between the M25 and M20 (up to +250 PCUs) (-10% to +10%)

iv. Brewers Road / The Ridgeway / Peartree Lane eastbound, north of the A2 (up to +250 PCUs in places) (-40% to +10%)

v. Shorne Ifield Road west of Shorne (up to +250 PCUs) (over 40%)

vi. Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham (Up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+20% to +40%)

ii. A228 between the M20 and M2 (Up to 250 PCUs on two sections) (-10% to +10%, over 40% on a short section)

iii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

iv. Tanyard Hill / The Street / Forge Lane northwards passing through Shorne (up to +250 PCUs) (over 40%)

Inter peak

A.1.44 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. M20 between Swanley and Maidstone (reduction)

iii. A2 between M2 junction 1 (the M2/A2/A289 interchange) and Strood (reduction)

iv. A229 between Maidstone and the M2 (reduction)

v. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction)

A.1.45 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Maidstone (up to +250 PCUs) (-10% to +10%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+10% to +20%, over 40% in places)

PM peak

A.1.46 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 5 (reduction)

ii. M25 between junction 4 and junction 5 (reduction)

iii. A2 between Canterbury and Dover (reduction)

iv. A229 between Maidstone and M2 (reduction)

v. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (reduction)

vi. Halfpence Lane / The Street, Cobham (reduction)

vii. Green Lane / Camer Road / Sole Street, between Cobham and Hook Green (reduction)

b. Adjoining AONB

i. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (reduction)

ii. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase over 40% along a very short section)

A.1.47 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Bearsted (up to +500 PCUs between junction 3 and junction 4) (-10% to +10%)

ii. M25 between Oxted and the M26 (up to +250) (-10% to +10%)

iii. M26 between the M25 and M20 (up to +250 PCUs) (-10% to +10%)

iv. M20/A20 between Ashford and Dover (up to +250) (-10% to +10%, up to 20% on a short section near Folkestone)

v. Shorne Ifield Road west of Shorne (up to +250 PCUs) (over 40%)

vi. Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham (Up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+20% to +40%)

ii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%,)

iii. Wrotham Road, passing through Hook Green (up to +250 PCUs) (+10% to +20%)

iv. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

v. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

Phase 9: 01/12/2028 to 31/03/2029

AM peak

A.1.48 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (reduction)

iii. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase over 40% along a very short section)

A.1.49 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Bearsted (up to +250 PCUs) (-10% to +10%)

ii. M25 between Oxted and the M26 (up to +250 PCUs) (-10% to +10%)

iii. M26 between the M25 and M20 (up to +250 PCUs) (-10% to +10%)

iv. Brewers Road / The Ridgeway / Peartree Lane, north of the A2 (+500 PCUs westbound) (over 40% along a short section of The Ridgeway and along Peartree Lane)

v. Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham (Up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+10% to +40% along a short section)

ii. A289 between the A2 and the A226 (up to +250 PCUs on a very short section) (-10% to +10%)

iii. Tanyard Hill / The Street / Forge Lane northwards passing through Shorne (up to +250 PCUs) (over 40%)

Inter peak

A.1.50 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A2 between M2 junction 1 (the M2/A2/A289 interchange) and Strood (reduction)

iii. A229 between Maidstone and the M2 (reduction)

iv. Halfpence Lane, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase over 40% along a very short section

A.1.51 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Maidstone (up to +250 PCUs) (-10% to +10%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+20% to +40%)

PM peak

A.1.52 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 5 (reduction)

ii. M25 between junction 5 and junction 4 (reduction)

iii. A2 between Canterbury and Dover (reduction)

iv. A229 between Maidstone and M2 (reduction)

v. Halfpence Lane, Cobham (reduction)

vi. A260, west of Hook Green (reduction)

b. Adjoining AONB

i. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (reduction)

ii. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase over 40% along a very short section)

A.1.53 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Bearsted (up to +250 PCUs) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +250 PCUs) ((-10% to +10%)

iii. M20/A20 between Ashford and Dover (up to +250) (-10% to +10%, up to 20% on a short section near Folkestone)

iv. Brewers Road / The Ridgeway / Peartree Lane, north of the A2 (+250 PCUs westbound) (over 40% along a short section of The Ridgeway and along Peartree Lane)

v. Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham (Up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+20% to +40%)

ii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%,)

iii. Wrotham Road, passing through Hook Green (up to +250 PCUs) (-10% to +10%)

iv. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

v. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

vi. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs in a single location) (up to 40% in places)

Phase 10: 01/04/2029 to 31/07/2029

AM peak

A.1.54 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 2 (reduction)

ii. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase up to 40% along a very short section in places)

A.1.55 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and the M26 (up to +250 PCUs) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +250 PCUs) (-10% to +10%)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +250 PCUs in places) (+10% to +20% along a short section)

iv. Brewers Road / The Ridgeway / Peartree Lane, north of the A2 (+250 PCUs) (between +20% and +40% along and short section of The Ridgeway and along Peartree Lane)

v. Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham (Up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (-10% to +10%)

ii. A228 between the M20 and M2 (Up to 250 PCUs along a short section) (-10% to +10%)

iii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

iv. Tanyard Hill / The Street / Forge Lane northwards passing through Shorne (up to +250 PCUs) (over 40%)

v. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

Inter peak

A.1.56 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase of 10% to 20% north of Vigilant Way)

A.1.57 Increases in traffic flows during the inter peak are shown on the following roads:

a. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+20% to +40%)

ii. A228 between the M20 and M2 (Up to 50 PCUs along a short section) (-10% to +10%, over 40% on a very short section)

iii. Tanyard Hill / The Street / Forge Lane northbound passing through Shorne (up to +250 PCUs in places) (over 40% in places)

iv. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

v. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

PM peak

A.1.58 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 2 (reduction)

ii. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase up to 40% along a very short section)

A.1.59 Increases in traffic flows during the AM peak are shown on the following roads:

a. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+10% to +20%)

ii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

iii. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

iv. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

Phase 11: 01/08/2029 to 31/12/2030

AM peak

A.1.60 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 2 (reduction)

ii. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase up to 40% along a very short section)

A.1.61 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +250 PCUs) (+10% to +20% along a short section)

ii. Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham (up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

ii. Tanyard Hill / The Street / Forge Lane northwards passing through Shorne (up to +250 PCUs in places) (over 40%)

iii. Jeskyns Road Cobham (up to +250 PCUs) (+20% to +40%)

iv. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

Inter peak

A.1.62 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

i. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase of 10% to 20% north of Vigilant Way)

A.1.63 Increases in traffic flows during the inter peak are shown on the following roads:

a. Adjoining AONB

i. A226 between Gravesend and Rochester (up to +250 PCUs) (+10% to +20%)

ii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

iii. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

iv. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

PM peak

A.1.64 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

   i. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

   i. Thong Lane between the A2 and the A226, Gravesend (reduction, excluding an increase of over 10% along a very short section)

A.1.65 Increases in traffic flows during the AM peak are shown on the following roads:

a. Adjoining AONB

   i. A226 between Gravesend and Rochester (up to +250 PCUs) (+10% to +20%)

   ii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +10%)

   iii. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

   iv. Henhurst Road west of Cobham (up to +250 PCUs) (-10% to +10%)

Annex B Traffic effects – Construction phase – HGVs

B.1.1 Figure 7.20.1 shows the predicted changes in traffic flows for the construction phases for HGVs at AM peak, Inter peak and PM peak. The predicted reductions and increases in traffic flows, within and adjoining the AONB, are set out below. Only predicted increases above 5 HGVs are listed below.

Phase 1: 01/04/2029 to 31/07/2029

AM peak

B.1.2 There would be no reductions in traffic flows during the AM peak.

B.1.3 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs) (-10% to +10%)

ii. M20 Swanley to Maidstone (up to +25 HGVs along a short section) (+10% to +20% along a short section between junction 3 and junction 4)

iii. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (up to +25 HGVs) (-10% to +10%)

Inter peak

B.1.4 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. A289 between the A2 and the A226 (up to +25 HGVs (-10% to +10%)

PM peak

B.1.5 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. A289 between the A2 and the A226 westbound (reduction)

B.1.6 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. A289 between the A2 and the A226 eastbound (up to +25 HGVs) (-10% to +10%, over 40% on a very short section at the junction with the A226)

ii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs) (over 40%)

Phase 2: 01/09/2025 to 28/02/2026

AM peak

B.1.7 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (reduction)

B.1.8 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs) (-10% to +10%)

ii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

Inter peak

B.1.9 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A229 Maidstone to M2 (reduction)

B.1.10 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (up to +25 HGVs along a short section) (-10% and +10%)

ii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

PM peak

B.1.11 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs) (-10% and +10%)

ii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

Phase 3: 01/03/2026 to the 31/05/2026

AM peak

B.1.12 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (reduction)

B.1.13 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs, up to +50 HGVs westbound between Oxted and junction 5 with the M26) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% to +10%)

iii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

b. Adjoining AONB

i. A289 between the A2 and the A226 (up to +25 HGVs) (-10% to +10%)

Inter peak

B.1.14 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A229 Maidstone to M2 (reduction)

B.1.15 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (up to +25 HGVs along between junction 5 and junction 3) (-10% and +10%)

ii. M25 between Oxted and Swanley (up to +25 HGVs) (-10% and +10%)

iii. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (up to +25 HGVs) (-10% to +10%)

iv. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

PM peak

B.1.16 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and junction 3 with the M26

B.1.17 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs) (-10% and +10%)

ii. M26 between M25 and M20 (up to +25 HGVs) (-10% and +10%)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs) (over 40%)

iv. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

Phase 4: 01/06/2026 to 31/10/2026

AM peak

B.1.18 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (reduction)

B.1.19 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs, up to +50 HGVs westbound between Oxted and junction 5 with the M26) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% to +10%)

iii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

b. Adjoining AONB

i. A289 between the A2 and the A226 (up to +25 HGVs) (-10% to +10%)

Inter peak

B.1.20 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A229 Maidstone to M2 (reduction)

B.1.21 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (up to +25 HGVs) (-10% and +10%)

ii. M25 between Oxted and Swanley (up to +25 HGVs between junction 5 and junction 3) (-10% and +10%)

iii. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (up to +25 HGVs) (-10% to +10%)

iv. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

PM peak

B.1.22 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and junction 3 with the M26

B.1.23 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs) (-10% and +10%)

ii. M26 between M25 and M20 (up to +25 HGVs) (-10% and +10%)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs) (-10% and +10%)

iv. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (up to +25 HGVs) (-10% to +10%)

v. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

Phase 5: 01/11/2026 to 31/03/2027

AM peak

B.1.24 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and M2 junction 4 (reduction)

B.1.25 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs, up to +50 HGVs westbound between Oxted and junction 5 with the M26) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% to +10%)

iii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

Inter peak

B.1.26 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A229 between Maidstone and M2 (reduction)

B.1.27 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (up to +25 HGVs) (-10% and +10%)

ii. M25 between Oxted and Swanley (up to +25 HGVs between junction 4 and junction 3) (-10% and +10%)

iii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

PM peak

B.1.28 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and junction 3 with the M26 (reduction)

ii. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (reduction)

B.1.29 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs) (-10% and +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs at the M20 interchange at junction 3) (-10% and +10%)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs) (over 40%)

iv. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (up to +25 HGVs) (between 10% and 40%, over 40% along a short section south of the A2)

Phase 6: 01/04/2026 to 31/08/2027

AM peak

B.1.30 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and M2 junction 4 (reduction)

B.1.31 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs, up to +50 HGVs westbound between Oxted and junction 5 with the M26) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% to +10%)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs) (-10% and +10%)

iv. A226 between Gravesend and Rochester (up to +25 HGVs) (+20% to +40% between Thong Lane and Forge Lane)

Inter peak

B.1.32 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A229 Maidstone to M2 (reduction)

B.1.33 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (up to +50 HGVs) (+10% to +20%)

ii. M25 between Oxted and Swanley (up to +25 vehicle) (-10% and +10%)

iii. M26 between the M25 and M20 (up to +25 HGVs) (-10% and +10%)

iv. A228 between the M20 and M2 (Up to +25 HGVs) (20% to 40%)

v. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (Up to +25 HGVs) (up to 20% on a short section)

PM peak

B.1.34 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A229 between Maidstone and M2 (reduction)

B.1.35 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and junction 3 (up to +25 HGVs) (-10% and +10%)

ii. M25 between Oxted and Swanley (up to +25 HGVs) (-10% and +10%)

iii. M26 between the M25 and M20 (up to +25 HGVs) (-10% and +10%)

iv. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs) (-10% and +10%, up to 40% in the vicinity of the interchange)

v. A228 between the M20 and M2 (Up to +25 HGVs) (over 40%)

vi. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (Up to +25 HGVs) (-10% and +10%)

Phase 7: 01/09/2027 to 31/03/2028

AM peak

B.1.36 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and M2 junction 4 (reduction)

b. Adjoining AONB

i. High Street, Cobham (reduction)

B.1.37 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs, up to +50 HGVs westbound between Oxted and junction 5 with the M26) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% to +10%)

iii. A226 between Gravesend and Rochester (up to +25 HGVs) (+20% to +40% between Thong Lane and Forge Lane)

iv. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (Up to +25 HGVs) (up to 20% on a short section)

Inter peak

B.1.38 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A229 Maidstone to M2 (reduction)

iii. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (reduction in the vicinity of the interchange)

B.1.39 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (up to +50 HGVs) (+10% to +20%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% and +10%)

iii. A228 between the M20 and M2 (Up to +25 HGVs) (20% to 40%)

PM peak

B.1.40 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A229 between Maidstone and M2 (reduction)

B.1.41 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Maidstone (up to +25 HGVs) (-10% and +10%)

ii. M25 between Oxted and junction 4 (up to +25 HGVs) (-10% and +10%)

iii. M26 between the M25 and M20 (up to +25 HGVs) (-10% and +10%)

iv. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs) (-10% and +10%, up to 40% in the vicinity of the interchange)

v. A228 between the M20 and M2 (Up to +25 HGVs) (over 40%)

vi. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (up to 25 HGVs, reduction in the vicinity of the interchange) (-10% and +10%)

Phase 8: 01/04/2028 to 30/11/2028

AM peak

B.1.42 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

   i. M20 between Swanley and M2 junction 4 (reduction)

b. Adjoining AONB

   i. High Street, Cobham (reduction)

B.1.43 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

   i. M25 between Oxted and Swanley (up to +25 HGVs, up to +50 HGVs westbound between Oxted and junction 5 with the M26) (-10% to +10%)

   ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% to +10%)

   iii. A226 between Gravesend and Rochester (up to +25 HGVs) (+20% to +40% between Thong Lane and Forge Lane)

Inter peak

B.1.44 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

   i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

   ii. M25 between junction 4 and junction 3 (reduction)

   iii. A229 Maidstone to M2 (reduction)

   iv. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (reduction)

B.1.45 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

   i. M20 Swanley to Maidstone (up to +50 HGVs) (+10% to +20%)

   ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% and +10%)

   iii. A228 between the M20 and M2 (Up to +25 HGVs) (20% to 40% in places)

PM peak

B.1.46 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A229 between Maidstone and M2 (reduction)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (reduction in the vicinity of the interchange)

B.1.47 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Maidstone (up to +25 HGVs) (-10% and +10%)

ii. M25 between Oxted and junction 4 (up to +25 HGVs) (-10% and +10%)

iii. M26 between the M25 and M20 (up to +25 HGVs) (-10% and +10%)

iv. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs) (-10% and +10%, up to 40% east of the interchange)

v. A228 between the M20 and M2 (Up to +25 HGVs) (over 40%)

Phase 9: 01/12/2028 to 31/03/2029

AM peak

B.1.48 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and M2 junction 4 (reduction)

B.1.49 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% to +10%)

Inter peak

B.1.50 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 and between junction 5 and junction 7 (reduction)

ii. M25 between junction 5 and junction 3 (reduction)

iii. A229 Maidstone to M2 (reduction)

iv. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (reduction)

B.1.51 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (up to +50 HGVs) (+10% to +20%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% and +10%)

iii. A228 between the M20 and M2 (Up to +25 HGVs) (20% to 40% in places)

PM peak

B.1.52 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M25 southbound between junction 5 and junction 3

ii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (reduction in the vicinity of the interchange)

B.1.53 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 2 (up to +25 HGVs) (-10% and +10%)

ii. M20 between Swanley and Maidstone, (up to +25 HGVs between junction 3 and junction 4) (-10% and +10%)

iii. M25 between Oxted and junction 4 (up to +25 HGVs) (-10% and +10%)

iv. M26 between the M25 and M20 (up to +25 HGVs) (-10% and +10%)

v. A228 between the M20 and M2 (Up to +25 HGVs) (over 40%)

Phase 10: 01/04/2029 to 31/07/2029

AM peak

B.1.54 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and M2 junction 4 (reduction)

B.1.55 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and junction 4 (up to +25 HGVs) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% to +10%)

Inter peak

B.1.56 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 (reduction)

ii. A229 Maidstone to M2 (reduction)

B.1.57 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (up to +25 HGVs) (+10% to +20%)

PM peak

B.1.58 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M25 between Oxted and Swanley (up to +25 HGVs, excluding up to 5 HGVs between junction 5 to junction 4) (-10% and +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs in the vicinity of the M20 interchange) (-10% and +10%)

Phase 11: 01/08/2029 to 31/12/2030

B.1.59 There would be no reductions or increases in traffic flows during Phase 11 of construction.

Annex C Traffic effects – Opening year 2030

C.1.1 Figure 7.20.2 shows the predicted changes in traffic flows for PCUs for the opening year 2030, at AM peak, Inter peak and PM peak. The predicted reductions and increases in traffic flows, within and adjoining the AONB, are set out below. Only predicted increases above 50 PCUs are listed below.

AM peak

C.1.2 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M26 between the M20 and M25 (reduction)

ii. M20 between Maidstone and Swanley(reduction)

iii. A20 between Maidstone and Swanley (reduction)

iv. A227 between the M20 and Vigo Village (reduction)

v. The Street through Cobham (reduction)

vi. Halfpence Lane between Cobham and the A2 (reduction)

b. Adjoining AONB

i. A228 within Rochester (reduction)

ii. A226 westbound between Rochester and Gravesend (reduction)

C.1.3 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2/A2/A289 interchange and Dover (Over 1,001 PCUs in places) (20% to 40%)

ii. A229 northbound between Maidstone and M2 (Up to 1,000 PCUs) (20% to 40%)

iii. A2 westbound between Strood and M2 junction 1 (the M2/A2/A289 interchange) (Up to 500 PCUs, excluding the vicinity of junction 1 where a larger of increase of up to 1000 PCUs would occur) (Over 40% in places)

iv. M25 between Swanley and Oxted (Up to +250 PCUs, excluding the vicinity of junction 3 at Swanley where some larger increases of up to 1000 PCUs would occur) (-10% to +10)

v. A225 passing through Eynsford (short section only) (Up to +250 PCUs) (-10% to +10)

vi. Rochester Road between Aylesford and A229 (Up to +250 PCUs) (20% to 40%)

vii. Boxley Road / The Street / Pilgrim's Way / Lidsing Road passing through Boxley between the M20 and M2 (Up to +250 PCUs) (10% to 20%)

viii. Trottiscliffe Road / Taylors Lane / Addington Lane / Vigo Hill through Trottiscliffe between the A20 and A227 (Up to +250 PCUs) (10% to 40%)

b. Adjoining AONB

i. A228 between the M20 and M2 (Up to 500 PCUs) (Over 40% in places)

ii. A289 westbound between the A2 and the A228 (Up to +500 PCUs) (-10% to +10%)

iii. A229 between M2 junction 3 and the A230 (Up to +250 PCUs) (-10% to +10%)

iv. A249 between M2 junction 7 and A2 (Up to +250 PCUs) (-10% to +10%)

v. A20 between junction 3 with the M20 and the B2173, west of Swanley (Up to +250 PCUs) (-10% to +10%)

vi. A228 between M20 junction 4 and Kings Hill (Up to +250 PCUs) (-10% to +10%)

vii. A227 between Vigo village and the A2 (Up to +250 PCUs) (10% to 20%)

viii. A21 between the A224 and A223, south of Orpington (Up to +250 PCUs) (-10% to +10%)

ix. A226 eastbound between Rochester and Gravesend (Up to +250 PCUs) (10% to 20%)

x. Forstal Road between Aylesford and the A229 (Up to +250 PCUs) (Over 40%)

xi. Jeskyns Road west of Cobham (Up to +250 PCUs on a short section west of Cobham) (Over 40%)

Inter peak

C.1.4 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M26 between the M20 and M25 (reduction)

ii. M20 between Maidstone and Swanley (reduction, excluding a short section north of Maidstone between junction 5 and junction 6 eastbound where an increase of up to +250 PCUs would occur)

iii. Halfpence Lane between Cobham and the A2 (reduction)

iv. Brewers Road / The Ridgeway north of the A2 (reduction)

b. Adjoining AONB

i. M25 between junction 3 and junction 2, east of Swanley (reduction)

C.1.5 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2/A2/A289 interchange and Dover (Over 1,001 PCUs in places) (20% to 40%)

ii. A229 between Maidstone and M2 (Up to 1,000 PCUs) (20% to 40%)

iii. M25 between Swanley and Oxted (Up to +250 PCUs, excluding the vicinity of junction 3 at Swanley where a larger increase of up to 500 PCUs would occur) (-10% to +10)

iv. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (Up to 250 PCUs, excluding the vicinity of junction 1 where a larger increase of up to 500 PCUs would occur) (10% to 40%)

v. Rochester Road between Aylesford and A229 (Up to +250 PCUs) (20% to 40%)

b. Adjoining AONB

i. A228 between the M20 and M2 (Up to 500 PCUs) (Over 40% in places)

ii. A289 between the M2 and the A226 (Up to +250 PCUs) (-10% to +10)

iii. A227 between Vigo village and the A2 (Up to +250 PCUs on a section north of Vigo Village) (10% to 20%)

iv. A226 eastbound between Rochester and Gravesend (Up to +250 PCUs) (10% to 20%)

v. Jeskyns Road west of Cobham (Up to +250 PCUs on a short section west of Cobham) (Over 40%)

PM Peak

C.1.6 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M26 between the M20 and M25 (reduction)

ii. M20 between Maidstone and Swanley (reduction)

iii. A20 between Folkestone and the B2011 (reduction)

iv. A249 between M20 junction 7 and M2 junction 5 (reduction)

v. Green Lane / Camer Road / Sole Street between Cobham and Hook Green (reduction)

vi. The Street through Cobham (reduction)

vii. Halfpence Lane between Cobham and the A2 (reduction)

viii. Thong Lane between the A2 and the A226 (reduction)

b. Adjoining AONB

i. M25 between junction 2 and junction 3, east of Swanley (reduction)

ii. A2 between the Hever Court Road / Henhurst Road junction and the A227 (reduction)

C.1.7 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2/A2/A289 interchange and Dover (Up to +250 PCUs, excluding a section between junction 1 and junction 3 where some larger increases of over 1,001 PCUs would occur) (10% to 40% between junction 1 and junction 3)

ii. A229 between Maidstone and M2 (Up to 500 PCUs) (10% to 20%)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (Up to 500 PCUs) (20% to 40%)

iv. M25 between Swanley and Oxted (Up to +250 PCUs, excluding a short section in the vicinity of junction 3 at Swanley where some larger increases up to 500 PCUs would occur) (-10% to +10%)

v. Rochester Road between Aylesford and A229 (Up to +250 PCUs) (10% to 20%)

vi. Thong Lane between the A2 and the A226 (Up to +250 PCUs) (10% to 40%, over 40% on some short sections)

vii. Boxley Road / The Street / Pilgrim's Way / Lidsing Road passing through Boxley between the M20 and M2 (Up to +250 PCUs) (10% to 20%)

b. Adjoining AONB

i. A226 between Rochester and Gravesend (Up to +250 PCUs) (10% to 40% over 40% on one short section)

ii. A289 eastbound between the M2 and the A226 (Up to 250 PCUs) (10% to 40%)

iii. A228 between the M2 and the A289, south-east of Strood (Up to +250 PCUs) (-10% to +10%)

iv. A227 between Vigo village and the A2 (Up to +250 PCUs) (10% to 20%)

v. A228 between the M20 and M2 (Up to +250 PCUs) (10% to 20%)

vi. Jeskyns Road west of Cobham (Up to +250 PCUs) (Over 40%)

vii. Walderslade Road / a section of King George Road and Gorse Avenue / Walderslade Woods within Walderslade (Up to +250 PCUs) (10% to 40% in places)

Annex D Traffic effects – Opening year 2030 – HGVs

D.1.1 Figure 7.20.2 shows the predicted changes in traffic flows for HGVs for the opening year 2030, at AM peak, inter peak and PM peak. The predicted reductions and increases in traffic flows, within and adjoining the AONB, are set out below. Only predicted increases above 5 HGVs are listed below.

AM peak

D.1.2 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Maidstone (reduction, excluding a short section north of Maidstone)

ii. M25 westbound between Oxted and the M26 (reduction)

iii. M26 between the M20 and M25 (reduction)

iv. The Street Cobham (reduction)

b. Adjoining AONB

i. A21 between Sevenoaks and the M25 (reduction)

ii. Castle Way west of Leybourne (reduction)

D.1.3 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +100 HGVs in places, over 100 HGVs in the vicinity of M2/A2/A289 interchange) (-10% to +10%)

ii. M25 Oxted to Swanley (up to +25 HGVs, excluding the reduction between Oxted and the M26) (-10% to +10%)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs in places) (-10% to +10%, over 40% within Strood centre)

iv. A229 between Maidstone and the M2 (up to +100 HGVs in places, over 100 HGVs in the vicinity of M2 junction 3) (over 40% in places)

v. Rochester Road, between Aylesford and A229 (up to +50 HGVs) (over 40%)

vi. Chatham Road Kit's Coty (up to +50 HGVs) (-10% to +10%)

vii. Warren Road south of Blue Bell Hill (up to +25 HGVs in places) (Over 40%)

viii. Ford Lane / Taylors Lane / Vigo Hill through Trottiscliffe between the A20 and A227 (up to +25 HGVs) (-10% to +10%, over 40% along Ford Lane)

ix. Green Lane / Camer Road / Sole Street between Cobham and Hook Green (up to +25 HGVs) (-10% to +10%, over 40% along Green Lane and Sole Street)

b. Adjoining AONB)

i. A228 between the M20 and M2 (up to +100 HGVs) (-10% to +10%, over 40% in places)

ii. A289 between the A2 and the A226 (up to +25 HGVs) (-10% to +10%)

iii. Leybourne Way Larkfield (up to +25 HGVs) (up to +20%)

iv. Jeskyns Road Cobham (up to +25 HGVs) (Over 40%)

Inter peak

D.1.4 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Folkestone (reduction, excluding a short section north of Maidstone)

ii. M25 westbound between Oxted and the M26 (reduction)

iii. M26 between the M20 and M25 (reduction)

iv. A20 between Folkestone and Dover (reduction)

v. The Street Cobham (reduction)

b. Adjoining AONB

i. A21 between Sevenoaks and the M25 (reduction)

ii. B260 between Hook Green and New Barn (reduction)

iii. Castle Way west of Leybourne (reduction)

iv. Leybourne Way Larkfield (reduction)

D.1.5 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (+50 to over +100 HGVs between junction 3 and M2/A2/A289 interchange) (-10% to +10%)

ii. A2 between Canterbury and Dover (up to +25 HGVs) (-10% to +10%)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs in places) (-10% to +10%, over 40% within Strood centre)

iv. A229 between Maidstone and the M2 (up to +100 HGVs in places, over 100 HGVs in the vicinity of M2 junction 3) (-10% to +10%, up to over 40% on very short sections)

v. Rochester Road between Aylesford and A229 (up to +50 HGVs) (Over 40%)

vi. Chatham Road Kit's Coty (up to +50 HGVs) (-10% to +10%)

vii. Warren Road south of Blue Bell Hill (up to +25 HGVs in places) (-10% to +10%)

viii. Ford Lane / Taylors Lane / Vigo Hill through Trottiscliffe between the A20 and A227 (up to +25 HGVs) (-10% to +10%, over 40% along Ford Lane)

ix. Green Lane / Camer Road / Sole Street between Cobham and Hook Green (up to +25 HGVs) (over 40% along most of the route)

b. Adjoining AONB

i. A228 between the M20 and M2 (up to +100 HGVs) (-10% to +10%, over 40% in places)

ii. A289 between the A2 and the A226 (+25 HGVs in the vicinity of the A2) (-10% to +10%)

iii. Jeskyns Road Cobham (up to +25 HGVs) (Over 40%)

iv. Forstal Road Aylesford (up to +50 HGVs) (-10% to +10%)

PM peak

D.1.6 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB
   i. M20 between Swanley and Folkestone (reduction, excluding a short section north of Maidstone)
   ii. M25 westbound between Oxted and the M26 (reduction)
   iii. M26 between the M20 and M25 (reduction)
   iv. A20 between Folkestone and Dover (reduction)
   v. A249 between the M20 and M2 (reduction)

b. Adjoining AONB
   i. A289 between the A2 and A226 (reduction)
   ii. B260 between Hook Green and New Barn (reduction)
   iii. Castle Way west of Leybourne (reduction)

D.1.7 Increases in traffic flows during the PM are shown on the following roads:

a. AONB
   i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +100 HGVs in places, reduction between junction 5 and junction 7) (-10% to +10%)
   ii. A2 between Canterbury and Dover (up to +25 HGVs) (-10% to +10%)
   iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs) (-10% to +10%, over 40% within Strood centre)
   iv. A229 between Maidstone and the M2 (up to +100 HGVs in places) -10% to +10%, up to over 40% on very short sections)
   v. Rochester Road between Aylesford and A229 (up to +50 HGVs) (Over 40%)
   vi. Chatham Road Kit's Coty (up to +50 HGVs) (-10% to +10%)
   vii. Warren Road south of Blue Bell Hill (up to +25 HGVs in places) (-10% to +10%)

b. Adjoining AONB
   i. A228 between the M20 and M2 (up to +50 HGVs in places) (over 40% in places)
   ii. New Court Road between Peters Village and Burham (up to +25 HGVs) (over 40%)

Annex E Traffic effects – Design year 2045

E.1.1 Figure 7.20.2 shows the predicted changes in traffic flows for PCUs for the design year 2045, at AM peak, inter peak and PM peak. The predicted reductions and increases in traffic flows, within and adjoining the AONB, are set out below. Only predicted increases above 50 PCUs are listed below.

AM peak

E.1.2 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

   i. M20 between Maidstone and Swanley (reduction)

   ii. M26 between the M20 and M25 (reduction)

   iii. A20 between Swanley and Maidstone (intermittent reduction)

   iv. A21 between the junction with the A225 south of Sevenoaks and the M25 (reduction)

   v. A20 between Folkestone and junction with the B2011 (reduction)

   vi. The Street Cobham (reduction)

   vii. Halfpence Lane between Cobham and the A2 (reduction)

   viii. A227 between the M20 and Vigo Village (reduction)

b. Adjoining AONB

   i. A226 westbound between Rochester and Gravesend (reduction)

   ii. A228 within Rochester (reduction)

   iii. A289 eastbound between the A2 and the A226 (intermittent reduction)

   iv. Brewers Road / The Ridgeway / Peartree Lane, north of the A2 (reduction)

   v. Lower Higham Road / Lower Road between Gravesend, Chalk and Lower Higham (reduction)

   vi. B261 within Gravesend (reduction)

   vii. A section of Singelwell Road and Thong Lane, Gravesend (reduction)

E.1.3 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover (Over 1,001 PCUs in places) 10% to 40% in places

ii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (Up to 1,000 PCUs) (Over 40% during AM peak)

iii. A229 between Maidstone and M2 (Up to 1,000 PCUs) (10% to 40%, over 40% on some short sections)

iv. M25 between the M26 and Swanley (Up to +250 PCUs) (-10% to +10%)

v. A225 between Eynsford and the M20 (Up to +250 PCUs) (-10% to +10%)

vi. A249 between Detling and the M2 (Up to +250 PCUs) (-10% to +10%)

vii. A252 between Challock and Chilham (Up to +250 PCUs) (-10% to +10%)

viii. Rochester Road between Aylesford and A229 (Up to +250 PCUs) (20% to 40%)

ix. Lidsing Road between Boxley and the M2 (Up to +250 PCUs) (-10% to +10%)

x. Ford Lane between Trottiscliffe and the M20 (Up to +250 PCUs) (-10% to +10%)

b. Adjoining AONB

i. A228 between the M20 and M2 (Up to 500 PCUs) (10% to 40%, over 40% on some short sections)

ii. A289 between the A2 and the A226 (Up to +500 PCUs) (-10% to +10%)

iii. A227 between Vigo Village and the A2, outside the AONB (Up to +250 PCUs) (between 20% and 40% for a short section between Meopham and the A2)

iv. A249 between M2 junction 5 and the A2 (Up to +250 PCUs) (-10% to +10%)

v. A226 eastbound between Rochester and Gravesend (Up to +250 PCUs) (10% to 40%)

vi. M20 between junction 8, east of Bearsted and junction 9, Ashford (Up to +250 PCUs) (-10% to +10%)

vii. Forstal Road between Aylesford and the A229 (Up to +250 PCUs) (Over 40% during AM peak)

viii.)Jeskyns Road west of Cobham (Up to +250 PCUs) (Over 40% during AM peak)

ix. Lower Road / Swanley Lane / Highlands Hill / Ship Lane / London Road / Goldsel Road north and west of Swanley (Up to +250 PCUs) (-10% to +10%, excluding a section of Goldsel Road where ther would be an increase of betweeen 10% to 20%)

Inter peak

E.1.4 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M26 between the M20 and M25 (reduction)

ii. M20 between Maidstone and Swanley (reduction)

iii. Halfpence Lane between Cobham and the A2 (reduction)

b. Adjoining AONB

i. M25 between junction 3 and junction, west of Swanley, outside the AONB (reduction, excluding an increase along short sections of the motorway north of junction 3)

ii. A20 passing through Larkfield (reduction)

iii. Rochester Road between Aylesford and A229 (Up to +250 PCUs) (20% to 40%)

iv. Brewers Road north of the A2 (reduction)

v. A2 between the A227 and M2 junction 1 (the M2/A2/A289 interchange) (reduction, excluding a short section in the vicinity of the M2)

E.1.5 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2/A2/A289 interchange and Dover (Over 1,001 PCUs in places) (10% to 40% in places)

ii. A229 (northbound) between Maidstone and M2 (Up to 1,000 PCUs) (Over 40% during inter peak)

iii. M25 between Oxted and Swanley (Up to +500 PCUs) (-10% to +10%)

iv. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (Up to 250 PCUs) (20% to 40%)

v. Rochester Road between Aylesford and A229 (Up to +250 PCUs) (20% to 40%)

b. Adjoining AONB

i. M20 between junction 7, Weavering, and junction 9, Ashford (Up to +250 PCUs) (-10% to +10%)

ii. A20 west of Swanley between M25 junction 3 and the B2173 (Up to +250 PCUs) (-10% to +10%)

iii. A228 between the M20 and M2 (Up to 250 PCUs) (10% to 40%)

iv. A228 within Maidstone, (Up to 250 PCUs) (-10% to +10%)

v. A227 between Vigo village and the A2 (Up to +250 PCUs for a short section north of Vigo village) (10% to 20%)

vi. A289 between the A2 and the A226 (Up to +250 PCUs) (-10% to +10%)

vii. A249 between M2 junction 5 and the A2 (Up to +250 PCUs) (-10% to +10%)

viii. A226 eastbound between Rochester and Gravesend (Up to +250 PCUs) (10% to 20%)

ix. Jeskyns Road west of Cobham (Up to +250 PCUs) (Over 40%)

PM peak

E.1.6 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Maidstone and Swanley (reduction)

ii. M26 between the M20 and M25 (reduction)

iii. A20 between Maidstone and Swanley (intermittent reduction)

iv. A20 between the B2068, west of Folkestone and Dover (reduction)

v. A227 between the M20 and Vigo village (reduction)

vi. The Street through Cobham (reduction)

vii. Halfpence Lane between Cobham and the A2 (reduction)

viii. Green Lane / Camer Road / Sole Street between Cobham and Hook Green (reduction)

b. Adjoining AONB

i. A2 between the A227 and M2 junction 1 (the M2/A2/A289 interchange) (reduction, excluding a short section in the vicinity of the M2)

ii. Pilgrims Way near Eccles, west of the A229 (reduction)

E.1.7 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2/A2/A289 interchange and Dover (Over 1,001 PCUs in places) (10% to 20% and up to 40% on some short sections)

ii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (Up to 500 PCUs) (10% to 40%)

iii. M25 between Oxted and Swanley (Up to +500 PCUs) –(10% to +10%)

iv. A229 northbound between Maidstone and M2 (Up to 500 PCUs) (-10% to +10%)

v. A249 between M20 junction 7 and M2 junction 5 2 (Up to +250 PCUs) (-10% to +10%)

vi. Rochester Road between Aylesford and A229 (Up to +250 PCUs) (10% to 20%)

vii. Boxley Road / The Street / Pilgrim's Way / Lidsing Road passing through Boxley between the M20 and M2 (Up to +250 PCUs) (20% to 40% south of Boxley)

viii. Cobhambury Road / Warren Road / Bush Road between Cuxton and Cobham (Up to +250 PCUs) (-10% to +10%)

b. Adjoining AONB

i. M20 between junction 7, Maidstone and junction 9, Ashford (Up to +250 PCUs) (-10% to +10%)

ii. A20 west of Swanley between M25 junction 3 and the B2173 (Up to +250 PCUs) (-10% to +10%)

iii. A228 between the M20 and M2 (Up to 250 PCUs) (-10% to +10%)

iv. A227 between Vigo Village and the A2, outside the AONB (Up to +250 PCUs) (10% and 40%)

v. A249 between M2 junction 2 and the A2 (Up to +250 PCUs) (-10% to +10%)

vi. A229 within Walderslade (Up to 250 PCUs) (-10% to +10%)

vii. A226 eastbound between Rochester and Gravesend (Up to +250 PCUs) (10% to 40%)

viii. Brewers Road / The Ridgeway / Peartree Lane north of the A2 (Up to +250 PCUs) (Over 40% in places)

ix. Thong Lane between the A2 and the A226 (Up to +250 PCUs) (Over 40% in places)

x. Walderslade Road in Walderslade (Up to +250 PCUs) (-10% to +10%)

xi. Hempstead Road in Hempstead (Up to +250 PCUs) (-10% to +10%)

xii. Jeskyns Road west of Cobham (Up to +250 PCUs) (Over 40%)

Annex F Traffic effects – Design year 2045 – HGVs

F.1.1 Figure 7.20.2 shows the predicted changes in traffic flows for HGVs for the design year 2045, at AM peak, inter peak and PM peak. The predicted reductions and increases in traffic flows, within and adjoining the AONB, are set out below. Only predicted increases above 5 HGVs are listed below.

AM peak

F.1.2 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Maidstone (reduction

ii. M25 westbound between Oxted and the M26 (reduction)

iii. M26 between the M20 and M25 (reduction)

iv. The Street Cobham (reduction)

b. Adjoining AONB

i. A21 between Sevenoaks and the M25 (reduction)

ii. A289 between the A2 and A226 (reduction)

F.1.3 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +100 HGVs in places, over 100 HGVs in the vicinity of M2/A2/A289 interchange) (-10% to +10%)

ii. M25 Oxted to Swanley (up to +25 HGVs, excluding up to +50 HGVs along a short section in the vicinity of junction 3) (-10% to +10%)

iii. A2 between Strood and M2 junction 1 (the M2/A2/A289 interchange) (up to +25 HGVs in places) (-10% to +10%, over 40% within Strood centre)

iv. A229 between Maidstone and the M2 (up to +100 HGVs in places, over 100 HGVs in the vicinity of M2 junction 3) (over 40% in places)

v. Rochester Road between Aylesford and A229 (up to +25 HGVs) (over 40%)

vi. Chatham Road Kit's Coty (up to +100 HGVs) (-10% to +10%)

vii. Warren Road south of Blue Bell Hill (up to +25 HGVs in places) (Over 40%)

viii. Ford Lane / Taylors Lane / Vigo Hill through Trottiscliffe between the A20 and A227 (up to +25 HGVs) (-10% to +10%, over 40% along Ford Lane)

ix. Green Lane / Camer Road / Sole Street between Cobham and Hook Green (up to +25 HGVs) (-10% to +10%, over 40% along two sections)

b. Adjoining AONB

i. A228 between the M20 and M2 (up to +100 HGVs) (-10% to +10%, over 40% in places)

ii. Leybourne Way Larkfield (up to +25 HGVs) (up to +20%)

iii. Jeskyns Road Cobham (up to +25 HGVs) (Over 40%)

Inter peak

F.1.4 Reductions in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Maidstone (reduction, excluding a short section north of Maidstone)

ii. M25 westbound between Oxted and the M26 (reduction)

iii. M26 between the M20 and M25 (reduction)

b. Adjoining AONB

i. B260 between Hook Green and New Barn (reduction)

ii. Castle Way west of Leybourne (reduction)

iii. Leybourne Way Larkfield (reduction)

F.1.5 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (-10% to +10%, over 100 HGVs northbound between junction 3 and M2/A2/A289 interchange) (-10% to +10%)

ii. A229 between Maidstone and the M2 (over 100 HGVs northbound) (-10% to +10%, over 40% in the vicinity of M20 junction 6)

iii. Rochester Road between Aylesford and A229 (up to +50 HGVs) (Over 40%)

iv. Chatham Road Kit's Coty (up to +50 HGVs) (-10% to +10%)

v. The Street / Halfpence Lane Cobham (up to +25 HGVs) (Over 40%)

vi. Ford Lane / Taylors Lane / Vigo Hill through Trottiscliffe between the A20 and A227 (up to +25 HGVs) (-10% to +10%, over 40% along Ford Lane)

vii. Green Lane / Camer Road / Sole Street between Cobham and Hook Green (up to +25 HGVs) (over 40% along most of the route)

b. Adjoining AONB

i. A227 between the M20 and Meopham (up to +25 HGVs) (-10% to +10%, over 40% along a short section at the junction with the A20)

ii. A228 between the M20 and M2 (up to +100 HGVs) (-10% to +10%, over 40% in places)

iii. Jeskyns Road Cobham (up to +25 HGVs) (Over 40%)

iv. Forstal Road Aylesford (up to +50 HGVs) (-10% to +10%)

PM peak

F.1.6 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Bearsted (reduction, excluding a short section north of Maidstone)

ii. M25 westbound between Oxted and the M26, and between junction 4 and Swanley (reduction)

iii. M26 between the M20 and M25 (reduction)

iv. Eyhorne Street, Upper Street, Hollingbourne Hill, Primrose Lane between the M20 and M2

b. Adjoining AONB

i. A21 between Sevenoaks and the M25 (reduction)

ii. B260 between Hook Green and New Barn (reduction)

iii. Castle Way west of Leybourne (reduction)

F.1.7 Increases in traffic flows during the inter peak are shown on the following roads:

a. AONB

i. M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 (up to +100 HGVs in places, reduction between junction 3 and junction 5) (-10% to +10%)

ii. M25 westbound between Swanley and the M26 (up to +25 HGVs) (-10% to +10%)

iii. A229 between Maidstone and the M2 (up to +100 HGVs in places) -10% to +10%, up to over 40% in the vicinity of M20 junction 5)

iv. A249 between the M20 and M2 (up to +25 HGVs) (-10% to +10%)

v. Rochester Road between Aylesford and A229 (up to +50 HGVs) (Over 40%)

vi. Chatham Road Kit's Coty (up to +100 HGVs) (-10% to +10%)

b. Adjoining AONB

i. A227 between the M20 and Meopham (up to +25 HGVs) (-10% to +10%, over 40% at the junction with the A20)

ii. A228 between the M20 and M2 (up to +25 HGVs, +50 along a short section) (over 40% in places)

iii. New Court Road between Peters Village and Burham (up to +25 HGVs) (over 40%)

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