national highways

Lower Thames Crossing

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

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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

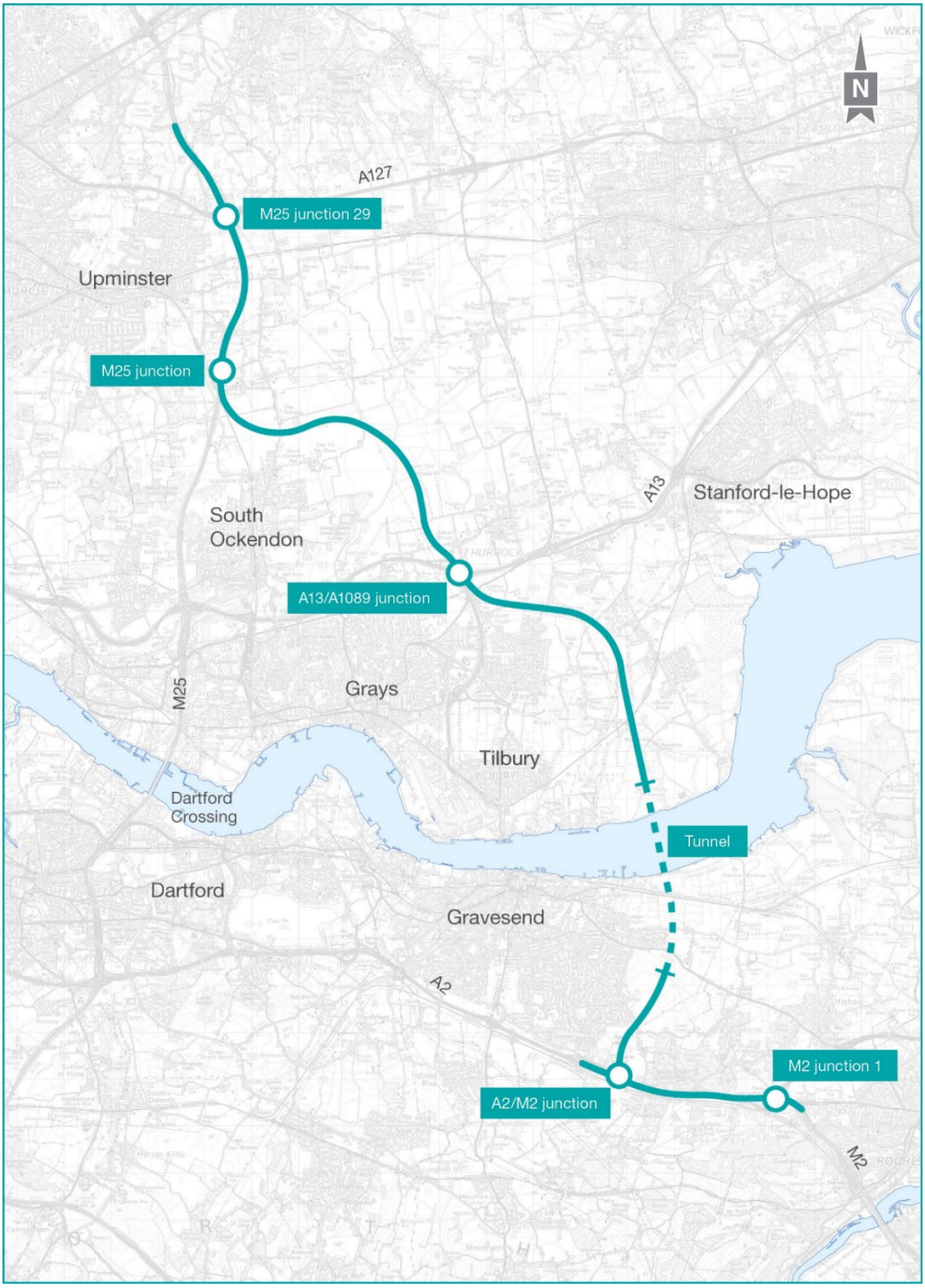
1.2.6 In common with most A-roads, the A122 would operate with no hard shoulder but would feature a 1m hard strip on either side of the carriageway. It would also feature technology including stopped vehicle and incident detection, lane control, variable speed limits and electronic signage and signalling. 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 in 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.

2.4.10 It is noted that the bandings of forecast change to traffic flows (in PCUs) and percentages shown on Figures 7.20.1 and 7.20.2, for example +51 to +250 and +20% to +40%, illustrate a worst-case prediction. This is because the actual forecast flow on a given link may be lower than the upper banding and often considerably less.

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	+501 and greater PCUs +51 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

2.4.11 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

2.4.12 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. This 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.

M20 between junction 3 and junction 4

Existing landscape context

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

3.3.12 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

3.3.13 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.

M25 between Oxted and Swanley

Existing landscape context

3.3.14 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.

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

3.3.16 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

3.3.17 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.

3.3.18 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.

A228 between the M20 and M2

Existing landscape context

3.3.19 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.

3.3.20 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.

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

Road corridor character

3.3.22 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.

A229 between the M20 and M2

Existing landscape context

3.3.23 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.

3.3.24 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 the M20 and M2 crossing the A229 at three locations.

Road corridor character

3.3.25 The A229 corridor between the M20 and 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.

A289 between the M2 and the B2000

Existing landscape context

3.3.26 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.

3.3.27 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

3.3.28 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

3.3.29 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.

3.3.30 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

3.3.31 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 / Addington Lane / The Street / Taylors Lane / Vigo Hill through Trottiscliffe between the A20 and A227

Existing landscape context

3.3.32 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.

3.3.33 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

3.3.34 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.

3.3.35 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

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

3.3.37 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

3.3.38 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

3.3.39 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

3.3.40 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

3.3.41 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

3.3.42 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.

3.3.43 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.

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.

The Street / Halfpence Lane, Cobham

Existing landscape context

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

3.3.65 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

3.3.66 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

3.3.67 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.

3.3.68 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

3.3.69 Between Hook Green and Cobham 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 / The Street / Taylors Lane / Vigo Hill through Trottiscliffe between the A20 and A227

Existing landscape context

3.3.70 To the north of the M26, 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.

3.3.71 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

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

3.3.73 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.

Court Road / New Court Road between Peters Village and Burham

Existing landscape context

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

3.3.75 The Medway Valley Walk follows Court Road / 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

3.3.76 Court Road / 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 Court Road / New Court Road.

Chatham Road at Kit's Coty

Existing landscape context

3.3.77 The single carriageway minor road is located within the AONB to the south of Kit's Coty (south of Blue Bell Hill).

3.3.78 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

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

Affected settlements

Affected settlements

3.3.80 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, passing though or adjacent to settlements. 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. Cobham

c. Shorne Ridgeway

d. Sole Street

e. Trottiscliffe

Boxley

Existing settlement context

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

Settlement character adjoining affected road

3.3.82 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.

Cobham

Existing settlement context

3.3.83 Cobham is located within the AONB and includes Cobham Village Conservation Area.

Settlement character

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

Shorne Ridgeway

Existing settlement context

3.3.85 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

3.3.86 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

3.3.87 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

3.3.88 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

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

Settlement character adjoining affected road

3.3.90 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.

3.4 Existing tranquillity

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

3.4.2 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.

3.4.3 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

4.1.1 Figures 7.20.1 and 7.20.2 show the predicted changes in traffic flows (Do-Minimum scenario against the Do-Something scenario) during construction and operation respectively.

Construction phase

4.1.2 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

4.1.3 Traffic effects during construction are listed in the following annexes at the end of this appendix.

a. Annex A: Traffic effects – Construction phase

b. Annex B: Traffic effects – Construction phase – HGVs

Operational phase

4.1.4 Figure 7.20.2 shows the predicted changes in traffic flows (Do-Minimum scenario against the Do-Something scenario) for the opening year 2030 and the design year 2045:

a. all traffic (expressed in PCUs) and

b. HGVs

4.1.5 The maps show the predicted changes for the AM peak, Inter peak and PM peak.

4.1.6 Traffic effects during the opening year and design year are listed in the following annexes at the end of this appendix.

a. Annex C: Traffic effects – Opening year 2030

b. Annex D: Traffic effects – Opening year 2030 – HGVs

c. Annex E: Traffic effects – Design year 2045

d. Annex F: 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/A122 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 the scoping matrix in Table 2.1, 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, the following roads have also been scoped out of the assessment of visual disturbance:

Main roads

a. M25 north of junction 3 (the A20 / M20 / M25 interchange)

b. A20 / A25 between A227 at Borough Green and the A228

c. A224 Court Road, east of Orpington

d. A226 between Gravesend and Rochester

e. A227 Wrotham Road between Hook Green and the A2

f. A228 between M20 junction 4 and Kings Hill

Minor roads

g. B258 between Crockenhill and Swanley centre

h. B260 between Hook Green and New Barn

i. Green Farm Lane, north of Shorne

j. Henhurst Road west of Cobham

k. Knowle Road, Wouldham

l. Lower Higham Road / Lower Road / Chalk Road

Urban areas

m. Roads within Gravesend urban area

n. Roads within Leybourne and Larkfield urban area, Aylesford

o. Roads within Swanley urban area

p. Roads within Strood urban area, Rochester

q. Roads within Wigmore urban area, Gillingham

r. Roads within Walderslade urban area, Chatham

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: 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.

Phase 1

4.3.8 Figure 7.20.1 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 (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 and The Ridgeway, Thong Lane between the A2 and Gravesend 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 250 PCUs, which would be an increase of over 40%, is predicted along Brewers Road and The Ridgeway during the AM and PM peaks. This would broadly equate to an approximate frequency of up to approximately four 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.

4.3.15 Given the degree of enclosure along Brewers Road and The Ridgeway, including housing along the southern edge of Shorne Ridgeway, 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 Thong Lane, between the A2 and Leander Drive, Gravesend, 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 and PM peaks.

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, northbound, 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 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 (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 and The Ridgeway, Thong Lane between the A2 and Leander Drive, Gravesend 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 and therefore there would also be no notable effects during these periods.

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 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 (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 and The Ridgeway, and Tanyard Hill, The Street and Forge Lane.

4.3.28 With the exception of Thong Lane and Jeskyns Road (below the scoping threshold), compared to phase 1 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 and therefore there would also be no notable effects during these periods.

Phase 4

4.3.30 Figure 7.20.1 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 (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 and The Ridgeway 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. The main exception is that Thong Lane has been scoped out of the assessment for phase 4 in the AM peak.

4.3.33 During the Inter peak and PM peak predicted increases in traffic flows would be no greater than the AM peak and therefore there would also be no notable effects during these periods.

Phase 5

4.3.34 Figure 7.20.1 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 (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 and The Ridgeway; Cobhambury Road, Warren Road and Bush Road westbound, 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 that there would also be increases along Peartree 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 and there would therefore also be no notable effects during these periods, 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

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

Predicted change in traffic flows

4.3.38 An increase of up to 250 PCUs is predicted along the minor road route which is an increase of up to 40% along Brewers Road and The Ridgeway however, this would only occur during the AM peak.

Visual effects

4.3.39 Given the degree of enclosure from housing and vegetation within the AONB west of Brewers Lane and The Ridgeway, there would be very limited views of traffic from within the AONB, therefore there would be no notable visual effects.

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

Predicted change in traffic flows

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

Visual effects

4.3.41 Given that the minor road route is within the AONB with predicted traffic increases of over 40% and 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.

Phase 6

4.3.42 Figure 7.20.1 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 (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 Swanley and Bearsted (junction 3 to junction 4), Cobhambury Road, Warren Road, Bush Road eastbound, Shorne Ifield Road westbound 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 the predicted increase in traffic flows along Cobhambury Road, Warren Road, Bush Road are similar to those during the AM peak and Inter peak in phase 5 with a notable visual disturbance likely. The main exception is the M20 between junction 3 and junction 4 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 and therefore there would also be no notable effects during these periods, with the exception of the following:

a. Brewers Road and The Ridgeway, northbound, 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.

b. Tanyard Hill, The Street and Forge Lane, northbound, where there would be an increase of up to 250 PCUs which is over 40% during the AM peak and Inter peak which would be similar to those predicted during the AM peak in 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

M20 between junction 3 and junction 4

Predicted change in traffic flows

4.3.47 The worst-case predicted change would occur in both directions between junction 3 and junction 4 where there would be an increase of up to 500 PCUs per hour which is an increase of over 40%.

Visual effects

4.3.48 Given the degree of enclosure along the M20 corridor between junction 3 and junction 4, it is concluded that there would be no notable visual effects from the AONB as a result of predicted changes to traffic flows.

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, westbound, which is an increased traffic flow of over 40%.

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 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 (that meet the scoping threshold criteria set out in Table 2.1) would occur on main roads and minor roads during the PM peak. These comprise the M20 between Swanley and Bearsted (junction 3 to junction 4), Cobhambury Road, Warren Road and Bush Road eastbound, Shorne Ifield Road westbound and Jeskyns Road.

4.3.53 The predicted increases in traffic flows along Cobhambury Road, Warren Road and Bush Road during phase 7 of construction would be similar to those predicted during the AM peak in phase 5, with a notable visual disturbance likely. The predicted increases in traffic flows along Shorne Ifield Road during phase 7 would be 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 6 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 and therefore there would also be no notable effects during these periods, with the exception of the following:

a. Brewers Road, The Ridgeway, northbound, where there would be an increase up to 250 PCUs which is an increase of over 40% during the AM peak and Inter peak. The predicted increases in traffic flows would be similar to those predicted during the AM and PM peaks in phase 1 and are not therefore repeated.

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

Phase 8

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

4.3.56 During phase 8, 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 Swanley and Bearsted (junction 3 to junction 4), Shorne Ifield Road westbound; Cobhambury Road, Warren Road and Bush Road eastbound and along Jeskyns Road.

4.3.57 The predicted increases in traffic flows along Shorne Ifield Road during phase 8 are similar to those predicted during phase 6 and are not therefore repeated. The predicted increases along Jeskyns Road during phase 8 would be similar to those predicted during the PM peak of phase 1 and are not therefore repeated. The predicted increases in traffic flows along Cobhambury Road, Warren Road and Bush Road during the PM peak in phase 8 would be similar to those predicted during the AM peak in phase 5 with a notable visual disturbance likely.

4.3.58 During the AM peak and Inter peak predicted increases in traffic flows would be no greater than the PM peak and therefore there would also be no notable effects during these periods, with the exception of the following:

a. Brewers Road and The Ridgeway, northbound, 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 during phase 8 are similar to those predicted during the phase 1 AM peak and are not therefore repeated.

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

Phase 9

4.3.59 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.60 During phase 9, 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 and along Jeskyns Road.

4.3.61 The predicted increases in traffic flows along Brewers Road and The Ridgeway and Jeskyns Road during phase 9 would be 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 9 of construction would be similar to those predicted during the AM peak and Inter peak of phase 5, with a notable visual disturbance likely.

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

PM peak, except where stated

Adjoining AONB

Peartree Lane

Predicted change in traffic flows

4.3.63 An increase of up to 250 PCUs is predicted which is an increase of up to 40% along Peartree Lane. However, this would only occur during the AM and PM peak.

Visual effects

4.3.64 Given the degree of enclosure from housing and vegetation south of Peartree Lane, there would be very limited views of traffic from within the AONB and there would therefore be no notable visual effects.

4.3.65 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. Tanyard Hill, The Street and Forge Lane, northbound, where there would be an increase of over 40% during the AM peak. The predicted increases in traffic flows during phase 9 would be similar to those predicted during the AM peak and Inter peak of phase 1 and are not therefore repeated.

Phase 10

4.3.66 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.67 During phase 10, 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 westbound; Tanyard Hill, The Street and Forge Lane northbound and along Jeskyns Road.

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

4.3.69 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.

4.3.70 With the exception of Cobhambury Road, Warren Road and Bush Road, during the Inter peak and PM peak predicted increases in traffic flows would be no greater than the AM peak, and therefore there would also be no notable effects during these periods.

Phase 11

4.3.71 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.72 During phase 11, 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, and The Street and Forge Lane.

4.3.73 The predicted increases in traffic flows along The Street and Forge Lane during phase 11 of construction are similar to those predicted during phase 1 and are not therefore repeated, noting that there would be no increases in traffic flows along Tanyard Hill during the AM peak in phase 11.

4.3.74 The predicted increases in traffic flows along Cobhambury Road, Warren Road and Bush Road westbound during phase 11 would be similar to those predicted during phase 5, with a notable visual disturbance likely.

4.3.75 During the Inter peak and PM peak predicted increases in traffic flows would be no greater than the AM peak, and therefore there would also be no notable effects during these periods.

Construction phase – HGVs

4.3.76 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 B: Traffic effects – Construction phase – HGVs.

The predicted changes vary according to 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 1, 2, 3, 4, 5, 10 and 11, and during the PM peak for phases 6, 7, 8 and 9. However, during phases 6, 7, 8, 9, 10 and 11, no roads fall within the scoping threshold criteria for this assessment during the AM peak, Inter peak or PM peak.

Phase 1

4.3.77 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.78 During phase 1, no roads fall within the scoping threshold criteria for this assessment during the AM peak, Inter peak or PM peak.

Phase 2

4.3.79 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.80 During phase 2, 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. The highest increase comprises a short section of Brewers Road south of the A2.

4.3.81 During the Inter peak and PM peak predicted increases in traffic flows likely to affect views from the AONB would be no greater than the AM peak. 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

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

Visual effects

4.3.83 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.

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

Phase 3

4.3.85 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.86 During phase 3, 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. The highest predicted increase would occur on a short section of Brewers Road southbound south of the A2.

4.3.87 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.

4.3.88 During the Inter peak and PM peak predicted increases in traffic flows likely to affect views from the AONB would be no greater than the AM peak and therefore there would also be no notable effects during these periods.

Phase 4

4.3.89 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.90 During phase 4 of construction, 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. The highest increase comprises a short section of Brewers Road south of the A2.

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

4.3.92 During the Inter peak and PM peak predicted increases in traffic flows likely to affect views from the AONB would be no greater than the AM peak and therefore there would also be no notable effects during these periods.

Phase 5

4.3.93 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.94 During phase 5, 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.

The highest predicted increase would occur on a short section of Brewers Road south of the A2.

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

4.3.96 During the Inter peak and PM peak predicted increases in traffic flows likely to affect views from the AONB would be no greater than the AM peak and therefore there would also be no notable effects during these periods.

Phase 6

4.3.97 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

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

Phase 7

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

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

Phase 8

4.3.101 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

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

Phase 9

4.3.103 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

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

Phase 10

4.3.105 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

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

Phase 11

4.3.107 Figure 7.20.1 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

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

Construction phase – settlements

4.3.109 The main potential for visual disturbance arising from predicted increases in PCU traffic flows through settlements during construction is set out below. Shorne Ridgeway is the only settlement where predicted increases in traffic flows fall within the scoping threshold criteria. Predicted increases in HGV traffic flows through settlements during all phases of construction are below the scoping threshold criteria for assessment.

Shorne Ridgeway

Predicted change in effects

4.3.110 Increases of between 51 and 250 PCUs, which are increases of 40% or over, are predicted along a short section of The Ridgeway eastbound through Shorne Ridgeway during the AM peak in phases 1 to 8 and phase 10, during the Inter peak in phase 7, and during the PM peak in phases 1 and 9. An increase of up to 250 PCUs eastbound and up to 500 PCUs westbound is predicted along The Ridgeway during the AM peak in phase 9.

4.3.111 The increase during the AM peak from phases 6 to 8 and during the Inter peak in phase 7 would occur eastbound along The Ridgeway. By contrast, there would be a reduction in traffic flow of below -40% westbound along The Ridgeway during the AM peak, Inter peak and PM peak from phase 6 to phase 8. There would be no increases above the scoping threshold during phase 11. In addition, there would be no notable increase or decrease in HGV flows during the construction phases in the AM peak, Inter peak or PM peak.

Visual effects

4.3.112 Given the predicted traffic increases of 40% or over during one or more periods in most phases, notable visual effects could be experienced during the AM peak, Inter peak or PM peak from properties and public spaces adjoining The Ridgeway due to predicted changes to traffic flows through Shorne Ridgeway. However, the effects would to some extent be balanced by corresponding reductions in traffic flows, including the reduction in westbound traffic during phases 6 and 8. Notable effects are not likely to be experienced during phase 11 as traffic increases would be below the scoping threshold.

Opening year 2030

4.3.113 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 C: Traffic effects – Opening year 2030.

AM peak

4.3.114 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.115 The highest predicted increases in traffic flows along 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 westbound between the M2 and the A226, along the A229 northbound between the M20 and M2 and along the M2

between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 and between junction 4 and junction 5 of the M2.

4.3.116 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 the A229, along Trottiscliffe Road, Addington Lane, The Street, Taylors Lane, and Vigo Hill, along Forstal Road between Aylesford and the A229 and along Jeskyns Road west of Cobham.

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

Main Roads

AONBM2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Predicted change in traffic flows

4.3.118 The greatest predicted change along the M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover would occur between M2 junction 3 and M2 junction 1. 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 500 PCUs. On the remaining sections of the M2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.119 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 the M20 and M2

Predicted change in traffic flows

4.3.120 The worst-case predicted change along the A229 between the M20 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

4.3.121 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 the M20 and M2.

Adjoining AONB

A228 between the M20 and M2

Predicted change in traffic flows

4.3.122 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

4.3.123 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

4.3.124 The greatest predicted change along 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 along 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

4.3.125 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.

Minor roads

4.3.126 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 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

4.3.127 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

4.3.128 Given the degree of enclosure of Rochester Road 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 / Addington Lane / The Street / Taylors Lane / Vigo Hill between the A20 and A227

Predicted change in traffic flows

4.3.129 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

4.3.130 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

4.3.131 Along Forstal Road westbound 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

4.3.132 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

4.3.133 The greatest predicted change along Jeskyns Road would occur along a short section between The Street in Cobham and Henhurst Road eastbound 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 westbound.

Visual effects

4.3.134 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

4.3.135 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.136 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 A228 between the M20 and M2, along the A229 northbound between the M20 and M2 and between M2 junction 1 and junction 3.

4.3.137 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 the A229 and along the Jeskyns Road west of Cobham.

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

Main Roads

AONBM2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Predicted change in traffic flows

4.3.139 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 1,000 PCUs along the eastbound carriageway.

Visual effects

4.3.140 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 the M20 and M2

Predicted change in traffic flows

4.3.141 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

4.3.142 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 the M20 and M2.

Adjoining AONB

A228 between the M20 and M2

Predicted change in traffic flows

4.3.143 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

4.3.144 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.

Minor roads

4.3.145 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

4.3.146 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

4.3.147 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

4.3.148 The greatest predicted change along Jeskyns Road would occur along short section between The Street in Cobham, 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

4.3.149 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

4.3.150 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.151 The highest predicted increases in traffic flows on main roads (that meet the scoping threshold criteria set out in Table 2.1) would occur from M2 junction 1 (the M2/A2/A289 interchange) to junction 4 and along the A229 between the M20 and M2.

4.3.152 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 Boxley Road, The Street, Pilgrim's Way and Lidsing Road, Cobhambury Road, Warren Road and Bush Road, along Jeskyns Road, along a short section of Thong Lane between the A2 and Leander Drive and along Peartree Lane North of Tanyard Hill.

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

Main roads

AONBM2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Predicted change in traffic flows

4.3.154 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.

4.3.155 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

4.3.156 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 the M20 and M2

Predicted change in traffic flows

4.3.157 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

4.3.158 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 the M20 and M2.

Minor roads

4.3.159 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

4.3.160 The greatest predicted change would occur northbound along Thong Lane between the A2 and Leander Drive 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 the same section of Thong Lane during the PM peak.

Visual effects

4.3.161 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.

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

Predicted change in traffic flows

4.3.162 The greatest predicted change would occur along Lidsing Road southbound, north of Harp Farm Road, where there would be an increase of up to 250 PCUs per hour which is an increase in traffic flow of over 40%. The predicted change along Boxley Road to the south of Boxley and along The Street within Boxley would be up to 250 PCUs which is an increase of between 20% and 40%.

Visual effects

4.3.163 Given that the minor road route is within the AONB with predicted traffic increases of over 40% during the PM peak, notable visual effects could be experienced from locations along footpaths and nearby other minor roads within the AONB. Visual effects could result from views of increased traffic flows along open sections of the Boxley Road / The Street / Pilgrim's Way / Lidsing Road route. However, such effects would be very localised and only occur within a limited part of the day.

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

Predicted change in traffic flows

4.3.164 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

4.3.165 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.

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

Predicted change in traffic flows

4.3.166 An increase of up to 250 PCUs is predicted along Cobhambury Road, Warren Road and Bush Road, eastbound, which is an increased traffic flow of over 40% between Batt's Road and Luddesdown Road.

Visual effects

4.3.167 Given that the minor road route is within the AONB where there are predicted traffic increases of over 40% and views 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 the predicted changes to traffic flows.

Adjoining AONB

Jeskyns Road west of Cobham

Predicted change in traffic flows

4.3.168 The greatest predicted change along Jeskyns Road would occur southbound 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%.

Visual effects

4.3.169 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

4.3.170 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 D: Traffic effects – Opening year 2030 - HGVs.

AM peak

4.3.171 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.172 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 the M20 and M2.

4.3.173 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, along Warren Road south of Blue Bell Hill, along Green Lane, Camer Road and Sole Street, along Ford Lane, The Street, Taylors Lane and Vigo Hill and along Jeskyns Road.

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

4.3.175 The predicted increases in HGV flows during the 2030 PM peak are similar to those predicted during the AM peak in 2030, except along Chatham Road at Kit's Coty where HGV flows are similar to the Inter peak in 2030. The main exception is along Court Road/ New Court Road, for which an assessment is included below.

Main roads

AONBM2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover

Predicted change in traffic flows

4.3.176 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 HGVs 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.

4.3.177 On the remaining sections of the M2 between junction 1 and junction 3, there would be an increase in traffic flow of up to 50 HGVs per hour.

Visual effects

4.3.178 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 the M20 and M2

Predicted change in traffic flows

4.3.179 The greatest predicted change along the A229 would occur along the northbound carriageway 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.

4.3.180 There would be an increase in traffic flows of up to 25 HGVs per hour along the southbound carriageway.

Visual effects

4.3.181 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

4.3.182 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

4.3.183 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.

Minor roads

4.3.184 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

4.3.185 The predicted change along Rochester Road would be an increase of up to 25 HGVs northbound and 50 HGVs southbound. This is an increase in traffic flow of over 40%.

Visual effects

4.3.186 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

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

Visual effects

4.3.188 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 / The Street / Taylors Lane / Vigo Hill between the A20 and A227

Predicted change in traffic flows

4.3.189 The greatest predicted change would occur along Ford Lane, The Street, Taylors Lane and Vigo Hill southbound where there would be an increase of up to 25 HGVs per hour which is an increased traffic flow of over 40%.

Visual effects

4.3.190 Given the degree of enclosure along much of the route from adjacent woodland, tall hedgerows and adjoining residential buildings in Trottiscliffe, it is concluded that there are not likely to be any notable visual effects from the AONB.

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

Predicted change in traffic flows

4.3.191 The greatest predicted change would occur along Green Lane, Camer Road and Sole Street, southbound, where there would be an increase of up to 25 HGVs per hour which is an increase in traffic flow of over 40%.

Visual effects

4.3.192 Given the degree of enclosure along much of the route from adjacent woodlands within Camer Park Country Park, adjoining orchards, tall hedgerows and residential buildings in Hook Green and residential buildings adjoining the AONB boundary in Sole Street, it is concluded that there are not likely to be any notable visual effects from the AONB.

Adjoining AONB

Jeskyns Road west of Cobham

Predicted change in traffic flows

4.3.193 The greatest predicted change along Jeskyns Road southbound 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 westbound.

Visual effects

4.3.194 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

4.3.195 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.196 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 between the M20 and M2.

4.3.197 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, along Chatham Road at Kit's Coty, along Green Lane, Camer Road and Sole Street, along Ford Lane, The Street, Taylors Lane and Vigo Hill, and along Jeskyns Road.

4.3.198 The predicted increases in HGV flows during the Inter peak are similar to those predicted during the AM peak in 2030 and are not therefore repeated. The main exception is along the M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and Dover and along Chatham Road at Kit's Coty where there would be a greater increase than the AM peak and for which an assessment is set out below.

Main roads

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

Predicted change in traffic flows

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

4.3.200 On the remaining sections of the M2 between junction 3 and junction 7 and along the A2 Canterbury to Dover there would be an increase in westbound traffic flows of up to 25 HGVs per hour.

Visual effects

4.3.201 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.

Minor roads

Chatham Road at Kit's Coty

Predicted change in traffic flows

4.3.202 An increase of up to 50 HGVs per hour is predicted along Chatham Road which is an increase in traffic flow of over 40%.

Visual effects

4.3.203 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.

PM peak

4.3.204 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.205 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 between Rochester Road and the M2.

4.3.206 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, along Chatham Road at Kit's Coty and along Court Road/ New Court Road between Peters Village and Burham.

4.3.207 The predicted increases in HGV flows during the 2030 PM peak are similar to those predicted during the AM peak in 2030, except along Chatham Road at Kit's Coty where HGV flows are similar to the Inter peak in 2030, and are not therefore repeated.

4.3.208 The main exception is along Green Lane / Camer Road / Sole Street, Ford Lane / The Street / Taylors Lane / Vigo Hill, Jeskyns Road which are not impacted during the PM peak and along Court Road / New Court Road, for which an assessment is set out below.

Minor roads

AONB Court Road / New Court Road between Peters Village and Burham

Predicted change in traffic flows

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

Visual effects

4.3.210 Given the combination of 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

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

Boxley

Predicted change in effects

4.3.212 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 PM peak. There would be no increases above the scoping threshold during the AM peak and Inter peak. In addition, there would be no notable increase or decrease in HGV flows during the AM peak, Inter peak and PM peak.

Visual effects

4.3.213 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 through Boxley. In particular, along the west part of The Street where there is a typically more open aspect to adjoining properties. However, there would be no significant change in PCU traffic flows during the AM peak and no notable increase or decrease during the Inter peak.

Shorne Ridgeway

Predicted change in effects

4.3.214 An increase of up to 250 PCUs, which is an increase of up to 40%, is predicted along The Ridgeway through Shorne Ridgeway during the 2045 PM peak. There would be no increases in PCUs above the scoping threshold during the AM peak and Inter peak. In addition, there would be no notable increase or decrease in HGV traffic flows during the AM peak, Inter peak and PM peak.

Visual effects

4.3.215 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 due to predicted changes to traffic flows through Shorne Ridgeway. However, reductions in overall traffic flows (PCUs) during the AM peak and Inter peak would be likely to lead to a corresponding reduction in visual disturbance.

Sole Street

Predicted change in effects

4.3.216 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. There would be no increases above the scoping threshold during the PM peak. In addition, there would be no notable increase or decrease in PCU flows during the AM peak and Inter peak and a reduction in traffic flows during the PM peak.

Visual effects

4.3.217 Given the predicted HGV 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 through Sole Street. However, there would be no notable increase or decrease during the PM peak.

Trottiscliffe

Predicted change in effects

4.3.218 An increase of up to 250 PCUs, which is an increased traffic flow of up to 40%, is predicted along Addington Lane through the southern part of Trottiscliffe during the AM peak. There would be no increases above the scoping threshold during the Inter peak and PM peak.

4.3.219 An increase of up to 25 HGVs, which is an increased traffic flow of over 40%, is predicted along Ford Lane, The Street and Taylors Lane through Trottiscliffe during the AM peak and along Ford Lane during the Inter peak. There would be no increases above the scoping threshold during the PM peak.

Visual effects

4.3.220 Given the predicted increases in PCUs of up to 40% during the AM peak along Addington Lane, notable visual effects could be experienced from adjoining properties and public spaces as a result of predicted changes to traffic flows through Trottiscliffe. In particular, along the east part of Addington Lane where there is a typically more open aspect to adjoining properties. However, there would be no notable increase or decrease in traffic flows during the Inter peak and PM peak.

4.3.221 Given the predicted increase in HGVs of over 40% along Ford Lane during the AM and Inter peak and the similar increase along The Street and Taylors Lane during the AM peak and Inter peak, notable visual effects could be experienced from adjoining properties and public spaces as a result of predicted changes to traffic flows through Trottiscliffe. However, there would be no notable increase or decrease in traffic flows during the PM peak.

Design year 2045

4.3.222 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 E: Traffic effects – Design year 2045.

AM peak

4.3.223 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.224 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 5, the A228 between the M20 and M2, along the A289 between the A2 and the A226 and along the A229 between the M20 and the M2.

4.3.225 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.

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

Main roads

AONB

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

Predicted change in traffic flows

4.3.227 The greatest predicted change along the M2 would occur along 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.

4.3.228 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

4.3.229 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.

A229 between the M20 and M2

Predicted change in traffic flows

4.3.230 The greatest predicted change along the A229 between the M20 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

4.3.231 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 the M20 and M2.

Adjoining AONB

A228 between the M20 and M2

Predicted change in traffic flows

4.3.232 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.

4.3.233 On the remaining sections of the A228, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.234 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

4.3.235 The greatest predicted change along 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.

4.3.236 On the eastbound carriageway of the A289, there would be a reduction in traffic flows.

Visual effects

4.3.237 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.

Minor roads

4.3.238 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 250 PCUs is also set out below for the AM peak.

AONB

Rochester Road between Aylesford and A229

Predicted change in traffic flows

4.3.239 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

4.3.240 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

4.3.241 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

4.3.242 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

4.3.243 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

4.3.244 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

4.3.245 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.246 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 M25 between junction 3 and junction 4, along the A229 between the M20 and M2, and along the M2 between junction 1 and junction 3 and between junction 4 and junction 5.

4.3.247 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.

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

Main roads

AONB

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

Predicted change in traffic flows

4.3.249 Traffic flows on the westbound and eastbound carriageways of the M2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 7 are predicted to be similar to those for the AM peak with the exception of junction 3 to junction 4 where the predicted Inter peak flows are only up to +250 PCUs.

4.3.250 On all other sections of the M2 between M2 junction 7 (the M2/A2 interchange) and Dover, there would be a decrease in traffic flows compared to the AM peak.

Visual effects

4.3.251 Given the overall reduction in traffic flows along sections of the M2 corridor 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 the M20 and M2

Predicted change in traffic flows

4.3.252 The greatest predicted change along the A229 between the M20 and 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 along the northbound carriageway between the M20 and Blue Bell Hill.

4.3.253 On the remaining sections of the A229 between the M20 and M2, there would be an increase in traffic flows of up to 250 PCUs.

Visual effects

4.3.254 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 the M20 and M2.

M25 between Oxted and Swanley

Predicted change in traffic flows

4.3.255 The greatest predicted change on the M25 between Oxted and Swanley would be between junction 3 and junction 4 northbound where there would be an increase in traffic flows of up to 500 PCUs.

4.3.256 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

4.3.257 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.

Minor roads

4.3.258 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

4.3.259 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

4.3.260 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

4.3.261 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

4.3.262 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

4.3.263 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.264 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 junction 3 and junction 4, along the A229 between the M20 and M2, and along the M2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 5.

4.3.265 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 Boxley Road and The Street south of Boxley, along Brewers Road, The Ridgeway and

Peartree Lane, along Cobhambury Road, Warren Road and Bush Road, along Thong Lane, and along Jeskyns Road west of Cobham.

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

Main roads

AONB

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

Predicted change in traffic flows

4.3.267 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.

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

Visual effects

4.3.269 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.

M25 between Oxted and Swanley

Predicted change in traffic flows

4.3.270 The greatest predicted change on the M25 would be on the westbound carriageway between junction 3 and junction 4 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

4.3.271 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.

A229 between the M20 and M2

Predicted change in traffic flows

4.3.272 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

4.3.273 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.

Minor roads

4.3.274 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

4.3.275 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

4.3.276 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 / Peartree Lane, north of the A2

Predicted change in traffic flows

4.3.277 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

4.3.278 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.

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

Predicted change in traffic flows

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

Visual effects

4.3.280 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.

Adjoining AONB

Thong Lane

Predicted change in traffic flows

4.3.281 The greatest predicted change along Thong Lane between the A2 and the A226 would occur along the northbound carriageway where there would be an increase of up to 250 PCUs per hour which is an increase in traffic flow of over 40%.

Visual effects

4.3.282 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

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

Visual effects

4.3.284 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

4.3.285 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 F: Traffic effects – Design year 2045 – HGVs.

AM peak

4.3.286 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.287 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 between the M20 and M2 in the vicinity of M2 junction 3.

4.3.288 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, along Warren Road south of Blue Bell Hill, along Ford Lane, The Street,

Taylors Lane, Vigo Hill, along Green Lane, Camer Road and Sole Street and along Jeskyns Road.

4.3.289 The predicted increases in HGV flows during the AM peak in 2045 are similar to those predicted during the 2030 AM peak.

Inter peak

4.3.290 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.291 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 between the M20 and the M2.

4.3.292 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, along Chatham Road at Kit's Coty, along The Street and Halfpence Lane, Cobham, along Ford Lane, The Street and Taylors Lane, along Green Lane, Camer Road and Sole Street and along Jeskyns Road.

4.3.293 The predicted increases in HGV flows during the Inter peak in 2045 are similar to those predicted during the AM peak in 2030 and are not therefore repeated, with the exception of the M2/A2 between M2 junction 1 (the M2/A2/A289 interchange) and junction 3 and along Chatham Road at Kit's Coty where the predicted change is similar to the Inter peak in 2030.

4.3.294 The other main exception is along The Street and Halfpence Lane, Cobham for which an assessment is set out below.

Minor roads

AONB

The Street / Halfpence Lane, Cobham

4.3.295 An increase of up to 25 HGVs which is an increased traffic flow of over 40% is predicted along The Street and Halfpence Lane during the Inter peak.

Visual effects

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

PM peak

4.3.297 Figure 7.20.2 shows roads affected by an increase in traffic within the AONB and roads up to 3km beyond the AONB.

4.3.298 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 the M2 and Rochester Road.

4.3.299 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, along Chatham Road at Kit's Coty and along Court Road / New Court Road.

4.3.300 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 exception is Court Road / New Court Road, for which predicted increases in HGV flows during 2045 would be similar to those predicted during the 2030 PM peak and the A228 for which predicted increases in HGV flows would be up to +25 HGVs in the 2045 PM peak.

Design year 2045 – settlements

4.3.301 The main potential for visual disturbance arising from predicted increases in traffic flows through the settlements of Boxley, Shorne Ridgeway, Sole Street and Trottiscliffe 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 Cobham as follows.

Cobham

Predicted change in effects

4.3.302 An increase of up to 25 HGVs, which is an increase of over 40% is predicted along The Street through Cobham during the 2045 Inter peak. There would be no increases above the scoping threshold during the AM peak and PM peak. In addition, there would be a reduction in PCU flows during the AM peak and PM peak and no notable change during the Inter peak.

Visual effects

4.3.303 Given the predicted HGV increases of up to 40%, notable visual effects could be experienced during the Inter peak from adjoining properties and public spaces as a result of predicted changes to traffic flows through Cobham, in particular along the east part of The Street where there is a typically more open aspect to adjoining properties. However, there would be a reduction in overall traffic flow (PCUs) during the AM peak and no significant change during the PM peak.

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.

4.4.2 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.

4.4.3 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

4.4.4 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.

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

4.4.6 In settlements within the AONB, there is potential for some visual disturbance in Shorne Ridgeway, adjoining The Ridgeway, during phases 1 to 10 of construction.

4.4.7 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, Addington Lane, The Street, Taylors Lane and Vigo Hill, along Boxley Road, The Street, Pilgrim's Way and Lidsing Road between the M20 and M2, and along Cobhambury Road, Warren Road and Bush Road between Cuxton and Cobham.

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

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

4.4.10 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 and Cobhambury Road, Warren Road and Bush Road between Cuxton and Cobham.

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

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

Conclusions

4.4.13 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

4.4.14 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

4.4.15 During operation, 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 during the opening year in 2030 and the design year in 2045.

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, Addington Lane, The Street, Taylors 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 The potential for notable visual disturbance has also been identified from increased traffic on the minor road route between Cobham and Cuxton, comprising Cobhambury Road, Warren Road and Bush Road during the PM peak. Affected views would be similar to those described above for the construction phase.

6.3.8 The potential for notable visual disturbance has also 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 during the PM peak affecting views from the surrounding AONB. Key visual receptor

locations include the North Downs Way and Pilgrim's Way, and a network of local footpaths, which cross or connect the minor road route.

6.3.9 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. Affected views would be similar to those described above for the opening year.

6.3.10 The potential for notable visual disturbance has also been identified from increased traffic on the minor road route between Cobham and Cuxton, comprising Cobhambury Road, Warren Road and Bush Road during the PM peak. Affected views would be similar to those described above for the construction phase.

Affected settlements

6.3.11 During construction, the potential for notable visual disturbance has been identified from increased traffic through Shorne Ridgeway during phases 1 to 10 of construction.

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

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 1 to 10 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, Addington Lane, The Street, Taylors Lane and Vigo Hill between the A20 and A227 and along Cobhambury Road, Warren Road and Bush Road between Cuxton and Cobham due to visual disturbance

b. Boxley, 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 routes and settlements:

a. Boxley Road, The Street, Pilgrim's Way and Lidsing Road between the M20 and M2 motorways and along Cobhambury Road, Warren Road and Bush Road between Cuxton and Cobham due to visual disturbance

b. Boxley, Cobham, Shorne Ridgeway, Sole Street and Trottiscliffe, 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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The Campaign to Protect Rural England (2007). Tranquillity Map of England. Accessed June 2022. https://www.cpre.org.uk/resources/tranquility-map-england/

Landscape Institute (March 2017). Technical Information Note 01/2017 (Revised) Tranquillity – An overview.

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.

Annexes

Annex A Traffic effects – Construction phase

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. However, only predicted increases above 50 PCUs are listed below and the list excludes roads scoped out using the additional scoping criteria set out in paragraph 4.3.4.

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 (up to +250 PCUs) (over 40% along Brewers Road and The Ridgeway)

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

b. Adjoining AONB

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

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

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)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

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 2) (-10% to +10%)

ii. Brewers Road / The Ridgeway (up to +250 PCUs and up to +500 PCUs along a short section between Park Pale and Halfpence Lane (over 40% along Brewers Road and The Ridgeway)

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

b. Adjoining AONB

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

ii. 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. AONB

i. There would be no reductions in traffic flows within the AONB during the AM peak.

b. Adjoining AONB

i. A289 westbound between the A2 and the A226 (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. M20 between Swanley and Bearsted (up to +250 PCUs) (-10% to +10%)

iii. M25 between Oxted and Swanley (up to +250 PCUs between junction 3 and junction 4) (-10% to +10%)

iv. A229 between the M20 and M2 (up to +250 PCUs) (-10% to +10%)

v. Brewers Road / The Ridgeway (up to +250 PCUs and +500 PCUs along a short section south of the A2) (over 40% along Brewers Road and The Ridgeway)

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

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 There would be no reductions in traffic flows during the Inter peak.

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% and over 40% in the vicinity of Thong)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

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)

ii. A2 between Canterbury and Dover (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

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

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

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

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

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. AONB

i. There would be no reductions in traffic flows within the AONB during the AM peak.

b. Adjoining AONB

i. A2 westbound between in the vicinity of M2 junction 1 (the M2/A2/A289 interchange) (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 4) (-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 the M20 and M2 (up to +250 PCUs) (-10% to +10%)

vi. Brewers Road / The Ridgeway (up to +250 PCUs) (over 40% along Brewers Road and The Ridgeway)

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 There would be no reductions in traffic flows during the Inter peak. Increases in traffic flows during the Inter peak are shown on the following roads:

a. AONB

i. There would be no increases in traffic flows within the AONB during the Inter peak.

b. Adjoining AONB

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

PM peak

A.1.17 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. A2 between Canterbury and Dover (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the Inter peak.

A.1.18 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. M20/A20 between Folkestone and Dover (up to +250 PCUs) (-10% to +10%)

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

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

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

AM peak

A.1.19 There would be no reductions in traffic flows during the 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 the M20 and M2 (up to +250 PCUs) (-10% to +10%)

vi. Brewers Road / The Ridgeway (up to +250 PCUs,) (over 40% along Brewers Road and The Ridgeway)

b. Adjoining AONB

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

Inter peak

A.1.21 There would be no reductions in traffic flows during the Inter peak.

A.1.22 Increases in traffic flows during the Inter peak are shown on the following roads:

a. AONB

i. Brewers Road / The Ridgeway / Peartree Lane (up to +250 PCUs) (-10% to +10% along Peartree Lane, +20% to +40% along Brewers Road and The Ridgeway)

b. Adjoining AONB

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

PM peak

A.1.23 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. A2 between Canterbury and Dover (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

A.1.24 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. M20/A20 between Ashford and Dover (up to +250 PCUs) (-10% to +10%)
b. Adjoining AONB
   i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

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

AM peak

A.1.25 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) except for a single short section south of Vigilant Way

A.1.26 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 (up to +250 PCUs) (+20% to +40% along Peartree Lane, over 40% along Brewers Road and The Ridgeway)

vi. Cobhambury Road / Warren Road / Bush Road westbound 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 passing through Shorne (up to +250 PCUs) (over 40%)

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

Inter peak

A.1.27 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)

A.1.28 Increases in traffic flows during the Inter peak are shown on the following roads:

a. AONB

i. There would be no increases in traffic flows within the AONB during the Inter peak.

b. Adjoining AONB

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

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

PM peak

A.1.29 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 westbound) and along the A2 westbound between Canterbury and Dover (reduction)

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

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

A.1.30 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 Leander Drive and the A226, Gravesend (up to +250 PCUs) (+10% to +40% and over 40% along a very short section in the vicinity of the A226)

b. Adjoining AONB

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

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

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

AM peak

A.1.31 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. Halfpence Lane / The Street, Cobham (reduction)

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

iv. Brewers Road / The Ridgeway / Peartree Lane southbound (reduction)

b. Adjoining AONB

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

A.1.32 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 (up to +250 PCUs in places) (-40% to +10% along Peartree Lane, over 40% along Brewers Road and The Ridgeway northbound)

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

b. Adjoining AONB

i. A228 between the M20 and M2 (up to +250 PCUs) (-10% to +20%)

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

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

Inter peak

A.1.33 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 The M20 and M2 (reduction)

iii. Brewers Road / The Ridgeway (reduction)

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

b. Adjoining AONB

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

A.1.34 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. Tanyard Hill / The Street / Forge Lane passing through Shorne (up to +250 PCUs) (over 40%)

PM peak

A.1.35 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 (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. Thong Lane northbound between the A2 and the A226, Gravesend (reduction, excluding an increase over 40% along a very short section)

A.1.36 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 and up to 500 PCUs on a short section between junction 3 and junction 4) (-10% to +10%)

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

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

iv. Shorne Ifield Road, westbound, west of Shorne (up to +250 PCUs) (over 40%)

v. Trottiscliffe Road / Addington Lane / The Street / Taylors Lane / Vigo Hill between the A20 and A227 (Up to +250 PCUs) (+10% to +20%)

b. Adjoining AONB

i. A228 between the M20 and M2 (Up to 250 PCUs) (up to 20% on a very short section)

ii. A289 between the A2 and the A226 (up to +250 PCUs) (+10% to +20% and up to 40% on a short section)

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

Phase 7: 01/09/2027 to 31/03/2028

AM peak

A.1.37 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. Halfpence Lane / The Street, Cobham (reduction)

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

b. Adjoining AONB

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

A.1.38 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 (up to +250 PCUs) (over 40% along Brewers Road and The Ridgeway northbound)

v. Shorne Ifield Road, westbound, west of Shorne (up to +250 PCUs) (over 40%)

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

b. Adjoining AONB

i. A228 between the M20 and M2 (Up to 250 PCUs) (up to 20% on a short section)

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

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

Inter peak

A.1.39 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 the M20 and M2 (reduction)

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

b. Adjoining AONB

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

A.1.40 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. Brewers Road / The Ridgeway / Peartree Lane (up to +250 PCUs) (-10% to +10% along Peartree Lane, over 40% along Brewers Road and The Ridgeway northbound)

b. Adjoining AONB

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

PM peak

A.1.41 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 (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. Thong Lane between the A2 and Leander Drive, Gravesend (reduction, excluding an increase of +20% to +40% along very short sections)

A.1.42 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 and 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%)

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

vi. Trottiscliffe Road / Addington Lane / The Street / Taylors Lane / Vigo Hill between the A20 and A227 (Up to +250 PCUs along Trottiscliffe Road and Addington Lane) (+10% to +20%)

vii. Shorne Ifield Road, westbound, west of Shorne (up to +250 PCUs) (over 40%)

b. Adjoining AONB

i. A228 between the M20 and M2 (Up to 250 PCUs) (+10% to +20%)

ii. A289 between the A2 and the A226 (up to +250 PCUs) (-10% to +20%,)

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

Phase 8: 01/04/2028 to 30/11/2028

AM peak

A.1.43 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. Halfpence Lane / The Street, Cobham (reduction)

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

iv. Brewers Road / The Ridgeway / Peartree Lane, southbound (reduction)

b. Adjoining AONB

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

A.1.44 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 (up to +250 PCUs in places) (-40% to +10% along Peartree Lane, over 40% along Brewers Road and The Ridgeway northbound)

v. Shorne Ifield Road, westbound, 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. A228 between the M20 and M2 (Up to 250 PCUs on two sections) (-10% to +10%)

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

Inter peak

A.1.45 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 the M20 and M2 (reduction)

iii. Brewers Road / The Ridgeway / Peartree Lane (reduction)

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

b. Adjoining AONB

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

A.1.46 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. Tanyard Hill / The Street / Forge Lane northwards passing through Shorne (up to +250 PCUs) (over 40%)

PM peak

A.1.47 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 the M20 and M2 (reduction along a short section)

v. Brewers Road / The Ridgeway / Peartree Lane (reduction)

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

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

b. Adjoining AONB

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

A.1.48 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 and +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%)

v. Shorne Ifield Road, westbound, west of Shorne (up to +250 PCUs) (over 40%)

vi. Cobhambury Road / Warren Road / Bush Road, eastbound, 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. Jeskyns Road Cobham (up to +250 PCUs) (over 40%)

Phase 9: 01/12/2028 to 31/03/2029

AM peak

A.1.49 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. Halfpence Lane / The Street, Cobham (reduction)

b. Adjoining AONB

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

ii. Thong Lane between the A2 and Leander Drive, Gravesend (reduction)

A.1.50 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, (+500 PCUs) (over 40%)

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

b. Adjoining AONB

i. A228 between M20 and the M2 (up to +250 PCUs) (-10% to +10%)

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.1.51 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 the M20 and M2 (reduction)

iii. Halfpence Lane, Cobham (reduction)

b. Adjoining AONB

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

A.1.52 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. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

PM peak

A.1.53 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 7 (reduction)

ii. M25 between junction 5 and junction 4 (reduction)

iii. A2 between Canterbury and Dover (reduction)

iv. Halfpence Lane, Cobham (reduction)

b. Adjoining AONB

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

A.1.54 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%)

iv. Brewers Road / The Ridgeway / Peartree Lane, (+250 PCUs) (over 40%)

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

Phase 10: 01/04/2029 to 31/07/2029

AM peak

A.1.55 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)

A.1.56 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. Brewers Road / The Ridgeway, (up to +250 PCUs) (over 40% along Brewers Road and The Ridgeway)

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

b. Adjoining AONB

i. A228 between the M20 and M2 (Up to 250 PCUs along a short section) (-10% to +10%)

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

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

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

Inter peak

A.1.57 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)

A.1.58 Increases in traffic flows during the Inter peak are shown on the following roads:

a. AONB

i. There would be no increases in traffic flows within the AONB during the Inter peak.

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 northbound passing through Shorne (up to +250 PCUs in places, excluding Tanyard Hill) (over 40% along The Street and Forge Lane)

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

PM peak

A.1.59 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 northbound between the A2 and the A226, Gravesend (reduction, excluding an increase up to 40% along a very short southbound section near the A226)

A.1.60 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. There would be no increases in traffic flows within the AONB during the PM peak.

b. Adjoining AONB

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

ii. Jeskyns Road eastbound, Cobham (up to +250 PCUs) (over 40%)

Phase 11: 01/08/2029 to 31/12/2030

AM peak

A.1.61 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)

A.1.62 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. Cobhambury Road / Warren Road / Bush Road, westbound, 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% along The Street and Forge Lane)

iii. Jeskyns Road Cobham (up to +250 PCUs) (+20% to +40%)

Inter peak

A.1.63 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 northbound between the A2 and the A226, Gravesend (reduction

A.1.64 Increases in traffic flows during the Inter peak are shown on the following roads:

a. AONB

i. There would be no increases in traffic flows within the AONB during the Inter peak.

b. Adjoining AONB

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

ii. Jeskyns Road eastbound, Cobham (up to +250 PCUs) (over 40%)

PM peak

A.1.65 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 northbound, between the A2 and the A226, Gravesend (reduction)

A.1.66 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. There would be no increases in traffic flows within the AONB during the PM peak.

b. Adjoining AONB

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

ii. Jeskyns Road eastbound, Cobham (up to +250 PCUs) (over 40%)

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 and the list excludes roads scoped out using the additional scoping criteria set out in paragraph 4.3.4.

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

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. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (up to +25 HGVs) (-10% to +10%)

b. Adjoining AONB

There would be no increases in traffic flows adjoining the AONB during the AM peak.

Inter peak

B.1.4 There would be no reductions in traffic flows during the Inter peak.

B.1.5 Increases in traffic flows during the Inter peak are shown on the following roads:

a. AONB

i. A289 between the A2 and the A226 (up to +25 HGVs (-10% to +10%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

PM peak

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

a. AONB

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

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

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

a. AONB

i. A289 westbound between the A2 and the A226 (up to +25 HGVs) (-10% to +10%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

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

AM peak

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

a. AONB

i. M20 westbound, Swanley to Maidstone (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the AM peak.

B.1.9 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 between Park Pale and Halfpence Lane(up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the AM peak.

Inter peak

B.1.10 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 northbound (reduction)

ii. A229 Maidstone to M2 northbound (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the Inter peak.

B.1.11 Increases in traffic flows during the Inter peak are shown on the following roads:

a. AONB

i. M20 northbound, Swanley to Maidstone (up to +25 HGVs along a short section) (-10% and +10%)

ii. Brewers Road between Park Pale and Halfpence Lane (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

PM peak

B.1.12 There would be no reductions in traffic flows during the PM peak.

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

a. AONB

i. Brewers Road between Park Pale and Halfpence Lane (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

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

AM peak

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

a. AONB

i. M20 Swanley to Maidstone (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the AM peak.

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

a. AONB

i. M25 between Oxted and Swanley (up to +50 HGVs eastbound between Oxted and M25 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 between Park Pale and Halfpence Lane (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. A289 between the A2 and the A226 (up to +25 HGVs) (-10% to +10%)

Inter peak

B.1.16 Reductions in traffic flows during the Inter peak are shown on the following roads:

a. AONB

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

ii. A229 Maidstone to M2 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the Inter peak.

B.1.17 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 1) (-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 between Park Pale and Halfpence Lane (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

PM peak

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

a. AONB

i. M20 southbound between Swanley and junction 3 with the M26

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

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

a. AONB

i. M25 anticlockwise between Oxted and Swanley (up to +25 HGVs) (-10% and +10%)

ii. M26 eastbound between M25 and M20 (up to +25 HGVs) (-10% and +10%)

iii. Brewers Road between Park Pale and Halfpence Lane (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

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

AM peak

B.1.20 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 Swanley to Maidstone (reduction)

ii. There would be no reductions in traffic flows adjoining the AONB during the AM peak.

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the AM peak.

B.1.21 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 anticlockwise (eastbound) 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 between Park Pale and Halfpence Lane (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. A289 between the A2 and the A226 (up to +25 HGVs) (-10% to +10%)

Inter peak

B.1.22 Reductions in traffic flows during the Inter peak are shown on the following roads:

a. AONB

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

ii. A229 northbound Maidstone to M2 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the Inter peak.

B.1.23 Increases in traffic flows during the Inter peak are shown on the following roads:

a. AONB

i. M20 westbound 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 between Park Pale and Halfpence Lane (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

PM peak

B.1.24 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 eastbound between Swanley and junction 3 with the M26

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

B.1.25 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 eastbound between M25 and M20 (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 between Park Pale and Halfpence Lane (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

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

AM peak

B.1.26 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and M20 junction 4 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the AM peak.

B.1.27 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 anticlockwise (eastbound) between Oxted and Swanley (up to +50 HGVs westbound between Oxted and M25 junction 5) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% to +10%)

iii. Brewers Road between Park Pale and Halfpence Lane (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the AM peak.

Inter peak

B.1.28 Reductions in traffic flows during the Inter peak are shown on the following roads:

a. AONB

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

ii. A229 northbound between the M20 and M2 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the Inter peak.

B.1.29 Increases in traffic flows during the Inter peak are shown on the following roads:

a. AONB

i. M20 westbound Swanley to Maidstone (up to +25 HGVs) (-10% and +10%)

ii. M25 between Oxted and Swanley (up to +25 HGVs between junction 4 and M25 junction 3 anticlockwise) (-10% and +10%)

iii. Brewers Road between Park Pale and Halfpence Lane (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

PM peak

B.1.30 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 eastbound between Swanley and junction 3 with the M26 (reduction)

ii. A289 eastbound between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

B.1.31 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 on a very short section approaching M20 junction 3) (-10% and +10%)

iii. Brewers Road between Park Pale and Halfpence Lane (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

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

AM peak

B.1.32 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and M20 junction 4 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the AM peak.

B.1.33 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 anticlockwise (eastbound) between Oxted and Swanley (up to +50 HGVs westbound between Oxted and M25 junction 5) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% to +10%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the AM peak.

Inter peak

B.1.34 Reductions in traffic flows during the Inter peak are shown on the following roads:

a. AONB

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

ii. A229 northbound Maidstone to M2 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the Inter peak.

B.1.35 Increases in traffic flows during the Inter peak are shown on the following roads:

a. AONB

i. M20 westbound Swanley to Maidstone (up to +50 HGVs) (-10% and +10%)

ii. M25 anticlockwise between Oxted and Swanley (up to +25 vehicle) (-10% and +10%)

iii. M26 westbound between the M25 and M20 (up to +25 HGVs) (-10% and +10%)

iv. A228 southbound 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) (over 40% on a short section)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

PM peak

B.1.36 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 southbound (reduction)

ii. A229 between the M20 and M2 southbound (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

B.1.37 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 Swanley (up to +25 HGVs) (-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) (over 40%)

v. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (Up to +25 HGVs) (over 40% on a short section)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

Phase 7: 01/09/2027 to 31/03/2028

AM peak

B.1.38 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and M20 junction 4 (reduction)

b. Adjoining AONB

i. The Street, Cobham (reduction)

B.1.39 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 anticlockwise (eastbound) between Oxted and M25 junction 5 (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. A289 between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (Up to +25 HGVs) (up to 20% on a short section)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the AM peak.

Inter peak

B.1.40 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. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the Inter peak.

B.1.41 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% between M20 junction3 and junction 1)

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%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

PM peak

B.1.42 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

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

ii. A229 southbound between the M20 and M2 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

B.1.43 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. A228 between the M20 and M2 (Up to +25 HGVs) (over 40%)

v. A289 northbound 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%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

Phase 8: 01/04/2028 to 30/11/2028

AM peak

B.1.44 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and M20 junction 4 (reduction)

b. Adjoining AONB

i. The Street, Cobham (reduction)

B.1.45 Increases in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M25 anticlockwise between Oxted and M25 junction 5 (up to +50 HGVs) (-10% to +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% to +10%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the AM peak.

Inter peak

B.1.46 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 northbound Maidstone to M2 (reduction)

iv. A289 southbound between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the Inter peak.

B.1.47 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% between M20 junction 3 and junction 2 and the slip road to M25 northbound)

ii. M26 between the M25 and M20 (up to +25 HGVs) (-10% and +10%)

iii. A228 southbound between the M20 and M2 (Up to +25 HGVs) (20% to 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

PM peak

B.1.48 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

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

ii. A229 southbound between the M20 and M2 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

B.1.49 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and Maidstone, junction 2 to junction 5 (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. A228 between the M20 and M2 (Up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

Phase 9: 01/12/2028 to 31/03/2029

AM peak

B.1.50 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and M20 junction 4 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the AM peak.

B.1.51 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%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the AM peak.

Inter peak

B.1.52 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 6 westbound (reduction)

ii. M25 clockwise between junction 5 and junction 3 (reduction)

iii. A229 northbound Maidstone to M2 (reduction)

iv. A289 southbound between M2 junction 1 (the M2/A2/A289 interchange) and the A226 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the Inter peak.

B.1.53 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% along a short section)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

PM peak

B.1.54 Reductions in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M25 clockwise between junction 5 and junction 2 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

B.1.55 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 westbound 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%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

Phase 10: 01/04/2029 to 31/07/2029

AM peak

B.1.56 Reductions in traffic flows during the AM peak are shown on the following roads:

a. AONB

i. M20 between Swanley and M20 junction 4 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the AM peak.

B.1.57 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%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the AM peak.

Inter peak

B.1.58 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 northbound (reduction)

ii. A229 Maidstone to M2 northbound (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the Inter peak.

B.1.59 Increases in traffic flows during the Inter peak are shown on the following roads:

a. AONB

i. M20 westbound Swanley to Maidstone (up to +25 HGVs) (+10% to +20%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the Inter peak.

PM peak

B.1.60 There would be no reductions in traffic flows during the PM peak.

B.1.61 Increases in traffic flows during the PM peak are shown on the following roads:

a. AONB

i. M25 anticlockwise between Oxted and M25 junction 5 and between M25 junction 4 and junction 3 (up to +25 HGVs) (-10% and +10%)

ii. M26 between the M25 and M20 (up to +25 HGVs in the vicinity of the M20 interchange) (-10% and +10%)

b. Adjoining AONB

i. There would be no increases in traffic flows adjoining the AONB during the PM peak.

Phase 11: 01/08/2029 to 31/12/2030

B.1.62 There would be no reductions or increases in traffic flows likely to affect the AONB 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 and the list excludes roads scoped out using the additional scoping criteria set out in paragraph 4.3.4.

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 in places)

iv. A227 between the A20 and Vigo village (reduction)

v. The Street through Cobham (reduction)

vi. Halfpence Lane between Cobham and the A2 (reduction)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the AM peak.

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 (between 250 and 1000 PCUs and over 1,001 PCUs between junction 1 and junction 3, up to 500 PCUs between junction 4 and junction 5) (20% to 40%)

ii. A229 northbound between Maidstone and M2 (Up to 1,000 PCUs) (-10% to +10%)

iii. 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%)

iv. A225 passing through Eynsford (short section only) (Up to +250 PCUs) (-10% to +10%)

v. Rochester Road between Aylesford and A229 (Up to +250 PCUs) (20% to 40%)

vi. Boxley Road / The Street / Pilgrim's Way / Lidsing Road passing through Boxley between the M20 and M2 (Up to +250 PCUs) (10% to 20%)

vii. Trottiscliffe Road / Addington Lane / The Street / Taylors Lane / Vigo Hill 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 +20-%)

iii. A249 between M2 junction 5 and A2 (Up to +250 PCUs) (-10% to +10%)

iv. A227 between Vigo village and Hook Green (Up to +250 PCUs) (10% to 20%)

v. A21 between the A224 and A223, south of Orpington (Up to +250 PCUs) (-10% to +10%)

vi. Forstal Road between Aylesford and the A229 (Up to +250 PCUs) (Over 40% along a short section)

vii. 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. M25 junction 5 and Oxted westbound (reduction)

ii. M26 between the M20 and M25 (reduction)

iii. 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)

iv. Halfpence Lane between Cobham and the A2 (reduction)

v. Brewers Road / The Ridgeway (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 the M20 and M2 (Up to 1,000 PCUs) (20% to 40%)

iii. M25 between Swanley and Oxted (Up to +250 PCUs, excluding north of junction 3 at Swanley where a larger increase of up to 500 PCUs would occur) (-10% to +10%)

iv. 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 Hook Green (Up to +250 PCUs on a section north of Vigo Village) (10% to 20%)

iv. 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)

b. Adjoining AONB

i. There would be no reductions in traffic flows adjoining the AONB during the PM peak.

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, and between junction 3 and 4 where there would be an increase of up to 500 PCUs) (10% to 40% between junction 1 and junction 3)

ii. A229 between the M20 and M2 (Up to 500 PCUs) (10% to 20%)

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

iv. Rochester Road between Aylesford and A229 (Up to +250 PCUs) (10% to 20%)

v. Brewers Road / The Ridgeway / Peartree Lane (Up to +250 PCUs) (20% to 40% along Brewers Road and The Ridgeway, over 40% along Peartree Lane)

vi. Thong Lane northbound between the A2 and the A226 (Up to +250 PCUs) (-10% to +10%, over 40% along a section of Thong Lane between the A2 and Leander Drive)

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% and over 40% north of Boxley)

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

b. Adjoining AONB

i. A289 eastbound between the M2 and the A226 (Up to 250 PCUs) (10% to 40%)

ii. A227 between Vigo village and Hook Green (Up to +250 PCUs) (10% to 20%)

iii. A228 between the M20 and M2 (Up to +250 PCUs) (10% to 20%)

iv. Jeskyns Road west of Cobham (Up to +250 PCUs) (Over 40%)

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 and the list excludes roads scoped out using the additional scoping criteria set out in paragraph 4.3.4.

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 3 (up to +100 HGVs in places, over 100 HGVs in the vicinity of M2/A2/A289 interchange) (up to 40% and over 40% in the vicinity of junction 2 and junction 3)

   ii. M25 Oxted to Swanley (up to +25 HGVs, excluding the reduction between Oxted and the M26) (-10% to +10%)

   iii. A225 between Eynsford and the M20 (Up to +25 HGVs) (-10% to +10%)

   iv. A229 between the M20 and M2 (up to +100 HGVs in places, over 100 HGVs in the vicinity of M2 junction 3) (over 40%)

v. Rochester Road, between Aylesford and A229 (up to +50 HGVs) (over 40%)

vi. Warren Road south of Blue Bell Hill (up to +25 HGVs in places) (Over 40%)

vii. Ford Lane / The Street / Taylors Lane / Vigo Hill through Trottiscliffe between the A20 and A227 (up to +25 HGVs) (over 40%)

viii. Green Lane / Camer Road / Sole Street between Cobham and Hook Green (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. A227 between Vigo village and Hook Green (up to +25 HGVs) (Over 40%)

ii. A228 between the M20 and M2 (up to +100 HGVs) (over 40%)

iii. 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)

b. Adjoining AONB

i. A228 west of Leybourne (reduction)

ii. 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) (up to 40% and over 40% in the vicinity of junction 2 and junction 3)

ii. A2 between Canterbury and Dover (up to +25 HGVs) (-10% to +10%)

iii. A229 between the M20 and M2 (up to +100 HGVs in places, over 100 HGVs in the vicinity of M2 junction 3) (between 20% and 40% and over 40% between Kit's Coty and the M2)

iv. Rochester Road between Aylesford and A229 (up to +50 HGVs) (Over 40%)

v. Chatham Road at Kit's Coty (up to +50 HGVs) (over 40%)

vi. Ford Lane / The Street / Taylors Lane / Vigo Hill between the A20 and A227 (up to +25 HGVs) (up to 40% and over 40% along Ford Lane)

vii. Green Lane / Camer Road / Sole Street between Cobham and Hook Green (up to +25 HGVs) (over 40%)

b. Adjoining AONB

i. A227 between Vigo village and Hook Green (up to +25 HGVs) (up to 40%)

ii. A228 between the M20 and M2 (up to +100 HGVs) (over 40%)

iii. Jeskyns Road Cobham (up to +25 HGVs) (Over 40%)

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. A228 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) (over 40% northbound between junction 1 and junction 3)

ii. A2 between Canterbury and Dover (up to +25 HGVs) (-10% to +10%)

iii. A229 between the M20 and M2 (up to +100 HGVs in places) (Over 40%)

iv. Rochester Road between Aylesford and A229 (up to +50 HGVs) (Over 40%)

v. Chatham Road at Kit's Coty (up to +50 HGVs) (Over 40%)

b. Adjoining AONB

i. A228 between the M20 and M2 (up to +50 HGVs in places) (Over 40%)

ii. Court Road / 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 and the list excludes roads scoped out using the additional scoping criteria set out in paragraph 4.3.4.

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. A227 between the M20 and Vigo Village (reduction)

vii. The Street Cobham (reduction)

viii. Halfpence Lane between Cobham and the A2 (reduction)

b. Adjoining AONB

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

ii. Brewers Road / The Ridgeway / Peartree Lane (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. A229 between the M20 and M2 (Up to 1,000 PCUs) (10% to 40%)

iii. M25 between the M26 and Swanley (Up to +250 PCUs, excluding short sections in the vicinity of junction 3 where there would be an increase of up to 500 PCUs) (-10% to +10%)

iv. A225 between Eynsford and the M20 (Up to +250 PCUs) (-10% to +10%)

v. A249 between Detling and the M2 (Up to +250 PCUs) (-10% to +10%)

vi. A252 between Challock and Chilham (Up to +250 PCUs) (+10% to +20%)

vii. Rochester Road between Aylesford and A229 (Up to +250 PCUs) (20% to 40%)

viii. Lidsing Road between Boxley and the M2 (Up to +250 PCUs) (20% to +40%)

ix. Ford Lane between Trottiscliffe and the M20 (Up to +250 PCUs) (20% to +40%)

b. Adjoining AONB

i. A228 between the M20 and M2 (Up to 500 PCUs) (10% to 40% and 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 Hook Green (Up to +250 PCUs) (10% to 20%)

iv. A249 between M2 junction 5 and the A2 (Up to +250 PCUs) (-10% to +10%)

v. M20 between junction 8, east of Bearsted and junction 9, Ashford (Up to +250 PCUs) (-10% to +10%)

vi. Forstal Road between Aylesford and the A229 (Up to +250 PCUs) (Over 40%)

vii. Jeskyns Road west of Cobham (Up to +250 PCUs) (Over 40%)

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. A20 passing through Larkfield (reduction)

ii. Brewers Road and The Ridgeway (reduction)

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, over 40% south of junction 1)

ii. A229 (northbound) between Maidstone and M2 (Over 1,000 PCUs south of the M2) (Over 40%)

iii. M25 between Oxted and Swanley (Up to +500 PCUs) (-10% to +10%)

iv. 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. A228 between the M20 and M2 (Up to 250 PCUs) (10% to 40%)

iii. A227 between Vigo village and Hook Green (Up to +250 PCUs for a short section north of Vigo village) (10% to 20%)

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

v. 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 A20 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. 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. M25 between junction 3 and junction 4 (Up to +500 PCUs) (-10% to +10%)

iii. A229 northbound between Maidstone and M2 (Up to 500 PCUs) (-10% to +10%)

iv. A249 between M20 junction 7 and M2 junction 5 (Up to +250 PCUs) (-10% to +10%)

v. Rochester Road between Aylesford and A229 (Up to +250 PCUs) (10% to 20%)

vi. Brewers Road / The Ridgeway / Peartree Lane (Up to +250 PCUs) (20% to 40% along Brewers Road and The Ridgeway, over 40% along Peartree Lane)

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%)

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

b. Adjoining AONB

i. M20 between junction 7, Maidstone and junction 9, Ashford (Up to +250 PCUs) (-10% to +10%)

ii. A228 between the M20 and M2 (Up to 250 PCUs) (-10% to +10%)

iii. A227 between Vigo Village and Hook Green (Up to +250 PCUs) (10% and 20%)

iv. Thong Lane between the A2 and the A226 (Up to +250 PCUs) (Over 40% in places)

v. 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 and the list excludes roads scoped out using the additional scoping criteria set out in paragraph 4.3.4.

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. A20 between Swanley and Maidstone (reduction)

v. The Street / Halfpence Lane 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 3 (up to +100 HGVs in places, over 100 HGVs in the vicinity of M2/A2/A289 interchange) (up to 40% and over 40% between junction 1 and junction 2)

ii. M25 Oxted to Swanley between junction 3 and junction 5 (up to +25 HGVs, up to +50 HGVs along a short section in the vicinity of junction 3) (-10% to +10%)

iii. A229 between the M20 and M2 (up to +100 HGVs in places, over 100 HGVs in the vicinity of M2 junction 3) (over 40%)

iv. Rochester Road between Aylesford and A229 (up to +25 HGVs) (over 40%)

v. Warren Road south of Blue Bell Hill (up to +25 HGVs in places) (over 40%)

vi. Ford Lane / The Street / Taylors Lane / Vigo Hill between the A20 and A227 (up to +25 HGVs) (Over 40%)

vii. Green Lane / Camer Road / Sole Street between Cobham and Hook Green (up to +25 HGVs) (Over 40%)

b. Adjoining AONB

i. A227 between Vigo village and Hook Green (up to +25 HGVs) (Over 40%)

ii. A228 between the M20 and M2 (up to +100 HGVs) (Over 40%)

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. A228 west of Leybourne between the M20 and A20 (reduction)

ii. 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 3 over +100 HGVs) (Over 40% in places)

ii. A227 Gravesend Road between the A20 and Vigo village (up to +25 HGVs) (Over 40%)

iii. A229 between the M20 and M2 (over 100 HGVs northbound) (Over 40% northbound)

iv. Rochester Road between Aylesford and A229 (up to +50 HGVs) (Over 40%)

v. Chatham Road at Kit's Coty (up to +50 HGVs) (Over 40%)

vi. The Street / Halfpence Lane Cobham (up to +25 HGVs) (Over 40%)

vii. Ford Lane / The Street / Taylors Lane / Vigo Hill between the A20 and A227 (up to +25 HGVs) (Up to 40% and over 40% along Ford Lane)

viii. Green Lane / Camer Road / Sole Street between Cobham and Hook Green (up to +25 HGVs) (Over 40%)

b. Adjoining AONB

i. A227 between Vigo village and Hook Green (up to +25 HGVs) (up to 40%)

ii. A228 between the M20 and M2 (up to +100 HGVs) (Over 40%)

iii. Jeskyns Road Cobham (up to +25 HGVs) (Over 40%)

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 eastbound between Oxted and the M26, and between junction 4 and junction 3 (reduction)

iii. M26 between the M20 and M25 (reduction)

iv. Eyhorne Street, Upper Street, Hollingbourne Hill, Swanton Street Cottages, Swanton Street, The Street, Primrose Lane between the M20 and M2

b. Adjoining AONB

i. A228 west of Leybourne (reduction)

F.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 +100 HGVs in places and over +100 HGVs in the

vicinity of M2 junction 1 but reduction between junction 3 and junction 5) (-10% to +10% and over 40% increase northbound between junction 1 (the M2/A2/A289 interchange) and junction 3)

ii. M25 westbound between Swanley and the M26 (up to +25 HGVs) (-10% to +10%)

iii. A227 between the M2 and Vigo village (up to +25 HGVs) (over 40%)

iv. A229 between the M20 and M2 (up to100 HGVs north of Chatham Road) (Over 40%)

v. A249 between the M20 and M2 (up to +25 HGVs) (-10% to +10%)

vi. Rochester Road between Aylesford and A229 (up to +50 HGVs) (Over 40%)

vii. Chatham Road at Kit's Coty (up to +25 HGVs) (Over 40%)

b. Adjoining AONB

i. A227 between Vigo village and Hook Green (up to +25 HGVs) (up to 40%)

ii. A228 between the M20 and M2 (up to +25 HGVs, +50 along a short section) (Over 40%)

iii. New Court Road between Peters Village and Burham (up to +25 HGVs) (over 40%)

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