



A122 LOWER THAMES CROSSING

Written Representation

**Produced by Kent County Council
(Interested Party Reference Number: 20035779)**

18th July 2023

Table of Contents

Executive Summary	3
1. Introduction	17
2. Kent County Council’s Overall Position	18
3. Written Representation	19
4. Highways and Transport (as Local Highway and Transport Authority)	20
5. Public Rights of Way	38
6. Sustainable Urban Drainage System (SUDS)	40
7. Public Health	44
8. Biodiversity	45
9. Heritage Conservation	66
10. Skills and Employability – Construction Workforce	77
11. Impacts on Community Assets	80
12. Representations relating to the draft Development Consent Order and Highways Related Documents	83
13. Conclusion	91

Executive Summary

This is a summary of the Written Representation produced by Kent County Council (KCC) as a statutory consultee and host authority.

KCC's Written Representation outlines the principal representations which KCC intends to make in relation to National Highway's Lower Thames Crossing (LTC) Development Consent Order (DCO) application.

Kent County Council's Overall Position

KCC has long supported proposals for a new crossing of the River Thames. It is clear the need for a new Lower Thames Crossing (LTC) is now urgent: demand to cross the Thames at Dartford exceeds the available capacity and having a single point of failure on the network leads to journey time delays, increased costs for businesses and individuals, and ultimately restricts economic growth both regionally and nationally. It is time for a significant change to our Strategic Road Network (SRN) to make it fit for purpose now and into the future. KCC therefore continues to support the proposed LTC and the investment in additional road capacity that will unlock new opportunities for Kent, the South East and the wider UK.

KCC's support for the project is stated in its statutory Local Transport Plan 4 (LTP4), where the new Crossing is also part of the long-term transport policy aim of bifurcation. This splitting of traffic to/from the Channel portals along the M20/A20 and M2/A2 corridors will help to release capacity and therefore relieve pressure on the M20, especially in times of disruption to cross-Channel services. To fully achieve this aim, improvements to the A2/M2 are needed as well as enhanced links between the corridors, such as the A229 (for which KCC needs a financial contribution from National Highways to deliver a Large Local Major scheme that will ensure this essential link is able to support LTC traffic when the project opens). The LTC must be delivered and seen as only the first stage in improving the A2/M2 corridor (Road Investment Strategy pipeline projects of A2 Brenley Corner and A2 Dover Access must also be delivered by National Highways in advance of the LTC opening for public use) to provide an enhanced strategic route from the Port of Dover to the Midlands and the North, essential to UK prosperity.

It is clear that LTC is of strategic importance to the long-term economic prosperity of this country going forwards, but it will (together with the Dartford Crossing) serve an equally important local function. With increased crossing capacity and greater journey time reliability, residents in Kent will have a much greater range of opportunities for work, education and leisure. Currently this market is suppressed by the unreliability of the Dartford Crossing, which constrains productivity in the Lower Thames area. To not proceed with the project would lead to a worsening of the existing unacceptable conditions at Dartford as well as restrict economic growth and miss out on productivity benefits nationally, regionally and locally. The detailed comments in KCC's submissions must be read in the context of our overall support for this strategically important project.

KCC's Written Representation

A scheme of this size and scale will inevitably result in a range of impacts to the local area. KCC's Local Impact Report (LIR) identifies the positive, negative, and neutral impacts of the LTC proposals on Kent, based on our local knowledge. Our Written Representation then elaborates on the impacts identified and proposes mitigation for the negative impacts of the LTC.

It is clear that with the correct monitoring and mitigation measures in place, the adverse impacts on the local area could be reduced. Only with these mitigation measures will the LTC be able to fully achieve its objectives.

KCC's requested mitigation for the identified impacts, outlined within our Written Representation, are summarised below.

Strategic Impacts

Strategic Impact A – Improved Network Resilience – Positive Impact

- No mitigation required.

Strategic Impact B – Reduced Journey Time Delays – Positive Impact

- No mitigation required.

Strategic Impact C – Increased Journey Time Reliability – Positive Impact

- No mitigation required.

Strategic Impact D – Supports Bifurcation between A2/M2 and M20/A20 corridors – Positive Impact

- No mitigation required.

Strategic Impact E – Generation of Economic Benefits – Positive Impact

- No mitigation required.

Transport Impacts

Transport Impact A – Impacts of the LTC on the Strategic Road Network (SRN) – Negative Impact

- A Requirement that National Highways should undertake mitigation works for any LTC impacts on the Strategic Road Network (SRN).
- The Applicant's monitoring strategy should be amended to include an assessment of increased use of unsuitable rural routes to avoid congestion on the SRN in the vicinity of the LTC.
- A Requirement that National Highways should make provision for Electric Vehicle (EV) charging points and HGV parking along the LTC route.
- A Requirement that National highways should make provision for cross-Thames active travel.

- Commitment from the Applicant to actively support the inclusion of the A2 Brenley Corner and A2 Access to Dover schemes in the next Road Investment Strategy.
- The M25 Junction 2 (M25/A2/A282) should be added to the list of SRN junctions to be monitored within the Applicant's Wider Network Impacts Monitoring and Management Plan (WNIMMP).

Transport Impact B – Wider Network Impacts (WNI) – Negative Impact

- The scope of the Applicant's Wider Network Impacts Monitoring and Management Plan WNIMMP (APP-545) should be further expanded to include the locations identified in the Wider Network Impacts (WNI) Study and to cover baseline surveys before construction starts.
- A Requirement that National Highways should deliver mitigation on the Local Road Network (LRN) as identified through the WNI study (details of mitigation schemes including costs to be provided later in the Examination on completion on the study – expected October 2023). In the alternative, a Requirement that National Highways should fund KCC to carry out the identified WNI study mitigation works.

Transport Impact C – Impacts of the LTC on the A229 Blue Bell Hill – Negative Impact

- KCC has developed an improvement scheme for the A229 Blue Bell Hill to mitigate the existing situation as exacerbated by the effects of the LTC. A Requirement that National Highways should carry out those works at its own expense should be added to the DCO. In the alternative, National Highways should fund KCC to carry out such works. If the Government does provide the Large Local Major (LLM) funding for the mitigation works, then National Highways should provide the 15% match funding (anticipated to be approximately £35 million) towards those works.

Transport Impact D – Road Safety Impacts of the LTC – Positive Impact for the Strategic Road Network (SRN) but Negative for the Local Road Network (LRN)

- A Requirement that National Highways must carry out an International Road Assessment Programme (iRAP) scenario assessment of the Project itself, together with local routes demonstrating a casualty cost as a result of the Project (A226, A227, A228 and A229), and undertake works required to mitigate the adverse safety impacts of such assessment.

Transport Impact E – Public Transport and Active Travel Impacts of the LTC – Negative Impact

- A Requirement that National Highways must submit a scheme to the Secretary of State for approval, following consultation with KCC, to identify and fully fund mitigation to local bus services which are disrupted as a result of temporary works during construction.
- A Requirement that temporary works are identified in writing to the KCC Public Transport team at least four weeks in advance of them happening and required compensation discussed at the same time based on £200 per additional operational hour.

Transport Impact F – Severance Issues for Walkers, Cyclists and Horse Riders (WCH) – Positive to the Cobham Area but Negative to Valley Drive and Wrotham Road

- No mitigation required for Cobham area.
- A Requirement that National Highways must submit a scheme to the Secretary of State for approval, following consultation with KCC, to identify the impacts on Valley Drive and Wrotham Road and fully fund mitigation appropriate mitigation measures. In the alternative, KCC would accept a Section 106 Agreement for these mitigation measures to be secured.

Transport Impact G – Dangerous Goods Vehicles (DGVs) and Oversized Vehicles – Negative impact but with potential to be positive

- A Requirement that National Highways submits to the Secretary of State for approval, following consultation with KCC, a scheme that requires Dangerous Good Vehicles (DGVs) and oversized vehicles to use the Project in order to phase out the use of the Dartford Traffic Management Cell and remove the associated delays and incidents, rather than just reducing them.

Transport Impact H – Construction Shifts and Deliveries – Negative Impact

- A Requirement that restricts:
 - (a) construction deliveries and construction vehicles movements; and
 - (b) construction worker shift changes occurring, during the LRN peak hours (0800-0900 and 1700-1800).
- A Requirement that National Highways should fund proposed remedial measures, along with providing a six-monthly monitoring report to KCC to determine whether Travel Plan targets are being met and whether the construction traffic generation is at or lower than predicted. In the alternative, KCC would accept a Section 106 Agreement for these mitigation measures to be secured.

Transport Impact I – Construction Traffic Routing – Negative Impact

- A Requirement that construction vehicle routing plans should be agreed with KCC, along with a left turn ban for construction related HGVs when joining the A226.
- A Requirement for a scheme for the monitoring of construction vehicle movements to ensure compliance with agreed haulage routes, and associated rat running on the local road network.
- A Requirement that the Applicant must permit:
 - (a) all construction-related traffic, including workers to use Haul Road H18, to access the southern portal compound from Phase 2 until it is no longer operational, and
 - (b) construction workers in cars to use both the A226 and Lower Higham Road access points to access the A226 Gravesend Road compound.

Transport Impact J – Construction Impacts on the Condition of the Existing Local Road Network (LRN) – Negative Impact

- A Requirement for the Applicant to carry out a programme of pre-emptive works to prevent or minimise damage to the Local Road Network during the LTC construction phase. In the alternative, funding for KCC to undertake such works at National Highway's expense.

Transport Impact K – Highways Asset generation and impact of transference from National Highways to Kent County Council – Negative Impact

- A Requirement that, before the commencement of construction, National Highways provide KCC with further information regarding the full structural and local details of the structures and special geotechnical measures that will become the responsibility of KCC.
- A Requirement that National Highways should cover the costs of KCC Officers undertaking the technical approval process for any new structures or special geotechnical measures.
- A Requirement for that National Highways pay KCC, as Local Highway Authority, an appropriate commuted sum for the long-term maintenance of each structure KCC is expected to accept ownership of.

Wider Network Impact Monitoring and Management Plan (WNIMMP) –

- Requirements should be imposed to secure that:
 - Baseline surveys are undertaken at least one year before commencement of construction and supplemented with additional surveys annually until five years post-opening.
 - Certain key roads on KCC's local and major road network (such as the A229, A249, A227, A228 and A226) that will be impacted by the LTC, are incorporated into National Highways' permanent monitoring programme.
 - At least four (4) cameras are used to monitor each road; with a total of 20 cameras needed for the whole programme of additional permanent monitoring on the KCC local and major road network.
- DCO Schedule 2 Requirement 14 should be amended to include the following sites within the WNIMMP:
 - M2 Junction 1 to Junction 4 journey time monitoring
 - M25 Junction 2
 - A2 Pepper Hill Junction
 - A227/Green Lane Junction
 - A228 Junctions between the M2 and M20
- DCO Schedule 2 Requirement 14 should also be amended to include active travel monitoring within the WNIMMP, including key routes for walkers, cyclists and horse riders affected by the LTC.
- A Requirement for National Highways to provide a funding package for KCC to implement mitigation measures on the LRN, which are required to address a direct impact of the LTC.

Public Rights of Way (PRoW) Impacts

PRoW Impact A – Enhancements to the Public Rights of Way Network – Positive Impact

- A Requirement or agreement that National Highways should pay KCC a commuted sum to cover the additional maintenance costs of any new and improved Public Rights of Way which are to be transferred to KCC.

PRoW Impact B – Omission of improvements to bring Hares Bridge up to cycling/equestrian standard – Negative Impact

- A Requirement to secure improvements to Hares Bridge to accommodate pedestrians, cyclists and equestrians.

PRoW Impact C – Omission of improvements to bring key structures up to cycling/equestrian standard – Negative Impact

- A Requirement to secure the provision for future improvements to bring structures up to walking, cycling and horse riding (WCH) standards.

PRoW Impact D – Designation of temporary National Cycle Route (NCR) 177 – Negative Impact

- An amendment to the designation of temporary National Cycle Route (NCR) 177, from permissive route to Public Bridleway.

PRoW Impact E – Absence of construction detail – Negative Impact

- The Applicant should be required to provide one clear plan which indicates the PRoW network to be created and includes the legal status of the routes to be provided and links to the wider PRoW network.
- A General Arrangement Plan should also be provided showing the WCH widths achievable to ensure they adhere to relevant standards.

PRoW Impact F – Existing leisure/recreation PRoW use – Negative Impact

- A Requirement to secure liaison with KCC's Public Rights of Way and Access Service on the closure of PRoWs during construction and restoration of routes, to minimise disruption to WCH users.
- A Requirement to secure the installation of active travel counters for 12 months prior to construction and three years post road opening.

Minerals and Waste Impacts

Minerals and Waste Impact A – Mineral Safeguarding – Neutral Impact

- No mitigation required.

Minerals and Waste Impact B – Waste Generation – Positive Impact

- No mitigation required.

Sustainable Urban Drainage System (SUDS)

SUDS Impact A – Departure on Peak Rainfall – Negative Impact

- A Requirement for the Applicant to demonstrate the future climate change for the 3.3% AEP rainfall event has been considered.
- Or for evidence of it being acceptable to the Environment Agency.

SUDS Impact B – Drainage design of realigned or widened highway – Positive Impact

- No mitigation required.

SUDS Impact C – Watercourse channels – Neutral/Positive Impact

- KCC would actively encourage the improvement of existing watercourses and a package of methods to achieve this to be provided by the Applicant.

SUDS Impact D – Discharge rates – Positive Impact

- No mitigation required.

SUDS Impact E – Surface flooding 1 – Negative Impact

- The Applicant should provide information clearly demonstrating that as a result of the proposed works areas, there is no detrimental impact on the local area.

SUDS Impact F – Surface flooding 2 – Neutral/Positive Impact

- No mitigation required.

SUDS Impact G – Flood issue – Positive Impact

- No mitigation required.

SUDS Impact H – Surface water flow path – Negative Impact

- The Applicant should be required to provide further information to clearly demonstrate that the construction of the project does not interfere with the watercourse.

SUDS Impact I – Groundwater flooding – Negative/Neutral Impact

- A Requirement for the Applicant to demonstrate the future climate change for the 3.3% AEP rainfall event has been considered.
- Or for evidence of it being acceptable to the Environment Agency.

SUDS Impact J – Flooding from sewers and water mains – Negative Impact

- Any works involved with the diversion of a sewer or water main should be approved and overseen by the appropriate asset owner.

SUDS Impact K – Surface water run off – Negative Impact

- Detailed design should clearly demonstrate that suitable pollution control mechanisms are to be installed and that these are sufficient to mitigate issues of contamination and pollution to receiving groundwaters.

SUDS Impact L – Discharged water run off – Neutral Impact

- No mitigation required.

SUDS Impact M – Contamination – Neutral Impact

- No mitigation required.

SUDS Impact N – Permanent Drainage System – Negative Impact

- Information should be provided of any proposed connections to the permanent drainage system and for this to demonstrate appropriate management of surface water.

SUDS Impact O – Box Culvert Installation – Negative Impact

- It should be clearly demonstrated that the overarching approval body (EA, IDB, LLFA) for the receiving network which the water passing through the type of culvert, approves this method of waterproofing and does not consider it a risk to pollution.

SUDS Impact P – Management of Surface Water – Neutral Impact

- No mitigation required.

SUDS Impact Q – Sustainable Drainage Systems – Neutral Impact

- No mitigation required.

SUDS Impact R – Ponds – Positive/Neutral Impact but with the potential to be negative

- The programming of the construction of these new ponds needs to be carefully considered such that they are established sufficiently so to be a 'like for like' replacement of any drainage feature that is to be removed or diverted.

SUDS Impact S – Infiltration basins – Negative Impact

- Definitive clarification should be provided that no surface water drainage is to be conveyed to the infiltration basin south of the Thames.

SUDS Impact T – Rainfall runoff – Negative Impact

- Full consideration should be given to all and any methods that could be utilised to ensure that the quality of surface water discharged from the temporary works is such as it is not detrimental to the wider receiving water network.

Health Impacts

Health Impact A – Air quality during construction and operation – Neutral Impact (however further information is required)

- Further assessments should be provided by the Applicant on the changes in air quality as a result of construction and operation and assess the impact this has on human health.

Health Impact B – Active Travel Impacts by Ward – Positive Impact

- Wards identified as having a high sensitivity should be targeted for improvements in active travel to reduce health inequalities between communities.

Biodiversity Impacts

Biodiversity Impact A – Foraging/Commuting Bats and associated habitat – Negative/Neutral Impact

- The Applicant should be required to undertake updated surveys.
- Early provision of new planting should be provided to mitigate the extensive loss of hedgerows.

Biodiversity Impact B – Roosting Bats – Neutral Impact

- Additional information such as details around the survey approach and timetabling should be included within the DCO documents.
- Detailed design for the proposed hibernation bunker should consider successful designs by the Sussex and Kent Bat Group.
- A detailed mitigation strategy and plan is required.

Biodiversity Impact C – Dormouse – Negative/Neutral Impact

- The Applicant should be required to undertake updated surveys.
- Early provision of new planting should be provided to mitigate the extension loss of hedgerows.
- Ongoing monitoring and long-term management.

Biodiversity Impact D – Badgers – Negative/Neutral Impact

- The Applicant should be required to undertake updated surveys.
- A detailed Impact Assessment and mitigation strategy is required, providing details of proposed habitat creation and proposals for long term management and monitoring.

Biodiversity Impact E – Water Voles – Neutral Impact

- Habitat creation and a clear long term management plan will result in a neutral impact to Water Voles.
- Displacement should be undertaken between 15th February and 31st March.
- Funding/better management of the existing low suitability ditches.

Biodiversity Impact F – Otter – Neutral Impact

- The Applicant should be required to undertake updated surveys.

Biodiversity Impact G – Invertebrate – Negative Impact

- The Applicant should be required to undertake updated surveys.
- The Landscape Ecology Management Plan (LEMP) should provide details of species planting.
- A thorough management plan is required to manage the loss of veteran trees.

Biodiversity Impact H – Loss of Ancient Woodland – Negative Impact

- A detailed plan should be provided outlining where ancient woodland soil will be moved to.
- Clarification is required regarding the term 'contamination'.
- A detailed mitigation strategy and ongoing management/habitat creation/monitoring plan should be produced by the Applicant.

Biodiversity Impact I – Bird – Negative/Neutral Impact

- Updated surveys should consider the increase in suitability of agricultural land and golf courses (area which were previously maintained).
- The key habitats being lost should be replaced with established planting and monitored/managed in the long term.

Biodiversity Impact J – Outline Landscape and Ecology Management Plan (OLEMP) - Negative Impact

- The Applicant needs to include clear details on how replacement habitats will be created and managed, including who will be responsible for management and any associated funding within the LEMP.
- A joint up approach to LEMPs to ensure continuity between landscaping and mitigation management across the Project.

Biodiversity Impact K – Lighting – Negative Impact

- Lighting spill should be reduced to as low as possible within the adjacent habitat.

Biodiversity Impact L – Biodiversity Net Gain – Negative Impact

- The Applicant should be required to correctly run the Biodiversity Net Gain (BNG) metric with clear detail of limitations and reference to the wider habitat creation/benefits to biodiversity.

Biodiversity Impact M – Green Bridges – Negative/Neutral Impact

- The Applicant needs to ensure the design of green bridges provide opportunities for connectivity to other suitable habitats.

Biodiversity Impact N – Nitrogen Deposition – Neutral Impact

- A clear management plan is required to ensure new habitats can be established, retained and managed in the long term.

Biodiversity Impact O – Reptiles and Great Crested Newts (GCNs) – Positive Impact

- The Applicant should be required to produce a clear Reptile Mitigation Strategy Plan, showing distribution of different species of reptiles, proposed displacement areas, proposed translocation and receptor areas for each species.

Climate Change

Climate Change Impact A – Construction and Operation Emissions – Negative Impact

- The Applicant should be required to provide Electric Vehicle (EV) charging points along the route and prioritise the use of public transport.

Heritage Conservation Impacts

Heritage Conservation Impact A – Conservation Areas – Negative/Neutral Impact

- The Applicant should be required to screen using earthworks and woodland planting, and the final design of mitigation earthworks and planting should take full account of the local historic environment character and any constraints due to buried archaeological remains.

Heritage Conservation Impact B – Designated built heritage (listed buildings) – Negative Impact

- The Applicant should be required to screen using earthworks and woodland planting, and the final design of mitigation earthworks and planting should take full account of the local historic environment character and any constraints due to buried archaeological remains.

Heritage Conservation Impact C – Non-designated built heritage – Negative Impact

- If it is not possible to avoid physical impacts then the Applicant should be required to commit to historic building recording, to a minimum of Historic England Level 3.
- The Applicant should also be required to screen using earthworks and woodland planting, and the final design of mitigation earthworks and planting should take full account of the local historic environment character and any constraints due to buried archaeological remains.

Heritage Conservation Impact D – Archaeology – Scheduled Monuments – Negative/Neutral Impact

- The wording of the Historic Environment section of the draft DCO should be revised to include *“acceptance of the project archives with a suitable box fee will be agreed with the relevant Local Planning Authorities”*.
- The Applicant should be required to screen using earthworks and woodland planting, and the final design of mitigation earthworks and planting should take full account of the presence of scheduled monuments, the local historic environment character and below ground archaeological remains.

Heritage Conservation Impact E – Archaeology – Geology and Palaeolithic/Early Holocene archaeology – Negative Impact

- The Applicant should be required to commit to the staged investigations and mitigation as set out in the ES (AS-044), dAMS-OWSI (APP-367), PDQM (APP-358), SPAA-&-RF, Annex F (APP-359) and relevant supporting project delivery documents and that updated versions of these documents are submitted for consideration during the examination process.
- Mitigation of impacts to geoarchaeology and Palaeolithic/Early Holocene archaeology will comprise a combination of preservation in situ (where possible) and where not then detailed archaeological excavation, recording, analysis and reporting, as secured by the DCO Requirements (AS-038, Section 9).

Heritage Conservation Impact F – Archaeology – Non-designated archaeology – Negative Impact

- The Applicant should be required to commit to the staged investigations and mitigation as set out in the ES (AS-044), dAMS-OWSI (APP-367), PDQM (APP-358), SPAA-&-RF, Annex F (APP-359) and relevant supporting project delivery documents.
- The Applicant should be required to undertake archaeological investigations as early as possible to ensure there is sufficient time before the start of construction.
- Mitigation should take the form of a combination of preservation in situ (where possible) and where not, then detailed archaeological excavation, recording, analysis and reporting, as secured by the DCO Requirements (AS-038 Section 9).
- The Applicant may be required to fully excavate the total defined site to the west of Thong village as it may not be possible to guarantee long term preservation of part of the asset and it may be necessary to excavate the whole asset to understand the part directly impacted.
- The Applicant should provide scope in the dAMS-OWSI for final decisions on the extent of excavation of sites to be agreed with the local planning authority archaeologist.
- The Applicant should commit to finding options for preservation in situ where other high value heritage assets are identified.
- National Highways should commit to securing the temporary and long-term management of heritage assets that would be preserved in situ.
- A monitoring regime should be agreed between the Applicant, KCC and Historic England for non-designated archaeological remains associated with organic deposits in the wetland areas.
- The Applicant should commit to appropriate archaeological investigations and mitigation in areas of Soil Scrape where there are negative impacts for below-ground archaeology.
- Confirmation that preliminary works do not include the building of compounds or utility works where there could be major environmental impacts and that details of agreed approaches to mitigation, including plans, are included and agreed with KCC during the examination process.

Heritage Conservation Impact G – Registered Parks and Gardens – Negative Impact

- The Applicant should be required to screen using earthworks and woodland planting, and the final design of mitigation earthworks and planting should take full account of the presence of scheduled monuments, the local historic environment character and below ground archaeological remains.

Heritage Conservation Impact H – Historic Landscapes – Negative Impact

- The Applicant should be required to ensure that the proposed mitigation earthworks and woodland planting will preserve aspects of the open agricultural historic landscape character around Thong village which contributes to the setting and significance of Thong Conservation Area.
- Detailed documentary research of the historic landscape should be undertaken and combined with archaeological evidence.

- Final, detailed design for mitigation areas of landscape creation and planting, including Chalk Park, should take account of the results of archaeological investigations and a detailed understanding of setting of heritage assets.
- Precise details of the mitigation that will be put in place, for example, in respect of Shorne Woods Country Park, which will be impacted by utilities works along its southern border should be provided.
- The Applicant should be required to commit to an iterative, research focused approach to mitigation which will be developed as the scheme progresses.
- The Applicant should be required to ensure they have sufficient resources (funding and staff) to undertake the necessary archaeological mitigation.

Other Matters

Workforce Impact A – Increase in employment in Kent – Positive Impact

- The Applicant should have a dedicated team of staff to ensure the measures set out within the SEES are delivered.
- A Requirement should be made that any training offered should directly link to available jobs and in respect of those jobs and associated apprenticeships, there should also be a clear progression route for new apprentices and existing staff to progress and further their careers within the scheme.
- The Applicant should be required to support a centralised apprenticeship scheme, such as a flexi-jobs apprenticeship scheme or the lead contractor employing all apprentices, to ensure that the volume of apprenticeships required can be offered.
- The Applicant and their delivery partners should be required to provide staff to act as tutors in shortage areas or provide funding to enable the education providers to offer financial incentives to support recruitment.
- The Skills, Education and Employment Strategy (SEES) should be revised to increase the volume of apprentices to match either the previous statutory (although no longer) of 2.3% of the workforce as an example of best practice, or aim for funding of at least one apprentice per £1m of spend on labour on the scheme.
- The training target within the SEES should be revised from 350 to a more appropriate 500 spaces given the size of the scheme.

Community Assets Impact A – Loss of revenue at Shorne Woods Country Park – Negative Impact

- A commitment from the Applicant to reimburse KCC for its demonstratable loss of income before, during and after construction of the LTC. To protect cash flow and to mitigate against compounded losses, this should be assessed and paid on an annual basis ensuring the SWCP is left in no worse of position than it would have otherwise been before the scheme.
- A commitment from the Applicant to fund a community engagement programme and to collaborate with KCC to produce a campaign to help highlight what Shorne Woods Country Park (SWCP) has to offer. The aim of this will be to inform and promote the SWCP from an educational and environmental standpoint. We consider this will go some of the way to help mitigate some of the negative impacts that will be caused by the LTC.

Community Assets Impact B – Tree removal and replanting at Shorne Woods Country Park – Negative Impact

- A Requirement on the Applicant to provide mitigation planting and maintenance of the new woodland that needs to be led by members of the Council's Country Parks team, as experts in their field. KCC estimates that two members of staff will need to be dedicated full time to deliver this mitigation and seeks a commitment that associated costs would be covered by the Applicant.

Community Assets Impact C – Proposed Car Park at Thong Lane – Negative Impact but with potential to be positive

- A Requirement on the Applicant to provide a sustainable business case (which is approved by KCC) in advance of any agreement to transfer/manage the facility and a commitment that associated costs would be covered by the Applicant.

Community Assets Impact D – Blighted Property – Woodlands Cottage, Thong Lane – Negative Impact

- A commitment from the applicant to work in collaboration with KCC to minimise the impacts to Woodlands Cottage. If suitable solutions cannot be agreed upon for any reason, then a blight notice may need to be served.

Conclusion

This Written Representation from Kent County Council (KCC) has set out the authority's position on the Lower Thames Crossing (LTC) scheme which is one of overall support. However, further mitigation is required, and this been set out in this Representation, to enable the Project to achieve its full benefits at a local, regional and national level in Kent, the wider South East and the UK as a whole.

1. Introduction

- 1.1. Kent County Council, referred to as “KCC”, is one of many host authorities for National Highway’s A122 Lower Thames Crossing (LTC) Project (“the Project”).
- 1.2. The Project is being progressed by an application for Development Consent by National Highways (“the Applicant”) that was accepted by the Planning Inspectorate on 28th November 2022. If granted, the Development Consent Order (“DCO”) will permit the construction of a new crossing under the River Thames through a tunnel, providing a connection between the A2/M2 in Kent and the M25 south of Junction 29.
- 1.3. For many years Kent County Council has engaged with National Highways throughout the development of its proposals for the Lower Thames Crossing, providing responses to each public consultation (both statutory and non-statutory). KCC Officers have regularly attended technical workshops with the Applicant, engaged in discussions regarding the Statement of Common Ground (SoCG) (APP-126), the Principal Areas of Disagreement Summary Statement (AS-072) and submitted a Relevant Representation to the Examining Authority (RR-0557).
- 1.4. A summary of the Council’s Written Representation is provided in the previous section of this document.

2. Kent County Council's Overall Position

- 2.1. Kent County Council (KCC) has supported proposals for a new Lower Thames Crossing for many years and through many consultations led by the Applicant, National Highways, and the Department for Transport (DfT). KCC is clear that the need for a new Lower Thames Crossing (LTC) is now urgent: demand to cross the Thames at Dartford exceeds the available capacity and having a single point of failure on the network leads to journey time delays, increased costs for businesses and individuals, and ultimately restricts economic growth both regionally and nationally. It is now time for a significant change to our Strategic Road Network (SRN) to make it fit for purpose now and into the future. KCC therefore continues to support the proposed LTC and the investment in additional road capacity that will unlock new opportunities for Kent, the South East and the wider UK.
- 2.2. KCC's support for the project is stated in its statutory Local Transport Plan 4 (LTP4), where the Crossing is also part of the long-term transport policy aim of bifurcation. This splitting of traffic to/from the Channel portals along the M20/A20 and M2/A2 corridors will help to release capacity and therefore relieve pressure on the M20, especially in times of disruption to cross-Channel services. To fully achieve this aim, improvements to the A2/M2 are needed as well as enhanced links between the corridors, such as the A229 (for which KCC needs a financial contribution from National Highways to deliver a Large Local Major scheme that will ensure this essential link is able to support LTC traffic when the project opens). The LTC must be delivered and seen as only the first stage in improving the A2/M2 corridor (Road Investment Strategy pipeline projects of A2 Brenley Corner and A2 Dover Access must also be delivered by National Highways) to provide an enhanced strategic route from the Port of Dover to the Midlands and the North, essential to UK prosperity.
- 2.3. It is clear that LTC is of strategic importance to the long-term economic prosperity of this country going forwards, but it will (together with the Dartford Crossing) serve an equally important local function. With increased crossing capacity and greater journey time reliability, residents in Kent will have a much greater range of opportunities for work, education and leisure. Currently this market is suppressed by the unreliability of the Dartford Crossing, which constrains productivity in the Lower Thames area. To not proceed with the project would lead to a worsening of the existing unacceptable conditions at Dartford as well as restrict economic growth and miss out on productivity benefits nationally, regionally and locally. The detailed comments that follow in this Written Representation must be read in the context of our overall support for this strategically important project.

3. Written Representation

- 3.1. This Written Representation elaborates on the points raised within our Relevant Representation (RR-0557) and Local Impact Report (LIR). In summary, an outline of the principal representations which KCC intends to make in relation to the application will concern:
- Highways and Transportation – as the Local Highway and Transport Authority for Kent;
 - Public Rights of Way – as Local Highway Authority for Kent;
 - Public Health – as Public Health Authority for Kent;
 - Surface Water Flooding and Drainage – as the Lead Local Flood Authority for Kent;
 - Biodiversity;
 - Climate Change;
 - Heritage Conservation;
 - Skills and Employability;
 - Impacts on Community Assets; and
 - Additional Issues Associated with the draft DCO and Highways Related Documents.

4. Highways and Transport (as Local Highway and Transport Authority)

- 4.1. KCC has been investigating and documenting potential highways-related impacts of the LTC since the 2018 Statutory DCO Consultation. Mitigation of the following key negative impacts of the Project are discussed under the following headings, corresponding with the impacts identified in our Local Impact Report (LIR):
- Transport Impact A: Impacts of the LTC on the Strategic Road Network (SRN)
 - Transport Impact B: Wider Network Impacts (WNI)
 - Transport Impact C: Impacts of the LTC on the A229 Blue Bell Hill
 - Transport Impact D: Road Safety Impacts of the LTC
 - Transport Impact E: Public Transport and Active Travel Impacts of the LTC
 - Transport Impact F: Severance Issues for Walkers, Cyclists and Horse Riders (WCH)
 - Transport Impact G: Dangerous Goods Vehicles and Oversized Vehicles
 - Transport Impact H: Construction Shifts and Deliveries
 - Transport Impact I: Construction Traffic Routeing
 - Transport Impact J: Construction Impacts on the Condition of the Existing Local Road Network (LRN)
 - Transport Impact K: Highways Asset generation and impact of transference from National Highways to Kent County Council
- 4.2. This section of our Written Representation ends with a discussion on the Applicant's proposal to monitor these impacts under the Wider Network Impacts Management and Monitoring Plan (WNIMMP) (APP-545).
- 4.3. KCC made clear at the Preliminary Meeting of 6th June 2023 that although the National Policy Statement for National Networks (NN NPS) of 2014 currently remains the designated policy for the Lower Thames Crossing Examination, the Government has undertaken consultation on a draft revision in March 2023 (which closed on 6th June 2023). Clearly, the existing NN NPS may be replaced during the examination of the LTC dDCO or before any decision is taken on the dDCO. Furthermore, KCC notes that para 1.17 of the draft revised NN NPS states that: *"However, any emerging draft NPSs (or those designated but not having effect) are potentially capable of being important and relevant considerations in the decision-making process. The extent to which they are relevant is a matter for the relevant Secretary of State to consider within the framework of the Planning Act 2008 and with regard to the specific circumstances of each Development Consent Order application."*
- 4.4. KCC notes, in this context, that paragraph 5.280 of the draft revised NN NPS places a greater emphasis on the requirements of the Applicant to mitigate negative *"impacts on surrounding transport infrastructure including connecting transport networks"*, which *"could include the Applicant increasing the project's scope to avoid impacts on surrounding transport infrastructure and improve*

network resilience. Where proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the Secretary of State should expect applicants to accept requirements and/or obligations to fund infrastructure or mitigate adverse impacts on transport networks."

Transport Impact A: Impacts of the LTC on the Strategic Road Network (SRN)

- 4.5. With reference to Transport Impact A in our Local Impact Report (impacts of the LTC on the Strategic Road Network (SRN), analysis using both National Highways' Lower Thames Area Model (LTAM) and KCC's proprietary Kent Transport Model (KTM) identified the following SRN junctions where implementation of the LTC leads to an increase in traffic volume to capacity ratio, with the road links or junctions acting at or over capacity:
- M25 J2 (A2/A282)
 - A2 Pepper Hill (Hall Road)
 - A2/A227 (Tollgate)
 - A2 Gravesend East (Valley Drive)
 - M2 J2 (A228)
 - M2 J3 (A229)
 - M20 J6 (A229)
- 4.6. The following SRN junctions were previously identified as impacted by the LTC in studies of the LTAM/KTM and – while they are not flagged as impacted in the latest KTM review – they may re-join the list later due to the postponement of LTC construction by two years and accompanying traffic growth:
- M25 J3 (M20)
 - A2 Spring Head (A2260 & B259)
 - M2 J1 (A289) (though we note and support the concerns of Medway Council on this Junction)
 - M2 J4 (A278)
- 4.7. Although National Highways is responsible for the SRN, there are no mitigation plans for any SRN junctions impacted by the LTC; nor do they feature in the next Road Investment Strategy (RIS) programme. All SRN junctions listed above have been included in the Wider Network Impacts Management and Monitoring Plan (WNIMMP) (APP-545) for the project, except for M25 Junction 2 (M25/A2/A282), which we request to be added. Further comments and requests related to the WNIMMP (APP-545) are provided at the end of this Highways and Transportation section.
- 4.8. Four of these junctions located on the A2 between Springhead and Gravesend East have been shown to cause issues for the adjacent Local Road Network (LRN), managed by KCC, and are currently being analysed as part of a Wider Network Impacts (WNI) Study (discussed in the next sub-section for Impact B). KCC remains concerned that there is no commitment to fund or deliver mitigations for any LTC impacts identified.
- 4.9. KCC's Local Impact Report also identified a capacity issue at the new junction of the LTC with the A2. The junction is included in the WNIMMP (APP-545) and

KCC requests that the monitoring programme also include an assessment of increased use of unsuitable rural routes as bypasses to avoid the SRN due to congestion in the vicinity of the A2/LTC junction. The Wider Network Impact (WNI) Study (see Transport Impact B) has demonstrated that such “rat running” is forecast to occur, and it is also a key concern of local stakeholders.

- 4.10. The Department for Transport (DfT) has recently updated Circular 02/2013 to Circular 01/2022 Strategic Road Network and the Delivery of Sustainable Development. It is noted that the LTC, a flagship project for the SRN, does not comply with several requirements of the updated document. This includes omitting a previously planned service area, so no provision is made in the Project for Electric Vehicle (EV) chargers or Heavy Goods Vehicle (HGV) parking and the maximum distance between motorway service areas remains over 50 miles; and there is also no provision for cross-Thames active travel.
- 4.11. Furthermore, the LTC must be considered as part of a wider package of infrastructure improvements necessary to maintain the UK’s international connectivity. It is essential that the A2/M2 corridor is looked at holistically. Improvement schemes identified as pipeline projects for the DfT’s next Road Investment Strategy (RIS) at ‘A2 Brenley Corner’ and ‘A2 Access to Dover’ need to be delivered. However, neither of these schemes are currently committed and KCC understands that the ‘A2 Access to Dover’ project has been paused in its development pending a review by the DfT.
- 4.12. Alongside these uncommitted pipeline schemes, other capacity enhancements along the M2 are also needed and improved connections between the M2/A2 and the M20 (e.g. KCC’s A229 Blue Bell Hill Improvement Scheme (see Transport Impact C in later sub-section)), to ensure that the two strategic corridors to the Port of Dover and Channel Tunnel are resilient and the full benefits of the LTC are realised.

Summary of KCC’s Mitigation Requests for Transport Impact A: Impacts of the LTC on the Strategic Road Network (SRN)

- A Requirement that National Highways should undertake mitigation works for any LTC impacts on the Strategic Road Network (SRN).
- The Applicant’s monitoring strategy should be amended to include an assessment of increased use of unsuitable rural routes to avoid congestion on the SRN in the vicinity of the LTC.
- A Requirement that National Highways should make provision for Electric Vehicle (EV) charging points and HGV parking along the LTC route.
- A Requirement that National highways should make provision for cross-Thames active travel.
- Commitment from the Applicant to actively support the inclusion of the A2 Brenley Corner and A2 Access to Dover schemes in the next Road Investment Strategy.
- The M25 Junction 2 (M25/A2/A282) should be added to the list of SRN junctions to be monitored within the Applicant’s Wider Network Impacts Monitoring and Management Plan (WNIMMP).

Transport Impact B: Wider Network Impacts (WNI)

- 4.13. With reference to Transport Impact B in our Local Impact Report (Wider Network Impacts (WNI)), impacts of the LTC on the Local Road Network (LRN) have been identified at several times in the Project's history using the same traffic volume to capacity (V/C) ratio analysis with the LTAM and KTM models. It was agreed between National Highways and KCC to review these impacts in more detail and to develop mitigations to the level of pre-Strategic Outline Business Case (SOBC) in the Wider Network Impacts (WNI) Study. Task 1 of the WNI Study, identifying the impacts, is complete and attached as Appendix B to the Local Impact Report. Task 2, developing the SOBC for the mitigation schemes, is commencing at the time of writing and will be made available to the Examining Authority on completion (expected October 2023).
- 4.14. The Kent WNI Study is a KCC owned study, funded by National Highways, to investigate impacts on the wider network in Kent. National Highways does not consider that the proposed interventions are required to make the Lower Thames Crossing acceptable, and that they should be developed in line with Government policy and funding mechanisms outside of the Lower Thames Crossing. National Highways has said, pursuant to its licence, that it will cooperate with KCC in this matter.
- 4.15. The WNI Study has confirmed the following key corridors of negative impacts of the LTC identified in the earlier work:
- The A2 between Spring Head and Gravesend East
 - The A227 between the A2 and the M20
 - The A228 between the M2 and the M20
 - Cycleway corridors on the A226 and adjacent to the A229
- 4.16. Task 1 of the WNI Study is focussed on determining potential mitigation measures to alleviate the LTC impacts identified. More details of those impacts are presented in KCC's Local Impact Report, and the proposed mitigation measures (Task 2) will be identified in a report for the Examining Authority when they are finalised. The assessment will also identify the wider economic impacts of leaving those impacts unmitigated. KCC will update the Examining Authority with our requests of the Applicant when more clarity on costings for these mitigation measures become available through Task 2 of the WNI Study.
- 4.17. In the meantime, KCC requests that the scope of the Applicant's Wider Network Impacts Monitoring and Management Plan WNIMMP (APP-545) is further expanded to include the locations identified in the WNI Study and to cover baseline surveys before construction starts. Further comments and requests related to the WNIMMP (APP-545) are provided at the end of this Highways and Transportation section.
- 4.18. KCC is also aware of the concerns of local stakeholders regarding the impacts of LTC-related traffic in rural areas such as Cobham, Shorne and Higham. These impacts have been identified in the WNI Study and local representatives from these areas are also expected to submit their own Written Representations on this matter

Summary of KCC's Mitigation Requests for Transport Impact B: Wider Network Impacts (WNI)

- The scope of the Applicant's Wider Network Impacts Monitoring and Management Plan WNIMMP (APP-545) should be further expanded to include the locations identified in the WNI Study and to cover baseline surveys before construction starts.
- A Requirement that National Highways should deliver mitigation on the Local Road Network (LRN) as identified through the WNI study (details of mitigation schemes including costs to be provided later in the Examination on completion on the study – expected October 2023). In the alternative, a Requirement that National Highways should fund KCC to carry out the identified WNI study mitigation works.

Transport Impact C: Impacts of the LTC on the A229 Blue Bell Hill

- 4.19. With reference to Transport Impact C in our Local Impact Report (traffic impacts of the LTC on the A229 Blue Bell Hill), KCC continues to work on a mitigation scheme that caters for the LTC impacts as well as alleviating existing congestion and increased traffic from Local Plan development, under the Department for Transport's (DfT) Large Local Majors (LLM) Programme. A decision on whether this scheme proceeds to the next stage of development, Outline Business Case (OBC), is overdue by Government.
- 4.20. The match funding requirement for the LLM Programme is 15%, which for the A229 Blue Bell Hill Improvements Scheme is approximately £35 million (estimated at construction start date of 2026). This local contribution is currently unfunded, therefore, there is a funding gap preventing delivery of the scheme. However, this assumes that LLM funding for the remaining 85% of the scheme costs will be granted by the DfT, which at the time of this Written Representation is uncertain as the bid has still not been granted approval to proceed to OBC. Only on completion of OBC will a funding decision on scheme delivery be made by Government. It must therefore be assumed that there is no funded mitigation for the impacts of the LTC on the A229 and its junctions with the M2 at Junction 3 and the M20 at Junction 6.
- 4.21. The development of the A229 Blue Bell Hill Improvement Schemes came as the result of a feasibility study carried out by KCC to assess key routes in Kent against the Major Road Network (MRN) objectives. The A229 Blue Bell Hill was ranked 2nd worst against 97 other A routes in the county indicating the need for improvement.
- 4.22. The A229 Blue Bell Hill Improvement Scheme has been developed to address current congestion issues as well as the proposals for local growth and the additional traffic generated as a result of the opening of the Lower Thames Crossing.

- 4.23. The A229 Blue Bell Hill Improvement Scheme Strategic Outline Business Case (SOBC) demonstrates good value for money (BCR of 2.2 in the latest data provided to DfT) for mitigating local growth and the impact of the Lower Thames Crossing.
- 4.24. KCC note again paragraph 5.280 of the draft revised National Policy Statement (NPS) for National Networks (2023) which states *“Where a development negatively impacts on surrounding transport infrastructure including connecting transport networks, the Secretary of State should ensure that the applicant has taken reasonable steps to mitigate these impacts. This could include the applicant increasing the project’s scope to avoid impacts on surrounding transport infrastructure and providing resilience on the wider network.”* The adverse impacts on A229 Blue Bell Hill are clearly documented in the Transport Assessment and KCC’s LIR but they have not been mitigated by the Applicant.
- 4.25. Transport Assessment Appendix F Wider Network Impacts Management and Monitoring Policy Compliance (APP-535) states in Para 1.4.3 that *“In some cases, there are adverse impacts on journey times. For example, there are major adverse impacts on the intersection between the A229 and the M20, and the modelling indicates that these would result in an increase of the journey time along the A229, between the M2 and the M20, of up to two minutes. Where these impacts occur, there is potentially a case for further investment on the road network, and at this location KCC are currently developing an SOBC seeking DfT funding due to the existing traffic flows at this location (the A229 Blue Bell Hill Improvement Scheme).”*
- 4.26. In addition, the WNIMMP (APP-545) states in paragraph 3.3.10 that the A229 scheme would *“strengthen the network’s readiness for the opening of the Project”*. However, funding is yet to be agreed by the DfT and there is currently a £35m funding gap for the 15% required local contribution, which unless funded by LTC to mitigate the impact of the Project, will mean that it cannot go ahead.
- 4.27. Insufficient funding for the A229 Blue Bell Hill Improvement Scheme and lack of mitigation of the LTC impacts has implications for local communities and the economy. An unreliable network, which suffers from congestion and variable journey times, can impact on the willingness of residents to commute and have cost implications for businesses. It will impact the movement of goods and services through the M2/M20 corridor and have wider economic impacts on productivity and attracting investment. Journey time reliability is also critically important to longer distance travel, and in particular for businesses involved in ‘just in time’ supply chains, or the movement of perishable goods. It is also likely to impact on the ability of Local Authorities to implement their Local Plans.

Summary of KCC's Mitigation Requests for Transport Impact C: Impacts of the LTC on the A229 Blue Bell Hill

- KCC has developed an improvement scheme for the A229 Blue Bell Hill to mitigate the existing situation as exacerbated by the effects of the LTC. A Requirement that National Highways should carry out those works at its own expense should be added to the DCO. In the alternative, National Highways should fund KCC to carry out such works. If the Government does provide the Large Local Major (LLM) funding for the mitigation works, then National Highways should provide the 15% match funding (anticipated to be approximately £35 million) towards those works.

Transport Impact D: Road Safety Impacts of the LTC

- 4.28. With reference to Transport Impact D in our Local Impact Report (increased accident costs on the A226, A227, A228 and A229 with the Project), KCC requests that National Highways mitigate the road safety impacts of the Project by carrying out International Road Assessment Programme (iRAP) scenario assessment of the Project itself, together with local routes demonstrating a casualty cost as a result of the Project (A226, A227, A228 and A229). An iRAP assessment should be completed for the 'With Scheme' and 'Without Scheme' scenarios for these four routes. Any increase in risk score (not just star rating) under the 'With Scheme' scenario for these 4 routes should be mitigated.
- 4.29. KCC notes an equivalent accident analysis has not been carried out for the 11 phases of construction, which have been modelled in the LTAM, so potential impacts on road safety during the construction phase of the project are not able to be quantified.

Summary of KCC's Mitigation Requests for Transport Impact D: Road Safety Impacts of the LTC

- A Requirement that National Highways must carry out an International Road Assessment Programme (iRAP) scenario assessment of the Project itself, together with local routes demonstrating a casualty cost as a result of the Project (A226, A227, A228 and A229), and undertake works required to mitigate the adverse safety impacts of such assessment.

Transport Impact E: Public Transport and Active Travel Impacts of the LTC

- 4.30. With reference to Transport Impact E in our Local Impact Report (public transport and active travel impacts of the LTC, and in particular the impact to bus services during LTC construction), KCC Public Transport officers have calculated increased costs to KCC bus services of approximately £80k due to delays arising from LTC construction traffic management measures, as set out in the Transport Assessment (APP-529). For the highest frequency services which are likely to suffer from Thong Lane closure and A226 Contraflow, bus priority should also still be considered.

- 4.31. In addition, KCC Public Transport requires a further £80k to be secured to cover the temporary works that may impact bus services, but which the Transport Assessment (APP-529) cannot determine at this stage. The funds could be held by National Highways and only be drawn down upon in the event that this is required due to the temporary works.
- 4.32. It is imperative that temporary works are raised with the KCC Public Transport team at least four weeks in advance of them happening and required compensation discussed at the same time based on £200 per additional operational hour. Temporary bus priorities should still be considered to counter the impact of delay on buses where possible.
- 4.33. Additionally, it is noted that Transport Assessment (APP-529) Table 7.14, Bus journey time impacts, does not cover bus route 101 (Maidstone - Gillingham), which is expected to be adversely impacted by increased traffic and delay on the A229 on implementation of the LTC. Plate 7.38, Bus/coach routes considered in analysis, indicates the A229 lies just outside the scope of the analysis, which is unfortunate, as this road is one of the most impacted on the LRN by implementation of the LTC, as demonstrated in our comments on LTC impacts on the A229 Blue Bell Hill.
- 4.34. 15 years post opening of the LTC, the Dartford Crossing is predicted to be operating at 95% capacity. It is therefore vital that the network is future proofed by providing for alternative modes, which not only offer modal choice but also provide reliable resilience to the network during periods of congestion. This provision is required at the outset.
- 4.35. The current design represents a missed opportunity to embed sustainable public transport access from the outset. It is unlikely that any local bus operator will be able to deliver commercially viable services linking local employment, leisure, and residential zones across the Thames, including demand responsive transport (DRT) and bus rapid transit (BRT). This is because, as stated by National Highways, “the most suitable collection and drop-off points would be at the proposed M2/A2 junction and as far north as the proposed A13/A1089 junction”. This will result in prohibitive public transport journey time for targeted local trips across the Thames.
- 4.36. Bus priority on the LTC could be a segregated access at locations much closer to the tunnel portals to create attractive and competitive public transport journey times. As the use of the emergency access has been ruled out by National Highways, KCC requires consideration of alternative priority accesses for public transport as part of developing future-ready new highway infrastructure.
- 4.37. It is government policy to ensure that road schemes fully consider bus improvement and bus priority, and KCC encourages National Highways to follow similar principles to deliver 21st century road infrastructure. [Ref: *National Bus Strategy (NBS) Bus Service Improvement Plan (BSIP) Highways & Network Management Initiatives 1*].

- 4.38. KCC remains concerned with the lack of facilities for walking, cycling and public transport on the crossing itself. This approach is contrary to current guidance such as the National Policy Statement for National Networks (DfT 2014, referenced in the Transport Assessment (APP-529)), the recently updated Circular 01/2022 Strategic Road Network and the Delivery of Sustainable Development; and Gear Change: A Bold Vision for Walking and Cycling, all of which require projects to consider and provide for alternative modes. The proposal is not in line with current policies and sufficient evidence has not been provided to demonstrate why this is the case or indeed, acceptable.

Summary of KCC's Mitigation Requests for Transport Impact E: Public Transport and Active Travel Impacts of the LTC

- A Requirement that National Highways must submit a scheme to the Secretary of State for approval, following consultation with KCC, to identify and fully fund mitigation to local bus services which are disrupted as a result of temporary works during construction.
- A Requirement that temporary works are identified in writing to the KCC Public Transport team at least four weeks in advance of them happening and required compensation discussed at the same time based on £200 per additional operational hour.

Transport Impact F: Severance Issues for Walkers, Cyclists and Horse Riders (WCH)

- 4.39. With reference to Transport Impact F in our Local Impact Report (severance issues on Valley Drive and Wrotham Road for walkers, cyclists and horse riders), KCC requests that severance impacts on Valley Drive and built-up sections of Wrotham Road are mitigated through a Requirement of the DCO or a Section 106 agreement, securing measures including formalised pedestrian / cycle crossing points to be determined by KCC as the Local Highway Authority.

Summary of KCC's Mitigation Requests for Transport Impact F: Severance Issues for Walkers, Cyclists and Horse Riders (WCH)

- A Requirement that National Highways must submit a scheme to the Secretary of State for approval, following consultation with KCC, to identify the impacts on Valley Drive and Wrotham Road and fully fund appropriate mitigation measures. In the alternative, KCC would accept a Section 106 Agreement for these mitigation measures to be secured.

Transport Impact G: Dangerous Goods Vehicles and Oversized Vehicles

- 4.40. With reference to Transport Impact G in our Local Impact Report (impacts of continuing traffic management measures at the Dartford Crossing for dangerous goods vehicles (DGVs) and oversized vehicles), KCC requests that National Highways commit to diverting DGVs and oversized vehicles to use the Project in order to phase out the use of the Dartford Traffic Management Cell and remove the associated delays and incidents, rather than just reducing them.

Summary of KCC's Mitigation Requests for Transport Impact G: Dangerous Goods Vehicles and Oversized Vehicles

- A Requirement that National Highways submits to the Secretary of State for approval, following consultation with KCC, a scheme that requires DGVs and oversized vehicles to use the Project in order to phase out the use of the Dartford Traffic Management Cell and remove the associated delays and incidents, rather than just reducing them.

Transport Impact H: Construction Shifts and Deliveries

- 4.41. With reference to Transport Impact H in our Local Impact Report (impacts of construction shifts and deliveries on the LRN at peak times), KCC requests that National Highways provide the following mitigations:
- A Requirement should be inserted in the dDCO, that restricts
 - (a) construction deliveries and construction vehicles movements; and
 - (b) construction worker shift changes occurring, during the LRN peak hours (0800-0900 and 1700-1800).
 - A Requirement that National Highways should fund proposed remedial measures, along with providing a six-monthly monitoring report to KCC to determine whether Travel Plan targets are being met and whether the construction traffic generation is at or lower than predicted. In the alternative, KCC would accept a Section 106 Agreement for these mitigation measures to be secured.
- 4.42. KCC welcomes the measures National Highways are proposing to reduce the scheme's construction impact on the LRN, including on-site accommodation, a shuttle service, subsidised or discounted public transport tickets and funding to draw down should targets be exceeded. However, further detail is required to ensure these are appropriate and fully secured as a requirement of any consent granted. KCC also welcomes the opportunity to work with National Highways to ensure Construction Travel Plans are sustainable.

Summary of KCC's Mitigation Requests for Transport Impact H: Construction Shifts and Deliveries

- A Requirement that restricts
 - (a) construction deliveries and construction vehicles movements; and
 - (b) construction worker shift changes occurring, during the LRN peak hours (0800-0900 and 1700-1800).
- A Requirement that National Highways should fund proposed remedial measures, along with providing a six-monthly monitoring report to KCC to determine whether Travel Plan targets are being met and whether the construction traffic generation is at or lower than predicted. In the alternative, KCC would accept a Section 106 Agreement for these mitigation measures to be secured.

Transport Impact I: Construction Traffic Routeing

4.43. With reference to Transport Impact I in our Local Impact Report (impacts of construction traffic routeing proposals), KCC requests that National Highways provide the following mitigations:

- Construction vehicle routing plans shown on Plates 4.1, 4.2, 4.5 and 4.6 of the Outline Traffic Management Plan for Construction (APP-547) should be conditioned, along with the left turn ban for construction related HGVs when exiting the southern tunnel entrance compound, joining the A226.
- Construction vehicle movements should be monitored to ensure they are adhering to agreed routes. Construction monitoring should also assess the extent to which traffic diverts to "rat runs" on the local road network as a result of delays caused by construction traffic management measures. This should cover both making sure contractor HGVs serving the construction compounds adhere to approved routes, as well as monitoring of other (regular) traffic movements, avoiding construction areas by using unsuitable rural road routes. Automatic Number Plate Recognition (ANPR) is likely to be the most appropriate tool as it would enable rat runs to be identified and also enable the contractor to identify whether LTC vehicles are causing any issues that are being raised by KCC or the public.
- National Highways should permit (a) all construction-related traffic including workers to use Haul Road H18 to access the southern portal compound from Phase 2 until it is no longer operational, and (b) construction workers in cars to use both the A226 and Lower Higham Road access points to access the A226 Gravesend Road compound. Further consideration should be given to demonstrating that these additional right turners wouldn't cause blocking back on the A226.

Summary of KCC's Mitigation Requests for Transport Impact I: Construction Traffic Routeing

- A Requirement that construction vehicle routing plans should be agreed with KCC, along with a left turn ban for construction related HGVs when joining the A226.
- A Requirement for a scheme for the monitoring of construction vehicle movements to ensure compliance with agreed haulage routes, and associated rat running on the local road network.
- A Requirement that the Applicant must permit:
 - (a) all construction-related traffic, including workers to use Haul Road H18, to access the southern portal compound from Phase 2 until it is no longer operational, and
 - (b) construction workers in cars to use both the A226 and Lower Higham Road access points to access the A226 Gravesend Road compound.

Transport Impact J: Construction Impacts on the Condition of the Existing Local Road Network (LRN)

- 4.44. With reference to Transport Impact J in our Local Impact Report (construction impacts on the condition of the existing LRN), previous projects of this scale have ensured that damage to KCC's road network from construction traffic or SRN traffic diverted onto the LRN is quantified and repaired. This has been done by undertaking pavement condition surveys before and after project construction and identifying sections of road where this deterioration can be attributed to the project. These can then be repaired or funded by the project, ensuring KCC is not disadvantaged and left with a significant repair bill.
- 4.45. KCC believes that while this approach is an important fall-back option, it is more prudent to address these problem areas pre-emptively. As an alternative, works can be carried out before the LTC construction begin, to build resilience into the LRN and ensure asset failures do not occur during the construction. Given the high level of local concern regarding the LTC project, such a pre-emptive programme could also represent a way to build good will with local residents and stakeholders.
- 4.46. KCC has identified a programme of pre-emptive works which would address areas likely to fail during the LTC construction phase. This programme involves £2.55 million of planned renewal and preservation works and sits alongside the £1.15 million that KCC is already in the process of investing in these routes. Evidence for the requested works / funding contribution and the full network review can be provided to the Examining Authority upon request. These have already been provided to the applicant for consideration.

Summary of KCC's Mitigation Requests for Transport Impact J: Construction Impacts on the Condition of the Existing Local Road Network

- A Requirement for the Applicant to carry out a programme of pre-emptive works to prevent or minimise damage to the Local Road Network during the LTC construction phase. In the alternative, funding for KCC to undertake such works at National Highway's expense.

Transport Impact K: Highways Asset generation and impact of transference from National Highways to Kent County Council

4.47. With reference to Transport Impact K in our Local Impact Report (impacts of transference to Kent County Council of some highways assets created for the scheme), KCC requests that National Highways provide the following mitigation:

- Full structural and location details of the structures and special geotechnical measures that will become the responsibility of KCC, as Local Highway Authority, are to be provided to KCC.
- KCC are to be the technical approval authority for any structures or special geotechnical measures (as defined in DMRB Standard CD622). National Highways will undertake the KCC structures technical approval process in full and are to pay for KCC's time in undertaking the technical approval in accordance with KCC's technical approval procedure.
- National Highways are to pay KCC appropriate commuted sums. The DCO made must ensure these commuted sums be determined based on the Association of Directors of Environment, Economy, Planning and Transport (ADEPT) Bridges Commuted Sums for each structure National Highways requests Kent County Council to accept ownership of.

Summary of KCC's Mitigation Requests for Transport Impact K: Highways Asset generation and impact of transference from National Highways to Kent County Council

- A Requirement that, before the commencement of construction, National Highways provide KCC with further information regarding the full structural and local details of the structures and special geotechnical measures that will become the responsibility of KCC.
- A Requirement that National Highways should cover the costs of KCC Officers undertaking the technical approval process for any new structures or special geotechnical measures.
- A Requirement for that National Highways pay KCC, as Local Highway Authority, an appropriate commuted sum for the long-term maintenance of each structure KCC is expected to accept ownership of.

The Wider Network Impacts Management and Monitoring Plan (WNIMMP) (APP-545)

- 4.48. The Applicant proposes to address many of the LTC impacts mentioned above by means of a Wider Network Impacts Management and Monitoring Plan (WNIMMP) (APP-545).
- 4.49. The overriding theme of the WNIMMP (APP-545) and the complementary DCO document 7.9 Transport Assessment Appendix F Wider Network Impacts Management and Monitoring Policy Compliance (APP-535) is that the adverse impacts of the project are acceptable in policy terms. However, KCC considers that failure to mitigate these adverse impacts would reduce the benefits realised by the Project. Whilst we acknowledge the benefits in having access to the monitoring data, there is still no commitment to fund any schemes where it is demonstrated that the LTC impact causes unacceptable impacts. This includes on the Strategic Road Network where the existing network management duty is referenced but pipeline schemes in the RIS programme are not yet guaranteed or funded. Indeed, the A2 Access to Dover pipeline scheme has been paused, pending review by DfT.
- 4.50. On the local road network, we consider the most significant impact of the Project is on the A229 Blue Bell Hill and the junctions either end (M20 J6 and M2 J3). The WNIMMP (APP-545) confirms that the greatest impacts of the Project in the south are on those areas (as well as M2 J1 and J2) but references the Strategic Outline Business Case work that KCC is undertaking to mitigate impacts on the A229 Blue Bell Hill. To be absolutely clear, any scheme on the A229 is currently uncommitted and unfunded as it is currently under review by the DfT. If the review passes the scheme into the next phase of work (the Outline Business Case) then there is still a significant funding shortfall before it would become committed. The WNIMMP (APP-545) states in paragraph 3.3.10 a that the A229 scheme would “*strengthen the network’s readiness for the opening of the Project*” – this is firm acknowledgement that the A229 scheme is needed to ensure the LTC’s success.
- 4.51. National Highways’ post-opening project evaluation (POPE) methodology manual for major projects, states in Section 1.2 that the “*current POPE method has three key timeframes for data collection and analysis:*
- *Collection of pre-construction baseline data – The collection of pre-construction data associated with a project to support a post opening evaluation.*
 - *One-year after study – Refers to the production of a one-year after evaluation which sets out a comparison of the forecast and outturn impacts of a project against each of the AST categories.*
 - *Five-years after study – A follow up evaluation which expands on the findings after the first year and sets out a comparison of a projects’ forecast and outturn impacts against each of the appraisal metrics. Where possible, the outturn value for money is assessed based on the observed benefits.”*

- 4.52. WNIMMP (APP-545) paragraphs 5.2.1 and 5.5.1 indicate the monitoring schedule would commence with baseline surveys one year before opening. Paragraphs 5.2.3 and 5.5.2 indicate the monitoring schedule during LTC operations would be at the one year and five years post-opening intervals. KCC considers that traffic flows will have already altered at year one from the project's long construction period with the change in route/destination choice arising from that disruption. This would be beyond measurement from the data collected by Contractors as suggested. Baseline surveys should be undertaken at least one year before commencement of construction and supplemented with additional surveys annually until five years post-opening. Local stakeholders would not accept LTC impact mitigations being addressed only at the one year and five years post-opening intervals.
- 4.53. Section 2.5 of the POPE methodology manual states that changes in background traffic levels are assessed by looking at changes in traffic trends at national, regional and local levels from before and after its construction, using data from the road traffic statistics in Great Britain produced annually by the DfT. This information is not so readily available for KCC's local road network as it is for National Highways' Strategic Road Network. KCC therefore requests that certain key roads on our Local and Major Road Network impacted by the LTC are incorporated into National Highways' permanent monitoring programme as follows:
- The A229 Blue Bell Hill should be permanently monitored before and after LTC construction to identify impacts on traffic movements on this primary major road network link between the M2 and the M20. The A229 is considered the most impacted of KCC roads by implementation of the LTC, as shown in the model output Plates in the Applicant's DCO documents and as discussed in our Local Impact Report. KCC Traffic Management advises that the A249 Detling Hill should also be permanently monitored, as it is always impacted if the A229 is heavily trafficked or subject to incident; impacts that would not be apparent in the core scenario LTAM or KTM model outputs. KCC comments on the Applicant's road safety analysis have also identified the A229 between the motorways as one worthy of monitoring. The A229 is also a key interest of National Highways with respect to potential trunking. They have recently confirmed to KCC that they have recommended to DfT that the A229 (from M2 J3 Chatham to M20 J6 Maidstone) and the A249 (from M2 J5 Sittingbourne to M20 J7 Maidstone) should proceed to detailed development for potential redesignation as SRN in the RIS3 period 2025 to 2030.
 - The A227 and A228 should be permanently monitored before and after LTC construction. As well as assessing traffic movements on these secondary links between the A2/M2 and the M20 corridors, this initiative would also help to monitor potential rat-running on unsuitable rural roads, a key concern of local stakeholders. KCC comments on the Applicant's road safety analysis have also identified this road section between the A2/M2 and the M20 corridors as worthy of monitoring.

- The A226 should be permanently monitored before and after LTC construction. With its location broadly parallel to the A2/M2 corridor east of Gravesend, it is expected to experience additional traffic avoiding congestion on the A2 corridor, including the new LTC/A2 intersection. KCC comments on the Applicant's road safety analysis have also identified this road section between the motorways as one worthy of monitoring.
- 4.54. The method for including the A226, A227, A228, A229 and A249 into National Highways' permanent monitoring is suggested to be Smart Traffic Monitoring systems, such as the 'Vivacity' cameras currently used by KCC. These systems detect and classify vehicles, as well as pedestrians and cyclists on roads where they are permitted. Analysis would also provide data on modal shift to active travel alongside traffic volumes and speeds; currently a key DfT objective. Cameras permanently located at either end of the monitored sections of these roads on both sides of the carriageway would collect the data needed to assess the impact of the LTC on these key local routes, including comparative journey time data and journey time reliability. Four (4) cameras would be needed per road; with a total of 20 cameras needed for the whole programme of additional permanent monitoring on the KCC local and major road network.
- 4.55. Section 2.7 of the POPE methodology manual states that 'screenlines' can be used *"to assess broader vehicle movements and identify any reassignment has occurred and, potentially, to determine whether there has been a change in rat-running near a project"*. The additional permanent monitoring sites proposed above would address such objectives for the key movements between the M2 and M20 motorways, as well as potential rat-running issues described in our Local Impact Report.
- 4.56. This additional permanent monitoring initiative would also benefit the Kent Real Time Traffic Model proposal – a project to develop the existing KTM to incorporate real time data streams and produce a county-wide real-time traffic model that has the ability to offer a suite of a management and decision support tools to allow KCC to make more informed decisions on real time network interventions. KCC and National Highways are currently discussing the funding of this project under National Highways' LTC Designated Funds programme.
- 4.57. WNIMMP (APP-545) Section 5.3 and Plate 5.1 indicate the locations to be monitored as suggested by the Applicant, subject to consultation with the relevant local highway authorities during the DCO Schedule 2 Requirement 14 approval process. KCC advises it will be suggesting the following additional sites:
- M2 Junction 1 to Junction 4 journey time monitoring should be added, as identified in our Local Impact Report under Impacts of the LTC on the Strategic Road Network. This section covers the only journey time route assessed to increase on LTC implementation, which may lead to a negative impact of encouraging traffic to find alternative routes (rat runs) on unsuitable roads of the local road network.

- M25 Junction 2 should be added, as identified in our Local Impact Report under Impacts of the LTC on the Strategic Road Network. This junction is forecast to approach capacity in LTC Opening Year 2030 and to exceed capacity in LTC Design Year 2045 according to the KTM model analysis of the Wider Network Impacts (WNI) Study.
 - A2 Pepper Hill junction should be added, alongside the Hall Road/Springhead Road junction already included, together with the Hall Road/Station Road/New Barn Road junction south of the A2. This intersection is forecast to exceed capacity in both 2030 and 2045 according to the KTM model analysis of the WNI Study, as identified in our Local Impact Report under Impacts of the LTC on the Strategic Road Network.
 - A227 / Green Lane junction should be added, as identified under Wider Network Impacts in our Local Impact Report. Implementation of the LTC leads to significant increases in heavy goods vehicle traffic on alternative routes between the A227 / Green Lane and A2 to access the LTC, including the villages of Meopham, Hook Green, Sole Street and Cobham.
 - A228 junctions between the M2 and the M20 should be added, as identified under Wider Network Impacts in our Local Impact Report. The vast majority of junctions along the A228 are forecast to see significant increases in traffic in the with-LTC scenario; with particularly HGV traffic flows along the A228 increasing by up to 160 vehicles per hour. A number of junctions are also forecast to operate over capacity with LTC, leading to further congestion and use of inappropriate alternative routes.
- 4.58. Active travel monitoring should be added, in particular the two cycleway corridors identified under Wider Network Impacts in our Local Impact Report, but also key routes for walkers, cyclists and horse riders (WCH) affected by the Project.
- 4.59. Finally, the scope of the WNIMMP is for monitoring only, the 'management' function in the title is not catered for unless there is funding secured for use against adverse impacts that are identified post-opening. KCC requests that such a funding package is secured for use on the Local Road Network (LRN), to be held by National Highways with the facility for KCC to draw down funding based on the findings of the monitoring and supporting information.

Summary of KCC's Requested Changes to the Applicant's Wider Network Impact Monitoring and Management Plan (WNIMMP)

- Requirements should be imposed to secure that:
 - Baseline surveys are undertaken at least one year before commencement of construction and supplemented with additional surveys annually until five years post-opening.
 - Certain key roads on KCC's local and major road network (such as the A229, A249, A227, A228 and A226) that will be impacted by the LTC, are incorporated into National Highways' permanent monitoring programme.
 - At least four (4) cameras are used to monitor each road; with a total of 20 cameras needed for the whole programme of additional permanent monitoring on the KCC local and major road network.
- DCO Schedule 2 Requirement 14 should be amended to include the following sites within the WNIMMP:
 - M2 Junction 1 to Junction 4 journey time monitoring
 - M25 Junction 2
 - A2 Pepper Hill Junction
 - A227/Green Lane Junction
 - A228 Junctions between the M2 and M20
- DCO Schedule 2 Requirement 14 should also be amended to include active travel monitoring within the WNIMMP, including key routes for walkers, cyclists and horse riders affected by the LTC.
- A Requirement for National Highways to provide a funding package for KCC to implement mitigation measures on the LRN, which are required to address a direct impact of the LTC.

5. Public Rights of Way

- 5.1. With reference to the negative impacts on Public Rights of Way (PRoW) identified in our Local Impact Report, KCC requests that National Highways provide the following mitigation measures:
- Improvements to bring Hares Bridge up to standard to accommodate pedestrians, cyclists and equestrians.
 - Provision for future improvements to bring the following structures cross sections up to cycling / equestrian standard as per the requirements of LTN 1/20 and CD 143 Designing for walking, cycling and horse-riding, including minimum dimensions. These structures will provide for key active travel movements across the A2 and the LTC itself:
 - Brewers Road Bridge
 - Thong Lane Green Bridge (over A2)
 - Thong Lane Green Bridge (over A122 LTC)
 - Marling Cross Overbridge
 - Walking, cycling and horse riding (WCH) routes to have Public Rights of Way / public highway designation reflecting their intended use. The 'permitted path' (between points 6/53 and 8/22, sheets 5 & 6, DCO document 2.7 Rights of Way and Access Plan Volume B (APP-025)) to have Public Bridleway status.
 - Liaison with KCC Public Rights of Way and Access Service on PRoW closure during construction and restoration of routes, to minimise disruption to WCH users.
 - Installation of active travel counters 12 months before the construction phase starts; with the counters to be maintained for a period of three years post completion.
 - One clear plan indicating the PRoW network to be created, including:
 - The legal status of the routes to be provided, and the links to the wider PRoW network.
 - A General Arrangement Plan showing the WCH widths achievable to ensure these adhere to relevant standards.
- 5.2. The creation of additional WCH routes and improvement of some existing WCH routes will place an increased maintenance burden on the County Council. The absence of clear construction detail does not enable:
- The provision to be fully assessed in respect of its suitability for WCH use. Equestrian needs are somewhat different from those of cyclists and a surfacing material must be selected that meets all needs.
 - Commuted sums to be calculated. The negative impact of an increased maintenance burden can only be properly mitigated if a commuted sum is accurately calculated and provided.
- 5.3. If it is not possible to provide this construction detail at this point a requirement to consult further with the Public Rights of Way and Access Service and to agree a commuted sum must be a requirement of the DCO.

Summary of KCC's Requested Mitigation for Public Rights of Way Impacts

- A Requirement to secure improvements to Hares Bridge to accommodate pedestrians, cyclists and equestrians.
- A Requirement to secure the provision for future improvements to bring the following structures cross sections up to cycling / equestrian standard as per the requirements of LTN 1/20 and CD 143 Designing for walking, cycling and horse-riding, including minimum dimensions. These structures will provide for key active travel movements across the A2 and the LTC itself:
 - Brewers Road Bridge
 - Thong Lane Green Bridge (over A2)
 - Thong Lane Green Bridge (over A122 LTC)
 - Marling Cross Overbridge
 - Walking, cycling and horse riding (WCH) routes to have Public Rights of Way / public highway designation reflecting their intended use. The 'permitted path' (between points 6/53 and 8/22, sheets 5 & 6, DCO document 2.7 Rights of Way and Access Plan Volume B (APP-025)) to have Public Bridleway status.
- A Requirement to secure liaison with KCC Public Rights of Way and Access Service on PRow closure during construction and restoration of routes, to minimise disruption to WCH users.
- A Requirement to secure the installation of active travel counters 12 months before the construction phase starts; with the counters to be maintained for a period of three years post completion.
- One clear plan indicating the PRow network to be created, including:
- The legal status of the routes to be provided, and the links to the wider PRow network.
- A General Arrangement Plan showing the WCH widths achievable to ensure these adhere to relevant standards.
- A Requirement or agreement that National Highways should pay KCC a commuted sum to cover the additional maintenance costs of any new and improved Public Rights of Way which are to be transferred to KCC.

6. Sustainable Urban Drainage System (SUDS)

SUDS Impact A: Departure on Peak Rainfall

- 6.1. With reference to SUDS Impact A: Departure on Peak Rainfall, in order to demonstrate that future climate change for the 3.3% Annual Exceedance Probability (AEP) rainfall event has been considered and that it can be suitably manage from a surface water aspect or indeed that the uplift is not required, KCC request for it to be demonstrated that either:
- the risk of flooding for the 3.33% AEP year critical rainfall event does not result in flooding with the recommended climate uplift allowance applied.
 - or for evidence of it being acceptable to the Environment Agency for a departure from their recommended peak rainfall allowance advice to be submitted for the 3.3% AEP event.

SUDS Impact C: Watercourse Channels

- 6.2. With reference to SUDS Impact C, KCC would actively encourage the improvement of existing watercourses wherever possible and would ask that a package of information be provided which details those watercourses being considered for improvement and the methods which are proposed to achieve this.

SUDS Impact E: Surface Flooding 1

- 6.3. With reference to SUDS Impact E, KCC would request that there for all areas within KCC responsibility where it is envisaged that as a result of the proposed works areas of flooding are redistributed information is provided which clearly demonstrates that as a result there is no detrimental impact on the local area.

SUDS Impact H: Surface water flow path

- 6.4. With reference to SUDS Impact H, KCC would ask for information to be provided which clearly demonstrates that the construction of the project does not interfere with the watercourse.

SUDS Impact I: Groundwater Flooding

- 6.5. With reference to SUDS Impact I, KCC request that in order to demonstrate that future climate change for the 3.3% AEP rainfall event has been considered and that it can be suitably managed from a ground water emittance aspect or indeed that the uplift is not required for it to be demonstrated that either:
- the risk of flooding for the 3.33% AEP year critical rainfall event does not cause excessive ground water mounding resulting in flooding with the recommended climate uplift allowance applied.

- or for evidence of it being acceptable to the Environment Agency for a departure from their recommended peak rainfall allowance advice to be submitted for the 3.3% AEP event.

SUDS Impact J: Flooding from sewers and water mains

- 6.6. With reference to SUDS Impact J, KCC would advise that any works involved with the diversion of a sewer or water main (or indeed any utility) should be approved and overseen by the appropriate asset owner with their confirmation as such provided as to the methods proposed for doing so.

SUDS Impact K: Surface water run off

- 6.7. With reference to SUDS Impact K, KCC would request that as part of any future detailed design submission it is clearly demonstrated that suitable pollution control mechanisms are to be installed and that these are sufficient to mitigate issues of contamination and pollution to receiving groundwaters.

SUDS Impact N: Permanent Drainage System

- 6.8. With reference to SUDS Impact N, KCC would request for information to be provided of any temporary proposed connections to the permanent drainage system and for this to demonstrate that surface water is appropriately managed with regards to flood risk and pollution control.

SUDS Impact O: Box Culvert Installation

- 6.9. With reference to SUDS Impact O, KCC would advise that it should be clearly demonstrated that the overarching approval body (EA, IDB, LLFA) for the receiving network which the water passing through these types of culverts, approves the method of waterproofing and does not consider it a risk to pollution.

SUDS Impact R: Ponds

- 6.10. With reference to SUDS Impact R, KCC would advise that the programming of the construction of these new features needs to be carefully considered such that they are established sufficiently so as to be true 'like for like' replacement of any drainage feature that is to be removed or diverted.
- 6.11. We would ask that a program of the works detailing the timings for the proposed removal of the ponds and the channel improvement works be submitted and that it clearly demonstrates that a sufficient period of time is allowed for to ensure the establishment of any replacement features prior to their being brought into use.

SUDS Impact S: Infiltration basins

- 6.12. With reference to SUDS Impact S, KCC would request that definitive clarification is provided that no surface water drainage in association with the construction phase of the project is to be proposed to be conveyed to the infiltration basins south of the Thames.

SUDS Impact T: Rainfall runoff

- 6.13. With reference to SUDS Impact T, KCC would request that full consideration is given to all and any methods that could be utilised to ensure that the quality of surface water discharged from the temporary works is such so that it is not detrimental to the wider receiving water network. Evidence of the agreement from the receiving networks 'owners' that any proposed methods to manage the quality of surface water are appropriate will be required.

Summary of KCC's Requested Mitigation for Surface Water Flooding and Drainage Impacts

- Demonstrate that the risk of flooding for the 3.33% AEP year critical rainfall event does not result in flooding with the recommended climate uplift allowance applied, or evidence of it being acceptable to the Environment Agency for a departure from its recommended peak rainfall allowance advice.
- Information provided which details the watercourses being considered for improvement.
- Information provided which clearly demonstrates that there is no detrimental impact on the local area for all areas within KCC's responsibility where it is envisaged that areas of flooding are redistributed.
- Information provided which clearly demonstrates that the construction does not interfere with watercourses.
- Demonstrate that future climate change for the 3.3% AEP rainfall event has been considered and that it can be suitably managed for ground water emittance, or that the uplift is not required if either the risk of flooding does not cause excessive ground water mounding, or it is acceptable to the Environment Agency for a departure from its recommended peak rainfall allowance advice.
- That any works involved with the diversion of a sewer or water main (or indeed any utility) should be approved and overseen by the appropriate asset owner.
- Any future detailed design submission clearly demonstrates that suitable pollution control mechanisms are to be installed and that these are sufficient to mitigate issues of contamination and pollution to receiving groundwaters.
- Information provided of any temporary proposed connections to the permanent drainage system and for this to demonstrate that surface water is appropriately managed with regards to flood risk and pollution control.
- The overarching approval body (EA, IDB, LLFA) for the receiving network which the water passing through the type of culvert, approves the method of waterproofing.
- Ponds need to be established so that they are a 'like for like' replacement of any drainage feature being removed or diverted and sufficient time given for the establishment of replacement features.
- Definitive clarification that no surface water drainage from the construction phase of the project is to be conveyed to the infiltration basins south of the Thames.
- The quality of surface water discharged from the temporary works is such that it is not detrimental to the wider receiving water network. Evidence of the agreement from the receiving networks 'owners' will be required.
- KCC will seek to secure these matters through Requirements or agreements, to the extent that they cannot otherwise be agreed and secured by agreement with National Highways.

7. Public Health

Health Impact A: Air Quality during construction

- 7.1. With reference to Health Impact A, KCC would like to see further assessments on the changes in air quality as a result of construction and operation based on impact on human health given the evidence provided by WHO.

Health Impact B: Active Travel Impacts by Ward

- 7.2. Based on the evidence base provided by the Applicant, and the assessment of impacts on active travel during operation, KCC would like to see in particular those wards identified with a high sensitivity having a greater focus so improvements in active travel can be made, therefore reducing the potential risk of increasing health inequalities between communities.

Summary of KCC's Requested Mitigation for Public Health Impacts

- The Applicant must complete further assessments on the changes in air quality resulting from construction and operation of the Project and the assess the impact that this has on human health.
- Wards identified as having a high sensitivity should be targeted for improvements in active travel to reduce health inequalities between communities.
- KCC will seek to secure these matters through Requirements or agreements, to the extent that they cannot otherwise be agreed and secured by agreement with National Highways.

8. Biodiversity

- 8.1. It is understood that the Applicant intends to update all protected species surveys. These latest surveys were planned for 2023-24, but it is understood they may be delayed following the ministerial announcement to delay the start of Project construction.
- 8.2. Natural England will be reviewing and approving survey and mitigation information. Irrespective of monitoring requirements for the European Protected Species (EPS)/wildlife licensing, KCC advises that regular monitoring of all species should be undertaken for the scheme for the long term. Monitoring reports should be published to show the success rate of mitigation and to inform future remedial management and future projects.

Biodiversity Impact A: Foraging/Commuting Bats and associated habitat

Activity surveys – transects

- 8.3. Within the Bat survey scope, all manned/walked transect surveys appear to have been based on the Good Practice requirements for Moderate habitat suitability (Table 3.1 of 6.3 Environmental Statement - Appendix 8.8 - BATS (APP-397). However, some of the transects were in habitats of Ancient Semi-Natural Woodland (ASNW) / High suitability, some in Low – as detailed in Table B.1 of Appendix 8.8 (APP-397).
- 8.4. As a result, there is the potential for impacts to have been underestimated; however, due to development the maximum amount of habitat creation within the Order Limits has been proposed.

Activity surveys – Static surveys:

- 8.5. Bat Conservation Trust (BCT) Guidelines (Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition) state that one to three statics are required per transect depending on habitat suitability. However, there appears to be inconsistency in the number of static points per transect. The surveys undertaken by the Applicant are in line with BCT Guidelines in terms of the numbers of static surveys which were carried out (once a month April – October and all habitats treated as Moderate or High), but do not appear to be in line with BCT Guidelines with regard to the number of static detectors which were used. For example:
- Claylane Wood (high suitability habitat to be lost) and Ashenbank Wood had two detectors per transect, but guidelines advise 3 detectors.
 - Transect 7 = golf course has 4 static points, perhaps because it is a long transect, while Cobham park (also a long transect) only used two static points.
 - Shorne Wood has 3 static detectors for High suitability, while Brewers Wood ASNW transect 4 only had one static point (single Barbastelle recording, unconfirmed).

- 8.6. Furthermore, the Applicant's approach does not appear to be fully explained by transect length or single habitat type. KCC suggests that an additional explanatory table is inserted within Appendix 8.8 (6.3 Environmental Statement APP-397) showing:
- Transect number and name
 - Transect length
 - Number of detectors in place per month per transect
 - Rationale / Brief habitat description

Crossing point surveys

- 8.7. The Applicant originally carried out crossing point surveys in 2018 and 2019. The survey effort at the time was correct for moderate habitat suitability, and this appears to be appropriate based on habitat types. However, given the time passed since these surveys were originally undertaken, KCC would request updated surveys to be completed.

A2 and HS1 corridor activity surveys

- 8.8. Activity surveys of the A2 road and HS1 railway corridors between Shorne Woods Country Park and Rochester & Cobham Park Golf Club have been carried out by the Applicant. These aimed to identify functionally connected habitats that would be severed by the Project. The methodology is non-standard – for example, under Bat Conservation Trust (BCT) Good Practice guidance, low habitat suitability would be one visit per season. However, the surveys comprised of one survey in May, two in July 2019. In terms of indicating that the area is used at all then it does for that time of year, but isn't a reliable measure of the full extent of activity, or of seasonal variation in activity. Therefore, these surveys have not fully assessed the significance of these corridors and would have expected higher levels of survey to have been carried out to fully assess the impact.
- 8.9. Overall there is potential for the impact on Foraging and Commuting Bats to have been underestimated, particularly as it is not fully understood how bats are crossing the A2/HS1 and this may limit the mitigation proposed. However, KCC acknowledges that the Applicant proposes to deliver the maximum amount of habitat creation possible within the confines of the Order Limits.

Foraging Habitat Loss

- 8.10. While replacement habitat is proposed, due to the time delay in provision of this habitat, KCC would expect the bat population to experience a reduction in size due to the reduction of foraging and roosting availability in the short to medium term.
- 8.11. Paragraph 8.6.135 of DCO Document 6.1 Environmental Statement - Chapter 8 - Terrestrial Biodiversity (APP-146) states:

The replacement planting of semi-improved natural broadleaved woodland and plantation woodland habitat is predicted to be of at least equal value to what is going to be lost and likely higher quality compared to the plantation

*woodland, although would take at least 30 years to become sufficiently established. The irreversible lost ancient woodland is classed as irreplaceable habitat, although to help compensate the loss, 48.75ha of ancient woodland compensation planting would be provided. The habitat lost is likely to be of a high value to bats, however, there are large areas of ancient woodland habitat in the wider landscape which the local bat population would still be able to utilise. A total of 43.56km of hedgerow habitat would be lost (across the whole development footprint) but new hedgerow habitat would be created as well as improving existing hedgerows which would take approximately **five to ten years** to become sufficiently established.”*

- 8.12. Planting will be required to mitigate the extensive loss of hedgerows. New planting should provide some foraging (not roosting) resource within 3-4 years. Whilst an expected decline in insects and foraging should be temporary, several years of insufficient food to support raising young will have longer term repercussions.
- 8.13. The short to moderate negative impact identified within Biodiversity Impact A of our LIR has the potential to be neutral in the long term if the key habitats being lost (hedgerows and woodland) are successfully established/managed/monitored in the long term. Early provision of replacement hedgerows as well as woodland planting will be required to close gap between loss and replacement. For example early habitat creation and use of mature planting (e.g. not whips) will help to reduce any negative impacts.
- 8.14. The timeline for landscaping associated with the new roads and green bridges is currently unclear, and it is important to these are known as they will be essential in providing opportunities to hop over the roads. Specific dates are not required at this point in time, but a maximum intervening period between habitat removal and planting must be provided/understood and demonstrated within the EPS to understand impacts on the roosts.

Monitoring

- 8.15. The proposed mitigation involves monitoring bat boxes (for 3 years) and of the use of green bridges with cameras (for 6 years) and of the hibernation bunker (for 10 years). The Bat Draft European Protected Species Licence (6.3 Environmental Statement - Appendix 8.16 - Draft EPS Mitigation Licence Application - Bats APP-408) states this requirement is proportionate in terms of roosts. However, whilst they may not be specifically required as part of the EPS, KCC would recommend that any ongoing management plan reviews include foraging/commuting surveys. The results of the foraging/commuting surveys could help the ecologist understand better the success rate of the replacement roosts.

Biodiversity Impact B: Roosting Bats

- 8.16. The Bat Draft European Protected Species (EPS) Licence (6.3 Environmental Statement - Appendix 8.16 - Draft EPS Mitigation Licence Application - Bats APP-408)(North and South combined in EPS) states:
- 20 out of 70 suitable structures have not been surveyed. An additional 23 structures not yet subject to Preliminary Roost Assessment (PRA).
 - Every tree (access permitting) within the Project Order Limits and 50m buffer has been ground assessed and the majority received at least one direct survey (climb and inspect, ground endoscope or emergence survey).
 - Hibernation surveys were only undertaken at the two known hibernation bunkers.
 - Green Bridge surveys – South of river: Two being retained / enhanced, one new being built. No surveys of existing two bridges.
 - Hibernation surveys or assessments have not been undertaken on other structures and trees. This will be captured in future surveys prior to the final licence application.

Additional information KCC requests to be included within the DCO:

- A list of the structure and tree surveys to be completed (south of river) with an accompanying plan (including utility routes as unclear if included)
 - Confirmation of the survey approach to be followed for the remaining tree assessments, i.e.
 - *Ground level assessment*
 - *Close inspection of any suitable features with endoscope*
 - *Minimum 2 or 3 Emergence/re-entry surveys with cameras of all Moderate / High suitability trees to be lost/impacted unless downgraded to Low by close inspection. Surveys usually still required for full roost characterisation even if bats are identified during close inspection.*
 - Methodology of the bridge surveys to be undertaken and confirmation from a highways expert that the measures are achievable.
 - Timetabling and extent of hibernation surveys to be undertaken
 - Details relating to potential impact of tree clearance on the microclimate around retained trees / roosts.
- 8.17. Twenty roosts are to be lost (north and south) as a result of the LTC, all small day roosts except the hibernation bunker. Other than the hibernation bunker, all mitigation for both tree and structure loss will be bat boxes. There is no proposals for replacement structures are to be provided at this time, but provision for bat houses has been made should maternity roost mitigation be required pending further surveys. KCC accept this approach is proportionate but request that consideration is given for the strapping of felled roost features to retained tree. KCC would also advise that this approach requires commitment to regularly assessing the tree to ensure they are secure.

- 8.18. The Applicant has confirmed that the EPS Licence will be amended to show the retention of the existing hibernation bunker, and KCC is supportive of this change. However, KCC advises that a successfully proven design provided by Sussex and Kent Bat Group should be considered for the design of the proposed hibernation bunker.
- 8.19. For the impact on roosting bats to be neutral, replacement roosts need to be located in an area where connectivity and foraging will be retained/maintained. Individual species needs (e.g. light adverse species) should also be taken in to account. A detailed mitigation strategy and plan is required which demonstrates the replacement roosts will be located in an area which will be retained, enhanced and managed.

Biodiversity Impact C: Dormouse

- 8.20. As stated in KCC's Local Impact Report, from the EPS draft licence (6.3 Environmental Statement - Appendix 8.18 - Draft EPS Mitigation Licence Application – Dormouse APP-414) information, KCC understands that 52ha of optimum habitat and 5km of hedgerow will be lost, supporting an estimated 202 dormice. Table D5.2 stated that habitat supporting an estimated 134 dormice will be lost, and habitat supporting an estimated 68 dormice will be disturbed. This is described as an impact of High impact at site level, Low impact at County level and Negligible impact at Regional level. Due to the numbers and the extent of proposed vegetation clearance we do not agree that it can be considered low impact at county level.

Age of survey data

- 8.21. KCC is satisfied with the results of the Dormouse surveys but we would advise that the surveys are updated due to the data being over three seasons old.

Persuasion

- 8.22. Approximately 30ha will be cleared under the persuasion method. However this is proposed using a non-standard, faster technique (see box below copied from EPS form) with up to 150m² being cleared per day, instead of recommended maximum of each strip being narrower than the radius of a typical home range for that habitat (50m) and with clearance carried out in stages. Given that dormouse have a limited mobility and are referenced as unlikely to move from disturbed areas, it is unclear how creating a bigger area of disturbance will work as a persuasive clearance method. Further explanation of this approach should be provided within the DCO and EPS draft.
- 8.23. The Applicant has submitted the draft EPS licence to Natural England, and it is understood the mitigation approach has been provisionally accepted. The Applicant's Ecology Team have informed KCC Ecological Advice Service that the mitigation has been designed by the author of new pending Hazel Dormouse guidance, which is said to include evidence which supports this faster approach to vegetation clearance. KCC would advise that as this guidance has not been published, it is not possible to verify this approach and

KCC'S Ecological Advice Service has not been included in discussions between the Applicant and Natural England. KCC understands that Natural England will continue to review the mitigation approach as part of the final EPS Licence application; however, we advise that insufficient information has been provided to the rationale for the success of this clearance approach.

- 8.24. Similar to Biodiversity Impact B, the short to moderate negative impact identified within Biodiversity Impact C of our LIR has the potential to be neutral in the long term if the key habitats being lost (hedgerows and woodland) are successfully established/managed/monitored in the long term. Early provision of replacement hedgerows as well as woodland planting will be required to close gap between loss and replacement. For example early habitat creation and use of mature planting (e.g. not whips) will help to reduce any negative impacts.

Carrying Capacity

- 8.25. There does not appear to be any information regarding predicted figures for increased population density within retained habitats, given that the compensation areas will take several years to fully establish. In this regard it is noted that the planting adjacent to retained/persuasion areas won't be started until 2025. An average density has been estimated across all areas of 2.5/ha; KCC advise that this could be used to determine the likely density within each habitat area post-clearance. This information would assist with KCC's assessment with regard to the following guidance from the Dormouse Conservation Handbook: *"Whichever season is chosen for clearance, care should be taken to ensure that the number of animals displaced does not result in unnaturally high densities in the remaining woodland. As a rule of thumb, clearance of more than 10 per cent of any woodland (or woodland complex if well-connected) should be avoided. For example, a 10 ha wood may be capable of supporting a post-breeding population of 10 dormice per ha. Clearance of a single hectare (10 per cent) of this woodland over the winter might displace five dormice in the spring (allowing for 50 per cent mortality over the winter), resulting in a total population in the remaining 9 ha of 50 dormice or 5.5 per ha, well within the carrying capacity of the woodland."*

- a. While Natural England will continue to review the mitigation approach, KCC advises that there is a need to be confident of the following:
- II. That sufficient mitigation being provided by the Applicant. The area of mitigation woodland/scrub is sufficient in terms of expected population density. To assess this, we repeat our previous comment:

An average density has been estimated across all areas of 2.5/ha; we advise that this could be used to determine the likely density within each habitat area post-clearance.

This information is required to ensure that foraging resources will be sufficient within the proposed mitigation areas. From conversations with the LTC team, it is understood that nesting resources have been focussed

on. We are not aware of evidence supporting the approach that nesting resources alone are the limiting factor on hazel dormouse distribution and do not agree with this approach.

III. That the proposed areas of mitigation habitat will be created sufficiently in advance and managed appropriately in the short and long term.

- 8.26. Detailed mitigation strategies, reviews of advance planting /enhancements of retained habitat to ensure that these areas can support the hazel dormouse populations prior to translocation commencing. On going monitoring and long term management of these areas is required.

Translocation

- 8.27. KCC notes that translocation is proposed for the areas between the A2 carriageways. Consultation will be required with the Applicant regarding regular access onto and off of the reservation to install and check dormouse traps throughout the translocation period.

Biodiversity Impact D: Badger

Age of survey data

- 8.28. KCC is satisfied with the results of the Badger surveys, but would advise that the Applicant undertakes updated surveys as the data is now over three seasons old.
- 8.29. Paragraph 6.2.1 of the badger survey (6.3 Environmental Statement - Appendix 8.12 – Badger APP-401) states: *“A number of landowners refused access during the surveys, so no surveys have been carried out in these areas. Before any construction works are carried out, all unsurveyed areas would be surveyed to ensure that no badger setts are present.”* All areas would have to be surveyed as part of the licence application.
- 8.30. KCC agrees that the mitigation proposed by the Applicant has followed National England’s Badgers: advice for making planning decisions guidance and best practice for loss setts and details the following:
- Sett closure for all setts within order limits. One artificial main sett proposed. Precautionary measures proposed to avoid disturbance where sett within 30m of the Project’s Order Limits.
- 8.31. However, insufficient information assessing the impact on loss of foraging habitat and fragmentation has been provided. A more detailed Impact Assessment is required to show how the proposals will meet any requirement for mitigation and compensation with regard to foraging and commuting habitat, including areas not yet surveyed. This may require additional bait-marking surveys for areas where setts will be retained but the relevant foraging areas have not been identified. For example:

- 8.32. Further information on the foraging behaviour of badger within Claylane Wood (only the main sett was surveyed). While the sett was not in use as a main sett at the time of the previous surveys, numerous setts are present, indicating active use of the area to some degree. Due to fragmentation impacts of the proposed road, we advise that further assessment is required as to frequency/extent of badger activity in this area to inform mitigation. The former main sett lies outside of the OL and cannot therefore be closed; as such, the level of disturbance during habitat creation works to the north of Claylane needs to consider potential damage/disturbance impacts on this sett, and the potential for badgers accessing the construction works area.
- 8.33. There is also a need to ensure there is good connectivity across the site to limit the risk of badger crossing roads (both an impact on badgers and health and safety issue for drivers).
- 8.34. A detailed mitigation strategy is required, providing details of proposed habitat creation (including advanced planting), establishment of new habitats, and proposals for long time management and monitoring. Planting must include more mature species (e.g. not whips) to ensure habitats can establish as soon as possible.

Biodiversity Impact E: Water Voles

Survey data

- 8.35. KCC is satisfied with the results of the Applicant's Water Vole surveys, but it is important to note that no surveys have been undertaken for the nitrogen deposition land parcels that were added to the Order Limits in 2022. KCC understand that surveys are planned for within 500m of utilities works areas / associated road works but would advise that the surveys are updated due to the data being over three seasons old.
- 8.36. Furthermore, the Applicant should be required to provide a timetable which demonstrates that additional/updated surveys and licence application/mitigations are achievable prior to the commencement of construction works.
- 8.37. Surveys of displacement areas should also be undertaken immediately prior to construction works taking place. If animals are still present, then trapping and translocation should occur. Any detailed mitigation strategy would need to include the potential for trapping/translocation being required within the timetable of works.

Mitigation

- 8.38. There is the potential for Biodiversity Impact E: Water Voles to be neutral if there is sufficient habitat creation and a clear long term management plan.

- 8.39. Currently, all mitigation proposed by the Applicant for the southern section of the route is in the form of displacement. The Applicant's draft conservation licence (6.3 Environmental Statement - Appendix 8.20 - Draft Water Vole Conservation Licence Application APP-416) refers to displacement taking place until mid-April. Whilst we understand Natural England have provisionally accepted this, KCC would advise that in order for this mitigation to be successful, it should be undertaken between 15th Feb – 31st March in South East England (Water Vole Cons Handbook Dean 2016, Appendix 1 Displacement Protocol). Following this best practice would avoid impacts on young born during that calendar year.
- 8.40. Furthermore, the draft conservation licence includes the proposals to create a habitat mitigation area once a construction compound is no longer required (see para 5.1.9 water vole report), (6.3 Environmental Statement - Appendix 8.10 - Water Vole APP-399) The location of this area is immediately adjacent to an existing ditch network supporting moderate and high water vole populations. KCC would advise that it needs to be demonstrated that the proposed water vole displacement mitigation will be sufficient to allow this habitat creation work to take place.
- 8.41. In addition, KCC would advise that funding/better management of the existing Low suitability ditches would also provide enhancement and should be implemented regardless of whether they are included within the Project's Order Limits or not.
- 8.42. There is a need to ensure that the Development Licence application period is included within the construction timetable.

Biodiversity Impact F: Otter

- 8.43. Biodiversity Impact F: Otter has the potential to be neutral pending sufficient protection of retained water courses and habitats during construction.
- 8.44. However, as the surveys were undertaken over three seasons ago, the Applicant should be required to complete updated surveys, including eDNA of waterbodies and DNA of scat if found (use of both approaches will give precise information on locations used).
- 8.45. Amendments to the Order Limits have identified two additional watercourses being crossed (W242 and W243). These watercourses should be surveyed for signs of otter before any construction is carried out.

Biodiversity Impact G: Invertebrate

- 8.46. Approximately 40 species of notable/nationally rare or scarce invertebrate species were identified during the Kent-based surveys. The LTC proposals will result in two key adverse impacts to invertebrates; habitat loss/loss of connectivity and lighting.
- 8.47. Surveys undertaken by the Applicant have been appropriate (key habitats surveyed) but there has been no targeted light trapping exercise for moths. As moths represent a quarter of insect species in the UK, this is a significant omission.
- 8.48. Moth surveys have been provisionally agreed with the Applicant as part of updated surveys, but KCC would highlight that this has not been confirmed within the subsequently written submission provided to the Examining Authority. While the Applicant may not feel that moth surveys are justified as part of the impact assessment, KCC would advise that these baseline surveys are required to inform the future monitoring of habitat creation, enhancement and management. With regard to the limitation and risk of equipment damage/theft overnight, KCC does not feel that this is a valid limitation for a project of this scale and is not supported by the successful use of bat static detectors.
- 8.49. The Applicant has said that Buglife and Butterfly Conservation have been consulted with in terms of food plants/species mixes proposed, based on species considered most likely to be present. However, KCC is not aware of any details having been provided regarding species planting and would advise that this information forms part of the Landscape and Ecology Management Plan (LEMP).
- 8.50. KCC Ecology Advice Service has previously highlighted the following concerns to the Applicant;
- Overwintering invertebrates and their eggs will be present in virtually all vegetation to be removed. There appears to be no information regarding what will happen to the removed scrub.
 - It was not proposed to retain standing deadwood as it is arguably more valuable than deadwood on the ground and, as part of a previous HS1 project, felled mature trees were strapped to living trees within Ashenbank wood demonstrating that all the felled trees/deadwood can be left in their respective woodland environments.
 - 30 replacement trees are nowhere near adequate to account for the value of a removed veteran tree, we highlight particular concern at the use of 'specimen'. Replacement trees must be native, straight species and of local provenance.
- 8.51. The Applicant has clarified that their Register of Environmental Actions and Commitments (REAC) document will be updated to include specific and explanatory wording committing to veteranisation, strapping of veteran hulks,

retention of standing deadwood, retention of scrub material and dead hedging. While exact areas will be agreed with the relevant woodland management teams as part of the detailed design, the REAC will include a plan highlighting broad areas for submission to the Examining Authority. However, KCC understands that an updated REAC document has not been submitted as part of the DCO Application.

- 8.52. It is imperative a thorough and sufficient management plan is in place to manage the loss of veteran trees and the time for the replacement habitat/increased lighting.

Biodiversity Impact H: Loss of Ancient Woodland

National Vegetation Classification (NVC) and Lower Plants

- 8.53. No notable ground flora was found during the Applicant's surveys which would warrant a specific translocation exercise. However, some notable ground flora was identified within the woodland environments and it is important to note that ancient woodland soil (which will have relatively interesting ground flora seed bank in theory) is given the same protection as the above ground trees. Indeed, a small amount of ancient woodland soil will contain far more biodiversity than an exponentially larger amount of above ground ancient woodland.
- 8.54. Table 7.1 of DCO Document 6.3 Environmental Statement - Appendix 8.2 - Plants and Habitats (APP-391) states that:
"Areas identified on the Environmental Masterplan (Figure 2.4, Application Document 6.2) for compensatory ancient woodland planting to offset the loss of ancient woodland would be inoculated, where reasonably practicable, with soils from ancient woodland sites within Order Limits, as indicated on ES Figure 8.1, Designated Sites (Application Document 6.2), that would be disturbed by construction activity. The suitability of the soil from the donor sites would be determined by a soil scientist prior to commencement of works in those areas, with consideration for existing ground flora composition and diversity and potential contamination."
- 8.55. KCC is concerned by the Applicant's use of 'where reasonably practical', although it is understood there may be limitations in carrying out this exercise. The Applicant should be required to provide a clear plan demonstrating which ancient soil will go.
- 8.56. The Applicant should also be required to clarify the term 'contamination'. It is assumed this pertains to invasive species but this should be made clear within further submissions.
- 8.57. Sufficient information has been provided at this time, on the understanding that as part of the submission, the following will be provided regarding Ancient Woodland soil translocation. The REAC document will be amended to include:

- A list of limitations / parameters regarding soil translocation, such as contaminants (asbestos etc), invasive species and archaeological features.
 - A pre-construction survey which will include soil analysis for contaminants, botanical surveys for invasive species.
 - Confirmation of exact areas of soil to be moved will be shown on clear plans at detailed design stage, once the extent of woodland loss/need to move soil is fully understood.
- 8.58. Furthermore, at the detailed design stage KCC would expect the Applicant to produce a detailed mitigation strategy and ongoing management/habitat creation/monitoring plan.

Biodiversity Impact I: Bird

- 8.59. In KCC's view, the Applicant's breeding/wintering bird surveys were adequate. However, KCC would advise that when undertaking updated surveys, consideration needs to be given to the increase in suitability of agricultural land and golf courses due to changes in management where land has already been purchased, or is due to be purchased, under Compulsory Purchase Order.
- 8.60. KCC is satisfied with the Special Protection Area (SPA) assessment of impacts on the wintering bird assemblage associated with the designated site, primarily because:
"Works to construct the infrastructure for the new South Portal construction drainage discharge would not take place within the Thames Estuary and Marshes Ramsar, and any work within functionally linked land, as shown on HRA Figure 2 (Application Document 6.5 Habitats Regulations Assessment - Screening Report and Statement to Inform an Appropriate Assessment APP-487) would only be undertaken during April, May, June and July". This must be included within the construction timetable.
- 8.61. South of the river there is no loss of land which has been considered as functionally linked, but there is potential for temporary disturbance and as compensation for this during the construction period only an area will be covered by a management agreement with the landowner. Functionally linked land is land which is used by species associated with the SPA but not within the designated site boundary.
- 8.62. It is noted within 6.5 Habitats Regulations Assessment - Screening Report and Statement to Inform an Appropriate Assessment APP-487) that:
"To provide enhanced functionality of functionally linked land associated with the Thames Estuary and Marshes SPA/Ramsar during the construction period, the management of the three fields in the plot south of the Metropolitan Police firing range and adjacent to the SPA/Ramsar (Land Registry ref. K794941) will consist of either a standing ripe crop ready to be harvested, winter stubbles or grass ley from 1 October to 1 March each year throughout the construction and operation of the A226 Gravesend Road and Milton compounds".

- 8.63. KCC is satisfied that justification for temporary mitigation has been provided by the Applicant (e.g. no permanent loss of functionally linked land). However the timings of works/active management of farmland habitat will be imperative to ensuring mitigation is successful.
- 8.64. Furthermore, there is a short to moderate negative impact on breeding birds which has the potential to be neutral in the long term if the key habitats being lost (hedgerows and woodland) are successfully established/managed/monitored in the long term. The Applicant should be required to provide information on the early provision of hedgerows and woodland planting to close gap between loss and replacement. For example early habitat creation and use of mature planting (e.g. not whips) will help to minimise the extent of the negative impact.
- 8.65. An area of suitable habitat could expand across the Order Limits as land gets taken out of current management (for example, the closure of Southern Valley Golf Course) and the breeding bird interest increases across the site. Therefore KCC would advise that current management of these areas is maintained to prevent suitable habitat for protected/notable species establishing on site.

Biodiversity Impact J: Outline Landscape and Ecology Management Plan (OLEMP)

- 8.66. KCC would advise that any seed mix must consist of native, site-appropriate species and be of local provenance to retain the integrity of existing habitats and to maximise the potentially for biodiversity net gain and enhancement.
- 8.67. Under the 'Management Requirements' section for each proposed habitat creation project, there appears to be no management prescriptions, just a brief description of the aims. As such, it is not clear how these habitats will be created and maintained. Crucially, details on who will be responsible for management and how associated funding will be secured has been omitted. The open habitats, such as the meadows and chalk grassland will require minimal but very specific management on an annual basis.
- 8.68. Within 6.7 Outline Landscape and Ecology Management Plan (APP-490) KCC notes that: *"The LEMP shall be further developed by the Contractor for each section of the development, and future iterations of the document will include details of management regimes, management expectations and monitoring requirements for each part of the authorised development, not just those outlined in this document."*
- 8.69. KCC is concerned at the possibility that, pending the structure under which the scheme is managed post-determination, contractors for individual sections may be required to develop LEMP documents independently of each other. This has the potential to result in a lack of continuity between the landscaping and

management proposals for mitigation, Biodiversity Net Gain and Nitrogen Deposition among the different sections of the scheme.

- 8.70. There is also a need to ensure that proposed habitat creation and enhancement areas will be managed appropriately in the short and long term (by both the Applicant and future landowners/managers). There is also a need to ensure that the mitigation habitats are retained long term and not lost as part of future developments (i.e. habitat creation as part of HS1 is being lost for this scheme).
- 8.71. Given the above two points, KCC would expect a more detailed Habitat Creation and Enhancement Plan for south of the River Thames to have been submitted as part of the DCO. This should include:
- Expected construction works area (not completed development footprint as shown on the Env Masterplan);
 - All areas where habitat creation/enhancement are required for mitigation purposes;
 - All areas to be lost where species/habitat mitigation is required;
 - Outline information of the methodology, timing, management requirements and persons responsible (as far as is known) for each habitat area created/enhanced (given that some land will revert to private ownership). This information will need to align with species mitigation, BNG and Nitrogen Deposition targets;
 - Proposed species lists for each habitat area to be created/enhanced.
 - Details of who will be responsible for ensuring all the works are carried out correctly across the whole development.

Biodiversity Impact K: Lighting

- 8.72. In regard to lighting, KCC is disappointed that very minimal information has been provided for the operational phase of the development, with only a small section highlighting the expected light spill upon key receptors.
- 8.73. Details of the current light spill (in lux levels) compared to the expected light spill for the whole of the new development (within the Kent side) should be provided, as without this KCC is unable to assess the impact of proposed lighting. Crucially, every available option to limit light pollution must be taken to avoid serious impacts to invertebrates (the faunal basis of all terrestrial ecosystems) and all other nocturnal species whose behaviour is likely to be impacted by increased levels of artificial lighting such as bats, badger, hazel dormouse, hedgehog. This information should be provided and formatted in a way which specifically focuses on the ecological impact of lighting and is accessible for a 'non-lighting expert'.
- 8.74. During a meeting with the Applicant's Ecology team regarding the above concerns, it was explained that due to size of scheme, the current lighting plan has deliberately focussed on key high value areas only as a baseline/reference

point. Within these areas, Lux levels from roadside lighting drops to < 0.5 Lux at 30m, which is 'standard use for Highways'. Due to the location adjacent to SSSI and AW and within 100m of the SPA/Ramsar/SSSI we would expect the lighting design to go above and beyond standard use for highways.

- 8.75. Furthermore, KCC has outstanding concerns regarding the limited information provided and potential impacts of lighting on existing and proposed habitats, mitigation areas and connectivity routes. We advise that there is significant potential for negative impacts of lighting on the behaviour of bats, invertebrates, badger and hazel dormouse in the long term. Further information on the lighting design is required so that it can be shown how dark corridors will be provided/maintained throughout sensitive areas, including hop-overs / Green bridges.
- 8.76. In an attempt to mitigate the negative impact, lighting spill should be reduced to as low as possible within the adjacent habitat, as in KCC's view 0.5lux at 30m is too high.

Biodiversity Impact L: Biodiversity Net Gain

- 8.77. KCC has a number of concerns with the Applicant's current BNG calculations:
- That the anticipated BNG will be lower than 3% for Kent.
 - Concerns that trading rules have not been satisfied and thus the positive net gain scores south of the Thames will be invalid
 - Concerns that condition assessment information may be inaccurate – a limitation the ecologists acknowledge. BNG has been discussed since the original DCO submission, there has therefore been adequate time for this information to be collated
 - There is no mention in the BNG report about how additionality has been dealt with, with regards to protected species. For example, receptor sites for GCN/reptiles should only be allowed within the calculations up to no net loss and it is not clear within the submission if this point has been addressed.
- 8.78. Generally, KCC advises that the approach is complicated and unsatisfactory. We have reviewed the additional written information provided to the KCC Ecological Advice Service following our Relevant Representation submission from the LTC Ecology team regarding the approach to BNG calculations and we advise that our concerns are unchanged. These concerns are as follows:
- We remain concerned that the anticipated BNG will be lower than 3% for Kent, particularly given that this value is based on an invalid metric calculation which has been admitted to inflate the units achievable for woodland (as detailed below).
 - Re. comment that "6000 rows of data had to be compressed into 250 row limit of metric." KCC would suggest, if possible, dividing the scheme into sections to avoid combining areas / rows and maintain clarity, then combining results.

- The Applicant clarified that they took worse-case scenario in terms of potential for habitat creation in an aim to make metric the “*as robust / achievable / realistic*” as possible. This approach meant that trading rules were not met as the lowest target for woodland, i.e. plantation, was used as the replacement habitat for lowland deciduous woodland. While the rationale is reasonable in terms of not over-estimating the potential for priority habitat woodland creation, plantation has resulted in a higher BNG unit value being achieved more easily than if the correct like for like habitat - lowland deciduous woodland - was the target, as plantation is easier to create. The BNG unit outcome has therefore been artificially higher, while trading rules are not met. The metric is therefore invalid.
- 8.79. Justification for this approach was that the BNG is indicative, having been provided for completeness while there is currently no legislative requirement for NSIP projects to achieve 10% BNG under the Environment Act (2021). It is anticipated that under the Environment Act there will be a requirement for DCO’s to demonstrate 10% BNG from 2025. But it is currently understood that a requirement for 10% BNG under the Environment Act (2021) will be managed for all Major developments from November 2023 through an amendment to the Town and Country Planning Act. In this regard, we question the provision of a BNG metric given their limitations and potential to cause confusion. The outcome of this approach is the risk that habitat creation/enhancement measures will not align with those stipulated within the OLEMP/LEMP, or that a lower quality habitat will be established under the proposal. The OLEMP / LEMP and BNG have to be a reflection of each other otherwise it cannot be assessed whether BNG has been achieved or not under future monitoring. BNG also standardises the condition assessment for the LEMP, although not a full methodology. It is not clear for example how new woodland would be condition assessed (for example as plantation woodland or as Lowland Deciduous). We conclude that there is significant potential for confusion in the future over acceptable creation/management targets and monitoring outcomes, and again question whether BNG calculations which do not meet the metric principles are valid or worth referencing.
- 8.80. The Applicant has worked out areas and unit values, and included mitigation up to 5% of total unit value, which they reason is below the no net loss threshold. This infers that 95% of BNG habitat creation/enhancement is additional to that required for mitigation requirements it is our view due to the species interest (as detailed above) this is not correct. KCC are not aware of this approach within the metric guidance and the additional information provided by the LTC team has not addressed these concerns.
- 8.81. It is understood the Applicant has run various scenarios and are willing to provide a metric with mitigation areas excluded; however KCC advise that this information has not yet been submitted. In order to mitigate the impacts, KCC would suggest the Applicant correctly runs the BNG metric with clear detail of

limitations and reference to the wider habitat creation and the benefits to biodiversity.

Biodiversity Impact M: Green Bridges

8.82. With reference to Biodiversity Impact M: Green Bridges, KCC is concerned that the three proposed green bridges offer poor connectivity to other suitable habitats and the inclusion of roads on the green bridges provides additional hazards to animals trying to use the bridges to access other areas of suitable habitat. We highlight the following points:

- Thong Lane Green Bridge South (Page 12 of 6.2 Environmental Statement - Figure 2.4 - Environmental Masterplan Section 2 (2 of 10) APP-160) in particular appears to have roads as significant barriers to suitable habitat.
- No tree planting is proposed to be undertaken on existing bridges; however, reference to tree planting has been noted within the documents (OLEMP reference to tree canopy height), therefore suggesting that tree planting will be carried out. KCC would request clarification is given regarding tree-planting proposals for existing bridges / maximum proposed vegetation height.
- In the event that existing bridges will be managed to provide scrub and grassland habitat only, KCC would advise that ecological advice should be sought with regard to management of natural tree growth which will occur over time, prior to damage occurring which requires complete clearance of vegetation.
- New Thong Lane Overbridge (Page 17 6.2 Environmental Statement - Figure 2.4 - Environmental Masterplan Section 2 (2 of 10) APP-160) increased width is relative to existing and has potential for connectivity once vegetation developed. This needs to provide an important link between Claylane and Shorne / hibernation caves, therefore there is a need to minimise lighting impacts to encourage light averse woodland species.
- Brewers Road bridge – connectivity would be better to south compared to Thong lane south. Appears to show scrub habitat creation along eastern edge but existing bridge appears to be of insufficient width to implement it particularly when considering the PRoW requirements. With regard to existing mature trees to south over HS1 it is not clear if these are being retained as part of proposed linear tree/scrub feature.
- Further details are required on the Lighting Impact Assessment for the Green Bridges. Plans appear to include a high concentration of lighting both below and on the bridge, particularly for existing bridges.

Biodiversity Impact N: Nitrogen Deposition

8.83. The Air Quality Assessment documents to assess nitrogen deposition 6.3 Environmental Statement - Appendix 8.14 - Designated Sites Air Quality Assessment (1 – 4 APP-403- APP-406) and 6.3 Environment Statement - Appendix 8.22 - Terrestrial Ecology Surveys at Nitrogen Deposition Compensation Sites APP-418 are very thorough but our expertise in this regard

is limited. The approach that the majority of the woodlands and designated sites within 200m of the site will be impacted due to nitrogen deposition appears sensible.

- 8.84. Woodlands are proposed to be created and there is a need to ensure they can be established, retained and managed in the long term (similar to the above comments for the LEMP).
- 8.85. A number of the woodlands surveyed as part of this works were flagged up as not having any management and therefore as part of this process there is a need to question if further mitigation can be carried out through enabling management of some/all of those woodlands. Explanation received and accepted– sites not owned and therefore management cannot be controlled.

Appropriate Assessment / Habitat Regulations Assessment

- 8.86. The conclusions of no adverse impact are based on the implementation of best practice guidelines for avoiding impacts from surface water, dust, noise, air quality, vibration and lighting during construction and operational phase.
- 8.87. The Thames Estuary Marshes next to / under the road receives its water via surface water/drains rather than ground water. There is a need to ensure that KCC are satisfied that the LTC tunnel and road construction does not impact the functionality of the marshes and ensure that they will continue to receive and retain water.

Biodiversity Impact O: Reptiles and Great Crested Newts (GCNs)

- 8.88. Results within DCO Document 6.3 Environment Statement - Appendix 8.6 – Reptiles (APP-395) and 6.3 Environmental Statement - Appendix 8.5 – Amphibians APP-394 indicate that the reptile assemblage south of the Thames is important at the County level. Low populations of grass snake and low to good populations of slow-worm and common lizard are estimated south of the Thames.
- 8.89. There are limitations to the surveys carried out in terms of areas where it was not possible to survey and these have been acknowledged in the reporting. The Applicant states that these limitations have been accounted for in the design of the mitigations for the project.
- 8.90. However, there seems to be quite a number of potentially suitable areas where surveys were not carried out, including:
- Areas of semi-improved grassland within Southern Valley Golf Course.
 - Nitrogen deposition compensation sites – understood to comprise arable field margins or areas of negligible impact. No further information required.

- Utilities diversions routes – Suggested by LTC Ecology team that surveys already undertaken. Update surveys required throughout scheme to ensure adequate mitigation areas proposed – see below.
 - Additional areas where landowners refused access. The Applicant needs to undertake surveys once these land parcels have been purchased.
- 8.91. DCO Document 6.1 Environmental Statement - Chapter 8 - Terrestrial Biodiversity (APP-146) details that 32.61ha of potentially suitable reptile habitat will be lost during construction, but only one reptile receptor site (13ha) seems to have been proposed. Other sites are proposed to include habitat suitable for reptiles, but the area of habitat managed specifically for the benefit of reptiles is unclear within the documents and also if these areas will be receptor sites as well.
- 8.92. DCO Document 6.1 Environmental Statement - Chapter 8 - Terrestrial Biodiversity (APP-146) detail that where directional habitat clearance is not considered appropriate, a programme of trapping and translocation would occur to move animals away from the construction site and to established receptor sites with sufficient carrying capacity prior to habitat clearance occurring. It is not clear how many areas are likely to need a trapping and translocation exercise and consequently, how many receptor sites will be needed, when they will need to be created and where they are best located. Only one receptor site has been clearly mentioned in the OLEMP for reptiles and it is noted that this habitat itself will have habitat manipulation and then habitat creation to make it suitable. It is also noted that this habitat has a time to target condition time of 10 years.
- 8.93. There is concern that mitigations and compensation for reptiles has not been thought out in enough detail to ensure that there are sufficient receptor sites with enough carrying capacity and that these are likely to be available at the right time during construction.
- 8.94. Following discussion of the above with the Applicant, KCC understands that a total 39ha of mitigation habitats are to be provided across the scheme (south of river) and that 26ha of this will be potentially suitable for reptiles. This 26ha includes mitigation areas for Nitrogen Deposition and KCC would have expected the following information to be included within the DCO:
- Confirmation of how the proposed reduction in Nitrogen deposition land impacts on the total area of potential new reptile habitat.
 - A clear Reptile Mitigation Strategy Plan, showing distribution of different species of reptiles, proposed displacement areas, proposed translocation and receptor areas for each species, and the full extent of all potentially suitable reptile habitat
- 8.95. A number of areas have been proposed to incorporate suitable reptile habitat and be available to connect up populations, reducing fragmentation effects from the project. These include: three green bridges, Gateway to Shorne Woods

Country Park (7.5ha), Chalk Park and Environs (89ha) and Open Space North of Claylane Wood (32ha).

- 8.96. The new green bridge has potential to provide some mitigation for the loss of connectivity in the long term. The green bridges over the A2 have negligible potential to provide connectivity for ground-dwelling species including reptiles.
- 8.97. Biodiversity Impact O: Reptiles and Great Crested Newts (GCNs) has the potential to be positive with the replacement of arable/golf course and areas which are actively managed for reptiles (which includes in the long term chalk park and nitrogen deposition sites). A requirement should also be placed on the Applicant to produce a detailed mitigation strategy.

Great Crested Newts (GCN)

- 8.98. Receptor sites, mitigation areas and habitat manipulation zones have been identified by the Applicant in the form of maps. However, there does not yet appear to be a timetable for the implementation of these mitigation measures and as with reptiles we are concerned as to whether suitable receptor areas will be available when required. However as with reptiles we accept there is capacity to create/enhance suitable habitat for the GNC population in the short to long term.
- 8.99. Gully pots are only to be included in the drainage design of the Project where no suitable alternative exists to achieve the relevant drainage objective. KCC understands that the detailed drainage scheme will be provided at a later stage. At that time, KCC proposes that wherever gully pots are proposed in the vicinity of areas likely to support amphibians, wildlife kerbs should be used in association with dropped kerbs which are connected to suitable terrestrial habitat for animals to move into. We acknowledge that seasonal maintenance requirements for amphibian ladders are likely to restrict their usage along the main proposed carriageways. The drainage scheme needs to be carried out with input from an ecologist to ensure it is fit for purpose.

Marine Mammals

- 8.100. KCC notes that surveys were undertaken by the Applicant during 2013/14 and that these will therefore require updating. The Marine Mammal Organisation (MMO) has been consulted by the Applicant and it is understood that for noise impacts has been proposed. However, a further review is required of updated survey information / any additional mitigation subsequently proposed and KCC would defer to the comments/advice of the MMO.

Summary of KCC's Requested Mitigation for Biodiversity Impacts

- The Applicant should be required to undertake updated surveys as the current surveys are now three years old.
- Early provision of new planting should be provided to mitigate the extensive loss of hedgerows, with established plants used as much as possible.
- Additional information such as details around the survey approach and timetabling should be included within the DCO documents.
- Detailed design for the proposed hibernation bunker for roosting bat should consider successful designs by the Sussex and Kent Bat Group.
- Detailed monitoring and long-term management plans should be secured through the DCO.
- Displacement of water voles should follow best practice and be undertaken between 15th February and 31st March.
- Funding for better management of the existing low suitability ditches is required to mitigate the impact on water voles.
- The Landscape Ecology Management Plan (LEMP) should provide details of species planting.
- A thorough management plan is required to manage the loss of veteran trees.
- A detailed plan should be provided outlining where ancient woodland soil will be moved to.
- Clarification is required regarding the term 'contamination'.
- Updated surveys should consider the increase in suitability of agricultural land and golf courses (areas which were previously maintained).
- The Applicant needs to include clear details on how replacement habitats will be created and managed, including who will be responsible for management and any associated funding within the Landscape Ecology Management Plan (LEMP).
- LEMPs should ensure continuity between landscaping and mitigation management across the Project.
- Lighting spill should be reduced to as low as possible within the adjacent habitat.
- The Applicant should be required to correctly run the Biodiversity Net Gain metric with clear detail of limitations and reference to the wider habitat creation/benefits to biodiversity.
- The Applicant needs to ensure the design of green bridges provide opportunities for connectivity to other suitable habitats.
- The Applicant should be required to produce a clear Reptile Mitigation Strategy Plan, showing distribution of different species of reptiles, proposed displacement areas, proposed translocation and receptor areas for each species.
- KCC will seek to secure these matters through Requirements or agreements, to the extent that they cannot otherwise be agreed and secured by agreement with National Highways.

9. Heritage Conservation

Heritage Conservation Impact A – Conservation Areas

- 9.1. With reference to Heritage Conservation Impact A in our Local Impact Report (Impacts to Conservation Areas), KCC requests that National Highways commits to mitigation by screening using earthworks and woodland planting as set out in the ES Chapter 6 (AS-044) and that the final design of mitigation earthworks and planting takes full account of the local historic environment character and any constraints due to buried archaeological remains.

Heritage Conservation Impact B: Designated built heritage (Listed Buildings)

- 9.2. With reference to Heritage Conservation Impact B in our Local Impact Report (Impacts to designated built heritage assets – Listed Buildings), KCC requests that National Highways commits to mitigation by screening using earthworks and woodland planting as set out in the ES Chapter 6 (AS-044) and that the final design of mitigation earthworks and planting takes full account of the local historic environment character and any constraints due to buried archaeological remains.

Heritage Conservation Impact C: Non-designated built heritage south of the Thames

- 9.3. With reference to Heritage Conservation Impact A3 in our Local Impact Report (Impacts to non-designated built heritage assets), KCC requests that National Highways avoids impacts to the non-designated built heritage assets (1562) and (1875) and instead conserves and promotes them. These are the caves that were converted to air raid shelters in Thong Lane, Shorne (Asset 1562) and a WW2 Air raid shelter (Asset 1875).
- 9.4. If it can be demonstrated that it is impossible to avoid the physical impacts to these two assets then KCC requests that National Highways commits to historic building recording, to minimum of Historic England Level 3 as acknowledged in DCO documents AS-044 and APP-367.
- 9.5. In respect of other non-designated built heritage assets, KCC requests that National Highways commits to mitigation by screening using earthworks and woodland planting as set out in the ES Chapter 6 (AS-044) and that the final design of mitigation earthworks and planting takes full account of the local historic environment character and any constraints due to buried archaeological remains.

Heritage Conservation Impacts D-F

- 9.6. The following DCO Requirements for the Historic Environment are set out in the Draft Development Consent Order (AS-038):

9.—(1) No part of the authorised development is to commence until for that part a site-specific written scheme for the investigation of areas of

archaeological interest, reflecting the relevant mitigation measures set out in the AMS-OWSI, has been submitted to and approved in writing by the Secretary of State, following consultation by the undertaker with the relevant planning authority and Historic England on matters related to their respective functions.

(2) The authorised development must be carried out in accordance with the scheme referred to in sub-paragraph (1) unless otherwise agreed in writing by the Secretary of State.

(3) A copy of any analysis, reporting, publication or archiving required as part of the written scheme referred to in sub-paragraph (1) must be deposited with the Historic Environment Record of the relevant planning authority within one year of the date of completion of the authorised development or such other period as may be agreed in writing by the relevant planning authority or specified in the written scheme referred to in sub-paragraph (1).

(4) Any archaeological remains not previously identified which are revealed when carrying out the authorised development must be retained in situ and reported to the relevant planning authority as soon as reasonably practicable from the date they are identified.

(5) No construction operations are to take place within 10 metres of the remains referred to in sub-paragraph (4) for a period of 14 days from the date of any notice served under sub-paragraph (4) unless otherwise agreed in writing by the Secretary of State.

(6) If the relevant planning authority determines in writing that the archaeological remains require further investigation, no construction operations are to take place within 10 metres of the remains until provision has been made for the further investigation and recording of the remains in accordance with details to be submitted in writing to, and, unless otherwise agreed by the Secretary of State, approved in writing by, the relevant planning authority, such approval not be unreasonably withheld or delayed.

(7) In this paragraph, "AMS-OWSI" means the draft Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (Appendix 6.9 of the environmental statement, application document TR010032/APP/6.3).

- 9.7. With reference to Heritage Conservation Impacts D, E, and F in our Local Impact Report, KCC requests that National Highways revises the wording of the Requirements in discussion with KCC. KCC questions the need 9(1) for the Secretary of State to approve site-specific written schemes of investigation and in 9(3) we request that wording is added that acceptance of the project archives with a suitable box fee will be agreed with the relevant Local Planning Authorities.

Heritage Conservation Impact D - Scheduled Monuments

- 9.8. With reference to Impact B1 in our Local Impact Report (Impacts to Scheduled Monuments), KCC requests that National Highways commits to mitigation by screening, using earthworks and woodland planting, as set out in the ES Chapter 6 (AS-044) and related documents and plans, and that the final design of mitigation earthworks and planting takes full account of the presence of scheduled monuments, the local historic environment character and below ground archaeological remains.

Heritage Conservation Impact E - Geoarchaeology and Palaeolithic/Early Holocene

- 9.9. With reference to Heritage Conservation Impact E in our Local Impact Report (Impacts to Geoarchaeology and Palaeolithic/Early Holocene archaeology), KCC requests that National Highways commits to the staged investigations and mitigation as set out in the ES (AS-044), dAMS-OWSI (APP-367), PDQM (APP-358), SPAA-&-RF, Annex F (APP-359) and relevant supporting project delivery documents and that updated versions of these documents are submitted for consideration during the examination process.
- 9.10. KCC requests that National Highways commits to Stage 1 investigations to inform detailed mitigation, including for the sediments through which the tunnel boring machine would pass. Mitigation of impacts to geoarchaeology and Palaeolithic/Early Holocene archaeology will comprise a combination of preservation in situ (where possible) and where not then detailed archaeological excavation, recording, analysis and reporting, as secured by the DCO Requirements (AS-038, Section 9).
- 9.11. KCC requests that National Highways clarifies the wording in the DCO assessment tables document (AS-052) so that it accords with the wording of the dAMS-OWSI (APP367), in stating the requirement for Stage 1 investigations to inform decisions about mitigation. At present the wording in (AS-052) refers to mitigation of two types: Archaeological excavation and recording and Archaeological survey and archaeological excavation and recording. KCC requests that National Highways clarifies the difference between these two forms of mitigation and includes an option for preservation in situ.

Impacts from the Tunnel Boring Machine (TBM).

- 9.12. The tunnel boring will impact on Later Pleistocene/early Holocene gravels and sands with archaeological interest and KCC requests that National Highways commits to a programme of archaeological investigations of the sediments through which the Tunnel Boring Machine (TBM) would pass to inform decisions about appropriate mitigation. Mitigation would include monitoring, by suitable qualified and experienced Palaeolithic archaeologists, of the slurry from the TBM to record any archaeological artefacts. The recording process will include a method by which any objects identified can be located back to their origin at the cutting face for interpretive purposes.

Heritage Conservation Impact F - Non-designated archaeology (within and outside the order limits)

- 9.13. With reference to Heritage Conservation Impact F in our Local Impact Report (Impacts to non-designated archaeology), KCC requests that National Highways commits to the further staged investigations and mitigation as set out in the ES (AS-044), dAMS-OWSI (APP-367), PDQM (APP-358), SPAA-&-RF, Annex F (APP-359) and relevant supporting project delivery documents.
- 9.14. With reference to Heritage Conservation Impact F in our Local Impact Report (Impacts to non-designated archaeology), KCC requests that National Highways commit to carrying out archaeological investigations as early as possible to ensure there is sufficient time before construction were to commence. The defined areas for investigations and mitigation excavation will be agreed with KCC and be clearly relatable with the mapping that will be used by the Main Works Contractor/Utilities and all others involved in ground works. These details will be set out in the updated dAMS which is linked to the REAC.
- 9.15. As noted in the LIR (Heritage Conservation Impacts E and F), some areas of the scheme in Kent have not been subject to archaeological investigations due to access issues and/or the inclusion of additional areas of land into the project. This situation carries the risk of unexpected archaeological discoveries, some of which may be of national importance, being discovered during the works for a consented scheme, with the consequently significant adverse/negative impact of such remains having to be recorded before their loss, rather than being preserved in situ. Some of this risk could be removed by undertaking the agreed evaluation during the EIP stage or before construction starts. KCC strongly recommends that this occurs and unnecessary delays to construction can then be avoided.
- 9.16. Areas of uncertainty should be more clearly mapped in the DCO documents and greater clarity provided on the timing and extent of archaeological investigations to address gaps in the understanding of archaeological potential such as the area of High Palaeolithic potential (PQ6) so that impacts can be understood and appropriate mitigation agreed.
- 9.17. KCC requests that National Highways commits to mitigation taking the form of a combination of preservation in situ (where possible) and where not, then detailed archaeological excavation, recording, analysis and reporting, as secured by the DCO Requirements (AS-038 Section 9).
- 9.18. KCC requests that National Highways commits to further research into defining the extent of chronologically and spatially related heritage assets and, further, that KCC Heritage Conservation will be able to determine the extent of excavation recording which will be required. The details to be agreed with KCC Heritage Conservation will be included in a revised dAMS-OWSI (APP-367) and the forthcoming site-specific Written Schemes of Investigation.

- 9.19. For example, the LTC project would negatively impact (permanently remove through construction and associated groundworks) on an important area of multi-period archaeological interest to the west of Thong village.
- 9.20. DCO document (AS-044) states in Section 6.6.61 that *'A high value non-designated site of multiperiod settlement activity (3650) including a Late Iron Age/Roman enclosure complex and evidence of Bronze Age to Iron Age local industry through salt production was recorded to the west of Thong and within the Order Limits. The western part of this asset containing the enclosure complex lies within the main works construction area, footprint of the main alignment and within gas utilities working areas; the parts of the asset located within the footprint of these activities would be removed. The remaining part of asset 3650 within the Order Limits (approximately one quarter of the original asset) would be preserved in situ as no construction activity is proposed in the identified south-eastern extent of the asset. The impact would be mitigated by archaeological excavation and recording (REAC Ref. CH001; AMS-OWSI No. 4) of the areas of the asset to be removed during construction. Following mitigation, this would result in a permanent impact of major adverse magnitude and a large adverse effect, which is assessed as significant'*.
- 9.21. KCC may require that LTC fully excavate the total defined site as it may not be possible to guarantee long term preservation of part of the asset and it may be necessary to excavate the whole asset to understand the part directly impacted. KCC also requests that consideration be given in the PACE for part of the area west of Thong village to be used as a community archaeology project excavation area.
- 9.22. KCC requests that National Highways provides scope in the dAMS-OWSI for final decisions on the extent of excavation of sites to be agreed with the local planning authority archaeologist. An example of such as case is noted in ES Section 6.6.51 where it states *'In addition, asset (3742) would not be completely removed by the construction of the Southern Tunnel Entrance compound. The part of the asset which is not mitigated by archaeological excavation and recording would be temporarily fenced (REAC Ref. CH001; AMS-OWSI No. 1) to ensure no accidental damage occurs during construction'*. KCC endorses the need for protection measures for archaeological remains where it is agreed that long term preservation is possible and appropriate.
- 9.23. KCC asks that National Highways commits to finding options for preservation in situ where other high value heritage assets are identified (e.g. see Section 6.6.59 of the ES (AS-044)) and as noted ES (AS-044) Section 6.5.9 *'Other embedded mitigation measures have arisen during the course of the assessment and relate to other operational features of the Project. For example: the relocation of proposed attenuation ponds to preserve a non-designated high value Mesolithic archaeological site discovered during trial trenching (3769)'*.
- 9.24. KCC requests that National Highways commits to securing the temporary (e.g. use of fencing and risk-mapping) and long-term management of heritage assets such as (3769) that would be preserved in situ (see Section 6.6.72 where it states that *'The high value non-designated in-situ Mesolithic campsite (3769),*

although located within the Order Limits, would not experience any impacts during construction. The asset would experience no change, resulting in a neutral effect, which is assessed as not significant’.

- 9.25. KCC requests that National Highways provide more detail in the dAMS-OWSI (APP-367) about the Shorne Higham Character Areas surface-water-fed hydrological system and provide evidence that the tunnel and TBM, in passing beneath the designated wetland site, would not impact on hydrology nor lead to any de-watering, that would impact on waterlogged archaeological remains.
- 9.26. KCC has discussed with the Applicant the potential for non-designated archaeological remains associated with organic deposits in the wetland areas of the scheme in Kent and asked for information on the baseline monitoring of the hydrological environment. KCC requests that a monitoring regime, to be agreed with KCC and Historic England, is established for such areas.
- 9.27. KCC requests that further details about the archaeological resource within the CA3B compound and how impacts would be mitigated are included in the dAMS-OWSI (APP-367).
- 9.28. KCC requests that National Highways commits to appropriate archaeological investigations and mitigation in areas of Soil Scrape as illustrated in mapping (AS-047) where there are negative impact implications for below-ground archaeology. There is a need to ensure that all such land parcels have appropriate investigation and mitigation measures agreed in the dAMS-OWSI (APP-367).
- 9.29. KCC requests that National Highways confirm within the dAMS-OWSI (APP-367) that preliminary works do not include the building of compounds or utility works where there could be major environmental impacts and that details of agreed approaches to mitigation, including plans, are included and agreed with KCC during the examination process.
- 9.30. With reference to Heritage Conservation Impacts D, E & F in our Local Impact Report, KCC requests that National Highways provides more detail during the examination process on a research-based approach to archaeological mitigation. This can be achieved by updating the dAMS-OWSI (APP-367) where the latter states from Section 5.1.4 *‘Additionally, the Scheme-wide Written Scheme of Investigation for Trial Trenching south of the River Thames and the Scheme-wide Written Scheme of Investigation for Trial Trenching north of the River Thames (Application Document 6.3, Appendices 6.11 and 6.12) identified specific research questions. 5.1.5 The relevant research agenda, Scheme-wide Written Schemes of Investigation, desk-based studies, geophysical surveys and the results of the archaeological trial trenching are used to develop specific research questions for the Project in consultation with key stakeholders and relevant experts. 5.1.6 Each Site Specific Written Scheme of Investigation (SSWSI) of areas of archaeological interest prepared in accordance with the Draft Development Consent Order Requirement 9 (Application Document 3.1) will clearly identify research objectives developed, and approaches which will contribute to meeting those objectives’.*

- 9.31. KCC requests that National Highways commit to continuing the iterative, research-focused approach, which will be developed as the scheme progresses. NH/LTC have started to address this issue by creating thematic and period-based maps of known and potential archaeology. These will be used to determine the type and extent of archaeological mitigation set out in the dAMS/OWSI (and as discussed in a preliminary mitigation meeting on 20.3.2023). The dAMS/OWSI will also specifically note the requirement for scientific analysis of data on all sites as part of the post-excavation process.
- 9.32. With reference to Heritage Conservation Impact F in our Local Impact Report (Impacts to non-designated archaeology), KCC requests that National Highways commit to defining more precisely the role of KCC archaeological advisers and local standards. KCC requests that there is great clarity about the definition of the types of mitigation being proposed and that relevant KCC Specifications are referenced in the DCO documentation (e.g. the dAMS-OWSI) as minimum requirements. KCC has provided NH/LTC with copies of the relevant specification documents.
- 9.33. KCC requests that National Highways state in the dAMS-OWSI (APP-367) that Local Planning Authority Archaeological Advisors will formally approve and sign off the following: Written Schemes of Investigation, areas for archaeological excavation following initial stage mapping of stripped areas, sample strategies, areas to be sign-off for construction, post-excavation documents which will set out the post-excavation assessment, analysis, reporting and archiving and that National Highways will commit to an agreed payment for the LPA archaeological officers to carry out the above tasks.
- 9.34. With reference to Heritage Conservation Impact F in our Local Impact Report (Impacts to non-designated archaeology), KCC requests that National Highways commit to more clearly defining with maps and tables, all areas within the Order Limits (including newly added Nitrogen Deposition sites) the programme for archaeological investigations and mitigation in each area.
- 9.35. With reference to Heritage Conservation Impact F in our Local Impact Report (Impacts to non-designated archaeology), KCC requests that National Highways commits to more clearly defining in the dAMS-OWSI (APP-367) that the project archive will go to a suitable repository with an agreed box charge and be prepared to KCC guidelines and that these matters will be agreed with KCC Heritage Conservation.

Heritage Conservation Impact G - Registered Parks and Gardens

- 9.36. With reference to Heritage Conservation Impact G in our Local Impact Report (Impacts to Registered Parks and Gardens), KCC requests that National Highways commits to mitigation by screening using earthworks and woodland planting as set out in Section 6.5.11 (AS-044) and on related plans and that such mitigation takes full account of below-ground archaeological remains.

Heritage Conservation Impact H - Historic landscapes

- 9.37. With reference to Heritage Conservation Impact H in our LIR (Impacts to Historic Landscapes) KCC requests that National Highways commits to ensuring that the proposed mitigation earthworks and woodland planting will preserve aspects of the open agricultural historic landscape character around Thong village which contributes to the setting and significance of Thong Conservation Area.
- 9.38. KCC also requests that National Highways commits to undertaking detailed documentary research of the historic landscape (including historic routeways) and combines this data with the archaeological evidence, including that which will result from the detailed programme of archaeological mitigation excavation should the scheme progress, in order that the best possible outcomes can be achieved for maximum public benefit. The commitment to, and details of this work, will be included in an updated dAMS-OWSI (APP-367) and associated DCO landscape plans and documents.
- 9.39. KCC requests that National Highways commits to a final design for the public rights of way within the scheme area having associated signage and information based on a thorough understanding of historical and archaeological data. The commitment to this work will be included in an updated dAMS-OWSI (APP-367) and relevant documents.
- 9.40. KCC requests that National Highways commits to ensuring that the final, detailed design for mitigation areas of landscape creation and planting, including Chalk Park, will take account of the results of archaeological investigations and a detailed understanding of setting of heritage assets. The commitment to, and the details of this work, will be included in an updated dAMS-OWSI (APP-367).
- 9.41. KCC requests that National Highways commits to agreeing precise details of the mitigation that will be put in place, for example, in respect of Shorne Woods Country Park, which will be impacted by utilities works along its southern border. At present the Assessment Table (Table 1.13 Non-designated built heritage assessment table: South of the River Thames, (AS-052), notes that for Asset 1311 Construction Mitigation will be 'best practice'. These works will need to be mitigated by a detailed programme of archaeological works and the commitment to, and detail of this work, will be included in an updated dAMS-OWSI (APP-367).
- 9.42. KCC requests that National Highways commits to further developing the draft Public Archaeology and Community Engagement strategy (PACE - Appendix A of the dAMS-OWSI – APP-367) in consultation with the KCC Heritage Conservation Team, as the project has the potential to deliver significant positive public benefit outcomes in terms of increased understanding of the past as well as opportunities for local residents to be involved in how the science of archaeology (field and lab work) is undertaken. KCC welcomes the work already being supported separately by the LTC Legacy and Benefits team to set a foundation for community archaeology which will help deliver the PACE

strategy as well as supporting appropriate archive and museum infrastructure needed for the outputs from this project. The commitment to, and refinement of, the PACE strategy will be included in an updated dAMS-OWSI (APP-367).

- 9.43. KCC requests that National Highways commits to an iterative, research-focussed approach to mitigation which will be developed as the scheme progresses. NH/LTC has started to address this issue by creating thematic and period-based maps of known and potential archaeology. These will be used to determine the type and extent of archaeological mitigation set out in the dAMS/OWSI (and as discussed in a preliminary mitigation meeting on 20.3.2023). The dAMS/OWSI will also specifically note the requirement for scientific analysis of data on all sites as part of the post-excavation process. The commitment to this work will be included in an updated dAMS-OWSI (APP-367).
- 9.44. KCC requests that National Highways commits to ensuring that they have sufficient resources (funding and staff) to undertake the necessary archaeological mitigation. The immense scale of the LTC archaeological mitigation works will necessitate a significant number of archaeologists. The Applicant is aware that they need to prepare well in advance for this through their requirements for contractors. Documents such as the dAMS will need to continue to be updated (e.g. dAMS-OWSO section 2.6.4 – roles of different archaeological contractors). Following the Government announcement (8/3/23) of a two year slow down before construction, there may be more time for preliminary works which could help define 'in construction archaeological works' and this must be part of a clear strategy to retain key LTC staff to manage these works. The two years will be an important opportunity for surveys such as Palaeolithic investigations, metal detecting and field walking surveys and we request that the current LTC archaeology staff are kept involved during any slow-down phase to coordinate such works. The commitment to this work will be included in an updated dAMS-OWSI (APP-367).

Summary of KCC's Requested Mitigation for Heritage Conservation Impacts

- The Applicant should be required to screen using earthworks and woodland planting, and the final design of mitigation earthworks and planting should take full account of the local historic environment character, below ground archaeological remains, and any constraints due to buried archaeological remains.
- If it is not possible to avoid physical impacts on non-designated built heritage assets then the Applicant should be required to commit to historic building recording, to a minimum of Historic England Level 3.
- The wording of the Historic Environment section of the draft DCO should be revised to include *“acceptance of the project archives with a suitable box fee will be agreed with the relevant Local Planning Authorities”*.
- The Applicant should be required to commit to the staged investigations and mitigation as set out in the ES (AS-044), dAMS-OWSI (APP-367), PDQM (APP-358), SPAA-&-RF, Annex F (APP-359) and relevant supporting project delivery documents and that updated versions of these documents are submitted for consideration during the examination process.
- Mitigation of impacts to geoarchaeology and Palaeolithic/Early Holocene archaeology will comprise a combination of preservation in situ (where possible) and where not then detailed archaeological excavation, recording, analysis and reporting, as secured by the DCO Requirements (AS-038, Section 9).
- The Applicant should be required to undertake archaeological investigations as early as possible to ensure there is sufficient time before the start of construction.
- Mitigation should take the form of a combination of preservation in situ (where possible) and where not, then detailed archaeological excavation, recording, analysis and reporting, as secured by the DCO Requirements (AS-038 Section 9).
- The Applicant may be required to fully excavate the total defined site to the west of Thong village as it may not be possible to guarantee long term preservation of part of the asset and it may be necessary to excavate the whole asset to understand the part directly impacted.
- The Applicant should provide scope in the dAMS-OWSI for final decisions on the extent of excavation of sites to be agreed with the local planning authority archaeologist.
- The Applicant should commit to finding options for preservation in situ where other high value heritage assets are identified.
- The Applicant should commit to securing the temporary and long-term management of heritage assets that would be preserved in situ.
- A monitoring regime should be agreed between the Applicant, KCC and Historic England for non-designated archaeological remains associated with organic deposits in the wetland areas.
- The Applicant should commit to appropriate archaeological investigations and mitigation in areas of Soil Scrape where there are negative impacts for below-ground archaeology.

- Confirmation that preliminary works do not include the building of compounds or utility works where there could be major environmental impacts and that details of agreed approaches to mitigation, including plans, are included and agreed with KCC during the examination process.
- The Applicant should be required to ensure that the proposed mitigation earthworks and woodland planting will preserve aspects of the open agricultural historic landscape character around Thong village which contributes to the setting and significance of Thong Conservation Area.
- Detailed documentary research of the historic landscape should be undertaken and combined with archaeological evidence.
- Final, detailed design for mitigation areas of landscape creation and planting, including Chalk Park, should take account of the results of archaeological investigations and a detailed understanding of setting of heritage assets.
- Precise details of the mitigation that will be put in place, for example, in respect of Shorne Woods Country Park, which will be impacted by utilities works along its southern border should be provided.
- The Applicant should be required to commit to an iterative, research focused approach to mitigation which will be developed as the scheme progresses.
- The Applicant should be required to ensure they have sufficient resources (funding and staff) to undertake the necessary archaeological mitigation.
- KCC will seek to secure these matters through Requirements or agreements, to the extent that they cannot otherwise be agreed and secured by agreement with National Highways.

10. Skills and Employability – Construction Workforce

- 10.1. National Highways intends to implement the principles and measures set out within their Skills, Education and Employment Strategy (SEES) (Appendix B of APP-505), as part of a Section 106 Agreement. Whilst KCC supports the objectives of the strategy and considers that the applicant should remain in control of driving this agenda and delivering the strategy throughout the life of the project, the danger is that when it transitions from the planning/procurement phase to delivery, the focus on these issues is lost. Dedicated staff will need to be allocated to take responsibility for this and to deliver on an agreed plan.
- 10.2. The skills gap analysis proposed in the SEES is crucial. Currently, delivery partners will be expected to complete this, but KCC feels that this should remain the responsibility of the Applicant, working in collaboration with local authorities and other partners. Furthermore, if the Applicant retains responsibility and acts as the single point of contact, this will substantially aid local education and skills providers in supporting the Applicant in delivering the strategy. Once this is completed, links should be made to local education providers to see what can be delivered using existing resources and what cannot. Resources/funding will need to be identified and development planned to ensure these gaps are filled.
- 10.3. Any training offered should directly link to available jobs and in respect of those jobs and associated apprenticeships, there should also be a clear progression route for new apprentices and existing staff to progress and further their careers within the scheme.
- 10.4. Pre-employment programmes should include re-engagement programmes for those who are a long way from the labour market, given the duration of the scheme and wide range of professions that it will require. This programme will need to be systematic and delivered to a regular timetable such as the academic year so that partners know how to engage effectively with the LTC across the lifetime of the project. It is essential that these programmes by the scheme can be predicted and marketed as we have extensive experience of being asked to provide referrals for pre-employment programmes at short notice and not being able to fill them. Agencies need time to get to know programmes and to become confident in them before referrals become easy to find.
- 10.5. Delivering construction based apprentices can be difficult due to the fact that most projects are delivered by a range of subcontractors and thus are unable to offer the duration or range of skills required for an apprenticeship. A centralised scheme, such as a flexi-jobs apprenticeship scheme or the lead contractor employing all apprentices, will be needed to ensure that the volume of apprenticeships required can be offered.

The impact of construction

- 10.6. KCC has an established Careers and Enterprise Company team in Kent and it is essential that the Applicant works with them to ensure a co-ordinated approach across the area. This should be reflected in the form of a Requirement or Section 106 Agreement placed upon the Applicant.
- 10.7. The skills and employment group should be established early and will need to include all education providers, including schools, if it is to be effective. The timeliness of the establishment and implementation of the SEES should be made explicit in any Requirement or Section 106 Agreement placed upon the Applicant.
- 10.8. Support for the whole curriculum should be offered as there are many links beyond STEM e.g.: business studies – looking at the finances and running of the Project; Philosophy and ethics – decision making linked social and environmental issues. A focus on STEM will not help all students and we disagree with the SEES having a focus largely limited to STEM.
- 10.9. Page 28 of the SEES refers to a target of “*at least 2,000 hours supporting and tutoring educators to help deliver effective learning, careers engagement and training to students.*” In many cases, due to the extreme shortage, there are no staff to support. To ensure effectiveness we require the applicant and their delivery partners to provide staff to act as tutors in shortage areas or provide funding to enable the education providers to offer financial incentives to support recruitment. This should be reflected in any obligation or agreement placed upon the applicant.
- 10.10. We disagree with the number of targeted apprenticeships that are detailed in the Skills, Employment and Education Strategy. As part of any condition on the DCO to oblige the creation and implementation of funded Skills, Employment and Education Strategy, we require that the volume of apprentices be increased to match either the previous statutory (although no longer) of 2.3% of the workforce as an example of best practice or aim for funding of at least one apprentice per £1m of spend on labour on the scheme.
- 10.11. We also consider the targeted 350 training spaces for local communities over the life of the construction of the scheme unambitious and unlikely to deliver a significant impact within Kent. The total equates to 50 per year assuming the seven year construction period of the scheme. That 50 will be shared across multiple local authorities and their communities such as only a handful of people will benefit per year. Given the scale of the scheme we require that a more ambitious target is set, and suggest 500, weighted by the population across the local communities through which the scheme will be constructed.

Summary of KCC's Requested Mitigation for Skills and Employability Impacts

- The Applicant should have a dedicated team of staff to ensure the measures set out within the SEES are delivered.
- A Requirement should be made that any training offered should directly link to available jobs and in respect of those jobs and associated apprenticeships, there should also be a clear progression route for new apprentices and existing staff to progress and further their careers within the scheme.
- The Applicant should be required to support a centralised apprenticeship scheme, such as a flexi-jobs apprenticeship scheme or the lead contractor employing all apprentices, to ensure that the volume of apprenticeships required can be offered.
- The Applicant and their delivery partners should be required to provide staff to act as tutors in shortage areas or provide funding to enable the education providers to offer financial incentives to support recruitment.
- The SEES should be revised to increase the volume of apprentices to match either the previous statutory (although no longer) of 2.3% of the workforce as an example of best practice, or aim for funding of at least one apprentice per £1m of spend on labour on the scheme.
- The training target within the SEES should be revised from 350 to a more appropriate 500 spaces given the size of the scheme.
- KCC will seek to secure these matters through Requirements or agreements, to the extent that they cannot otherwise be agreed and secured by agreement with National Highways.

11. Impacts on Community Assets

Community Assets Impact A: Loss of revenue at Shorne Woods Country Park

- 11.1. KCC considers Shorne Woods Country Park (SWCP) to be Kent's flagship Country Park. SWCP provides a multitude of facilities and is an important educational hub used by school groups and the public to learn about the environment and nature. The commercial facilities and SWCP itself are an important employer in the area and employees rely upon the continued success of the Park and the wider parks estate.
- 11.2. The character and fabric of SWCP is of utmost importance to the local and the wider community in Kent. SWCP seeks to deliver amenity, education and woodland interpretation for the wider benefit of the community and aims to help improve both the mental and physical health of the community. It is of utmost importance that this community facility is protected so that it can continue to provide these critical services.
- 11.3. The revenue SWCP generates allows the Country Park to be financially self-sufficient. However, the LTC will result in an adverse impact on the following revenue streams, all of which are worthy of assessment for compensation:
 - Car park income
 - Café income
 - Team building
 - Conferences/venue hire
 - Events
 - Education visits
 - Training
- 11.4. KCC can provide evidence of the income generated from the above revenue streams in previous years to ensure compensation is reasonable.
- 11.5. Furthermore, the impact of lengthy diversions, congestion and the loss of trees and their replacement will impact on whether people visit or book SWCP. In addition, the closure of Brewers Road bridge for any period would be significant for the country park and have a large impact on visitor numbers, as well as increasing traffic along local country lanes and through Shorne village.

Community Assets Impact B: Tree removal and replanting at Shorne Woods Country Park

- 11.6. With reference to Community Assets Impact B within our Local Impact Report, it is clear the proposed utility diversions will have an adverse impact on SWCP in regards to tree removal and temporary loss of land.
- 11.7. KCC welcomes the mitigation planting that has been offered by the Applicant but would request that as part of this mitigation, members of the SWCP team lead on the planting and maintenance of the new woodland. This will help manage existing Ancient Woodland and the integration of a new habitat.

Community Assets Impact C: Proposed Car Park at Thong Lane

- 11.8. KCC had some initial discussions with the Applicant regarding the potential for long term legacy of the LTC construction compounds. The possibility of utilising part of the A2 construction compound as an addition car parking facility for Shorne Woods Country Park once construction of the LTC is complete was discussed between KCC and National Highways.
- 11.9. KCC supports the idea in principle, as it is hoped such car park could help leave a legacy for the country park and wider area, whilst also meeting the demands for additional parking capacity at SWCP. Furthermore, National Highways could install electric charging points at the car park to support the transition to electric and ultra-low emission vehicles.
- 11.10. Nevertheless, it must be understood that the proposed car park is not sufficient compensation for the loss of revenue at the Country Park, and as it stands KCC is not committed to taking on the management/ownership of the proposed car park unless the facility has a sustainable business case with sufficient income generation potential to cover the ongoing management costs. If the car park does not generate enough income to cover the costs of its long term management then the proposed car park would be a liability to the Country Park.

Community Assets Impact D: Blighted Property Woodlands Cottage, Thong Lane

- 11.11. With reference to Community Assets Impact D within our Local Impact Report, Woodlands Cottage is a KCC owned property and there is a fair chance that KCC will be in a position to offer the property for sale in the lead up to or during implementation of the scheme itself.
- 11.12. However, as the property is within close proximity to the Order Limits of the LTC, there is a high probability that the property will be blighted as a result of the Project. The County Council should therefore reserve its statutory right to serve a blight notice in such circumstances.

Summary of KCC's Requested Mitigation for Community Assets Impacts

- A commitment from the Applicant to reimburse KCC for its demonstratable loss of income before, during and after construction of the LTC. To protect cash flow and to mitigate against compounded loses, this should be assessed and paid on an annual basis ensuring the Shorne Woods Country Park (SWCP) is left in no worse of position than it would have otherwise been before the scheme.
- A commitment from the Applicant to fund a community engagement programme and to collaborate with KCC to produce a campaign to help highlight what SWCP has to offer. The aim of this will be to inform and promote the SWCP from an educational and environmental standpoint. We consider this will go some of the way to help mitigate some of the negative impacts that will be caused by the LTC.
- Mitigation planting and maintenance of the new woodland needs to be led by members of the Council's Country Parks team, as experts in their field. KCC estimates that two members of staff will need to be dedicated full time to deliver this mitigation and seeks a commitment that associated costs would be covered by the Applicant.
- A Requirement on the Applicant to provide a sustainable business case (which is approved by KCC) in advance of any agreement to transfer/manage the new car park facility.
- A commitment from the applicant to work in collaboration with KCC to minimise the impacts to Woodlands Cottage. If suitable solutions cannot be agreed upon for any reason, then a blight notice may need to be served.
- KCC will seek to secure these matters through Requirements or agreements, to the extent that they cannot otherwise be agreed and secured by agreement with National Highways.

12. Representations relating to the draft Development Consent Order and Highways Related Documents

- 12.1. In addition to the issues above, greater clarity will be required from National Highways on a range of important issues, including, for example:
- KCC needs to understand precisely which parts of the authorised development will be transferred to it as highway authority (e.g. roads, bridges, LEMP works etc). KCC needs to see a table/matrix of Schedule 3 Part 5 (list of road closures, classification of roads) and Schedule 1 (relevant part of the authorised development) to assist with understanding which parts of authorised development are to be transferred to KCC in order to inform any side agreement discussions.
 - KCC needs to understand clearly which roads in the Classification of Roads Plan (APP-041) relate to what Authorised Works and what works and new assets KCC will ultimately be responsible for.
 - National Highways states the Control Plan (referenced in APP-003), which is effectively the mitigation 'route map', is a non-statutory framework of documents, some of which are in the application and others which will be completed as secured by DCO requirements following consent. However, there is a clear gap in the DCO in terms of implementation of mitigation and the relationship of the documents identified within the Control Plan is not clear.
 - The discharge of requirements under the DCO will also place a very considerable resource burden on KCC as a relevant highway authority. KCC seeks a mechanism that ensures National Highways will reimburse KCC with the costs of resourcing this additional work. This is not currently clear within the draft DCO and other documents.
 - KCC has also noticed DCO drafting issues in the draft DCO, such as the failure to include a 'time limit' within which development must 'commence'. As currently drafted, the DCO will allow unlimited time for the discharge of pre-commencement requirements.
- 12.2. The above examples illustrate where the application documents are currently inadequate, but the issues are not limited to the above examples. Furthermore, once further information/clarification is provided, as requested above, additional issues may arise on the draft DCO and other documents.

Draft Development Consent Order

Articles

- 12.3. KCC's comments relating specifically to the Articles of the Draft DCO are as follows:
- Article 2 (definitions) – The term 'relevant local highway authority' should be defined and correspond to the definition of 'relevant planning authority', as there is more than one 'highway authority' for this project. This expression is also used in Article.6(3).

- Article 10 (construction and maintenance of new streets etc) – This Article places new maintenance obligations on KCC. As a result, KCC requests that the DCO to be amended to provide that appropriate commuted sums be paid to KCC to cover these additional liabilities. Alternatively, KCC would be content for such sums to be secured by agreement.
- Article 15 (classification of roads) – This Article classifies certain roads, for some of which KCC will be the Local Highway Authority. Again, KCC requests that the DCO to be amended to provide that appropriate commuted sums be paid to KCC to reduce the additional maintenance burden that will be placed upon KCC. Alternatively, KCC would be content for such sums to be secured by agreement.
- Article 17 (traffic regulation – local roads) – This Article allows National Highways to make/suspect traffic regulation orders on local roads, with the consent of the local highway authority. By Article.17(11), if the Local Highway Authority does not respond within 28 days of an application, then it is deemed to have agreed. KCC does not accept this timescale. In the normal course of business we would require 12 weeks (this is the application period for a Temporary Traffic Regulation Order (TTRO)) to create an order prior to its start date. KCC requests that this 12 weeks time period is retained. However, if the 28 day consultation is the start of a 12 week lead in time then it is adequate (8 weeks for National Highways to draw up and advertise its order), although clarification on this point is required.
- Article 21 (surveys and investigation of land) – By Article.21(6), if KCC has not responded to applications for surveys and investigations of land then it is deemed to have granted consent. KCC does not agree that a nil return should be assumed to be consent and the Applicant should make every reasonable effort to obtain consent from the land owner.

Requirements

- 12.4. In the text above, KCC has identified a number of topics / issues on which it will seek Requirements to reflect its concerns about the dDCO. In the text below KCC has identified possible wording for some of these provisions, but recognises that these draft Requirements (and others) will need to be discussed with National Highways and, if not agreed, in any future DCO Issue Specific Hearing.
- 12.5. KCC's comments relating specifically to the Requirements of the Draft DCO are as follows:
- 12.6. **Requirement 1 (Interpretation)** - The definition of the term 'commence' means the beginning of any 'material operation' (as defined in s.56(1) of the Town and Country Planning Act 1990), but it then excludes a number of operations. This means that those excluded operations may be undertaken before National Highways has discharged the various 'pre-commencement' requirements in

Schedule 2 (e.g. requirements 4(2), 8(1) and 9(1)). This restricted meaning of the word 'commence' is important when considering the 'time limit' in Requirement 2.

- 12.7. **Requirement 2 (Time limit)** - Requirement 2 provides as follows: *"The authorised development must not begin later than the expiration of 5 years beginning with the date on which this Order comes into force."* (underlining added)
- 12.8. A number of points arise from the two Requirements above. Firstly, section 154 of the Planning Act 2008 provides as follows:
"(1) Development for which development consent is granted must be begun before the end of—
(a) the prescribed period, or
(b) such other period (whether longer or shorter than that prescribed) as is specified in the order granting the consent.
(2) If the development is not begun before the end of the period applicable under subsection (1), the order granting development consent ceases to have effect at the end of that period."
- 12.9. Second, section 154(1) clearly relates to when development is 'begun' (it does not use the term 'commence') and the 'material operations' to begin development is set by s.155 that says:
"(1) For the purposes of this Act (except Part 11) development is taken to begin on the earliest date on which any material operation comprised in, or carried out for the purposes of, the development begins to be carried out.
(2) 'Material operation' means any operation except an operation of a prescribed description."
The 'operations of a prescribed description' are set out in regulation 7 of the Infrastructure Planning (Interested Parties and Miscellaneous Provisions) Regulations 2015 ('the 2015 Regulations') and comprises *"The measuring or marking out of a proposed road ..."*. Thus, any 'material operation' (s.155(1)), apart from the measuring and marking out of a proposed road, will 'begin' development for the purposes of s.154(2), but the 'excluded' operations will not 'commence' development because of the requirement 1 definition.
- 12.10. Third, the 'prescribed period' referred to in s.154(1)(a) is set out in regulation 6(1) of the 2015 Regulations as follows: *"Development for which development consent is granted must be begun before the end of a period of five years beginning on the date on which the order granting development consent is made."*
- 12.11. Requirement 2 of the draft DCO has, therefore, set an 'other period' under s.154(1)(b) in that the five years is set to run from when the DCO comes 'into force' and not from when it is 'made'.
- 12.12. Fourth, Requirement 2 has not set a time limit for when development must 'commence'; only when it must be 'begun'. Thus, if any material operation (apart from laying out a road) 'began' the development for the purposes of s.154(2) it would not cease to 'have effect' and, there being no time set within which it

must 'commence', there would be no limit on when the undertaker could discharge its 'pre-commencement' requirements.

- 12.13. This situation arose in reverse in the Court of Appeal decision in Tidal Lagoon (Swansea Bay) plc v Secretary of State for Business, Energy and Industrial Strategy [2022] EWCA Civ 1579. There the relevant requirement gave a time limit for 'commence', but not 'begin', and the issue was whether works that were sufficient to 'begin' the development but not 'commence' the development meant that the DCO had not ceased to have effect.
- 12.14. KCC suggests that Requirement 2 be amended to read:
*"2. (1) The authorised development must not begin later than the expiration of 5 years beginning with the date on which this Order comes into force.
(2) The authorised development must not commence later than the expiration of 5 years beginning with the date on which this Order comes into force."*
This wording would remove any residual doubt about the effect of sections 154/155 and the time within which development must 'commence' (as defined) for the purpose of the pre-commencement requirements.
- 12.15. **Draft Requirement 3** requires the detailed design to be in accordance with the design principles document and the preliminary scheme design, along with the Kent Design Guide for those sections on the Kent network. Mitigation secured under other requirements may, however, not be adequately reflected in those documents.
- 12.16. The words *"Subject to the other requirement in this Schedule,"* should therefore be inserted at the start of the requirement so that it does not preclude potential mitigation secured pursuant to other requirements.

Wider Network Impacts mitigation – Strategic Road Network

- 12.17. With reference to the comments made previously regarding Transport Impact A, KCC would suggest a new requirement is added to the DCO which states:
(1) No part of the authorised development is to commence until written details of an impact monitoring and mitigation scheme has been submitted to and approved in writing by the Secretary of State, following consultation with the local highway authority, in respect of the following junctions on the strategic highway network:
(a) [SRN JUNCTION]
(b) [SRN JUNCTION]
(c) [ETC]
- (2) The impact monitoring and mitigation scheme must include:*
(a) a before and after survey to assess the changes in traffic;
(b) the locations to be monitored and the methodology to be used to collect the required data;
(c) the periods over which traffic is to be monitored;
(d) the method of assessment of traffic data;
(e) control sites to monitor background growth;

- (f) the implementation of monitoring must start no less than 3 months before the authorised development is commenced;*
- (g) agreement of baseline traffic levels;*
- (h) the submission of survey data and interpretative report to the relevant local highway authority;*
- (i) details of the measures to be undertaken to mitigate any adverse traffic effects of the authorised development at the above junctions.*

(3) No part of the tunnel area is to open to traffic until the undertaker has implemented the mitigation measures at paragraph 2(i) at its own expense or, where agreed in writing by the relevant local highway authority, provided sufficient funds to the relevant local highway authority for that highway authority to implement those mitigation measures.

Wider Network Impacts mitigation – Local Road Network

12.18. With reference to the comments made previously regarding Transport Impact B, KCC would suggest a new requirement is added to the DCO which states:

(1) No part of the authorised development is to commence until written details of an impact monitoring and mitigation scheme has been submitted to and approved in writing by the local highway authority, in respect of the following junctions on the local highway network:

- (a) [LRN JUNCTION]*
- (b) [LRN JUNCTION]*
- (c) [ETC]*

(2) The impact monitoring and mitigation scheme must include:

- (a) a before and after survey to assess the changes in traffic;*
- (b) the locations to be monitored and the methodology to be used to collect the required data;*
- (c) the periods over which traffic is to be monitored;*
- (d) the method of assessment of traffic data;*
- (e) control sites to monitor background growth;*
- (f) the implementation of monitoring must start no less than 3 months before the authorised development is commenced;*
- (g) agreement of baseline traffic levels;*
- (h) the submission of survey data and interpretative report to the relevant local highway authority;*
- (i) details of the measures to be undertaken to mitigate any adverse traffic effects of the authorised development at the above junctions.*

(3) No part of the tunnel area is to open to traffic until the undertaker has implemented the mitigation measures at paragraph 2(i) at its own expense or, where agreed in writing by the relevant local highway authority, provided sufficient funds to the relevant local highway authority for that highway authority to implement those mitigation measures.

Wider Network Impacts general monitoring and management

12.19. With reference to the comments made previously regarding Transport Impact B, KCC would suggest a further new requirement is added to the DCO which states:

(1) Without prejudice to requirements [x] and [y] above, no part of the authorised development is to commence until written details of a wider highways impacts monitoring and mitigation scheme has been submitted to and approved in writing by the local highway authority.

(2) The impact monitoring and mitigation scheme must include:

- (a) a before and after survey to assess the changes in traffic;*
- (b) the locations to be monitored and the methodology to be used to collect the required data;*
- (c) the periods over which traffic is to be monitored;*
- (d) the method of assessment of traffic data;*
- (e) control sites to monitor background growth;*
- (f) the implementation of monitoring must start no less than 3 months before the authorised development is commenced;*
- (g) agreement of baseline traffic levels;*
- (h) the submission of survey data and interpretative report to the relevant local highway authority;*
- (i) details of the measures to be undertaken to mitigate any adverse traffic effects of the authorised development at the above junctions.*

(3) No part of the tunnel area is to open to traffic until the undertaker has implemented the mitigation measures at paragraph 2(i) at its own expense or, where agreed in writing by the relevant local highway authority, provided sufficient funds to the relevant local highway authority for that highway authority to implement those mitigation measures.

Public transport

12.20. With reference to the comments made previously regarding Transport Impact E, KCC would suggest a further new requirement is added to the DCO which states:

Draft new requirement

(1) No part of the authorised development is to commence until the Applicant has submitted to the relevant local highway authority a scheme to monitor and mitigate the effects of the construction work for the authorised development on local bus services in Kent and that scheme has been approved in writing by the local highway authority.

(2) The approved monitoring and mitigation scheme in paragraph (1) shall include before and after monitoring of bus services, including service level, any additional distances travelled and delays to journey times, for bus services on routes subject to construction work or which are diverted as a result of the

authorised development and the Applicant must report the results of such monitoring to the local highway authority within 6 months of the end of each such construction work.

(3) The Applicant must notify the relevant local highway of its intention to commence construction works that have the potential to disrupt or delay bus services within Kent not less than 4 weeks before the start of such work.

(4) The approved monitoring and mitigation scheme in paragraph (1) must also identify a formula for compensating the providers of any bus services whose services have been adversely affected by the authorised development.

(5) The Applicant must carry out the monitoring and mitigation for bus services in accordance with the scheme approved under paragraph (1) and must pay any compensation to the bus operator within 6 months of the end of each relevant construction work.

Active Travel provision

12.21. With reference to the comments made previously regarding Transport Impact F, KCC would suggest a further new requirement is added to the DCO which states:

Draft new requirement

(1) No part of the authorised development is to commence until a scheme setting out written details of the provision for walkers, cyclists and horse-riders has been submitted to and approved in writing by the highway authority.

(2) The written details under sub-paragraph (1) must:

(a) include the provision for WCH users at new and existing overbridges of the [ROADS];

(b) include the provision for WCH users at new and existing at-grade highway crossings that are affected by the scheme; and

(c) unless otherwise agreed in writing by the local highway authority, accord with the principles set out in the walking and cycling matrix.

(3) No part of the authorised development is to open for public use until the approved scheme has been implemented by the undertaker.

Construction impacts on the Local Road Network

12.22. There does not appear to be a requirement for the Applicant to undertake surveys of the condition of local roads and provide a payment on account of additional maintenance costs. The DCO should be amended accordingly to reflect this requirement.

Draft new requirement

(1) No part of the authorised development is to commence until for that part a pre-condition schedule of the affected local highways and a post-condition specification in which the affected local highway will be returned to, has been submitted to and approved in writing by the local highway authority.

(2) The local highway must be returned in accordance with the approved post-condition specification.

Generally

12.23. Clearly the above represent just some of the additional Requirements that KCC has identified as potentially necessary in the body of its Written Representations (above), but it is anticipated that many of KCC's concerns will be resolved in discussion with National Highways and so draft text for all potential Requirements is not considered appropriate at this stage.

13. Conclusion

- 13.1. This Written Representation from Kent County Council (KCC) has set out the authority's position on the Lower Thames Crossing (LTC) scheme which is one of overall support.
- 13.2. However, further mitigation is required to enable the Project to achieve its full benefits at a local, regional and national level in Kent, the wider South East and the UK as a whole.
- 13.3. The table below summarises the impacts from KCC's Local Impact Report and the required mitigation that KCC is requesting of the Applicant.

Impact	Description of Impact	Nature of Impact	Required Mitigation
Strategic Impacts			
Strategic Impact A	Improved Network Resilience	Positive	<ul style="list-style-type: none"> No mitigation required.
Strategic Impact B	Reduced Journey Time Delays	Positive	<ul style="list-style-type: none"> No mitigation required.
Strategic Impact C	Increased Journey Time Reliability	Positive	<ul style="list-style-type: none"> No mitigation required.
Strategic Impact D	Supports Bifurcation between A2/M2 and M20/A20 Corridors	Positive	<ul style="list-style-type: none"> No mitigation required.
Strategic Impact E	Generation of Economic Benefits	Positive	<ul style="list-style-type: none"> No mitigation required.
Transport Impacts			
Transport Impact A	Impacts of the LTC on the Strategic Road Network (SRN)	Negative	<ul style="list-style-type: none"> A Requirement that National Highways should undertake mitigation works for any LTC impacts on the Strategic Road Network (SRN). The Applicant's monitoring strategy should be amended to include an assessment of increased use of unsuitable rural routes to avoid congestion on the SRN in the vicinity of the LTC. A Requirement that National Highways should make provision for Electric Vehicle (EV) charging points and HGV parking along the LTC route. A Requirement that National highways should make provision for cross-Thames active travel. Commitment from the Applicant to actively support the inclusion of the A2 Brenley Corner and A2 Access to Dover schemes in the next Road Investment Strategy. The M25 Junction 2 (M25/A2/A282) should be added to the list of SRN junctions to be monitored within the Applicant's Wider Network Impacts Monitoring and Management Plan (WNIMMP).
Transport Impact B	Wider Network Impacts (WNI)	Negative	<ul style="list-style-type: none"> The scope of the Applicant's Wider Network Impacts Monitoring and Management Plan WNIMMP (APP-545) should be further expanded to include the locations identified in the WNI Study and to cover baseline surveys before construction starts. A Requirement that National Highways should deliver mitigation on the Local Road Network (LRN) as identified through the WNI

Impact	Description of Impact	Nature of Impact	Required Mitigation
			study (details of mitigation schemes including costs to be provided later in the Examination on completion on the study – expected October 2023). In the alternative, a Requirement that National Highways should fund KCC to carry out the identified WNI study mitigation works.
Transport Impact C	Impacts of the LTC on the A229 Blue Bell Hill	Negative	<ul style="list-style-type: none"> • KCC has developed an improvement scheme for the A229 Blue Bell Hill to mitigate the existing situation as exacerbated by the effects of the LTC. A Requirement that National Highways should carry out those works at its own expense should be added to the DCO. In the alternative, National Highways should fund KCC to carry out such works. If the Government does provide the Large Local Major (LLM) funding for the mitigation works, then National Highways should provide the 15% match funding (anticipated to be approximately £35 million) towards those works.
Transport Impact D	Road Safety Impacts of the LTC	Positive for SRN Negative for LRN	<ul style="list-style-type: none"> • No mitigation required. • A Requirement that National Highways must carry out an International Road Assessment Programme (iRAP) scenario assessment of the Project itself, together with local routes demonstrating a casualty cost as a result of the Project (A226, A227, A228 and A229), and undertake works required to mitigate the adverse safety impacts of such assessment.
Transport Impact E	Public Transport and Active Travel Impacts of the LTC	Negative	<ul style="list-style-type: none"> • A Requirement that National Highways must submit a scheme to the Secretary of State for approval, following consultation with KCC, to identify and fully fund mitigation to local bus services which are disrupted as a result of temporary works during construction. • A Requirement that temporary works are identified in writing to the KCC Public Transport team at least four weeks in advance of them happening and required compensation discussed at the same time based on £200 per additional operational hour.

Impact	Description of Impact	Nature of Impact	Required Mitigation
Transport Impact F	Severance Issues for Walkers, Cyclists and Horse Riders (WCH)	Positive e.g., Cobham area Negative e.g., Valley Drive	<ul style="list-style-type: none"> No mitigation required for Cobham area. A Requirement that National Highways must submit a scheme to the Secretary of State for approval, following consultation with KCC, to identify the impacts on Valley Drive and Wrotham Road and fully fund mitigation appropriate mitigation measures. In the alternative, KCC would accept a Section 106 Agreement for these mitigation measures to be secured.
Transport Impact G	Dangerous Goods Vehicles (DGVs) and Oversized Vehicles	Negative but potential to be Positive	<ul style="list-style-type: none"> A Requirement that National Highways submits to the Secretary of State for approval, following consultation with KCC, a scheme that requires DGVs and oversized vehicles to use the Project in order to phase out the use of the Dartford Traffic Management Cell and remove the associated delays and incidents, rather than just reducing them.
Transport Impact H	Construction Shifts and Deliveries	Negative	<ul style="list-style-type: none"> A Requirement that restricts <ul style="list-style-type: none"> (a) construction deliveries and construction vehicles movements; and (b) construction worker shift changes occurring, during the LRN peak hours (0800-0900 and 1700-1800). A Requirement that National Highways should fund proposed remedial measures, along with providing a six-monthly monitoring report to KCC to determine whether Travel Plan targets are being met and whether the construction traffic generation is at or lower than predicted. In the alternative, KCC would accept a Section 106 Agreement for these mitigation measures to be secured.
Transport Impact I	Construction Traffic Routeing	Negative	<ul style="list-style-type: none"> A Requirement that construction vehicle routing plans should be agreed with KCC, along with a left turn ban for construction related HGVs when joining the A226. A Requirement for a scheme for the monitoring of construction vehicle movements to ensure compliance with agreed haulage routes, and associated rat running on the local road network.

Impact	Description of Impact	Nature of Impact	Required Mitigation
			<ul style="list-style-type: none"> • A Requirement that the Applicant must permit: <ul style="list-style-type: none"> (a) all construction-related traffic, including workers to use Haul Road H18, to access the southern portal compound from Phase 2 until it is no longer operational, and (b) construction workers in cars to use both the A226 and Lower Higham Road access points to access the A226 Gravesend Road compound.
Transport Impact J	Construction Impacts on the Condition of the Existing Local Road Network (LRN)	Negative	<ul style="list-style-type: none"> • A Requirement for the Applicant to carry out a programme of pre-emptive works to prevent or minimise damage to the Local Road Network during the LTC construction phase. In the alternative, funding for KCC to undertake such works at National Highway's expense.
Transport Impact K	Highways Asset generation and impact of transference from National Highways to Kent County Council	Negative	<ul style="list-style-type: none"> • A Requirement that, before the commencement of construction, National Highways provide KCC with further information regarding the full structural and local details of the structures and special geotechnical measures that will become the responsibility of KCC. • A Requirement that National Highways should cover the costs of KCC Officers undertaking the technical approval process for any new structures or special geotechnical measures. • A Requirement for that National Highways pay KCC, as Local Highway Authority, an appropriate commuted sum for the long-term maintenance of each structure KCC is expected to accept ownership of.
Wider Network Impact Monitoring and Management Plan (WNIMMP)			<ul style="list-style-type: none"> • Requirements should be imposed to secure that: <ul style="list-style-type: none"> ▪ Baseline surveys are undertaken at least one year before commencement of construction and supplemented with additional surveys annually until five years post-opening. ▪ Certain key roads on KCC's local and major road network (such as the A229, A249, A227, A228 and A226) that will be impacted by the LTC, are incorporated into National Highways' permanent monitoring programme.

Impact	Description of Impact	Nature of Impact	Required Mitigation
			<ul style="list-style-type: none"> ▪ At least four (4) cameras are used to monitor each road; with a total of 20 cameras needed for the whole programme of additional permanent monitoring on the KCC local and major road network. • DCO Schedule 2 Requirement 14 should be amended to include the following sites within the WNIMMP: <ul style="list-style-type: none"> ▪ M2 Junction 1 to Junction 4 journey time monitoring ▪ M25 Junction 2 ▪ A2 Pepper Hill Junction ▪ A227/Green Lane Junction ▪ A228 Junctions between the M2 and M20 • DCO Schedule 2 Requirement 14 should also be amended to include active travel monitoring within the WNIMMP, including key routes for walkers, cyclists and horse riders affected by the LTC. • A Requirement for National Highways to provide a funding package for KCC to implement mitigation measures on the LRN, which are required to address a direct impact of the LTC.
Public Rights of Way (PRoW) Impacts			
PRoW Impact A	Enhancements to the Public Rights of Way Network	Positive	<ul style="list-style-type: none"> • A Requirement or agreement that National Highways should pay KCC a commuted sum to cover the additional maintenance costs of any new and improved Public Rights of Way which are to be transferred to KCC.
PRoW Impact B	Omission of improvements to bring Hares Bridge up to cycling / equestrian standard	Negative	<ul style="list-style-type: none"> • A Requirement to secure improvements to Hares Bridge to accommodate pedestrians, cyclists and equestrians.
PRoW Impact C	Omission of improvements to bring key structures up to cycling / equestrian standard	Negative	<ul style="list-style-type: none"> • A Requirement to secure the provision for future improvements to bring structures up to walking, cycling and horse riding (WCH) standards.
PRoW Impact D	Designation of temporary National Cycle Route (NCR) 177	Negative	<ul style="list-style-type: none"> • An amendment to the designation of temporary National Cycle Route (NCR) 177, from permissive route to Public Bridleway.

Impact	Description of Impact	Nature of Impact	Required Mitigation
PRoW Impact E	Absence of construction detail	Negative	<ul style="list-style-type: none"> The Applicant should be required to provide one clear plan which indicates the PRoW network to be created and includes the legal status of the routes to be provided and links to the wider PRoW network. A General Arrangement Plan should also be provided showing the WCH widths achievable to ensure they adhere to relevant standards.
PRoW Impact F	Existing leisure/recreation PRoW use	Negative	<ul style="list-style-type: none"> A Requirement to secure liaison with KCC's Public Rights of Way and Access Service on the closure of PRoWs during construction and restoration of routes, to minimise disruption to WCH users. A Requirement to secure the installation of active travel counters for 12 months prior to construction and three years post road opening.
Minerals and Waste Impacts			
Minerals and Waste Impact A	Mineral Safeguarding	Neutral	<ul style="list-style-type: none"> No mitigation required.
Minerals and Waste Impact B	Waste Generation	Positive	<ul style="list-style-type: none"> No mitigation required.
Sustainable Urban Drainage System (SUDS)			
SUDS Impact A	Departure on Peak Rainfall	Negative	<ul style="list-style-type: none"> A Requirement for the Applicant to demonstrate the future climate change for the 3.3% AEP rainfall event has been considered. Or for evidence of it being acceptable to the Environment Agency.
SUDS Impact B	Drainage design of realigned or widened highway	Positive	<ul style="list-style-type: none"> No mitigation required.
SUDS Impact C	Watercourse channels	Neutral/ Positive	<ul style="list-style-type: none"> KCC would actively encourage the improvement of existing watercourses and a package of methods to achieve this to be provided by the Applicant.
SUDS Impact D	Discharge rates	Positive	<ul style="list-style-type: none"> No mitigation required.

Impact	Description of Impact	Nature of Impact	Required Mitigation
SUDS Impact E	Surface flooding 1	Negative	<ul style="list-style-type: none"> The Applicant should provide information clearly demonstrating that as a result of the proposed works areas, there is no detrimental impact on the local area.
SUDS Impact F	Surface flooding 2	Neutral/ Positive	<ul style="list-style-type: none"> No mitigation required.
SUDS Impact G	Flood issue	Positive	<ul style="list-style-type: none"> No mitigation required.
SUDS Impact H	Surface water flow path	Negative	<ul style="list-style-type: none"> The Applicant should be required to provide further information to clearly demonstrate that the construction of the project does not interfere with the watercourse.
SUDS Impact I	Groundwater flooding	Negative/ Neutral	<ul style="list-style-type: none"> A Requirement for the Applicant to demonstrate the future climate change for the 3.3% AEP rainfall event has been considered. Or for evidence of it being acceptable to the Environment Agency.
SUDS Impact J	Flooding from sewers and water mains	Negative	<ul style="list-style-type: none"> Any works involved with the diversion of a sewer or water main should be approved and overseen by the appropriate asset owner.
SUDS Impact K	Surface water run off	Negative	<ul style="list-style-type: none"> Detailed design should clearly demonstrate that suitable pollution control mechanisms are to be installed and that these are sufficient to mitigate issues of contamination and pollution to receiving groundwaters.
SUDS Impact L	Discharged water run off	Neutral	<ul style="list-style-type: none"> No mitigation required.
SUDS Impact M	Contamination	Neutral	<ul style="list-style-type: none"> No mitigation required.
SUDS Impact N	Permanent Drainage System	Negative	<ul style="list-style-type: none"> Information should be provided of any proposed connections to the permanent drainage system and for this to demonstrate appropriate management of surface water.
SUDS Impact O	Box Culvert Installation	Negative	<ul style="list-style-type: none"> It should be clearly demonstrated that the overarching approval body (EA, IDB, LLFA) for the receiving network which the water passing through the type of culvert, approves this method of waterproofing and does not consider it a risk to pollution.
SUDS Impact P	Management of surface water	Neutral	<ul style="list-style-type: none"> No mitigation required.
SUDS Impact Q	Sustainable Drainage Systems	Neutral	<ul style="list-style-type: none"> No mitigation required.

Impact	Description of Impact	Nature of Impact	Required Mitigation
SUDS Impact R	Ponds	Positive/ Neutral (but potential to be Negative)	<ul style="list-style-type: none"> The programming of the construction of these new ponds needs to be carefully considered such that they are established sufficiently so to be a 'like for like' replacement of any drainage feature that is to be removed or diverted.
SUDS Impact S	Infiltration basins	Negative	<ul style="list-style-type: none"> Definitive clarification should be provided that no surface water drainage is to be conveyed to the infiltration basin south of the Thames.
SUDS Impact T	Rainfall runoff	Negative	<ul style="list-style-type: none"> Full consideration should be given to all and any methods that could be utilised to ensure that the quality of surface water discharged from the temporary works is such as it is not detrimental to the wider receiving water network.
Health Impacts			
Health Impact A	Air quality during construction and operation	Neutral (however further information is required)	<ul style="list-style-type: none"> Further assessments should be provided by the Applicant on the changes in air quality as a result of construction and operation and assess the impact this has on human health.
Health Impact B	Active Travel Impacts by Ward	Positive/	<ul style="list-style-type: none"> Wards identified as having a high sensitivity should be targeted for improvements in active travel to reduce health inequalities between communities.
Biodiversity			
Biodiversity Impact A	Foraging/Commuting Bats and associated habitat	Negative/ Neutral	<ul style="list-style-type: none"> The Applicant should be required to undertake updated surveys. Early provision of new planting should be provided to mitigate the extensive loss of hedgerows.
Biodiversity Impact B	Roosting Bats	Neutral	<ul style="list-style-type: none"> Additional information such as details around the survey approach and timetabling should be included within the DCO documents. Detailed design for the proposed hibernation bunker should consider successful designs by the Sussex and Kent Bat Group. A detailed mitigation strategy and plan is required.

Impact	Description of Impact	Nature of Impact	Required Mitigation
Biodiversity Impact C	Dormouse	Negative/ Neutral	<ul style="list-style-type: none"> The Applicant should be required to undertake updated surveys. Early provision of new planting should be provided to mitigate the extension loss of hedgerows. Ongoing monitoring and long-term management.
Biodiversity Impact D	Badgers	Negative/ Neutral	<ul style="list-style-type: none"> The Applicant should be required to undertake updated surveys. A detailed Impact Assessment and mitigation strategy is required, providing details of proposed habitat creation and proposals for long term management and monitoring.
Biodiversity Impact E	Water Voles	Neutral	<ul style="list-style-type: none"> Habitat creation and a clear long term management plan will result in a neutral impact to Water Voles. Displacement should be undertaken between 15th February and 31st March. Funding/better management of the existing low suitability ditches.
Biodiversity Impact F	Otter	Neutral	<ul style="list-style-type: none"> The Applicant should be required to undertake updated surveys.
Biodiversity Impact G	Invertebrate	Negative	<ul style="list-style-type: none"> The Applicant should be required to undertake updated surveys. The Landscape Ecology Management Plan (LEMP) should provide details of species planting. A thorough management plan is required to manage the loss of veteran trees.
Biodiversity Impact H	Loss of Ancient Woodland	Negative	<ul style="list-style-type: none"> A detailed plan should be provided outlining where ancient woodland soil will be moved to. Clarification is required regarding the term 'contamination'. A detailed mitigation strategy and ongoing management/habitat creation/monitoring plan should be produced by the Applicant.
Biodiversity Impact I	Bird	Negative/ Neutral	<ul style="list-style-type: none"> Updated surveys should consider the increase in suitability of agricultural land and golf courses (area which were previously maintained). The key habitats being lost should be replaced with established planting and monitored/managed in the long term.

Impact	Description of Impact	Nature of Impact	Required Mitigation
Biodiversity Impact J	Outline Landscape and Ecology Management Plan (OLEMP)	Negative	<ul style="list-style-type: none"> The Applicant needs to include clear details on how replacement habitats will be created and managed, including who will be responsible for management and any associated funding within the LEMP. A joint up approach to LEMPs to ensure continuity between landscaping and mitigation management across the Project.
Biodiversity Impact K	Lighting	Negative	<ul style="list-style-type: none"> Lighting spill should be reduced to as low as possible within the adjacent habitat.
Biodiversity Impact L	Biodiversity Net Gain	Negative	<ul style="list-style-type: none"> The Applicant should be required to correctly run the BNG metric with clear detail of limitations and reference to the wider habitat creation/benefits to biodiversity.
Biodiversity Impact M	Green Bridges	Negative/ Neutral	<ul style="list-style-type: none"> The Applicant needs to ensure the design of green bridges provide opportunities for connectivity to other suitable habitats.
Biodiversity Impact N	Nitrogen Deposition	Neutral	<ul style="list-style-type: none"> A clear management plan is required to ensure new habitats can be established, retained and managed in the long term.
Biodiversity Impact O	Reptiles and Great Crested Newts (GCNs)	Positive	<ul style="list-style-type: none"> The Applicant should be required to produce a clear Reptile Mitigation Strategy Plan, showing distribution of different species of reptiles, proposed displacement areas, proposed translocation and receptor areas for each species.
Climate Change			
Climate Change Impact A	Construction and Operation Emissions	Negative	<ul style="list-style-type: none"> The Applicant should be required to provide Electric Vehicle (EV) charging points along the route and prioritise the use of public transport.
Heritage Conservation Impacts			
Heritage Conservation Impact A	Conservation Areas	Negative/ Neutral	<ul style="list-style-type: none"> The Applicant should be required to screen using earthworks and woodland planting, and the final design of mitigation earthworks and planting should take full account of the local historic environment character and any constraints due to buried archaeological remains.

Impact	Description of Impact	Nature of Impact	Required Mitigation
Heritage Conservation Impact B	Designated built heritage (Listed Buildings)	Negative	<ul style="list-style-type: none"> The Applicant should be required to screen using earthworks and woodland planting, and the final design of mitigation earthworks and planting should take full account of the local historic environment character and any constraints due to buried archaeological remains.
Heritage Conservation Impact C	Non-designated built heritage	Negative	<ul style="list-style-type: none"> If it is not possible to avoid physical impacts then the Applicant should be required to commit to historic building recording, to a minimum of Historic England Level 3. The Applicant should also be required to screen using earthworks and woodland planting, and the final design of mitigation earthworks and planting should take full account of the local historic environment character and any constraints due to buried archaeological remains.
Heritage Conservation Impact D	Archaeology – Scheduled Monuments	Negative/ Neutral	<ul style="list-style-type: none"> The wording of the Historic Environment section of the draft DCO should be revised to include “<i>acceptance of the project archives with a suitable box fee will be agreed with the relevant Local Planning Authorities</i>”. The Applicant should be required to screen using earthworks and woodland planting, and the final design of mitigation earthworks and planting should take full account of the presence of scheduled monuments, the local historic environment character and below ground archaeological remains.
Heritage Conservation Impact E	Archaeology – Geology and Palaeolithic/Early Holocene archaeology	Negative	<ul style="list-style-type: none"> The Applicant should be required to commit to the staged investigations and mitigation as set out in the ES (AS-044), dAMS-OWSI (APP-367), PDQM (APP-358), SPAA-&-RF, Annex F (APP-359) and relevant supporting project delivery documents and that updated versions of these documents are submitted for consideration during the examination process. Mitigation of impacts to geoarchaeology and Palaeolithic/Early Holocene archaeology will comprise a combination of preservation in situ (where possible) and where not then detailed archaeological excavation, recording, analysis and reporting, as secured by the DCO Requirements (AS-038, Section 9).

Impact	Description of Impact	Nature of Impact	Required Mitigation
Heritage Conservation Impact F	Archaeology – Non-designated archaeology	Negative	<ul style="list-style-type: none"> • The Applicant should be required to commit to the staged investigations and mitigation as set out in the ES (AS-044), dAMS-OWSI (APP-367), PDQM (APP-358), SPAA-&-RF, Annex F (APP-359) and relevant supporting project delivery documents. • The Applicant should be required to undertake archaeological investigations as early as possible to ensure there is sufficient time before the start of construction. • Mitigation should take the form of a combination of preservation in situ (where possible) and where not, then detailed archaeological excavation, recording, analysis and reporting, as secured by the DCO Requirements (AS-038 Section 9). • The Applicant may be required to fully excavate the total defined site to the west of Thong village as it may not be possible to guarantee long term preservation of part of the asset and it may be necessary to excavate the whole asset to understand the part directly impacted. • The Applicant should provide scope in the dAMS-OWSI for final decisions on the extent of excavation of sites to be agreed with the local planning authority archaeologist. • The Applicant should commit to finding options for preservation in situ where other high value heritage assets are identified. • National Highways should commit to securing the temporary and long-term management of heritage assets that would be preserved in situ. • A monitoring regime should be agreed between the Applicant, KCC and Historic England for non-designated archaeological remains associated with organic deposits in the wetland areas. • The Applicant should commit to appropriate archaeological investigations and mitigation in areas of Soil Scrape where there are negative impacts for below-ground archaeology.

Impact	Description of Impact	Nature of Impact	Required Mitigation
			<ul style="list-style-type: none"> Confirmation that preliminary works do not include the building of compounds or utility works where there could be major environmental impacts and that details of agreed approaches to mitigation, including plans, are included and agreed with KCC during the examination process.
Heritage Conservation Impact G	Registered Parks and Gardens	Negative	<ul style="list-style-type: none"> The Applicant should be required to screen using earthworks and woodland planting, and the final design of mitigation earthworks and planting should take full account of the presence of scheduled monuments, the local historic environment character and below ground archaeological remains.
Heritage Conservation Impact H	Historic landscapes	Negative	<ul style="list-style-type: none"> The Applicant should be required to ensure that the proposed mitigation earthworks and woodland planting will preserve aspects of the open agricultural historic landscape character around Thong village which contributes to the setting and significance of Thong Conservation Area. Detailed documentary research of the historic landscape should be undertaken and combined with archaeological evidence. Final, detailed design for mitigation areas of landscape creation and planting, including Chalk Park, should take account of the results of archaeological investigations and a detailed understanding of setting of heritage assets. Precise details of the mitigation that will be put in place, for example, in respect of Shorne Woods Country Park, which will be impacted by utilities works along its southern border should be provided. The Applicant should be required to commit to an iterative, research focused approach to mitigation which will be developed as the scheme progresses. The Applicant should be required to ensure they have sufficient resources (funding and staff) to undertake the necessary archaeological mitigation.

Impact	Description of Impact	Nature of Impact	Required Mitigation
Other Matters			
Workforce Impact A	Increase in employment in Kent	Positive	<ul style="list-style-type: none"> • The Applicant should have a dedicated team of staff to ensure the measures set out within the SEES are delivered. • A Requirement should be made that any training offered should directly link to available jobs and in respect of those jobs and associated apprenticeships, there should also be a clear progression route for new apprentices and existing staff to progress and further their careers within the scheme. • The Applicant should be required to support a centralised apprenticeship scheme, such as a flexi-jobs apprenticeship scheme or the lead contractor employing all apprentices, to ensure that the volume of apprenticeships required can be offered. • The Applicant and their delivery partners should be required to provide staff to act as tutors in shortage areas or provide funding to enable the education providers to offer financial incentives to support recruitment. • The SEES should be revised to increase the volume of apprentices to match either the previous statutory (although no longer) of 2.3% of the workforce as an example of best practice, or aim for funding of at least one apprentice per £1m of spend on labour on the scheme. • The training target within the SEES should be revised from 350 to a more appropriate 500 spaces given the size of the scheme.
Community Assets Impact A	Loss of revenue at Shorne Woods Country Park	Negative	<ul style="list-style-type: none"> • A commitment from the Applicant to reimburse KCC for its demonstratable loss of income before, during and after construction of the LTC. To protect cash flow and to mitigate against compounded loses, this should be assessed and paid on an annual basis ensuring the SWCP is left in no worse of position than it would have otherwise been before the scheme. • A commitment from the Applicant to fund a community engagement programme and to collaborate with KCC to produce a campaign to help highlight what Shorne Woods Country Park

Impact	Description of Impact	Nature of Impact	Required Mitigation
			(SWCP) has to offer. The aim of this will be to inform and promote the SWCP from an educational and environmental standpoint. We consider this will go some of the way to help mitigate some of the negative impacts that will be caused by the LTC.
Community Assets Impact B	Tree removal and replanting at Shorne Woods Country Park	Negative	<ul style="list-style-type: none"> A Requirement on the Applicant to provide mitigation planting and maintenance of the new woodland that needs to be led by members of the Council's Country Parks team, as experts in their field. KCC estimates that two members of staff will need to be dedicated full time to deliver this mitigation and seeks a commitment that associated costs would be covered by the Applicant.
Community Assets Impact C	Proposed Car Park at Thong Lane	Negative but with potential to be Positive	<ul style="list-style-type: none"> A Requirement on the Applicant to provide a sustainable business case (which is approved by KCC) in advance of any agreement to transfer/manage the facility and a commitment that associated costs would be covered by the Applicant.
Community Assets Impact D	Blighted Property Woodlands Cottage, Thong Lane	Negative	<ul style="list-style-type: none"> A commitment from the applicant to work in collaboration with KCC to minimise the impacts to Woodlands Cottage. If suitable solutions cannot be agreed upon for any reason, then a blight notice may need to be served.