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Norwich to Tilbury

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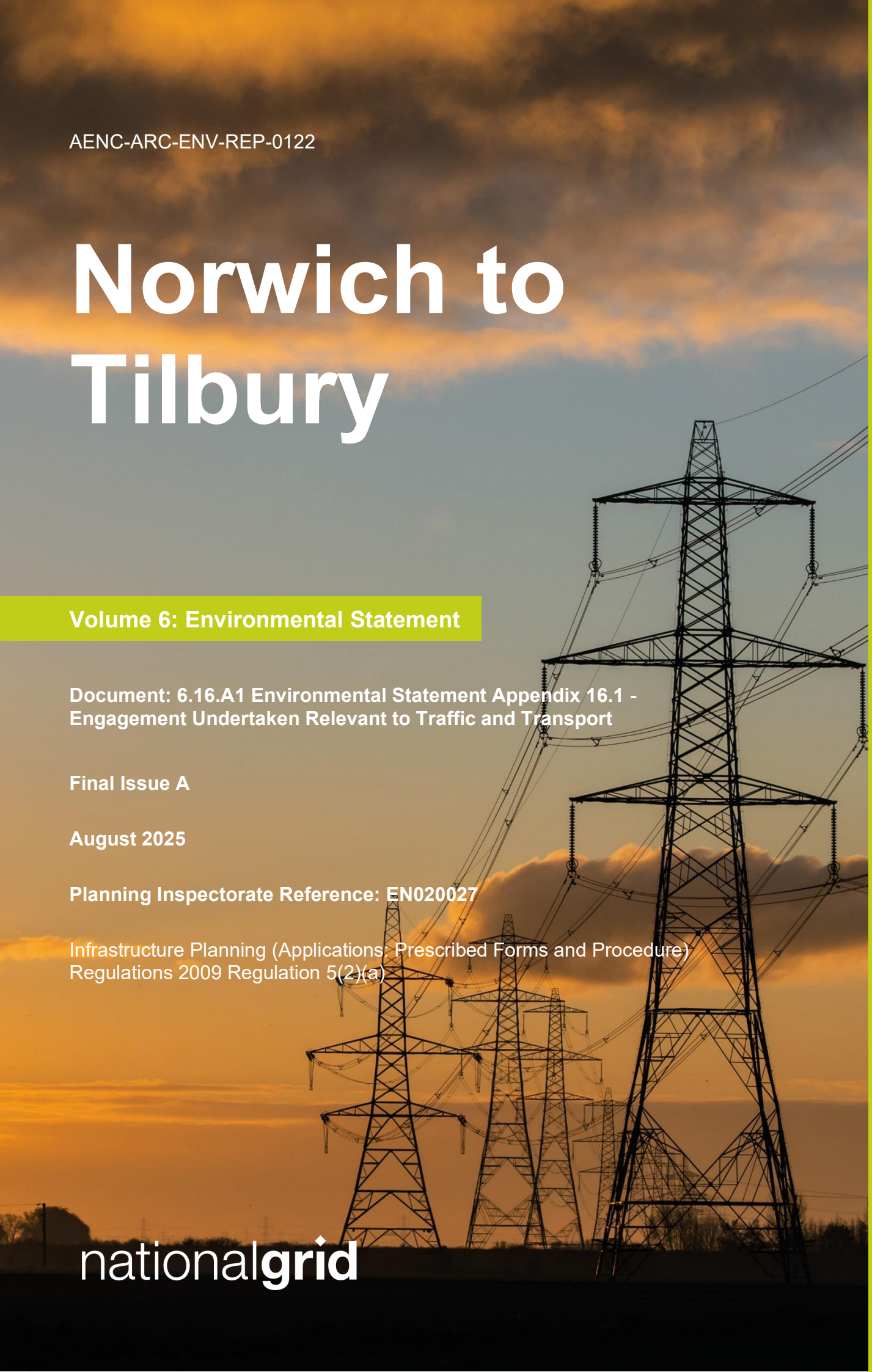

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16. Engagement Undertaken Relevant to Traffic and Transport

16.1 Introduction

16.1.1 This appendix has been produced to support Chapter 16: Traffic and Transport (document reference 6.16) of the Environment Statement (ES) (Volume 6 of the Development Consent Order (DCO) application) for Norwich to Tilbury (the 'Project'). It presents an overview of the discussions held with the relevant stakeholders.

16.2 Engagement

16.2.1 For the purposes of engagement, a Local Highway Authority (LHA) Thematic Group was formed, which includes Essex County Council, Norfolk County Council, Suffolk County Council, Thurrock Council and National Highways. Table A16.1.1 provides a summary of discussions and how these have influenced the Project, scope and the approach to the assessment.

Table A16.1.1 Engagement undertaken relevant to Traffic and Transport

Reference	Comment	National Grid's Response
Local Highway Authority Thematic Group Meeting (Essex, Norfolk, Suffolk, and Thurrock), and National Highways, July 2022	LHAs raised the need to consider cumulative effects, abnormal indivisible loads (AIL) routes, agreement on the sensitivity of roads/area, commitments for effects resulting from operation (and maintenance) and decommissioning, and appropriate mitigation measures.	The assessment methodology used in this ES has included the sensitivity of the roads/surrounding area along the Primary Access Routes (PAR), was shared with the relevant highway authorities and comments received have been considered in the classification of the road sensitivity. The significant effects for all roads identified along the PARs have been assessed in this ES. The assessment follows the Institute of Environmental Management and Assessment (IEMA) Guidelines: Environmental Assessment of Traffic and Movement (EATM) (2023) that include: i. Cumulative effects on the local highway network and Strategic Road Network (SRN) from this Project and all other relevant developments ii. Appropriate routes for abnormal load movements and mitigation strategies to secure safe passage. The assessment of traffic and transport effects during operation (and maintenance) and decommissioning has been scoped out of the ES (i.e. not included as effects are considered to be negligible) as per the Environmental Impact Assessment (EIA) Scoping Opinion (document reference 6.20) provided by the Planning Inspectorate in 2022 ID 2.2.1 and 3.14.1. Details on decommissioning can be found within Chapter 4: Project Description (document reference 6.4). Embedded, standard and additional mitigation measures related to traffic and transport at this stage have been described in Chapter 16: Traffic and Transport (document reference 6.16). Further detail on mitigation measures are included in a separate Transport Assessment (TA) (document reference 7.11) and the Outline Construction Traffic Management Plan (CTMP) (document reference 7.3).

Reference	Comment	National Grid's Response
Local Highway Authority Thematic Group Meeting, August 2023	LHAs requested an early agreement on link sensitivity, traffic counts, AILs, and data and underlying assumptions behind traffic and workforce calculations. Local Authorities raised potential issues with carrying out traffic surveys in November (as poor weather could encourage more car traffic and result in fewer walkers and cyclists). It was suggested that waterways transport for AIL, and cable drum deliveries was considered. Suffolk County Council requested assessment work to be undertaken beyond looking at collision clusters. Norfolk County Council raised the importance of reinstatement after removal of site accesses following the completion of the Project.	Link sensitivity and traffic count survey locations were shared with the relevant highway authorities and their comments taken on board. The schedule of AILs and routes/mitigation agreed with the relevant highway authority is provided within Appendix A: AIL Access Strategy of the Outline CTMP (document reference 7.3). Preliminary workforce numbers are provided in Chapter 15: Socio-economics, Recreation and Tourism (document reference 6.15) and anticipated to comprise a maximum 1,721 Full Time Equivalents (FTEs) at any one time, updates and further assumptions behind these numbers are provided in the ES and within the Outline Construction Worker Travel Plan (CWTP) (Appendix B within the Outline CTMP (document reference 7.3)). Traffic counts were conducted in November 2023, November 2024 and May 2025 to support the assessment within the ES. These counts are classified for vehicles movements to understand the total number of vehicles and Heavy Good Vehicles (HGV). It was agreed with the LHA that spot checks would be undertaken to alleviate concerns raised regarding the time of year surveys were undertaken. Separate non-motorised user (NMU) counts were undertaken in September/October 2024. The Project has explored the feasibility of multi-modal transport options to support construction. These options include the use of regional ports to support the delivery of large items such as Super Grid Transformers, and the use of rail or water-borne transport modes to supplement movements by road where practical and appropriate. Further details are summarised in the TA (document reference 7.11). Collision analysis has been undertaken along the road links and at junctions identifying the total number of collisions and severity, collisions involving cyclists and pedestrians. Work has also been undertaken to look beyond collision clusters that includes looking at routes with road safety concerns. Reinstatement of site accesses would be undertaken, with relevant discussions with the LHA and landowners.

Reference	Comment	National Grid's Response
Local Highway Authority Thematic Group Meeting, September 2023	LHAs requested further detail on the vehicle types that would use the PARs. LHAs also requested a Public Right of Way (PRoW) assessment is provided within a separate chapter in the ES.	An overview of the type of construction vehicles that would use the PAR was shared with the LHAs. As per the EIA Scoping Report (document reference 6.19) and EIA Scoping Opinion (document reference 6.20) a separate PRoW chapter has not been provided. This is because PRoW are assessed using different methodologies by several different environmental topic chapters, including Chapter 16: Traffic and Transport (document reference 6.16), Chapter 15: Socio- Economics, Recreation and Tourism (document reference 6.15), Chapter 10: Health and Wellbeing (document reference 6.10) and Chapter 13: Landscape and Visual (document reference 6.13). Instead, PRoWs are assessed separately within each relevant environmental topic chapter and cumulative effects on a single PRoW presented within the Chapter 17: Cumulative Effects (document reference 6.17). The Outline PRoW Management Plan (document reference 7.6) has been prepared to set out the proposed approach to the management of PRoWs during construction of the Project.
Transport Working Group Regional Meeting (Thurrock), September 2023	It was agreed Department for Transport (DfT) traffic data from 2019 should be used in assessment in the ES. Thurrock Council raised concerns regarding changes to traffic patterns following the pandemic. Validation of traffic patterns between 2019 and 2023 is expected. Brentwood Road was given as an example of a road with a pattern change. Thurrock Council also requested that the construction programme does not overlap with other development such as the Lower Thames Crossing (LTC) project.	Where DfT traffic count data was not available for all roads along the PARs, additional traffic count surveys were undertaken in November 2023. The locations of the surveys were agreed with Thurrock Council. Additionally, traffic surveys were undertaken near to several existing DfT count sites. These were used to compare the recorded flow data with the predicted 2023 vehicle flows using the 2019 DfT count data and applied growth factor. This was undertaken to validate the use of the DfT survey data in relation to concerns on changes to travel patterns because of the COVID-19 pandemic. Traffic flow data for the A1089 Asda Roundabout, required as part of the multi-modal assessment, were obtained with permission from the LTC project with survey data from 2024. The DfT has provided more updated traffic data for 2023, and therefore these new DfT counts have been used for the ES. Where DfT traffic count

Reference	Comment	National Grid's Response
		data was not available, additional traffic count surveys were undertaken in November 2024. For the assessment of the new Tilbury North Substation options, traffic count surveys carried out in June 2024 were provided by the LTC project team. Traffic flows from 'committed developments' that overlap with the Project have been included within the ES and used to undertake the assessment in the ES and the TA.
Transport Working Group Regional Meeting (Norfolk), September 2023	Norfolk County Council raised concerns regarding the alignment through the A1066 Victoria Road (Diss). It was noted this is a congested route. DfT counts in Norfolk are largely only available up to 2019. It was agreed DfT traffic data from 2019 should be used in assessment in the ES. Norfolk County Council suggested additional surveys may be needed to support assessment.	Concerns regarding the sensitivity of routeing construction vehicles through Diss have been considered. The Outline CTMP (document reference 7.3) prepared in consultation with Norfolk County Council details the construction access strategy through Diss and Thetford addressing the concerns regarding the crossing of the A1066. An alternative PAR on the west via Thetford has been assessed within the TA (document reference 7.11) to reduce the impact of the construction route through Diss. Construction traffic would be routed via both routes. Additional traffic count surveys were undertaken in November 2023. The locations of the surveys were agreed with Norfolk County Council. Furthermore, traffic surveys were undertaken in 2023 near to several existing DfT count sites including the A1066. These were used to compare the recorded flow data with the predicted 2023 vehicle flows using the 2019 DfT count data and applied growth factor. This validated the use of the DfT survey data in relation to concerns on changes to travel patterns because of the pandemic. The DfT has provided more updated traffic data for 2023 which has been used for the ES. Where DfT traffic count data was not available, additional traffic count surveys were undertaken in November 2024, including locations on the A1066.
Transport Working Group Regional	Suffolk County Council noted restricted vehicle movements on the A12 to access	Initial mitigation measures regarding the A12 and access to the B1068 were assessed to ensure all movements could be accommodated safely.

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Meeting (Suffolk), September 2023	the B1068 (H13B-A1) (restricted slip roads). Suffolk County Council identified that they hold a database of recent traffic surveys that could be used within our assessment. Suffolk County Council agreed to the use of 2019 DfT traffic data for assessments. However, it was highlighted that this may represent an exaggerated worst-case when compared with current 2023 data, as a result of a changes to traffic levels and patterns following the COVID-19 pandemic.	However, the access to the Project in this area via B1068 (superseded route H13B-A1) has been discarded and the access is via B1070 (route H13-A1). Survey data from Suffolk County Council was requested and the data received informs the assessment within this ES. At Preliminary Environmental Information Report (PEIR) stage, where DfT traffic count data was not available for all roads along the PAR, additional traffic count surveys were undertaken in November 2023. The locations of the surveys were shared and agreed with Suffolk County Council. Furthermore, traffic counts were undertaken near to several existing DfT count sites including the A1120 Bell's Lane. These were used to compare the recorded flow data with the predicted 2023 vehicle flows using the 2019 DfT count data and applied growth factor. This was undertaken to validate the use of the DfT survey data in relation to concerns on changes to travel patterns because of the pandemic. The DfT has provided more updated traffic data for 2023 and therefore these new DfT counts have been used for the ES. Where DfT traffic count data was not available additional traffic count surveys have been undertaken in November 2024.
Transport Working Group Regional Meeting (Essex), October 2023	Essex County Council requested a more focused discussion on the new East Anglia Connection Node (EACN) Substation access. Essex County Council requested additional information on the usage of Bentley Road, inc. pedestrians/cyclists etc. Essex County Council identified initial area of concern e.g., Wick Lane, Mill Road, and constrained junctions in Whitham.	A meeting was held with Essex County Council on 16 October 2023 to provide more information on the proposals on the new EACN Substation access via Bentley Road. Automatic Traffic Counts (ATC) and NMU counts were undertaken in November 2023 for the EACN Substation on Bentley Road and the A120 to help inform the extent of mitigation required along the proposed construction route. Further ATC and NMU surveys to inform the ES were undertaken August, September and October 2024.

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	Essex County Council requested a review of road widths and white lining. Essex County Council agreed using 2019 DfT traffic data for assessments. However, noted this may represent an exaggerated worst-case when compared with current 2023 data.	Areas of concern are noted along the PAR and have been taken into consideration. Further assessment has been undertaken within the ES and TA (document reference 7.11). In terms of road widths and white lines along the PARs a review was undertaken to help inform the design when considering two-way movement of construction traffic. Indicative Highway Mitigation Plans are provided within Appendix C of the Outline CTMP (document reference 7.3). At PEIR stage, where DfT traffic count data was not available for all roads along the PAR, additional traffic count surveys were undertaken in November 2023. The locations of the surveys were agreed with Essex County Council. Furthermore, traffic surveys were undertaken near to several existing DfT count sites including the A1341 Via Urbis Romanae. These were used to compare the recorded flow data with the predicted 2023 vehicle flows using the 2019 DfT count data and applied growth factor. This was undertaken to validate the use of the DfT survey data in relation to concerns on changes to travel patterns because of the pandemic. The DfT has provided more updated traffic data for 2023 and therefore this new DfT counts have been used for the ES. Where DfT traffic count data was not available additional traffic count surveys have been undertaken in November 2024.
Transport Working Group Meeting (Norfolk, Essex, Suffolk and Thurrock) January 2024	Meeting held with Norfolk, Essex, Suffolk and Thurrock to discuss the Draft Outline CTMP when the document was being drafted. LHAs provided high level feedback on proposed structure and content, including lessons learned from previous projects.	The Outline CTMP (document reference 7.3) refers to: • Pre and post construction condition surveys • Details on the core working hours and permitted activities which could occur outside of these hours • Details on the process that the development of the CTMP (to be developed by the Main Works Contractor(s)) would follow to post DCO,

Reference	Comment	National Grid's Response
	Feedback has been recorded for consideration throughout the development of the Draft Outline CTMP, including: • Pre and post construction condition surveys and any remedial measures to be agreed with LHA • Additional consideration given to working hours • Consideration for the process that the CTMP would follow before being applicable, including reviews by stakeholders and local authorities • Any variations to the CTMP must seek prior agreement with the relevant LHA and the Local Street Authority. Request to manage closures to not be in excess of time required • Request for measures in place to monitor assumptions.	and the LHA and Local Street Authority input into the variations of the CTMP • Details on the process for recording activity against the mitigation measures and the compliance procedure.
Transport Working Group Regional Meeting (Norfolk) March 2024	Norfolk County Council requested more information regarding the traffic volumes on the A140 including: • Split of traffic between north and south • Impacts on Long Stratton as sensitive receptor	The assessment of traffic on the SRN and Major Road Network (MRN)[1], including the A140 through Long Stratton Bypass and between Dunston and Long Stratton have been included as part of the access strategy for road and multi-modal options presented in the TA (document reference 7.11). The traffic surveys for the road links captured 24 hour traffic flows, whereas for the junctions the data has been collected for the hours of 07:00 to 10:00

[1] The Strategic Road Network comprised motorways and A roads managed by National Highways. The Major Road Network are important A roads and local roads that are managed by Local Highway Authorities

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	• Impact of traffic on Long Stratton Bypass, planned to be completed in mid-2026 • Existing capacity concerns in A140 between Dunston and Long Stratton • The AM and PM peaks are not limited to an hour period, and that it is 7:30 am to 9:00 am in some places • Existing capacity concerns in A1066 throughout the day, and not just peak periods.	hrs and 15:00 to 19:00 hrs. This allows capture of the full AM and PM peak periods. At Diss, the 24 hour traffic volumes provide information of the peak periods throughout the day. Classified turning counts were also collected at these junctions on a weekend between 09:00 to 19:00 hrs.
Transport Working Group Regional Meeting (Suffolk) March 2024	Suffolk County Council pointed to the degree of uncertainty inherent to traffic modelling and emphasised that routes falling a few percentage points short of the IEMA thresholds should not be omitted from further assessment due to this uncertainty. Cumulative developments need to be included. Some are in the vicinity of the Project, including: • Solar farms planned around the A140 corridor • National Grid Bramford to Twinstead • Scottish Power Renewables development	The assessment indicates that all the routes in Suffolk show an exceedance of the threshold for HGV traffic currently, and hence all the road links forming the PARs in Suffolk have been subject to further assessment. The impact of committed developments is included in the assessment. The list of committed developments is shown in Tables A16.3.2 to A16.3.5 within Appendix 16.3: Future Baseline (document reference 6.16.A3). The documentation from the various planning applications were initially reviewed to determine if there was any traffic data or traffic routes that would suggest they should be considered for the traffic and transport assessments within the ES and TA (document reference 7.11). This initial list of committed developments was provided and discussed with the Local Authorities in August 2024 and shared in March 2025. The planning applications from Scottish Power Renewables have not been included in the assessment. The construction routes for East Anglia ONE north and East Anglia TWO Offshore Wind Farms do not overlap with the PARs of the Project. East Anglia THREE Offshore Wind Farm is expected to be operational before the construction of the Project commences and no

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	• National Highways Copdock Interchange (A12/A14 Junction) upgrade works • Improvement works at the A140/A1120 junction • A1071 ongoing residential developments. Confirmation was requested of the inclusion of projects in early stage of development. Suffolk County Council enquired whether PRoW surveys would be undertaken. In many places PRoW are locally significant transport routes, and hence Suffolk County Council would prefer that PRoW would not be split between multiple themes. Additionally, it was emphasised that decisions around PRoW should be based on data, rather than professional judgement, due to previous issues in this regard.	significant traffic impacts are anticipated during the operational phases of this development. Where there is a high degree of uncertainty around early-stage projects, these planning and East Anglia TWO Offshore Wind Farms are expected not to overlap with the PARs of the Project. East Anglia THREE Offshore Wind Farm is expected to be operational before the construction applications are not included in the assessment. Monitoring of these developments was undertaken throughout the development of the ES. PRoW usage surveys were carried out in August 2024 and March 2025. The list of PRoWs was agreed with the LHA and PRoW officers. The PRoW assessment is covered in Chapter 13: Landscape and Visual (document reference 6.13), Chapter 15: Socio-Economics, Recreation and Tourism (document reference 6.15) and Chapter 16: Traffic and Transport (document reference 6.16). Chapter 16: Traffic and Transport (document reference 6.16) covers the analysis of the existing baseline conditions (Section 16.5 and Tables A16.2.84 and A16.2.85 in Appendix 16.2 Traffic and Transport Baseline Conditions) (document reference 6.16.A2) and the assessment of the walkers, cyclists and horse-riders delay in the PRoW (Section 16.7 of Chapter 16: Traffic and Transport (document reference 6.16) and Table A16.4.3 in Appendix 16.4: Traffic and Transport Construction Effects (document reference 6.16.A4)). Additionally, there is a specific Outline PRoW Management Plan (document reference 7.6) that covers the approach to the management of PRoWs during construction of the Project.
Transport Working Group Regional Meeting (Essex)	Essex County Council pointed out that the hours of greatest change (i.e. the period of greatest impact, which could fall outside of the typical peak periods on the existing	The AM and PM peak hours are the analysed periods in the TA (document reference 7.11) following standard assessment practice. These time periods represent the times when the highway network is potentially more sensitive to capacity constraints and when there would be consequently more adverse

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March 2024	network) should also be considered as part of the impact assessment. Chelmsford Bypass would include both the road and significant number of houses, depending on timelines, and there is a degree of uncertainty over how this will interact, and this should be considered. Duration of traffic impact is important to understand whether these would be transitory or more long term. Essex County Council asked if considerations for the cumulative impacts on PRoW have been made and raised repeated concerns around the lack of dedicated PRoW focus, noting that PRoW content is currently spread over multiple sections. Essex County Council wants to understand the intended duration and phasing of any proposed closures to fully consider impacts, especially in cases where PRoWs and local roads in the same area will be closed concurrently.	effects. However, the Chapter 16: Traffic and Transport (document reference 6.16) includes an assessment of the driver delay and public transport delay to passengers during the 12-hour period between 7am to 7pm to ensure that all the implications of the Project are captured outside of the assessed peak hours. The Chelmsford North East Bypass (CNEB) Scheme is known and considered as a committed development. The first phase of the CNEB (Section 1A) is expected to be finished by Spring 2026. Phase 2 will be constructed when funding is identified, therefore no set programme at this stage. The PRoW assessment is covered in various chapters of this ES to support each one of assessments. Additionally, a PRoW Management Plan (document reference 7.6) has been prepared with the aim of reducing disruption to users (as far as practicable). The document summarises the PRoWs within the Study Area affected as a result of proposed construction activities by the Project. The proposed management strategy describes the proposed management and temporary diversion works. Additionally, the programme and the PRoW Management Plan (document reference 7.6) helps to understand the PRoW diversions/closures and their duration. Access, Rights of Way and Public Rights of Navigation Plans (document reference 2.5) show details of any changes to the PRoW network.
Transport Working Group Regional Meeting (Thurrock) March 2024	Thurrock Council requested more information of the proposed routeing of traffic on the SRN, noting the A1089 Asda Roundabout on the access to the Port of Tilbury to be a particular area of concern due to potential knock-on effects of	The proposed junctions have been included in the TA (document reference 7.11). The future baseline traffic flows and the effects from committed developments have been assessed. Within the TA (document reference 7.11) the access strategy for road and multi-modal options have been

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	congestion at this junction on other parts of the road network in Thurrock. Other junctions have been raised as particularly sensitive: • M25 Junction 30 • A13 Orsett Cock Roundabout • A1013 Stanford Road/Buckingham Hill Road. It was added that it would be useful to look at ways to reduce overall traffic impacts related to the Project including movements made by staff, for example by looking to provide staff park and ride facilities in a similar manner to the DCO proposals for the Thurrock Flexible Generation project. National Highways pointed out that the SRN in the area is sensitive and that it would be looking to see full impact assessments for junctions in the area. Thurrock Council queried if the rural nature of the roads in the PARs had been considered for the definition of sensitivity, as there are concerns around existing HGV traffic on some of those roads, and sections of narrow width where HGVs cannot pass other vehicles.	assessed and impacts on the junction around the SRN are considered on this basis. The rural nature of the road is not a parameter to define the road sensitivity, as per IEMA Guidelines: EATM (2023). It is based on the presence of receptors, the assessment of the roads, the number of personal injury collisions and the collision clusters where identified. However, where concerns have been identified, mitigation measures are proposed to solve width and visibility issues. The mitigation measures categorised as red (highway improvement works such as road widening and passing bays where the extent of the works require land outside of the extent of the existing public highway) and orange (highway improvement works such as road widening and passing bays where the extent of the works are contained within the existing public highway) are described within the Outline CTMP (document reference 7.3). All the mitigation measures (red, orange, yellow and green) can be found in the Indicative Highway Mitigation Plans within Appendix C of the Outline CTMP (document reference 7.3). Within Section 16.6 of the ES Chapter 16: Traffic and Transport (document reference 6.16), and the Outline CTMP (document reference 7.3) proposed mitigations have been identified to reduce overall traffic impacts related to the Project. For example, the Main Works Contractor(s) will implement a CWTP, prepared in accordance with the Outline CWTP, prior to construction commencing with the aim of proactively managing trips to and from the site, to minimise local effects by reducing the number of single occupancy vehicle trips and encouraging the uptake of sustainable modes of travel. The M25 Junction 30 and A1089 Asda Roundabout, part of the SRN, have been included in the TA (document reference 7.11).

Reference	Comment	National Grid's Response
Transport Working Group Meeting (Norfolk, Essex, Suffolk and Thurrock) April 2024	Suffolk County Council raised concerns regarding the Stoke Ash junction, noting the collision history in this location, and it was requested to be included in the assessment	The Stoke Ash Workhouse Road junction has been reviewed within the TA (document reference 7.11).
Transport Working Group Regional Meeting (Norfolk) June 2024	Norfolk County Council raised existing issues on the A140 at Newton Flotman and Tasburgh relating to vehicles turning off the A140, suggesting that this could cause tailbacks on the A140. Concerns raised over the route on the A1066 through Diss, and a preference to use the A1066 through Thetford as much as practicable where the LHA has not raised any concerns regarding sensitive junctions.	The PARs are not accessed from the A140 at Newton Flotman and Tasburgh. Therefore, construction vehicles turning off the A140 are not expected at these locations. An alternative PAR west of Thetford has been assessed within the TA (document reference 7.11) to reduce the impact of the construction route through Diss. During peak hours construction traffic will be routed 100% through Thetford. Outside of these hours construction traffic will be split 50/50 and routed through both Diss and Thetford. Discussions are ongoing with Norfolk County Council to agree this distribution of construction traffic based on the results of traffic modelling undertaken.
Transport Working Group Regional Meeting (Suffolk) June 2024	Suffolk County Council suggested that the northern section of the B1113 in the county could be an issue due to width restrictions for two-way HGV traffic.	Mitigation measures are proposed to solve width issues such as cutting vegetation and temporary signage to indicate traffic to slow or give-way whilst passing on bends and accessing Fundenhall Road. Indicative Highway Mitigation Plans are provided within Appendix C of the Outline CTMP (document reference 7.3).
Transport Working Group Regional Meeting (Essex) June 2024	Essex County Council has reviewed the list of sensitive junctions provided in previous meetings and has requested to include the A1060/Park Avenue junction in Chelmsford in the assessment.	The A1060/Park Avenue junction has been included in the TA (document reference 7.11)

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Transport Working Group Regional Meeting (Thurrock) June 2024	Thurrock Council noted that surveys being carried out during July 2024 would not fall within a neutral period for the county due to school exams etc. Ideally, they should be undertaken in a neutral period, and anticipates this would be a particular issue with regards to peakiness around the A1089 Asda Roundabout. National Highways added that it would be able to accept survey results in the first week of July, though beyond that they would be less comfortable with the outcomes.	The initial proposal to carry out traffic surveys in July 2024 before the start of the school holidays was not possible. As suggested by Thurrock, a neutral month was selected, and traffic surveys were arranged for November 2024.
EACN - Local Highway Authority Engagement Meeting (Essex County Council) June 2024	Essex County Council queried whether both the shared haul road (with North Falls and Five Estuaries wind farms projects) and the proposed EACN Substation permanent access between Bentley Road and Ardleigh road would be required. A new planning application from Nembess for a 600 megawatt (MW) solar farm and battery storage site in the vicinity of Ardleigh is expected to be completed in approx. 2032. Essex County Council requested confirmation if this development has been accounted for as a cumulative impact. Essex County Council noted that the NMU usage surveys on both Bentley Road and Ardleigh Road were undertaken in	The permanent access would still be required post construction even if the shared haul road is used to provide construction access to the site. However, its use would be much less frequent than would be the case if it is utilised during construction. The planning application for the solar farm and battery storage has been granted, and therefore it has been accounted for as a committed development as emphasised by the Local Planning Authority. The team is conscious of the timing of the survey as a winter month, particularly with regards to the apparent use of Bentley Road and Ardleigh Road by leisure cyclists due to the noticeably higher number of cyclists recorded on weekend days. Additional summer surveys were undertaken in August 2024 for Thursday to Sunday inclusive..

Reference	Comment	National Grid's Response
	November 2024, and those surveys might not reflect the maximum number of users.	
Transport Working Group Regional Meeting (Norfolk) July 2024	Norfolk County Council commented that the planning applications for Norwich Main Substation and the adjacent Equinor project had plans for works in this area, including their own accesses. Norfolk County Council noted the importance of knowing the duration for which the mitigation would need to be in place to understand if longer-term mitigations would be required.	Liaison and coordination with other projects is detailed within the Outline CTMP (document reference 7.3).
Transport Working Group Regional Meeting (Suffolk) July 2024	Suffolk County Council noted that the abnormal load route on the B1113 through Sproughton is a known local sensitivity, adding that there are movements on this route relating to a local business, as well as this being the agreed heavy load route to Bramford Substation. It was noted that the Beagle roundabout (A1071/B1113) may be replaced in future with a signalised junction as part of a nearby residential development.	Details on access for AILs can be found in the AIL Access Strategy, within Appendix A of the Outline CTMP (document reference 7.3). Consideration has been given to the Beagle roundabout (A1071/B1113) and potential impact.
Transport Working Group Regional Meeting (Essex) August 2024	Essex County Council queried the length of time which the mitigation would need to be in place for.	Separate AIL meetings have been carried out to explain details of mitigation measures. A schedule of mitigations has been developed with proposed levels of information to be provided in each location and were issued to Essex County Council for review and agreement on a case-by-case basis.

Reference	Comment	National Grid's Response
		Details of mitigation are included within the Outline CTMP (document reference 7.3) and Appendix A: AIL Access Strategy of the Outline CTMP (document reference 7.3) .
Transport Working Group Regional Meeting (Thurrock) August 2024	Thurrock Council noted that their Network Management Team would need to be consulted with regards to any planned traffic management. Thurrock Council queried about the duration of the proposed mitigation around the existing traffic islands on the A1013 Stanford Road to accommodate AILs. Many of the islands provide pedestrian crossing facilities. It was raised that the presence of the existing waste disposal site, the existing quarry, and the Tarmac building products facility already have HGVs using Buckingham Hill Road. The waste disposal site can be particularly busy around weekends, with some existing issues associated with traffic queuing to access the site at certain times. Additional congestion will impact residents as this area is the main access to the village of East Tilbury.	Engagement has been undertaken with Thurrock Council Network Management Team regarding Traffic Regulation Orders and Temporary Traffic Regulation Orders. The quantum of and programme for AIL deliveries has been identified. The AIL Access Strategy is documented as Appendix A within the Outline CTMP (document reference 7.3). Additional development around these proposed mitigations will consider the duration for which it would be required, and what measures are necessary to maintain pedestrian access. Buckingham Hill Road has been assessed as part of the ES and the A1013/Buckingham Hill Road junction has been modelled within the TA (document reference 7.11).
Transport Working Group Meeting (Norfolk, Essex, Suffolk and Thurrock)	Thurrock Council noted that there are additional DCO projects in Thurrock which could interact with the Project, and that some of those projects were considering the usage of park-and-ride type	Car sharing and public transport has been promoted as a potential mitigation measure as an alternative to a park-and-ride arrangement. within the Outline CWTP found within Appendix B of the Outline CTMP (document reference 7.3).

Reference	Comment	National Grid's Response
August 2024	arrangements for staff in order to mitigate the numbers of staff movements at sensitive junctions. Norfolk County Council noted that they would look to see an indication of arrival times within the Outline CWTP. They have explained that certain sections of the highway network in the county were particularly sensitive at specific times, citing the A140 towards Norwich during the morning peak as an example	The traffic increase during construction has been assessed on the A140 as part of the impact assessment relating to the SRN/MRN in the TA.
Transport Working Group Regional Meeting (Norfolk) September 2024	National Grid presented the general structure and content of TA that was considered appropriate by Norfolk. Provided an overview of the initial capacity assessment methodology.	Structure and modelling methodology has been used to develop the TA (document reference 7.11). A draft version of the TA was submitted for comment in March 2025, and a response was provided by Norfolk.
Transport Working Group Regional Meeting (Suffolk) September 2024	National Grid presented the general structure and content of TA that was considered appropriate by Suffolk. Provided an overview of the initial capacity assessment methodology	Structure and modelling methodology has been used to develop the TA (document reference 7.11), and a draft was submitted for comment in March 2025.
Transport Working Group Regional Meeting (Essex) October 2024	National Grid presented the general structure and content of TA that was considered appropriate by Essex. Provided an overview of the initial capacity assessment methodology.	Structure and modelling methodology has been used to develop the TA (document reference 7.11).. A draft version of the TA was submitted for comment in March 2025, and a response was provided by Essex.

Reference	Comment	National Grid's Response
Transport Working Group Meeting (Thurrock) October 2024	National Grid presented the general and content of TA that was considered appropriate by Thurrock. Provided an overview of the initial capacity assessment methodology.	Structure and modelling methodology has been used to develop the TA (document reference 7.11), A draft version of the TA was submitted for comment in March 2025, and a response was provided by Essex.
Transport Working Group Meeting (Norfolk, Essex, Suffolk, Thurrock, National Highways) January 2025	National Grid presented a work in progress draft of the Transport Assessment and discussed the methodology for the junction sifting process, junction assessment methodology and cumulative assessment.	Structure and modelling methodology has been used to develop the TA, and Structure and modelling methodology has been used to develop the TA. A draft version of the TA was submitted for comment in March 2025, and a response was provided by Norfolk.
Transport Working Group Regional Meeting (Norfolk) January 2025	National Grid presented examples of the likely environmental mitigation measures for the junctions and PARs that have been identified in the ES and TA assessments, especially on those locations where pedestrian, cyclists and horse-riders amenity has raised a significant level of effects. Approach to mitigation agreed in principle but would require site specific measures to be identified based on future traffic conditions.	Workshops with Norfolk undertaken to assess all mitigation on a case-by-case basis. Details are provided within the Outline CTMP (document reference 7.3).
Transport Working Group Regional Meeting (Suffolk) January 2025	National Grid presented examples of the likely environmental mitigation measures following the ES assessment of effects for junctions and PARs predominately where pedestrian, cyclist and horse-rider amenity	Mitigation workshops with Suffolk undertaken to assess all mitigation at the junctions and PARs on a case-by-case basis. Details are provided within the Outline CTMP (document reference 7.3).

Reference	Comment	National Grid's Response
	was raised from detailed assessment within ES. Approach to mitigation agreed in principle but would require site specific measures to be identified based on future traffic conditions.	
Transport Working Group Regional Meeting (Thurrock) February 2025	National Grid presented examples of the likely environmental mitigation measures following the ES assessment of effects for junctions and PARs predominately where pedestrian, cyclist and horse-rider amenity was raised from detailed assessment within ES. Approach to mitigation agreed in principle but would require site specific measures to be identified based on future traffic conditions. Locations noted where concern raised for pedestrians crossing the PARs (informally) e.g. to access McDonalds from the A1013. Red, Amber, Green (RAG) strategy presented for junction mitigation. The RAG strategy will help to focus on key junctions in terms of the likely mitigation required to ensure sufficient time is allowed to develop and discuss proportionate measures prior to the submission of the DCO. RAG strategy agreed in principle.	Mitigation workshops with Thurrock undertaken to assess all mitigation at the junctions and PARs on a case-by-case basis. Details are provided within the Outline CTMP (document reference 7.3). Embedded, standard and additional mitigation measures have been outlined in Chapter 16: Traffic and Transport (document reference 6.16). RAG strategy was used to prioritise order of junctions and mitigation required.
Transport Working Group Regional Meeting (Essex) February 2025	National Grid presented examples of the likely environmental mitigation measures following the ES assessment of effects for junctions and PARs predominately where pedestrian, cyclist and horse-rider amenity	Mitigation workshops with Essex undertaken to assess all mitigation at the junctions and PARs on a case-by-case basis. Details are provided within the Outline CTMP (document reference 7.3).

Reference	Comment	National Grid's Response
	was raised from detailed assessment within ES. Approach to mitigation agreed in principle but would require site specific measures to be identified based on future traffic conditions. RAG strategy presented for junction mitigation. The RAG strategy will help to focus on key junctions in terms of the likely mitigation required to ensure sufficient time is allowed to develop and discuss proportionate measures prior to the submission of the DCO. RAG strategy agreed in principle. Mitigation measures may be informed by feasibility studies previously undertaken by Essex.	RAG strategy was used to prioritise order of junctions and mitigation required.
Additional IEMA Mitigation (Thurrock) March 2025	National Grid presented examples of the likely environmental mitigation measures following ES assessment of effects on PARs predominately for WCH Amenity where large or moderate significance of effect was identified. Request to consider mitigation for some additional locations i.e. the uncontrolled crossings as part of the WCH severance assessment due to safety concerns. Approach to mitigation agreed in principle but a review of the sensitivity of some PARs need to be carried out, i.e. Heath	Review of sensitivity of PARs undertaken and presented within the ES Chapter 16: Traffic and Transport (document reference 6.16). A review of uncontrolled formal and informal crossing for pedestrians was undertaken within the TA and ES as requested by Thurrock. This included Buckingham Hill Road, Hoford Road and A1013 Standford Road. Standard mitigation is outlined within the Outline CTMP (document reference 7.3) and additional mitigation detailed within the ES Chapter 16: Traffic and Transport (document reference 6.16). The TA provides a summary of mitigation required for the Project

Reference	Comment	National Grid's Response
	Road, A1013 Stanford Road and Buckingham Hill Road.	
Additional IEMA Mitigation (Norfolk) March 2025	National Grid presented examples of the likely environmental mitigation measures following ES assessment of effects on PARs predominately for WCH Amenity. Approach to mitigation agreed in principle.	The TA provides a summary of the IEMA mitigation which included standard mitigation outlined within the Outline CTMP (document reference 7.3) and additional mitigation detailed within the ES Chapter 16: Traffic and Transport (document reference 6.16)
Additional IEMA Mitigation (Suffolk) March 2025	National Grid presented examples of the likely environmental mitigation measures following ES assessment of effects for junctions and PARs predominately where WCH Amenity raised from detailed assessment within the ES (Volume 6 of the DCO application). Approach to mitigation agreed in principle but would require site specific measures to be reviewed by Suffolk against receptor sensitivity for each PAR.	Details of proposed mitigation and sensitivities were provided to Suffolk, and details are provided within the TA and the ES Chapter 16: Traffic and Transport (document reference 6.16).
Transport Working Group Regional Meeting (Norfolk) April 2025	National Grid presented results of the junction modelling assessments. Provided a recap on the junction selection process, assessment methodology, approach to mitigation, and proposed mitigation (where necessary). Request to discuss the need to avoid the A47/A140 Ipswich Road roundabout during the AM peak hour with National Highways. In the A11/A1066 roundabout it could be necessary to avoid peak hours.	Findings of the junction modelling can be found within Section 7: Transport Assessment of the TA (document reference 7.11). Additional environmental mitigation as a result of the initial IEMA assessment are presented in Chapter 16: Traffic and Transport (document reference 6.16). The Outline PRoW Management Plan (document reference 7.6) has been prepared to set out the proposed approach to the management of PRoWs during construction of the Project.

Reference	Comment	National Grid's Response
	Norfolk County Council noted that the baseline scenario is already over capacity with delays at Diss and suggested exploring the possibility of not adding more issues to the road. This applies to pedestrian, cyclist and horse-rider amenity, crossings of schools, etc. Suggested to explore the off- peak baseline flows and a comparison with the peak hour flows. National Grid presented the proposed additional environmental mitigation measures following the ES assessment of effects on PARs, in relation to pedestrian, cyclist and horse-rider amenity.	The Outline CTMP (document reference 7.3) describes how compliance on construction flows will be monitored and managed with engagement with LHA.
Transport Working Group Regional Meeting (Thurrock) April 2025	National Grid presented results of the junction modelling assessments. Provided a recap on the junction selection process, assessment methodology, approach to mitigation, and proposed mitigation (where necessary). Approach and findings of results need to be reviewed following submission of a validation report for each junction. National Grid presented the proposed additional environmental mitigation measures following the ES assessment of effects on PARs, in relation to pedestrian, cyclist and horse-rider amenity and pedestrian, cyclist and horse-rider severance.	Findings of the junction assessments can be found within the TA (document reference 7.11). Additional environmental mitigation as a result of the initial IEMA assessment are presented in Chapter 16.6: Traffic and Transport (document reference 16.6).

Reference	Comment	National Grid's Response
Transport Working Group Regional Meeting (Suffolk) May 2025	National Grid presented results of the junction modelling assessments. Provided a recap on the junction selection process, assessment methodology, approach to mitigation, and proposed mitigation (where necessary). Approach and findings of results agreed in principle but request for time to further review the findings of the assessment modelling and to review existing baseline. National Grid presented the proposed additional environmental mitigation measures following the ES assessment of effects on PARs, in relation to pedestrian, cyclist and horse-rider amenity. Approach to mitigation agreed in principle but request for time to further review the proposals was requested.	Findings of the junction assessments can be found within the TA (document reference 7.11). Additional environmental mitigation as a result of the initial IEMA assessment are presented in Chapter 16.6: Traffic and Transport (document reference 6.16).
Transport Working Group Regional Meeting (National Highways and Thurrock) May 2025	National Grid presented results of the junction modelling assessments. Provided a recap on the junction selection process, assessment methodology, approach to mitigation, and proposed mitigation (where necessary). Approach and findings of results agreed in principle but request for time to further review the findings of the assessment modelling and to review existing baseline.	Findings of the junction assessments can be found within the TA (document reference 7.11). Additional environmental mitigation as a result of the initial IEMA assessment are presented in Chapter 16.6: Traffic and Transport (document reference 16.6).

Reference	Comment	National Grid's Response
	National Highways requested a check on cumulative developments associated with the junctions, particularly at the A14 J55 Copdock Interchange. Noted that a proposed upgrade to the junction, as part of the proposed improvement schemes in the Government's third Road Investment Strategy (RIS3 – 2025-30), is unlikely to occur before the Project peak construction year. National Highways to investigate baseline conditions at the A47 Norwich Southern Bypass/A140 Ipswich Road junction where the assessment may not necessarily represent existing capacity. In addition, review of available baseline and recent modelling on all junctions to be undertaken, particularly at the A120 Braintree Bypass/B1018 Braintree Rd junction Thurrock noted that surrounding businesses will be interested in the A1089 Asda roundabout modelling assessment to ensure there will be no significant impact to their operations.	

Abbreviations

Abbreviation	Full Reference
AIL	Abnormal Indivisible Load
ATC	Automatic Traffic Counter
CNEB	Chelmsford North East Bypass
CTMP	Construction Traffic Management Plan
CWTP	Construction Worker Travel Plan
DCO	Development Consent Order
DfT	Department for Transport
EACN	East Anglia Connection Node
EATM	Environmental Assessment of Traffic and Movement
EIA	Environmental Impact Assessment
ES	Environmental Statement
FTE	Full Time Equivalent
HGV	Heavy Goods Vehicle
IEMA	Institute of Environmental Management and Assessment
LHA	Local Highways Authority
LTC	Lower Thames Crossing
MRN	Major Road Network
NMU	Non-motorised users
PAR	Primary Access Route
PEIR	Preliminary Environmental Impact Report
PRoW	Public Rights of Way
RAG	Red, amber, green
SRN	Strategic Road Network
TA	Trasport Assessment
The Project	Norwich to Tilbury

Glossary

Term	Definition
Abnormal indivisible load	A large load which cannot 'without undue expense or risk of damage' be divided into two or more smaller loads for the purposes of being transported by road, and which exceeds limits set out in terms of weight (>44 tonnes), length (>18.65 m), and width (>2.9 m).
Additional mitigation measures	Comprises measures over and above embedded and standard mitigation measures to reduce environmental effects. This would include, but not be limited to, mitigation required for protected species.
Alignment	The proposed overhead line and underground cable route.
Amenity	A term used to describe the character or attractiveness of an area. The assessment of amenity considers landscape and visual, noise and vibration, and traffic and transport effects.
Automatic traffic counter	An automatic counter which records the total number of vehicles passing along a designated road or highway, calculating a vehicle's speed and category
Cable	An insulated conductor designed for underground installation.
Committed Development	A development that has full or outline planning permission, or is allocated in an adopted development plan.
Construction Traffic Management Plan	Plan detailing the procedures, requirements and standards necessary for managing the traffic effects during construction of the Project so that safe, adequate and convenient facilities for local movements by all transport modes are maintained throughout the construction process.
Construction Worker Travel Plan	Plan that sets out the framework and principles proposed for the management of construction worker travel to mitigate potential impacts and encourage more sustainable modes of transport.
Cumulative effects	The assessment of the impact on the environment which results from the incremental impact of an action when added to other past, present or reasonably foreseeable actions regardless of what agency or person undertakes such actions. Cumulative impact can result from individually minor but collectively significant actions taking place over a period of time.
Development Consent Order	A statutory instrument which grants consents and other rights to build a Nationally Significant Infrastructure Project, as defined by the Planning Act 2008.
Embedded design measures	Mitigation measures are those that are intrinsic to and built into the design of the Project.
Environmental Impact Assessment (EIA)	An assessment of the likely effects of a development project on the environment, which is reported in an Environmental Statement that is

Term	Definition
	publicised and consulted on and taken into account in the decision on whether a project should proceed.
Environmental Statement (ES)	The main output from the EIA process, an ES is the report required to accompany an application for development consent (under the Infrastructure Planning (EIA) Regulations 2017) to inform public and stakeholder consultation and the decision on whether a project should be allowed to proceed. The EIA Regulations set out specific requirements for the contents of an ES for Nationally Significant Infrastructure Projects.
Heavy Goods Vehicle	A motor vehicle with a gross vehicle weight (GVW) of more than 3.5 tonnes, used for transporting goods. This includes lorries, articulated trucks, and other large freight vehicles
Local Planning Authority	The public authority whose duty it is to carry out specific planning functions for a particular area.
Main Works Contractor(s)	Contractor(s) appointed by National Grid to construct the Project
Major Road Network	Important A roads and local roads that are managed by Local Highway Authorities
Mitigation	The action of reducing the severity and magnitude of change (impact) to the environment. Measures to avoid, reduce, remedy or compensate for significant adverse effects.
Order Limits	The maximum extent of land within which the authorised development may take place.
Permanent access	Access required to infrastructure during the operational phase of the Project, for operational and maintenance purposes.
Primary Access Routes	These are the roads on the local road network that would be used by construction vehicles between the strategic road network and the access points within the Order Limits.
Public Right of Way	A footpath, bridleway or byway accessible to all members of the public.
Scoping	Scoping is the process of determining the content and extent of matters that should be covered in the Environmental Impact Assessment.
Scoping Report	Report determining the content and extent of matters that should be covered in the Environmental Impact Assessment.
Standard mitigation measures	Comprise management activities and techniques, which would be implemented throughout construction of the Project to limit effects through adherence to good site practices.
Strategic Road Network	Motorways and A roads managed by National Highways
Substation	Substations are used to control the flow of power through the electricity system. They are also used to change (or transform) the voltage from a

Term	Definition
	higher to lower voltage to allow it to be transmitted to local homes and businesses.
Transport Assessment	Transport Assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport effects of the Project. It is separate to Chapter 16: Traffic and Transport (document reference 6.16).

Bibliography

Institute of Environmental Management and Assessment (IEMA) (2023) *IEMA Guidelines: Environmental Assessment of Traffic and Movement (EATM)*

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com