FIVE ESTUARIES
OFFSHORE WIND FARM

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VOLUME 9, REPORT 9.24: OUTLINE CONSTRUCTION TRAFFIC MANAGEMENT PLAN

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FIGURES

DEFINITION OF ACRONYMS

Acronym	Definition
AIL	Abnormal Indivisible Load
ALAR	Abnormal Load Assessment Report
CoCP	Code of Construction Practice
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
ECC	Export Cable Corridor
EACN	East Anglia Connection Node
GPS	Global Positioning System
HDD	Horizontal Directional Drilling
HGV	Heavy Goods Vehicles
LGV	Light Goods Vehicle
LRN	Local Road Network
NF OWF	North Falls Offshore Wind Farm
NGET	National Grid Electricity Transmission
NH	National Highways
OWF	Offshore Wind Farm
PAMP	Public Access Management Plan
PROW	Public Rights of Way
RSA	Road Safety Audit
SRN	Strategic Road Network
TCC	Temporary Construction Compound
TJB	Transition Joint Bays
WCH	Walking, cycling and horse-rider
WTGs	Wind turbine generators

GLOSSARY OF TERMS

Term	Definition
VE	Five Estuaries Offshore Wind Farm.
VE OWFL	Five Estuaries Offshore Wind Farm Limited (the Applicant)
Development Consent Order	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP) from the Secretary of State (SoS).
EIA	Environmental Impact Assessment (the process of evaluating the likely environmental impacts of a proposed project or development).
ES	Environmental Statement (the documents that collate the processes and results of the EIA).
Export Cable Corridor (ECC)	The area(s) where the export cables will be located.

1 INTRODUCTION

1.1 BACKGROUND

1.1.1 Five Estuaries Offshore Wind Farm Limited (the Applicant) has submitted an application to the Planning Inspectorate on behalf of the Secretary of State, for a Development Consent Order for the Five Estuaries Offshore Wind Farm (herein referred to as VE) under section 37 of the Planning Act 2008.

1.1.2 VE is the proposed extension to the operational Galloper Offshore Wind Farm. The project includes provision for the construction, operation, maintenance and decommissioning of an offshore wind farm located approximately 37 kilometres off the coast of Suffolk at its closest point in the southern North Sea; including up to 79 wind turbine generators and associated infrastructure making landfall at Sandy Point between Frinton-on-Sea and Holland-on-Sea, the installation of underground cables, and the construction of an electrical substation and associated infrastructure near to the existing Lawford Substation to the west of Little Bromley in order to connect the development to National Grid's proposed East Anglia Connection Node substation, which would be located nearby. All onshore connection infrastructure would be located in the administrative area of Tendring District Council, within Essex County Council. VE will have an overall capacity of greater than 100 Megawatts (MW) and therefore constitutes a Nationally Significant Infrastructure Project (NSIP) under the Section 15 (3) of the Planning Act 2008.

1.2 PURPOSE OF THIS OUTLINE CTMP

1.2.1 This Outline Construction Traffic Management Plan (Outline CTMP) has been produced to be submitted as part of the DCO application.

1.2.2 This is an outline document that, by reference to the assessments reported in the ES, sets out the key elements that will be secured in the CTMP which will be submitted to and approved by the relevant planning authority as a requirement of the Development Consent Order (DCO) ahead of construction.

1.2.3 The Construction Traffic Management Plan(s)[1] (CTMP(s)) will be produced by the Principal Contractor(s) appointed to undertake the construction works, in accordance with this outline CTMP.

1.2.4 This Outline CTMP sets out the approach that will be taken to manage the potential impacts of construction traffic for the onshore works and should be read in conjunction with the assessment of the anticipated VE construction traffic, which is provided in Volume 6, Part 3, Chapter 8: Traffic and Transport.

1.3 SCOPE OF THIS OUTLINE CTMP

1.3.1 For the avoidance of doubt, this Outline CTMP relates to construction traffic associated with the onshore elements of VE comprising:

- Export cable installation from the landfall location to the transition jointing bays (TJBs) including Horizontal Directional Drilling (HDD)/trenchless works;
- Temporary works associated with landfall HDD and TJB excavation;

[1] There is potential to be more than one Final CTMP, with such documents being prepared for different work areas or contractors.

- Cable installation along the onshore Export Cable Corridor (ECC) including jointing bays and potential HDD/trenchless crossings;
- Temporary works associated with the ECC and onshore substation (OnSS) including establishment of haul roads and Temporary Construction Compounds (TCCs);
- Proposed OnSS and associated construction access, including widening works to Bentley Road; and
- Connection to existing National Grid infrastructure.

1.3.2 This document does not relate to construction traffic associated with offshore works seaward of Mean High Water Spring, that are principally marine activities.

1.3.3 The CTMP is intended to be a working document that evolves during the construction period. The CTMP only applies to the construction stage of the VE and does not apply to pre-commencement works, operation or decommissioning of VE.

1.3.4 Whilst this Outline CTMP is for the construction of VE, given the potential for the overlap of construction periods of North Falls Offshore Wind Farm (NF OWF) and National Grid Electricity Transmission (NG) East Anglia Connection Node (EACN) Substation projects, reference is also made to these projects and the potential for coordinated CTMP measures.

1.3.5 This would be most relevant for the construction of VE and NF OWF, as the VE construction accesses (see Table 3.1) and haul roads/haul road crossings (see Table 3.2) would be used for the construction of both projects in the following 'build options' which cover the three delivery scenarios as set out in Volume 9, Report 30: Co-ordination Document):

- "Build option 1" means scenario 1 in which the first project to construct will deliver works to support grid connection co-ordination, including the laying of onshore cable ducts for the second project;
- "Build option 2" means scenarios 2 and 3 in which the undertaker only constructs those works required for VE

1.4 STRUCTURE OF THIS OUTLINE CTMP

1.4.1 The structure of this Outline CTMP is provided in Table 1.1.

Table 1.1: Structure of this Outline CTMP

Section	Topic
Section 1	Introduction
Section 2	Responsibilities, notifications and monitoring
Section 3	Key construction details and on-site control measures
Section 4	Vehicle routeing and off-site control measures
Section 5	Complaints and enquiries procedure
Section 6	References

2 RESPONSIBILITIES, NOTIFICATIONS AND MONITORING

2.1 RESPONSIBILITIES

2.1.1 For the construction of Five Estuaries the Principal Contractor(s) for the will be responsible for the implementation of the CTMP for the relevant work area, to monitor the application of measures within the CTMP, and to propose and make modifications to the Plan during the planning and construction process, if required. Monitoring of the CTMP will be undertaken and any necessary amendments would be made in consultation with Essex County Council as the local highway authority, and with National Highways (NH) in terms of impacts upon the strategic road network (SRN) with any revision of the plan requiring approval from the relevant planning authority.

2.1.2 A Community Liaison Officer (CLO) will be appointed by the Project, as set out in Volume 9, Document 21: Code of Construction Practice (CoCP). A key part of their role will include responsibility to adequately communicate all factors relating to the construction, including traffic and transport management, throughout construction to the community.

2.1.3 A direct point of contact within the developer organisation will be made available and communicated widely for residents and the wider community to contact for information purposes or to discuss any VE construction matters, including those pertaining to traffic management.

2.1.4 The number of site personnel, traffic numbers, and the construction programme will be reviewed as VE progresses. Any significant changes would be discussed and agreed with both Essex County Council and NH (if appropriate). Regular meetings, where required, may be organised for monitoring purposes.

2.1.5 The Applicant is committed to putting in place effective communication channels, and to record and act on comments, complaints or queries during the construction of VE, such as on the measures included in the final CTMP, raised by interested parties.

2.2 LOCAL RESIDENTS

2.2.1 The Project will engage with local residents and will manage public relations with local residents and businesses that will be affected by the construction and related traffic. The CLO will undertake proactive community liaison, keeping local residents informed of the type and timing of works involved, including traffic management measures to be implemented and any planned temporary road closures. This will be undertaken through emails, posters, notices, exhibitions, letters, newsletters, website updates and parish council meetings.

2.2.2 Communication and notices will also be provided to the relevant parish councils as well as Tendring District Council and Essex County Council to ensure that community representatives are aware of construction activity and can liaise with community members.

2.3 ABNORMAL INDIVIDIBLE LOADS

2.3.1 The movement of Abnormal Indivisible Loads (AILs) will be outside of the restrictions (routes and times) contained within the CTMP and will be subject to separate agreement with the relevant highway authorities and police through the Electronic Service Delivery for Abnormal Loads (ESDAL) system. This includes notification to stakeholders and advising of timings, routes and any asset protection measures (with the relevant highway authorities, police and Network Rail) appropriate to the type of load.

2.3.2 Should delivery of AILs or other construction traffic activities, be required outside of the core working hours (see Volume 9, Document 21: CoCP, Section 3.2) prior notice will be given to the local planning authority in a reasonable time (to be agreed with Essex County Council) before such traffic movements commence.

2.3.3 The Project will keep residents fully informed of details in relation to the timing of the delivery of AILs. Ahead of any delivery, the CLO will communicate, where appropriate, information via local notice boards, email updates to stakeholders and those who have registered for updates via the website. The communication could also include notifications issued to the local press and, where appropriate, notification letters to local residents and businesses that may be impacted.

2.3.4 Notification letters will contain the following information:

- Name and contact details of relevant Applicant personnel;
- Estimated commencement date for deliveries;
- Duration of delivery period;
- Estimated times of deliveries;
- Any details of the route (if appropriate); and
- Request to keep the highway clear of parked cars during the delivery period (if appropriate)

2.3.5 The Project will make every effort to work with local stakeholders to ensure disruption caused by AIL deliveries is minimised. Groups of particular relevance include, but are not limited to;

- Schools;
- Local bus operators, including school bus operators;
- Local doctors, surgeries or health providers;
- Holiday accommodation developments;
- Royal Mail;
- Leisure Centres; and
- Churches.

2.3.6 Contact with these service providers will be made in advance of planned AIL deliveries.

2.4 EMERGENCY SERVICES

2.4.1 The Police, Fire and Ambulance service will be given written notice of:

- Planned temporary lane or road closures required to install the export cable across roads where Horizontal Directional Drilling (HDD) or other trenchless technique is not being used (timescale for the notification to be agreed with Essex County Council); and
- AIL deliveries and kept fully informed throughout the delivery period (through the ESDAL system described in Paragraph 2.2.1).

2.4.2 Any Police escorts required will be arranged prior to delivery of the AILs.

2.5 PLANNED ENGINEERING WORKS

2.5.1 The Project will work with Essex County Council and NH to identify any planned engineering works that conflict with the delivery route times. Discussions will then be made to minimise disruption to the local community and the planned engineering works.

2.6 COMMUNITY EVENTS

2.6.1 The CLO will engage with key stakeholders and the local community to keep informed of any planned community events, so that the Project can avoid these wherever practicable when scheduling any construction activities that may cause disruption and AIL deliveries.

3 KEY CONSTRUCTION DETAILS AND ON-SITE

3.1.1 In accordance with good construction practice, opportunities will be sought to reduce the overall number of HGV movements by consolidating loads and using the largest feasible vehicles, taking into account any other environmental constraints that may affect HGV routes and the size of vehicle.

3.1.2 Also, VE will plan for maintaining stockpiles of critical path items such as aggregate. These stockpiles will facilitate advanced planning of deliveries, maximise payloads, and enable a smooth import profile to be maintained.

3.2 CONSTRUCTION SITE ACCESS AND TEMPORARY CONSTUCTION COMPOUNDS

3.2.1 The proposed construction access locations and TCCs are set out in Table 3.1. These are also shown on Figure 3-1. The construction accesses would also be used by vehicles associated with the construction of NF OWF, should the two projects be constructed in build-option 1, as described in Paragraph 1.3.5. In build option 2 there may be some overlap if the project's delivery times are close together however this will be less that in scenario 1.

3.2.2 General Arrangement (GA) drawings of the construction access designs are provided in Appendix A, prepared by:

- Royal Haskoning DHV (RHDHV) for AC-1 to AC-8; and
- Mott MacDonald for AC-9 to AC-12.

3.2.3 The designs have been based on the largest vehicle type required to utilise the access (with the exception of a large low loader, which is an AIL (non-special order), which would use the accesses when there would be no other construction vehicle movements and use the whole width of the access if required).

3.2.4 Visibility splays are based on 85th percentile speeds and the criteria in the Design Manual for Roads and Bridge (DMRB) (Section 3 of CD 123 Geometric design of at-grade priority and signal-controlled junctions and Table 2.10 of CD 109 Highway Link Design) for speeds above 37mph, or Manual for Streets (MfS) Table 7.1 for speeds of 37mph or lower.

3.2.5 The construction access designs have been subject to a Stage 1 Road Safety Audit (RSA) (see Appendix M of Volume 6, Part 6, Annex 8.1: Transport Assessment). RHDV and Mott Macdonald responded to the Stage 1 RSA in Designer's Response Reports (see Appendix N of Volume 6, Part 6, Annex 8.1: Transport Assessment).

3.2.6 The construction access designs have been discussed and agreed with Essex County Council; however, the final location, layout and control measures that will be required would be discussed and agreed with Essex County Council through detailed design investigations post DCO consent.

- The Final CTMP(s) will include details of such measures which will include the following:
- Additional temporary signage to warn road users of heavy plant turning in the highway;
- Additional temporary traffic calming measures for highway users at the access point;

- Pedestrian arrangements at the access point;
- Extent of road-sweeping activity in vicinity of access point; and
- Frequency of monitoring of highway condition.

3.2.7 Based on discussions with Essex County Council the following known traffic management measure has been identified:

- Temporary speed limit reduction to 30mph on the B1035 Thorpe Road/Tendring Road in the vicinity of AC-5.

3.2.8 All traffic management measures adopted will be in accordance with Traffic Signs Manual, Chapter 8, Traffic Safety Measures and Signs for Road Works and Temporary Situations (Department for Transport (DfT), 2009).

3.2.9 TCCs will be constructed to provide site facilities for the workforce and also allow plant and materials to be stored safely and securely near the works. Should VE and NF OWF be built out simultaneously, there would be a TCC for each project within the TCC area defined.

3.2.10 Each TCC will provide the following:

- Laydown areas;
- Car parking for small to medium vehicles;
- Parking and unloading areas for HGVs;
- Waste storage facilities; and
- Welfare facilities.

3.2.11 Each TCC located at the key construction sites will provide similar facilities, though with greater provision for car parking and HGV unloading areas where appropriate. In addition, they may include offices which will not only serve the adjoining construction activities but also as an administration area for the cable route.

3.2.12 All TCCs will have sufficient areas available at all times for all vehicles to enter in a forward gear and to be accepted directly.

Table 3.1: Construction access points and TCCs

Access/TCC	Highway link	Details
AC-0	Holland Haven Country Park car park access road	For access to the beach for personnel to monitor HDD (or other trenchless technique) progress. This access is shared with Anglian Water.
AC-1/TCC 1	B1032 Clacton Road	For access to Onshore ECC Route Section 1, between landfall and the Great Eastern Mainline Spur
AC-2/TCC 2	B1032 Clacton Road	For access to Onshore ECC Route Section 1, between landfall and the Great Eastern Mainline Spur
AC-3A/TCC 3	B1033 Thorpe Road	For access to Onshore ECC Route Section 2 between the Great Eastern Mainline Spur and the B1033 Thorpe Road

Access/TCC	Highway link	Details
AC-3B	B1033 Thorpe Road	For access to Onshore ECC Route Section 3 between the B1033 Thorpe Road and the B1035 Tendring Road
AC-4/ TCC 4	B1035	For access to Onshore ECC Route Section 3 between the B1033 Thorpe Road and the B1035 Tendring Road
AC-5/TCC 5	B1035 Thorpe Road	For access to Onshore ECC Route Section 4a between B1035 Tendring Road and Tendring Brook
AC-6/TCC 6	B1035 south of A120	For access to Onshore ECC Route Section 4b between the A120 and Tendring Brook
AC-7/TCC 6	B1035 south of A120	For access to Onshore ECC Route Section 4b between the A120 and Tendring Brook
AC-8A/TCC 7	B1035 Clacton Road	For access to Onshore ECC Route Section 5 between the B1035 Clacton Road and the A120
AC-8B/TCC 8	B1035 Clacton Road	For access to Onshore ECC Route Section 5 between the B1035 Clacton Road and Bentley Road
AC-9/TCC 9	Bentley Road	For access to Onshore ECC Route Section 5 between the B1035 Clacton Road and Bentley Road
AC-10/TCC 9	Bentley Road	For access to Onshore ECC Route Section 6/7, the OnSS and 400kV route
AC-11/TCC 9	Bentley Road	For access to Onshore ECC Route Section 6/7, the OnSS and 400kV route
AC-12/12A/ OnSS TCC	Ardleigh Road	Could be used during periods of construction works set up or close down and access to EACN Substation Compound and 400kV connection works.

620000 621000 622000 623000 624000

220000 219000 218000 217000

Section 1

FRINTON-ON-SEA

N

B1032

Great Holland

CR-1

AC-2

TCC2

AC-1

TCC1

Frinton Golf Course

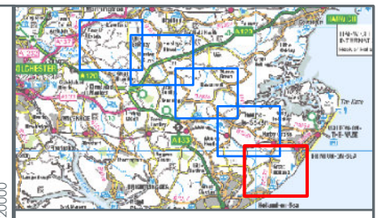
AC-0

Beach Works TCC

Holland-on-Sea

Holland Brook

Pickers Ditch



LEGEND

- Onshore Order Limits
- Offshore Order Limits
- Onshore Export Cable Corridor Section Division
- Onshore Export Cable Corridor
- Temporary Beach Access Zone
- Temporary Construction Compound (TCC)
- Off Route Haul Road
- Access and Crossing Zone
- Landfall Compound Zone
- Indicative Landfall Compound

Construction Access Route

- Local Access Route to Temporary Construction Compound - All Vehicles
- Local Access Route Car/LGV Only (Assessed Route in the Study Area)

Note.
Onshore Export Cable Corridor Section Division has been Removed in Inset for Clarity.

0 125 250 500
Metres

PROJECT TITLE:
FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
CONSTRUCTION ACCESS POINTS, TCCs AND HAUL ROAD CROSSINGS

VER	DATE	REMARKS	Drawn	Checked
1	21/03/2024	ES Submission	DB	JRS

DRAWING NUMBER: 3.1

Sheet No: 1 of 5

SCALE:	PLOT SIZE:	DATUM:	PROJECTION:
1:15,000	A3	OSGB 1936	British National Grid

FIVE ESTUARIES
OFFSHORE WIND FARM

3.3 PARKING

3.3.1 Parking areas located at the TCCs will have safe and secure barriers to segregate all personnel from site plant and vehicle routes. All signage within designated car parking areas must be followed, with no vehicles parked in a way which restricts either vision or access.

3.4 ON-SITE HAUL ROADS

3.4.1 Onsite haul roads will be monitored on a daily basis to identify any deterioration of condition. Non-emergency remedial works to the track will be carried out at times outside peak times of usage, significant emergency repairs will be undertaken immediately, and adjacent haul road sections will be restricted from use as required to safely accommodate works.

3.4.2 All routes will be monitored for dust and control or suppression methods will be deployed as appropriate through the use of dust suppression water bowsers.

3.5 ROAD CROSSING

CONSTRUCTION VEHICLES

3.5.1 As a primary control measure, contractors will be required to minimise travel along the public highway between different sections of the haul road. This will be achieved where possible through the construction of haul road crossings with entry and exit points directly opposite each other.

3.5.2 Where such access points are required to form crossings of the public highway, suitable measures will be incorporated in the access designs to ensure that the construction traffic crossing the highway is controlled for the duration of construction of that section.

3.5.3 The locations identified to have a haul road crossing point are identified in Table 3.2. The haul road crossings would also be used by vehicles associated with the construction of NF OWF, should the two projects be constructed in build-option 1 as described in Paragraph 1.3.5.

3.5.4 Road crossings will require control measures to ensure safe movement of construction traffic across the public highway as well as maintaining the safety of all other highway users.

3.5.5 The Final CTMP(s) will include details of such measures which will include the following:

- Additional temporary signage to warn road users of heavy plant crossing the highway;
- Additional temporary traffic calming measures for highway users at the crossing point;
- Pedestrian arrangements at the crossing point;
- Extent of road-sweeping activity in vicinity of access point; and
- Frequency of monitoring of highway condition.

Table 3.2: Haul Road crossing locations

Crossing	Highway link	ECC Route Section
CR-1	Little Clacton Road	1
CR-2	B1034 Sneating Hall Lane	3
CR-3	Damant's Farm Lane	3
CR-4	B1414 Landermere Road	3
CR-5	Golden Lane	4a
CR-6	Lodge Lane	4b
CR-7	Wolves Hall Lane	4b
CR-8A and CR-8B	Stones Green Road	4b
CR-9A and CR-9B	Payne's Lane	6
CR-10A and CR-10B	Spratts Lane	6
CR-11A and CR-11B	Barlon Road	6
AC-12	Ardleigh Road	6/ 7

3.5.6 General Arrangement (GA) drawings of the haul road crossings are provided in Appendix A, prepared by Royal Haskoning DHV (RHDHV). AC-12, which would also be a crossing for construction vehicles for VE and NF OWF) has been designed by Mott MacDonald and could be used for vehicles associated with the construction of the EACN Substation.

3.5.7 The haul road crossing designs have been subject to a Stage 1 Road Safety Audit (RSA) (see Appendix M of Volume 6, Part 6, Annex 8.1: Transport Assessment). RHDV and Mott Macdonald responded to the Stage 1 RSA in Designer's Response Reports (see Appendix N of Volume 6, Part 6, Annex 8.1: Transport Assessment).

3.5.8 The haul road crossing designs have been discussed and agreed with Essex County Council in principle; however, the final location, layout and control measures that will be required at the haul road crossings would be discussed and agreed with Essex County Council through detailed design investigations post DCO consent, t under the final CTMP and the protective provisions.

3.5.9 All traffic management measures adopted will be in accordance with Traffic Signs Manual, Chapter 8, Traffic Safety Measures and Signs for Road Works and Temporary Situations (Department for Transport (DfT), 2009).

CABLE ROUTE

3.5.10 The Onshore ECC will cross a number of public roads for which trenchless crossing techniques may be used to install the cable ducting. Therefore, no management measures for the control of traffic will be required for this aspect of the works.

3.5.11 Open trenching will be used for installing the cable under some public roads, which will require either a temporary lane closure or a full temporary road closure whilst these works are undertaken.

TEMPORARY ROAD CLOSURES

3.5.12 For roads where it is not possible to keep one lane open in order to maintain a safe separation between the construction works and travelling public there will be a requirement for a temporary closure to through traffic.

3.5.13 The final design of any temporary road closure would be developed by the appointed contractor in consultation with Essex County Council as the local highway authority.

3.5.14 For roads where there is an alternative route option, signage advising of the diversion would be provided.

3.5.15 For minor roads that provide access to a small number of users without alternative access options, to ensure that access can be maintained, it may be possible to use steel plates to allow local access over the open trenches.

3.6 ON-SITE TRAFFIC SAFETY

3.6.1 All traffic visiting construction sites will be required to report to site security where they will obtain clear instructions, before further movement is acceptable. If applicable an induction will be completed, vehicle permits will be issued, and the Site rules & emergency procedure will be explained.

3.6.2 The site speed limit shall be 15 mph on all internal site roads / hauls roads and must be adhered to at all times. Appropriate speed limits within the TCCs will be set. Speed limit signs shall be installed on all haul roads and site access roads.

3.6.3 All traffic will use the signed site directions and all drivers will accommodate other haul road users in a courteous manner. Reversing (other than to park) within the compound areas is not permitted.

3.6.4 Full time site traffic (vehicles/plant situated on-site for majority of construction phase) that requires re-fuelling will follow the instructions supplied at their induction and also the guidelines within their method statement for the works.

3.6.5 Heavy site traffic will be equipped with audible reversing warning with additional visual aids e.g. reversing cameras, mirrors utilised on all plant. All safety features must be inspected on a daily basis with faults immediately reported to the Foreman Fitter who will assess and repair any damage to the plant. Site management will ensure that all loads are covered fully to limit the loss of material in transit.

3.7 VEHICLE CLEANING

3.7.1 Measures to ensure materials are not transferred onto the highway, such as a wheel and body wash, will be operated at each construction access, Road cleaning will take place when required to remove any deposits that are carried from the site.

3.8 BANKS PERSON

3.8.1 A banks person will be used to direct construction vehicles in and out of a VE construction access, where required, in conjunction with any other traffic management measures.

3.9 PUBLIC ACCESS MANAGEMENT

3.9.1 The specific location and measures for ensuring the safety of users of the Public Rights of Way (PRoW) that cross or are adjacent to the proposed construction works are set out in the Outline Public Access Management Plan (Outline PAMP) Volume 9, Report 25: Outline PAMP.

4 VEHICLE ROUTING AND OFF-SITE CONTROL MEASURES

4.1 VEHICLE ROUTEING

ACCESS ROUTES FOR HGVS AND WORKFORCE VEHICLES

4.1.1 The anticipated routes for both construction HGVs and construction workforce traffic (cars/ LGVs) to TCCs or construction access points are provided in Table 4.1 below and illustrated in Figure 4-1.

Table 4.1: Construction access routes

Construction Access	ECC Route Section	Access Route
AC-0 / AC-1/ TCC 1/ AC-2/ TCC 2	1	A12, A120, A133, B1027 Valley Road/ Frinton Road, B1032 Clacton Road or A120, U-turn at A12 J29, A120, A133, B1027 Valley Road/ Frinton Road, B1032 Clacton Road
AC-3A/ TCC 3/ AC-3B	2/ 3	A12, A120, A133, B1033, B1441 Weeley Road/ Clacton Road, B1414 Harwich Road/ Station Road, B1033 Frinton Road/ Thorpe Road or A120, U-turn at A12 J29, A120, A133, B1033, B1441 Weeley Road/ Clacton Road, B1414 Harwich Road/ Station Road, B1033 Frinton Road/ Thorpe Road
AC-4/TCC 4	3	A12, A120, A133, B1033 Colchester Road, B1035 Tendring Road or A120, U-turn at A12 J29, A120, A133, B1033 Colchester Road, B1035 Tendring Road
AC-5/TCC 5	4a	A12, A120, A133, B1033 Colchester Road, B1035

Construction Access	ECC Route Section	Access Route
		Tendring Road, B1035 Thorpe Road or A120, U-turn at A12 J29, A120, A133, B1033 Colchester Road, B1035 Tendring Road, B1035 Thorpe Road
AC-6/ AC-7/ TCC 6	4b	A12, A120, B1035 or A120, B1035
AC-8A/ TCC 7/ AC-8B/ TCC 8	5	A12, A120, B1035 Clacton Road or A120, B1035 Clacton Road
AC-10/TCC 9	5	A12, A120, Bentley Road or A120, U-turn at Harwich Road roundabout, Bentley Road
AC-9/ AC-11/AC-12/ TCC 10/ TCC 11/ OnSS TCC	6/ 7/ 400kV Route/ OnSS	A12, A120, Bentley Road or A120, U-turn at Harwich Road roundabout, Bentley Road

ACCESS ROUTES FOR WORKFORCE VEHICLES ONLY

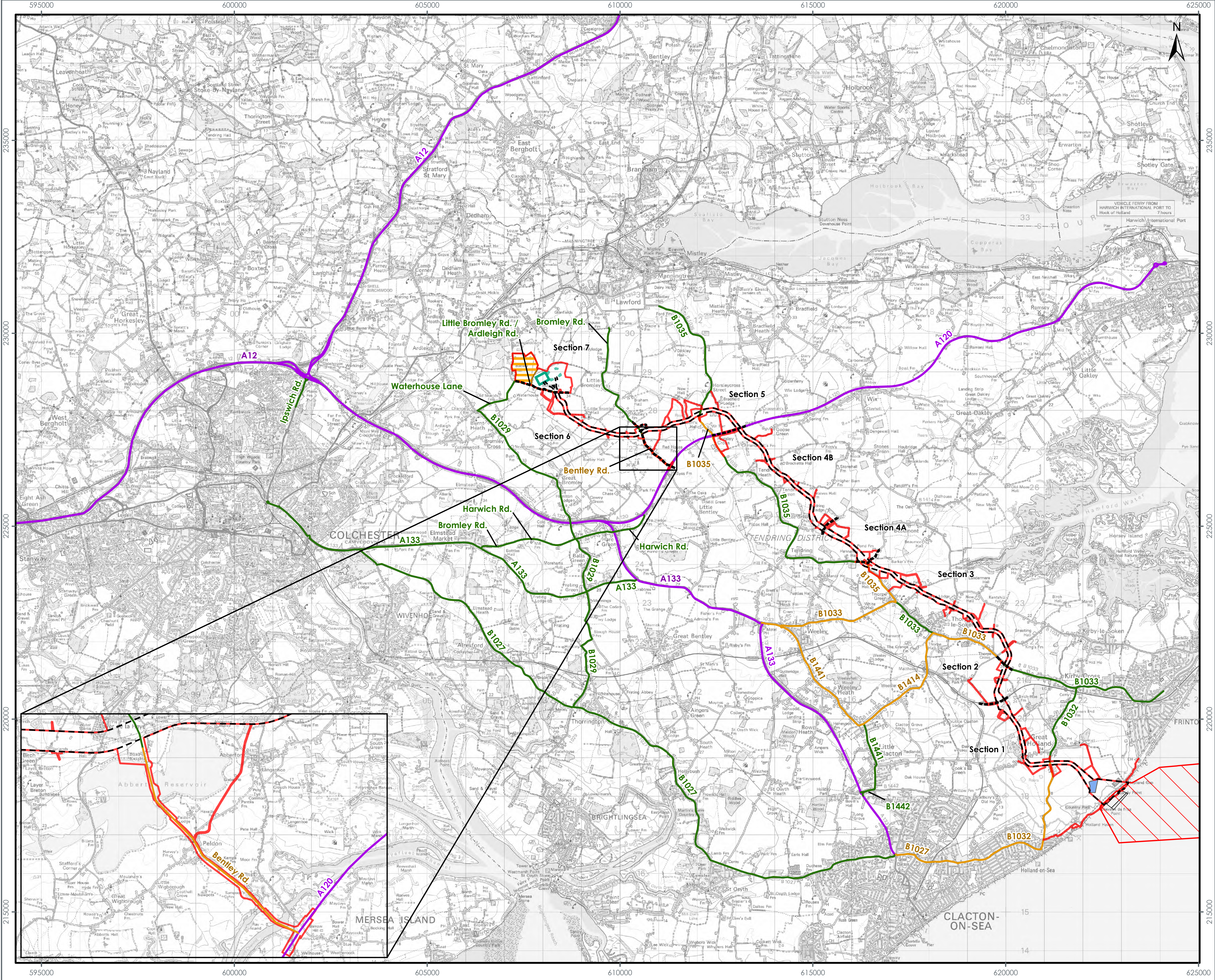
4.1.2 The additional anticipated routes (assessed in Volume 6, Part 3, Chapter 8: Traffic and Transport). for construction workforce traffic (cars/ LGVs only) to access TCCs or construction access points are set out below and illustrated in Figure 4-1:

- B1035 via Tendring, Goose Green and Tendring Green;
- B1033 via Kirby Cross;
- B1032 via Great Holland;
- B1027 between Colchester and the A133);
- B1029 between the B1027 and Waterhouse Lane;

- A133 between Colchester and the A133;
- Waterhouse Lane/ Little Bromley Road/ Ardleigh Road;
- Bromley Road/ Shop Road/ Bentley Road (north of AC-9); and
- Progress Way/ B1441

4.1.3 All delivery contractors and construction staff will be instructed to use the agreed construction access routes, with compliance with the agreed CTMP for each work area of the onshore works being a condition of supply contracts and a number of measures will be implemented to ensure compliance:

- Construction access routes will have temporary signs posted along the proposed routes to site accesses prior to the commencement of construction activities, with the nature and placement of signage to be agreed with Essex County Council and NH and will be set out in the final CTMP. Where multiple access points use a common road to site, signage will be clearly distinguishable between access points.
- Signage will also be placed at the exit of construction site access points to instruct construction traffic to follow the designated route;
- The delivery routes would be communicated by the Principal Contractor to all companies and/or drivers involved in the transport of materials and plant to and from site by HGV construction vehicle;
- Data from HGV vehicles that are fitted with monitoring devices (such as Global Positioning System (GPS) tracking) to record the routes, timing, speed of vehicles when making deliveries, will be available to assist in auditing and complaint investigation; and
- The registration numbers for all HGVs making deliveries would be recorded. Coupled with the HGV monitoring device data (where fitted) outlined above, this would allow a check of any reported breaches of the agreed delivery routes and undertake enforcement action if required.



LEGEND

- Onshore Order Limits
- Offshore Order Limits
- Onshore Export Cable Corridor Section Division
- Onshore Export Cable Corridor
- Substation Operational Boundary
- North Falls Indicative Substation Operational Boundary
- Landfall Compound Zone
- Landfall Exit Pit Sheet Piling Zone
- National Grid EACN Substation Zone

Construction Access Route

- Core Access Route
- Indicative Local Access Route Car/LGV Only (Assessed Route in the Study Area)
- Local Access Route to Temporary Construction Compound - All Vehicles

Note.
Onshore Export Cable Corridor Section Division has been Removed in Inset for Clarity.

0 1 2 4
Kilometres

PROJECT TITLE:
FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
CONSTRUCTION ACCESS ROUTES

VER	DATE	REMARKS	Drawn	Checked
1	21/03/2024	ES Submission	DB	JRS

DRAWING NUMBER: 4.1

SCALE:	PLOT SIZE:	DATUM:	PROJECTION:
1:90,000	A3	OSGB 1936	British National Grid

FIVE ESTUARIES
OFFSHORE WIND FARM

HIGHWAY IMPROVEMENTS

PROPOSALS

4.1.4 The following improvements are proposed at the A120/Bentley Road junction and along Bentley Road to facilitate the construction traffic of VE, and would also be required for NF OWF and EACN):

- A120/Bentley Road junction improvement – widening of the carriageway and the acceleration taper for merging vehicles onto the A120 (see Appendix X of Volume 6, Part 3: Annex 8.1: Transport Assessment);
- Widening of Bentley Road to between 6.0 and 6.75m between the A120 and the VE construction accesses on Bentley Road (see Appendix X of Volume 6, Part 3: Transport Assessment); and
- Provision of a temporary 40mph speed limit along Bentley Road from the junction with the A120.

4.1.5 The Order Limits will also include land to construct a temporary segregated Non-Motorised User (NMU) path along Bentley Road.

TRAFFIC MANAGEMENT

A120/ BENTLEY ROAD JUNCTION

4.1.6 Lane closure of the A120 eastbound carriageway will be required for the installation of the merge taper at the junction and the carriageway widening. With works undertaken to remove a section of the island at the junction of Little Bromley Road on the westbound carriageway, a contraflow traffic management arrangement would be possible under a reduced speed limit.

BENTLEY ROAD WIDENING

4.1.7 To complete the widening works along Bentley Road the road will need to be closed to traffic, although access to residences would need to be retained for the duration. A diversion along Payne's Lane, Hilliards Road and Park Road will be needed, this is approximately a 4km diversion.

4.1.8 Alternatively works could be undertaken with traffic signals and shuttle working through the works, this could be accommodated over a series of night works to limit the impact on road users.

ABNORMAL INVISIBLE LOADS (AILS)

4.1.9 The construction of the onshore works will require the delivery of a number of AILs. These are expected to comprise transformers and reactors for the proposed OnSS.

4.1.10 An initial assessment of the anticipated route for the AIL deliveries (between the Port of Harwich and a new link road (which would be permanent access for the EACN) from Bentley Road to Ardleigh Road has been undertaken to inform the DCO application.

4.1.11 The assumed route is:

- Port of Harwich;
- Parkeston Bypass;
- St Nicholas Roundabout onto the A120;
- Parkeston Roundabout on the A120;

- A new roundabout on the A120 to be constructed to accommodate a new development;
- B1352 Roundabout on the A120;
- B1035 Horsley Cross Roundabout on the A120; and
- Bentley Road.

4.1.12 Details of the AIL route investigations and the swept path drawings of theA120/ Bentley Road junction are provided in Appendix Y of Volume 6, Part 6, Annex 8.1: Transport Assessment.

4.1.13 In terms of an initial assessment, a swept path analysis of the A120 Bentley Road junction has been undertaken, which shows the transformer delivery vehicle would need to turn into Bentley Road from the A120 east via a contraflow using the eastbound carriageway for a section of around 200m.

4.1.14 No modifications to the junction (other than those proposed for standard construction HGVs) would be required.

4.1.15 Whilst the above proposal has been agreed in principle by NH, additional options may be considered during the detailed design stage, should the DCO be approved.

4.1.16 Once the specific transportation vehicles have been confirmed (post consent), an Abnormal Load Assessment Report (ALAR) will be prepared which will set out the key points and issues associated with the selected route for the AILs, to verify that the route is feasible for the delivery, subject to physical and operational mitigation works. The ALAR will inform the traffic management measures that will need to be identified for the movement of the AIL.

4.1.17 The following would need to be adhered to for AIL deliveries:

- All temporary works, such as removal of street furniture, will be subject to discussion with Essex County Council and form part of a delivery plan for each AIL;
- Prior to the movement of AILs, public awareness is required to allow residents to plan and time their journeys to avoid disruption;
- The movement of AILs will be timed to avoid periods of heavy traffic flow (i.e. for those that are able to be transported during the night) to minimise disruption to the public. Specific timing restrictions imposed by the police or local authority have not been determined at this stage; local residents along the route will be informed when the AILs are travelling along the route to ensure that interaction between the local community and AIL delivery vehicles is minimised;
- Due to the size of vehicles required to transport these loads, escorts may be required for the entire route to control oncoming and conflicting traffic.
- AIL vehicles will be accompanied by escort vehicles. The escort vehicles are in place to provide manoeuvring assistance, warning of hazards and to report information on clearances etc to the drivers of the AIL vehicles; and
- If a road closure is required, arrangements will be put in place to facilitate local access to properties on the closed route and to ensure safe passage of any emergency vehicles which may require access.

4.1.18 To further improve driver information, NH will be approached as operators of Variable Message Signs on the trunk road network to investigate whether existing signs could be used to warn drivers of AILs and to warn them of potential delays.

4.2 WALKING, CYCLING AND HORSE-RIDER (WCH) MANAGEMENT

4.2.1 Where reasonably practicable and where it is safe to do so, the Project will aim to maintain access for WCHs along the public highway at locations such as at construction accesses and haul road crossings.

4.2.2 Specific locations on the construction vehicle access routes where management measures such as warning signage may be required on the public highway will be identified in the final CTMP(s) and are likely to include: (and not limited to):

- Bentley Road;
- B1027 St. John's Road/Valley Road;
- The circular cycle routes promoted by Essex County Council (See Appendix N of Volume 6, Part 6, Annex 8.1: Transport Assessment);
- The B1033 Colchester Road at and including the roundabouts with the A133 and B1441; and
- The B1441 Clacton Road.

4.3 PRE AND POST CONSTRUCTION SURVEYS

4.3.1 Prior to the start, and following completion, for each stage of the onshore works of the construction works, road condition surveys for some access roads will be undertaken and agreed with Essex County Council. These surveys will inform any works that may be required to rectify specific damage to the road network as a direct result of construction work.

4.3.2 The roads to be surveyed would be discussed and agreed with Essex County Council to include in the final CTMP(s); however, feedback received from Essex County Council in relation to the Bentley Road widening works stated that a core sample survey would be required on Bentley Road to determine existing construction due to uncertainty of the as built condition of the road and potential for minimal construction depths.

4.4 EMERGENCY PLANNING

4.4.1 An emergency plan will be developed to address a possible major incident, that should wherever possible include use of "A" and "B" classified roads in order to gain access to or egress from the Onshore ECC TCC's or OnSS.

4.4.2 The Principal Contractor(s) will be required to identify a local recovery service which will be used in the event of a contractor vehicle breakdown.

4.5 COORDINATION WITH OTHER DEVELOPMENTS

4.5.1 The Applicant will ensure liaison takes place by the Principal Contractor(s) with Essex County Council and NH to ensure that where construction works will take place at the same time as other developments, including NF OWF and EACN, cumulative impacts on the SRN and Local Road Network (LRN) will be minimised wherever practical.

5 COMPLAINTS AND ENQUIRY PROCEDURES

5.1 ENQUIRIES AND COMPLAINTS

5.1.1 It is important that members of the public or interested parties are able to make enquiries or valid complaints about the transport elements of the construction works. Such complaints and enquiries can provide a valuable feedback mechanism which helps reduce potential impacts on sensitive features and also allows the construction techniques to be refined and improved.

5.1.2 It is anticipated that the complaints and enquiries procedure can be made via the CLO, as set out in Volume 9, Document 21: Code of Construction Practice (CoCP), Section 2.5,

5.1.3 The CLO will manage and respond to any questions and complaints and keep a robust record of all correspondence. A system for dealing with enquiries or complaints will be established by the Applicant and the Principal Contractor.

5.1.4 A Communications and Public Relations Procedure will be developed and implemented throughout construction to ensure that local residents, parish and town councils and businesses are kept informed of work activities. This will also include providing the local community information about types and timings of works, transport routes, likely hours of traffic movements and traffic management measures that will be carried out. Paying particular attention to potential work outside of standard hours and where activities occur in close proximity to residential properties.

5.1.5 All complaints and enquiries will be logged promptly by the Applicant and kept on site for review by Essex County Council upon request.

5.2 CHECKING AND CORRECTIVE ACTION

5.2.1 As outlined above, it is intended for the Final CTMP(s) to be a 'living document' which is updated periodically as and when required.

5.2.2 Each contractor will be responsible for establishing a programme of monitoring, the results of which will be fed back for inclusion within the CTMP if necessary.

5.2.3 Any checking or corrective action required will also be monitored. This methodology will ensure that the construction activities are being undertaken in accordance with the CTMP(s).

5.2.4 The CTMP will include a section on enforcement the contractor would undertake in the event of a breach or non-conformance/compliance. This process of monitoring and enforcement would likely include similar elements as outlined below:

- Completion of a Non-Conformance Report – to record any traffic related incident and work that has not been carried out in accordance with the CTMP(s) or Method Statement;
- Completion of a Corrective Action Report – to record any identified deficiency as a result of monitoring, inspection, surveillance and valid complaint; and
- Action – any necessary actions identified as a result of the above would be allocated to a responsible person, along with a timescale for the action to be undertaken.

5.2.5 Records would be retained by the Applicant throughout the construction process. The records will be maintained either in hard copy or electronically in such a manner that they are readily identifiable, retrievable and protected against damage, deterioration or loss.

6 REFERENCES

DMRB, CD 123 Geometric design of at-grade priority and signal-controlled junctions (National Highways, 2021)

DMRB, CD 109 Highway Link Design (National Highways, 2020)

Manual for Streets, (Department for Transport, 2007)

Traffic Signs Manual, Chapter 8, Traffic Safety Measures and Signs for Road Works and Temporary Situations (Department for Transport, 2009).

FIVE ESTUARIES
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