One Earth Solar Farm

Volume 7.0: Other Documents [EN010159]

Outline Construction Traffic Management Plan

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Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Reg 5 (2) (q)

Contents

Glossary

Term	Definition
Annual Average Daily Traffic (AADT)	A measurement of the average number of vehicles on a road over a year.
Abnormal Indivisible Load (AIL)	Abnormal loads that cannot be divided into two or more loads to be transported by road and are in excess of the limits set out in the Road Vehicles (Construction and Use) Regulations 1986.
Construction Traffic Management Plan (CTMP)	The approved document that sets out measures on how construction traffic, including site personnel movements, will be safely controlled during a construction period.
Department for Transport (DfT)	The UK Government department responsible for transport matters.
Design Manual for Roads and Bridges (DMRB)	A set of documents and design guidelines that contains information about current design standards relating to the design, assessment and operation of roads within the UK.
Environmental Impact Assessment Report (EIAR)	A report that details the potential environmental effects of a proposed development project.
Heavy Goods Vehicle (HGV)	A vehicle that is used to transport goods and materials and has a gross combination mass of more than 3,500 kg
Light Goods Vehicle (LGV)	A vehicle that is used to transport goods and materials and has a gross combination mass of less than 3,500 kg.
National Cycle Network (NCN):	A UK-wide network of signed paths and routes for walking, wheeling, cycling and exploring outdoors.
National Road Traffic Forecast (NRTF)	Forecasts produced by the DfT to predict further traffic growth.
Ordnance Survey (OS)	The national mapping agency for Great Britain. Excludes Northern Ireland.
Principal Contractor	The main construction contractor appointed by the Applicant to oversee and control the construction phase of any project, involving more than one contractor.

List of Abbreviations and Acronyms

Term	Definition
AADT	Annual Average Daily Traffic
AIL	Abnormal Indivisible Load
BoP	Balance of Plant
CCS	Considerate Constructors Scheme
CLOCS	Construction Logistics and Community Safety
CTMP	Construction Traffic Management Plan
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
EIAR	Environmental Impact Assessment Report
HGV	Heavy Goods Vehicle
LGV	Heavy Goods Vehicle
NCN	National Cycle Network
NRTF	National Road Traffic Forecast
OS	Ordnance Survey

1. Introduction

1.1 Report Purpose

1.1.1 Pell Frischmann has been instructed by One Earth Solar Farm Limited (hereafter referred to as the 'Applicant') to produce an Outline Construction Traffic Management Plan (oCTMP) to support the Development Consent Order (DCO) for a solar energy development (hereafter referred to as the 'Proposed Development') located on land centred around High Marnham, within the boundaries of both Nottinghamshire County Council and Lincolnshire County Council. The terminology used in this document is defined in the **Glossary of Terms and Abbreviations [EN010159/APP/7.17].**

1.1.2 The Proposed Development comprises the construction, operation and maintenance, and decommissioning of a solar photo-voltaic (PV) array electricity generating facility. The project includes solar PV arrays, Battery Energy Storage Systems (BESS), onsite substations and associated grid connection infrastructure which will allow for the generation and export of electricity to the proposed National Grid High Marnham Substation. The Applicant has secured a connection agreement with National Grid which will allow export and import of up to 740 megawatts (MW) of electricity to the National Grid High Marnham Substation. Further detail is provided in **ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5].**

1.1.3 The purpose of the oCTMP is to provide the framework through which the CTMP will be prepared, which in turn details how traffic measures for the management of construction traffic will be implemented as part of the Proposed Development. This document does not address operational or decommissioning traffic activities.

1.1.4 The CTMP will be prepared in accordance with this oCTMP, in accordance with a Requirement of the DCO and would be approved by the relevant local planning and highway authorities in advance of starting the construction works.

2. Access Strategy

2.1 General

2.1.1 The Proposed Development straddles the administrative boundaries of both Nottinghamshire County Council (NCC) and Lincolnshire County Council (LCC), with the majority of the Proposed Development falling within the boundaries of NCC.

2.1.2 For ease of reference and for the purposes of this oCTMP, the land within the Order limits can be subdivided into four sections; namely:

- The Western Development area (located to the west of the River Trent and accessed from the A57);
- The Southwestern Development area (located to the west of the River Trent and accessed from Polly Taylor's Road and Crabtree Lane);
- The Eastern Development area (located to the east of the River Trent and accessed directly from the A1133); and
- The Southeastern Development area (located to the east of the River Trent and located to the south of the disused Fledborough – Lincoln railway line).

2.1.3 To construct the Proposed Development, a variety of vehicles will be required. These will include, but not be limited to:

- Cars, Light Goods Vehicles (LGV) and Vans;
- Articulated and rigid Heavy Goods Vehicles (HGV) delivering plant, materials and electrical components;
- Rigid HGV delivering bulk materials such as aggregate, ready mix concrete, etc for use on the site;
- Specialist machinery, usually delivered using a low loader style articulated HGV, including loads that may include loads such as directional drilling equipment and excavation plant (for the cable grossing under the River Trent); and
- Abnormal Indivisible Loads (AIL) carrying special oversized loads such as electrical grid transformers.

2.2 Construction Traffic

2.2.1 Construction traffic will enter the Proposed Development via a set of specifically designed access junctions. The principal access points are located on the A57 and A1133 and serve the main development areas of the Proposed

Development. Minor access points are also provided on other roads to distinct sections of the site within the Order limits.

2.2.2 A plan illustrating the access points is provided in **Figure 2.1**.

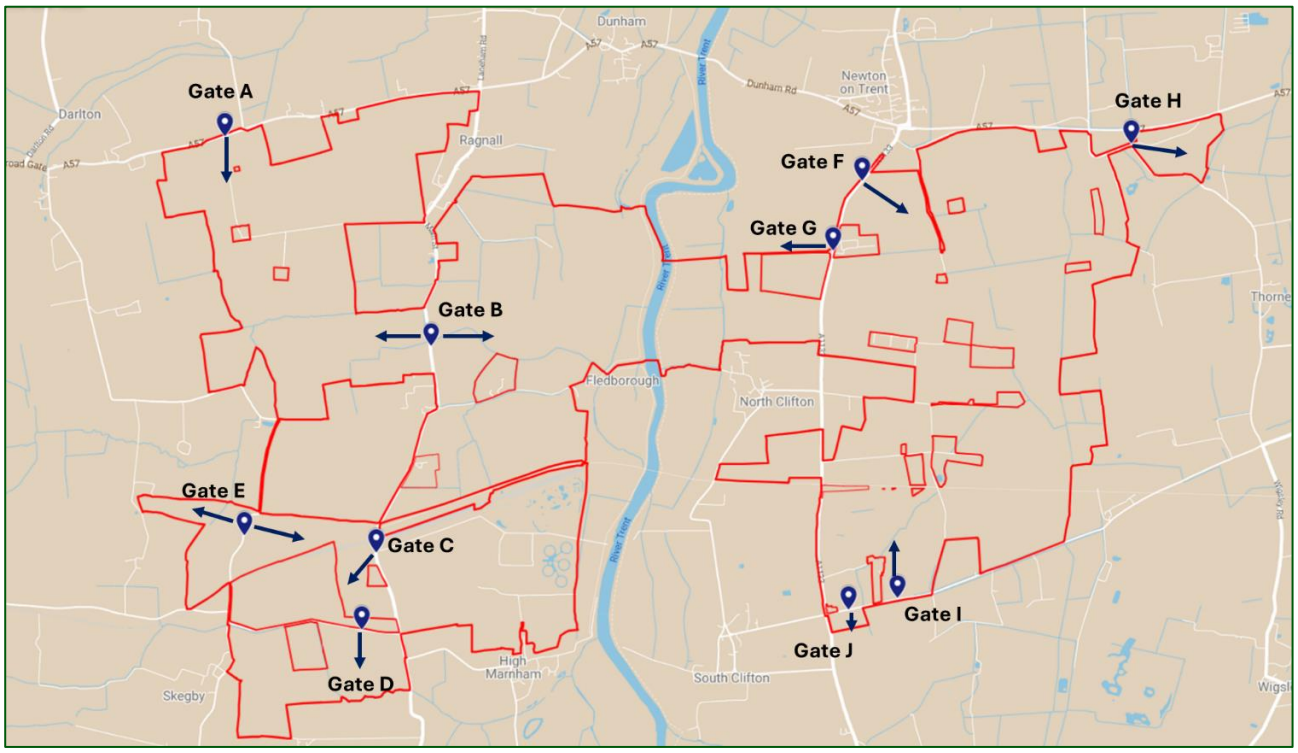

Figure 2.1 Site Access Location Plan

2.3 Abnormal Loads

2.3.1 A detailed AIL Route Survey of the access route has been undertaken and is provided in Appendix A of **ES Volume 3, Appendix 12.2: Transport Assessment [EN010159/APP/6.21]**. Mitigation measures to allow access for these loads between the trunk road network and the AIL access junctions have been identified. The detailed design of these works would be secured by DCO and would be subject to a technical approval process, reviewed and approved by the relevant road authorities.

2.4 Proposed Operational and Maintenance Access Strategy

2.4.1 During the operational phase of the Proposed Development, it is anticipated that the trip generation associated with the maintenance of the Proposed Development will be minimal and that occasional access by LGV or 4x4 vehicles would be required.

2.4.2 To protect future stakeholders, it is proposed that a Decommissioning Traffic Management Plan (DTMP) to be included within the **Decommissioning Environmental Management Plan (DEMP) [EN010159/APP/7.6]** is prepared

prior to decommissioning works commencing and that this requirement is secured via a DCO requirement.

3. Access Arrangements and Permits

3.1 Access Junctions

3.1.1 Access to the Proposed Development will be taken from the public road at 10 locations, as illustrated in **Figure 1**.

3.1.2 The access junctions will be permanent and will be used throughout the lifetime of the Proposed Development.

3.1.3 The junction bellmouths and initial track sections from the public road will feature a metalled road surface to reduce the opportunity for debris and mud to be deposited on the public road. Vegetation within the visibility splays will be trimmed to ensure sufficient sight lines for vehicles using the access junctions.

3.1.4 The access junctions will be signed to clearly indicate the point of access to the Proposed Development. The Site Manager will implement appropriate measures, to ensure that there will be no verge parking by staff working at the Proposed Development. These will include, but not limited to, the provision of Staff Travel Plan to reduce the need for private car access, the provision of designated parking areas within the construction compounds, a contractual agreement to only park in designated areas, staff training, signage and regular tool-box talks on working at the site.

3.2 Timing and Permitting

3.2.1 Construction working hours will be 7.00 - 19.00 hours Monday to Saturday. The need to undertake some limited works outside normal working hours or overnight cannot be discounted, and 24-hour working may be necessary in some locations. Such works may include, for example, some trenchless crossings if the technique in use and/or ground conditions dictate that continuous working is required, highways works (to minimise traffic disruption) or commissioning activities.

3.2.2 Wherever possible, HGV deliveries will avoid school opening and closing times during term time so not to disrupt journeys to and from school. Term times and hours for Newton on Trent CoE Primary, Dunham on Trent CoE Primary and North Clifton Primary Schools will be obtained and advised to the Principal Contractor, noting that construction traffic is not routed along any routes that front the three schools.

3.2.3 The timing of AIL convoy movements will be confirmed with the Police prior to deliveries commencing. The Police have previously advised for other projects that their preference is for loads to depart ports in the early evening to avoid peak traffic flows.

3.2.4 The Principal Contractor will liaise with both County Councils to prepare a diary for local community events such as village fetes, farmer's markets, etc. Where possible, HGV traffic flows would avoid moving on these days.

3.2.5 Consultation on the timings of movements will also be undertaken with other neighbouring developers to coordinate haulage operations that may use the access route during the construction period in order to minimise the cumulative impact on communities and road users.

3.2.6 The implementation of the access junction works and any associated mitigation works on the public road network required to allow access for the AIL and HGV deliveries will be subject to a technical approval process.

3.2.7 Prior to any construction works being undertaken within the limits of road adoption, the detailed design of these works must be submitted to the appropriate highway authority for approval. These submissions will include:

- A programme for the works, details of the construction method and traffic management requirements;
- A detailed design pack of drawings and specifications detailing the works and any service / utility works that may need to be accommodated;
- The necessary health and safety information required under the Construction, (Design & Management) Regulations, or their equivalent at the point of submission;
- Details of the proposed contractor, including their insurance provisions;
- If required by the local road authorities, a Road Safety Audit (RSA) to a combined Stage 1 and Stage 2 standard;
- Details of any necessary road signage and road markings; and
- Details of any proposed remediation proposals should the works not be permanent.

3.2.8 The Applicant will reimburse the highway authorities for the technical approval process at the time the applications are made, in line with costs for similar Section 278 or Section 184 applications made under the Highways Act.

3.2.9 The finalised CTMP will detail the exact process for these technical approvals.

3.2.10 The BE16 abnormal load permits and movement orders will be submitted using National Highways ESDAL (Electronic Service Delivery for Abnormal Loads) system. Permits and orders relating to these will be obtained by the haulier undertaking the transport of AIL components.

3.3 Road Closures

3.3.1 No public roads will require to be closed solely as a result of the activities associated with the construction of the Proposed Development.

3.3.2 Lane closures will be required to construct the access junctions in a safe and efficient manner. One lane would be coned off and controlled by traffic signals when the junction is being constructed.

3.3.3 These works will be temporary in nature and short-lived. They would not exceed 50 metres (m) in length and would not result in full road closures, diversion or significant delays.

3.3.4 As soon as the junctions were complete, the traffic signals and lane restrictions would be removed.

4. Proposed Traffic Management Measures

4.1 General Measures

4.1.1 Wherever reasonably possible, local suppliers such as quarries and concrete works are proposed to help minimise traffic levels of the network. Upon selection of the Principal Contractor, wider area routing information will be made available and final numbers of traffic movements confirmed.

4.1.2 The following measures would be implemented through the CTMP during the construction phase:

- Contractual requirement in the Balance of Plant (BoP) contract that contractors will only use the agreed access route;
- Direction signage signposting traffic on the agreed access route;
- Identification numbers on HGV and vans to allow easy recognition. These to be of a unique design and to be installed on the sides and rear of all HGV accessing the Site, for journeys to and from the Site;
- Providing the public with details of how to report use of unapproved routes or driving issues of concern;
- Using GPS trackers to allow the monitoring of all frequent bulk material delivery HGV movements;
- Setting out Site staff disciplinary measures for those who ignore the agreed access route and enforcing these throughout the construction period;
- All Site vehicles will feature “white noise” reversing warning devices to reduce noise disruption when on Site;
- All materials delivery lorries (dry materials) will be sheeted to reduce dust and stop spillage on public roads;
- Specific training and disciplinary measures will be established to ensure the highest standards are maintained to prevent construction vehicles from carrying mud and debris onto the carriageway;
- Wheel cleaning facilities will be established at the Site entrances. A road sweeper would also be provided at Site to ensure that the public road near the Site access junctions is kept clean;
- A 30 miles per hour (mph) speed limit will apply to all HGV deliveries being made to Site on non-A class roads and Main Street; and

- Site induction for all staff instructing them on what route to Proposed Development they can use to enter and exit the Site and obtaining their acknowledgement on the approved access routes. The induction would include:
- A toolbox talk safety briefing;
- The need for appropriate care and speed control;
  - A briefing on driver speed reduction agreements (to slow Site traffic at sensitive locations through towns and villages on the route); and
  - Identification of the required access routes and access junction operation and the controls to ensure no departure from these routes.

4.2 Agreed Transport Routes

4.2.1 Construction traffic will be split between the west and east development areas, separated by the River Trent.

4.2.2 All construction access for the west development areas will be taken from the A57 to the west of Dunham. Traffic will access land parcels from a set of private access roads that bypass the village of Ragnall. Access to other sections of the western development area will be taken from new access junctions located on the public road network to the south of Ragnall.

4.2.3 Bulk materials for the western development areas will be sourced from local quarries and suppliers located to the south and would access the construction Site via the A1 corridor and A57.

4.2.4 The majority of the eastern development areas will be accessed from the A1133 at a new access junction located to the south of Newton on Trent. A further access on Moor Lane provides access to the development area to the south of the disused Fledborough – Lincoln railway line.

4.2.5 Bulk materials for the eastern areas will be sourced from local quarries and suppliers located to the south and would access the Site via the A1133 corridor.

4.2.6 The approved access routes are illustrated in **Figure 5** and **Figure 6** of **ES Volume 3, Appendix 12.2: Transport Assessment [EN010159/APP/6.21].**

4.2.7 Bulk material deliveries will not be permitted to cross the River Trent at Dunham Bridge.

4.2.8 Barred routes to HGV and LGV traffic will include:

- A6075 Darlton Road;

- Marnham Road (to the west of Crabtree Lane);
- Crabtree Lane (to the north of the Site access junctions);
- Woodcoates Road in Darlton;
- Main Street (between the A57 junction and they proposed Site access junction);
- Roadwood Lane (to the south and west of the Site access junction)
- Mill Lane (to the east of the A1133);
- Moor Lane (to the west of the A1133);
- Eagle Road and Spalford Road (to avoid traffic cutting through from the east);
- High Street (South Clifton), to the west of the A1133;
- A1133 to the north of the A57; and
- Drinsey Nook Lane.

4.3 Traffic Management Group

4.3.1 The traffic management proposals in this report will be provided to the Principal Contractor and they will be required to abide by these regulations as part of their commercial contracts with the Applicant. Failure to follow the traffic management measures proposed would be a contractual matter and could result in contractors being dismissed from the Site.

4.3.2 To assist with general traffic management proposals and measures during the construction period, it is proposed that a Traffic Management Group be formed to help advise of progress, issues and to feedback public comments. The suggested structure of this group would include, but would not be limited to the following:

- Local Road Manager(s) from Nottinghamshire County Council;
- Local Road Manager(s) from Lincolnshire County Council;
- Local ward elected members;
- A representative from each of the neighbouring Parish Councils;
- A representative from the Police;
- The Site Manager;
- The CTMP Co-ordinator; and
- A senior member from the Applicant's development team.

4.3.3 This group would help co-ordinate works and provide a robust conduit for information and issues that may arise. It is suggested that it would meet as a minimum, every two months during the construction period, although specific construction activities may warrant changes in frequency over that time.

4.3.4 Pages with information about the construction of the Proposed Development will be available on the project website. These will be updated throughout the construction period. If visitors to the Site are unable to find the answer to their question on the webpages, an email address will be provided on the project website to contact the Applicant. In addition, details will also be circulated via a newsletter advising about ongoing activities. A telephone number for the CTMP Co-ordinator would be published during operational hours to resolve any traffic management problems that occur, and these calls would be logged and reported to the Applicant on a weekly basis to monitor the situation.

4.3.5 All contractors will be monitored through regular spot-checks to ensure they follow the approved access route as detailed in **ES Volume 3, Appendix 12.2 Transport Assessment [EN010159/APP/6.21]**. Access routes identified will be clearly defined in all sub-contracts and signposted.

4.3.6 The Site access junctions will be kept clear at all times during construction and will be monitored by on-site staff to ensure vehicles do not attempt to use the area for parking.

4.3.7 Use of a visible vehicle identification system will be employed to ensure compliance with the agreed route and driver behaviour standards. This will allow the public to identify any rogue vehicles to the Site office for easy recognition and review. The visible identifier will be mandatory and required for trips to and from the construction Site.

4.3.8 The Applicant will also create a protocol for working with local businesses to ensure the construction traffic does not interfere with deliveries or normal business traffic wherever practicable.

4.3.9 The following measures would be provided to assist in managing traffic across the study area road network.

4.4 Contractor Selection & CLOCS

4.4.1 The Principal Contractor working on the Site will be required to adhere to the Considerate Constructors Proposed Development (CCS) and Construction Logistics and Community Safety (CLOCS) best practice guidance. This will be a mandatory requirement and failure to adhere would be a contractual matter.

4.4.2 The Principal Contractor would be required to ensure that all subcontractors are compliant to CLOCS principals. Regular audits by the Applicant would be undertaken to monitor compliance and require changes, if necessary.

4.4.3 CLOCS is a national standard that requires all stakeholders in construction to take responsibility for health & safety beyond construction Site boundaries. It demands collaborative action to prevent collisions between vehicles servicing construction projects and vulnerable road users.

4.4.4 The CLOCS standards require the following form all key partners working on the Proposed Development:

The Applicant shall:

- Specify in tender and contract documents for all stakeholders to comply to the CLOCS Standard;
- Ensure the project team develops and implements a suitable and sufficient CLP (Construction Logistics Plan);
- Ensure effective monitoring of compliance to the CLOCS Standard;
- Obtain and monitor the contractor's action plan to address all identified issues and non-compliances; and
- Ensure that all collisions that result in harm (and near-miss incidents) that occur on journeys associated with the project are quickly investigated and actions taken to prevent recurrence.
- The Principal Contractor shall:
- Ensure the project's potential impact on the community has been properly risk-assessed;
- Develop and / or implement the agreed CLP and ensure it remains suitable and sufficient;
- Procure Site and fleet operations that comply to the requirements of the CLOCS Standard;
- Ensure Site arrangements enable the safest fleet operations including but not limited to, 'last mile' routing, level access / egress, stable loading / unloading areas, effective delivery management systems and competent Site access traffic marshals;
- Ensure effective and efficient Site access gate checks of HGVs and their drivers to ensure they always comply to the CLOCS Standard. Non-compliances must be immediately risk-assessed, appropriately mitigated and addressed through procurement processes;

- Ensure effective independent monitoring of the project's compliance with the CLOCS Standard is undertaken approximately every 6 months and appropriate action taken to address non-compliance; and
- Review information on all collisions that result in harm (and near-miss incidents) that occur on journeys associated with the project and ensure they are quickly investigated and actions taken to prevent recurrence.
- Vehicle operators (above 3.5 tonnes) working at the Site shall:
- Ensure all journeys meet the requirements described as Silver in the Fleet Operator Recognition Proposed Development (FORS) Standard (by addressing key management, driver, vehicle and operations issues);
- Provides acceptable evidence of compliance as defined / specified by each procurer through formal accreditation through FORS or equivalent; and
- Amongst other issues it:
  - Provides evidence of a quality fleet operation;
  - Helps with selection of the most effective safety equipment;
  - Ensures drivers receive appropriate supplementary training;
  - Requires the collection and reporting of collision data to inform 'lessons to be learned' – reporting to clients / principal contractors were procured to do so; and
  - Reduces risk to protect drivers and commercial reputation provides competitive advantage when bidding for work and opportunity to influence client procurement.

4.4.5 The use of CLOCS will help protect all road users form harm, both within and out with the Proposed Development.

4.5 Road Signage

4.5.1 A junction signage strategy will be prepared and agreed with both County Councils prior to works commencing. The strategy will include the following:

- Direction signage to ensure vehicles keep to the approved routes from the A57 and A1133;
- Site access signage to advise other road users of increased movements at the junctions;
- Chapter 8 (Traffic Signs Manual) "Slow Down" signage at locations near to the proposed access points; and
- AIL specific signage.

4.5.2 Regular maintenance will be undertaken at the sign locations to keep the plates clean and to ensure that verge vegetation does not obscure them.

4.5.3 In addition to the statutory road signage noted around the Site access junctions, further information signage would be provided to assist road users especially during AIL deliveries. Advance warning signs would be installed at the following locations on the road network:

- On the A57 and A1133 at locations agreed with both County Councils; and
- On the wider area AIL routes, including the A15.

4.5.4 Information signage could be installed to help assist drivers and an example is illustrated in **Figure 4.1**. Flip up panels (shown in grey) would be used to mask over days where convoys would not be operating. When no convoys are moving, the sign would be bagged over by the Traffic Management contractor.

4.5.5 This signage will assist in helping improve driver information and allow other road users to consider alternative routes or times for their journey (where such options exist).

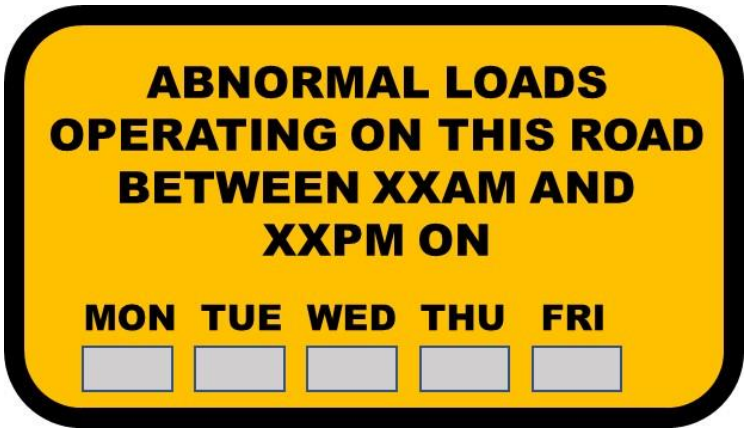

Figure 4.1: Example Information Sign

4.6 HGV Vehicle Requirements

4.6.1 To ensure the highest standards of safety for all road users and contractors, all HGVs frequently arriving at Site shall be required to comply with the following standards:

4.6.2 Prominent hazard warning signage, advising other road users not to get too close to the vehicle;

- A camera system for blind spots;
- Audible or visual front nearside driver alerts;

- Audible nearside left turn warning;
- Reversing external warning; and
- A Mobile Digital Recover capable of storing two weeks' worth of data, which may be viewed by the Principal Contractor on a 'just cause' basis.

4.7 Wear & Tear Agreement

4.7.1 A legal agreement with both local authorities is suggested to cover the cost of abnormal wear and tear on the study area road network. This would be agreed with each Council following the granting of planning approval.

4.7.2 The wear & tear agreement will address concerns about possible damage to the public road, verges and structures. It will be based upon condition surveys of the road to ensure that the condition of the road does not deteriorate solely as a result of the construction works.

4.7.3 Video footage of the pre-construction phase condition of the proposed access route would be recorded to provide a baseline of the state of the road prior to any construction work commencing. This High Definition (HD) baseline review would inform any change in the road condition during the construction stage of the Proposed Development as it notes the existing condition of the road surface and features and details current condition.

4.7.4 The condition survey would feature still images for the survey and would measures specific defects to monitor their progression. Locations of points would be accurately logged using a GPS tracker.

4.7.5 To agree the current condition of the road, the report would be agreed with the County Councils prior to construction works commencing.

4.7.6 Any immediate necessary repairs would be coordinated with the Council. Any damage caused by traffic associated with the Proposed Development, during the construction period that would be hazardous to public traffic, would be repaired immediately.

4.7.7 During construction activities, a general road wear and tear review would be undertaken with the County Councils every three months during construction. Interim reviews will be undertaken by the Principal Contractor on a weekly basis and the progress reports issued to the Applicant.

4.7.8 Any damage to road infrastructure caused directly by construction traffic would be made good, and street furniture that is removed on a temporary basis would be fully reinstated.

4.7.9 There would be a regular road edge review and any debris and mud would be removed from the public carriageway to keep the road clean and safe during the initial months of construction activity, until the construction junction and immediate access track works are complete.

4.7.10 Where defects occur on the road network, the Principal Contactor will ensure that they maintain a stockpile of road repair material to undertake repair works quickly and efficiently, when authorised by the Council to undertake interventions.

4.7.11 Upon completion of construction activities, a follow-on condition review will be undertaken and a defects list prepared. Works required to reinstate the road back to its original condition would be undertaken at the Applicant's expense following a review by the County Councils.

4.7.12 There are cases where defects will need to be undertaken quickly and the contractor will have arrangements in place to respond to serious and significant defects within two hours during normal working hours and within four hours outside normal working hours.

4.8 Turning Facilities & Banksmen

4.8.1 For safety reasons both onsite and for other road users, the Site has been designed so all vehicles can enter and exit the Site in a forward gear. No vehicle shall reverse onto unmanaged public roads and shall enter / exit the Site using forward gear only.

4.8.2 A banksman will be provided at the Site accesses to help guide traffic within the Site and to ensure health and safety access for the Site. The banksman will be in radio contact with the wider Site compound to advise of movements to and from the Site.

4.8.3 Upon completion of construction works, a gate will be provided on the access junctions. The gate will be set back from the public road to ensure that future maintenance HGV vehicles can stop at the gate without blocking the public road.

4.9 Onsite Parking

4.9.1 Once operational, parking will only be permitted in designated areas and all operatives will be required to reverse park at all times. An appropriate number of standard parking spaces and one disabled parking space will be provided adjacent to the control building. The Substations will have a small number of parking spaces adjacent to its control building. The parking provisions for the substations has been developed from operational experience of similar sized projects.

4.9.2 During the construction works, parking will be provided in designated areas and all operatives and visitors will be subject to Site rules. No parking will be permitted on the public road verges.

4.10 Staff Travel Plan

4.10.1 A Staff Travel Plan will be developed, to manage the arrival and departure profile of staff and to encourage sustainable modes of transport, especially car-sharing. A package of measures would include:

- Provision of public transport information to access where staff will be resident or collected from by buses provided under the Staff Travel Plan, so there is no need for non-local staff to bring cars to the wider area;
- Mini-bus service for transport of construction staff from Lincoln, Worksop and Newark;
- Promotion of a car sharing scheme; and
- Car parking management.

4.10.2 The Staff Travel Plan will be developed to reduce the number of single occupancy car journeys to and from the Proposed Development during construction and will minimise traffic on the local road network.

4.10.3 The Staff Travel Plan will be administered by the CTMP Co-ordinator and would be a contractual requirement as part of the Principal Contractor's contract with the Applicant.

4.10.4 The Staff Travel Plan will include targets to reduce car use during construction and will apply to Site visitors, where it is practical to do so.

4.11 Non-Motorised Road Users

Pedestrians and Cyclists

4.11.1 The Principal Contractor will ensure that speed limits are always adhered to by their drivers and associated subcontractors. Advisory speed limits will be installed on Roadwood Lane, Moor Lane, Pollys Taylor's Road and Crabtree Lane in advance of the Site access junctions to help reduce speeds and make drivers aware of cyclists, hikers and other vulnerable road users.

4.11.2 Signage will be installed on the Site exits that makes drivers aware of local speed limits and reminding drivers of the potential presence of pedestrians and cyclists in the area. This will also be emphasised in the weekly tool box talks.

Equestrians

4.11.3 The British Horse Society has made general recommendations on the interactions between HGV traffic and horses. Horses are normally nervous of large vehicles, particularly when they do not often meet them. Horses are flight animals and will run away in panic if really frightened. Riders will do all they can to prevent this but, should it happen, it could cause a serious accident for other road users, as well as for the horse and rider.

4.11.4 The main factors causing fear in horses in this situation are:

- Something approaching them, which is unfamiliar and intimidating;
- A large moving object, especially if it is noisy;
- Lack of space between the horse and the vehicle;
- The sound of air brakes; and
- Anxiety on the part of the rider.

4.11.5 It is suggested that the following actions will be included in the Site training for all HGV staff:

- On seeing riders approaching, drivers must slow down and stop, minimising the sound of air brakes, wherever possible;
- If the horse still shows signs of nervousness while approaching the vehicle, the engine should be shut down (if it is safe to do so);
- The vehicle should not move off until the riders are well clear of the back of the HGV;
- If drivers are wishing to overtake riders, please approach slowly or even stop in order to give riders time to find a gateway or lay by where they can take refuge and create sufficient space between the horse and the vehicle. Because of the position of their eyes, horses are very aware of things coming up behind them; and
- All drivers delivering to the Site must be patient. Riders will be doing their best to reassure their horses while often feeling a high degree of anxiety themselves.

4.11.6 Training for staff working at the Site will advise staff on how to react properly if encountering equestrians on the access route.

5. AIL Traffic Management Measures

5.1 AIL Movement Protocols

5.1.1 AIL movements must be escorted by the Police. Given the size of the proposed loads, it is expected that at least three private escorts and a minimum of two police escort vehicles are likely to be required (exact requirement will be confirmed with the police). The likely deployment of escorts will be as follows:

- The first police escort vehicle will be the advance escort and will be located sufficiently ahead of the convoy, to advise the convoy in good time of traffic stoppages, constraints and oncoming hazards;
- The second police escort and first civilian escort will provide support to the first escort at junction closures and would be located at the front of the lead vehicle; and
- The second civilian escort will be located behind the last vehicle to protect the rear of the convoy and ensure that following vehicles do not attempt dangerous overtaking manoeuvres. A third escort will be located at this location to provide support at the rear if the convoy and to prevent dangerous overtaking.

5.1.2 Before the convoys depart the Port of Entry (PoE) (to be determined post the granting of the DCO) the Lead Driver should check weather and traffic conditions and ensure this information is included within the daily toolbox talks.

5.1.3 Within the route, there are locations where general traffic flows will need to be stopped to allow the safe manoeuvre of the loads. In these circumstances the advance escorts will ensure that the traffic is stopped before the convoys enters the affected section. The advance escorts will confirm through radio contact that the area is clear and safe for transit. Should general traffic fail to observe the request to stop, the advance escort will advise the convoy to immediately halt and will then proceed to remove the rogue traffic. The convoy must not start without approval from the advance escort.

5.1.4 In areas where the load is likely to, or is close to straddling the centre line, the advance escort should be positioned to give advance warning to the convoy such that evasive action can be taken. In constrained areas and other locations where verges are potentially soft the drivers must exercise care to ensure the trailer wheels do not leave the road surface as this may result in adverse load stability conditions.

5.1.5 Urban areas along the route pose different challenges for the abnormal loads. Whilst the vehicle speeds will be less than those in the rural sections of the route, there are more potential conflicts with other road users to be aware of. These include:

- Pedestrians and cyclists;
- Local vehicular traffic;
- Parked vehicles;
- Side junctions; and
- Street furniture.

5.1.6 Within urban areas, the convoy escorts will need to be aware of all road and footway users at turn sections within the route. At these locations there is potential for load over-sail and reference to the swept path assessment drawings is considered essential to identify these areas. It is important to note that only the Police have the power to request that vehicles and pedestrians move.

5.1.7 Within urban areas there is a higher chance of parked vehicles along the route and a possibility that parked cars will restrict available road width. Whilst these areas will not impede the loads they do create a further zone where the load drivers and escorts will need to take care of conflicts that include restricted road widths, car doors opening and pedestrians crossing the road between parked vehicles.

5.1.8 Information relating to AIL movements will be provided directly to residents living in the immediate vicinity of the access route. Information on the movement of the abnormal load convoys would also be provided to local media outlets by the Principal Contractor (or their appointed AIL delivery contractors) to help assist the public. Information would be provided to local newspapers and radio stations, which will include:

- Newark Advertiser;
- Lincolnshire Echo;
- Worksop Guardian;
- Nottingham Post;
- Radio Newark; and
- BBC Radio Nottingham.

5.1.9 The project website will also be used to help advise of movements. Information would relate to expected vehicle movements on the route. It is hoped that this level of information will make residents aware of convoy movements and help reduce any conflicts.

5.2 AIL Convoy Health & Safety Measures

5.2.1 All staff working on the project will be inducted before entering the Site. This will be undertaken prior to the commencement of AIL movements.

5.2.2 A daily Tool Box Talk for all convoy staff to be held at the start of each working day and carried out by the appointed Transport Co-ordinator or Appointed Lead Driver. A detailed record of the talk should be kept and filed once the convoy has arrived at the Site.

5.2.3 The Tool Box Talks will cover a minimum of the following matters:

- The current version of the CTMP to be carried by all convoy vehicles;
- Identification of any updates since the previous version of the CTMP;
- Requirement to have a CB radio (fixed or portable), with fully charged batteries;
- Anticipated transport restrictions in each section of the route;
- Driver instructions on incident reporting;
- Driver instructions on trailer steering methodology, and availability of assistance;
- Instructions on areas requiring traffic stoppage, and methodology for convoy passing through these areas;
- The welfare arrangements for drivers;
- A summary of the predicted weather, traffic and road conditions; and
- Any questions on the contingency plans.

5.2.4 Each of the convoy vehicles must be suitably equipped with hazard warning devices to warn all other road users. All the tractor, trailer and escort vehicles operating on the project must have the following:

- Tractor units to have beacon bars on the roof and 3M reflective markings on both sides;
- All vehicle warning signage to be in English;
- Trailer units to have amber beacons on the rear with 3M reflective markings on both sides;
- All escort vehicles will have beacon bars on the roof, with 360 degree motion for all round visibility, and 3M reflective markings;
- Fire extinguisher and first aid kit; and
- Certified cargo lashing straps are to be used at all times. Certification must be carried and made available for inspection, kept within the cab.

5.2.5 All hazard warning equipment must be checked and cleaned at the start of each day. Additional cleaning of the warning equipment may be required throughout the day and must be undertaken when required.

5.2.6 All relevant personnel must have the appropriate Personal Protective Equipment (PPE). All PPE clothing must be 'CE' marked to show it meets current standards and should be appropriate for use in trunk road situations (i.e. must be full coats with reflective bands on the arms).

5.3 Emergency & Contingency Plan

5.3.1 To ensure access for emergency service vehicles, a coordination protocol will be established with the blue light emergency services. As the AIL convoys are escorted by the Police, the Police will be aware of potential access issues for ambulances and fire service vehicles and can take appropriate action on the route to pull to the side of the road or mount a verge to allow emergency vehicles past.

5.3.2 Convoys will not enter constrained areas if a blue light emergency had been raised and will wait until the emergency situation along the road had been attended to.

5.3.3 The civilian escort vehicles carry equipment to make running repairs to vehicles in the unlikely event of a breakdown. Further spares and equipment can also be based at the Site for faster responses in case of mechanical issues.

5.3.4 The haulier will establish contracts with local suppliers to attend to any punctures and tyre issues, to minimise any stoppage time on the route.

6. Onsite Access Management Proposals

6.1 General Measures

6.1.1 During the construction phase, construction traffic has the potential to interact with walkers, cyclists and equestrians using the existing footpath network. Various measures are proposed to assist with the safety of all path users.

6.1.2 During construction, the Proposed Development will be subject to a Public Rights of Way Management Plan. This will set out measures that will be implemented, so far as is practical, to ensure the works do not adversely impact public rights of ways. An **Outline Public Rights of Way Management Plan [EN010159/APP/7.14]**) has been submitted within the application

6.1.3 The Applicant will ensure that the Principal Contractor will ensure the following during the construction phase:

- That any footpath which has had its surface disturbed will be remediated upon completion of the relevant construction activity (i.e. at a crossing point);
- People will not be asked to avoid using a route or area when there is no safety related reason to do so;
- Warning signs will be removed promptly when the relevant hazard has ceased;
- Vehicular access gates may be locked for management reasons including the control of unauthorised vehicles for example but would only be locked where a side pedestrian side gate is provided. Where construction activities present a potential danger to pedestrians / other users a temporary diversion or re-routing would be advised in the interests of health & safety;
- All pedestrian gates to be provided on Site will meet BS 5709 and shall have a minimum width of 1.525 m to ensure equine access; and
- Electric wires or barbed wire will not be used on the Site.

6.1.4 During construction activities, the construction contractor operatives will act and behave in a responsible manner when asking people to avoid construction activity risks. They will:

- Display signs notifying path users of any upcoming diversion option, prior to any diversion taking place;
- Notifying path users that a diversion option is in place by displaying signage at the Site of the diversion itself;

- Take precautions, such as asking people to avoid using a particular route or area, or to avoid doing a particular activity where there are more serious or less obvious hazards to their safety;
- Keep any precautions to the minimum area and duration required to safeguard people's safety;
- Notify the public about any precautions at all access points;
- Not deliberately obstruct a footpath; and
- Not obstruct or hinder people from exercising access rights, either by physically obstructing access or by otherwise discouraging or intimidating them.

6.1.5 In addition, all construction operatives will be required to understand the requirements of onsite access rights at their induction. Failure to observe these may result in their removal from Site.

6.2 Areas of Proposed Exclusion

6.2.1 Construction operations such as track construction, cabling and fencing works will require exclusion areas being set out in the areas surrounding these works.

6.2.2 Should there be a need to provide a short-term closure of a footway, the Applicant will advise the relevant Access Officers and will request the closure. Such closures would be signposted entrances to the affected footpath(s).

6.3 Proposed Temporary Diversions

6.3.1 Diversions to footpaths will only be required during track construction and cabling activities.

6.3.2 During construction, it will be necessary to form the access track across existing footpath alignments. During these operations, the footpath will be subject to a minor diversion around the advancing head of the access track works. This will ensure access for footpath users in safety and diversion signs will be provided.

6.3.3 The diversion works will be 2m in width and will provide a 10m approximate diversion to allow the access track works to slightly pass the crossing point. Ducting will be provided to allow cabling works at a later stage that will not disrupt footpath access.

6.3.4 Upon completion of the track works, a footpath crossing point would be installed.

6.4 Path Signage

6.4.1 Signage to inform footpath users will be provided on stakes at strategic locations on the footpath network. This will include at the entry points to the Site, at any crossing points and at strategic points as a reminder.

6.4.2 All direction signs will be green and will have text height of at least 75mm to allow easy viewing.

6.4.3 In addition, the Principal Contractor will post a plan of the Site at the entrance points to the Site each week highlighting areas where works are ongoing to help advise path users.

6.5 Crossing Point Details

6.5.1 Where a footpath crosses the access tracks, a crossing point would be formed. This will include the following:

- "Access Track Crossing Ahead" signage for the footpath, on either side of the crossing, located at least 20m in advance of the crossing;
- "Crossing Point" and "Please look in both directions" signage for the footpath on either side of the crossing;
- A 2m wide chicane to ensure that cyclists slow down for the crossing to ensure the safety of all users;
- "Crossing Ahead" and "Slow Down, 10mph" signs on access tracks, located 100m and 50m in advance of the crossing on both directions; and
- "Give Priority to Footpath Users" on the Site access track.

6.5.2 Reflective pole markers will be provided in advance of the crossing point to aid identification for access track users.

6.5.3 A visibility splay in the access track verge will be created so that footpath users have good visibility in either direction at each crossing point. This will be maintained throughout the construction phase.

6.5.4 All signage would be kept and maintained during the operational phase of the Proposed Development.

7. CTMP Management

7.1 CTMP Management Measures

7.1.1 The key to the successful delivery of the CTMP will be the implementation, monitoring, review and enforcement of the plan. Without the implementation at the start of the project, the CTMP will not be effective and it will need to be carefully monitored and reviewed as the project progresses.

7.1.2 Key to this will be the requirement in the Principal Contractor contract for the CTMP to be included as a deliverable measure within the contract, given the same status as the physical elements of the solar farm Site itself.

7.1.3 The contractor will be obliged to follow the CTMP and would face penalties if this is not undertaken, which could result in disciplinary actions and ultimately being removed from the contract. This requirement will be placed upon all subcontractors working on Site and will be communicated via the various contracts and through induction processes and tool box talks.

7.1.4 A CTMP Co-ordinator will be appointed on Site and would be responsible for the implementation of the Proposed Development and the monitoring of its effectiveness. The Co-ordinator would also be the communication point for all external queries raised by members of the public, whilst also being the on-site lead for the plan.

7.1.5 The Co-ordinator will be Appointed by the Applicant and will be their transport representative.

7.1.6 Prior to works commencing the Co-ordinator would agree with the Council the CTMP measures to be deployed on Site and would hold an initial meeting of the Traffic Management Group to advise all relevant groups of the start of works on Site, expected traffic levels and what measures are to be deployed.

7.1.7 During the construction phase a log of public and staff comments relating to the operation of the CTMP would be kept and the Co-ordinator would be required to brief the Applicant on the issues raised and what measures are to be undertaken to address comments.

7.1.8 The Co-ordinator would chair the Transport Management Group and would provide updates and information for onward dissemination to the local community including local media queries and press releases for items such as AIL movements.

7.1.9 Quarterly reviews of the CTMP will be undertaken and where modifications are required, these would be discussed with the Council(s) and Police and agreed

before changes occur on the ground. Updates would then be advised to the Traffic Management Group.

7.1.10 Regular road condition reviews and sign maintenance will also be undertaken to ensure that the physical measures are safe and working efficiently.

7.1.11 The engagement of stakeholders and local representatives is considered key in ensuring that the increase in traffic levels associated with the construction phase can be carefully, efficiently and sensitively managed to the benefit all parties concerned.

7.2 Complaint Management

7.2.1 When complaints are received, the CTMP Co-ordinator will record the incident using a database logging system. A receipt of the complaint will be emailed to the person making the complaint. The receipt will include details of the formal response and how the complaint can be escalated, if required.

7.2.2 The Co-ordinator will then investigate the incident and will discuss what actions need to occur with the Applicant and Site Manager.

7.2.3 To ensure public faith in the reporting system, the Co-ordinator will agree a response timetable as part of the agreed CTMP. The following suggested response times are suggested:

- Receipt of original complaint: Within 2 working days of the complaint being received;
- Investigation time: Within 3 working days of receipt of the complaint (assuming no requirement to involve / consult with third parties);
- Corrective Action Decision: Within 1 working day of the completion of the investigation (assuming no requirement to involve third parties); and
- Response: To be issued to the complainant within 2 working days of the Corrective Action Decision.

7.2.4 It is of the utmost importance that the public know that their complaint will be investigated, actioned and that they are informed of what actions are being taken.

7.2.5 The time taken to respond, the number of complaints raised and a review of the corrective actions will be a standing agenda item of the Traffic Management Group to ensure that the public can be assured that their issues are being considered and dealt with.

7.3 Co-ordination with other Proposed Developments

7.3.1 The CTMP Co-ordinator will liaise with other significant developments in the area with a view to coordinating works and deliveries between other proposed developments in the area.

7.3.2 Where common issues can be agreed, these will be implemented once to avoid the need for repetition and delay to existing road users, where it is possible to do so.

8. Summary

8.1.1 To assist with the management of construction traffic on the access routes, an Outline Construction Traffic Management Plan (oCTMP) is proposed. This outline document forms the basis of the final CTMP that will be used during construction of the Proposed Development.

8.1.2 The oCTMP sets out the approved access route to the Order limits, how this will be managed and the steps that will be undertaken to ensure that the roads leading to Site are well managed to the benefit of all road users.

8.1.3 The CTMP will be secured by DCO requirement and seeks to be able to be partly self-enforcing through spot checks, contractual controls and information provision.

8.1.4 The Applicant will work with both County Councils to further develop the oCTMP measures into the final CTMP and ensure that the road network can function in a safe and efficient manner for all road users.

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