

Tillbridge Solar

PEI Report Volume II Appendix 15-2: Framework Construction Traffic Management Plan
(CTMP)

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tillbridgesolar.com

Prepared for:

Tillbridge Solar Limited

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1. Introduction

1.1 Context

- 1.1.1 AECOM has been appointed by Tillbridge Solar Ltd (hereafter referred to as 'the Applicant') to prepare a combined Framework Construction Traffic Management Plan (F-CTMP) and Travel Plan as part of the proposed Tillbridge Solar scheme (hereafter referred to as 'the Scheme'), located approximately five kilometres to the east of Gainsborough and approximately 13 kilometres to the north of Lincoln in Lincolnshire. This F-CTMP forms part of the Preliminary Environmental Information (PEI) Report and is included as **PEI Report Volume II Appendix 15-2**.
- 1.1.2 The Scheme Boundary is split across two administrative areas, namely Lincolnshire County Council (LCC) and Nottinghamshire County Council (NCC). The Scheme Boundary primarily consists of agricultural fields mainly under arable production, with some small parcels of pasture, interspersed with trees, hedgerows, small areas of woodland and farm access tracks.
- 1.1.3 The Scheme comprises the installation of solar photovoltaic (PV) panels and on-site energy storage facilities at the site within Lincolnshire (hereafter referred to as the 'Principal Site') and associated infrastructure for connection to the existing National Grid substation, which is located at the decommissioned Cottam Power Station in Nottinghamshire (hereafter referred to as the 'Cable Route Corridor'). The Scheme would allow for the generation, storage, export and import of electricity with an anticipated capacity greater than 50 megawatts (MW).
- 1.1.4 The electricity generated by the Scheme will be exported to the National Grid via the Cable Route Corridor, through a connection between the Principal Site Substations and the Cottam National Grid Substation. This connection will also facilitate the import of electricity to be stored within the Battery Energy Storage System (BESS).

1.2 Document Purpose and Scope

- 1.2.1 This F-CTMP accompanies **PEI Report Volume I Chapter 15: Transport and Access** and has been developed as the project has progressed. This F-CTMP will be updated to accompany the ES that will be submitted with the DCO submission to the Secretary of State for Energy Security and Net Zero. It is anticipated that the DCO, if granted, would include a requirement for the F-CTMP to be developed into a detailed CTMP that would be submitted for the approval of the relevant authorities before construction begins. The DCO would, therefore, include a requirement to secure compliance with the measures set out in the detailed CTMP.
- 1.2.2 It should be noted that as this is a framework document, it sets out what the Applicant would consider is broadly required in order to manage the impact of construction traffic, however certain details remain to be developed as the design of the Scheme progresses. The full detail of all measures may not be

available until after consent for the Scheme has been granted and so the F-CTMP sets out the likely measures that will be implemented in accordance with the Requirements of the DCO, if granted.

- 1.2.3 The Cable Route Corridor for the Scheme has the potential to be shared with three nearby solar Nationally Significant Infrastructure Projects (NSIPs), which are the West Burton Solar Farm, Cottam Solar Farm and Gate Burton Solar Energy Park projects. For the purposes of transport and access, it is considered that a shared Cable Route Corridor would reduce potential cumulative effects. There is potential that a joint CTMP document could be prepared between the Scheme and the other solar DCOs post-consent to manage and mitigate cumulative effects if necessary, once further details are known on project timeframes and the approach for the shared Cable Route Corridor. To provide a worst-case assessment, it is assumed however that the Cable Route Corridor will not be shared with these other solar NSIPs; this is a worst-case assessment because three different Cable Route Corridors will need to be constructed individually, creating three times the construction impact of simply constructing one shared Cable Route Corridor.
- 1.2.4 This document sets out the Applicant's proposals to manage construction traffic and staff vehicles within the vicinity of the Scheme along the local highway network during the construction period of the works, in order to limit any potential disruptions and implications on the wider transport network. It identifies the management of freight traffic i.e. Heavy Goods Vehicles (HGVs), as well as staff (construction worker) vehicles.
- 1.2.5 This F-CTMP has been informed by consultation with LCC and NCC as the Local Highway Authorities (LHAs). Further details of the discussions and meetings held, as well as meeting minutes etc. are provided as part of the Transport Assessment (TA) which is included in **PEI Report Volume II Appendix 15-1**.
- 1.2.6 Within each section of this F-CTMP, a summary is included on the purpose of the section and if it is expected to be updated in the detailed CTMP.

1.3 Objectives

- 1.3.1 The objectives of this F-CTMP are to set a framework for the measures that would be developed in the CTMP to:
- Minimise the volume of HGV and staff vehicles associated with the construction phase as far as reasonably practicable;
 - Maximise the safe and efficient movement of materials and staff required during the construction phase as far as reasonably practicable;
 - Minimise the effect on and ensure efficient management of the local Public Rights of Way (PRoW) within the Scheme Boundary during the construction phase;
 - Minimise the impacts both for the local community and visitors to the area using the road network as far as reasonably practicable; and

- Set out the measures (i.e. management plan) to be adhered to by those travelling to and from the Principal Site and within its vicinity to reduce the impact of the construction of the Scheme on the local highway network and local communities.

1.4 Report Structure

1.4.1 This F-CTMP is structured as follows:

- **Section 2** provides details of the existing conditions regarding the Principal Site location, surrounding area and the existing highway network;
- **Section 3** covers relevant planning policy and best practice for the construction phase of the Scheme;
- **Section 4** summarises the HGV and staff vehicle movements that are expected to be generated by the Scheme across the construction period, including during the peak phase;
- **Section 5** provides details of the proposed site accesses for the Principal Site and the Cable Route Corridor, including details of layouts, visibility splays and swept paths, as well as routing arrangements and internal site layout considerations including access tracks, compounds and parking;
- **Section 6** provides details of the proposed traffic management including temporary traffic signals, Public Rights of Way (PRoW) diversions and temporary speed limits. A summary of the speed surveys undertaken are also provided in this section;
- **Section 7** provides details of the proposed PRoW management plan;
- **Section 8** summarises the proposed measures to manage the highway network and pedestrian and cycle routes during the construction phase, as well as measures directed at HGVs and staff members, as well as for the management, monitoring and review of the F-CTMP;
- **Section 9** outlines compliance and enforcement of the F-CTMP.

2. Existing Conditions

2.1 Overview

- 2.1.1 This section of the report discusses the site location as well as the existing conditions in terms of the local highway network, pedestrian and cycle routes and public transport networks (bus and rail).

2.2 Site Location

- 2.2.1 As shown in **PEI Report Volume III Figure 15-2**, the Scheme lies to the east and south-east of Gainsborough in Lincolnshire. The Principal Site is located approximately five kilometres to the east of Gainsborough and approximately 13 kilometres to the north of Lincoln. The Principal Site covers an area of approximately 1,400ha and is located to the south of Harpswell Lane (A631), to the west of Middle Street (B1398), largely to the north of Kexby Road and to the east of Springthorpe.
- 2.2.2 The Scheme will connect the Principal Site to the national transmission system at the existing National Grid Substation, which is located at the decommissioned Cottam Power Station in Cottam (Nottinghamshire), near the Lincolnshire/ Nottinghamshire border.

2.3 Surrounding Area

Principal Site

- 2.3.1 The areas surrounding the Principal Site comprise several small rural villages, including Harpswell and Glentworth approximately 500m and 1km to the east of the Scheme Boundary respectively, and Springthorpe and Heapham approximately 500m and 1.5km to the west of the Scheme Boundary respectively.
- 2.3.2 The four Principal Site accesses are located approximately 13km to the north of Lincoln on the A631 and the B1398. The A631 (High Street/Harpswell Lane) and B1398 Middle Street run along the northern and eastern boundaries of the Principal Site respectively and the A15 (Ermine Street) also runs parallel to the eastern boundary of the Principal Site. Several minor roads cross the Principal Site, including Springthorpe Road/Hill Road, Common Lane, Kexby Road and Willingham Road.
- 2.3.3 There is one PRow Gltw/85/1 situated within the southern extent of the Principal Site, running in a north-south direction from Kexby Road to the west of Glentworth village.

Cable Route Corridor

- 2.3.4 The Cable Route Corridor is to run through the counties of Lincolnshire and Nottinghamshire, separated by the River Trent.
- 2.3.1 The Cable Route Corridor is expected to run in a south-westerly direction from the Principal Site to connect with the National Grid at Cottam Substation.

Starting from the Principal Site, the Cable Route Corridor will cross Cow Lane, Glentworth Road and Fillingham Lane which are all narrow rural single lane roads. From east to west it will cross the B1241 (Normandy Road), the A1500 (Stow Park Road) and the A156 (High Street), which are two-way single carriageway roads with a single lane in each direction, as well as the railway line running between Gainsborough and Lincoln.

- 2.3.2 The villages of Upton, Kexby and Willingham by Stow are located approximately 2km to the west of the Cable Route Corridor.
- 2.3.3 Within Nottinghamshire, the Cable Route Corridor is expected to cross agricultural land, the disused railway track to the northwest of Cottam Power Station, the River Trent and Town Road/Headstead Bank, Cottam Road/Outgang Lane and Torksey Ferry Road, before reaching the Point of Connection at Cottam Power Station.
- 2.3.4 A list of all PRow which could potentially be impacted by the proposed Cable Route Corridor (both in Lincolnshire and Nottinghamshire) is provided in Section 2.4 of this F-CTMP.

2.4 Site Accessibility

Highway Network

- 2.4.1 The strategic and local highway network is discussed below and shown in **PEI Report Volume III Figure 15-2**.
- 2.4.2 The A631 is a single-carriageway road which links with the A15 in the east and the A638 past Gainsborough in the west. To the west the A631 provides a connection to the A159 and the A156 which are both routes through Gainsborough to the north and south respectively.
- 2.4.3 The A15 is a key route located to the east of the Principal Site running in a north to south direction. To the north the A15 provides a connection to the M180 and the A46 to the south. The A15 provides a key route to/from Lincoln to the south of the Principal Site.
- 2.4.4 The A57 is a single carriageway road which links the A1(M) to the A46 to the west of Lincoln. The A57 is classified by the DfT as part of the Strategic Road Network (SRN) and provides access to the A15 from the south. The A57 also provides access to Laneham Road, which joins with Rampton Road and provides access to Cottam Road from the west.
- 2.4.5 The A631 is a key route that runs along the northern boundary of the Principal Site in an east-west direction. Three access points into the Principal Site are proposed along the A631. The road does not contain footways or street lighting provision within the vicinity of the Principal Site and is rural in character.
- 2.4.6 The B1398 Middle Street is a local route that runs along the eastern extent of the Principal Site. A small section of the Scheme Boundary fronts the B1398 between the villages of Harpswell and Glentworth and includes an existing farm track access road into the Principal Site. The B1398 connects with the

A631 to the north and the A1500 (Till Bridge Lane) to the south. The B1398 provides connections to local villages including Harpswell, Glentworth and Fillingham. The road does not contain footways or street lighting provision within the vicinity of the Principal Site and is rural in character.

- 2.4.7 The A1500 (Till Bridge Lane) is located to the south of the Principal Site and runs in an east-west direction through Sturton by Stow and connects to the A156 to the west and the A15 in the east. The A1500 also runs within the vicinity of the Cable Route Corridor; it is expected that the Cable Route Corridor will cross the A1500 Stow Park Road between Marton and Sturton by Stow.
- 2.4.8 The B1241 (Willingham Road) runs in a north-south direction along the western extent of the Principal Site through Normanby by Stow, Willingham by Stow, Kexby and Upton. It is known by several different names along its extent including Gainsborough Road, Stow Road, Normanby Road, Sturton Road and High Street. It connects to Kexby Lane and Fillingham Lane. Where the B1241 runs through a number of villages the speed limit is 30mph; outside these areas the national speed limit applies.
- 2.4.9 Common Lane is a narrow rural road which runs in an east-west direction towards Heapham to the west and Harpswell to the east. Common Lane is located within the Principal Site, providing access to the A631 in the east and the B1241 in the west.
- 2.4.10 Kexby Road is a narrow rural road which runs in an east-west direction towards Upton in the west and Glentworth in the east. Kexby Road is located within the Principal Site, providing access to the B1398 (Middle Street).
- 2.4.11 Willingham Road is a narrow rural road which runs in an east-west direction towards Willingham by Stow to the west and Fillingham to the east. Willingham Road is located within the Principal Site.
- 2.4.12 All of the above routes are single carriageway roads with a single lane in each direction. Speed limits on the routes vary from 30mph to 40mph, where they pass through residential areas, up to the national speed limit (60mph) outside towns/villages and in rural areas.
- 2.4.13 Within the Study Area there are a number of other local roads that run through, alongside or in close proximity to the Principal Site. These include:
- Springthorpe Road/Hill Road is a single carriageway road with one lane in each direction but no road markings. It runs north-south through Springthorpe in close proximity (500m) to the north-western border of the Principal Site and provides a link to the A631 in the north and the B1241 in the south; and
 - High Street/ Willingham Road runs from the B1398 Middle Street through Fillingham village. The road has a single lane in each direction but no road markings and narrows to a single-track road. The road runs east-west across the south of the site, providing access to the B1398 in the east and Willingham by Stow in the west.

- 2.4.14 The Cable Route Corridor is to run in a south-westerly direction from the Principal Site to connect with the National Grid at Cottam Substation. The Cable Route Corridor will cross Cow Lane, Glentworth Road and Fillingham Lane which are all narrow rural single lane roads within the vicinity of the Principal Site. From east to west the Cable Route Corridor will cross the B1241 (Normandy Road), the A1500 (Stow Park Road) and the A156 (High Street), which are single carriageway roads with a single lane in each direction, as well as the railway line running between Gainsborough and Lincoln.
- 2.4.15 Within Nottinghamshire, the Cable Route Corridor is expected to cross agricultural land, the disused railway track to the north of Cottam, the River Trent and Town Road/Headstead Bank, Cottam Road/Outgang Lane and Torksey Ferry Road, before reaching the Point of Connection at Cottam Power Station.
- 2.4.16 Cottam Road and Outgang Lane are located in Nottinghamshire to the north of the existing Cottam Power Station and run in an east-west direction providing access to Cottam Power Station and on to Cottam. The Cable Route Corridor is expected to cross Cottam Road/ Outgang Lane as the Cable Route Corridor is proposed to run north-south across the road to the west of Cottam Power Station into the adjoining fields.
- 2.4.17 Town Street/Headstead Bank to the northeast of Cottam runs in a north-south direction and is expected to be in close proximity to the Cable Route Corridor, as the Cable Route Corridor is proposed to run east-west across Headstead Bank. Similarly, the Cable Route Corridor crosses Cow Pasture Lane and the disused railway track to the north of Cottam. Both Headstead Bank and Cow Pasture Lane are narrow, minor, very low trafficked single-track roads with no pedestrian facilities/ street lighting, etc.
- 2.4.18 Rampton Road is a single carriageway road which connects to Cottam Road and Green Lane at a junction in the north and to Laneham Road to the south. Laneham Road connects to Rampton Road in the north and A57 in the south. Both of the roads are subject to the national speed limit (60mph) and do not feature footways or street lighting, which is in keeping with their rural character.
- 2.4.19 Within Lincolnshire, the Cable Route Corridor will cross the A156 High Road in an east-west direction to the south of Marton. The A156 High Street/Gainsborough Road is a single carriageway road connecting with the A57 to the west of Saxilby in the south and with the A631/ A159 in Gainsborough to the north. The road is subject to the national speed limit (60mph) and does not include pedestrian footways or street lighting provision for the majority of its length, which is in keeping with its rural character. In the vicinity of Marton, the A156 High Street is restricted to a 30mph speed limit, and some pedestrian footway and street lighting provision is made in the urban area.
- 2.4.20 Along the A1500 Stow Park Road the Cable Route Corridor will cross the road in a north-south direction to the east of Marton. In the vicinity of Marton to the west and Sturton by Stow to the east, the A1500 is subject to a 30mph speed

limit; in the more rural sections it is subject to the national speed limit in keeping with its rural character.

- 2.4.21 The Cable Route Corridor is expected to cross the B1241 rural single carriageway to the south of Normanby by Stow in an east-west direction. The road is subject to the national speed limit (60mph) along its rural stretches (outside villages) and does not include footways or street lighting on these sections. All of the above routes are single carriageway roads with a single lane in each direction. Speed limits on the routes vary from 30mph to 40mph, where they pass through residential areas, up to the national speed limit (60mph) in rural areas.
- 2.4.22 In order to provide access to the Cable Route Corridor, the Scheme Boundary is expected to run in an east-west direction along Willingham Road off the A156 Gainsborough Road between Gate Burton (to the north) and Marton (to the south). The road is a narrow rural single lane road subject to the national speed limit (60mph). The Scheme Boundary is then expected to run in a north-south direction alongside Marton Road, which is a narrow rural 60mph single lane road, reducing to 30mph and widening as it reaches Willingham by Stow village. The Scheme Boundary will run through Willingham by Stow, along High Street and Fillingham Lane, in an east-west direction before running north towards Glentworth Road and south towards South Lane. High Street is a 30mph single carriageway road with a single lane in each direction which then narrows to become Fillingham Lane, which is subject to the national speed limit of 60mph. This section of the Scheme Boundary will be used to provide access, rather than being part of the Cable Route Corridor itself.

Walking Facilities

- 2.4.23 Due to the location of the Principal Site in rural Lincolnshire, there is limited footway provision in the surrounding area. Footways are limited to parts of the A631 and the settlements that surround the Principal Site, as follows:
- Along the northern boundary of the Principal Site, a narrow footway is provided along the northern side of the A631 from Pilham Lane through Corringham, where the footway widens, until the junction with Springthorpe Lane (approximately 850m).
 - A footway is provided along the southern side of the A631 through Corringham, ending at the Beckett Arms bus stop, within the vicinity of the Caravan Park homes off the northern side of the A631, where a footway is provided as far as the sign for Harpswell, where provision changes to the southern side of the carriageway until the junction with Common Lane (approximately 500m).
 - To the west of the Principal Site Boundary, the junction between the A631 and Springthorpe Road provides access to Springthorpe where approximately 450m of footway fronts onto residential properties on the eastern side of the carriageway, providing access to the Church and New Inn bus stops in Springthorpe.
 - To the east of the Principal Site Boundary, the junction between the A631 and Common Lane provides access to Harpswell where approximately

150m of footway is provided on the eastern side of the carriageway fronting onto residential properties and providing access to St Chad's Church.

- To the east of the Principal Site, the junction between the B1398 Middle Street and Hanover Hill provides access to Glentworth where approximately 650m of footway is provided along the northern side of the carriageway until it becomes a narrow single lane track after the village. The footway widens when fronting residential properties through Glentworth.
- To the east of the Principal Site along the B1398 Middle Street, approximately 600m of narrow unkept footways varying between the eastern and western sides of the road exist between the junction with Hanover Hill providing access into Glentworth and residential buildings to the south. The footway widens on the eastern side of the carriageway in front of the residential properties. Approximately 400m of narrow footway is also provided on the eastern side of the carriageway located north of the junction with the B1398 and Ingham Lane.
- To the east of the Principal Site Boundary, the junction between the B1398 Middle Street and High Street provides access to Fillingham where approximately 1km of footway is provided along the northern side of the road until it becomes a narrow single lane track after the village.

2.4.24 PRow within the vicinity of the Scheme have been identified using the LCC and NCC interactive PRow maps, which provide details on the location, name and type of PRow.

2.4.25 There is one PRow within the Principal Site Boundary, as discussed below and displayed within **PEI Volume III Figure 15-3**.

- **PRow Gltw/85/1** – a bridleway which runs through the southern extent of the Principal Site, running in a north-south direction for approximately 500m from Kexby Road, west of Glentworth Grange before linking within PRow Fill/85/1 to the south.

2.4.26 It should be noted that this PRow is located within an area of the Principal Site designated as a potential area of ecological enhancement, therefore it is not expected that any works related to the construction of the Scheme will have an impact on this PRow.

2.4.27 As above, due to the rural location of the Cable Route Corridor, there is limited footway provision in the surrounding area. Footways are limited to the northern side of Cottam Road and the western side of Town Street both near and through the village of Cottam, as well as both sides of Torksey Ferry Road within the village of Rampton.

2.4.28 All PRow which could be potentially impacted by the proposed Cable Route Corridor (both in Lincolnshire and Nottinghamshire) are shown in **PEI Volume III Figure 15-3**. These include (listed in a north-south direction):

- **PRow Stow/70/1** – a bridleway which runs through the eastern extents of the Cable Route Corridor (within Lincolnshire), running in a north-

south direction for approximately 500m to the south of Marton Road and to the west of Normanby by Stow.

- **PRoW Mton/68/1** – a footpath which runs through the eastern extents of the Cable Route Corridor (within Lincolnshire), running in an east-west direction for approximately 800m between A156 High Street (running into the fields to the east of the carriageway) and A1500 Stow Park Road (to the south of the carriageway, within the vicinity of Marton).
- **PRoW Mton/824/1** – a byway which runs along the boundary of the eastern extents of the Cable Route Corridor (within Lincolnshire), running in an east-west direction for approximately 50m to the east of the River Trent (along Trent Port Road) and linking with PRoW Bram/66/4 in the south and PRoW Mton/66/3 in the north.
- **PRoW Mton/66/4** – a footpath which runs through the eastern extents of the Cable Route Corridor (within Lincolnshire), running in a north-south direction for approximately 550m to the east of the River Trent and linking with PRoW Bram/66/1 in the south and PRoW Mton/824/1 in the north.
- **PRoW Bram/66/1** – a footpath which runs through the eastern extent of the Cable Route Corridor (within Lincolnshire), running in a north-south direction for approximately 200m and in an east-west direction for approximately 400m to the east of the River Trent and linking with PRoW Mton/66/4 in the north.
- **PRoW Cottam FP1** – a footpath which runs within the vicinity of the western extent of the Cable Route Corridor (within Nottinghamshire), running in a north-south direction for approximately 900m along the western bank of the River Trent and linking with PRoW Cottam FP3 in the north and PRoW Treswell FP7 in the south.
- **PRoW Cottam FP3** – a footpath which runs within the vicinity of the western extent of the Cable Route Corridor (within Nottinghamshire), running in an east-west direction for approximately 1km between Headstead Bank and the River Trent and linking with PRoW Cottam FP1 in the east.
- **PRoW Cottam RB4** – a restricted byway which runs within the vicinity of the western extent of the Cable Route Corridor (within Nottinghamshire), running in a north-south direction for approximately 1.1km between Cottam Road and Broad Lane and linking with PRoW Cottam RB6 in the middle.
- **PRoW Cottam RB6** – a restricted byway which runs within the vicinity of the western extent of the Cable Route Corridor (within Nottinghamshire), running in an east-west direction for approximately 180m and linking with PRoW Cottam RB4 in the west.
- **PRoW South Leverton BOAT16** – a byway open to all traffic which runs within the vicinity of the western extent of the Cable Route Corridor (within Nottinghamshire), running in a north-south direction for approximately 1.1km along Cow Pasture Lane to the north west of Cottam Power Station.

- **PRoW Treswell FP4** – a footpath which runs within the vicinity of the southwestern extent of the Cable Route Corridor (within Nottinghamshire), running in a north-south direction for approximately 250m to the west of Cottam Power Station, linking with PRoW Rampton FP5 to the south of Rampton Thorns and the east with Treswell PF5.
- **PRoW Rampton FP5** – a footpath which runs within the vicinity of the southwestern extent of the Cable Route Corridor (within Nottinghamshire), running in a north-south direction for approximately 800m to the west of Cottam Power Station, through the fields to the north of Torksey Ferry Road and linking PRoW Treswell FP4 to the south of Rampton Thorns.
- **PRoW Treswell FP5** – a footpath which runs within the vicinity of the southwestern extent of the Cable Route Corridor (within Nottinghamshire), running in a north-south direction for approximately 600m, south of Cottam Road to the west of Cottam Power Station and linking with PRoW Rampton FP6 and Treswell FP4 in the south.
- **PRoW Rampton FP6** – a footpath which runs within the vicinity of the southwestern extent of the Cable Route Corridor (within Nottinghamshire), running in a north-south direction for approximately 500m, north of Torksey Ferry Road to the west of Cottam Power Station and linking with PRoW Treswell FP5 in the north and PRoW Rampton BOAT13 in the south.
- **PRoW Rampton BOAT13** – a byway open to all traffic which runs within the vicinity of the southern extent of the Cable Route Corridor (within Nottinghamshire), running in an east-west direction for approximately 2.6km along the southern border of Cottam Power Station along Torksey Ferry Road and linking with PRoW Rampton BW8 and FP7 in the east and PRoW Rampton BOAT12, FP20 and FP6 in the west.
- **PRoW Rampton FP20** – a footpath which runs within the vicinity of the southern extent of the Cable Route Corridor (within Nottinghamshire), running in a north-south direction for approximately 380m along Nightleys Road and linking with PRoW Rampton FP9 in the south and PRoW Rampton BOAT13 in the north along Torksey Ferry Road.
- **PRoW Rampton BOAT12** – a byway open to all traffic which runs within the vicinity of the southern extent of the Cable Route Corridor (within Nottinghamshire), running in a north-south direction for approximately 600m along Shortleys Road and linking with PRoW Rampton BOAT13 along Torksey Ferry Road in the north and PRoW Rampton FP9 in the south.

2.4.29 In addition, there are several PRoW which run close to the Scheme Boundary, but do not cross it. The ES Transport Chapter will provide a refined list of PRoW that are likely to be impacted by the Scheme once the final extent of the Cable Route Corridor has been confirmed.

2.4.30 As the final extent of the Cable Route Corridor is not known at this stage, an assessment of the construction phase impact on the PRoW within the Cable Route Corridor has not been undertaken. This assessment will be included as

part of the ES Transport Chapter once the final route extent has been confirmed.

Cycling Facilities

- 2.4.31 There are no on- or off-road dedicated/ marked cycling facilities within the immediate vicinity of the Principal Site and whilst relatively fast vehicle speeds and high traffic flows on the A631 and A15 may deter cyclists, the B1241 Willingham Road to the west of the Scheme, the B1398 Middle Street to the east of the Scheme and the smaller roads within the Scheme Boundary itself are likely to be attractive to leisure cycling.
- 2.4.32 The nearest National Cycle Network route (between Harby and Lincoln) is located approximately 25km to the south of the Principal Site. There is also a narrow footway/cycle path on the eastern side of the A15 running for approximately 5.1km between RAF Scampton and Lincoln, to the south of the Principal Site Boundary.
- 2.4.33 The Principal Site could potentially be accessible by cyclists from Corringham, Hemswell and Springthorpe as all are located within an approximate 3km-4km cycle distance (approximately 10 minutes' cycle) of one of the proposed accesses along the A631.
- 2.4.34 There are no on- or off-road dedicated/ marked cycling facilities within the immediate vicinity of the Cable Route Corridor. The eastern extent of the Cable Route Corridor connects to the Principal Site and therefore as previously mentioned above, the relatively fast vehicle speeds and high traffic flows on the A631 and A15 may deter cyclists within the vicinity of the Cable Route Corridor in Lincolnshire.
- 2.4.35 There are a number of minor roads within the western extent of the Cable Route Corridor in Nottinghamshire that are likely to be attractive to leisure cyclists, including Cottam Road, which is relatively lightly trafficked. Additionally, this area could potentially be accessed by cyclists from Coates, South Leverton, Rampton and Treswell, as all are within a 2.5km cycle distance.
- 2.4.36 Approximately 2.6km (approximately 9 minutes' cycle) to the west of Cottam Power Station (within the Cable Route Corridor), the National Byway (a leisure cycling route covering parts of England, Scotland and Wales) runs in a north-south direction through Gainsborough and Treswell. The route includes some off-carriageway facilities.

Equestrian Facilities

- 2.4.37 There is one formal equestrian facility (i.e. bridleway) within the Principal Site Boundary as mentioned earlier in Section 2.4. Some of the roads within and surrounding the Scheme Boundary are generally lightly trafficked and therefore it is considered that they could be used by equestrians on this basis.
- 2.4.38 There are several equestrian facilities in the local area, including Laughton Wood Equestrian Centre which is located approximately 11km (approximately 12 minutes' drive) from the Principal Site to the north of Gainsborough. There

are also two liveryes located to the south of the Principal Site in the villages of Ingleby and South Carlton approximately 16km and 25km from the Principal Site respectively.

- 2.4.39 There are several formal equestrian facilities in the western part of the Cable Route Corridor within Nottinghamshire, including Bridleways, Restricted Byways and Byways Open to All Traffic (BOAT). These are listed in Section 15.7 above. There are also a number of narrow single-track roads to the north of Cottam near to Headstead Bank, which appear to be very lightly trafficked and therefore may be appealing to equestrians.

Public Transport

- 2.4.40 A detailed summary of the local bus and rail facilities in the vicinity of the Scheme is provided within the TA (**PEI Volume II Appendix 15-1**), including the frequency of the bus and rail services during the AM and PM peak periods.
- 2.4.41 It should be noted that most bus routes that operate within the vicinity of the Scheme Boundary do not provide services at times that are suitable for construction staff to travel to the Principal Site prior to the start of work (07:00) or to return home at the end of the working day (19:00). It is therefore considered unlikely that the existing bus services in the vicinity of the Scheme will provide a viable option for construction staff to travel to and from the Scheme to suit the construction working hours of 07:00-19:00.
- 2.4.42 Gainsborough is located to the west of the Principal Site and has two railway stations, Gainsborough Central and Gainsborough Lea Road (located circa. 10km from the Principal Site). These stations could be used as pick-up/drop-off points for construction staff via a staff shuttle service, subject to demand.
- 2.4.43 Retford Station and Saxilby Station are located to the west and south of the Cable Route Corridor (circa. 10km from the Cable Route Corridor). These stations could be used as locations to pick-up/drop-off construction staff via a shuttle service.
- 2.4.44 As detailed in the TA (**PEI Volume II Appendix 15-1**), there are a limited number of rail services before 07:00 and after 19:00 and it is therefore considered unlikely that the existing rail services in the vicinity of the Scheme will provide a viable option for construction staff to travel to and from the Scheme during the construction working hours of 07:00-19:00.
- 2.4.45 In terms of potentially utilising the railway for deliveries during the construction phase, whilst the existing Cottam Power Station features a rail station, this station and railway line are no longer in operation.

3. Policy and Best Practice

3.1 National Policy

Overarching National Policy Statement for Energy (NPS EN-1) (2011)

3.1.1 The Overarching NPS for Energy (EN-1) was published in 2011 and provides the basis for decisions regarding nationally significant energy infrastructure. Section 5.13 outlines the planning policy for traffic and transport, including guidance on undertaking relevant parts of the EIA, with particular reference to sections 5.13.3 to 5.13.5 of the document which are outlined below:

- Paragraph 5.13.3 states if a project is likely to have significant transport implications, a Transport Assessment should be included with the Environmental Statement;
- Paragraph 5.13.4 states where appropriate, a Travel Plan should be produced to include demand management measures to mitigate transport impacts; and,
- Paragraph 5.13.5 states where additional transport infrastructure is proposed, discussions should be held with the relevant network providers (in terms of the possibility of co-funding by Government for any third-party benefits).

3.1.2 The draft NPS EN-1 (2023) is currently under review and an updated draft was published for consultation in April 2023, where the above stated sections are proposed to be relocated to Section 5.14 of the draft document, with some amendments to the text including:

- Paragraph 5.14.7 states that the assessment should consider any possible disruption to services and infrastructure (such as road, rail and airports); and
- Paragraph 5.14.21 states that the Secretary of State (SoS) should only consider refusing development on highways grounds if there would be an unacceptable impact on highway safety, residual cumulative impacts on the road network would be severe, or it does not show how consideration has been given to the provision of adequate active public or shared transport access and provision.

National Policy Statement for Renewable Energy Infrastructure (NPS EN-3) (2011)

3.1.3 The National Policy Statement for Renewable Energy Infrastructure (NPS EN-3) (2011) sets out the policies relating to electricity generation from renewable sources of energy, for consideration in conjunction with NPS EN-1. Although it is noted that the document does not explicitly refer to solar schemes, any reference to transport is considered with reference to NPS EN-1.

3.1.4 The draft NPS EN-3 (2023) is currently under review and an updated draft was published for consultation in April 2023, with the inclusion of solar photovoltaic generation impacts set out within Section 2.54 of the draft document, which are outlined below:

- Paragraph 3.10.111 states the importance of assessing various potential routes to the site for the delivery of materials and components during the construction period;
- Paragraph 3.10.112 outlines the suitability of access roads and bridges for vehicles transporting components and the need to identify potential modifications where necessary;
- Paragraph 3.10.128 states that consistent with EN-1, the SoS should be satisfied, taking into account the views of the relevant local highway authorities, that any abnormal loads can be safely transported whilst minimising inconvenience to other road users and that the environmental effects of this and other construction traffic, after mitigation, are acceptable; and
- Paragraph 3.10.148 and 3.10.119 state that once solar farms are in operation, traffic movements are expected to be generally very light, and it is therefore very unlikely that traffic or transport impacts from the operational phase of a solar farm would prevent it from being approved by the SoS.

National Policy Statement for Electricity Networks Infrastructure (NPS EN-5) (2011)

3.1.5 National Policy Statement for Electricity Networks Infrastructure (NPS EN-5) sets out the policies relating to electricity networks infrastructure. Any reference to transport is considered in conjunction with reference NPS EN-1.

3.1.6 The draft NPS EN-5 (2023) is currently under review and an updated draft was published for consultation in 2021. Section 2.9.19 refers to the design of access roads and making it an integral part of the site layout and design so as to fit in with the surroundings. Section 2.9.19 also states that developers should minimise any adverse effects on existing land use and rights of way.

National Planning Policy Framework (July, 2021)

3.1.7 The National Planning Policy Framework (NPPF) was originally published in March 2012 and most recently revised in July 2021, outlining the Government's planning policies and how they are expected to be applied. The most relevant paragraphs in the context of transport are set out below:

- Paragraph 104 outlines that “transport issues should be considered from the earliest of stages of plan-making and development proposals”, in order to ensure:
 - “The potential impacts of development on transport networks can be addressed;
 - Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example

- in relation to the scale, location or density of development that can be accommodated;
 - Opportunities to promote walking, cycling and public transport use are identified and pursued;
 - The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for mitigation and for net gains in environmental quality; and
 - Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.”
- Paragraph 110 outlines the key considerations when assessing sites to be allocated for development in plans or specific development applications, and these include:
 - *“Appropriate opportunities to promote sustainable transport modes can be (or have been) taken up, given the type of development and its location;*
 - *Safe and suitable access to the Order limits can be achieved for all users;*
 - *The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance; and*
 - *Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.”*
 - Paragraph 111 states that development *“should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network are severe”*;
 - Paragraph 112 states that applications for development should give priority first to pedestrian and cycle movements and then, as far as possible, to facilitating access to high quality public transport; and
 - Paragraph 113 states that all developments that “will generate significant amounts of movement should be required to provide a Travel Plan, and the application should be supported by a Transport Statement or Transport Assessment so that the likely impacts of the proposal can be assessed”.

National Planning Practice Guidance (2014)

3.1.8 Planning Practice Guidance: ‘Travel Plans, Transport Assessments and Transport Statements in Decision Taking’ (2014) provides advice on when transport assessments and transport statements are required, and what they should contain. The most relevant paragraphs are summarised below:

- Paragraph 002 states *“Travel Plans, Transport Assessments and Transport Statements are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all developments which generate significant amounts of movements.”*;

- Paragraphs 004 and 005 state *“Transport Assessments and Transport Statements primarily focus on evaluating the potential transport impacts of a development proposal” and “may propose mitigation measures where these are necessary to avoid unacceptable or “severe” impacts”;*
- Paragraph 006 states *“Travel Plans, Transport Assessments and Statements can positively contribute to encouraging sustainable travel; lessening traffic generation and its detrimental impacts; reducing carbon emissions and climate impacts; creating accessible, connected and inclusive communities; improving health outcomes and quality of life; improving road safety and reducing the need for new development to increase existing road capacity of provide new roads.”;*
- Paragraph 007 states: *“Travel Plans, Transport Assessments and Statements should be:*
 - *proportionate to the size and scope of the proposed development to which they relate and build on existing information wherever possible;*
 - *established at the earliest practicable possible stage of a development proposal;*
 - *be tailored to particular local circumstances (other locally-determined factors and information beyond those which are set out in this guidance may need to be considered in these studies provided there is robust evidence for doing so locally);*
 - *be brought forward through collaborative ongoing working between the local planning authority/transport authority, transport operators, rail network operators, Highways Agency where there may be implications for the strategic road network and other relevant bodies. Engaging communities and local businesses in Travel Plans, Transport Assessments and Statements can be beneficial in positively supporting higher levels of walking and cycling (which in turn can encourage greater social inclusion, community cohesion and healthier communities).”*
- Paragraphs 013 to 015 provide further details of when Transport Assessments are required, how the need and scope of a Transport Assessment should be established and what information should be included.

3.2 Local Planning Policy

Lincoln Transport Strategy 2020 to 2036 (2022)

- 3.2.1 The new Lincoln Transport Strategy 2020-2036 (adopted 2022) has been developed by LCC, City of Lincoln Council, North Kesteven District Council and West Lindsey District Council. It aims to provide a clear vision for the future of transport across the Lincoln area up to 2036. The key strategies include:
- Enhancing connectivity across the network for all modes;
 - Increasing the capacity of the network and supporting the reduction in traffic in the urban area; and

- Rebalance movement towards walking and cycling.

3.2.2 The strategy recognises the increased importance of freight, but does not include policies in this regard.

Central Lincolnshire Local Plan (April 2023)

3.3 Policy S45 (Strategic Infrastructure Requirements) states:

“Infrastructure

Planning permission will only be granted if it can be demonstrated that there is, or will be, sufficient infrastructure capacity to support and meet all the necessary requirements arising from the proposed development. Development proposals must consider all of the infrastructure implications of a scheme; not just those on the site or its immediate vicinity. Conditions or planning obligations, as part of a package or combination of infrastructure delivery measures, are likely to be required for many proposals to ensure that new development meets this principle.

Consideration must be given to the likely timing of infrastructure provision. As such, development may need to be phased. Conditions or a planning obligation may be used to secure this phasing arrangement.

3.4 Policy S47 (Accessibility and Transport) states: *“Development proposals which contribute towards an efficient and safe transport network that offers a range of transport choices for the movement of people and goods will be supported.*

1) *All developments should demonstrate, where appropriate, that they have had regard to the following criteria:*

a) Located where travel can be minimised and the use of sustainable transport modes maximised;

b) Minimise additional travel demand through the use of measures such as travel planning, safe and convenient public transport, car clubs, walking and cycling links and integration with existing infrastructure;

c) Making allowance for low and ultra-low emission vehicle refuelling infrastructure.”

3.5 Policy S48 (Walking and Cycling Infrastructure) states: *“Development proposals should facilitate active travel by incorporating measures suitable for the scheme from the design stage. Plans and evidence accompanying applications will demonstrate how the ability to travel by foot or cycle will be actively encouraged by the delivery of well designed, safe and convenient access for all both into and through the site. Priority should be given to the needs of pedestrians, cyclists, people with impaired mobility and users of public transport by providing a network of high quality pedestrian and cycle routes and green corridors, linking to existing routes and public rights of way where opportunities exist, that give easy access and permeability to adjacent areas.*

Proposals will:

- a) protect, maintain and improve existing infrastructure, including closing gaps or deficiencies in the network and connecting communities and facilities;*
- b) provide high quality attractive routes that are safe, direct, legible and pleasant and are integrated into the wider network;*
- c) ensure the provision of appropriate information, including signposting and way-finding to encourage the safe use of the network;*
- d) encourage the use of supporting facilities, especially along principle cycle routes;*
- e) make provision for secure cycle parking facilities in new developments and in areas with high visitor numbers across Central Lincolnshire; and*
- f) consider the needs of all users through inclusive design.”*

3.6 Policy S49 (Parking Provision) states:

“Parking Provision Non-Residential Development

All other types of development should incorporate a level of car parking that is suitable for the proposed development taking into account its location, its size and its proposed use, including the expected number of employees, customers or visitors.

Infrastructure relating to electric vehicle charging points should be provided in accordance with Policy NS18.”

Fourth Lincolnshire Local Transport Plan 203/14-2022/23 (2013)

3.6.1 The Fourth Lincolnshire Local Transport Plan (LTP4) 2013/14 – 2022/23 (2013) builds on the strategies and policies adopted by previous Local Plans. Section 5.17 to 5.23 relates to travel planning and sustainable travel within new developments whilst Section 14.33 relates to reducing the impact of traffic. The transport goals set out within this document include:

- *“Provide a reliable, resilient transport system which supports a thriving economy and growth whilst encouraging sustainable and healthy travel;*
- *Improve access to key services, particularly enabling employment and training opportunities; and*
- *Minimise the impacts of transport on people’s lives, maximise opportunities to improve the environment and help tackle carbon emissions.”*

3.6.2 The Fifth Lincolnshire Local Transport Plan (Consultation Draft, 2021) has been approved by Lincolnshire and is currently pending adoption. The short-term horizon is for the period 2022-2026 but the plan also covers the medium and long-term future between 2026-2034 and 2034-2050. Chapter 4 of the document discusses the proposed themes related to the integrated transport strategy which include:

- Theme 1: Supporting economic growth;

- Theme 2: Future ready, green transport;
- Theme 3: Promoting thriving environments;
- Theme 4: Supporting safety, security and a healthy lifestyle;
- Theme 5: Promoting high aspirations; and,
- Theme 6: Improve quality of life.

3.6.3 Policy Green 4 states “We will use the local and strategic development management processes to ensure that development is planned, delivered and managed to reduce the need to travel and support the delivery of sustainable transport modes. We will support the provision of improved walking, cycling and public transport services and facilities as part of new developments and actively encourage innovative solutions such as car clubs, mobility hubs, active travel plans and other sustainable solutions as opposed to single occupancy car use”.

Gainsborough Transport Strategy (May 2022-2036) (2022)

3.6.4 The Gainsborough Transport Strategy 2022 – 2036 has been developed in partnership with West Lindsey District Council and Lincolnshire County Council to provide a vision for the future of transport to 2036. The strategy was updated to reflect the need to adapt to ongoing challenges like climate change and recovering from the COVID-19 pandemic. The updated strategy aims to support and help transition towards a net zero future and improve access to opportunities and services by improving travel choice through development of an inclusive, sustainable, and future-ready transport system. The strategy aims to promote how communities travel within Gainsborough in the promotion of future of mobility, walking and cycling, public transport and decarbonising transport. The objectives of the Strategy related to transport include:

- Sustainable Urban Extension delivery and sustainable travel;
- Active travel, natural environmental and open space;
- Reduce urban traffic;
- Future mobility;
- Reduce the need to travel;
- Rural accessibility; and
- Long distance connections.

3.6.5 The document looks to develop a sustainable transport strategy which will:

- Influence travel behaviour;
- Prioritise active modes;
- Promote shared and public transport; and,
- Mitigate residual impacts of traffic

Nottinghamshire Local Transport Plan 2011-2026 (2011)

- 3.6.6 Nottinghamshire Local Transport Plan (LTP) 2011 – 2026 (2011) sets out Nottinghamshire's transport strategy and outlines a programme of measures to be delivered over the short, medium and long-term. The strategy covers all types of transport including public transport, walking, cycling, cars and freight.

Adopted Bassetlaw Core Strategy and Development Management Policies Local Plan (2021) and Emerging Bassetlaw Submission Local Plan (2022)

- 3.6.7 Policy DM13 (Sustainable Transport) of the adopted Bassetlaw Core Strategy and Development Management Policies Local Plan (2021) will be considered along with relevant policies from the emerging Bassetlaw Submission Local Plan (2022) including Policy ST54 (Transport Infrastructure) and Policy ST55 (Promoting Sustainable Transport and Active Travel). Suggested changes in the Bassetlaw Local Plan Schedule of Suggested Changes to the Local Plan Publication Version and Policies Maps (2022) have also been reviewed.
- 3.6.8 The following neighbourhood plans, which form part of the local planning policy have been reviewed in relation to transport and access:
- Corringham Neighbourhood Plan (Submission Version March 2021);
 - Sturton by Stow and Stow Neighbourhood Plan 2019-2036 (2022); and
 - Hemswell and Harpswell Neighbourhood Plan 2022-2036 (2022).
- 3.6.9 The main focus of these neighbourhood plans is to protect and enhance existing PRoWs and to support provision of new routes to promote walking and cycling use.

3.7 Industry Guidance

Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Road Traffic (1993)

- 3.7.1 The IEMA Guidelines for the Environmental Assessment of Road Traffic (1993) provide guidance on examining the environmental impacts of developments in terms of traffic and transportation. This guidance has been used to underpin the assessment methodology set out within Section 15.4 of **PEI Report Volume I Chapter 15: Transport and Access**.

3.8 Other Relevant Guidance

Construction Logistics and Community Safety (CLOCS) (2022)

- 3.8.1 CLOCS (2022) guidance draws upon evolving best practice, standards, policies and codes of practice, providing a standard which planning authorities, developers and contractors can implement and providing a

coherent set of guidelines which can be adhered to, with the primary goals of achieving:

- Zero collisions between construction vehicles and the community;
- Improved air quality and reduced emissions;
- Fewer vehicle journeys; and
- Reduced reputational risk.

4. Construction Movements

4.1 Introduction

4.1.1 This section provides a summary of the forecast HGV and staff vehicle movements estimated during the construction phase of the Scheme in terms of vehicles, estimated number of movements (peak and average) and routing. Further details are also provided in the TA (**PEI Report Volume II Appendix 15-1**). This section provides an overview of the forecast construction movements as background information.

4.2 Construction Programme

4.2.1 The main construction phase for the Scheme is currently predicted to commence in Q3 2025, with the construction peak in terms of activity and vehicle movements expected to take place in 2026. The approach taken offers a reasonable worst-case assessment, as it is based on a relatively short construction period (24 months) that would generate the highest number of peak hour and daily road trips on the local network.

4.3 Construction Vehicle Movements

4.3.1 There is expected to be an average of 500 construction staff on site each day over the construction period, with a daily peak of 1,250 construction staff in 2026.

4.3.2 All construction staff will travel to/ from the Principal Site between 06:00-07:00 and 19:00-20:00 for the 12-hour working day between 07:00-19:00. An internal shuttle bus service is anticipated to be utilised to transport construction staff from the Principal Site to the Cable Route Corridor working areas (and vice-versa) to reduce vehicular trips on the surrounding highway network. It should however be noted that it won't be possible to access the whole Cable Route Corridor internally due to barriers such as the River Trent.

4.3.3 For the Principal Site, in addition to the construction staff traffic, there will be an average of 65-70 HGVs per day (130-140 vehicle movements) over the construction period, with a daily peak of 120 HGVs (240 vehicle movements) in 2026.

4.3.4 The associated vehicle trips will be split across four access points for the Principal Site; three located along the A631 Harpswell Lane and one located on the B1398 Middle Street, as shown in **PEI Volume III Figure 15-6**.

4.3.5 The forecast trip distribution of construction staff vehicles has been derived using mid-year (2020) population estimates extracted from all Middle Layer Super Layout Areas (MSOAs) within or partially within a 30km radius (approximately 45 minutes' drive time) of the Principal Site, using Access 2 on the A631 as the centre point. The 30km construction staff travel distance is based on professional judgement, experience from other DCO Solar schemes and is also in line with **PEI Volume I Chapter 14: Socio-Economics and Land Use**. Further details of the trip distribution and assignment of construction staff is provided within the TA (**PEI Volume II Appendix 15-1**).

- 4.3.6 It is anticipated that at peak, 10-25 construction staff and between 10-12 HGVs per day (20-24 vehicle movements) will be required to construct the Cable Route Corridor over a six-month period. On average, it is anticipated that there will be three to five HGVs (six to ten vehicle movements) per day over the six-month construction period. The associated vehicle trips are expected to be split across multiple access points. In view of the minimal levels of vehicle trips to be generated and given that different access points would be utilised than those used to access the Principal Site, the Cable Route Corridor is not expected to have a material impact on the surrounding highway network. Nonetheless, these trips have been included as part of the assessment of the Scheme to provide a worst-case assessment.
- 4.3.7 The peak daily number of HGVs and construction staff (to provide a robust assessment) required for the Principal Site are summarised below:
- 120 HGV deliveries (240 movements per day); and,
 - 1,250 construction staff (persons) with the forecast number of staff vehicles identified below.
- 4.3.8 The construction staff associated with the Cable Route Corridor are assumed to first travel to one of the four Principal Site accesses and then be transported to the relevant section of the Cable Route Corridor via an internal shuttle bus service. The peak number of construction staff (1,250) therefore applies to the whole Scheme, not just construction of the Principal Site. It is assumed that a pick up location from one of the designated car parks within the Principal Site will be established to provide a meet-up point for Cable Route Corridor staff to limit the number of trips made by the internal shuttle service between the Principal Site and the Cable Route Corridor. It should however be noted that it won't be possible to access the whole Cable Route Corridor internally due to barriers such as the River Trent. Further details of the routing between the Principal Site and the Cable Route Corridor will be included within the ES Transport Chapter.
- 4.3.9 In terms of construction staff vehicles, the following has been included as part of the assessment within the TA (**PEI Volume II Appendix 15-1**):
- Based on information provided by the project team and as agreed with the respective LHAs, during the construction peak, it is anticipated that 600 construction staff (48% of persons at the construction peak) would be transferred to/ from the Principal Site by an external shuttle service (e.g. coach).
 - At this stage of the Scheme, it is expected that each of the external shuttle services will have a capacity for 50 construction staff, meaning a peak of 14 external shuttle services will be required to pick-up construction staff in the morning and drop-off construction staff in the evening (accounting for a typical occupancy of 80% to 90%) during the peak construction period.
 - To provide a robust assumption of vehicle movements for the purposes of this assessment, it is assumed that the external shuttle services will originate from the Principal Site in both the AM and PM development peak hours, equating to 28 vehicle movements in the AM and PM (14

outbound movements and 14 inbound movements, with a daily total of 56 vehicle movements associated with the shuttle service). The number of shuttle services required at each of the four Principal Site Accesses are identified below:

- Principal Site Access 1 = 4 shuttle services (eight vehicle movements in each of the AM and PM, with 16 daily vehicle movements)
 - Principal Site Access 2 = 3 buses (six vehicle movements in each of the AM and PM, with 12 daily vehicle movements)
 - Principal Site Access 3 = 3 buses (six vehicle movements in each of the AM and PM, with 12 daily vehicle movements)
 - Principal Site Access 4 = 4 buses (eight vehicle movements in each of the AM and PM, with 16 daily vehicle movements)
- It is assumed that during the construction peak, 650 construction staff (52% of persons at the peak of construction) would travel by private vehicle with an average vehicle occupancy of 1.3 staff per vehicle, resulting in 500 staff vehicles (1,000 daily movements). This approach was agreed with the LHAs during consultation on 19 January 2023 and is based on previous large scale Solar Farm/ Energy Park experience and professional judgement.
- 4.3.10 The above mode shares are considered to provide a worst-case assessment in terms of the forecast number of construction staff vehicles forecast based on previous experience of Solar Farm/ Energy Park projects and professional judgement.
- 4.3.11 In relation to the external shuttle service provision, if additional demand is identified by the monitoring carried out as part of the CTMP (which will be secured through a Requirement of the DCO), then additional shuttle services will be provided to further reduce the number of construction staff vehicles on the network.
- 4.3.12 Given the locations of the nearest rail and bus services/ stops to the Scheme and considering the public transport timetables in relation to the construction staff working hours, there will be limited opportunity for construction staff to travel to the Principal Site by rail or bus. Nevertheless, sustainable travel will be promoted for usage by construction staff travelling to/ from the Principal Site with further details set out within this document.
- 4.3.13 The forecast distribution of HGVs across the site accesses for the Principal Site is presented below in Table 4-1.
- 4.3.14 To provide the most robust assessment, the worst-case scenario has been assumed (i.e. all HGVs will therefore access the Principal Site from the east via the A15 (50% from the A15 north and 50% from the A15 south)). No HGVs are proposed to access the Principal Site from the west along the A631.

Table 4-1: Forecast HGV Trip Distribution (Construction Accesses) for the Principal Site

Site Access	Description	Construction Staff and HGV (%)
Principal Site Access 1 (A631)	Three site accesses serving primarily the northern section of the Principal Site	30%
Principal Site Access 2 (A631)		20%
Principal Site Access 3 (A631)		20%
Principal Site Access 4 (B1398 Middle Street)	One site access serving the southern section of the Principal Site	30%
Total	-	100%

4.3.15 Based on the trip generation and distribution outlined above, the forecast peak daily trip generation for each of the Principal Site Accesses during the construction period (in terms of vehicles) is set out in Table 4-2.

Table 4-2: Forecast Peak Daily Construction Vehicles for the Principal Site

Site Access	HGVs	Staff Vehicles	Shuttle Service**	Total Vehicles
Principal Site Access 1 (A631)	35	141	8	184
Principal Site Access 2 (A631)	25	104	6	135
Principal Site Access 3 (A631)	25	104	6	135
Principal Site Access 4 (B1398)	35	150	8	193
Total	120	500	28	648

**Difference in totals due to rounding. The values in the table represent total vehicles and not daily movements.*

***each shuttle service to depart from and arrive back to the Site twice per the morning and evening i.e. 14 shuttle services picking-up and dropping-off staff in the morning, and 14 shuttle services in the evening*

4.3.16 A daily profile of overall construction movements (arrivals and departures) for the Principal Site is presented in Table 4-3 which includes construction staff vehicles, shuttle services and HGVs based on the anticipated travel patterns across the day.

Table 4-3: Forecast Peak Daily and Hourly Construction Movements for the Principal Site

Hour	HGVs		Private Vehicles		Shuttle Service		Total Vehicles	
	In	Out	In	Out	In	Out	In	Out
06:00-07:00	0	0	500	0	14	14	514	14
07:00-08:30	0	0	0	0	0	0	0	0
08:30-09:30	15	15	0	0	0	0	15	15
09:30-10:30	15	15	0	0	0	0	15	15
10:30-11:30	15	15	0	0	0	0	15	15
11:30-12:30	15	15	0	0	0	0	15	15
12:30-13:30	15	15	0	0	0	0	15	15
13:30-14:30	15	15	0	0	0	0	15	15
14:30-15:30	15	15	0	0	0	0	15	15
15:30-16:30	15	15	0	0	0	0	15	15
16:30-19:00	0	0	0	0	0	0	0	0
19:00-20:00	0	0	0	500	14	14	14	514
Total	120	120	500	500	28	28	648	648

- 4.3.17 Further details of the assessment of the peak daily HGVs is provided within the TA (**PEI Report Volume II Appendix 15-1**).
- 4.3.18 An HGV routing plan is shown in the TA (**PEI Report Volume II Appendix 15-1**), identifying the key routes which will be used by HGVs to travel to/ from each of the Principal Site Accesses. It should be noted that for the Principal Site, all HGVs (excluding abnormal loads) will be expected to travel avoiding the local towns/ villages such as Sturton by Stow and Willingham by Stow. A separate routing plan for abnormal loads will be provided in support of the ES.
- 4.3.19 The forecast trip distribution and assignment of construction staff vehicles and HGVs are provided within the TA (**PEI Report Volume II Appendix 15-1**).
- 4.3.20 There is expected to be a daily peak of 10-25 construction staff and 10-12 HGVs (with an average of three to five HGVs per day across the construction period) associated with the Cable Route Corridor (over a six-month period). The associated HGV trips are expected to be split across multiple access points including those to the east of the River Trent (in Lincolnshire) and those to the west of the River Trent (in Nottinghamshire). At this stage of the Scheme, the specific localised Cable Route Corridor site accesses the HGVs are required to use are unknown. However, HGVs associated with the Cable Route Corridor will be expected to use the routes identified in **PEI Report Volume II Appendix 15-1**, along the A631, A15 and B1398 to/ from the Cable Route Corridor site accesses.

4.3.21 An internal shuttle service is expected to transport construction staff from the Principal Site directly to the Cable Route Corridor (and vice-versa). This will result in a minimal number of trips within the Study Area generated by the movement of construction staff between the Principal Site and the Cable Route Corridor. It should however be noted that it won't be possible to access the whole Cable Route Corridor internally due to barriers such as the River Trent. Also, it should be noted that construction staff would travel to/ from the Principal Site at the start and end of their 12-hour working day, i.e. before 07:00 and after 19:00.

4.4 Vehicle Types

4.4.1 It is expected that the majority of vehicles accessing the Scheme during the construction and operational phase will be classified under the 'normal' size category (i.e. transit vans and HGVs). Based on the experience of vehicles required for other similar Solar Farm/ Energy Park schemes, it is anticipated that the following vehicle types will serve the Scheme during the construction phase:

- Cars;
- Tractors;
- Small vans;
- 10m rigid vehicles;
- Box vans;
- 8-wheeler rigid lorries;
- Concrete mixers;
- Articulated lorries (16.5m); and
- Abnormal Indivisible Loads (AILs) / Abnormal Loads (details of the vehicles required to transport AILs will be set out within this F-CTMP to be submitted within the ES once these have been confirmed).

4.4.2 Swept path analysis (vehicle tracking) will be carried out at ES stage for a maximum legal articulated vehicle (16.5m in length) for the proposed access points across the Scheme (this includes both the Principal Site and Cable Route Corridor).

4.5 Abnormal Indivisible Loads

4.5.1 AILs are expected to be required to transport the transformers to the Principal Site for the on-site Substations. The number required will be confirmed within the ES Transport Chapter as details of these are not known at this stage. Currently it is assumed that the vehicles required for the Scheme could include the following (based on experience on other projects of similar type and scale):

- A circa 65.8m length vehicle to deliver the transformers to the Principal Site arrival only, as the vehicle would be disassembled prior to egress); and

- Several 24.6m length vehicles to transport cable drums to/ from the Cable Route Corridor via multiple access points (arrivals and departures).
- 4.5.2 A specialised haulage service will be employed to allow these components to be transported with the necessary escort, permits and traffic management, with the applicant consulting the relevant highways authorities to ensure the correct permits are obtained. This is a standard measure to help accommodate abnormal loads and will therefore be included within the DCO submission, secured by this F-CTMP. The police will also be given advanced notification under the Road Vehicle Authorisation of Special Types Order 2003.
- 4.5.3 Once confirmed, further details of the AILs required will be set out within this F-CTMP to be submitted as part of the ES.

5. Site Access, Layout and Routing

5.1 Introduction

- 5.1.1 During the construction phase, the Scheme will be served by four access points into the Principal Site, three access points will be from the A631 Harpswell Lane and one from B1398 Middle Street.
- 5.1.2 It is currently expected that the Cable Route Corridor will be served by six additional access points as well as Principal Site Access 2 and the existing T-Junction access into Cottam Power Station on Cottam Road/Outgang Lane), namely:
- Cottam Road (access near Overcoat Lane);
 - A156 High Street;
 - Willingham Road;
 - Stow Road (north of Normanby-by-Stow);
 - Fillingham Lane; and
 - Cow Lane.
- 5.1.3 The proposed accesses for the Principal Site will be utilised during both the construction and operational phases. The accesses to the Cable Route Corridor will also be retained during the operational phase (secured with gates) in order to facilitate occasions where maintenance and repairs are required.

5.2 Site Access Arrangements

The proposed accesses for the Principal Site are as follows:

- Principal Site Access 1 - A631 Harpswell Lane/ School Lane T-Junction;
 - Principal Site Access 2 - A631 Harpswell Lane/ Unnamed road leading to Harpswell Low Farm (T-Junction);
 - Principal Site Access 3 - A631 Harpswell Lane/ Unnamed road leading to Harpswell Grange (T-Junction); and
 - Principal Site Access 4 - B1398 Middle Street / Unnamed road T-Junction (located between Coachroad Hill and Harpswell).
- 5.2.1 Principal Site Accesses 1 to 3 will primarily serve the northern section of the Principal Site utilising the existing internal tracks. The B1398 Middle Street site access will primarily serve the southern section of the Principal Site.
- 5.2.2 The Principal Site Accesses offer the following benefits:
- Direct access from the A631 and B1398 Middle Street utilising existing T-Junctions;

- Allow existing tracks/ routes within the Principal Site to be utilised which minimise the need to construct additional access tracks or for large amounts of vegetation removal to be required;
 - The accesses will be located on parts of the highway network which do not pose any problems in terms of highway safety;
 - The site accesses will be located on sections of the carriageway where the required visibility splays will be provided in both directions (the visibility splays will be included as part of the ES Transport Chapter); and
 - The site accesses will be used within the HGV routing strategy, to avoid narrow rural roads and to utilise the close proximity (circa five to ten minutes' drive) to/ from the A15.
- 5.2.3 During the operational phase, it is assumed at this stage that all four Principal Site Accesses used during the construction phase will remain in use.
- 5.2.4 Based on the information currently available for the Cable Route Corridor, the preliminary construction accesses proposed for the Cable Route Corridor are as follows:
- Cable Route Corridor Site Access 1 (existing access into Cottam Power Station)
 - Cable Route Corridor Site Access 2 (new access on Cottam Road, near Overcoat Lane);
 - Cable Route Corridor Site Access 3 (new access on A156 High Street);
 - Cable Route Corridor Site Access 4 (new access on Willingham Road);
 - Cable Route Corridor Site Access 5 (new access on via Stow Road, north of Normanby by Stow);
 - Cable Route Corridor Site Access 6 (new access on via Fillingham Lane);
 - Cable Route Corridor Site Access 7 (new access on via Cow Lane); and
 - Cable Route Corridor Site Access 8 (as Principal Site Access 2).
- 5.2.5 It should be noted that these accesses are subject to change as the design of the Cable Route Corridor is progressed and finalised.
- 5.2.6 The proposed Cable Route Corridor Accesses listed above are in addition to those identified for the Principal Site on the A631 and the B1398 Middle Street, which could be utilised if required when connecting the Cable Route Corridor to the on-site Substations within the Principal Site. An overview of the Scheme Boundary, including the Cable Route Corridor, is shown in **PEI Report Volume III Figure 15-1**.
- 5.2.7 The proposed layouts of the accesses to the Principal Site will be provided at ES stage and will include details of any local highway improvements (e.g. verge clearance, hedge cutting and/ or carriageway realignment) as required. A 6.0m carriageway width will be provided along internal construction routes to accommodate (two way) HGV movements. The proposed site access roads will be surfaced with a bound surfacing material over a minimum 20m distance from the junction, to minimise the transfer of material onto the public

highway as a result of construction vehicles. The site access roads will be designed to accommodate two-way movements and swept path analysis will be provided at ES stage.

5.3 Access Tracks

- 5.3.1 Existing tracks which run throughout the Principal Site are expected to be utilised as internal routes to move construction vehicles and staff internally between different areas during the construction period. Crucially, this means that use of the existing highway network running through the Principal Site, including Common Lane and Kexby Road, as part of any internal routes will be minimised and avoided if possible. The precise routes to be utilised along existing internal tracks have not been finalised at this stage and will be presented within the ES Transport Chapter, including details of any impact on PRowS, once the Scheme design has been confirmed.
- 5.3.2 At this stage of the project, marshals are expected to be employed to manage the crossing of the local highways which are within the Scheme, such as School Lane and Common Lane. However, consultation with the local highway authorities will be undertaken to identify the appropriate method of management of these points during the construction phase.
- 5.3.3 Utilising existing internal routes also minimises the need for construction vehicles to use local rural roads such as Common Lane and Kexby Lane and minimises the need to build any new road infrastructure within the Principal Site. Some strengthening may be required to ensure that the existing internal routes are suitable for heavy traffic loads during the construction period.
- 5.3.4 The Cable Route Corridor will be utilised to transport goods, materials, equipment and construction staff along the route. At this stage of the works, it is assumed that a haul road will be utilised through the Cable Route Corridor, to provide access. Where the Cable Route Corridor crosses the River Trent for example, the existing highway network either side of the river will need to be utilised.

5.4 Swept Path Analysis (Vehicle Tracking)

- 5.4.1 The proposed routing strategy for HGVs (non-AIL) is shown in the TA (**PEI Report Volume II Appendix 15-1**). The proposed routes will ensure that larger vehicles take the most direct route to and from the Scheme, while minimising the number of turning movements. Swept path analysis (vehicle tracking) for a maximum legal articulated vehicle will be provided at ES stage.
- 5.4.2 The swept path analysis (vehicle tracking) will demonstrate that construction vehicles will be able to turn in/ out of the proposed accesses without overrunning any kerb lines. It should be noted that marshals will be in place to control HGV movements at the accesses to ensure these movements are carried out safely. An appropriate level of visibility will be achievable to/ from the accesses as set out above. No carriageway widening is expected to be required, although some widening of existing access tracks and vegetation clearance may be required within the Scheme Boundary at the Principal Site and Cable Route Corridor site access points.

5.5 Vehicle Routing

- 5.5.1 The HGV routing to/ from the Principal Site is identified in the TA (**PEI Report Volume II Appendix 15-1**) and shows the routes to/ from the four site accesses for the Principal Site along the A631, B1398 Middle Street and A15. These routes provide wider connection towards the M180 to the north and the A46 and A57 to the south.
- 5.5.2 At this stage of the project, the exact routing of the HGVs to/ from the Cable Route Corridor Accesses is not known. However, the HGV routes, in principle, are expected to follow the same as those identified for the Principal Site utilising the A15, A631 and B1398 Middle Street. The HGV routes for the Cable Route Corridor will be identified within the ES Transport Chapter.

5.6 Abnormal Indivisible Loads

- 5.6.1 A detailed assessment of the abnormal vehicles required for the Principal Site and Cable Route Corridor will be carried out by an abnormal loads specialist to assess the movement associated with the delivery of a transformer. The nature of the delivery is such that an AIL will only be required when the transformer is transported to the Principal Site as the vehicle will be disassembled and take the form of a standard vehicle prior to its departure. The AIL report (including vehicle routing and swept paths) will be presented as part of the CTMP or the ES when completed.

5.7 Visibility Splays

- 5.7.1 The Design Manual for Roads and Bridges (DMRB) CD 109 (Highway Link Design) identifies desirable minimum Stopping Sight Distances (SSDs) based on the design speed of the road. These values are adopted within DMRB CD 123 (Geometric design of at-grade priority and signal-controlled junctions) in order to determine the visibility requirements (the 'y' distance) at priority junctions, measured along the edge of the major road carriageway from the centreline of the minor arm at the junction. These requirements are shown in Table 5-1 below.

Table 5-1: Desirable Minimum SSDs based on Design Speed

Design Speed (kph)	SSD ('Y' Distance)
50	70m
60	90m
70	120m
85	160m
100	215m
120	295m

- 5.7.2 The minimum distance from which the visibility splays are measured at simple priority junctions is at a 2.4m setback (the 'x' distance) from the give-way line.

- 5.7.3 The 'Desirable Minimum' SSDs in the DMRB are based on a driver perception/ reaction time of two seconds and a deceleration rate of 0.25g (2.45 m/s²). The 'Absolute Minimum' (one step below Desirable Minimum) SSD values use the same reaction time and a deceleration rate of 0.375g (3.68 m/s²).
- 5.7.4 The 85th percentile speed of traffic represents the appropriate speed measurement for an existing major road when determining visibility splay requirements. The above parameters have been adopted to calculate the desirable minimum and absolute minimum visibility requirements on the A631 and B1398 based on the highest recorded 85th percentile speeds from the surveys carried out in July 2022. The results will be presented in the ES Transport Chapter.
- 5.7.5 Drawings showing the areas required to be kept clear to achieve the above desirable minimum (rather than absolute minimum) visibility splays and SSDs will be provided at the ES stage to demonstrate that these can all be achieved through the clearance of vegetation etc. within the highway boundary and/ or the land included within the Scheme Boundary.

5.8 Car and Cycle Parking

- 5.8.1 In accordance with the peak parking demand identified in the TA (**PEI Report Volume II Appendix 15-1**), during the construction phase the construction staff car parking spaces will be capped at 500 across the Scheme. Parking for construction staff will only be provided within the Principal Site, as follows:
- Principal Site Access 1 = 150 spaces (30%);
 - Principal Site Access 2 = 100 spaces (20%);
 - Principal Site Access 3 = 100 spaces (20%); and
 - Principal Site Access 4 = 150 spaces (30%).
- 5.8.2 Utilisation at each car park will be monitored and the potential to introduce additional parking during the peak construction period will be explored to ensure that parking does not occur outside of the Scheme Boundary.
- 5.8.3 An internal shuttle bus service will be provided to move staff from the car parks to different areas of construction within the Principal Site and between the Principal Site and the Cable Route Corridor, making use of the existing internal tracks where possible. It should, however, be noted that it will not be possible to access the whole Cable Route Corridor internally due to barriers such as the River Trent.
- 5.8.4 A sufficient number of cycle parking spaces within the Principal Site will be provided to encourage staff to travel by bicycle where viable. Currently it is envisaged that 12 cycle parking spaces (1% of the peak number of construction staff) will be provided within the Principal Site for construction and operational staff to use. There is no specific cycle parking standard for the land use of the Scheme, but based on professional judgement and the location of the Scheme in a rural setting, it is considered that this constitutes an appropriate provision. Depending on the compound design during the construction phase of the Scheme, there may be an opportunity to provide

more. This will be explored further at the ES stage. Cycle parking provision will also be monitored and increased if required.

- 5.8.5 No car parking spaces are proposed to be provided along the Cable Route Corridor as staff will be transferred to and from this portion of the Scheme via an internal shuttle bus service. All construction staff that have driven will park within the car parks associated with the Principal Site.

5.9 Construction Compounds

- 5.9.1 The main construction compounds will be accessed via the site accesses from the A631 and B1398 Middle Street, with each containing offices, mobile welfare units, canteens, storage and waste skips, a power supply, parking areas and space for storage, a wheel washing facility, a bunded area for refuelling and the storage of liquids, as well as unloading and turning areas.
- 5.9.2 Five temporary construction compounds will be located across the Principal Site. At this stage of the Scheme, no further details about the location and size of the compounds are known and the ES will therefore expand on this element of the Scheme.
- 5.9.3 Construction compounds will be located at specified positions within the Cable Route Corridor, accessed via the nearest access point to that compound. Construction staff will travel via a (mostly) internal shuttle bus service from the Principal Site in order to access the compounds within the Cable Route Corridor. At this stage of the project, no further details about the location and size of the compounds are known and the ES will therefore expand on this element of the Scheme.

6. Management and Measures

6.1 Introduction

6.1.1 This section of the F-CTMP outlines the construction traffic and travel plan management measures that would be developed and detailed in the detailed CTMP.

6.2 Management Measures and Controls

HGV Measures and Controls

6.2.1 The following measures will be implemented to manage HGV deliveries to the Scheme Boundary and further details are set out under separate headings below:

- Delivery Management System (DMS) and Traffic Management and Monitoring System (TMMS);
- HGV Routes;
- HGV Timing Restrictions;
- HGV Monitoring;
- HGV Emission Standards;
- Communications Strategy;
- Highway Conditional Surveys;
- Site Access Arrangements;
- Abnormal Indivisible Loads; and
- Marshal and Site Management.

CLOCS Standard

6.2.2 The CLOCS Standard is a national industry standard that should be applied to all construction projects and programmes to ensure safe, efficient and environmentally friendly construction vehicle journeys. The principal contractors and fleet operators shall comply with the requirements of the CLOCS Standard by implementing a Construction Logistics Plan (CLP) and ensuring the following:

- Vehicle routes to and from the site committed in the CLP are specified, communicated and followed;
- Ground conditions of the site are suitable for vehicles and fitted with safety features;
- Access to and egress from the site is managed, marked, understood and clear of obstacles; and
- Collate annual collisions and emissions performance information and where necessary, produce an improvement plan.

Delivery Management System (DMS) and Traffic Management and Monitoring System (TMMS)

- 6.2.3 A DMS will be implemented to control bookings of HGV deliveries from the start of the construction period. This will be used to effectively plan all HGV deliveries in accordance with the construction programme, regulate the flow of HGVs via timed delivery slots and monitor compliance of HGV routing.
- 6.2.4 A TMMS will be developed. The TMMS will provide details of the technologies and other means employed to monitor HGVs to/from the Scheme Boundary (e.g. Global Positioning System (GPS), Automatic Number Plate Recognition (ANPR)). This will enable the Applicant to monitor the following:
- Compliance with the HGV routes;
 - Compliance with HGV limits in terms of number of deliveries arriving and departing at any one time and over the course of the day; and
 - Compliance with the timing restrictions.
- 6.2.5 The precise form of DMS would be determined following the appointment of a contractor and will include a summary of the contractual requirements with which those visiting the site will have to adhere, along with the measures to be taken for non-compliance. This could include, for example, implementing a three-strike system for contractors which could lead to financial penalties.
- 6.2.6 In addition, the TMMS will also record all HGVs which enter and exit the Principal Site, to allow all vehicles to be monitored. If a complaint is made in relation to inappropriate routes being used, then this will be cross-referenced with the TMMS to allow appropriate actions to then be taken.
- 6.2.7 The precise form of TMMS would be determined following the appointment of a contractor and will include a summary of the contractual requirements which those visiting the Principal Site will have to adhere to, along with the measures to be taken for non-compliance. This could include implementing a three-strike system for sub-contractors, which could lead to financial penalties.

HGV Routes

- 6.2.8 HGVs will be required to comply with the proposed routing strategy outlined in the TA (**PEI Report Volume II Appendix 15-1**) in accordance with the DMS and TMMS. The following strategies will be applied:
- Routing strategy for HGVs (excluding abnormal vehicles) for the Principal Site;
 - Routing strategy for HGVs (including abnormal vehicles) for the Cable Route Corridor will be included as part of the ES assessment once these have been carried out by the appointed consultant; and,
 - Routing strategy for abnormal vehicles for the Principal Site will be included as part of the ES assessment once these have been carried out by the appointed consultant.
- 6.2.9 In the case of exceptional circumstances where the proposed routing to the Site is compromised due to an incident or road closure for example, then it is

considered acceptable for HGVs to be redirected via an alternative route or to deliver outside of the established scheduling if required.

HGV Timing Restrictions

- 6.2.10 To reduce the potential impact of HGV deliveries, the arrival and departure times will be managed to minimise the number of HGVs travelling to the Site during the actual highway network peak hours; identified within the TA (**Appendix 15-1** of Volume II if the PEI Report) as 07:30-08:30 and 16:30-17:30. For example, HGVs will be arranged to avoid being released from the Site during the actual PM highway network peak hour.
- 6.2.11 The timing restrictions, considered likely to be implemented at this stage are:
- No arrivals or departures on a Weekday between 07:30 and 08:30, and between 16:30 and 17:30;
 - No arrivals or departures on a weekday before 07:00 or after 19:00;
 - No arrivals or departures on a Saturday before 08:00 or after 13:00; and
 - No arrivals or departures on Sundays or public holidays.
- 6.2.12 The restrictions imposed on deliveries by HGVs will be set out within the DMS and TMSS.

HGV Monitoring

- 6.2.13 The Applicant will implement a monitoring system whereby the route of all HGVs travelling to and from the site is recorded such that non-compliance with the CTMP can be identified and measures taken. The precise form this monitoring will take will be included within the CTMP.
- 6.2.14 The Applicant is committed to undertaking robust data collection and formulating a reporting mechanism to record collisions and near misses associated with construction traffic or on construction routes. If there is a pattern of incidents that is apparent from information collected then this will be reviewed in terms of understanding causality. Understanding the underlying cause of any road safety issues will inform the approach to their resolution. Where relevant, operational measures will be considered and introduced by the Applicant to reduce the likelihood of occurrence, e.g. driver training. The Applicant will raise and discuss any apparent road safety issues with the relevant local highway authority.

HGV Emissions

- 6.2.15 All HGVs routing to the development Site (with the exception of vehicles used for the transportation of AILs including cranes) will be required to be compliant with the latest emission standards at the time of construction. The HGVs will be compliant with 'Euro VI' emissions standards.

Communications Strategy

- 6.2.16 A Communications Strategy will be developed by the Applicant to ensure that the measures contained within the CTMP are communicated to the workforce. This would include an information pack setting out the contractual requirements which will be provided to potential staff. Furthermore, regular

meetings will be held with contractors to discuss HGV management and to address any issues associated with travel to / from the Scheme as well as to relay information including any restrictions and requirements which should be followed.

Highway Condition Surveys

- 6.2.17 The Applicant will undertake highway condition surveys before, during and after the construction to identify any impacts which are a result of the development that need to be remediated. The exact roads will be agreed with the LHAs in advance of construction. It is noted that the condition surveys include the PRoWs, which are crossed during the construction period.
- 6.2.18 Where the pre-condition survey identifies that there would be a benefit to having appropriate measures in place to protect or maintain the road surface, to reduce the likelihood of damage caused by construction vehicles, the Applicant will enter discussions with the LHA on this matter.

Site Access Arrangements

- 6.2.19 The site access layouts will be designed to accommodate HGVs and this will be supported by the swept path analysis (vehicle tracking) which will be provided at ES stage.
- 6.2.20 A hardstanding surface will be provided at the proposed accesses to ensure the weight of the HGVs can be accommodated. In addition, wheel washing facilities will be provided at every access to minimise mud from being trafficked onto the highway.
- 6.2.21 Vegetation clearance will be carried out at the proposed site accesses, where required, in order to achieve appropriate levels of visibility, subject to agreement with the local highway authorities.
- 6.2.22 The detailed design of the site accesses will include measures to minimise vehicles obstructing the public highway at the access points. This will include:
- Any gates required or currently in situ will be located a sufficient distance into the site to ensure that HGVs can pull off the public highway fully without causing an obstruction. All gates will open inwards to the site.
 - Internal site layout will ensure that all HGVs access and egress the site in a forward gear, with any turning required to be accommodated on the site.
 - Deliveries will be managed to avoid entering and exiting vehicles meeting at an access point. In the unlikely event that this occurs, the entering vehicle will have priority, and the internal site layout will be designed to ensure that there is sufficient space for the exiting vehicle to wait within the site and allow the entering vehicle to pass without obstruction. Sufficient forward visibility will be provided to enable this to take place safely.

Abnormal Indivisible Loads

- 6.2.23 Before the movement of any AILs the police will be given advanced notification as required under the Road Vehicle Authorisation of Special Types Order 2003.

- 6.2.24 In addition, communication and co-ordination will occur with both National Highways (as appropriate) and the LHAs before the AILs are required on-site to ensure sufficient notification is provided. This also includes the co-ordination of the temporary removal and subsequent re-instatement of signage and street furniture.
- 6.2.25 The transportation of AILs will be undertaken in line with the Government and the local highway authority's guidance, and timely applications will be made. Advance notice will be given to the Department for Transport, National Highways, the relevant highway authorities, the police and bridge owners as necessary in line with the requirements depending on the vehicles' weight, width and length which applies to AILs.

Marshals and Site Management

- 6.2.26 A suitably qualified marshal will be positioned at each of the proposed Principal Site Accesses, Cable Route Corridor Accesses and at internal crossing points when required, to allow vehicle arrivals and departures, as well as internal vehicle movements to be safely controlled during the construction period. This includes the network of internal access routes and the PRow crossing points within the Scheme. Visibility will be maximised between construction vehicles and other users at the crossing points (through hedgerow clearance for example), and advanced signage will be provided to warn users of the potential presence of construction vehicles and crossing points. Manned controls will be provided at each crossing point (marshals and gates), with a default priority that construction traffic will give-way to other users.

Staff Measures and Controls

- 6.2.27 Staff movements will be managed through the implementation of the following measures:
- A cap on construction staff vehicle parking (monitored and with some flexibility provided if required to prevent any off-site parking);
 - Encouraging car sharing;
 - Staff arrival and departure times;
 - External shuttle bus service providing transport between temporary accommodation/ residential centres and the Principal Site; and
 - Internal shuttle bus service transferring staff directly from the Principal Site to the access points along the Cable Route Corridor. It should, however, be noted that it will not be possible to access the whole Cable Route Corridor internally due to barriers such as the River Trent.

Cap on Construction Staff Vehicles

- 6.2.28 The measures to reduce vehicle trips above are outline measures with details to be defined when more information on workforce locations is known. This is typical of a Framework Travel Plan at this stage of the planning process. To ensure the ultimate effectiveness of the proposed measures, and to provide additional confidence to the Highway Authorities, a cap on construction staff

parking will be applied and monitored. This will ensure that the level of traffic generated does not exceed that assessed within **PEI Report Volume I Chapter 15: Transport and Access**.

- 6.2.29 The Applicant has demonstrated that an average occupancy of 1.3 persons per vehicle would not result in a significant effect in EIA terms (see Section 15.9 of **PEI Report Volume I Chapter 15: Transport and Access**), and therefore it is proposed to establish a daily vehicle cap at this level, which is 500 staff vehicles for the Principal Site (split across the four access points).
- 6.2.30 The capacity of each car park is set to be limited to circa 100-150 vehicles, to accommodate (but limit) the expected parking demand of construction staff within the Principal Site during the peak period, with additional parking available for shuttle buses. The usage of the car park will be monitored and the potential to introduce additional parking during the peak construction period will be explored to ensure that parking does not occur outside of the Scheme boundary.
- 6.2.31 No car parking spaces will be provided for construction staff within the construction compounds serving the Cable Route Corridor, as staff will be transferred to and from this part of the Scheme via an internal shuttle bus service after utilising the car parks within the Principal Site construction compounds.

Car Sharing

- 6.2.32 To reduce the potential impact of vehicles associated with the local staff during the construction period, the Applicant will implement measures to encourage car sharing to reduce the number of vehicles travelling to/ from the Principal Site each day. The benefits of car sharing will be promoted to encourage multi-occupancy vehicle use, such as reduced fuel costs and ease of parking with guaranteed spaces for those car-sharing within the compounds. A Car Share Scheme will be implemented to match potential sharers and to help staff identify any colleagues who could potentially be collected along their route to/ from the Principal Site. The limited car parking and the use of the shuttle service will encourage staff to travel together.
- 6.2.33 Due to the rural location of the Scheme, it is anticipated that the majority of staff will drive or be a vehicle passenger to / from the Scheme. For the purpose of the assessment carried out within the TA (**PEI Report Volume II Appendix 15-1**), it is assumed that the staff vehicles will have an average vehicle occupancy of 1.3 persons. The average vehicle occupancy has been identified from previous experience of large-scale solar farms and professional judgement. However, a higher average occupancy level will be aspired to, in order to further reduce the impact of the development on the local network and the SRN. The staffing requirement and occupancy for the Cable Route Corridor is inclusive within the overall Scheme, given that staff will be transferred to/ from the Cable Route Corridor by an internal shuttle service.

Staff Arrivals and Departures

- 6.2.34 The proposed working hours of construction staff are expected to be 07:00-19:00 (12-hour shift) resulting in construction staff travelling to/ from the

Scheme outside of the traditional highway network peak hours, which makes use of the spare capacity on the highway network outside of the peak times.

- 6.2.35 Construction staff will be expected to arrive in the hour before the start of work (06:00-07:00) and to depart in the hour after the end of the working day (19:00-20:00). Based on the above, all staff are expected to avoid the traditional morning and evening highway network peak hours. The proposed working hours are therefore designed to minimise additional trips at the busiest times in terms of trips on the surrounding highway network. If any works are required outside of the above working hours, then these will comply with any restrictions agreed with the relevant planning/ highway authorities.
- 6.2.36 To minimise additional vehicle trips on local roads, construction staff will be directed to take routes to the Scheme Boundary by using the main routes such as the A631 to the north, the A57 to the south, the A156 to the west and the A15 to the east, which will provide the most direct access to the Principal Site and therefore limit the impact on local/ rural roads.

Shuttle Bus Service

- 6.2.37 As agreed with the client and LHAs, an external shuttle service is expected to be used to transport 600 construction staff (48% of persons) staying within local accommodation in the vicinity of the Site. At this stage of the project, it is expected that each of the shuttle services will have capacity for 50 construction staff, meaning a peak of 14 shuttle services will be required to pick-up construction staff in the morning and drop-off construction staff in the evening (accounting for a typical occupancy of 80% to 90%).
- 6.2.38 In relation to the shuttle service provision, if additional demand is identified by the monitoring carried out as part of the detailed CTMP then additional shuttle services will be provided to accommodate these and to further reduce the number of construction staff vehicles on the network.
- 6.2.39 The external shuttle service will primarily be provided for transporting staff between the Principal Site and appropriate temporary accommodation and residential centres in the vicinity of the Scheme, considered likely to be Gainsborough (north), Scunthorpe (north), Doncaster (north), Lincoln (south), Retford (west) and Newark on Trent (south). A detailed assessment of the location of temporary accommodation (for non-local staff) and staff residential locations will be undertaken by the Socio-economic team to identify urban areas and locations where higher proportions of staff are based. Areas with the greatest concentration of staff will be targeted to maximise the number of staff being transferred by shuttle service. The exact pick-up/drop-off locations of construction staff will be confirmed once known prior to the beginning of construction.
- 6.2.40 With regards to the external shuttle service, the following assumptions have been adopted:
- The shuttle buses will travel between the Principal Site Accesses and temporary accommodation/ residential centres to transport all non-local staff to/ from the Site;

- The shuttle buses will depart from the Principal Site, travel to the local temporary accommodation/ residential centres to pick-up the construction staff and return to the Site within the hour prior to the start of work;
- The shuttle buses will depart from the Principal Site and travel to the temporary accommodation/ residential centres to drop-off the construction staff within the hour after the end of the working day (before returning back to the Site);
- Each shuttle bus will be expected to have a typical occupancy of 80% to 90% when transporting construction staff to/from the Scheme; and
- A round trip (travelling from the Principal Site to temporary accommodation/ residential centres and then back to the Site) for each shuttle bus is expected to take an average of 15-30 minutes (it is assumed that a shuttle bus would both depart and return within an hour).

6.2.41 The primary aim of the external shuttle service is to minimise the number of private vehicle trips taking place on the local highway network during the construction period.

6.2.42 Within the Principal Site, an internal shuttle service is expected to use the existing internal tracks/routes to transport staff between the main compound and the secondary compounds. This will help prevent additional trips between the site accesses on the surrounding highway network. The internal shuttle service will also be utilised to transport staff between the Principal Site and the Cable Route Corridor. It should however be noted that it won't be possible to access the whole Cable Route Corridor internally due to barriers such as the River Trent.

6.3 Additional Measures and Controls

Stage 1 Road Safety Audit

- 6.3.1 As the proposed Principal Site Accesses are existing accesses on the highway network, a Stage 1 Road Safety Audit (RSA) will only be required if significant changes are necessary, for example widening to allow for AILs to safely enter and egress. Once the Principal Site Access layouts have been confirmed and swept path analysis undertaken at ES stage, the requirement for a Stage 1 RSA will be assessed.
- 6.3.2 The Cable Route Corridor is expected to require new accesses on the highway network and therefore Stage 1 RSAs may be required in this instance. This will be confirmed at ES stage once the Cable Route Corridor access locations and layouts are known.
- 6.3.3 Any Stage 1 RSAs undertaken will be compliant with DMRB GG119.

Traffic Management Measures

- 6.3.4 Temporary Traffic Management (TTM) measures will be required to accommodate the construction of each of the access points and will be included within the DCO submission. Furthermore, TTM is expected to be required to accommodate the installation of the Cable Route Corridor across the A1500 Stow Park Road, A156 High Road, Cottam Road, Cow Pasture Lane and Headstead Bank in the instance that trenchless Horizontal Directional Drilling (HDD) is not employed.

Highway Measures

- 6.3.5 The following highway improvements could potentially be required to accommodate construction vehicles travelling to/ from the Site, with details to be provided as the Scheme proposals are developed further:
- Junction improvements to accommodate the AILs used to transport the transformers to the Principal Site and to transport the cable drums both to and from the Cable Route Corridor;
 - Potential carriageway widening and vegetation clearance to provide appropriate visibility splays at the site accesses.

6.4 PRow

- 6.4.1 Access to all existing PRow will be retained during the construction phase, with no PRow closures expected and a limited number of temporary local PRow diversions around the Cable Route Corridor when the cabling is installed or to physically separate these from the proposed construction routes.
- 6.4.2 Temporary local PRow diversion routes will be provided where necessary to avoid any PRow closures or potential conflicts within the Scheme (i.e. for the one PRow within the Principal Site and those PRow impacted throughout the Cable Route Corridor, if considered necessary). The diversion routes will be

agreed with the local authorities prior to construction and will be detailed in the ES Transport Chapter.

- 6.4.3 Further details of the anticipated interactions between construction works/routes and how the existing PRoW will be managed during the construction phase are set out within Section 7 of this document.

6.5 Combined Measures

- 6.5.1 The opportunity to combine mitigation measures (including some of the above measures) with the West Burton Solar Farm, Cottam Solar Farm and Gate Burton Solar Energy Park schemes (see **PEI Report Volume I Chapter 17: Cumulative Effects**) will be explored in order to reduce cumulative impacts during the construction phase. This could include sharing the shuttle service to transport construction staff to/ from multiple sites, sharing construction compounds to consolidate trips or sharing the access points to install and maintain the Cable Route Corridor. Final details will be set out as the Scheme proposals are developed further and once further details in relation to the other solar farm schemes are known e.g. project timeframes and the approach for the shared Cable Route Corridor.

6.6 Management Structure

- 6.6.1 The overall management and implementation of the CTMP will be the responsibility of the Applicant. A Transport/ Travel Plan coordinator will be appointed by the Applicant to be responsible for the management, development and implementation of the CTMP.

- 6.6.2 The Transport / Travel Plan coordinator will:

- Liaise proactively as appropriate with local transport and traffic groups, local planning authorities, local highway authorities, the police, Parish Councils, the public, and the emergency services. The Transport / Travel Plan Co-ordinator will be responsible for recording and collating any complaints related to transport aspects of construction activities;
- Monitor the CTMP to identify what is working well and what can be improved;
- Promote the CTMP to all staff and contractors travelling to and from the site to ensure compliance with its contents;
- Monitor data relating to HGV routes, timing of HGV arrivals and departures, how contractors are utilising the DMS and the emission standards of vehicles;
- Monitor data relating to levels of staff vehicles using each car park and introduce measures to ensure that it remains below the established caps;
- Monitor data on road safety, including collisions and near misses, liaise with the local highway authorities and introduce measures to manage road safety risk where appropriate;
- Manage the Car Share Scheme;

- Investigate providing a shuttle service to local railway stations and local residential areas to pick-up and drop-off staff;
- Assign staff to the most appropriate staff car park including the provision of a car parking permit system; and
- Discuss issues which come to light with the relevant parties and discuss any amendments required to ensure that compliance with the CTMP is maintained.

6.7 Monitoring and Review

HGVs

- 6.7.1 To ensure that contractors are complying with the CTMP, a monitoring and review approach will be taken. This will be led by the Transport / Travel Plan Co-ordinator.
- 6.7.2 The Transport / Travel Plan Co-ordinator will monitor data relating to the routes utilised, the timings of arrivals and departures, how contractors are utilising the DMS, the emission standards of vehicles accessing the site, road safety, including collisions and near misses, and reports from external parties including the public. Reporting will be on a monthly basis initially, however, the frequency of reporting will be reviewed as construction progresses and may be reduced once the peak construction month has passed. The reporting will set out the results of the data monitoring and identify any issues that need to be resolved and what measures would need to be implemented to ensure that any identified issues do not occur again.

Staff

- 6.7.3 The Car Share Scheme will be managed by the Transport / Travel Plan Co-ordinator to implement and identify potential matches for car sharers. This will also be available to staff so that they can find their own matches. The Transport / Travel Plan Co-ordinator will require the starting location of staff before commencing work on site, to assist in promoting the Car Share Scheme and also to allocate car drivers to one of the four car parking areas which will be based on their starting location for their travel to the Site. This takes into consideration if staff are starting their journey from a different location to their home.
- 6.7.4 The construction staff car parks will be monitored during the arrival of staff in the morning and departure of staff in the evening. The car parking areas will be managed to ensure the efficient arrival of staff and assignment of car parking spaces, where vehicles will be routed to the most appropriate location based on their arrival time. The car parking management will ensure staff entering the car parking areas park in a timely and safe manner. Given the working patterns identified it is not expected there will be the requirements for car parking management outside of the development peak hours of 06:00-07:00 and 19:00-20:00.
- 6.7.5 The Applicant proposes to introduce a cap on vehicle numbers using each of the staff car parks in line with the peak number of staff vehicles forecast in the

TA (**PEI Report Volume II Appendix 15-1**), to provide a level of control and to ensure the measures are effective.

6.7.6 Monitoring will be undertaken by way of In/Out counts at the car park accesses. The exact method will be determined by the contractor. As a minimum, data will be collected on a weekly basis, although it is likely that it will be collected continuously using automated technology. The Transport / Travel Plan Co-ordinator will monitor data against the construction programme and take early action to introduce measures if vehicle numbers are forecast to exceed the cap.

6.7.7 The Applicant is committed to regular and frequent monitoring on a monthly basis, or such lesser frequency as is agreed with the local highway authorities. Monitoring will include collecting the following information and providing it to the local highway authorities:

- Freight movement to/from the Scheme;
- Details of non-compliance with routing or speed limits;
- Near misses or safety related incidents;
- Freight compliance with appropriate exhaust emissions (Euro VI);
- Transport of AILs to/from the Scheme;
- LGV movements to/from the Scheme;
- Staff movement to/from the Scheme, based on total numbers of vehicles and compliance with shift patterns; and
- Information on complaints received on transport related issues including parking.

7. PRow Management

7.1 Introduction

- 7.1.1 The details of the PRow have been obtained from the PRow Interactive Map on the LCC website for the part of the Scheme Boundary within Lincolnshire, and from the Prowmaps website for the part of the Scheme Boundary within Nottinghamshire (in the absence of a definitive map on NCC's website). The PRow (footpaths, byways and bridleways) are also shown on **PEI Report Volume III Figure 15-3**.
- 7.1.2 PRow management will be considered for the PRow which will be directly impacted by the Scheme. Once the Cable Route Corridor has been finalised, the PRow that are likely to be impacted will be known in terms of potential diversions during construction. At this stage of the project, all the PRow within the Cable Route Corridor have been identified within Section 4 of the TA (**PEI Report Volume II Appendix 15-1**). The final list of PRow affected by the Scheme will be set out within the ES Transport Chapter and management will be included within the CTMP.
- 7.1.3 As detailed within **PEI Report Volume I Chapter 15: Transport and Access**, there is one PRow located within the Principal Site and several PRow which could potentially be impacted by the Cable Route Corridor in both Lincolnshire and Nottinghamshire.
- 7.1.4 The only PRow within the Principal Site (**PRow Gltw/85/1**) is located within an area designated as a potential area of ecological enhancement and therefore it is not expected that any works related to the construction of the Scheme will have an impact on it. **PEI Report Volume I Chapter 14: Socio-Economics and Land Use** concludes that construction of the Principal Site will have **no effect** on users of PRow Gltw/85/1 as no closures or diversions are expected at this stage and woodland screening measures are proposed to mitigate against any potential amenity impacts.

7.2 Construction and Decommissioning

- 7.2.1 Access to all existing PRow and existing PRow widths will be maintained during the construction phase, with no PRow closures and a limited number of temporary local PRow diversions around the Cable Route Corridor works area when the cables are installed. The diversion routes will be agreed with the LHAs prior to construction. The PRow will be managed throughout the construction phase to ensure that routes can continue to be used as safely as possible.
- 7.2.2 Whilst the proposed construction routes and crossing point locations within the Scheme Boundary may be subject to minor changes during detailed design, these changes are not expected to change the management principles identified or result in any additional adverse impacts. Any changes to the proposed management throughout the construction phase of the Scheme will be agreed with the relevant local authority.

7.2.3 During the decommissioning phase, it is anticipated that the PRow will be managed in a similar way to the construction phase. There are not expected to be any PRow closures although some minor local diversions are likely to be required to provide safe access across the Principal Site whilst decommissioning activities are taking place. These diversions will be temporary and are expected to be similar in nature and duration to those during the construction phase.

Mitigation and Management Measures

7.2.4 Proposed mitigation and management measures relating to PRow during the construction phase include:

- Maintaining access to/ along PRow during the construction phase, including existing widths for PRow users;
- Providing temporary local PRow diversion routes where necessary e.g. when the Cable Route Corridor is installed, to avoid any PRow closures. Each diversion will be clearly marked out, along with appropriate signage at either end of the diversion. The diversion routes will be agreed with the relevant local authority prior to construction;
- Providing sufficient protection/ separation between existing PRow and the proposed construction route and works areas where necessary;
- Managing areas where the internal construction route crosses any existing PRow (where these are unable to be diverted), by maximising visibility between construction vehicles and other users (pedestrians and cyclists), implementing traffic management e.g. advanced signage to advise other users of the works, as well as manned controls at each crossing point (marshals), with a default priority that construction traffic will give-way to other users;
- Providing an internal shuttle service to transfer construction staff to/ from the Cable Route Corridor, in order to reduce traffic to this portion of the Scheme and therefore the number of potential PRow interactions (i.e. vehicles crossing PRow to access different areas across the Site); and
- Developing a communications strategy including regular meetings with contractors to review and address any issues associated with walking or cycling to/ from the Site, as well as to relay information including any restrictions and requirements which should be followed.

7.2.5 A Framework Decommissioning Environmental Management Plan (DEMP) will be prepared to accompany the ES and DCO submission, providing further details of the proposed mitigation relating to PRow during the decommissioning phase.

7.3 Operation

- 7.3.1 The existing PRow which pass through the Scheme are expected to be unaffected during the operational phase as the majority of vehicles accessing the Site will be maintenance vehicles/ Light Goods Vehicles (LGVs) and will be nominal in number. Furthermore, **PEI Report Volume I Chapter 14: Socio-Economics and Land Use** concludes that there will be **no effect** on users of PRow arising from the Scheme during the operational phase.
- 7.3.2 Discussions relating to the provision of new permissive paths during the operational phase are currently ongoing and plans for any such provision will be confirmed during the ES stage.

Mitigation and Management Measures

- 7.3.3 Proposed mitigation and management measures relating to PRow during the operational phase include:
- Maintaining access to all existing PRow within the Principal Site, with no diversions or closures (all PRow temporarily diverted during the construction phase will be reinstated during the operational phase); and
 - Controlling areas where the internal maintenance routes cross any existing PRow or local access roads (such as by providing gates) and permitting only operational traffic to utilise these internal routes within the Principal Site. Operational traffic would give-way to other users (pedestrians and road users) when utilising the crossing points. Visibility will be maximised between operational vehicles and other users, with warning signage provided if required.
- 7.3.4 A Framework Operation Environmental Management Plan (OEMP) will be prepared to accompany the ES and DCO submission, providing further details of the proposed mitigation relating to PRow during the operational phase.

8. Compliance and Enforcement

8.1 Introduction

8.1.1 This section of the F-CTMP provides a summary of the mechanisms that will ensure compliance with the detailed CTMP.

8.2 Compliance

8.2.1 There are three areas under which enforcement of the CTMP will be imposed: Best Practice, Contractual Conditions and Default Mechanisms.

8.3 Best Practice

8.3.1 The Applicant will use internal management procedures to ensure compliance with the requirements of the CTMP, including:

Contractor kick off meetings:

- Contractors will be reminded of the Applicant's standards and expectations as set out in contract documentation.

Site induction:

- Driver induction to include briefing on aims and objectives of the CTMP, including booking system, designated routes and driver behaviour.
- A copy of the CTMP will be provided to each of the companies who provide services to the Scheme so that all are informed of how the sites are being managed and what the Applicant expects all contractors to adhere to.

Reporting:

- Incidences of non-compliance with the CTMP will be investigated.
- Reports from each incident will be raised and shared with the relevant contractor.
- Where appropriate updates to the CTMP will be considered, in accordance with the provisions of the DCO, to resolve the risk of repeated breaches.

8.4 Contractual Conditions

8.4.1 Upon appointment, each contractor will be provided with a contract setting out their contractual requirements in terms of compliance with the CTMP.

8.4.2 A copy of the CTMP will be provided along with confirmation of the routes vehicles are required to take to reach the site from their starting location as well as the access which they will use and the time of entry.

8.5 Enforcement

8.5.1 If despite the careful efforts of the Applicant and its contractor, there are breaches of the movement arrangements as set out in this CTMP during the construction phase, the enforcement procedures are as follows.

- The Transport Co-ordinator will notify the Applicant of a breach of the CTMP arrangements as and when they occur.
- The Applicant will issue a warning letter to the relevant contractor outlining what action would be taken in the event of a further breach. Details relating to the action which would be taken will be provided within the detailed CTMP.
- The Applicant will report the details of the response to the Transport Co-ordinator as part of the monitoring report. The monitoring report will be made available to the relevant local planning authorities and relevant highway authorities at their request to ensure compliance and that action is being taken where breaches are occurring.

8.5.2 Mechanisms will be established to provide all parties with an understanding of the enforcement procedures to be applied and further detail on the sanctions which could be applied would be included within the detailed CTMP.

