Net Zero Teesside – Environmental Statement

Planning Inspectorate Reference: EN010103

Volume III – Appendices

Appendix 16B: Framework Construction Worker Travel Plan (CTWP)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended)

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16B. Framework Construction Worker Travel Plan

16.1 Introduction

16.1.1 This Framework Construction Worker Travel Plan (CWTP) has been prepared by AECOM on behalf of Net Zero Teesside Power Ltd & Net Zero Sea Storage Ltd together 'the Applicants' to accompany a Development Consent Order Application for the Proposed Development namely a new low-carbon electricity generating station (gas-fired power station) which will be constructed largely within the boundary of the Teesworks site (herein referred to as the PCC Site). The Proposed Development will also include a natural gas connection, electrical connection (for connection to the National Transmission System), CO_2 Gathering Network, CO_2 Export Pipeline and water supply and discharge connections.

16.1.2 The Framework CWTP is designed to promote and encourage the use of sustainable transport modes and reduce reliance on the private car during the construction phase of the Proposed Development which is expected to take approximately 51 months.

16.1.3 The Applicants realise that the success of the Travel Plan will be based on their commitment to ensure that the chosen Contractors encourage and promote the suggested measures detailed within this to their workers. The Framework CWTP sets out the aims, objectives and measures to promote sustainable travel to the site.

16.1.4 This document is a Framework CWTP. The appointed Contractor will be required to use this as the starting point for their final CWTP and demonstrates how targets defined in this Framework CWTP can be achieve. The measures will be implemented by the Contractors.

16.1.5 Following this introduction, the Framework CWTP is structured as follows:

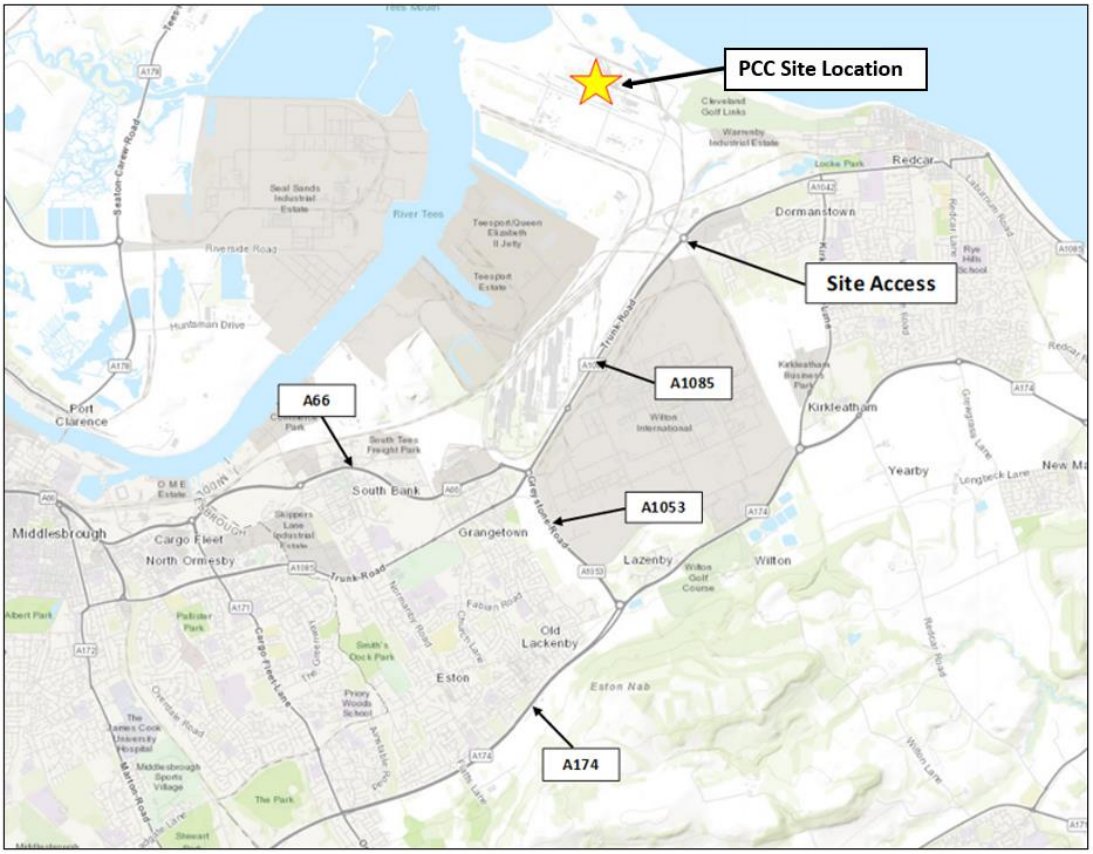
- Section 2 provides background information including the site location and accessibility;
- Section 3 describes the Proposed Development;
- Section 4 presents the final CWTP objectives;
- Section 5 sets out the roles and responsibilities;
- Section 6 describes the proposed measures;
- Section 7 describes the process for setting targets; and
- Section 8 outlines the proposed monitoring of the final CWTP.

16.2 Background

Site Description

16.2.1 The PCC Site is located approximately 3.5 km north-east of the A1053 which is part of Highways England's (HE) strategic road network providing onward connection to the A19 from either the A66 passing to the north of Middlesbrough or the A174 passing to the south. At a local level access to the PCC is via the A1085 Trunk Road which runs between Redcar and the A1053. Its location in relation to the surrounding area and the strategic road network is shown indicatively in Diagram 16B-1.

Diagram 16B- 1: PCC Site Location



Accessibility

16.2.2 The accessibility of the Proposed Development has been reviewed with respect to opportunities for walking, cycling and the availability of public transport.

Walking

16.2.3 The Chartered Institution of Highways and Transportation (CIHT) document 'Providing for Journeys on Foot' (2000) suggests a maximum walking distance of 2 km for journeys to work.

16.2.4 Considering a 2 km walking catchment, the potential for walking is limited with only the western edge of the built-up area of Redcar accessed via West Coatham Lane and Broadway West within a 2 km walking distance.

Cycling

16.2.5 Cycling is considered to be a viable alternative to that of the private car for journeys up to 8 km, providing a healthy and environmentally friendly form of transport.

16.2.6 In respect of acceptable cycle distances, 'Local Transport Note 2/08: Cycling Infrastructure Design', published by the Department for Transport states that many utility cycle trips are less than 3 miles (approximately 5 km), but for commuter journeys a distance of 5 miles (approximately 8 km) is not uncommon. An 8 km catchment area includes Redcar, Marske-by-the-Sea and the suburbs of Middlesbrough including Eston, Normanby and South Bank.

16.2.7 Within the vicinity of the Site there is a shared cycle / footway along the length of the A1085 Trunk Road between Redcar and Middlesbrough. Given the cycling infrastructure already in place on the local road network, it is considered that the Proposed Construction Laydown area is reasonably accessible for those living within the 8 km catchment wishing to cycle.

Public Transport

16.2.8 The CIHT document, 'Guidelines for Public Transport in Development' recommends a maximum walking distance of 400 m to a bus stop.

16.2.9 The nearest bus stops to the power station site are located on West Coatham Lane approximately 250 m south-east of the site entrance. Both the eastbound and westbound bus stops comprise a bus shelter and flag with timetable information displayed.

16.2.10 There are five services that stop at the West Coatham Lane bus stops, these are services 62, 64, X3, X3A, X4 and X4A.

16.2.11 Bus Service 62 runs between Middlesbrough and New Marske via Dormanstown and Redcar. Service 62 operates a half hourly service Monday to Saturday apart from Sunday which operates an hourly service. The service is run by Arriva Bus. The first bus departs Middlesbrough at 06:43 and New Marske at 06:25. The last bus departs Middlesbrough at 20:05 and New Marske at 19:45.

16.2.12 Bus Service 64 runs between Middlesbrough and Redcar operating two services in the morning from Redcar at 05:04 and 06:09 and two services in the evening from Middlesbrough at 17:30 and 18:10 Monday to Saturday. The service is run by Arriva Bus.

16.2.13 Bus Service X3 runs between Middlesbrough and Lingdale via Dormanstown, Redcar and Saltburn. Service X3 operates an hourly service Monday to Saturday. The service is run by Arriva Bus. The first bus departs Middlesbrough at 08:25 and Lingdale at 06:44. The last bus departs Middlesbrough at 17:25 and Lingdale at 17:54.

16.2.14 Bus Service X3A runs between Middlesbrough and Brotton. Service X3A operates an hourly service Monday to Saturday. The service is run by Arriva Bus. The first bus departs Middlesbrough at 08:50 and Brotton at 09:15. The last bus departs Middlesbrough at 17:55 and Brotton at 17:15.

16.2.15 Bus Service X4 runs between Middlesbrough and Whitby via Redcar and Saltburn. Service X4 operates a half hourly service Monday to Saturday apart from Sunday which operates an hourly service. The service is run by Arriva Bus. The first bus departs Middlesbrough at 06:02 and Whitby at 05:59. The last bus departs Middlesbrough at 18:10 and Whitby at 17:04.

16.2.16 Bus Service X4A runs between Middlesborough and Whitby via Redcar and Saltburn. Service X4A operates an hourly evening service Monday to Sunday. The service is run by Arriva Bus.

16.2.17 The bus services and service frequencies are summarised in Table 16B- 1 and demonstrate that there is a reasonable frequency of services running through the working week which would be suitable for use by construction workers.

Table 16B- 1: Bus Service Frequency

Service	Route	Mon – Fri (Daytime)	Mon – Fri (Evening)	Saturday	Sunday
62	Middlesbrough – New Marske	30 mins	60 mins	30 mins	60 mins
64	Middlesbrough - Redcar	2 services per day	n/a	2 services per day	n/a
X3	Middlesbrough - Lingdale	60 mins	n/a	60 mins	n/a
X3A	Middlesbrough - Brotton	60 mins	n/a	60 mins	n/a
X4	Middlesbrough - Whitby	30 mins	n/a	30 mins	60 mins
X4A	Middlesbrough - Whitby	n/a	60 mins	60 mins	60 mins

Rail

16.2.18 The nearest railway station to the Proposed Development is British Steel Redcar which is located within the Site boundary. The station is located on the Tees Valley Line and is operated by Northern Rail. Historically there were two eastbound services per day to Saltburn via Redcar and two westbound services per day to Bishop Auckland via Middlesbrough and Darlington. Northern Rail suspended all services to and from the station on 14 December 2019 due to the lack of passengers using the station.

16.2.19 However, there is potential for the station to be re-opened in the future for both construction staff and operational staff to use the train as a mode of traveling to work.

16.2.20 A summary of the previous services and their departure times from Redcar British Steel station are shown in Table 16B- 2.

Table 16B- 2: Rail Services from British Steel Redcar Station

Route	Mon - Fri	Saturday	Sunday
Redcar British Steel – Redcar - Saltburn	08:25; 18:17	08:25; 18:17	n/a
Redcar British Steel – Middlesbrough – Darlington – Bishop Auckland	07:57; 16:58	07:57; 16:58	n/a

16.2.21 The nearest station to the site that is still open is Redcar Central located approximately 3 km east of the Site.

16.2.22 A summary of the services and their frequencies are shown in Table 16B- 2.

Table 16B- 3: Rail Services from Redcar Central Station

Route	Mon - Fri	Saturday	Sunday
Darlington – Middlesbrough - Redcar Central - Saltburn	Every 30 mins	Every 30 mins	Every 60 mins
Bishop Auckland – Middlesbrough - Redcar Central - Saltburn	Every 60 mins	Every 60 mins	Every 60 mins

16.3 Proposed Development

Development Description

16.3.1 The Proposed Development comprises the construction and operation of a combined cycle gas turbine (CCGT) power station, with an electrical output of up to 860 MWe, together with equipment required for the capture and compression of carbon dioxide (CO_2) emissions from the power generating station. In addition, there is a need for the provision of supporting infrastructure and connections to support the power generating station and to facilitate the development of a wider industrial carbon capture network on Teesside, the construction of which also forms part of the Proposed Development. The Proposed Development also includes high-pressure compression of CO_2 and the onshore section of a pipeline to export the captured CO_2 for off-shore storage.

Indicative Construction Programme

16.3.2 It is anticipated that construction of the Proposed Development could (subject to the necessary consents being granted and an investment decision being made) potentially start as early as Quarter 4 (Q4) 2022. Construction activities are expected to last approximately 51 months.

Construction Phase Site Worker Traffic Generation

16.3.3 The assumed worst case is that the construction workforce would peak at circa 1,870 workers per day in months 22 - 26 of construction. The construction worker profile is shown within Annex 16A.3 of the Transport Assessment (Appendix 16A in ES Volume III, Document Ref. 6.4).

16.3.4 The core construction working hours for the Proposed Development would be 07:00 to 19:00 Monday to Friday (except bank holidays) and 07:00 – 13:00 on Saturday. Key exceptions to these core working hours could include activities that must continue beyond these hours (e.g. during concrete pouring) which would be agreed in advance with the local authority and non-noisy activities that may be undertaken at night.

16.3.5 In relation to traffic generation associated with construction workers, for robustness the peak construction month has been considered. The

assumption has been made that 80% of workers will travel to site by private car with an average occupancy of two workers per vehicle and 20% will travel to Site by minibus with an average occupancy of seven workers per vehicle. This is to account for the fact that some of the general and specialist workers will work in groups and arrive/depart together. All workers associated with pipeline construction will travel to site by private car with an average occupancy of two workers per vehicle. The resulting worst-case traffic volumes during the peak of construction are set out in Table 16B- 4.

Table 16B- 4: Daily Vehicle Profile during Peak Month of Construction

Hour Beginning	Arrivals	Departures
06:00	315	15
07:00	187	15
08:00	37	15
09:00	30	15
10:00	30	23
11:00	30	23
12:00	37	30
13:00	30	30
14:00	23	23
15:00	15	23
16:00	15	37
17:00	23	172
18:00	23	262
19:00	15	120
20:00	0	7
Total	**810**	**810**

16.3.6 The assumptions set out above and resulting expected traffic volumes set out above are a worst case and make no allowance for the potential reductions in travel by private car as a result of the implementation of the final CWTP.

Construction Phase HGV Traffic Generation

16.3.7 Appendix 16C: Framework Construction Traffic Management Plan (CTMP) (ES Volume III, Document Ref. 6.4) provides detail on how the HGVs generated by the construction phase will be managed.

Access Proposals

16.3.8 It is proposed that all construction workers associated with the construction of the PCC and those pipeline workers working to the south of the River Tees will access the PCC Site via the existing entrance located at the A1085 / West Coatham Lane Roundabout. Construction worker vehicles on arriving

via the site entrance will be directed to the parking area located at Steel House.

16.3.9 A park and ride system will then transport the construction workers between the construction worker parking area and the proposed PCC Site. Pipeline and connection workers would be transferred to the working area at Dabholm Gut by minibus via Sembcorp land using the southern arm of the A1085/West Coatham Lane roundabout which provides access to the Wilton International Complex.

16.3.10 Pipeline workers working to the north of the River Tees would go straight to their relevant compound.

Car Parking Provision

16.3.11 Parking demand would vary throughout the construction phase and an area of hardstanding will be set aside at Steel House within the Site to accommodate parking for construction workers. A park and ride system will then transport the workers to the PCC Site.

16.4 Objectives

16.4.1 The final CWTP would act in helping the environment by reducing the number of trips made to and from the Site by private car during the construction phase. All staff during construction would be made aware of the measures included in the final CWTP so that benefits can be delivered and the number of car borne trips reduced by promoting car sharing, minibus use and public transport.

16.4.2 The CWTP would aim to ensure all construction staff are aware of the advantages and potential for travel by more sustainable and environmentally friendly modes of transport, through raising awareness and the provision of information identifying travel options and the necessary contact information.

16.4.3 The primary objectives which are of most relevance during the construction phase of the Proposed Development are to:

- ensure that an appropriate package of measures is employed to encourage sustainable travel behaviour;
- reduce car usage (particularly single occupancy car journeys);
- raise awareness of the sustainable transport measures serving the Site; and
- minimise the impact of traffic on sensitive locations.

16.5 Roles and Responsibilities

The Applicants

16.5.1 The Applicants would be responsible for ensuring a condition of contract between the them and the contractors to develop and comply with the provisions of a CWTP, prepared in accordance with this Framework.

The Travel Plan Co-ordinator

16.5.2 The Travel Plan Co-ordinator has a key role to play in managing, monitoring and implementing the individual measures within the plan. The importance now placed on the Travel Plan process means that the Travel Plan Co-ordinator role is becoming increasingly important. The Travel Plan Co-ordinator would be appointed by the Contractor to manage and deliver the Travel Plan. The Travel Plan Co-ordinator's details would be supplied to Redcar and Cleveland Borough Council (RCBC) and HE.

16.5.3 The Travel Plan Co-ordinator would work closely with the Site Manager, who has overall responsibility for the Site, and thus has the authority to introduce measures for those workers who do not follow the guidelines.

16.5.4 The responsibilities of the Travel Plan Co-ordinator will include:

- encouraging the contractual obligations of contractors/ sub-contractors related to the Travel Plan to be adhered to;
- ensuring the Travel Plan notice board is located in a prominent position and that the information is kept up to date;
- being based on Site;
- acting as the key point of contact for issues related to construction traffic;
- undertaking a snap-shot parking survey on one day per month to ensure car park occupancy targets are being met;
- reviewing cycle parking provision on a monthly basis;
- engaging with local stakeholders;
- monitoring performance against the targets of the Construction Workers' Travel Plan; and
- implementing additional measures if not delivering on targets set.

The Contractor

16.5.5 The Contractor will be responsible for managing how their workers travel to and from the Site. Given the number of parking spaces to be provided, the Contractor's responsibilities will primarily include:

- providing a Travel Plan Co-ordinator to oversee the management and delivery of the Construction Workers' Travel Plan;
- encouraging and promoting the use of sustainable transport measures included within the Construction Workers' Travel Plan; and
- organising crew minibuses to transport workers to and from the Site where appropriate.

16.6 Travel Plan Measures

General

16.6.1 To encourage sustainable travel behaviour by construction staff throughout the period of construction, it is important that an appropriate package of measures is introduced. The package of measures would primarily aim to minimise the level of construction worker traffic, and wherever possible, minimise the impact and disruption of the remaining traffic on the local road network.

16.6.2 Given the unprecedented changes introduced by theCovid-19 pandemic to travel, all measures outlined in this section are subject to review in the light of prevailing government regulation and/ or guidance at the time of implementation.

Proposed Measures to Reduce the Level of Traffic

Car Parking

16.6.3 The availability of car parking has a major influence on the means of transport people choose for their journeys and is therefore an important Travel Plan measure in promoting sustainable travel to and from the Site.

16.6.4 It is proposed that sections of the car park will gradually be opened up as construction develops, with a defined number of construction worker car parking spaces to be provided during construction. Managing the number of parking spaces available on-site would help ensure that the number of vehicles is controlled, and that sustainable transport options are promoted. It would be the responsibility of the Travel Plan Co-ordinator working closely with the Site Manager, to determine the amount of spaces to be provided.

16.6.5 Car parking at the Site would be monitored by the Travel Plan Co-ordinator, with restricted access. The Site Manager and the Travel Plan Co-ordinator will set the appropriate criteria for construction workers to receive a pre-allocated parking space.

Minibus

16.6.6 Contractors would be encouraged to provide minibuses for transporting their workers from the key points of construction worker origin to the Site. This would have the benefit of reducing the number of vehicular trips on the local road network. For example, many of the construction workers would find local accommodation at hotels and bed and breakfasts (B&Bs). They would be keen to minimise their daily travel costs and a minibus service would be an attractive means of transport to them. The locations of accommodation chosen by these workers could provide suitable pick up locations for the minibus. Minibus routes could also be set up to collect workers that live locally from central pick up points.

16.6.7 The contractor would encourage the use of common hotels and B&Bs by workers that are not from the local area, to encourage the use of shared transport modes such as minibus.

16.6.8 The contractor would be requested to provide minibuses and to organise where the minibuses will pick up workers and at what times.

Car Sharing

16.6.9 The contractor would be encouraged to set up and manage a car share scheme for their workers. In construction projects, car sharing is already popular amongst workers due to the financial and social benefits it provides. Indeed, it is expected that some of the workers, if not based locally, would be away from home for a specific length of time, welcoming the companionship of other colleagues.

16.6.10 In emergencies, the Travel Plan Co-ordinator would provide a guaranteed lift home for car sharers e.g. by use of taxi. The provision could be extended for emergency situations for staff that cycle to the Site.

Cycling

16.6.11 Although cycling to the Site is likely to have limited appeal due to carrying personal protective equipment (PPE) etc. and the distance to the Site from larger conurbations) secure parking for bicycles would be provided. Construction staff that cycle to work would also have access to shower and changing facilities and lockers to store clothing, cycle helmets etc.

Public Transport Information

16.6.12 Information about all available forms of public passenger transport including routes and destinations, service frequencies and locations of nearest bus stops shall be provided in an information pack and sent to construction workers prior to them starting work at the Site. Public transport information would also be displayed on the travel information boards. It will be the responsibility of the Travel Plan Co-ordinator to ensure that this information is kept up to date.

On-site storage

16.6.13 An on-site storage facility is usually provided by contractors. This facility would encourage construction workers to store their tools / PPE on-site. This would reduce the number of tools they would need to carry each day and would assist those workers who are considering cycling or car sharing as a potential travel mode.

Minimising the Impact on the Local Road Network

Staggered Working Hours

16.6.14 Working hours on major construction sites tend to be long, due to pressures of timescales and available light. Therefore, the arrival and departure of workers' vehicles tend to be spread over the peak periods, rather than all falling in the traditional peak hours, thereby minimising the impact on any particular time period.

Travel Plan Communication

16.6.15 Details of the sustainable transport options available for accessing the Site would be provided in an information pack and sent to construction workers, prior to them starting work at the Site. This will raise awareness of the

initiatives being implemented and also allow staff to register an interest in the schemes. The Contractor will be responsible for ensuring all construction workers receive the information pack prior to starting work on Site.

16.6.16 All construction workers will receive an introductory meeting on the travel plan when they commence work, incorporated into the Site safety briefing. It will include the provision of the following information:

- details of sustainable transport measures available for accessing the Site; and
- parking arrangements.

16.6.17 This would ensure that each construction worker is fully aware of the Travel Plan and measures contained within it.

16.7 Targets

Parking

16.7.1 Without management, construction industry standards suggest a typical vehicle occupancy of 1.35 which would result in 1,385 vehicles arriving and departing the Site per day at the peak of construction.

16.7.2 One of the prime objectives of an active CWTP is to set clear and realistic targets. The main target to be achieved during the construction phase of the Proposed Development is as follows:

- To achieve a car occupancy of 2.33 workers per vehicle over the duration of the construction project. Up until handover of the Proposed Development, no more than one car or van should be parked on Site for every two people registered on Site per day.

16.7.3 The Travel Plan Co-ordinator will monitor parking utilisation at the Site reviewing the split between cars, vans and minibuses. Ensuring that this target is met is dependent on the Contractor encouraging its workers to travel to and from the Site by the sustainable options provided in the final CWTP. If monitoring (see Section 8 below) finds that the target is not being met, this will result in the implementation of additional measures to ensure the CWTP stays on course to meet its overall objectives.

16.7.4 This target represents a 42% reduction in vehicles arriving at the Site when compared to the industry standard.

16.8 Monitoring and Review

General Measures

16.8.1 Monitoring the Construction Workers' Travel Plan will be central to ensuring its aims are delivered in practice. Monitoring guarantees that failures or changing conditions are identified at the earliest point and that remedial action (i.e. identifying additional measures, providing incentives, marketing campaign to promote the Construction Workers' Travel Plan) can be taken, to ensure that the Travel Plan stays on course to meet its overall objectives.

16.8.2 The Travel Plan Co-ordinator would be responsible for monitoring the Travel Plan, to ensure an efficient and effective execution of the measures, and to refine the measures, where necessary, to cope with the changes in demand over the construction phase.

16.8.3 An important part of the monitoring strategy would be obtaining feedback from construction workers, HE, RCBC and local residents regarding any issues with construction worker traffic. The appointment of a Travel Plan Co-ordinator will ensure that an appropriate point of contact is available and can react to such feedback.

16.8.4 Furthermore, construction workers will be given the chance to offer their suggestions and ideas via a suggestion box/an informal discussion with the Travel Plan Co-ordinator; while review meetings will be held at regular intervals to ensure any issues are dealt with effectively.

Parking

16.8.5 The Travel Plan Co-ordinator will monitor the total number of construction workers on-site and the number of parking spaces provided to ensure car occupancy targets are being met. It is anticipated that monitoring will be undertaken on one day per month throughout construction.