Appendix 8C: Construction Worker Travel Plan

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8C. Construction Worker Travel Plan

8C.1 Introduction

Introduction and Scope

8C.1.1 This Construction Worker Travel Plan (CWTP) has been prepared by AECOM on behalf of VPI Immingham LLP (VPI) and Phillips 66 to support the proposed post-combustion carbon capture (PCC) developments at VPI Immingham Combined Heat and Power (CHP) Plant and the Humber Refinery ('the Proposed Developments').

8C.1.2 The Proposed Developments will deliver 3.8 megatonnes per annum of abated carbon dioxide emissions via:

- PCC retrofit to two gas turbines (GT1 and GT2) and two auxiliary gas boilers at the VPI Immingham CHP Plant; and
- PCC retrofit to the Fluid Catalytic Cracker (FCC) stack at the Humber Refinery.

Progress of the Proposed Developments is subject to the necessary consents being granted and government policy/ funding support being in place to enable final investment decisions to be made.

8C.1.3 The Proposed Development Sites ('the Sites') are located to the north of the A160 between Eastfield Road and Rosper Road, near South Killingholme in North Lincolnshire. The locations of the Sites are shown in Figure 1.1 in ES Volume III.

8C.1.4 The CWTP is designed to promote and encourage the use of sustainable transport modes and reduce reliance on private car during the construction phases of the Proposed Developments which are expected to take up to four years.

8C.1.5 The Applicants realise that the success of the CWTP 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 CWTP sets out the aims, objectives and measures to promote sustainable travel to the Sites.

8C.1.6 This document should be used as a starting point to guide production of the final CWTP and demonstrate how targets defined in this CWTP can be achieved. The measures detailed within this report will be implemented by the site contractors.

8C.2 Background

Site Description

8C.2.1 As described above the Sites are located to the north of the A160 between Eastfield Road and Rosper Road, near South Killingholme in North Lincolnshire.

8C.2.2 For the Proposed P66 Development, staff access during construction and operation will be via the existing access points into the Refinery and associated car parking areas.

8C.2.3 For the Proposed VPI Development, staff access will be via the existing main entrance to the CHP Plant.

8C.2.4 The A160 provides onward connection to the A180 and A15 trunk roads which are part of National Highways' strategic road network.

Sustainable Accessibility

8C.2.5 The accessibility of the Sites has been reviewed with respect to opportunities for walking, cycling and availability of public transport.

Walking

8C.2.6 The Chartered Institute of Highways and Transportation (CIHT) document 'Providing for Journeys on Foot' (2000) suggests a maximum walking distance of 2km for journeys to work.

8C.2.7 Considering a 2 km walking catchment, there is limited ability for employees at the VPI Site to access it on foot. The nearest settlements to the VPI Site are South Killingholme and Immingham, both of which are outside of the 2 km range considered acceptable for walking to work. In terms of infrastructure, Rosper Road has footways on the east side of the carriageway, on the north side of Humber Road and on the south side of the A160. These footways are of an appropriate width, surface and are lit and therefore it is possible for those who would wish to travel to the site from South Killingholme on foot to do so.

8C.2.8 In terms of accessing the main development areas of Phillips 66 Site via Eastfield Road, both North Killingholme and South Killingholme are within a 2 km catchment of the Phillips 66 Site. There are good connections from Eastfield Road to South Killingholme in the form of a foot and cycle way on Staple Road, meaning that workers travelling to the Phillips 66 Site from this village could safely be encouraged to travel on foot. North Killingholme is accessed from the Phillips 66 Site via Eastfield Road which, north of the site access points, does not have continuous footways and no footways are present on much of the route between the Phillips 66 Site and the village.

Cycling

8C.2.9 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.

8C.2.10 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 are from the Sites includes Immingham, North Killingholme, South Killingholme, Ulceby, Habrough and Brocklesby.

8C.2.11 In terms of infrastructure, there is a shared foot and cycle way on the south side of the A160, a shared foot and cycle way on Staple Road between Eastfield Road and South Killingholme and a shared foot and cycle way on the A1077 between South Killingholme and Ulceby. A combination of these facilities as well as some sections of on-road cycling mean that both the VPI Site and the Phillips 66 Site are accessible by bicycle for those employees who wish to use those modes.

Public Transport

8C.2.12 The Chartered Institute of Highways and Transportation (CIHT) document, 'Guidelines for Public Transport in Development' recommends a maximum walking distance of 400 m to a bus stop.

8C.2.13 The nearest bus stops to the VPI Site are on Manby Road, just north of Immingham. These stops are served by the 455 service which operates Monday to Friday between Barton-upon-Humber and Cleethorpes and has three services per day. Within Immingham, there are bus stops on Pelham Road which are also served by the 5 service which is an hourly service between Immingham and Grimsby. Both of these stops are however outwith the recommended 400 m guidance.

8C.2.14 The nearest bus stops to the main development areas of the Phillips 66 Site off Eastfield Road are on School Road in South Killingholme which is approximately 700 m walk via the Staple Road shared foot and cycle way. This stop is served by the 455 service and the 510 service. The 510 service operates between East Halton, South Killingholme and Immingham and has two services per day, an inbound and an outbound service.

8C.2.15 The bus services and frequencies are summarised in Table 8C.1 below.

Table 8C.1. Bus Service Timetabling

Service	Stop	Route	Monday-Friday	Saturday
5	Pelham Road	Immingham to Grimsby	Hourly	Hourly
455	Manby Road & School Road	Barton-upon-Humber to Cleethorpes	3 services daily	3 services daily
510	School Road	East Halton to Immingham	2 services daily	No service

Source: bustimes.org

Rail

8C.2.16 The nearest rail stations to the Sites are located at Ulceby and Habrough. Ulceby station is located approximately 5.8 km from the VPI Site and 4 km from the Phillips 66 Site while Habrough is located approximately 6.5 km from the VPI Site and 4.7 km from the Phillips 66 Site. Both stations are served by the East Midlands Railway service between Barton-upon-Humber and Cleethorpes which operates every two hours in each direction. Habrough is also on the Transpennine Express line between Manchester Piccadilly and Cleethorpes which operates an hourly service in each direction.

8C.3 Proposed Developments

Development Descriptions

8C.3.1 The Proposed Developments will deliver 3.8 megatonnes per annum of abated carbon dioxide emissions via:

- PCC retrofit to two gas turbines (GT1 and GT2) and two auxiliary gas boilers at the VPI Immingham CHP Plant; and
- PCC retrofit to the Fluid Catalytic Cracker (FCC) stack at the Humber Refinery.

8C.3.2 Further information is available in Chapter 3: The Proposed Developments, Need and Alternatives (ES Volume I).

Project Timescales

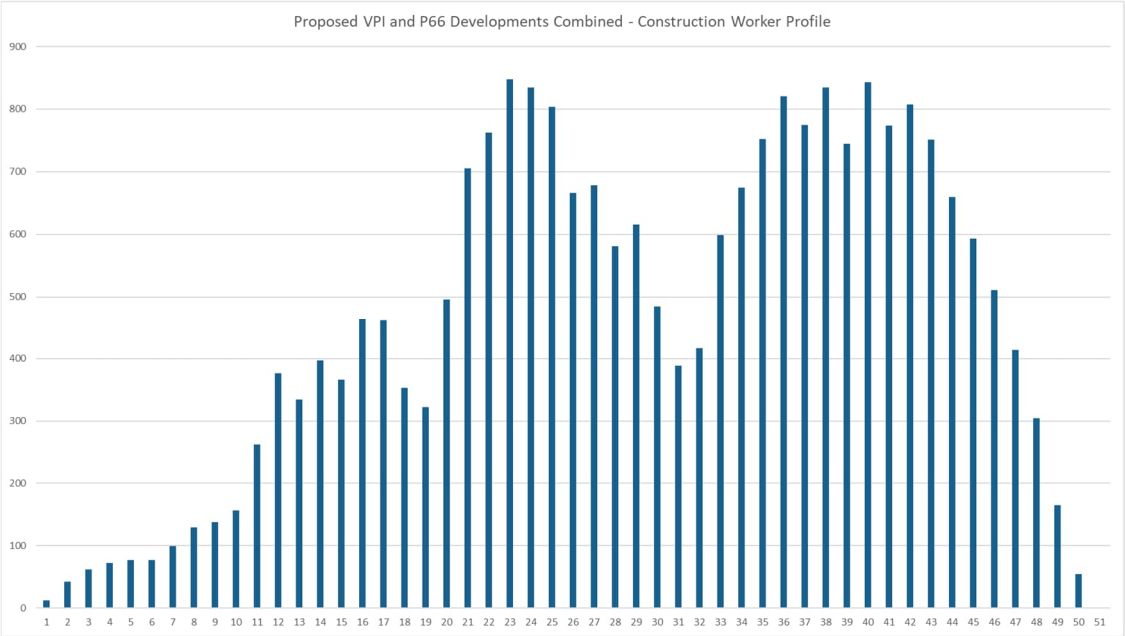
8C.3.3 Currently, it is anticipated that the construction of the Proposed VPI Development will begin in Q3 of 2024 while the Proposed Phillips 66 Development will begin in Q2 of 2024. Both Proposed Developments will be operational by late 2027/ early 2028.

8C.3.4 The assumed construction traffic activity has been based on information provided by the Applicants and covers both the expected level of HGV and staff traffic.

Construction Workers

8C.3.5 The anticipated worst case is that the construction workforce would peak across both the VPI Site and Phillips 66 Site during Month 23 which occurs in 2025 (see the Transport Assessment in Appendix 8A for details). The construction worker profile is shown in Plate 8C.2 below for the entirety of the construction programme.

Plate 8C.1. Construction Worker Profile



8C.3.6 The total construction staff expected on the Sites each day during the peak month (Month 23) is summarised in Table 8C.2 below.

Table 8C.2. Estimated Daily Construction Staff (During Peak Month 23)

Site	Total Construction Staff during Peak Month 23
VPI	57
Phillips 66	790
Cumulative Total	847

8C.3.7 The assumptions set out above and resulting expected traffic volumes 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 CWTP.

8C.3.8 Normal construction working hours for the Proposed Phillips 66 Development and Proposed VPI Development may be 24/7 as per the existing Humber Refinery and VPI Immingham CHP Plant operating and maintenance working hours.

8C.3.9

8C.3.10 In relation to traffic generation associated with construction workers, for robustness, the peak of the overall construction period for the two Proposed Developments has been considered. In Chapter 8: Traffic and Transport (ES Volume I) an assumption was made that workers would travel at a rate of 1 car per worker in order to ensure a robust assessment was undertaken. In all likelihood it would be expected that workers would travel to the Sites by other modes including car share and public transport, and these modes would be strongly encouraged through the development of the CWTP.

Car Parking Provision

8C.3.11 Demand for car parking would vary throughout the construction phases of the Proposed Developments however both the VPI Site and Phillips 66 Site are considered to have capacity to accommodate parking for construction workers.

8C.3.12 Car parking use will be monitored during construction and targets will be introduced to manage usage.

8C.4 Objectives

8C.4.1 The CWTP will act to reduce impacts on the environment by reducing the number of trips made to and from the Sites by private car during the construction phase. All staff during construction will 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.

8C.4.2 The CWTP will 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.

8C.4.3 The primary objectives 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 Sites; and
- minimise the impact of traffic on sensitive locations.

8C.5 Roles and Responsibilities

The Applicants

8C.5.1 The Applicants will be responsible for ensuring a condition of contract between them and their contractors is introduced to ensure compliance with the provisions set out in this CWTP.

The Travel Plan Co-ordinator

8C.5.2 The Travel Plan Co-ordinator has a key role to play in managing, monitoring and implementing the individual measures within the CWTP. The importance now placed on the Travel Plan process means that the Travel Plan Co-ordinator role is becoming increasingly important. Travel Plan Co-ordinators would be appointed by the Contractor for each of the Proposed Developments to manage and deliver the CWTP at each of the Sites. The Travel Plan Co-ordinators' details will be supplied to North Lincolnshire Council (NLC).

8C.5.3 The Travel Plan Co-ordinators will work closely with the Site Managers, who have overall responsibility for the Sites, and thus have the authority to introduce measures seeking to encourage sustainable travel to the Sites.

8C.5.4 The responsibilities of the Travel Plan Co-ordinators will include:

- encouraging the contractual obligations of contractors/ sub-contractors related to the CWTP 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 the Sites;
- acting as the key point of contact for issues related to construction traffic;
- undertaking a snap-shot parking survey on one day each 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 CWTP; and
- implementing additional measures if not delivering on targets set.

The Contractors

8C.5.5 The Contractor for each of the Proposed Developments will be responsible for managing how their workers travel to and from the Sites. The Contractors' responsibilities will primarily include:

- identifying a Travel Plan Co-ordinator for each of the Sites to oversee the management and delivery of the CWTP; and
- encouraging and promoting the use of sustainable transport measures included within the CWTP.

8C.6 Travel Plan Measures

General

8C.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 will 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.

Proposed Measures to Reduce the Level of Traffic

Car Parking

8C.6.2 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 Sites.

8C.6.3 It is proposed that sections of the car parks will gradually be opened up as construction develops, with a defined number of construction worker car parking spaces to be provided during construction of each of the Proposed Developments. Managing the number of parking spaces available on-site will help ensure that the number of vehicles is controlled, and that sustainable transport options are promoted. It will be the responsibility of the Travel Plan Co-ordinators working closely with the Site Managers, to determine the amount of spaces to be provided.

8C.6.4 Car parking at the Sites will be monitored by the Travel Plan Co-ordinators, with access managed. The Site Managers and the Travel Plan Co-ordinators will set the appropriate criteria for construction workers to receive a pre-allocated parking space.

Minibus

8C.6.5 Contractors will be encouraged to provide minibuses for transporting their workers from the key points of construction worker origin to the Sites. This will have the benefit of reducing the number of vehicular trips on the local road network. For example, many construction workers will likely find local accommodation at hotels and B&Bs. 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.

8C.6.6 The contractors will 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.

Car Sharing

8C.6.7 The contractors will 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.

8C.6.8 In emergencies, the Travel Plan Co-ordinators could 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 Sites.

Cycling

8C.6.9 Although cycling to the Sites is likely to have limited appeal due to the requirement to transport Personal Protective Equipment (PPE) along with potential long distances to the Sites from larger conurbations, secure parking for bicycles will be provided. Construction staff that cycle to work will also have access to shower and changing facilities and lockers to store clothing, cycle helmets etc.

Public Transportation Information

8C.6.10 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 Sites. Public transport information will also be displayed on the travel information boards. It will be the responsibility of the Travel Plan Co-ordinators to ensure that this information is kept up to date.

On-Site Storage

8C.6.11 An on-site storage facility is usually provided by contractors. This facility will encourage construction workers to store their tools/ PPE on-site. This will reduce the number of tools they need to carry each day and will assist those workers who are considering cycling or car sharing as a potential travel mode.

Minimising the Impact on the Local Road Network

Signage Strategy

8C.6.12 In order to ensure that construction vehicles unable to park on the Sites do not park on the public highway in the vicinity of the Sites, clear and appropriate signage will be required on Rosper Road and Eastfield Road. The signage will indicate no parking is permitted on the roads and the potential penalties for those who do.

Staggered Working Hours

8C.6.13 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 falling in the traditional peak hours, thereby minimising the impact on any particular time period.

Travel Plan Communication

8C.6.14 Details of the sustainable transport options available for accessing the Sites will be provided in an information pack and sent to construction workers, prior to them starting work at the Sites. This will raise awareness of the initiatives being implemented and also allow staff to register an interest in the schemes. The Contractors will be responsible for ensuring all construction workers receive the information pack prior to starting work on-site.

8C.6.15 All construction workers will receive an introductory meeting on the Travel Plan when they commence work, incorporated into the Sites' safety briefings. It will include the provision of the following information:

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

8C.6.16 This will ensure that each construction worker is fully aware of the CWTP and measures contained within it.

8C.7 Targets

8C.7.1 Although construction of the Proposed Developments will be temporary, it will be important to introduce various targets to assist with monitoring the CWTPs.

8C.7.2 Without management, construction industry standards suggest a typical vehicle occupancy of 1.35. Based on a daily total of 847 staff per day during the peak month (Month 23), this would result in 627 vehicles arriving and departing the Sites per day (e.g. 627 in and 627 out per day).

8C.7.3 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 Developments is as follows:

- To achieve a vehicle occupancy of 2 workers per vehicle over the duration of the construction project. Up until handover of the Proposed Developments, no more than one construction worker car or van should be parked on the Sites for every two people registered on the Sites per day.

8C.7.4 Based on a target vehicle occupancy of 2 workers per vehicle, this would equate to 424 vehicles arriving and departing the Sites per day (e.g. 424 in and 424 out per day). This target represents a 32% reduction in vehicles arriving / departing the Sites when compared to the industry standard.

8C.7.5 The Travel Plan Co-ordinators will monitor parking utilisation at the Sites reviewing the split between cars, vans and minibuses. Ensuring that this target is met is dependent on the Contractors encouraging their workers to travel to and from the Sites by the sustainable options provided in the final CWTP. If monitoring (see Section 8C.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.

8C.8 Monitoring and Review

General Measures

8C.8.1 Monitoring the CWTPs will be central to ensuring their 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 CWTPs) can be taken, to ensure that the CWTPs stays on course to meet its overall objectives.

8C.8.2 The Travel Plan Co-ordinators will be responsible for monitoring the CWTPs, 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.

8C.8.3 An important part of the monitoring strategy will be obtaining feedback from construction workers, National Highways, NLC and local residents regarding any issues with construction worker traffic. The appointment of a Travel Plan Co-ordinator for each of the Sites will ensure that appropriate points of contact are available and can react to such feedback.

8C.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-ordinators; while review meetings will be held at regular intervals to ensure any issues are dealt with effectively.

Parking

8C.8.5 The Travel Plan Co-ordinators 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.