Lighthouse Green Fuels Development Consent Order

Preliminary Environmental Information Report

Chapter 18 - Appendix 18d: Outline Construction Worker Travel Plan

Planning Inspectorate Reference: EN0110025

2nd December 2025

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1. Introduction

1.1 Document Purpose

1.1.1 This Appendix of the Preliminary Environmental Information Report (PEIR) sets out the Construction Worker Travel Pan (CWTP), prepared in support of the Traffic and Transport (T&T) assessment of the Proposed Development. It identifies the framework to promote and encourage the use of sustainable transport modes and reduce reliance on private vehicles during the construction of the Proposed Development.

1.1.2 The CWTP sets out the aims, objectives and measures to promote sustainable travel to the Site (in this Framework CWTP 'Site' refers to the respective construction compound and associated construction site.

1.1.3 This document should be read in conjunction with Traffic and Transport Chapter 18 (PEIR Volume 1).

1.2 Report Structure

This report contains the following:

- Section 2: Background;
- Section 3: Proposed Development Trip Generation;
- Section 4: Objectives;
- Section 5: Roles and Responsibilities;
- Section 6: Travel Plan Measures;
- Section 7: Targets; and
- Section 8: Monitoring and Review.

2. Background

2.1 Site Context

2.1.1 The Proposed Development Site covers a wide area located within the administrative boundaries of Stockton-on-Tees Borough Council (STBC) Billingham South Ward to the north and Redcar and Cleveland Borough Council (RCBC) South Bank Ward to the south of the River Tees.

2.1.2 The Main Site is located in the industrial area of Seal Sands, approximately 5km east of Billingham town centre and 4km north-east of Middlesbrough town centre in Teesside. It is on the north bank of the River Tees and roughly 3km south-west of Teesmouth. The Site is immediately bounded by the River Tees to the east and is surrounded by the Seal Sands industrial area.

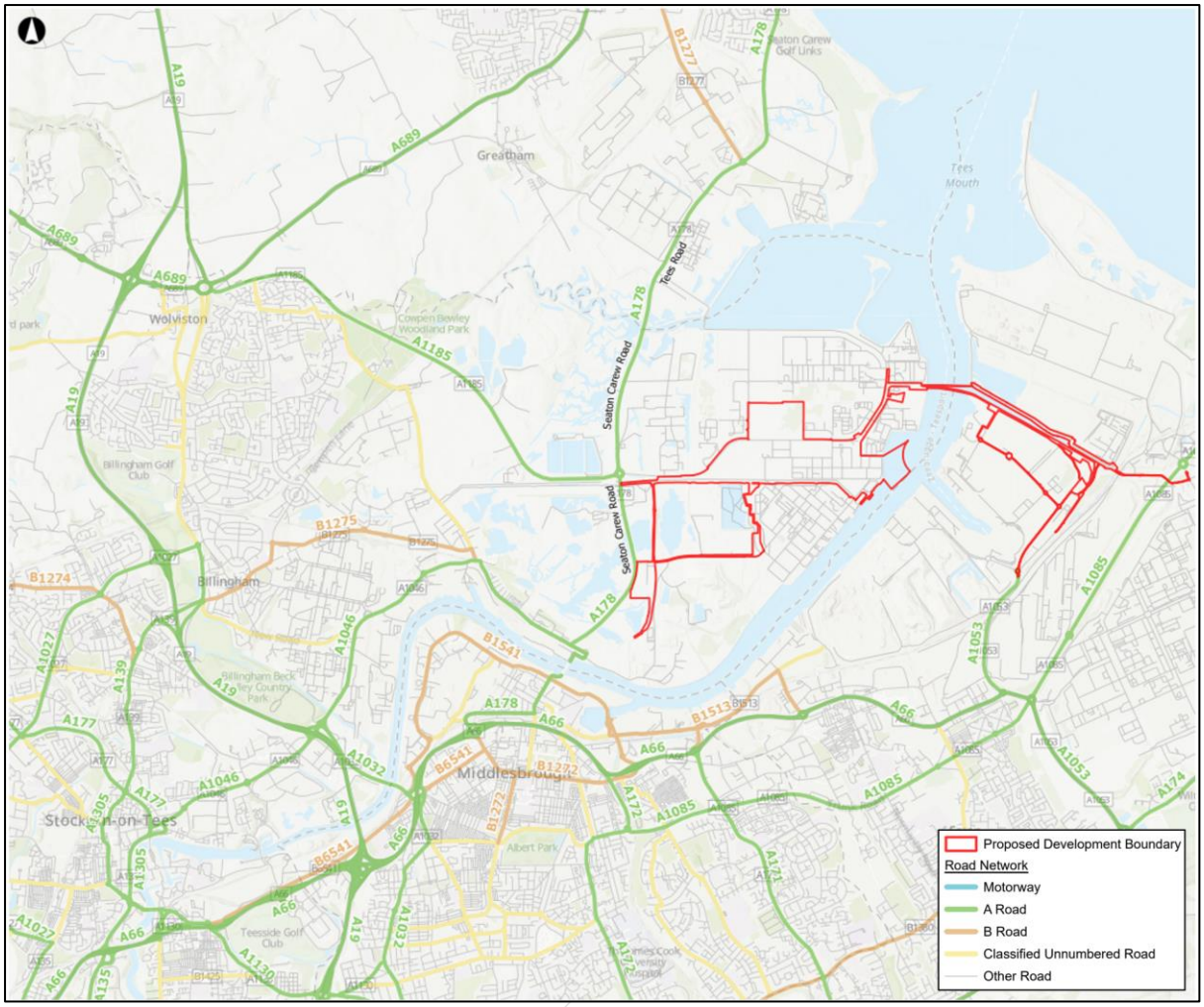
2.1.3 The Main site lies:

- To the south of Seal Sands Road;
- To the north of the operational Navigator Terminals North Tees rail terminal and the disused Tees Valley 1 and 2 waste to energy plants;
- To the east of the Tees Gas Processing Plant (TGPP);
- To the west of the Navigator North Tees bulk storage terminal;
- To the south of KD Pharma UK Ltd. and the Lianhetech chemical plant; and
- To the west and north of the Sembcorp pipeline corridor, which is also the route of the consented Northern Endurance Partnership CO2 Gathering Network corridor and the proposed H2Teesside hydrogen pipeline corridor.

2.1.4 The wider Site has several access corridors running to Port Clarence to the south, to Wilton and Dabholm Gut to the east, and to Lackenby to the south-east. These are:

- Construction vehicular access corridor from Wilton International North Gate off Steelhouse Gate Roundabout to the Dabholm Gut using the Sembcorp internal road network on the south bank of the Tees; and
- Construction vehicular access corridor from Tees Dock Road to Dabholm Gut on the South Bank of the Tees.

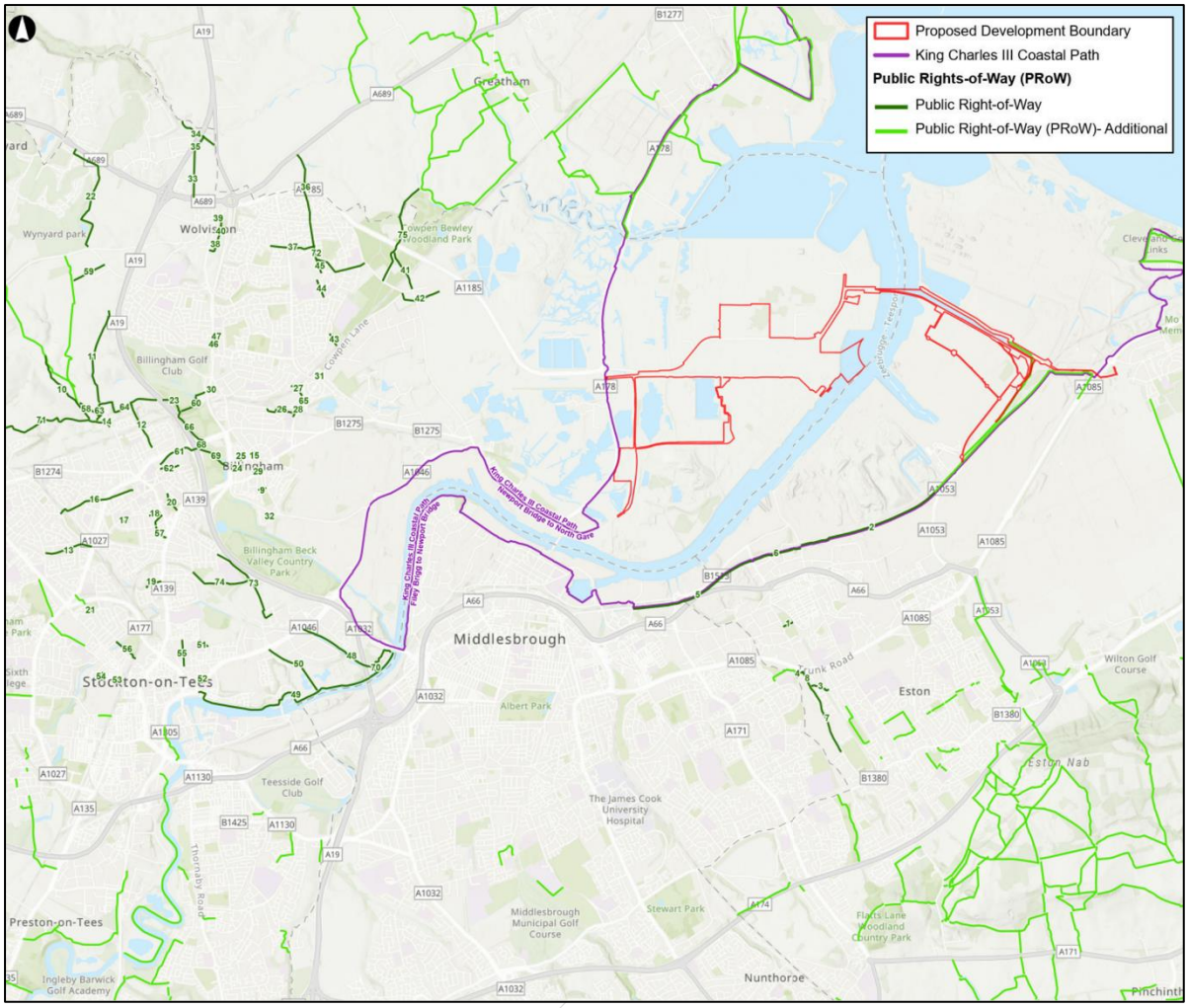
2.1.5 The location and extent of the Proposed Development is provided in Figure 1.1 (PEIR Volume 2) and shown indicatively in Inset 2-1.



Inset 2-1 Proposed Development Site Location and Traffic Study Area

2.2 Accessibility

2.2.1 The accessibility of the Proposed Development has been reviewed with respect to opportunities for walking, cycling and the availability of public transport. Inset 2-2 below shows the existing walking and cycling network in the local area.



Inset 2-2 Walking and Cycling Network

Walking

2.2.2 The document 'Providing for Journeys on Foot' from the Chartered Institution of Highways and Transportation (CIHT) (CIHT, 2000) recommends a maximum walking distance of 2km for commuting to work.

2.2.3 The potential for walking to and from the Main Site is limited, as the site is located in a heavy industrial area, and available walking routes do not readily connect to residential areas, which are more than 2km away. These routes within the 2km catchment extend partially north and south along Seaton Carew Road and northwest along the A1185.

2.2.4 The remaining 'A' roads to/from the Site (i.e. the A1185 and Seaton Carew Road links) do not currently feature any dedicated pedestrian or cycle infrastructure, which may impact accessibility of the site by foot and bicycle.

Cycling

2.2.5 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 5 miles (approximately 8km) is not uncommon.

2.2.6 In addition, the DfT Cycle Infrastructure Design Local Transport Note 1/20 (HM Government, 2020) states that:

> *"Recent growth of cycling recorded in central London and other towns and cities following programmes of investment have illustrated that there is significant potential for change in travel behaviour and that more people cycle for everyday journeys where acceptable conditions are provided. Two out of every three personal trips are less than five miles in length an achievable distance to cycle for most people, with many shorter journeys also suitable for walking. For schoolchildren the opportunities are even greater"*

2.2.7 The residential areas in the 8km catchment area include Billingham, the outskirts of Stockton-on-Tees, Greatham, Seaton Carew and the suburbs of Middlesbrough including Ayresome.

2.2.8 Within the vicinity of the Proposed Development there is limited cycling infrastructure. The Saltholme Cycle Path, accessible during RSPB Saltholme reserve opening hours, is located off Seaton Carew Road approximately 500m from the Main Site Access, providing a link to Port Clarence Road and the wider local cycle network in Middlesbrough and Stockton-on-Tees. Outside reserve opening hours, the nearest available cycle path is along Port Clarence Road, with direct access to the Site via the highway.

2.2.9 Given the industrial nature of the area, the potential for cycling may be reduced by the lack of dedicated cycleways.

Public Transport

2.2.10 The CIHT document, 'Guidelines for Public Transport in Development' (CIHT, 1999) recommends a maximum walking distance of 400m to a bus stop.

2.2.11 The nearest bus stops to the Main Site are situated on the A178, Seaton Carew Road, to the north of the A178, Seaton Carew Road/Huntsman Drive junction. Both the northbound and southbound bus stops are flagged by signage with the bus stop information displayed. Alternatively, the Community Fire Station stops are located approximately 250m south of the junction, also marked by signage.

2.2.12 In total there are 4 stops within the 400m walking catchment for a bus stop on Seaton Carew Road, serviced by the bus route 1 and operated by

Stagecoach.

2.2.13 Bus service 1 runs between via The Clarences, University Hospital of Hartlepool and Throston Grange, providing regular access to residential, industrial, and natural areas, including the RSPB Saltholme Reserve. This service operates seven days a week providing a half an hour service Monday to Saturday and an hourly service on Sunday. The first bus departs Middlesbrough and High Tunstall at 07:15. The last bus departs Middlesbrough at 18:52 and High Tunstall at 22:49.

2.2.14 The nearest bus stops to the Site south of the River Tees are the International East Gate stops on Wilton Common Lane, just off the A1085 Steelhouse Gate Roundabout. Alternatively, the International West Gate stops are available for access from the A1053 Tees Dock Road.

2.2.15 The stops are serviced by bus routes 62 and 64, which operate between Middlesbrough and Redcar, managed by Arriva North East. Routes 62 and 64 offer a half-hourly service from Monday to Friday. The first service departs from Middlesbrough at 06:38 for route 62 and at 06:50 for route 64, with the last buses leaving at 18:25 for route 62 and at 18:10 for route 64, respectively.

2.2.16 The bus services and service frequencies are summarised in Table 2-1 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 2-1 Bus Service Frequency

Service	Route	Daytime Frequency	
		Monday-Saturday	Sunday
1	Middlesbrough – Haverton Hill- Port Clarence – Hartlepool	2 buses per hour	1 bus per hour
62	Middlesbrough Bus Station, Stand 11 – Redcar Town Clock	2 buses per hour	No Sunday services
64	Middlesbrough – Grangetown	2 buses per hour	No Sunday services

Rail

2.2.17 The closest train stations to the Site are Middlesbrough Train Station and Billingham Train Station. Middlesbrough Train Station is over 3km from the Site. Access to the station would be via the Tees Transport Bridge but the bridge is closed indefinitely, and so access would instead be from the A178 via Haverton Hill Road. Billingham Train Station is over 5km from the Site.

Accessibility summary

2.2.18 From the above, it is considered that, although the Main Site is reasonably well connected by alternative modes of travel, given the working patterns and type of construction work, it is accepted that these are unlikely to represent a significant proportion of worker trips.

3. Proposed Development Trip Generation

3.1 Indicative Construction Programme

3.1.1 The duration of construction is anticipated to last 3 to 4 years. The construction programme is to be included in the Final Construction Worker Travel Plan (CWTP).

3.2 Construction Phase Site Worker Traffic Generation

3.2.1 This section summarises the construction worker trip generation. The assumed worst case is that the construction workforce would peak with a total of around 2,000 workers on site per day.

3.2.2 All traffic associated with construction is expected to use the Main Site access.

3.2.3 Census data (2021) and data form the Office of National Statistics (2023) shows that 23% of the workforce in the North East works in the construction industry. This portion of the construction staff will be based within the region and travel from home, with the remaining 77% of the workforce likely to be filled by transient workers who will travel from local accommodation within the region.

3.2.4 There will therefore be around 460 local workers travelling to Site. An average vehicle occupancy of 1 worker per vehicle has been assumed as a worst case, equating to 920 two-way vehicle trips per day across all activities.

3.2.5 From the remaining 1,540 transient workers, 80% (1,232 workers) of the staff will travel to site by private vehicle with an average vehicle occupancy of 2 workers per vehicle; in line with Net Zero Teesside Power (PINS ref: EN010103)

3.2.6 The remaining 20% of transient workers will travel to site via minibus, with an average occupancy of 7 workers per vehicle, requiring a total of 44 minibus trips, equating to 88 two-way trips.

3.2.7 In total, the construction phase is expected to generate around 2,000 two-way worker trips on the local highway network at the peak of construction (excluding HGVs). The stated vehicle occupancy of workers per car will be controlled though the CWTP. The Proposed Development will provide on-site parking space to accommodate construction traffic at the Main Site.

3.3 Construction Phase HGV Traffic Generation

3.3.1 The Outline Construction Traffic Management Plan (oCTMP) (PEIR

Appendix 18c oCTMP Volume 3) provides details on how the HGV traffic generated by the construction phase will be managed.

3.4 Access Proposals

3.4.1 Construction and operational access to the Main Site and associated utility connections in North Tees will be via Seal Sands Road which connects to the trunk road network via the A1185 and the A689/A19. This will account for most of the vehicular trips to Site.

3.4.2 In South Tees, construction access for utility connections only would be from the Wilton International North Gate located off the A1085 Steelhouse Gate Roundabout and then via the internal Sembcorp Road network to Dabholm Gut, or alternatively, via the A1053, Tees Dock Road.

4. Objectives

4.1.1 The aim of a CWTP is to reduce the number of trips made to and from the Proposed Development Site by private car during the construction phase, which in turn reduces congestion, and improves air quality. All workers during construction would be made aware of the measures included in the CWTP so that benefits can be delivered and the number of individual vehicle trips reduced by promoting car sharing, minibus use and public transport.

4.1.2 The Final 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 the provision of information identifying travel options and the necessary contact information.

4.1.3 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 Proposed Development Site; and
- Minimise the impact of traffic on sensitive locations.

5. Roles and Responsibilities

5.1 The Applicants

5.1.1 The Applicant's responsibilities will be as follows:

- Ensuring that contracts entered into with all Contractors working on site contain a requirement to develop and comply with the CWTP; and
- Appointing a CWTP Co-ordinator to deliver the Travel Plan.

5.2 The CWTP Co-ordinator

5.2.1 The CWTP Co-ordinator has a key role to play in managing, monitoring and implementing the individual measures within the CWTP. The CWTP Co-ordinator would be appointed by the Contractor(s) to manage and deliver the CWTP. The CWTP Co-ordinator's details would be supplied to Stockton-on-Tees Borough Council (STBC), Middlesbrough Council, Redcar and Cleveland Borough Council (RCBC) and National Highways.

5.2.2 The responsibilities of the CWTP Co-ordinator may include:

- Liaising with the overall Site manger to ensure that all workers are aware of the CWTP;
- Encouraging the contractual obligations of Contractors / sub-contractors related to the CWTP to be adhered to;
- Ensuring the CWTP notice board is located in a prominent position and that the information is kept up to date;
- Being based on site during construction;
- Acting as the key point of contact for issues related to construction traffic;
- Undertaking a snap-shot parking survey on a monthly basis to ensure car park occupancy targets are being met;
- Reviewing cycle parking provision on a regular basis;
- Engaging with local stakeholders;
- Monitoring performance against the targets of the CWTP; and
- Implementing additional measures if not delivering on targets set.

5.2.3 The CWTP Co-ordinator will 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.

5.3 Contractor(s)

5.3.1 The Contractor will be responsible for managing how its workers travel to and from the site and encouraging compliance to the CWTP. The main

responsibilities of the contractor will include:

- Encouraging and promoting the use of sustainable transport measures included within the CWTP; and
- Organising crew coaches or minibuses to transport workers to and from the Main Site, where appropriate, including pick up of workers from key locations within the local area.

6. Travel Plan Measures

6.1 General

6.1.1 To promote sustainable travel habits among construction personnel during the construction phase, it is essential to implement a suitable set of measures. This set of measures should primarily focus on reducing the amount of construction worker traffic and, where feasible, reducing the impact and disruption caused by the remaining traffic on the local road network.

6.2 Proposed Measures to Reduce the Level of Traffic

Working Hours

6.2.1 To minimise the impact from the construction workers traffic on the road network (during the weekday AM and PM peak periods, 08:00-09:00 and 17:00-18:00 respectively), working patterns shall be outside of these peak periods. Core construction working hours will be between 07:00 and 19:00 Monday to Friday (except bank holidays), Saturday 07:00 to 16:00 and Sunday 08:00 to 17:00. However, it is likely that some construction activities may need to be undertaken outside of these core working hours. This is principally because certain construction activities cannot be stopped, such as concrete pouring, but also potentially to manage the construction programme and ensure the completion of the works in line with the agreed timescales for commissioning.

Car Parking

6.2.2 The availability of car parking significantly influences the transportation choices individuals make for their journeys.

6.2.3 Effectively managing the number of parking spaces on-site will help control the volume of vehicles arriving to site and will help to promote sustainable transport options. The CWTP Co-ordinator, in collaboration with the Site Manager, will be responsible for determining the appropriate number of spaces to be allocated, thereby encouraging the use of sustainable modes (including private vehicle sharing) over single occupancy personal vehicles for workers travelling to site.

Minibuses and Coaches

6.2.4 The Contractor would be encouraged to provide minibus/coach services for transporting transient workers from key points near accommodations to the Main Site. This would have the benefit of reducing the number of vehicular

trips on the local road network. It is likely construction workers will be staying in local accommodation, and the provision of shared transport would be a preferable option for some.

6.2.5 The details of this will be developed in the Final CWTP once the location of workers is known and a suitable route can be determined, if deemed applicable by the Contractors.

Car sharing

6.2.6 The CWTP Co-ordinator would be encouraged set up and manage a car share scheme for their workers, with a target to ensure an average occupancy of 2 workers per vehicle.

6.2.7 In emergencies, the CWTP Co-ordinator would provide a lift home for car sharers, e.g. by use of taxi, and generally act as a point of contact for all workers as needed. The provision could be extended for emergency situations for staff that cycle to the Site.

Cycling

6.2.8 Cycling is likely to have limited appeal due to the limited cycling infrastructure in close proximity to the site and the potential need to carry bulky personal protective equipment (PPE). Construction staff that choose to cycle to work shall have access to shower and changing facilities and lockers to store clothing and cycle helmets at the Main Site Construction Compound. Lockable covered cycle stands, such as Sheffield style stands, will be provided to support those who may wish to cycle.

Public Transport Information

6.2.9 Information about all available forms of public passenger transport including routes and destinations, service frequencies and locations of nearest bus stops would be provided in an information pack (either a physical copy or electronically) 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 CWTP Co-ordinator to ensure that this information is kept up to date.

6.3 Minimising the Impact on the Local Road Network

CWTP Communication

6.3.1 Details of the sustainable transport options available for accessing the Site would be provided in an information pack (either a physical copy or electronically) and sent to construction workers, prior to them starting work at the Site. This will raise awareness of the measures being implemented,

as detailed above, and allow staff to register an interest in the schemes. The Contractors will be responsible for ensuring all construction workers receive the information pack (either a physical copy or electronically) prior to starting work on Site.

6.3.2 All construction workers will receive an introductory briefing on the CWTP 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 across the site.

6.3.3 This would ensure that each construction worker is fully aware of the CWTP and measures contained within it.

7. Targets

7.1 Parking

7.1.1 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 minimise single occupancy car use among workers over the duration of the construction phase, both local and transient workers will be encouraged to car share where possible to reduce the number of vehicles parking on site; and
- To ensure the number of vehicles on the local highway network does not exceed the worst-case traffic generation, the minimum number of parking spaces should be provided for both cars and minibuses, with priority given to car sharers.

7.1.2 The CWTP Co-ordinator will oversee parking utilisation at the compounds, analysing the distribution of vehicles among cars, vans, and minibuses. This role includes ensuring that the contractor promotes sustainable travel options for its workers commuting to and from the Site. Should the monitoring process (refer to Section 8) indicate that the targets are not being achieved, additional measures will be implemented to realign the CWTP with its overall target objectives.

8. Monitoring and Review

8.1 General Measures

8.1.1 Monitoring the CWTP 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 (such as identifying additional measures, providing incentives, or undertaking a marketing campaign to promote the CWTP) can be taken, to ensure that it stays on course to meet its overall objectives.

8.1.2 The CWTP Co-ordinator would be responsible for monitoring the Final CWTP(s), 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.

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

8.1.4 Furthermore, construction workers will be given the oportunity to offer their suggestions and ideas via a suggestion box or via an informal discussion with the CWTP Co-ordinator.

8.2 Remedial Measures

8.2.1 As part of the regular monitoring of car parking, should the target to achieve a car occupancy of two workers per vehicle over the duration of the construction project not be met, then further remedial action may be required. Further action could include:

- Focused campaigns to focus on changing behaviours and competitions to promote sustainable travel;
- Promotion of the car sharing scheme;
- Incentivised car sharing;
- A review of opportunities for Active Travel; and
- A review of any minibus service being provided to ensure that the routes used are the most efficient and to improve take-up.

8.2.2 The above measures will be kept under review by the CWTP Co-ordinator.

References

Ref 1 CIHT (1999). CIHT Planning for Public Transport in Developments. March 1999

Ref 2 CIHT (2000). Providing for Journeys on Foot.

Ref 3 HM Government (2020). Cycle infrastructure design (LTN 1/20)

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