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# Construction Environmental Management Plan

April 2022

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SeAH  
Monopile  
Facility

**Rev: 0**

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## 1.0 Purpose

This document is intended to set out the management measures that will be adopted during the construction of SeAH monopile facility.

In general, this Construction Environmental Management Plan (CEMP) sets out:

- An environmental management framework to which the Principal Contractor's management systems will apply;
- Environmental management and monitoring measures to be adopted and implemented throughout the construction phase;
- Responsibilities for implementation of management and monitoring measures during the construction phase;
- Traffic management and logistics policies to be adopted and monitored throughout the project lifecycle.

Measures set out in this CEMP are assumed to be adopted for the purposes of assessing likely environmental effects of this phase of the development.

The CEMP applies to all works within the boundary of the site and compliance with its content will be a mandatory requirement in all associated construction contracts.

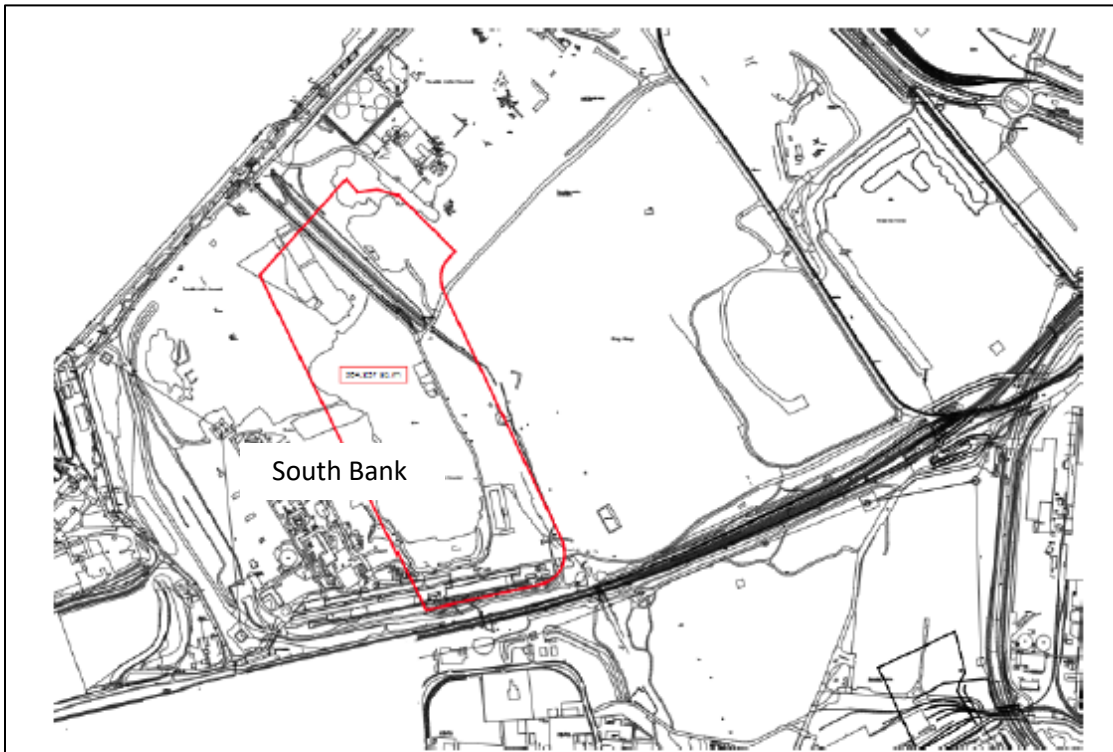
In response to the anticipated requirements of the planning conditions, this plan will address the following issues:

- Noise;
- Vibration;
- Dust;
- Smoke;
- Emissions;
- Scope of enabling and construction works;
- Contact arrangements;
- Routing of site traffic;
- Waste Storage, Separation and Disposal;
- Site security.

Section 1 outlines the location of the site and the scope of the project. Section 2 outlines the Principal Contractor's responsibilities, section 3 describes procedures for managing the site, and section 4 contains the Traffic Management Plan. Sections 5 and 6 describe the construction phases, and finally section 7 outlines the programme.

## 1.1 Site Location

The Site is located at South Bank of Teesworks industrial zone in Redcar. (Redcar Gate, Trunk Road, Redcar, TS10 5QW). South Bank is the western most point of Teesworks. Sitting on the banks of the River Tees, the zone can accommodate 4,500,000ft<sup>2</sup> for manufacturing, logistics and distribution. As a world-class facility there's also the potential for an additional 500,000ft<sup>2</sup>, offering ample space for growing businesses and expanding enterprises.



**Figure 1:** Site location plan (site boundary denoted by red line).

## 1.2 Proposed Development

SeAH Wind are to build a new monopile facility in the UK. This will be their first such facility and will be the first monopile manufacturing facility in the UK. The monopiles will be used in the offshore wind industry and provide the supports that are driven into the seabed. The facility will produce monopiles up to 120m long, 15.5m in diameter weighing 3000tons. The facility will be located on the new freeport near Middlesbrough in the North-East of the UK.

### 1.3 Description of works

The scope of the project will involve the following:

- Enabling works
  - Temporary works to enable access;
  - Temporary works to enable E&M services
- Piling work & RC work
  - Piling work with RC Foundation work
- Superstructure : Steel structure
  - Main facility building with ancillary buildings
- RC work
  - RC Slab at ground level
- External Finishes : Cladding
  - Colour metal sheets, Aluminum panels, Curtainwalling, Brise soleil, Skylights
- Internal Finishes & Commissioning
  - Paint, Glazing, Tiling, Timber panelling
- External Works

## 2.0 Responsibilities

Upon appointment, the Principal Contractor shall:

- Be responsible for the site environment and adhere to the obligations and recommendations set out in this Plan whilst also placing the same responsibility on all trade contractors through pre-start meetings and the approval of their detailed method statements and risk assessments. The Principal Contractor's site-based construction manager will be the key person contactable for onsite related issues.
- Ensure management systems comply with this Plan.
- Provide the Local Authority with information of key personnel.
- Ensure that they, and their trade contractors, provide and maintain tools, plant and equipment that are fit for purpose and without risks to health, safety and the environment.
- Obtain all necessary permits and licenses from regulatory bodies. Based on the Master Development Programme in Appendix A, information on the nature and timing of all key site activities will be provided by the Principal Contractor to Local Planning Authorities, the emergency services and other Statutory bodies as required.
- Ensure a safe place of work at all times with safe means of access and egress from the place of work.
- Ensure safe handling, transporting and storage of articles and substances that will be incorporated into the works, or used on the project.
- Only utilize competent employees and trade contractors who are trained and deemed competent in the safe working practices for the work they undertake. Appropriate levels of supervision will also be maintained.
- Provide adequate resources to ensure the health, safety and environmental objectives for the project are met in full.

- 
- Provide all persons on the project with information on the risks to health, safety and environment and the safe working practices to be implemented, to eliminate or reduce those risks to acceptable levels.
  - Ensure the health and safety of operatives, members of the public and others who come onto site or come into contact with the Principal Contractor's work activities.
  - Carry out all works without undue inconvenience and nuisance to members of the public and surrounding residents.
  - Ensure adequate welfare facilities are available throughout the project in compliance with CDM regulations.
  - Monitor work activities to ensure health and safety standards and objectives are being achieved and maintained by all involved with the project.
  - Co-operate with the Principal Designer, and trade contractors to ensure the highest standards of health and safety are achieved.
  - Comply fully with all duties under the Construction Design and Management Regulations (2015) and other relevant health and safety and environmental legislation.



## 3.0 Management Environmental Procedures & Controls

### 3.1 Environmental Incident Procedure

The Principal Contractor will establish and implement an environmental incident procedure as part of their Emergency Plan combined with their management systems on site. This procedure will be designed to respond to anticipated environmental hazards and risks on site and will include emergency control measures considering the Environment Agency's Pollution Prevention guideline, General Guide to the Prevention of Pollution and Pollution Incident Response Planning.

The environmental procedure will include:

- An environmental incident / pollution reporting and response plan;
- Measures to mitigate the adverse effects of an environmental incident;
- 24-hour emergency contact details and method of notifying emergency services, Local Authorities, Environmental Agency, other statutory authorities and key personnel;
- Measures to be adopted to investigate and prevent the recurrence of an environmental incident.

### 3.2 Good Housekeeping

The Principal Contractor will ensure that the site is kept in good order at all times, including the maintenance of all entrances and hoardings, clear directional signage and ensuring the immediate route to and from the site is kept clean from any debris.

#### 3.2.1 Project administration and Welfare Facilities

The guidance set out by the HSE 'Provision of welfare facilities during construction work' are to be followed as a basic minimum standard. However, where practicable the Workplace (HS&W) Regulations 1992 specifying the requirements for temporary facilities for the Works normally comprising of a suitably sized canteen, changing room, drying room and toilets will be followed.

The site accommodation will be selected to provide suitable changing, welfare and dining facilities to cater for the numbers of personnel expected on site.

Temporary services, water and power, will be used as required for the welfare facilities. Applications for temporary supplies will be completed prior to ground works starting and installed during the enabling works phase.

Appropriate level of telephone and broadband communications will be installed to the site offices.

#### 3.2.2 Site Security

The site will be made secure via the fitting of appropriate locks to the external entry points. All access gates will be securely locked out of hours. The site will also be monitored and recorded by CCTV cameras strategically located around the perimeter of the site paying attention to site and building entrances and exits.

In addition, it will be recommended that valuable items and power tools should be securely stored in site strong boxes or storage containers. Site boundaries will be secured when not in use and potentially hazardous materials will be safely secured e.g. fuel outlets will be locked, plant and equipment will be immobilized overnight.

### **3.2.3 General good housekeeping measure**

Measures to ensure the site is safe, secure and presentable at all times will include but will not be limited to the following:

- Clear access routes with appropriate signage;
- Segregation and regular removal of waste including food stuffs;
- Keeping the site tidy and clean;
- Inspecting hoarding frequently, repair as necessary;
- Visual inspections of plant, equipment and material storage areas for leaks and spills;
- Toilet, changing and drying facilities will be kept clean;
- Open fires will be prohibited at all times;

### **3.2.4 Hoarding and fencing**

Hoarding will be used to separate all construction works from general access. The extent and height of hoarding or fencing at a particular location will be selected to maintain effective security and achieve visual screening typically in line with the boundary plan (see Appendix B).

Hoarding will be maintained in good condition at all times and any unofficial advertising / graffiti will be removed as soon as possible.

### **3.2.5 Monitoring**

Regular recorded site inspections will be undertaken by the site manager which will include a review of housekeeping practices on site.

### 3.3 Transport & Traffic Management

A Traffic Management Plan has been developed setting out the methods of control, application and monitoring of construction site traffic. This can be found in section 4.

### 3.4 Air quality

Air quality effects will be controlled through the selection of appropriate plant and machinery, careful planning of works and effective site management. Planning of works will take into consideration local topography, prevailing wind patterns and local sensitive receptors.

Referring to visible dust, it is imperative to prevent statutory nuisance arising from the demolition, construction works or dusty activities. Therefore a philosophy of the prevention of dust formation in the first place shall be adopted. Dealing with dust should be in the following fashion:

1. Prevention
2. Suppression
3. Containment

These three principles are well established and are central to the control strategies to control dust. They follow a hierarchy to control the emissions.

Method statements shall identify all the dusty operations and establish the best available techniques that are required to control dust emissions.

The main principles for preventing dust emissions are containment of dusty processes and suppression of dust using water or proprietary suppressants. Suppression techniques need to be properly designed, used and maintained, in order to be effective.

#### 3.4.1 Plant and vehicles

- All loaded vehicles leaving site with the potential to cause dust will be sheeted.
- Vehicles will not be overloaded.
- All site vehicle engines, generators or site plant engines will be switched off when not in use.
- Plant and equipment will be kept in good repair and regularly maintained in accordance with the manufacturer's specifications.
- Plant and equipment maintenance records will be kept on site for the duration of the works.

#### 3.4.2 Materials handling and storage

- All materials and plant will be sited away from sensitive receptors.
- Tipping height of potentially dust generating materials will be minimized.
- Where possible all deliveries will be taken within the confines of the site
- Materials will be stored in an organized area away from the main routes of escape

### 3.4.3 Demolition and crushing (Pile head)

- During demolition activities, water will be used for the suppression of dust.
- Skips and loose materials will be covered / secured prior to leaving site.
- Demolition material will be segregated and stockpiled on site and removed regularly to avoid large quantities being stored.

### 3.4.4 Concrete work

- Large quantities of concrete, mortar or similar process where possible will be ready mixed and stored in enclosed / shielded areas to prevent the escape of dust.
- After concrete pours, the surface of the concrete will be kept free of dust and mud until cured.

### 3.4.5 Smoke and odours

Measures will be taken to avoid causing nuisance from smoke, odours, dust and other air emissions including the following:

- Burning of materials / fires are completely banned on site.
- Vehicles and plant will be maintained in accordance with manufacturer's guidance.
- Waste will be managed and will be removed from site on a regular basis to avoid excessive accumulation.
- The citing of activities with the potential to emit aerosols, fumes, odours and / or smoke including refueling and site ablution, will take account of prevailing wind and will avoid where practicable the transmission to locations of sensitive receptors.

### 3.4.6 Monitoring

Beyond the measures to prevent, control and mitigate the factors affecting air quality, monitoring will be carried out to include regular visual inspections of dust levels undertaken particularly during dry periods and action to reduce levels where necessary.

Where there is evidence of airborne dust from the building construction/demolition activities the site, the contractor should make their own inspection and assessment, and where necessary undertake ambient monitoring with the aim of identifying those process operations giving rise to the dust. Once the source of the emission is known, corrective action should be taken without delay.

## 3.5 Noise

### 3.5.1 General measures

Measures will be identified and employed to reduce the noise and vibration arising from the works. The Client is aware of their responsibilities under the Control of Pollution Act and the Environmental Protection Act. Specific measures will include:

- Selection of construction methods and programme timing to minimize noise and vibration at sensitive receptors;
- Selection of routes and programming for the transport of construction materials, spoil and personnel to minimize noise and vibration at sensitive receptors;
- The design and construction of temporary infrastructure to minimize noise and vibration.

Only plant conforming to relevant national & international standards, directives and recommendations on noise and vibration emissions will be permitted for use.

Plant or equipment liable to create noise or vibration will be located away from sensitive receptors or will be controlled by the use of lined and sealed acoustic covers or enclosures.

Any covers or enclosures necessary will remain in place whilst the relevant noise generating equipment is in use.

### 3.5.2 Working hours

Works at the site can take place 24 hours a day and 7 days a week as per the planning condition 20 to our outline planning permission ref. no. R/2020/0357/OOM.

### 3.5.3 Monitoring

The effect will be mitigated by the process of prevention where possible for each activity. If this is not possible then the selection of appropriate plant, techniques and where necessary the use noise baffling barriers will be used. The Principal Contractor will carry out weekly assessment of noise conditions at selected positions across the site layout and a log of results to be filed.

## 3.6 Water

### 3.6.1 Consents

Where discharges are required to controlled waters or sewers, consent will be obtained from the EA or the statutory sewerage undertaker as applicable.

Temporary and permanent potable water connections will be applied for to the local water authority to obtain consent prior to the works taken place. Connections will be carried out in line with the guidance set by the water authority.

Temporary and permanent foul and surface water connections will be applied for and agreed with the local sewer authority prior to the works taking place.

### 3.6.2 Site drainage

Site drainage requiring discharge into sewers will be in accordance with relevant permissions obtained from the sewerage or statutory authority.

It is not expected that any discharge to watercourses will occur but if it becomes necessary, they will only be permitted where discharge consent or other relevant approval has been obtained.

Site drainage will meet the effluent standards required by the sewerage undertaker or EA.

Design of the schemes permanent drainage system is not yet complete; however, the drainage works will be carried out in the early stages of the construction phase in order to avoid the need for temporary connections.

### 3.6.3 Pollution control

- All potentially polluting substances will be stored on impermeable surfaces with controlled drainage or at least 10m away from storm water sewers, grids, channels, watercourses and ditches.
- All fuel, chemicals and oils will be stored within bunded areas.
- All tank discharge pipes, valves and trigger guns will be contained securely within the bund when not in use.
- Bowsers will be stored within secure areas when not in use to protect against theft or vandalism.
- Leaking or empty drums will be removed and stored in a suitably bunded area separating from other drums prior to disposal by an appropriate licensed waste disposal contractor.
- All hazardous substances on site will be controlled in accordance with COSHH Regulations (2004).
- Refueling of plant and machinery will take place on concrete hard standing with controlled drainage.
- Spill kits will be held on site with a variety of absorbent materials to be used in the event of a spill of fuel, oil or chemicals.

### 3.6.4 Managing run off and silty water

- Where periods of prolonged or heavy rainfall are forecast, appropriate additional measures will be taken to control surface run off and move potentially polluting activities out of the areas susceptible to flood risk.

### 3.6.5 Monitoring

- All discharges will be monitored in accordance with the consents held.
- The volume of water use will be monitored during construction.

## 3.7 Waste

### 3.7.1 Plan

In order to minimize the generation of waste and waste disposed to landfill, all waste will be managed in accordance with the waste hierarchy and relevant regulatory controls.

Measures to reduce excessive quantities of material storage on site will include adopting a just in time approach to material deliveries.

A comprehensive Site Waste Management Plan (SWMP) has been developed by the Principal Contractor adopting best practice procedures in as many areas as possible. The SWMP will be updated as the project progresses capturing any changes that may result in differing waste streams and quantities. The SWMP provides a structure for waste disposal at all stages of the construction project. It helps to identify: Who will be responsible; What type of waste will be generated; How the waste will be managed, reduced, reused or recycled; How the quantity of waste generated from the project will be measured.

The SWMP and its contents are a statement of intent to implement good practice throughout the project cycle.

### 3.7.2 Material selection

During procurement, pro-active buying schemes (including group purchasing agreements) for materials will be sought to minimize packaging and waste wrapping of products. The buyer shall ensure accurate scheduling and ordering of materials in order to minimize waste through over ordering.

### 3.7.3 Waste Management

Compliance with all aspects of the Duty of Care (Environmental Protection Act 1990) will be achieved during construction in order to protect the interests and safety of others from the potential effects of handling, storing, transporting and disposing of materials and wastes arising from the works.

Disposal of waste from site will be carried out by a licensed wastecarrier.

All non-hazardous waste leaving site will be accompanied by a waste transfer note.

Copies of waste transfer notes for non-hazardous wastes will be kept for a minimum of 2 years.

If waste is to be deposited, kept or treated on the site, a Waste Management License or an exemption will be obtained.

Copies of documentation for the transport of hazardous waste will be kept for 5 years.

### 3.7.4 Storage of soil, materials and waste

Waste storage will be clearly labelled and segregated on site.

Measures will be taken to ensure that wastes cannot be blown away.

Good housekeeping measures will be followed to protect materials being stored.

The burning of waste on site is not permitted in any circumstances.

Site management will ensure that materials are not delivered to site too early and are not exposed to damage from weather or poor storage. Off cuts will be reused where possible (i.e. timber off cuts greater than 300mm in length could be used as noggins or packers).

### 3.7.5 Monitoring

Materials and waste taken off site will be measured and monitored and be the responsibility of the site manager.

As a minimum, the following waste management data will be provided:

- Quantity of materials and waste removed from site by type in volume and weight.
- Where the materials and waste are taken to.
- Waste transfer notes.
- Hazardous waste consignment notes.



The site manager will record and report the waste figures every month as part of the monthly management meetings.

### 3.9 Consultation

The Principal Contractor shall keep neighbors and others informed about unavoidable disturbance such as from noise, dust, or disruption of traffic. Clear information shall be given well in advance and in writing.

A Contact Board shall be displayed prominently; this is to ensure that problems can be rectified quickly, and that neighbors can channel their questions and complaints to a member of staff who has the authority to take action.

All Contact Boards shall include the following materials:

- The title 'Contact Board';
- Name of the Principal Contractor, address and person to whom correspondence should be addressed;
- Name of the site manager;
- Month and year of completion of works;
- Names and telephone numbers of staff who can take immediate action, so that contact can be made at any time.

Occupiers in the vicinity who may be affected by noise from these works shall be notified of the nature of the works, a contact name, telephone number (including that to be used outside normal working hours), and address to which any enquiries should be directed. Such notification shall take place, where possible within, 2 weeks but, in any event, at least a week prior to the works commencing.

Should noise/vibration/dust complaints arise from the building construction/building works, these complaints must be recorded in a complaint's register and made available to the Local Authority, if requested. The complaint register shall provide information on day, time, details of complaint, details of monitoring carried out and any additional mitigation works.

### 3.10 Considerate Constructors

The Principal Contractor shall register the site with the **Considerate Constructors Scheme [8]**, and will adhere to the code which is in 5 parts:

- Care about appearance;
- Respect the community;
- Protect the environment;
- Secure everyone's safety;
- Value their workforce.

## 4.0 Traffic Management Plan

### 4.1 Construction Traffic Routing

#### 4.1.1 Regional Routing

Site delivery vehicles will be instructed to approach the site using major trunk roads/motorways including the A66 and A174. (fig 4):

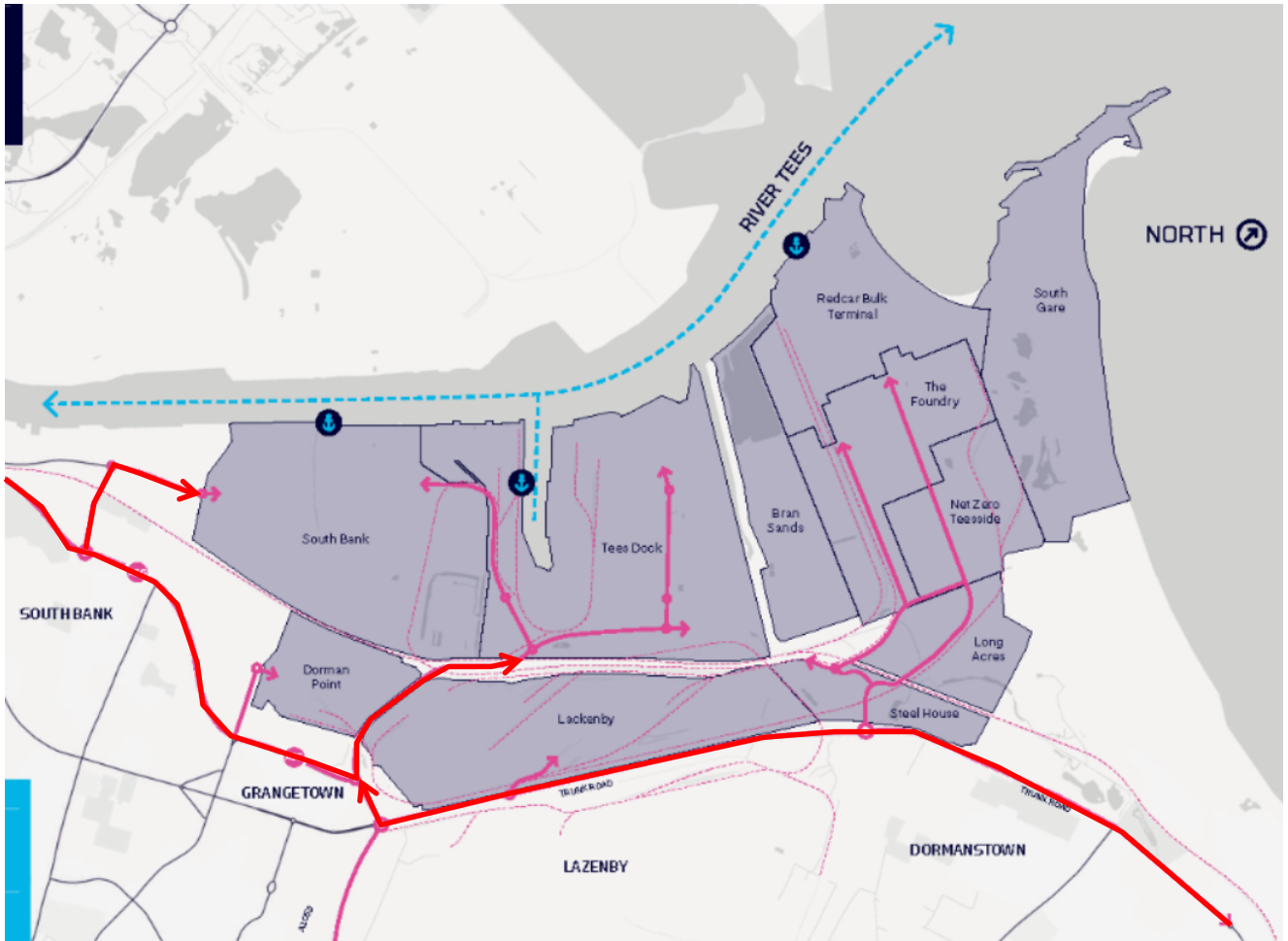
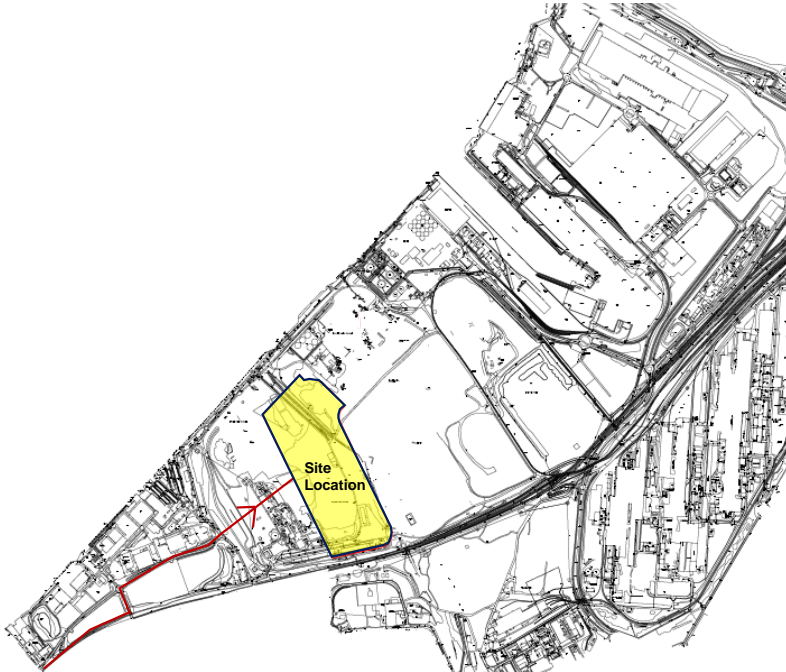


Figure 4: Regional routing to site.

#### 4.1.2 Local Approach to Site

As fig 5, all construction traffic will gain access to the site travelling along the A66 and turning into Old Station Rd, Dockside Rd. Old Station Rd is followed as it becomes Dockside Rd. Access to the site is found on the end of Dockside Rd.



**Figure 5:** Local routing to site.

An example of the proposed hoarding/fencing arrangement can be seen in fig 6 which is from another project.



**Figure 6:** Proposed hoarding and fencing

### 4.1.3 Delivery Management

All deliveries to site will be pre-booked with the dedicated logistics manager in advance. By using a pre-booked delivery system, the quantity of site traffic arriving at the same time shall be minimized.

All delivery vehicles will also be required to contact site 30 minutes before reaching the site. This will allow the gate staff to prepare and assess any traffic congestion on site.

To minimize traffic within the site vicinity and respecting the contents of TRO-11-20 issued by Redcar & Cleveland Borough council deliveries will be planned as far as is possible during the following times:

- Mondays to Fridays 07:30-23:00.
- Saturday 07:30-21:00.
- And at no time Sundays and Bank or Public Holidays.

Details of these preferred hours will be clearly provided with all sub-contract and materials orders and clear directions will be provided to all delivery drivers.

Vehicles will reverse onto site to unload and leave in a forward direction; a dedicated traffic marshal will be provided during reversing manoeuvres on site, and to assist entering and existing site safely.

It is a requirement for all vehicles and driver management practices to comply with the FORS Silver and Construction Logistics and Community Safety (CLOCS) standards.

### 4.2 Construction Vehicle Parking/Staff Travel Plan

Since public transportation is unable to reach the site due to its location, manpower will be transported by bus between the site and nearby station (Middlesbrough Station). The bus will be utilized by half of daily workforce, while the personal automobile will be used by the remaining half. Parking for private vehicles will be in specified zones. During the site induction process, which all workers on site will undergo before starting work, the local parking arrangements and enforcement will be clearly explained.

## 5.0 Construction Phase Management

### 5.1 Scope

SeAH Wind are to build a new monopile facility in the UK. This will be their first such facility and will be the first monopile manufacturing facility in the UK. The monopiles will be used in the offshore wind industry and provide the supports that are driven into the seabed. The facility will produce monopiles up to 120m long, 15.5m in diameter weighing 3000tons. The facility will be located on the new freeport near Middlesbrough in the North-East of the UK.

The Principal Contractor will be required to fully assess the risks associated with the works prior to commencement and prepare appropriate written statements stating the method of works and measures to be implemented to protect the public and the site workforce.

### 5.2 Site Set Up

The logistics plan during the works is shown in Appendix A. The key points are:

- A logistics compound will be formed in Southbank to where materials will be delivered as a detailed above.
- Hoarding with lockable gates to prevent public access to the site will be installed.
- Hoarding with locked gates will be installed to prevent unauthorized entry to the site. Site welfare (canteen, changing rooms, lockers, WCs etc.) is located at Office zone.

Hoarding and scaffolding licenses will be applied for by the Principle Contractor where required.

### 5.3 Sequence of Works

The sequence of works has been estimated as follows:

- Site Clearance according to designed ground level
- piling work
- Foundation for Steel Structure Column
- Roof Steel Structure
- Roof Cladding
- RC Slab casting at ground level

Please see programme attached as Appendix A



### 5.4 Site Management

The works will be supervised always by a competent person with appropriate experience and training. As a minimum that person will have **SMSTS certification** and there will always be a qualified 1<sup>st</sup> aider on site. All operatives attending site will possess as a minimum a trade specific CSCScard.

### 5.5 Anticipated Plant & Equipment

Consideration has been given to the type of plant that is likely to be used during the construction works. The anticipated vehicle type and use, as well as the anticipated plant and equipment associated with the construction process are set out in the tables below.

Monthly Heavy equipment Plan				2022					
				Jul +1 Month	Aug +2 Month	Sep +3 Month	Oct +4 Month	Nov +5 Month	Dec +6 Month
Total Number of Equipment	Daily stationed heavy equipment on site	Pile Rig	Daily	2.0	7.0	10.5	11.0	11.0	10.0
		Crane	Daily	2.0	7.0	10.5	11.0	14.0	16.0
		Boom Lift	Daily	-	-	-	-	4.0	8.0
		Cissor Lift	Daily	-	-	-	-	2.0	4.0
		Excavator	Daily	6.0	21.0	31.5	33.0	33.0	30.0
		Dump Truck	Daily	1.0	2.0	4.0	5.0	6.0	3.0
		Concrete Truck	Daily	2.0	6.0	14.0	17.0	19.0	9.0
		Trailer(Material)	Daily	1.0	1.0	1.0	1.0	3.0	4.0
	<b>Total</b>	<b>Sum</b>	<b>14.0</b>	<b>44.0</b>	<b>71.5</b>	<b>78.0</b>	<b>92.0</b>	<b>84.0</b>	
	Number of access vehicle	HGV	Daily	4.0	13.0	25.0	30.0	34.0	23.0
LGV		Daily	10.0	23.0	32.0	35.0	42.0	38.0	
<b>Total</b>		<b>Sum</b>	<b>14.0</b>	<b>36.0</b>	<b>57.0</b>	<b>65.0</b>	<b>76.0</b>	<b>61.0</b>	

Monthly Heavy equipment Plan				20					
				Jan +7 Month	Feb +8 Month	Mar +9 Month	Apr +10 Month	May +11 Month	Jun +12 Month
Total Number of Equipment	Daily stationed heavy equipment on site	Pile Rig	Daily	10.0	9.0	9.0	1.0	-	-
		Crane	Daily	16.0	20.0	20.0	12.0	14.0	16.0
		Boom Lift	Daily	8.0	14.0	14.0	17.0	21.0	23.0
		Cissor Lift	Daily	4.0	6.0	10.0	16.0	18.0	18.0
		Excavator	Daily	30.0	27.0	27.0	6.0	3.0	3.0
		Dump Truck	Daily	5.0	5.0	4.0	3.0	2.0	3.0
		Concrete Truck	Daily	17.0	16.0	13.0	10.0	6.0	10.0
		Trailer(Material)	Daily	5.0	6.0	6.0	6.0	7.0	8.0
	<b>Total</b>	<b>Sum</b>	<b>95.0</b>	<b>103.0</b>	<b>103.0</b>	<b>71.0</b>	<b>71.0</b>	<b>81.0</b>	
	Number of access vehicle	HGV	Daily	35.0	37.0	34.0	30.0	28.0	35.0
LGV		Daily	50.0	56.0	59.0	58.0	66.0	78.0	
<b>Total</b>		<b>Sum</b>	<b>85.0</b>	<b>93.0</b>	<b>93.0</b>	<b>88.0</b>	<b>94.0</b>	<b>113.0</b>	

Monthly Heavy equipment Plan				23					
				Jul +13 Month	Aug +14 Month	Sep +15 Month	Oct +16 Month	Nov +17 Month	Dec +18 Month
Total Number of Equipment	Daily stationed heavy equipment on site	Pile Rig	Daily	-	-	-	-	-	-
		Crane	Daily	12.0	8.0	9.0	4.0	2.0	2.0
		Boom Lift	Daily	17.0	12.0	13.0	7.0	5.0	5.0
		Cissor Lift	Daily	18.0	20.0	21.0	23.0	23.0	21.0
		Excavator	Daily	3.0	3.0	3.0	3.0	3.0	3.0
		Dump Truck	Daily	3.0	4.0	4.0	4.0	4.0	4.0
		Concrete Truck	Daily	11.0	11.0	15.0	13.0	12.0	12.0
		Trailer(Material)	Daily	4.0	3.0	3.0	1.0	1.0	1.0
	<b>Total</b>	<b>Sum</b>	<b>68.0</b>	<b>61.0</b>	<b>68.0</b>	<b>55.0</b>	<b>50.0</b>	<b>48.0</b>	
	Number of access vehicle	HGV	Daily	33.0	32.0	38.0	36.0	33.0	29.0
LGV		Daily	77.0	75.0	84.0	92.0	87.0	88.0	
<b>Total</b>		<b>Sum</b>	<b>110.0</b>	<b>108.0</b>	<b>122.0</b>	<b>128.0</b>	<b>120.0</b>	<b>97.0</b>	



Monthly Heavy equipment Plan				2024					
				Jan	Feb	Mar	Apr	May	Jun
				+19 Month	+20 Month	+21 Month	+22 Month	+23 Month	+24 Month
Total Number of Equipment	Daily stationed heavy equipment on site	Pile Rig	Daily	-	-	-	-	-	-
		Crane	Daily	-	-	-	-	-	-
		Boom Lift	Daily	3.0	3.0	3.0	3.0	3.0	-
		Cissor Lift	Daily	19.0	19.0	17.0	17.0	17.0	10.0
		Excavator	Daily	4.0	4.0	4.0	3.0	3.0	1.0
		Dump Truck	Daily	3.0	2.0	1.0	-	-	-
		Concrete Truck	Daily	10.0	4.0	3.0	-	-	-
		Trailer(Material)	Daily	1.0	1.0	1.0	-	-	-
	Total	Sum	40.0	33.0	29.0	23.0	23.0	11.0	
	Number of access vehicle	HGV	Daily	27.0	17.0	13.0	8.0	7.0	5.0
LBV		Daily	69.0	56.0	45.0	37.0	33.0	23.0	
Total		Sum	96.0	73.0	61.0	45.0	40.0	28.0	

Table 1: SUMMARY OF VEHICLE TYPE, USE AND DISTRIBUTION FOR THE CONSTRUCTION PHASE

## 6.0 Programme

Appendix A shows the summary construction programme.

Construction operations are expected to continue for 104 weeks from July 2022.

As per section 3.5.2, the hours of operations and ancillary works which are audible at the site boundary shall normally be carried out between the following hours:

- Mondays to Fridays 08:00 – 18:00
- Saturdays 08:00 – 13:00
- And at no time Sundays and Bank or Public Holidays.

When unforeseen circumstances result in noisy works (audible beyond the boundary of the site) extending beyond normal working hours, the Principal Contractor will notify and seek approval from the Redcar & Cleveland Borough council and records will be kept of such events by the Principal Contractor.

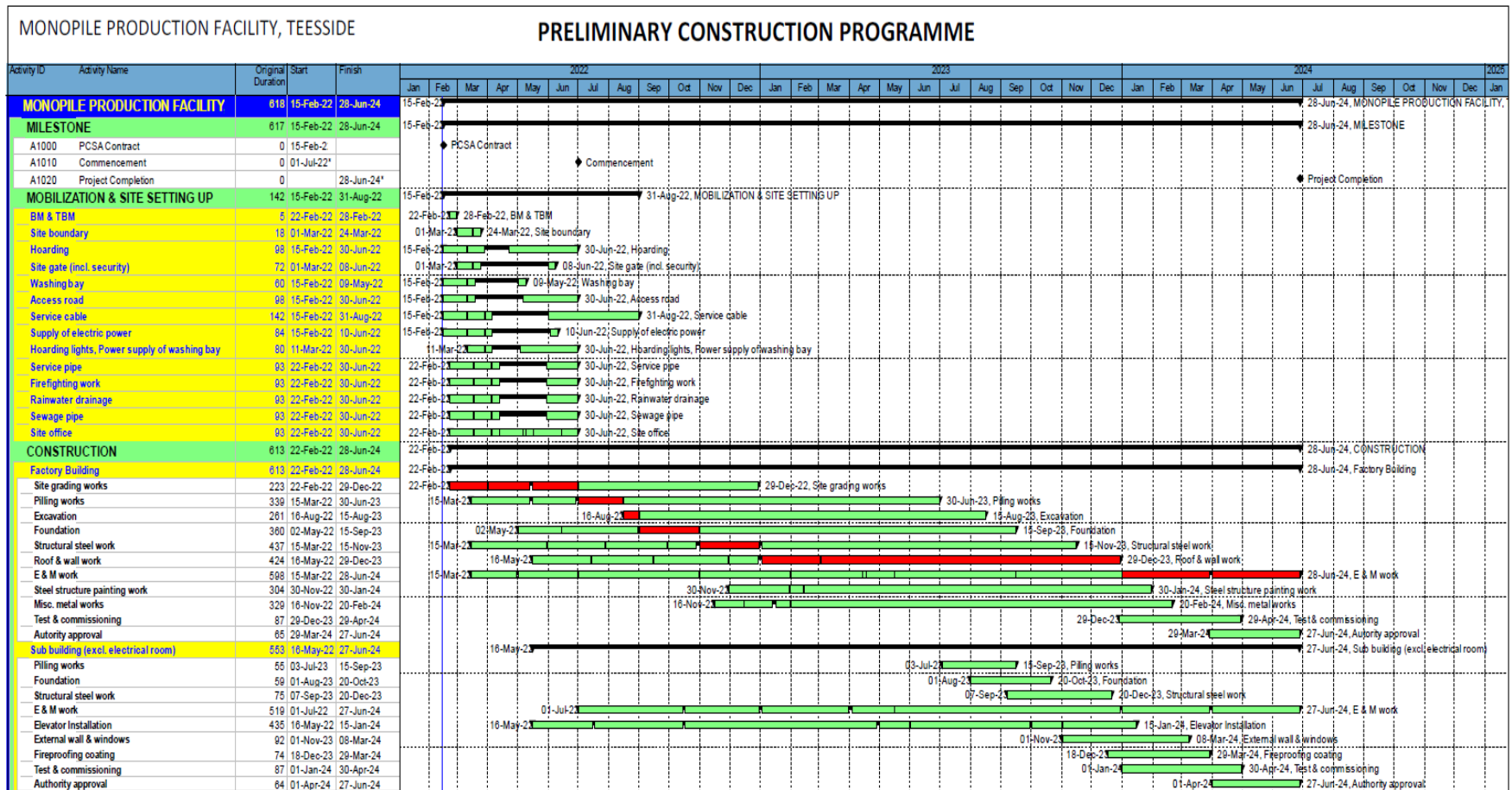


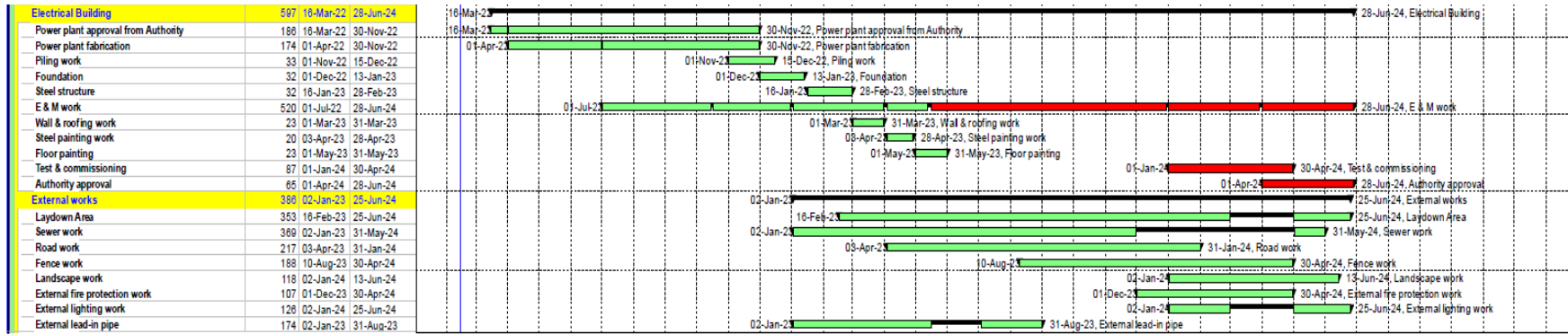
## References

[1] <https://www.ccscheme.org.uk/>

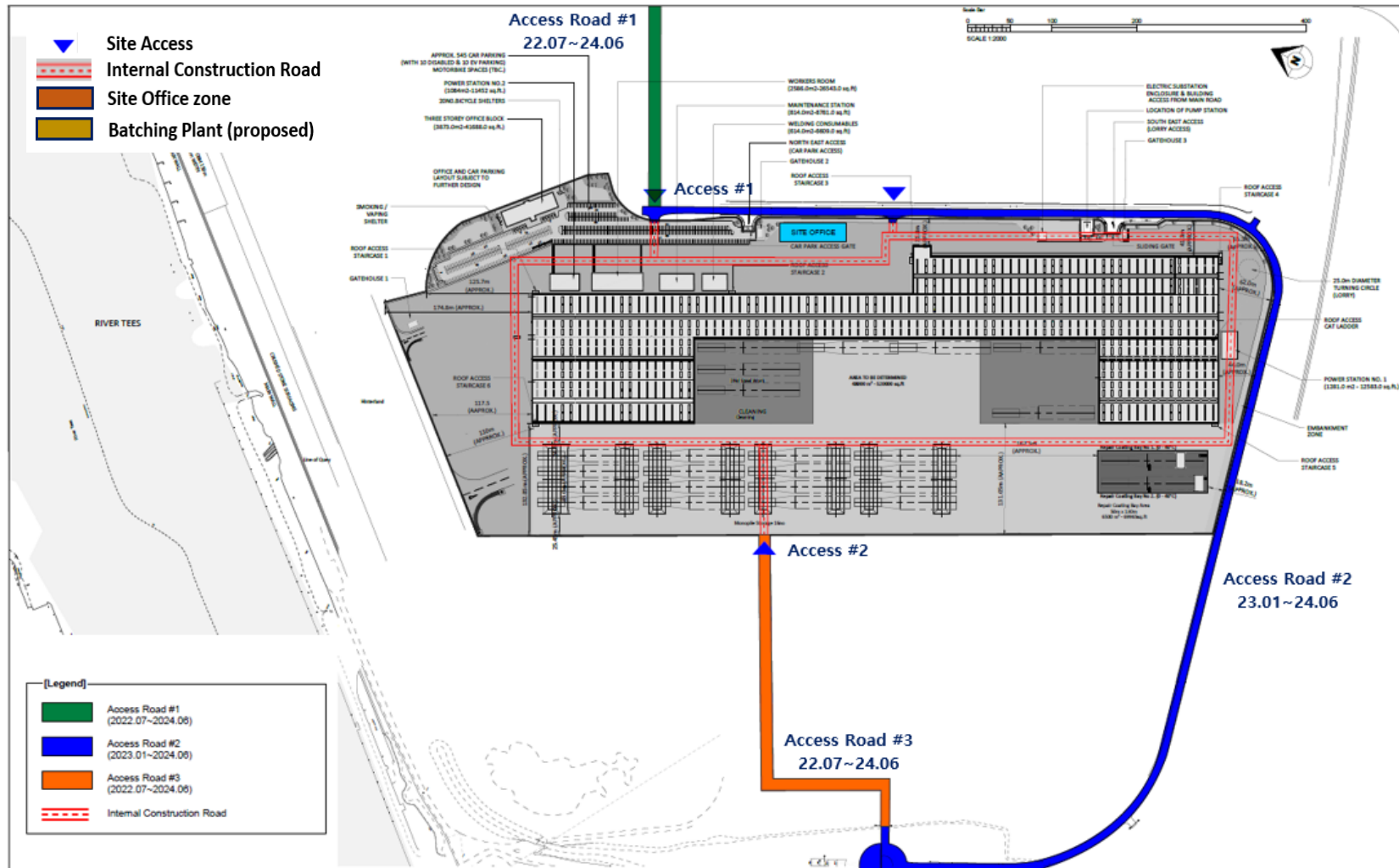
[2] <https://constructionlogistics.org.uk/construction-logistics-and-planning/>

# Appendix A – Overall Programme





## Appendix B – Site Logistics Plan



## Appendix C – Relevant Health and Safety Legislation

*Applicable legislation has been listed below.*

The Health and Safety at Work Act 1974

The Construction, Design and Management Regulations 2015

The Management of Health and Safety at Work Regulations 2006

The Regulatory Reform (Fire Safety) Order 2005

The Working at Heights Regulations 2007

The Control of Asbestos Regulations 2012

The Manual Handling Regulations 1992

The Personal Protective Equipment Regulations 2002

The Construction (Head Protection) Regulations 1989

Confined Spaces Regulations 1997

The Health and Safety (First Aid) Regulations 1981

The Control of Substances Hazardous to Health Regulations 2004

The Electricity at Work Regulations 1989

The Provision and Use of Work Equipment Regulations 1998

The Lifting Operations and Lifting Equipment Regulations 1998

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013

Control of Noise at Work Regulations 2005

Environmental Protection Act 1990

IAQM Guidance on the Assessment of Dust from Construction and Demolition 2014

The Hazardous Waste (England and Wales) Regulations 2005

[Workplace \(HS&W\) Regulations 1992](#)

*Other consents and licenses that are likely to be required include:*

- Utilities Consents/Licenses – Water companies and power providers.
- Hoarding License – Local Authority