Ford energy from waste

FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK

ENVIRONMENTAL STATEMENT
TECHNICAL APPENDIX L: OUTLINE CONSTRUCTION ENVIRONMENT MANAGEMENT PLAN

JUNE 2020

Viridor

GRUNDON

FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK

Outline Construction Environmental Management Plan

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1 Introduction

Background

1.1 This document provides a suggested outline from which a detailed construction environmental management plan (CEMP) can be developed in due course. The aim of the CEMP is to provide a framework for drawing together, communicating and implementing the mitigation required during the construction of the proposed energy recovery facility (ERF) and waste sorting and transfer facility (WSTF) at the Ford Circular Technology Park at Ford.

1.2 It is not, at this stage, a definitive document, as its development is an iterative process. The CEMP will be further developed following selection of the contractor(s) and agreed with all relevant authorities prior to commencement of any on site works. During the site preparation and construction activities it may be necessary to revisit the CEMP to update any changes relating to final design, specific technical aspects and any changes in statutory requirements and legislation.

1.3 The appointed contractor(s) will be required to follow the 'Considerate Constructors Scheme(1)'. Contractor(s) will be required to comply with all relevant environmental legislation and to take account of published standards, accepted industry best practice, national guidelines and codes of practice as appropriate.

1.4 In the event of other development projects coming forward in the local area at a similar time there is the possibility of an overlap of construction activities. Viridor Waste Management Limited, Grundon Waste Management Limited and Ford Energy from Waste Limited are committed to exploring flexible working arrangements to ensure temporary adverse effects are avoided wherever possible.

Purpose

1.5 The purpose of the CEMP is to provide a framework for a series of measures to:

- Deliver the relevant mitigation identified within the environmental statement (ES) through the environmental impact assessment (EIA) process and in other supporting documents
- Comply with construction-related planning conditions
- Ensure that the construction works are carried out in a manner that will minimise any adverse effects on the environment

1.6 The CEMP is based on construction industry best practice and the mitigation measures set out in the ES. It may need to be modified as a result of planning conditions attached to any future consent and following the appointment of the main contractor(s). The CEMP will inform the overall construction management plan (CMP) that will be prepared by the construction management teams, which will cover all construction-related issues, including health and safety procedures, induction requirements, risk assessments, quality procedures and environmental

[1] www.ccscheme.org.uk.

procedures. The CMP will cross reference to the CEMP to ensure that all construction environmental obligations identified in the ES and required by planning conditions are included.

The site

1.7 The application site is located at the Ford Circular Technology Park (the former Tarmac blockworks site, which forms part of the former Ford Airfield) to the west of the village of Ford, as shown in figure 1. The application site boundary is shown in figure 2. An aerial photograph of the site is shown in figure 3.

1.8 The 7.11 ha site is currently partially used for the existing waste transfer station (WTS) operations and partially vacant. The existing WTS building is located towards the centre of the site and portacabins, parking and containers associated with this operation are situated to the west of the WTS. There are also two vacant, former hangar buildings (currently not in use) towards the north of the site and a large area of hardstanding is situated towards the south and east of the site. The site is flat and approximately 6.7 m above ordnance datum (AOD).

1.9 Vehicular access to the site is gained via the existing access road that connects the site at its south east corner to Ford Road, just to the north of Climping / HMP Ford (this is not shown on figure 3 as this photograph was taken prior to the completion of the access road). The access road has recently replaced the previous one-way circulation system that saw vehicles using Rollaston Park Road to access the site from the west and the private access road to the north of Rodney Crescent to egress onto Ford Road to the east.

1.10 The application site also includes a small area of hardstanding to the north west of the main part of the site.

The surrounding area

1.11 Yapton is situated approximately 1 km to the west of the site, Climping approximately 1 km to the south, Littlehampton approximately 2 km to the east, and Arundel approximately 3 km to the north east.

1.12 The site is currently surrounded by agricultural land to the north, east and west, while a sewage treatment works and an area of sports pitches lie to the south. Ford Airfield Industrial Estate lies beyond the agricultural land to the west, beyond which is the residential area of Yapton. Ford Market and Viridor's materials recovery facility lies beyond the sewage treatment works to the south, beyond which there is another industrial estate, HM Prison Ford and the residential area of Climping. Ford village lies beyond the agricultural land to the north east, while Ford Lane and a small number of commercial premises lie beyond the agricultural land to the north. There is agricultural land and the Ford to Barnham railway line beyond these. Beyond the agricultural land to the east of the site is Ford Road, more agricultural land and the River Arun.

1.13 There are several public rights of way in the vicinity of the site to the north, including footpaths 366 and 366/1, which run north-south to Ford Lane, and footpath 200/3, which runs from Ford along the site's north eastern edge and joins footpath 363, which runs to Yapton.

1.14 Two planning applications have recently been submitted for development within the immediate vicinity of the proposed Ford ERF and WSTF development site. One application, by Redrow Homes Southern Counties and Wates Developments Ltd, is for a mixed use development including 1,500 residential dwellings and the other, by Ford Airfield Market, is for amending the layout of the existing market due to the proposed housing development (including the creation of a new car park and footpath and resurfacing of an existing access track). While decisions are not expected on these applications until later this year, granting permission for the mixed use development will clearly change the character of the surrounding area. (Both of the proposed developments are included in the cumulative impact assessment, along with other local proposals, see ES chapter 5 for further details).

Key environmental features and designations

1.15 There are no environmental or cultural heritage designations on site. Figure 4 shows the designations within 2 km of the site.

1.16 The site is not covered by any landscape designations, but it is approximately 2.2 km to the south of the South Downs National Park.

1.17 There are no designated archaeological assets on the site. The closest scheduled monuments are two areas of medieval settlement earthworks on the south east edge of Climping, approximately 1 km away. The site is an area of known archaeological potential and previous investigations at the airfield have shown the potential for multi-period farming and settlement activity.

1.18 There are no designated built heritage assets on the site. A number of features of the World War II and later development of Ford Airfield survive, including sections of the runway, parts of the taxiways and perimeter road and some structures, including several hangars. The site is a large area of concrete apron that is occupied by two hangars of World War II or early post-war date that were formerly in use as Ford Blockworks.

1.19 There are a number of designated heritage assets in the surrounding area. These include Yapton Church Lane and Main Road / Church Road conservation areas, approximately 1 km and 1.3 km to the west of the site respectively, which contain a number of listed buildings. There are also scattered listed buildings at Ford and Climping, the nearest of which is the grade II listed Atherington House, Ford Place, Southdown House and The Lodge (one collective listing) approximately 190 m to the north east. Other built heritage assets in the area include the three churches at Yapton, Ford and Climping, all of which are listed at grade I. There are no registered parks and gardens near the site.

1.20 The only internationally designated nature conservation site within 10 km of the site is the Duncton and Bignor Escarpment SAC, approximately 9.8 km to the north. There are two nationally designated nature conservation sites within 5 km of the site: Climping Beaches SSSI, 2.8 km to the south east, and Arundel Park SSSI, 4.2 km to the north east. There are no locally designated nature conservation sites within 2 km of the site.

1.21 There are no watercourses on or near the site. The nearest is a field drain approximately 350 m to the south east, which drains into the River Arun around

900 m to the east of the site. The Environment Agency classifies the river's ecological quality as moderate and its chemical quality as good, with the overall water body classified as moderate(2). The site is in flood zone 1 and is largely at very low risk of surface water flooding, with only small areas of low to medium risk in the west and north(3).

1.22 The site is not within a groundwater source protection zone or drinking water protected / safeguard area. It is underlain by bedrock that is classified as a principal aquifer of high groundwater vulnerability. The superficial deposits beneath the site are classified as a secondary A aquifer(4). The site does not lie within a minerals safeguarding area.

1.23 The site is not covered by an air quality management area (AQMA). Arun District Council undertakes regular air quality monitoring at two locations near the site: one in Ford, approximately 1 km to the north east and one in Yapton, approximately 1.7 km to the west. Recorded nitrogen dioxide (NO2) concentrations at these monitoring points in 2018 were well below the annual mean objective.

The proposed development

1.24 The proposed Ford ERF and WSTF encompass the following elements:

- A single stream energy recovery facility (ERF) – located on the eastern half of the application site and with a design capacity to treat 275,000 tonnes per annum (tpa) of non-hazardous, non-recyclable, residual waste material. A mixture of commercial and industrial (C&I) waste and municipal solid waste (MSW) will be the main sources of waste for the facility and this will be sourced principally from within the West Sussex county area, but also from the neighbouring counties of East Sussex, Hampshire and Surrey. Towards the centre of the building will be the steam turbine generator. This is designed to utilise high pressure steam from water heated by the combustion processes and generate approximately 31 MW of electrical power, of which approximately 28 MW will be exported to the local electrical distribution network (equivalent of powering approximately 68,250 homes over the lifetime of the plant) and the remainder will be used within the ERF. The proposals will also be able to export up to 10 MWth of heat in the form of steam or hot water in the future, should off-site recipients be identified. The ERF building will also include education, administrative and welfare facilities.
- A waste sorting and transfer facility (WSTF) – located on the western half of the application site and with a capacity to process up to 20,000 tpa non-hazardous waste. The WSTF will take MSW and C&I wastes collected from local householders, businesses and industries principally from within the West Sussex county area, but also from the neighbouring counties of East Sussex, Hampshire and Surrey.
- Buildings and structures ancillary to the ERF and WSTF – these include: a gatehouse, five weighbridges, vehicle workshop, air cooled condensers,

[2] https://environment.data.gov.uk/catchment-planning/WaterBody/GB540704105000.
[3] https://flood-map-for-planning.service.gov.uk.
[4] https://magic.defra.gov.uk.

electricity transformer, pump houses, storage tanks (diesel, fire water), staff and visitor parking and internal roads.

- Landscape planting – along the north, east and western boundaries of the site in order to screen the lower part of the buildings and the activity on the site at ground level. The site boundaries will also include security fencing, sections of flint wall, landscape bunds and acoustic timber fencing.
- Drainage – a proposed surface water drainage strategy for the developed site and a proposed foul water network discharging domestic foul and trade effluent into a local sewer.

1.25 Figure 5 shows the proposed layout of the site.

2 Details of construction works

Construction programme

2.1 The total site preparation and construction programme for the ERF and WSTF is expected to last for approximately 61 months as shown in figure 6. The following factors have influenced the length of the programme: the existing waste transfer and sorting operations are to continue uninterrupted for the duration of the construction and ERF commissioning programme and all construction laydown and car parking requirements are to be accommodated on site. Construction activities will therefore proceed as follows and as shown in figure 7:

- Phase 1 – Demolition of the westernmost existing building, construction of the northern half of the WSTF and any feasible enabling works for the southern half of the WSTF
- Phase 2 - Demolition of the remaining existing buildings including the existing WTS
- Phase 3 - Construction and commissioning of the ERF
- Phase 4 - Construction of the southern half of the WSTF

Phase 1

2.2 The total programme for Phase 1 is 10 months, as shown in figure 6. Two months have been allocated for demolition of the existing structure on this part of the site, relocation of existing WTS equipment and structures which might impact future phases, and one month for other enabling works. It is assumed that significant works will be required for underground services, such as re-routing or constructing new surface water drainage, management of leachate and laying of power and communications cabling. Underground services for the offices and workshop in the southern section of the WSTF, including site drainage will also be laid during this phase, where it is considered practical.

2.3 Following phase 1, when the northern section of the WSTF becomes operational, the area allocated to the southern section of the WSTF will provide space for Grundon Waste Management Limited's temporary offices and welfare facilities (i.e. four cabins), 40 car parking spaces and 20 HGV parking spaces, plus space for the construction contractor's site village. The extent of enabling works and installation of underground services that can take place in this area will depend on the likelihood of damage to such works and / or any safety risks whilst the space is being used for site offices and parking. This will be assessed with the contractor for the Phase 1 works in due course.

2.4 It is also anticipated that the WSTF weighbridges will be installed as part of Phase 1. However, the roads serving the WSTF will not be constructed at this point. Instead road markings will be applied to the existing concrete base to allow operation of the facility. As the new WSTF weighbridges will be surface mounted, this will allow them to be removed for laying of the new road surface and then reinstalled.

2.5 The WSTF car park will also be constructed during this phase, to allow this area to be used as car parking throughout the programme.

Phase 2

2.6 Phase 2 is assumed to last 3 months and will commence on completion of the northern half of the WSTF. Work will include the demolition of the two remaining existing structures on site, including the current WTS.

Phase 3

2.7 Phase 3, as shown in figure 6 has an overall length of 36 months and work will commence on completion of the demolition of the existing WTS. The programme comprises:

- Civil construction - including: mobilisation period, plant preparation, laying foundations for waste bunker, boiler areas, flue gas treatment areas, etc.
- Mechanical erection - including: including: installation of various tower cranes, assembly and erection of boilers, FGT plant, furnace grate, refractories and thermal insulation, conveyor systems, bag filters, stack installation, tank installations, ducts / connecting pipework, air cooled condensers, steam turbine, transformer and associated cabling, steel structure and cladding, and installation of solar panels etc.
- Cold and hot commissioning – including: high voltage power ready to start pre-commissioning, pre-commissioning and cold test period (i.e. cold commissioning), hot test period (i.e. hot commissioning) and operability testing.

2.8 All landscaping and roads which bound the ERF will be completed during this phase of works, as well as installation of the site weighbridges which lie to the south of the ERF. The weighbridge bypass lanes will be operational during the construction of the ERF to allow access to the WSTF. These roads will initially use the existing concrete base, but a final finish will be applied as part of the construction of the ERF. The ERF construction contractor will manage this in such a way that continuous access to the WSTF is maintained.

2.9 It is assumed that the off-site grid connection provided by SSE will involve the excavation of a trench within public highway (i.e. along existing roads and paths). It is likely that the installation contractor will seek to open as much trench at a time as possible so that suitable ducts can be laid quickly. Once the trench is backfilled and reinstated the electricity cable will be drawn through the ducts. Where the cable crosses the railway line, it is anticipated that directional drilling will be employed to install the cable beneath the railway lines to ensure minimal disturbance to both road traffic and rail movements.

Phase 4

2.10 The construction of the southern half of the WSTF will take 12 months. The southern half of the WSTF is more complex than the northern half, as the scope of work includes: a workshop and office building, and their internal fitout. This scope of work will require a shorter period for enabling works, as there are no existing buildings in this area of the site and underground services will have been partially completed during Phase 1.

2.11 Phase 4 will also include construction of the final finish for the site roads serving the WSTF and construction of the landscaping around the WSTF, including the

earth bunds. To accommodate construction of the roads, the WSTF weighbridges will have to be removed and reinstalled following completion of the site roads.

Construction employment

2.12 The number of people employed on site at any one time will vary considerably.

2.13 During Phase 1 (months 1 – 10) it is expected that the workforce will range in number from eight to a peak of 35, with the peak occurring in month six (see table 1). Initially, three site management personnel will be required, increasing to five as the programme progresses. It is expected that a workforce of five will be required to conduct the enabling works, as the demolition works will be conducted using heavy plant. A workforce of 10 is assumed for the entire scope of the underground services and for the sub structure. The super-structure will initially require 10 workers, involved in erection of the steelwork, which will increase to 15 workers for the erection of push walls and cladding installation, before reducing to 10 workers as the works reach completion. Due to the limited scope of M&E works in this programme, five operatives have been assumed.

Activity	Month									
	1	2	3	4	5	6	7	8	9	10
Site management	3	4	5	5	5	5	5	5	5	5
Demolition of existing structure	5	5								
Enabling works			3							
Sub structure				10	10	10				
Super structure						10	15	15	10	
M&E									5	5
Underground services			10	10	10	10	10	10	10	10
Total	8	9	18	25	25	35	30	30	30	20

Table 1: Construction work force for Phase 1

2.14 During Phase 2 (months 11 – 13) a constant workforce of 10 has been assumed for the demolition of the existing WTS, accounting for eight operatives and two site management personnel. The site management personnel are assumed to be a site manager and a health and safety manager and all work will be conducted using heavy plant.

2.15 Based on the construction of ERFs of a similar size elsewhere, it is expected that the construction workforce for Phase 3 (months 14 – 49) will peak at around 465 workers during month 35. The anticipated construction employment profile is shown in figure 8. Skilled labour will be supplied by the sub-contractors.

2.16 Table 2 sets out the expected workforce required for Phase 4 (months 50 – 61). It is expected that the workforce will peak at 37 in month 57. The site for the southern half of the WSTF has no existing buildings, as such enabling works will be limited. Due to the larger area of the southern half of the WSTF, a larger workforce has been assumed for the sub-structure and superstructure when compared to the northern half of the WSTF. The scope of works for M&E is greater for the southern half, due to the presence of a workshop and the site offices. Additionally, the offices will require internal fit out, which will require a workforce of around 10. External works will include the remaining site roads and

the landscaping works around the WSTF, for this a constant workforce of eight has been assumed.

Activity	Month											
	50	51	52	53	54	55	56	57	58	59	60	61
Site management	3	4	5	5	5	6	6	6	6	6	5	5
Enabling works	3											
Sub structure		15	15	15	10							
Super structure					10	15	20	15				
M&E								8	8	8		
Internal fitout									10	10	10	
Externals						8	8	8	8	8	8	8
Total	6	19	20	20	25	29	34	37	32	32	23	13

Table 2: Construction workforce for Phase 4

Site preparation and construction traffic

2.17 All site preparation and construction related HGV vehicles will access / depart the site via the existing access road, from / to the south onto Ford Road and then onto the A259 and the wider network. No construction HGV vehicles will be permitted to leave or access the site to / from the northern stretch of Ford Road. Figure 9 shows the strategic highway network and existing site access road.

2.18 Based on experience of similar projects elsewhere an estimation has been made for the volume of construction traffic for each of the four stages of the construction programme, which will include the following vehicle types: passenger vehicles (expected to be cars and vans), material removal vehicles (excavation arisings and for site clearance), concrete delivery vehicles and engineering fill deliveries.

2.19 The number of passenger vehicles for each stage has been calculated using the construction workforce numbers previously stated and a vehicle occupancy of 1.5, which is in line with standard practice. All construction staff will park on site and as staff will be working shifts, it is assumed that construction staff movements to and from site will occur mainly between the hours of 07:00 – 09:00 and 17:00 – 19:00 hrs.

2.20 For the purposes of the assessment, the following vehicle payloads have also been assumed: 14 m^3 for material removal vehicles, 7 m^3 for concrete delivery vehicles and 17 m^3 for engineering fill delivery vehicles. It is also assumed that HGV movements will be spread over the course of the working day.

2.21 A breakdown of the expected traffic for construction of the northern half of the WSTF (Phase 1) is provided in table 3. The figures presented in the table are two-way movements (i.e. movements to the site and from the site). It is assumed that material will be excavated from the site to a depth of 600 mm, allowing 300 mm for engineering fill and a 300mm thick concrete slab. An additional 500 m^3 of concrete has been assumed for construction of push walls and for other concrete requirements.

Activity	Month									
	1	2	3	4	5	6	7	8	9	10
Passenger vehicles	10	12	24	34	34	46	40	40	40	26
Material removal vehicles		4	4	6						
Concrete delivery vehicles					4	6	4			
Engineering fill delivery vehicles					2	4	2			
Total	10	16	28	40	40	56	46	40	40	26

Table 3: Phase 1 two-way construction traffic movements

2.22 It is estimated that the demolition works during Phase 2 will generate the two-way vehicle movements set out in table 4.

Activity	Month		
	11	12	13
Passenger vehicles	14	14	14
Material removal vehicles	4	8	6
Total	18	22	20

Table 4: Phase 2 two-way construction traffic movements

2.23 Based on the peak construction workforce of 465 for Phase 3, it is estimated that there will be a peak of 620 two-way (i.e. 310 movements to site and 310 movements from the site) passenger vehicle movements per day (around month 35) to site (based on a vehicle occupancy of 1.5). Also based on typical requirements for bulk deliveries during construction of an ERF, a peak of 102 two-way HGV movements per day (around month 26) to site has been estimated. The daily, two-way construction and passenger vehicle movements associated with Phase 3 of the construction programme are shown in figure 10.

2.24 A breakdown of the expected traffic for construction of the southern half of the WSTF (Phase 4) is set out in table 5. As for the northern half of the WSTF, it is assumed that the material will be removed to a depth of 600mm, allowing 300mm for engineering fill and a 300mm thick concrete slab. 750 m^3 of additional concrete has been allowed for push walls and internal walls. Additionally, 900 m^3 of engineering fill has been estimated to provide a base for site roads. This is a conservative assumption, as it may be that the existing concrete base can be used to support the site roads or else be broken up and re-used as engineering fill. The volumetric requirements for the different vehicle types are: 7,800 m^3 for material removal, 4,650 m^3 for concrete deliveries and 4,800 m^3 for engineering fill deliveries.

Activity	Month											
	50	51	52	53	54	55	56	57	58	59	60	61
Passenger vehicles	8	26	26	26	34	38	46	50	42	42	30	18
Material removals		4	10	10	6					8		
Concrete deliveries			4	6	20	6	4			4		
Engineering fill deliveries			2	4	8	4	2			4		
Total	8	30	42	46	68	48	52	50	42	58	30	18

Table 5: Phase 4 two-way construction traffic movements

2.25 Throughout the 61 month construction programme either the existing WTS or the proposed new WSTF will be operational. The existing WTS usually generates on average 72 two-way HGV movements per day (i.e. 36 movements to the site and 36 movements from the site). These figures include waste deliveries and

waste collections, plus diesel fuel deliveries associated with the operation of the existing WTS. The number of HGV movements forecast during the different construction phases varies, with the peak estimated during Phase 3 (construction of the ERF) when there will be 102 two-way HGV movements per day (i.e. 51 movements to the site and 51 movements from the site). Combining the operational WTS HGV movements (72) with the construction peak HGV movements (102) gives a total of 174 two-way HGV movements per day. It is important to note that for the majority of the construction period, the number of HGV movements will be much lower.

Work hours

2.26 Construction work audible outside of the site boundary will take place during standard hours, e.g. 07:00-19:00 hrs Monday-Saturday, with no work on Sundays or public holidays. Delivery of oversize plant and equipment, internal fit out, internal works and other non-intrusive works may take place outside of these times. Extraordinary events such as concrete pours may also need to take place outside these hours as by their nature they need to be continuous, however, this would not be without the prior consent of West Sussex County Council.

Construction equipment and laydown areas

2.27 A wide range of equipment will be required during the different construction phases, including: excavators, dump trucks, cranes, hoists, mobile elevating work platforms, forklift trucks, concrete pumps, piling rigs, compressors, generators and pumps.

2.28 The construction activities will require laydown areas for storage and limited pre-assembly of components. The location and size of laydown areas will vary throughout the programme. Table 6 and figure 11 identify the different laydown areas proposed.

Laydown area number	Location	Area (m^2)
1	Outage village area between the ERF and the WSTF	1,565
2	Eastern side of the ERF / bunded areas	6,575
3	Area for the air cooled condensers (ACCs)	1,220
4	ERF manoeuvring / contractor's areas	755
5	Underneath the tipping hall / future workshop (used for covered storage late in the ERF civil construction programme only)	2,210
6	West of the WSTF, northern section	1,950
7	West of the WSTF, southern section	7,350
Total		21,625

Table 6: Laydown areas proposed on site during construction

2.29 During Phase 1 areas 6 and 7 will be available throughout, which equates to a total area of 9,300 m2. An area immediately to the south of the northern half of the WSTF has also been allocated for contractor site cabins and car parking.

2.30 During Phase 2, all site cabins or storage space required for the demolition works will be accommodated within the demolition area boundary. From this phase onwards, the north west area of the site will be temporarily used for clean skip, bin and container storage associated with the WSTF. This will create a junction between the laydown areas west of the WSTF, construction areas in the

east of the site and the operational areas of the site, around which construction traffic will be carefully managed.

2.31 Construction of the ERF will require significantly more laydown area than the WSTF. The availability of each laydown area will vary throughout the programme. At the outset of the programme, works on the site will primarily be preparatory civil works, such as clearing the site of any existing small structures and levelling the terrain. Following this, the works will involve excavating the bunker, constructing the bunker walls and pouring concrete slabs for the process building. Laydown requirements for the civil works will mainly consist of stockpiling arisings and rebar material.

2.32 Laydown requirements are expected to peak with mechanical erection of the ERF, which occurs between months 26 and 31 of the programme. A total laydown area of 10,485 m2 is estimated to be available throughout the mechanical erection phase. Based on similar projects, this should be enough area for laydown. However, to reduce laydown requirements, it is proposed that the construction programme makes use of 'just in time' deliveries.

2.33 Laydown for construction of the southern half of the WSTF will use areas 6 and 7 until works are required to be progressed in these areas. As such, initially 9,300 m2 of laydown area will be available for this phase, gradually reducing to zero as construction works take over laydown areas later in the programme. Cabins for offices and welfare required for this final phase of construction will be accommodated within area 1.

Site cabins, welfare and parking

2.34 During all construction phases the site will require an area in which to place cabins, which will house site management and welfare facilities for construction workers. This area has been located on the southern half of the area for the WSTF. This area will be available up until it is required to progress the construction of the southern half of the WSTF, during phase 4. During phase 4, it is assumed that site cabins will be relocated to area 1, which is allocated as an outage village for the ERF. Figure 7 shows that there is space for up to four cabins in this area. Additional cabins may be accommodated by stacking if required.

2.35 Car parking is also required for construction workers. The WSTF car park will be used for construction car parking throughout the programme, as it will be constructed during Phase 1. However, this area will not be sufficient for all the Phase 3 ERF construction workforce, which will peak at 465 workers. Assuming a vehicle occupancy of 1.5, then peak passenger vehicles attending site per day will be 310 vehicles. An additional 260 car parking spaces will therefore be provided in laydown area 7 during this phase.

3 Legal and other requirements

3.1 A schedule of appropriate environmental legislation will be drawn up and will be reviewed / updated as necessary throughout the construction period. An initial (but not exhaustive) list of applicable legislation is set out below:

- Air Quality (England) Regulations 2000 (as amended)
- Ancient Monuments and Archaeological Areas Act 1979 (as amended)
- Construction (Design and Management) Regulations 2015
- Control of Noise at Work Regulations 2005
- Control of Pollution Act 1974
- Control of Pollution (Oil Storage) (England) Regulations 2001
- Environmental Permitting (England and Wales) Regulations 2016
- Environmental Protection Act 1990 (as amended)
- Health and Safety at Work etc Act 1974
- The Conservation of Habitats and Species Regulations 2019 (as amended)
- The Road Vehicles (Construction and Use) Regulations 1986
- The Wildlife and Countryside Act 1981 (as amended)
- Town and Country Planning (Listed Buildings and Conservation Areas) Act 1990
- Water Resources Act 1991 (as amended)

4 Register of environmental aspects

4.1 A register of environmental aspects shall be prepared by the appointed contractors in order to detail the environmental risk associated with the construction works. It will also detail the commitments and agreements made within the summary tables within chapter 16 of the environmental statement (ES) submitted as part of the planning application and any additional requirements set out in the planning conditions.

4.2 The register of environmental aspects is likely to include the following information:

- Activity
- Aspect
- Impact
- Legislation
- Significance
- Management response
- Other comments

5. Project team roles and responsibilities

5.1 Table 7 summarises the key project team roles and responsibilities.

Role	Responsibility
Project manager	Will have overall responsibility for environmental performance and compliance throughout the construction period
Site manager	Will ensure delivery of the CEMP, including its review and development, prepare the CMP, be responsible for monitoring activities and performance to ensure compliance with the CEMP, maintaining an auditable environment record filing system and be the main point of contact between regulatory authorities and environmental specialists
Site management team	Will be responsible for implementing the appropriate personnel training, provide toolbox talks to contractors, and assist the site manager in monitoring performance
Principal contractor	Will assist the site manager in the preparation of the CMP and prepare site-specific construction method statements as required, taking into account environmental issues identified in the CEMP
Contractor / sub-contractor	Will ensure the workforce is fully aware of the environmental issues and that measures set out in the CEMP are implemented, and take appropriate action in the event of non-conformances with the CEMP
Environmental specialists	A team of specialists will support the project on a part time basis as necessary, for example to undertake ecological watching briefs during construction.

Table 7: Key roles and responsibilities

6 Management of construction works

Reporting, communication and coordination

6.1 An environmental file kept on site should include all permits, licences and consents obtained, training records, statement and procedures relating to the project's environmental aspects, specialist reports, audit reports, inspection reports, complaints and contact details for the key environmental representatives working on the project.

6.2 Communication and coordination for the project will be achieved through regular meetings of the project team – attended by representatives from the construction team (including any key sub-contractors) and the environmental manager. Representatives from the relevant authorities will also be invited to attend these meetings as appropriate.

6.3 The scope of these meetings is likely to look at the results of inspections, environmental monitoring and any complaints, with an aim to consider how to manage, mitigate and prevent any future risks.

6.4 The site manager will be the public liaison contact for all environmental and construction issues. A contact name, telephone number and address for information or complaint purposes will be displayed for the public at the site entrance and prominent points around the site boundary. Any complaints relating to site operations will be recorded and investigated. The project manager will maintain a complaints register, which will be available for inspection by West Sussex County Council on request.

Training and awareness

6.5 Site personnel, including sub-contractors, are to be made aware of their responsibilities with respect to the CEMP and its implementation. All site personnel will receive induction training that covers the site emergency and response procedures and the environmental protection requirements. Toolbox talks will also be undertaken when required to cover environmental issues.

Operational control

6.6 All construction works at the site will be checked against the requirements of the CEMP. Any mitigation measures proposed through the ES will be put in place prior to the commencement of works to which they relate and staff will receive appropriate training.

6.7 Specific method statements will be prepared for various elements of works, and will be reviewed / approved by the project manager and, where necessary, the relevant environmental specialist.

6.8 Appropriate document control procedures will be implemented and copies of all audits, consents, licences etc will be maintained by the project manager and kept on site.

Checking and corrective action

6.9 Monitoring and reporting against the requirements of the CEMP will be undertaken by the project manager. If the requirements are not met, appropriate corrective action will be implemented.

Response to emergencies

6.10 A site incident response / emergency plan will define the procedures for dealing with events such as spillages of oil / chemicals and leaking containers. All staff and contractors working at the site will be made aware of the site incident response / emergency plan, and will know how to deal with an incident. Training exercises will be undertaken as necessary.

6.11 An up-to-date site drainage plan will be maintained and all contractors and sub-contractors will be made familiar with the drainage systems, any potential hazards (in particular, how to deal with fire-water runoff) and actions to take in an emergency. The plan and other necessary information will be displayed around the site.

6.12 A variety of products / materials will be kept on site for use in the event of a spillage / leakage (e.g. sand and / or earth bags, proprietary absorbents in the form of granules, sheets, pillows or a loose powder, leak-sealing devices such as a pad, clamp or putty, and drain seals). The materials will be well maintained, strategically placed at accessible locations and will be clearly marked with durable notices explaining their use. Any items used for the clear-up of a spillage will be disposed of appropriately. The Environment Agency would be notified in the event of a major spillage.

6.13 Any ground contaminated by a spillage / leakage of fuel oils / hydraulic oils during construction will be excavated and removed to an appropriately licensed waste disposal site.

6.14 Health and safety controls will be established in accordance with relevant health and safety procedures, including arrangements for the possibility that unforeseen contamination / pollution may be encountered during the construction phase. Personal protective equipment will be worn by all construction personnel including, where necessary, hard hats, high visibility clothing and protective footwear.

7 Environmental control measures

7.1 Specific procedures to manage the key environmental aspects of the projects will be developed by the contractor prior to work commencing, but these will include the following:

- Air quality and dust
- Noise and vibration
- Traffic and transport
- Ground conditions and the water environment
- Archaeology
- Ecology and trees
- Temporary lighting
- Waste

Air quality and dust

7.2 Mitigation measures for the generation of dust and particulate matter during construction will be in the form of adopting best practice construction measures, including:

- Develop and implement a dust management plan (DMP) which may include measures to control other emissions, approved by the local authority. The level of detail will depend on the risk and should include as a minimum the highly recommended measures in this document. The desirable measures should be included as appropriate for the site
- Carry out regular site inspections to monitor compliance with the DMP, record inspection results and make an inspection log available to the local authority when asked
- Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period
- Avoid site runoff of water or mud
- Implement a wheel wash system
- Ensuring vehicles entering and leaving the site are covered to prevent escape of materials during transport
- Cover, seed or fence stockpiles to prevent wind whipping
- Ensure all vehicles switch off engines when stationary - no idling vehicles
- Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate
- Avoid bonfires and burning of waste materials
- Avoid scabbling (roughening of concrete surfaces) if possible
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place

- Ensure effective water suppression is used during demolition operations. Handheld sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition, high volume water suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground
- Avoid explosive blasting, using appropriate manual or mechanical alternatives
- Bag and remove any biological debris or damp down such materials before demolition
- Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager / engineer or the site manager
- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner and record the measures taken
- Make the complaints log available to the local authority when asked

7.3 Appropriate training will be provided to site workers during the induction process on the need to minimise dust emissions to neighbouring properties and sensitive ecological receptors. Training will include advice on the correct use and maintenance of plant and equipment and the location of sensitive neighbouring receptors. Contractors will maintain records of plant and equipment maintenance and these will be made available to West Sussex County Council on request.

7.4 Mitigation measures relating to the control of construction traffic will be detailed in the construction traffic management plan discussed further in the traffic and transport section of this CEMP.

Noise and vibration

7.5 Best Practical Means (BPM) as defined by the Control of Pollution Act 1974, will be implemented as part of the working methodology to minimise the noise and vibration effects at receptors nearest to the construction works. The reduction in noise levels provided through the implementation of BPM will vary depending on the nature of the works. Typical BPM measures which will be considered, where reasonably practical, include:

- Programming noisy works so that these do not occur during Saturday working hours of 13:00-19:00
- During Saturday hours of 13:00-19:00, HGV movement numbers will be reduced when lower construction noise thresholds apply
- Plan working hours to take account of the effects of noise and vibration upon persons in areas surrounding site operations and upon persons working on-site
- Delivery of materials and removal of waste from the site will be planned to minimise disturbance
- The construction area will be surrounded by standard site hoarding
- Where reasonably practicable, adopt quiet working methods, using plant with lower noise emissions

- Where reasonably practicable, adopt working methods that minimise vibration generation
- Locate plant away from noise and vibration sensitive receptors, where feasible
- Use silenced and well-maintained plant conforming with the relevant EU directives relating to noise and vibration
- Avoid unnecessary revving of engines and switch off equipment when not required
- Keep internal haul routes well maintained
- Start-up plant and vehicles sequentially rather than all together
- Carry out regular inspections of noise mitigation measures to ensure integrity is maintained at all times
- Provide briefings for all site-based personnel so that noise and vibration issues are understood, and mitigation measures are adhered to

7.6 In addition to the above, all other guidance within BS5228 will be followed at all times.

7.7 If work is required to extend into periods beyond the agreed hours, separate authorisation will be requested from West Sussex County Council.

Traffic and transport

7.8 Construction traffic will be managed through a construction traffic management plan (CTMP), which will be agreed with West Sussex Council Highways. All traffic associated with the construction of the development will comply with the CTMP and use only the designated construction traffic access routes.

7.9 All site preparation and construction related HGV vehicles will access / depart the site via the existing access road, from / to the south onto Ford Road and then onto the A259 and the wider network. No construction HGV vehicles will be permitted to leave or access the site to / from the northern stretch of Ford Road.

7.10 A signage scheme will be agreed with West Sussex County Council prior to construction commencing, this will detail the location and use of signage for the construction period. Signage will ensure that all site HGV drivers follow the designated route. All contractors will be made aware of the scheme in advance of works commencing and will ensure that suppliers and sub-contractors comply.

7.11 Options to restrict the timings of construction deliveries will be discussed with West Sussex County Council Highways to avoid peak traffic movement periods on the local road network whenever possible. Details of any abnormal or large loads will also be consulted upon, planned and approved in accordance with direction from West Sussex County Council Highways, the Police and Highways England as appropriate.

7.12 Construction workers will be encouraged to use public transport services or non-car modes of transport where feasible. It is, however, recognised that

potential may be low due to the need to convey personal protective equipment, tools, etc.

7.13 All worker vehicle parking will be provided on site. Details of on-site parking for construction workers will be agreed in advance with West Sussex County Council. Greater use of car sharing will be promoted to reduce the number of vehicles where possible. Some form of incentive may help drive this behaviour within construction staff and will be considered further.

7.14 Staggered departure times from the site for construction workers will be considered in order to smooth the departure profile, through careful consideration of shift times between parallel workstreams on site. Work shuttles to reduce the number of vehicles by consolidating workers within single vehicles may also be considered.

7.15 As set out in the air quality and dust section above, when necessary all construction vehicles leaving the site will be required to pass through the wheel washing facilities. The access road and junction with Ford Road will be inspected daily to ensure local roads are kept clean.

7.16 Any environmental incidents involving traffic movements (such as fuel spillages) and the subsequent action taken, will be recorded in an environmental incident logbook.

7.17 Site inductions / briefings will be provided for all construction personnel so that traffic and transport issues are fully understood and the safety of other road users, pedestrians and cyclists considered.

Ground conditions and the water environment

7.18 The construction of the proposed development will be carried out in line with best practice measures to manage potential effects associated with ground conditions and the water environment. The measures will include the preparation of a pollutants, water and sediment management protocol to inform construction works, which will set out measures such as the following:

- Minimise storage of hazardous chemicals on site and, where storage is necessary, use anti-pollution measures such as bunded trays or leak-proof containers
- Use designated refuelling sites, located away from open water
- Any cleaning materials or chemicals used during the construction phase are not to be hazardous to the water environment
- No storage of potentially contaminating materials in areas liable to water inundation
- Use of electrical power, rather than diesel, where possible
- Design of construction methods to minimise disturbance to, and mobilisation of, sediment
- Controlled washing down of plant while on site
- Implementation of piling design with tight quality assurance / quality controls
- Oil spill kits to be kept on site, and site staff trained in their use

- Minimisation of dewatering requirements by programming excavation works to be as short as possible. The need for an environmental permit to undertake dewatering will be established and the necessary applications made as required
- Development of a waste soils management strategy
- Development of a materials management strategy
- Development of an asbestos management and health and safety plan (if necessary)

7.19 Based on current knowledge of the site's level of contamination, it is anticipated that standard personal protective equipment will be sufficient to provide protection to ground workers, although asbestos may need a specific protocol and equipment, should it be found on site.

7.20 Construction works will be carried out in accordance with the Environment Agency's (2007) Pollution Prevention Guideline 5: Works and Maintenance on or Near Water. While this document is no longer officially supported by the EA, it is still considered to be representative of good practice within the UK.

7.21 Detailed procedures for the temporary storage, handling and haulage of demolition and construction waste will be developed once further design and survey work has been completed, the nature of the waste material is fully understood and routes for recycling and disposal of waste material are established. All procedures will adopt best practice and ensure that materials are safely handled whilst fully mitigating any risk of pollution to the environment or any contamination, which may jeopardise effective reuse or recycling.

7.22 Regular on-site monitoring of the works will be undertaken by an environmental specialist during the construction phase. This will include groundwater sampling, surface water inspections and surface water runoff management observations.

7.23 Contractors will maintain records of all discharges to the foul and surface water systems, together with any water abstractions from dewatering or other processes. These records will be made available to the Environment Agency and West Sussex County Council on request. Any environmental incidents that lead to water contamination, and the remedial action taken, will be recorded in the environmental incident logbook.

7.24 In addition to the measures referred to above, further work and monitoring will be undertaken pre, during and post-construction in order to ensure that no residual risks associated with ground conditions remain once the proposed development is constructed. This work includes:

- An intrusive ground investigation (including a contaminated land interpretative report) to determine the presence and composition of any on-site contamination and the potential for off-site sources to have affected the site. Any significant contamination identified through appropriate risk assessment will be remediated where needed to mitigate the impacts on identified receptors. Design and completion of intrusive investigation and assessment will be in accordance with appropriate Eurocodes, British Standards and current UK guidance

- A separate UXO desk study / risk assessment for the site by a UXO specialist, in advance of intrusive works being undertaken at the site
- A remediation strategy report, depending upon the results of the intrusive ground investigation
- Completion of a foundation works risk assessment, in accordance with EA standards, prior to construction to inform the potential risks associated with foundation types under consideration or to identify mitigation measures that may be needed
- A Materials Management Plan (MMP) (where site won materials are sought for reuse) in accordance with the provisions of the CL:AIRE document, The Definition of Waste: Development Code of Practice, Version 2, March 2011
- A programme of long-term groundwater monitoring in line with any foundation works programme, including excavation and construction of the waste bunker. The long-term water monitoring will also include surface water monitoring of the nearest ditch and the River Arun, due to site discharge into these features
- Standard design measures for below ground structures constructed in groundwater such as piles, for example, by the provision of granular conveyance routes and drainage blankets where necessary to maintain groundwater flow rates to be approximately equivalent to that pre-development (although unlikely to be required)
- Compliance with environmental permits where needed to undertake the dewatering works
- Following groundworks and construction at the site, a verification report will be prepared to document the successful completion of the development and will include a detailed audit trail to ensure that the implementation of any required remedial measures was in accordance with the remediation strategy.

Archaeology

7.25 A programme of archaeological investigation is proposed as the geoarchaeological desk based assessment and deposit model produced by Archaeology South-East (see ES Technical Appendix F) has shown several metres of possible geo-archaeologically significant deposits present at depth across the site. The report recommends that a series of geoarchaeological test pits are undertaken to properly evaluate the nature of these deposits, assess the extent of preservation and to map them in detail across the site. Test pitting will allow deposits to be assessed for the potential to contain artefacts, ecofacts, and palaeoenvironmental material and inform whether further work will be required before construction commences.

7.26 The proposed construction phasing programme and sequencing allows for any further requirement such as any geotechnical engineering investigation. If deemed necessary, such targeted work will be the subject of a geoarchaeological method statement, or written scheme of investigation (WSI) in consultation with West Sussex County Council Archaeology, to ensure that borehole samples and the location of test pits produce soil samples and information for archaeological and geoarchaeology interest, as well as for engineering or hydrological purposes.

7.27 Should geoarchaeological remains be present and assuming that they are of low (local) significance and a design solution cannot be implemented to ensure their preservation in situ, further mitigation works such as a programme of archaeological excavation and recording, along with post-excavation paleoenvironmental assessment and dating, may be required to ensure the preservation by record of any threatened remains.

Ecology and trees

7.28 The existing scrub and hedgerow on site provide habitat for nesting birds, which are protected during the breeding bird season from March to September inclusive. To prevent the disturbance of nesting birds, the following methods for site clearance will be employed:

- Vegetation could be removed outside of the breeding bird season, between October and February, or
- Vegetation could be removed during the breeding bird season if preceded by a nesting bird check by a suitably experienced ecologist. Any nests that are recorded must be left with a 5 m exclusion zone around them until all of the chicks have fledged. For some species this may be up to five weeks

7.29 Using these mitigation methods will ensure no nests are disturbed or lost to the clearance works.

7.30 There are no predicted impacts on off-site ecological receptors during the construction phase, however, following a standard safe working plan for the works is good general practice. This prevents any impacts on adjacent and nearby receptors, even if of low value. The following methods will therefore be employed as good working practice (some of which overlap with others noted for dust and water management on-site during construction):

- Cover, seed or fence stockpiles to prevent wind whipping
- Erect solid screens or barriers around dusty activities or the site boundary at least as high as any stockpile on site
- Avoid site run-off of water or mud
- Ensure an adequate supply of water on site for dust suppression
- Ensure the use of quiet working methods, the most suitable plant and reasonable hours of working for noisy operations, where reasonably practicable
- Screen plant to reduce noise by increasing the distance between the source and the receiver
- Close acoustic covers to engines when they are in use or idling
- Protect storage areas and vehicle refuelling / maintenance areas with an impervious base and provide impermeable bunds of an adequate capacity around tanks containing potential pollutants
- Use drip trays and regular maintenance checks for construction plant
- Avoid working at night during the summer months

7.31 The Arboricultual Impact Statement (AIS) prepared by CBA Trees (June 2020) also notes the following best practice working methods to avoid root severance, damage to bark, branches, trunks, compaction of soil and soil contamination:

- All permitted or approved tree work will be carried out in accordance with the British Standard *Recommendations for Tree Work BS3998:2010*, by suitably qualified and experienced professional arborists. Under no circumstances shall site personnel undertake any tree pruning operations. All tree surgery works will be carried out prior to the development of the site, and erection of protective barriers
- Consideration will be given to the timing of any tree works to avoid the active growing period of trees. Therefore, all tree work will ideally be carried out during the dormant period from November through to February and then again from June to August
- Due to the bird-nesting season, considered to be from 1st March through to the 31st July (Natural England) depending on weather conditions, consideration will also be given to the potential for nesting birds. Where tree work is to be carried out within these months an ecologist will be consulted (as set out above)
- Before starting any site works tree protection will be installed in accordance with Tree Protection Plan CBA11322.02A TPP (see CBA Trees AIS, appendix CB3). This will occur immediately following the completion of tree works and prior to any site preparation works starting
- A copy of the Tree Protection Plan CBA11322.02A TPP will be kept on site for immediate reference for all site operatives
- Given the nature of the site and the proposed works, installing a protective barrier (as indicated on Tree Protection Plan CBA11322.02A TPP) will protect the retained trees. The appropriate barrier will be robust, resistant to impact and will require a positive or considered movement / adjustment by contractors of the barrier to adjust its position
- Any soft landscaping works within the development area will be in accordance with the approved landscape plan
- Landscaping works will be carried out within the root protection areas of retained trees at an appropriate time to provide the planting with the best opportunity to survive
- Bunds will be created close to or within root protection areas of trees, mostly on areas of existing built form. The works to create the bund and / or remove the existing built form (in particular for Group 1 – see CBA Trees AIS, May 2020) will be arboriculturally supervised to ensure that the initial ground works are completed in a fashion that is sympathetic to tree roots that may be exposed and ensure roots >25 mm are retained
- Excavation of planting pits within a root protection area (RPA) can cause serious harm to the root system of retained trees. Planting pits within the RPA of retained trees will be excavated by hand to avoid damage to roots greater than 25 mm and masses of smaller roots
- If any existing trees shown to be retained, or trees and shrubs to be planted as part of the landscaping scheme that are removed, die, become severely damaged beyond recovery or diseased within 2-5 years of the completion of the development, shall be replaced within the next planting season with

trees or shrubs of appropriate size and species that complement the existing tree stock.

- Should additional tree works become apparent during the construction process written consent will be sought from West Sussex County Council Tree Officer prior to these additional works being undertaken.

Temporary lighting

7.32 Lighting of the site will take account of security and safety. Lighting will be located and directed or screened so that it does not cause undue intrusion to nearby occupied premises or ecologically sensitive areas. Light sources will be used that minimise spillage and light pollution effects, and light only those areas that need lighting. As far as is reasonably practicable, the visual intrusion of the construction site on users of local facilities and amenities will be contained and limited.

7.33 Possible measures to minimise any lighting effects during construction will be considered, these include:

- The use of 3000K light sources
- Working hour restrictions to minimise the time that temporary lighting is in operation
- All temporary lighting to be turned off when work on site has finished, unless required for security or safety
- Presence detection sensors be utilised with temporary security lighting to ensure light is only switched on if required
- No light sources to emit light above the horizontal plane
- Light sources to be directed away from potentially sensitive ecological habitats

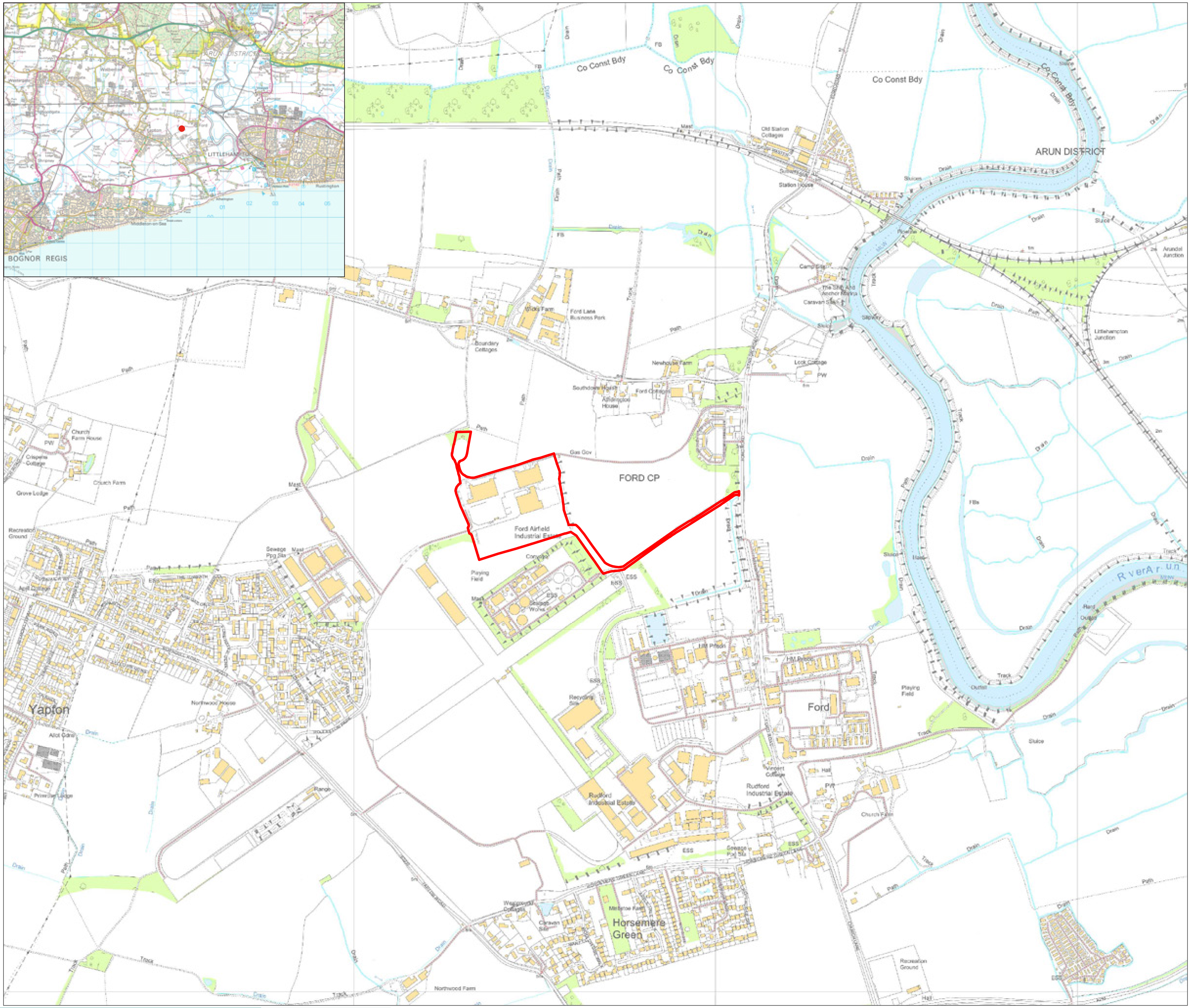
Waste

7.34 Where possible, construction waste materials will, in the following order of preference, be reduced, re-used, recycled and disposed of in accordance with regulatory requirements. Attempts will be made to avoid the over-specification of materials, thereby reducing wastage.

7.35 All waste materials will be segregated on site. Separate skips will be used so that wastes can be segregated for recycling and to prevent cross-contamination. They will be regularly inspected and replaced when full.

7.36 Hazardous waste will be stored separately and removed by an appropriately licensed contractor for disposal at a licensed site. No waste will be burnt on site.

Figures



Site Boundary

0 250 m

N

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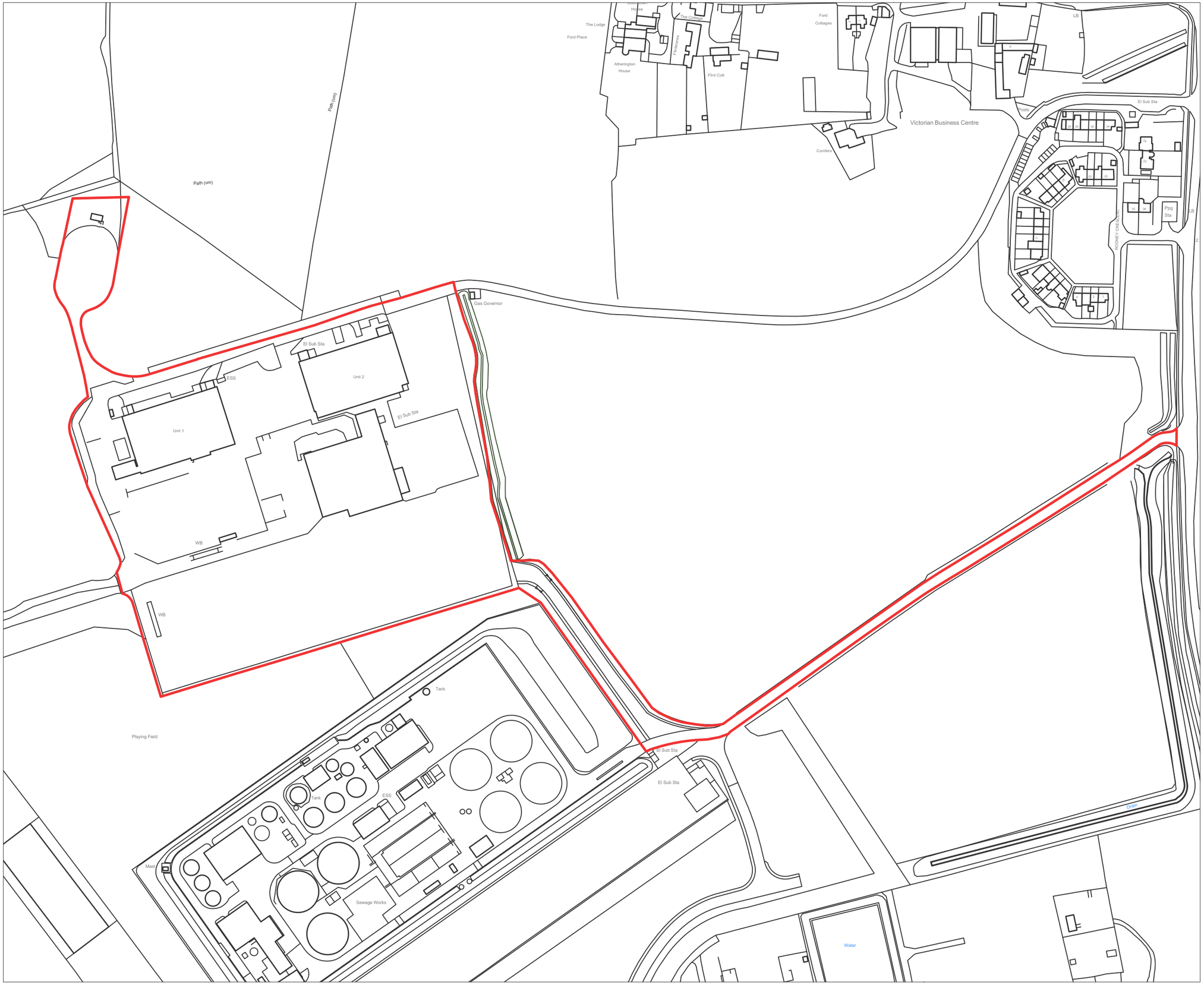
Figure 1
Site location



Key

Planning Application Boundary 7.11 ha

0 m 50 m 100 m

N

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Aerial imagery © Getmapping plc

Figure 3
Aerial photograph of the site

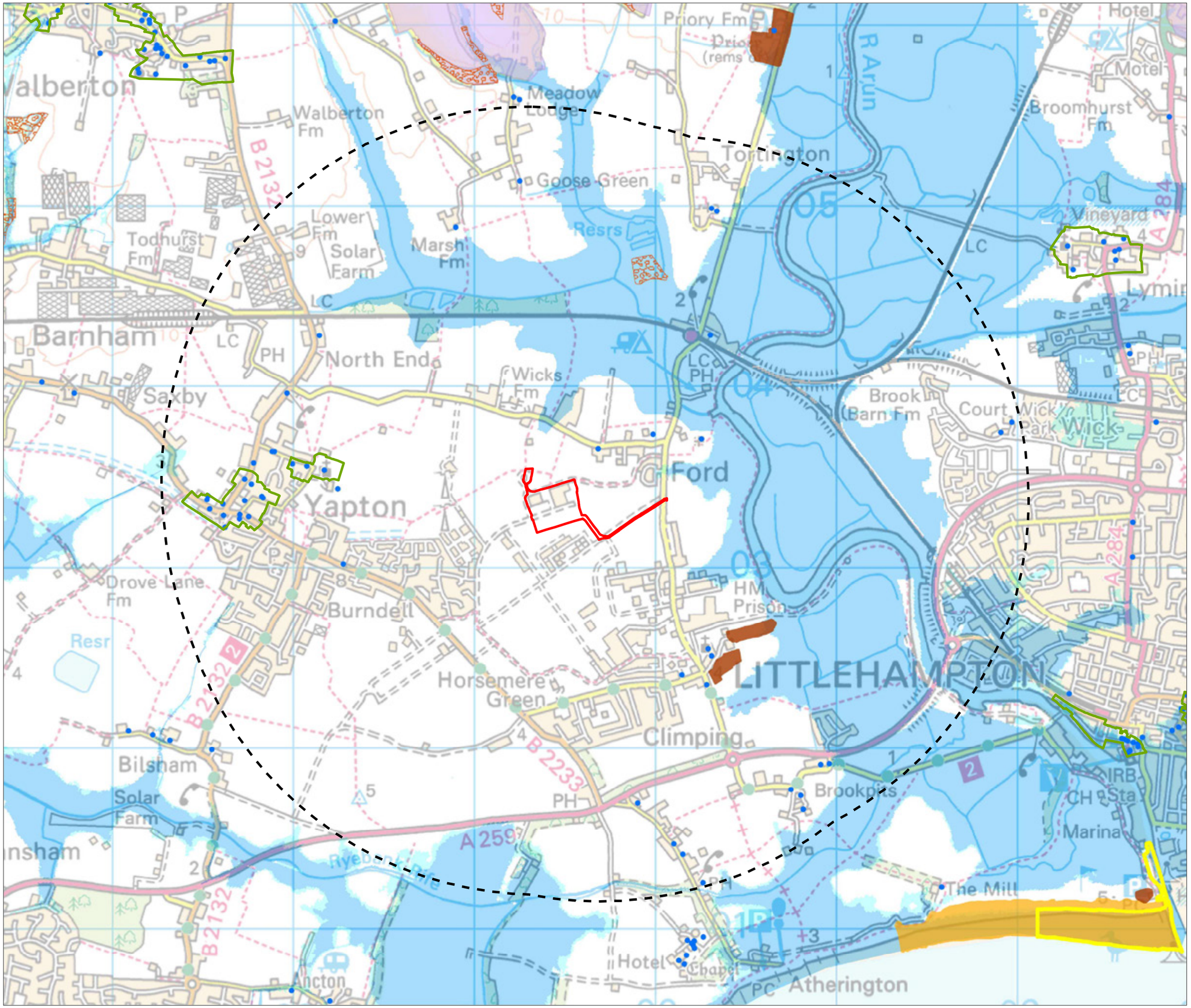

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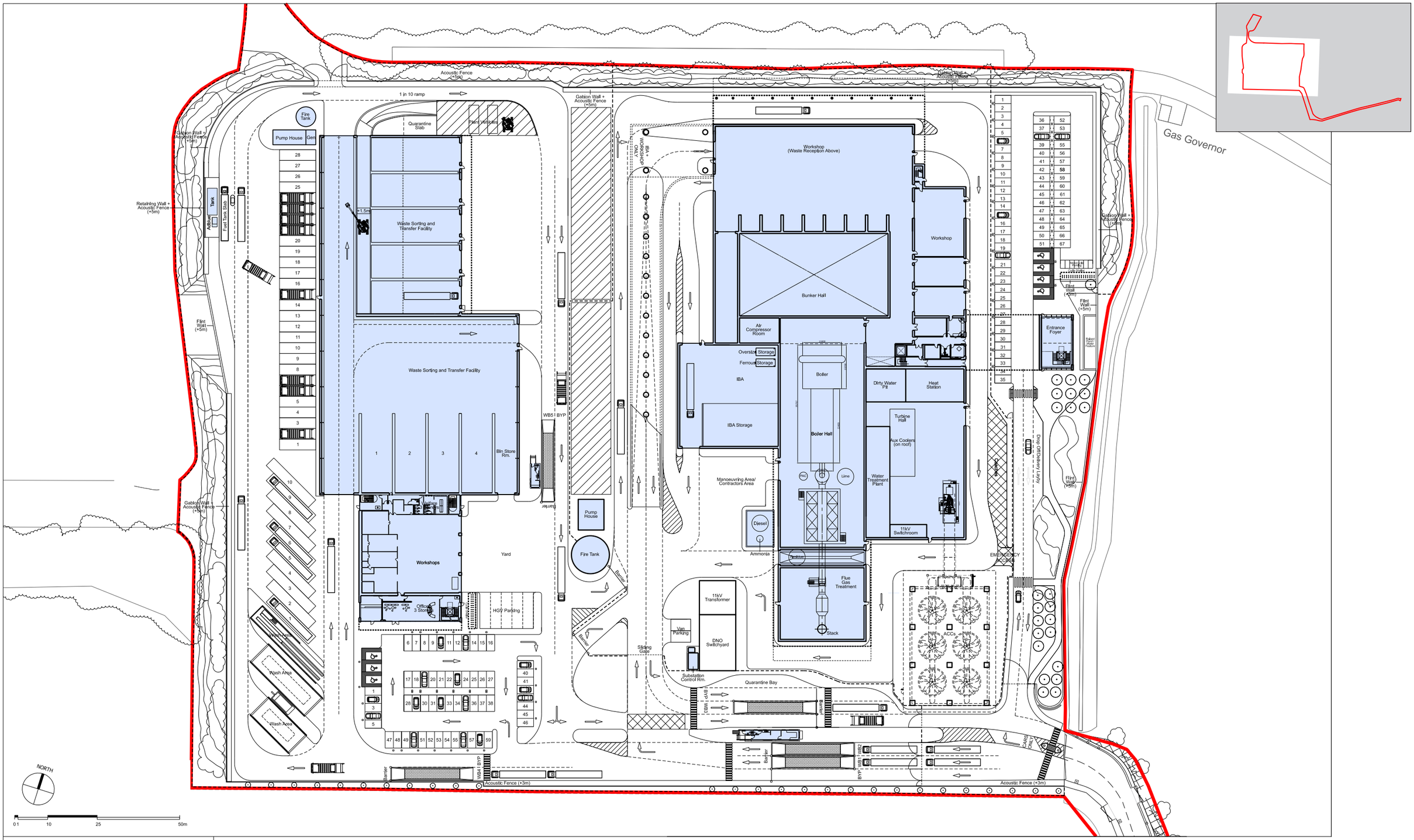
Figure 4
Key designations within 2km of the site



NOTE

1. THIS DRAWING IS COPYRIGHT GSDA LTD.
2. THE CONTRACTOR MUST NOT SCALE FROM THE DRAWING ALL DIMENSIONS TO BE TAKEN FROM DIMENSION STRINGS.
3. WHERE ANY DISCREPANCIES ARE FOUND BETWEEN DIMENSIONS THESE MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECTS FOR RESOLUTION.
4. WHERE DISCREPANCIES EXIST BETWEEN REFERENCE OR ASSEMBLY DRAWINGS & DETAIL DRAWINGS, THE LATTER TAKE PREFERENCE.

Key

- Fencing Line
- Red Line Boundary

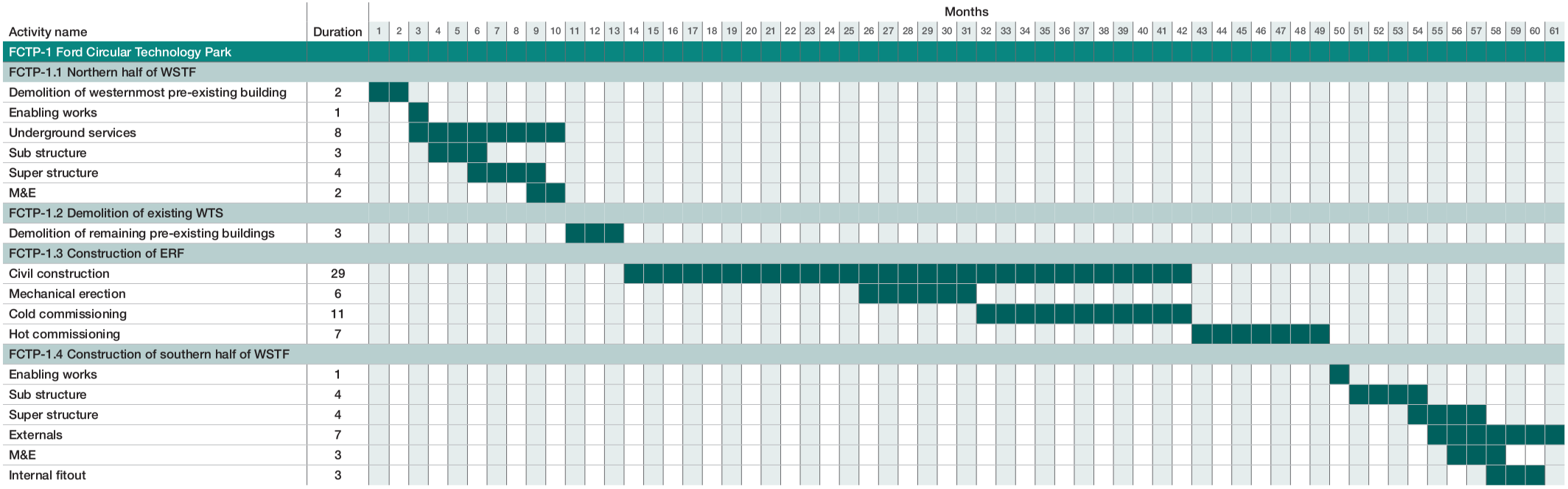


Figure 6 Estimated construction programme

based on table by FICHTNER Consulting Engineers Limited

based on the phasing plan by

FICHTNER
Consulting Engineers Limited

and the site plan by

GSDA

Figure 7
Construction phasing diagram

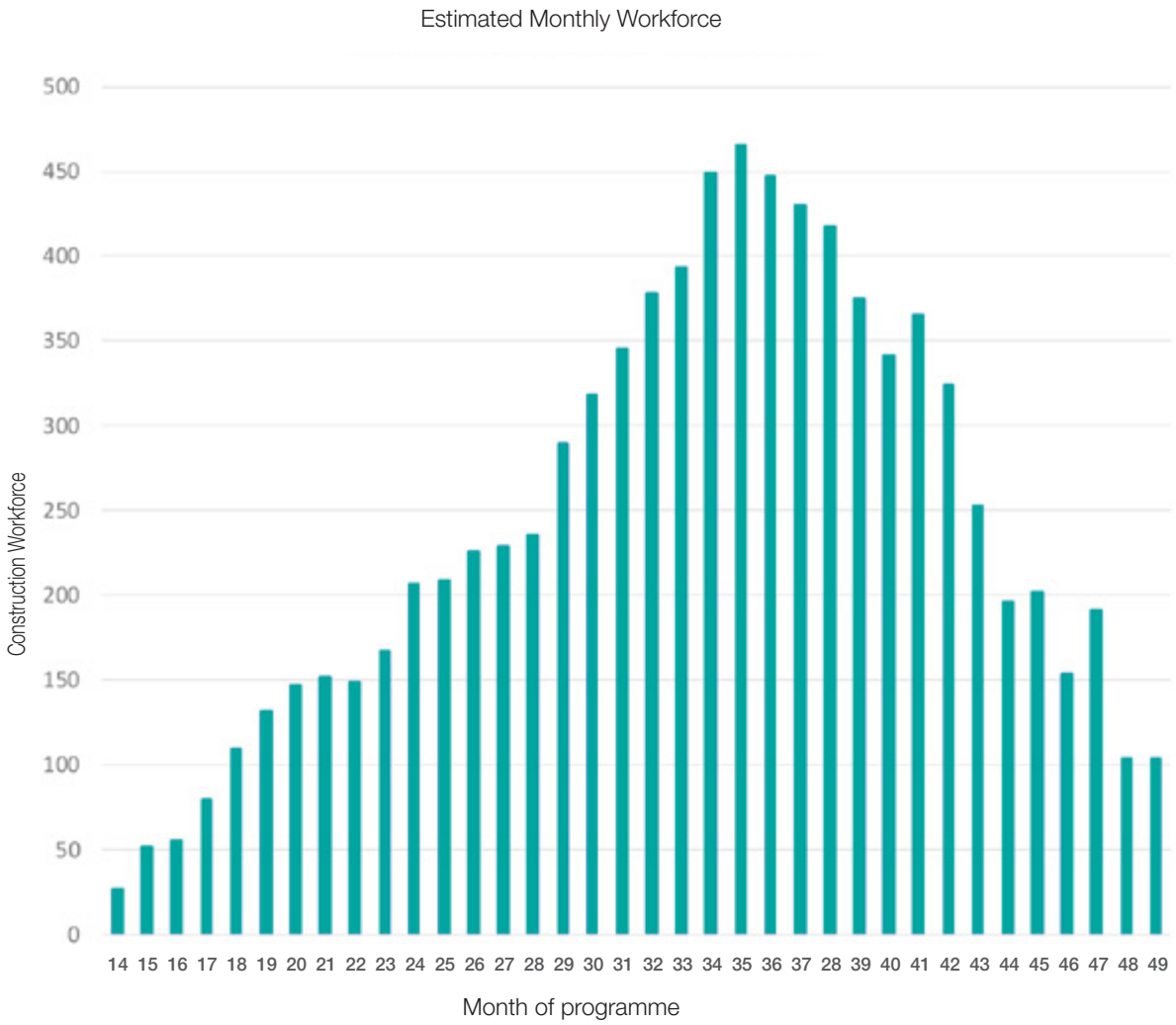


Figure 8 Construction workforce profile for Phase 3 construction work

based on graph by FICHTNER Consulting Engineers Limited

ALL SITE PREPARATION AND CONSTRUCTION RELATED HGV VEHICLES WILL ACCESS / DEPART THE SITE VIA THE EXISTING ACCESS ROAD, FROM / TO THE SOUTH ONTO FORD ROAD AND THEN ONTO THE A259 AND THE WIDER NETWORK. NO CONSTRUCTION HGV VEHICLES WILL BE PERMITTED TO LEAVE OR ACCESS THE SITE TO / FROM THE NORTHERN STRETCH OF FORD ROAD.

A27
A29
A280
A259
Ford Rd

0 1 2 km

N

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Site boundary

West Sussex County Council Strategic Lorry Routes

Figure 9 Strategic highway network and existing site access road

Figure 10 Construction traffic profile for Phase 3 construction work - daily movements

based on graph by FICHTNER Consulting Engineers Limited

Laydown area no. | Location

1. Outage village area between the ERF and the WSTF
2. Eastern side of the ERF / bunded areas
3. Area for the air cooled condensers
4. ERF manoeuvring / contractor's areas
5. Underneath the tipping hall / future workshop (used for covered storage late in the ERF civil construction programme only)
6. West of the WSTF, northern section
7. West of the WSTF, southern section

based on the phasing plan by

FICHTNER
Consulting Engineers Limited

and the site plan by

GSDA

Figure 11
Construction laydown areas