

Havant Thicket Reservoir

Site Compound Plan

Main Pipeline Works – Phase 1 (Bedhampton)

Date: 20/08/26 | P03

Document Reference: HTR-FUW-ZZ-BP-PL-T-1586



Document Control

Revision	Date	Author	Approved by	Reason for Issue
P01	30/04/26	LS / AW	JH	First draft
P02	24/07/26	LS / JF	DE	Revised compound layout
P03	20/08/26	LS / JF	DE	For planning submission

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1 Introduction

The Havant Thicket Reservoir Scheme, and the associated pipeline to transfer water from Bedhampton Springs, were granted outline planning permission by Havant Borough Council and East Hampshire District Council in October 2021 (refs. APP/20/00990 & APP/20/0091 and 51680/001 respectively).

Subsequently, in September 2025, a new pipeline planning permission (ref. APP/24/00405) was granted by Havant Borough Council (HBC) for the development of new pipelines to transfer water between Bedhampton Springs and Havant Thicket Reservoir, a new plant at Bedhampton Pumping Station, modifications to the Bedhampton 2 operational building and permanent diversion of Footpath 34 at Bedhampton Pumping Station. This new pipeline permission results from changes in the approach, pipeline route and design necessitating a new planning approval.

To enable discharge of conditions against this permission, the work areas have been split into 10 phases, as per the Main Pipeline Works Phasing Plan (ref. HTR-WAB-PI-ZZ-PL-W-0006) submitted under APP/25/00796. This document relates to Phase 1 of these phases, which covers works at the Bedhampton Pumping Station site.

1.1 Purpose of the Document

This Site Compound Plan has been prepared by Future Water MJJV for Phase 1 works (as above) being undertaken at Bedhampton Pumping Station.

The plan and accompanying drawing provide information on the layout and location of plant, storage facilities and welfare units, and also outline operational management and maintenance of the main compound and works areas.

It is required to discharge Condition 33 of Dual Pipeline permission, the specific requirements of which are set out below.

Condition 33 – Details of Works Area/Compounds

Notwithstanding the details provided with the works areas Works Area Summary (ref HTR-WAB-PI-ZZ-TN-W-0006 Rev P03), the following details shall be provided prior to works commencing at each compound works area location:

- i. Location of plant and compounds and other storage facilities.*
- ii. Details of the external appearance of welfare, site offices, and facilities, including the location of windows.*
- iii. Details of boundary treatments and temporary and site-specific acoustic screening.*
- iv. Details of service and delivery times.*
- v. Details of acoustic screening and plant insulation, including generators*
- vi. Details of the named site contact at the works location.*
- vii. Reinstatement works along the boundary and screen planting.*
- viii. Details of any generators and their operational requirements.*

The development shall be carried out in accordance with the approved details and retained thereafter.

2 Site Compound Details

The Bedhampton Pumping Station site is located on Meyrick Road, within the Bedhampton area of Havant Borough.

To the north and west, the site is directly neighboured by a railway line, and Bedhampton Railway Station is located roughly 60 m north-east of the site boundary. Further to the east, the site is neighboured by residential houses, with a small number of properties on Meyrick Road and others accessed via Meyrick Road or Brockhampton Road. To the south, the site is bordered by fields, with industrial units beyond these fields.

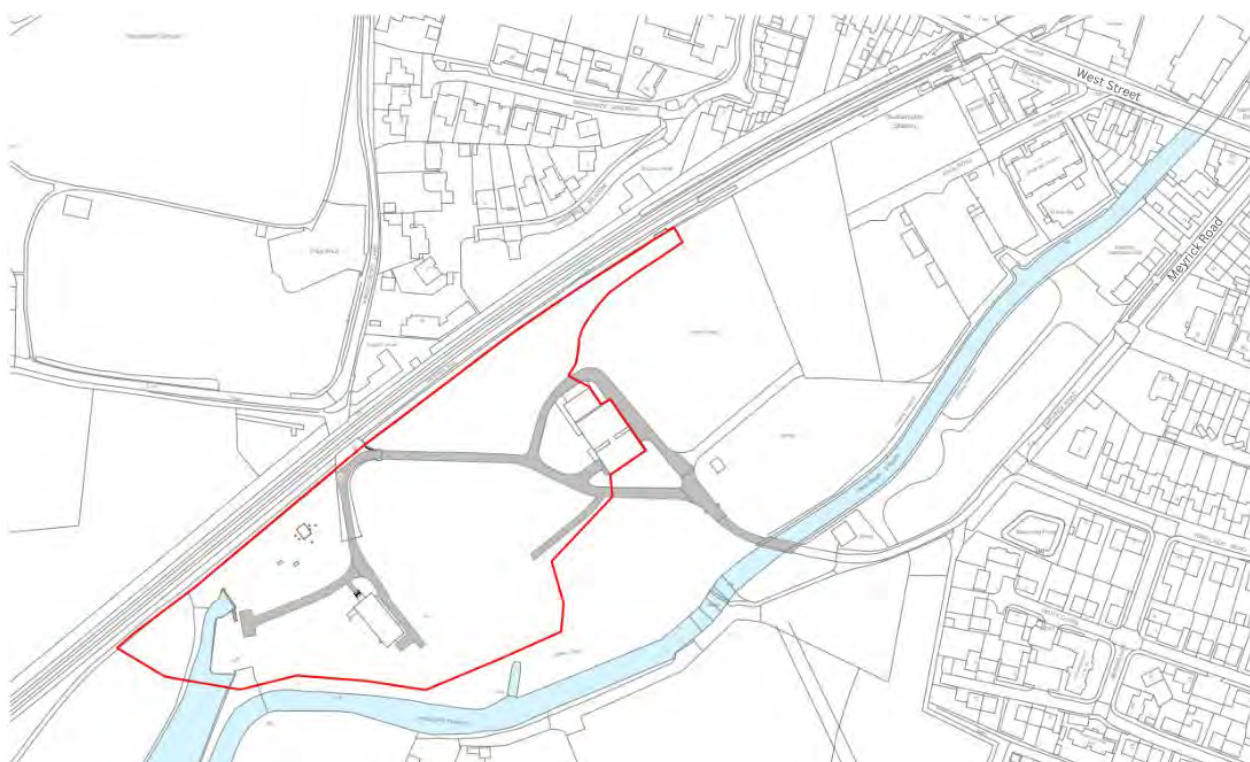


Fig. 1 – Site Location Plan

Within the existing Bedhampton Pumping Station site, Future Water (FW) will be establishing a site compound with welfare/facilities (see Section 2.1) and respective works areas (see Section 2.2). The site compound area will be established in two stages as below:

Stage	Compound Type	Works Covered	Timescale
Stage 1	Enabling works compound	<ul style="list-style-type: none"> - Site clearance - PRoW diversion works - PRoW bridge installation 	Autumn '26 – Spring '27
Stage 2	Main works compound	<ul style="list-style-type: none"> - BH1 building works - BH2 building works - Valve slab construction - Above ground pipe installation 	Spring '27 – Summer '29

Future Water's site compound (and respective works areas) are located within a separate area from the Ward & Burke (W&B) welfare/facilities and works areas, however, both contractors will use the same site access point on Meyrick Road.

2.1 Enabling Works Site Compound Layout & External Appearance

The enabling works site compound will be established in accordance with drawing HTR-FUW-ZZ-BP-DR-T-3173 (included as Appendix A). This will be utilised during PRoW diversion works, installation of the new PRoW bridge and general site clearance and preparation activities, taking place from Autumn 2026 to approximately Spring 2027.

The enabling works site compound will include the following welfare facilities for staff within portable cabin units:

- 1no. Future Water site team office
- 1no. Sub-Contractor site team office
- 1no. meeting room
- 1no. staff canteen unit
- 1no. male/female toilet unit
- 1no. locker/drying room unit

For general operation of the site compound, the following facilities will also be required:

- 2no. storage container
- 1no. generator

The portable cabin units will all be 24ft anti-vandal units and will be stacked two units high in order to maximise limited available space. Each unit will have 2 doors and 3 windows as per the layouts in Figure 3 below, with 1 door per unit in use as shown in Figure 4.



Fig. 2 – Example photograph of stacked cabin units

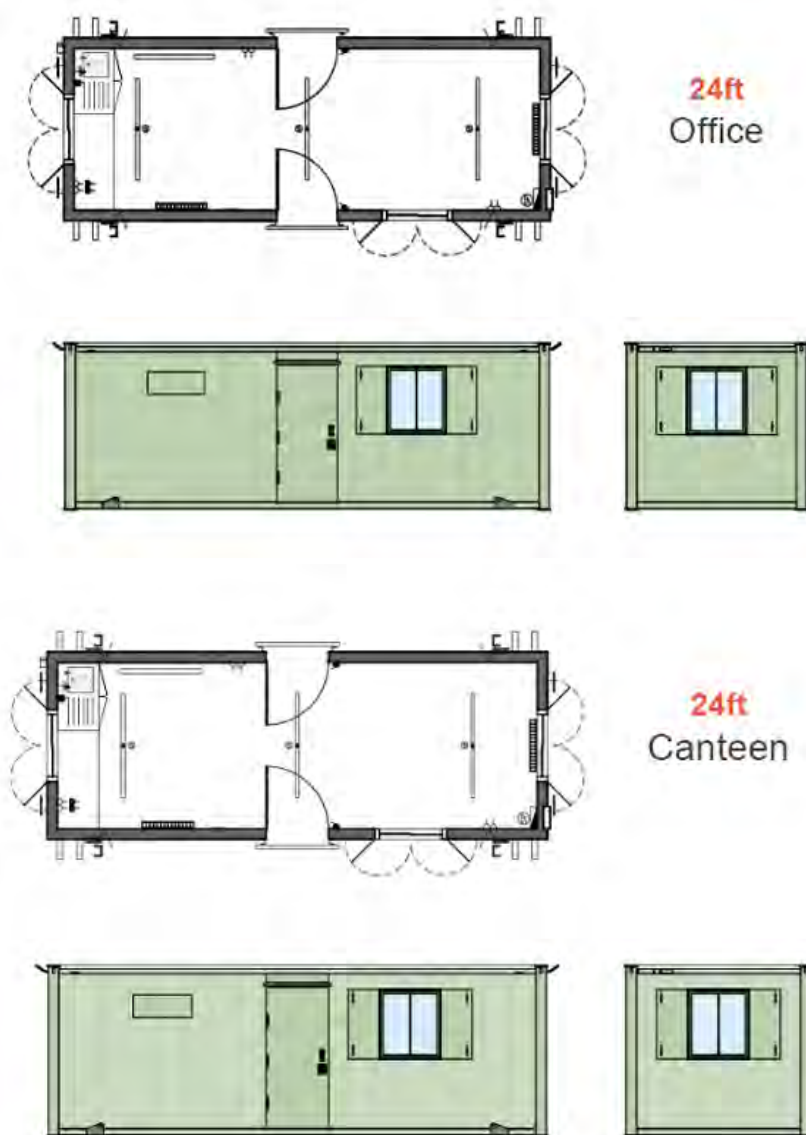


Fig 3. – 24ft portable cabin unit layouts

Externally the units will be light green/beige in colour and sited on a temporary Type 1 aggregate platform.

Metal shutters are built in to all windows on each unit, these will be opened during occupation of the site compound and closed outside of the site working hours. This is detailed in Figure 4 below.

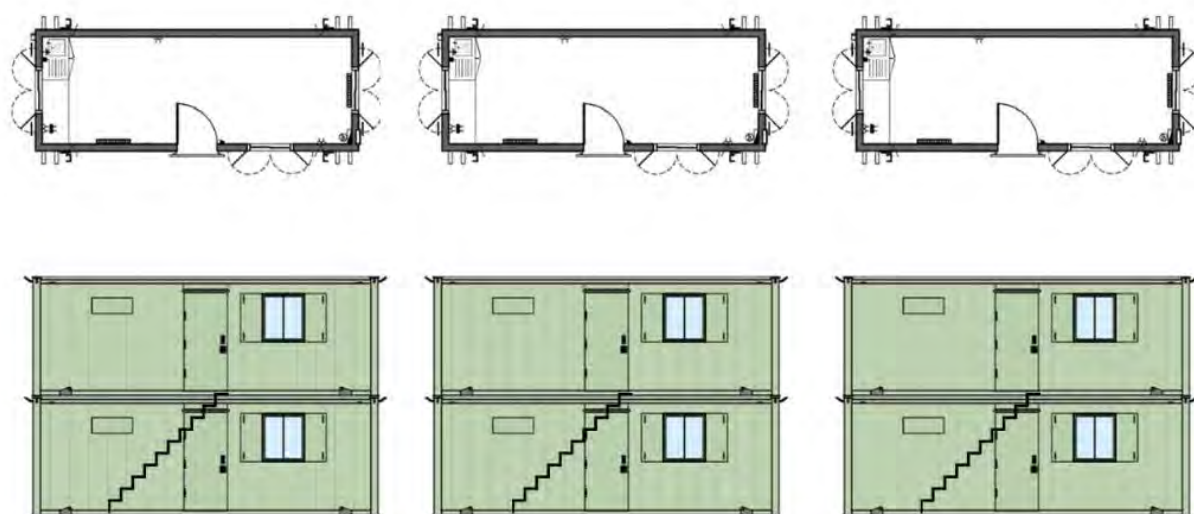


Fig. 4 – Cabin unit configuration

2.2 Main Works Site Compound Layout & External Appearance

The main works site compound will be established in accordance with drawing HTR-FUW-ZZ-BP-DR-T-3207 (included as Appendix B). This will be utilised during the main works phase at the Bedhampton Pumping Station site, taking place after completion of the PRoW diversion. The main works site compound will be established following demobilisation of the enabling works compound in approximately Spring 2027 and be in place until the completion of works in 2029.

The main works site compound will include the following welfare facilities for staff:

- 1no. temporary modular building containing:
 - o Future Water site team office
 - o Sub-Contractor site team office
 - o Meeting room
 - o Staff canteen
 - o Male/female toilets
 - o Locker/drying room

For general operation of the site compound, the following facilities will also be required:

- 2no. storage container
- 1no. generator

The temporary modular building will be equipped in accordance with the plan provided as Appendix C.

2.3 Site Compound Amenities

2.3.1 Parking Spaces

As detailed in the submitted Phase 1 Construction Traffic Management Plan (doc ref. HTR-FUW-ZZ-BP-PL-T-1584) and Construction Worker Travel Plan appendix (doc ref. HTR-FUW-ZZ-ZZ-PL-W-0549), site operatives and site management staff working full time on site will arrive at the Bedhampton Pumping Station site via minibus from the Main Reservoir Works site.

It is therefore anticipated only visiting Future Water Senior Management and Sub-Contractor staff will require parking at the site compound, making 10 parking spaces a suitable allocation for general use.

In the event of additional visitors being required to attend site for an ad-hoc activity, an arrangement will be made in advance for the use of parking within the Ward & Burke site compound to prevent parking on surrounding residential roads.

2.3.2 Site Compound Generator

The generator for the site compound will be a Aggreko Stage V 300 kVA diesel generator. The specification of this is included as Appendix D.

This generator has been selected for its high efficiency and super-silent operation, making it suitable for use on the Bedhampton Pumping Station site. The generator is enclosed within an advanced acoustic canopy and incorporates noise-attenuating technology designed to significantly reduce operational sound levels, ensuring minimal disturbance to nearby receptors.

The generator complies with Stage V emissions standards, supporting both environmental performance and neighbour amenity throughout the duration of the works.

2.4 Works Areas

The works to be undertaken at the Bedhampton Pumping Station site as part of Pipeline Phase 1 include the following:

- Site mobilisation and demobilisation
- Public Right of Way (PRoW) works, including pedestrian bridge installation
- Bedhampton 1 and Bedhampton 2 Building modifications
- Valve slab construction
- Generator slab construction
- Pipeline connection point installations
- Above ground pipeline installation
- Flowmeter installation

These works are all contained within the existing Portsmouth Water-owned Bedhampton Pumping Station site and, with the exception of the Bedhampton 1 Building modifications are all located within Future Water's CDM perimeter fence as shown in Appendices A & B.

The Bedhampton 1 Building is within the Bedhampton Pumping Station site boundary fencing, however, is surrounded by access roads also in use by Ward & Burke and Portsmouth Water Operations teams.

2.4.1 Plant Utilisation and Storage

The works covered in Section 2.2 require the following items of large plant to be utilised during construction, which will be stored within the plant laydown and storage area shown on Appendices A & B. This is located within the Future Water's CDM perimeter fenceline.

- 13t Excavator
- 20t Excavator (for Bedhampton 2 Building modifications only)
- Bomag roller 80 (for PRoW works only)
- Bomag roller 120
- 6t Dumper

In addition to the above, the following items of large plant will attend the site either for deliveries or for the duration of the working day only and, as such, will not be stored on site:

- Hiab
- 90t City Crane (LTM1090)
- Long reach telehandler.
- Concrete pump
- Concrete mixer lorry

2.4.2 Material Storage

In addition to the shared plant laydown and storage area, there are a further two material storage areas located with the CDM perimeter fenceline. These are labelled on Appendix A as provisional material storage and sub-contractor material storage and will both have a Type 1 aggregate surface.

3 Fencing and Boundary Treatments

As Bedhampton Pumping Station site is an already operational site for Portsmouth Water, site boundary fencing is in place around its perimeter and on either side of the current PRoW.

During the enabling works phase, fencing currently alongside the PRoW will be retained, with construction site perimeter fencing installed on either side of this, as depicted in Appendix A. This will ensure the site compound is secure and enable Future Water to undertake the PRoW diversion works within a fenced off area, whilst maintaining public access to the PRoW.

Access between the site compound and PRoW diversion works area is available via locked gates on either side of the current PRoW. Detail of how the interface with PRoW users will be managed is covered in the Construction Traffic Management Plan (doc ref. HTR-FUW-ZZ-BP-PL-T-1584).

Following completion of the PRoW diversion, fencing will be managed by utilising existing site boundary fencing and additional construction site perimeter fencing, which will include fencing alongside the diverted PRoW. This arrangement is detailed on Appendix B.

3.1 Acoustic Screening

Construction works within the site compound area will be limited to mobilisation and demobilisation periods of 7 days, when the hardstanding is constructed and the container units are lifted into place during mobilisation and removed during demobilisation. As

identified by the Noise & Vibration Management Plan (NVMP) submitted to discharge Condition 27, potential impacts are only considered for works that last more than 40 days in a 6-month period or 10 days in a 15-day period, as detailed in Table 1 and Section 6 of the NVMP. This is in line with guidance provided in Annex E of BS 5228:2009+A1:2014 'Code of Practice for Noise and Vibration Control on Construction and Open Sites' – Part 1: Noise.

As the works take place for less than 10 days, they do not exceed the duration criteria set out within the NVMP or BS 5228-1 for the assessment of significant construction noise effects. Consequently, these short-duration activities are not expected to result in significant adverse noise impacts at nearby receptors.

Standard best practicable means (BPM), as defined within the NVMP, will be implemented during these periods to minimise noise as far as reasonably practicable.

The generator specified for the site compound (detailed in Section 2.1.3) will be in use throughout the Bedhampton construction (Main Pipeline Works – Phase 1). The generator incorporates internal self-screening through its factory-designed acoustic enclosure. This surrounds the engine and alternator within a sealed, sound-attenuating canopy. Additionally, the air intake and exhausts are routed through acoustically baffled vents preventing direct noise breakout and key components are mounted on anti-vibration mounts, reducing the transmission of structure-borne noise to the enclosure and surrounding ground. Use of the generator within typical hours of construction, as per Planning Condition 35, is not expected to result in significant adverse noise impacts at nearby receptors.

4 Operation and Maintenance

Future Water works at Bedhampton Pumping Station (detailed in Section 2.2) will be supervised by internal Future Water staff, who will also manage attending sub-contractor personnel.

Named contacts for the works will be as follows:

Name	Role	Responsibility
Juri Fomenok	Senior Sub Agent	Day-to-day site activities
James Hanson	Construction Manager	Overall responsibility for site works

Contact details for the named site contacts will be briefed to all staff working on site as part of their site induction and displayed on signage around the site as below.

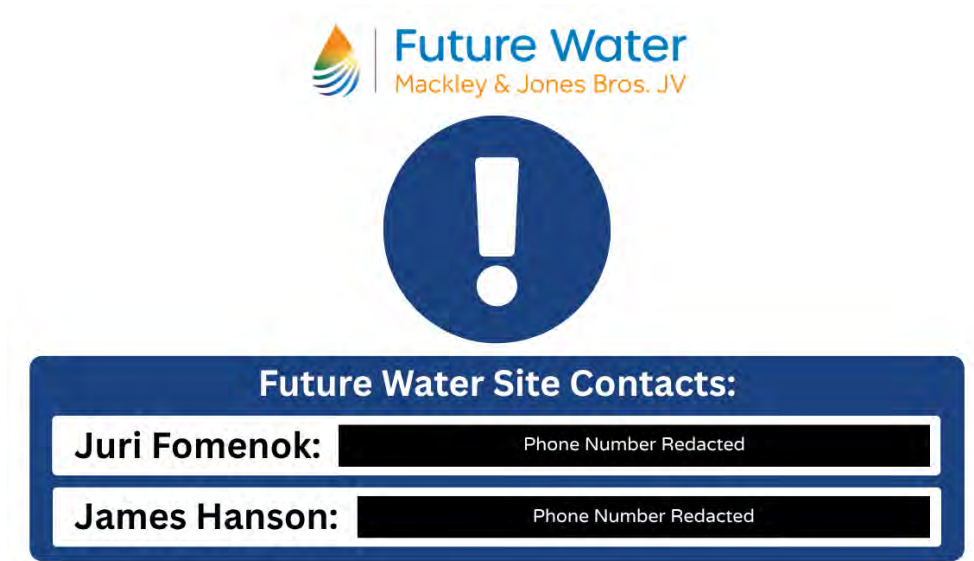


Fig. 6 – Example site signage

Signage will also be displayed on boundary fencing with suitable contact details for members of the public to use should they have any queries or concerns about the works. These will provide contact details for Portsmouth Water's Customer Contact Centre who can pass on any concerns directly to the project teams within Future Water and Portsmouth Water.

4.1 Service and Delivery Times

Vehicular site access to the existing Bedhampton Pumping Station site utilises Meyrick Road as an entry point. All vehicles will be instructed to approach the site access point from the north via junction 5 of the A3(M) – this is as established in approved Framework Construction Traffic Management Plan (doc ref. HTR-ATK-XX-XX-RP-Z-0077).

Approved site working hours detailed in Condition 35 are as below:

- 08:00-18:00 Monday to Friday
- 08:00-13:00 approved on Saturdays (if required)
- No Sunday or Public Holiday working

HGV deliveries and service vehicles will then be coordinated to occur outside weekday morning and afternoon peak traffic hours (08:00-09:00 and 17:00-18:00 respectively) and be suitably spaced out wherever feasible to do so.

5 Post-Construction Reinstatement

Landscape reinstatement at the Bedhampton Pumping Station site is detailed on drawing HTR-ATK-PL-XX-DR-L-0001 submitted and approved with hybrid pipeline permission (ref. APP/24/00405). This includes reinstatement of the site compound and works area hard standings.

Appendices

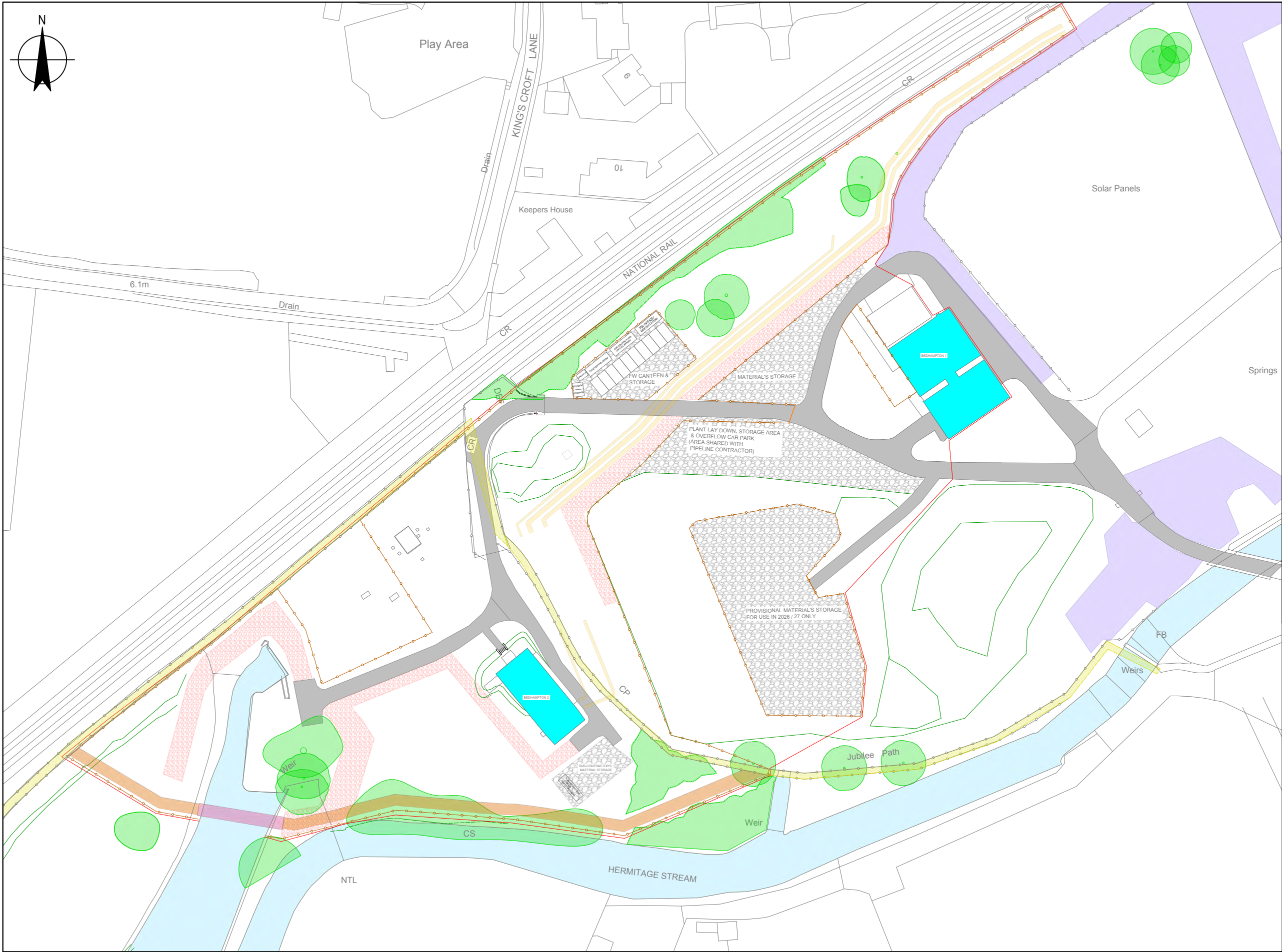
Appendix A – Site Layout Plan Enabling works

Appendix B – Site Layout Plan Main Works

Appendix C – Temporary Modular Building Layout

Appendix D – Site Compound Generator Specification

Appendix A – Site Layout Plan (Enabling Works)



- Key**
- Red Line Boundary
 - Building
 - Landscape lines
 - Existing Site Boundary Fence
 - CDM Perimeter Fence
 - Edge of Site Road
 - Existing Tree/Vegetation
 - Working Area Access Double Vehicle Gates
 - Site Shared Access Road
 - Pipeline Contractor's CDM Area
 - Proposed Valve Slab and Pipe route
 - Waterway
 - PRoW Footpath
 - PRoW footpath diversion
 - Bedhampton Building Works
 - Temporary Type 1 platform with Geogrid layer to protect underground services
 - Temporary Type 1 access with Geogrid layer to protect underground services



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE (UNO).
2. ALL LEVELS ARE IN METRES TO ORDNANCE DATUM UNO.
3. ALL CO-ORDINATES ARE RELATIVE TO OS NATIONAL GRID.
4. FUTURE WATER COMPOUND OFFICE CONTAINERS WILL BE 24FT AND DOUBLE STACK



P05	ProW added	LS	DE	20.08.2026
P04	Name description update	LS	JH	24.07.2026
P03	BIM number update	LS	JH	01.05.2026
P02	Compound location changed	LS	JH	30.03.2026
P01	Initial Issue	NT	JH	06.03.2026
Rev	Description	Checked	Approved	Date
Author	Juri Fomenok	Drafting Check	Lizzie Samms	
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Future Water
Mackley & Jones Bros. JV

5350

PORTSMOUTH WATER

Project HAVANT THICKET RESERVOIR

Status FOR INFORMATION

Status Code S2

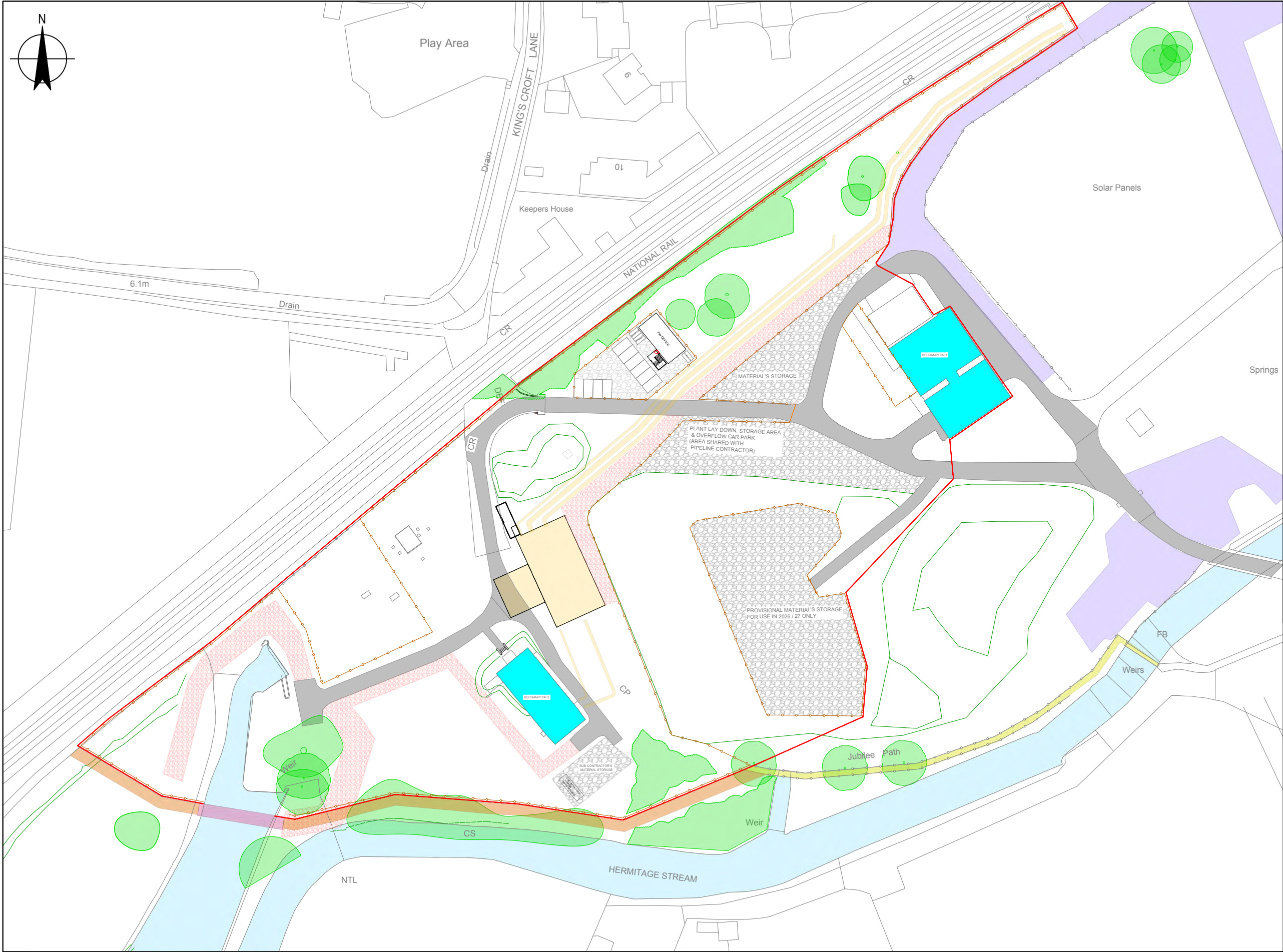
Drawing Title
**BEDHAMPTON
DUAL PIPELINE PHASE 1
WORKS COMPOUND
(ENABLING WORKS)**

Drawing No.
HTR-FUW-ZZ-BP-DR-T-3173

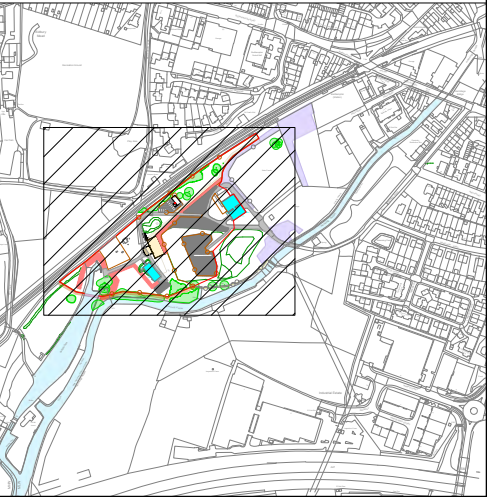
Size
A3

Rev
P05

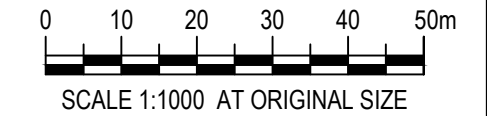
Appendix B – Site Layout Plan (Main Works)



- Key**
- Red Line Boundary
 - Building
 - Landscape lines
 - Existing Site Boundary Fence
 - CDM Perimeter Fence
 - Edge of Site Road
 - Existing Tree/Vegetation
 - Working Area Access Double Vehicle Gates
 - Site Shared Access Road
 - Pipeline Contractor's CDM Area
 - Proposed Valve Slab and Pipe route
 - Waterway
 - PfOW Footpath
 - PfOW footpath diversion
 - Bedhampton Building Works
 - Temporary Type 1 platform with Geogrid layer to protect underground services
 - Temporary Type 1 access with Geogrid layer to protect underground services



- NOTES**
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE (UNO).
 2. ALL LEVELS ARE IN METRES TO ORDNANCE DATUM UNO.
 3. ALL CO-ORDINATES ARE RELATIVE TO OS NATIONAL GRID.
 4. FUTURE WATER COMPOUND OFFICE CONTAINERS WILL BE 24FT AND DOUBLE STACK



P01 Initial Issue	LS	JH	24.07.2026
Rev	Description	Checked	Approved
Author	Juri Fomenok	Drafting Check	Lizzie Samms
Designer	Juri Fomenok	Design Check	James Hanson

Plot Date: 11 March 2026 - 3:19 PM Plotted by: Fomenok J. (Juri)

File Name: HTR-FUW-ZZ-BP-DR-T-3207.dwg

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5350

PORTSMOUTH WATER
Project HAVANT THICKET RESERVOIR
Status FOR INFORMATION

Status Code S2

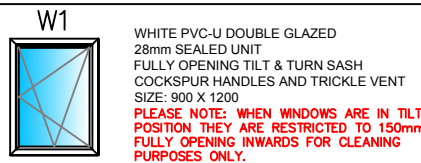
Drawing Title	BEDHAMPTON DUAL PIPELINE PHASE 1 WORKS COMPOUND (MAIN WORKS)	Size A3
Drawing No.	HTR-FUW-ZZ-BP-DR-T-3207	Rev P01

Appendix C – Temporary Modular Building Layout

DO NOT SCALE.
IF IN DOUBT ASK.

NOTES:

PVC-U WINDOW SPECIFICATION



Window positions and quantities indicative, dependant on module availability at time of order.
Furniture for illustration purposes only.

Toilet Facilities For Staff

Area	No. Wc's
Male Wc	2
DDA/Female Wc	1
Total Usage	50

Canteen Facilities

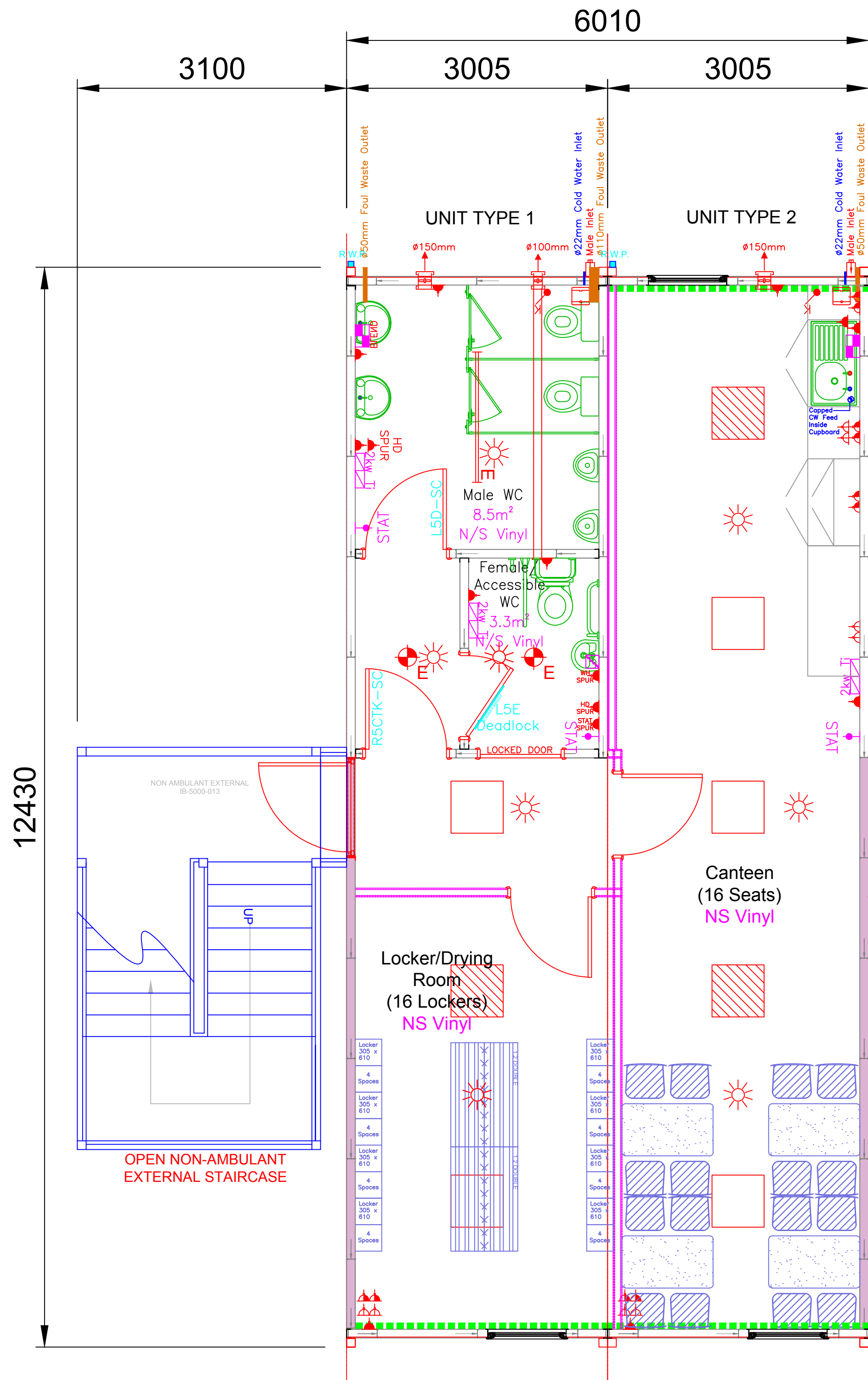
Area	Total	2 Sitings	3 Sitings
Modular Tables	4		
Seats	16	32	48

Locker Facilities (Lockers)

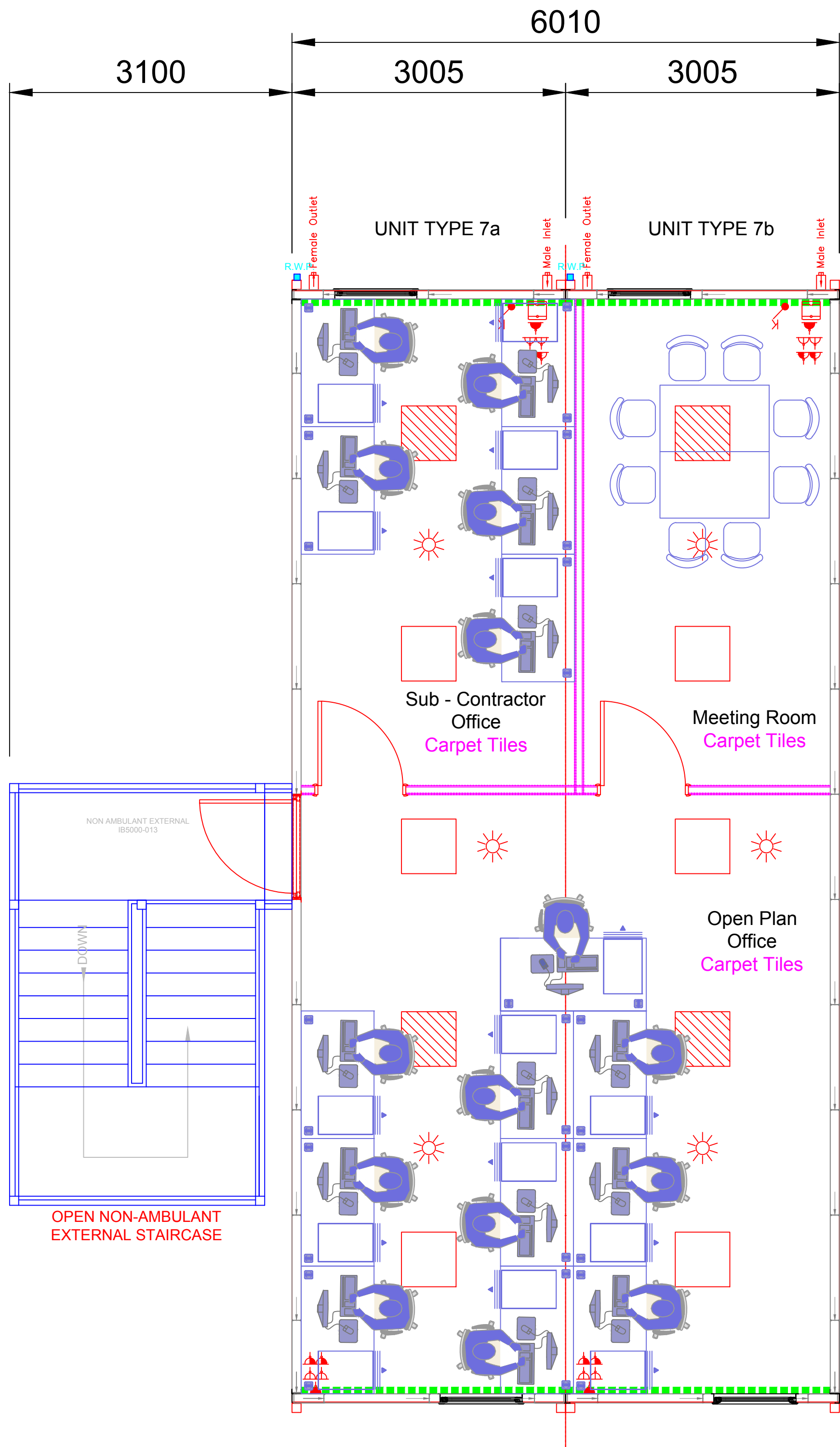
Area	#Lockers
305mm wide x 305mm long	16
Locker Spaces	32

Office Desks

Area	#Desks
Main Office	10
Sub/Con Office	5



GROUND FLOOR



FIRST FLOOR

P1	AM	Lockers, Canteen Seats & Office Desk Added	17/07/26
P0	AT	First Issue	01/07/26
Rev	By	Description	Date

**PREMIER
MODULAR**

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Client **Mackley**

Project **HTR**

Title **General Arrangement
Modular Accommodation**

Scale (at A1) 1: 40	Drawn AT	Date 01/07/26	Checked MAG
Drawing No. 43094-PML-B1-XX-DR-A-0001			Rev P1

Carbon Calculator - Annual/Project Output

Project Name HTR
Project Number 43094
Sector Office welfare accommodation
Total Floor Area 149.41 m²
Project Duration 24 Months

Estimated Project Duration Carbon Emissions (tCO ₂ e)	With Options
Embodied	0.05 tCO ₂ e
Monthly In Use	2.92 tCO ₂ e
Annual Emissions	35.58 tCO ₂ e
Total Project Emissions	71.15 tCO ₂ e

Estimated Annual/Monthly Energy Consumption (kwh)	With Options
Monthly Energy Consumption	21.1 kWh/m ²
Annual Energy Consumption	251.0 kWh/m ²
Total Annual Energy Usage	37507 kWh
Total Project Energy Usage	75014 kWh

Transline Plus V2.1 June 2026

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MODULAR**

Appendix D – Site Compound Generator Specification

aggreko

Stage V generators & battery hybrid Systems in synergy

Low emission temporary power
solutions for your business



GREENER UPGRADES®

The energy transition

At Aggreko we are supporting companies on their decarbonisation journey by providing newer technologies and techniques which lower carbon emissions and deliver fuel savings. This initiative is called **Greener Upgrades®**.



Greener Upgrades®, has been developed to support businesses in making choices that are kinder to the environment. These small switches make a big difference in lowering NOx, particulate matter and CO2 emissions, and reducing fuel consumption.

Our investment in new technology, alongside our consultative approach, delivers sustainable solutions for our customers that improve efficiencies and lower costs.



Power in partnership

We have made a multi-million pound investment to our fleet with the addition of Stage V generators and battery hybrids. Working together, this new fleet enables businesses to operate with greater efficiencies, low noise levels, and lessens the impact on global and local emissions. We introduce you to the technology and demonstrate the efficiencies they deliver, both individually and when combined.

Stage V generators

Designed to cut down on harmful pollutants, our Stage V generators are fully compliant with the European Commission's Medium Combustion Plant Directive (MCPD). They operate in the same way as the cleanest car engines limiting carbon monoxide, nitrogen oxides and particulate matter to provide efficient low carbon temporary power.

Battery hybrids

An integral part of a lower carbon future is energy storage. Harnessing power produced at one time that can be drawn upon when you need it most. Our fleet of hybrid batteries can be used across a variety of applications for a large range of sectors, enabling you to maximise your operational output whilst minimising downtime and emissions.



Stage V generators

Maximising performance, minimising emissions

Introduced by the EU, Stage V (Regulation 2016/1628) is an emissions standard for non-road mobile machinery (NRMM) with spark/compression ignition engines. It aims to reduce emitted harmful substances including particulate matter, and is an evolution of previous standards.

European Stage V non-road emission standards

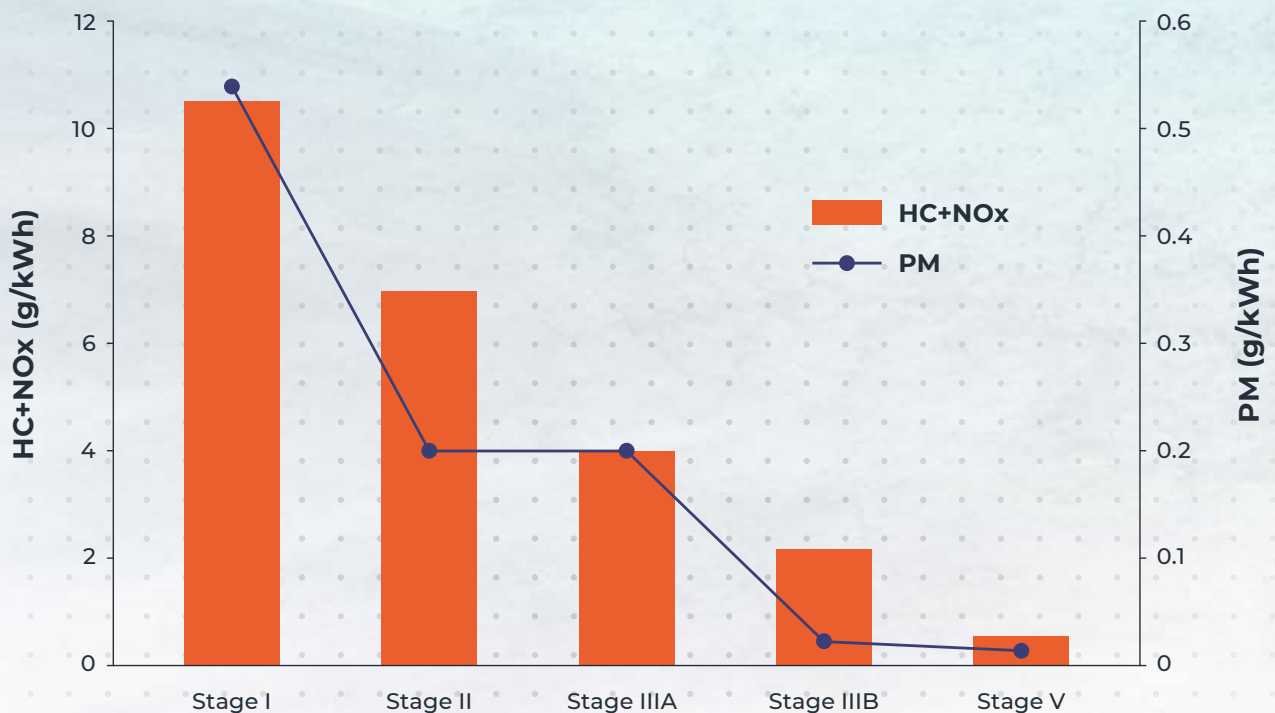


Figure 1. Emission limits from Stage I to Stage V for HC + NOx and PM



Setting the standard

Aggreko is proud to be the first UK hire company to design and manufacture our own Stage V generators. Developed to a high specification, we have the largest fleet available nationwide, with models ranging from 30kVA – 1200kVA.

Robust and fuel efficient, these low noise generators can deliver on your temporary power needs without sacrificing performance. Not simply following the standard but setting it.

Installed and monitored by experts, our Stage V generators deliver low-emission energy generation through improved technology with the following features across the range:

- Installation of a Diesel Particulate Filter to reduce fine diesel emissions
- Selective catalytic reduction system to reduce NOx emissions
- Added injection technology to further neutralise harmful particulates
- Diesel Oxidation Catalysts to reduce CO2 emissions through oxidation
- Low noise, with variable speed fans drastically reducing sound at lower loads and in lighter ambient conditions to allow for use in urban areas
- Arc Flash detection and ingress protection to give better defence of the components against the environment
- Internal Diesel Exhaust Fluid (DEF)/Adblue tank matched to internal fuel capacity to ensure that DEF only requires filling at the same frequency as fuel tank refills
- Two external DEF/AdBlue tank options to extend on-site refill intervals, supply multiple generators and reduce the required site installation footprint

We have the **largest Stage V fleet** available nationwide, with models ranging from 30kVA – 1200kVA.

Introducing our Stage V fleet

Superior. Smart. Sustainable.

30 kVA

Fuel consumption

100% Prime power – 9.52 l/hr
75% Prime power – 7.08 l/hr
50% Prime power – 4.95 l/hr

Exhaust emissions

NOx & HC – 3.542 g/kWh
PM – 0.0006 g/kWh
CO – 0.065 g/kWh



Noise 7m at 75% load,
53 dB(A) at 50Hz

Running hours 46.5
based on 50% prime
power

Size L 3.05m x
W 1.17m x H 1.89m

60 kVA

Fuel consumption

100% Prime power - 15.67 l/hr
75% Prime power - 11.79 l/hr
50% Prime power - 7.97 l/hr

Exhaust emissions

NOx – 0.145 g/kWh
PM – 0.0022 g/kWh
CO – 0.047 g/kWh
HC – 0.0145 g/kWh



Noise 7m at 75% load,
55 dB(A) at 50Hz

Running hours 56.5
based on 50% prime
power

Size L 3.05m x
W 1.17m x H 2m

100 kVA

Fuel consumption

100% Prime power - 20.89 l/hr
75% Prime power - 15.72 l/hr
50% Prime power - 10.62 l/hr

Exhaust emissions

NOx – 0.145 g/kWh
PM – 0.0002 g/kWh
CO – 0.038 g/kWh
HC – 0.005 g/kWh

Noise 7m at 75% load,
55 dB(A) at 50Hz



Running hours 25.5
based on 50% prime
power

Running hours based
on low load with 380l
external DEF tank -
550

Running hours based
on low load with
2000l external DEF
tank - 2,971

Size L 3.05m x
W 1.17m x H 2m

200 kVA

Fuel consumption

100% Prime power - 38.4 l/hr
75% Prime power - 27.4 l/hr
50% Prime power - 17.6 l/hr

Exhaust emissions

NOx – 0.4 g/kWh
PM – 0.02 g/kWh
CO – 3.5 g/kWh
HC – 0.2 g/kWh

Noise 7m at 75% load,
61.7 dB(A) at 50Hz



Running hours 41
based on 50% prime
power

Running hours based
on low load with 380l
external DEF tank -
143

Running hours based
on low load with
2000l external DEF
tank - 734

Size L 3.95m x
W 1.2m x H 2.26m

300 kVA

Fuel consumption

100% Prime power - 57 l/hr
75% Prime power - 43 l/hr
50% Prime power - 28.5 l/hr

Exhaust emissions

NOx – 0.345 g/kWh
PM – 0.0019 g/kWh
CO – 0.038 g/kWh
HC – 0.005 g/kWh

Noise 7m at 75% load,
63.4 dB(A) at 50Hz



Running hours 25.5
based on 50% prime
power

Running hours based
on low load with 380l
external DEF tank -
159

Running hours based
on low load with
2000l external DEF
tank - 858

Size L 4.5m x
W 1.2m x H 2.46m

600 kVA

Fuel consumption

100% Prime power - 113.1 l/hr
75% Prime power - 84.9 l/hr
50% Prime power - 57.8 l/hr

Exhaust emissions

NOx – 0.17 g/kWh
PM – 0.012 g/kWh
CO – 0.043 g/kWh
HC – 0.007 g/kWh

Noise 7m at 75% load,
73.1 dB(A) at 50Hz



Running hours 27.1
based on 50% prime
power

Running hours based
on low load with 380l
external DEF tank -
80

Running hours based
on low load with
2000l external DEF
tank - 429

Size L 5.16m x
W 1.9m x H 2.9m



1200 kVA

Fuel consumption

100% Prime power - 267 l/hr
75% Prime power - 199 l/hr
50% Prime power - 137 l/h

Exhaust emissions

NOX – 0.17 g/kWh
PM – 0.012 g/kWh
CO – 0.043 g/kWh
HC – 0.007 g/kWh

Noise 7m at 75% load,
79 dB(A) at 50Hz



Running hours 15.4
based on 50% prime
power

Running hours based
on low load with 380l
external DEF tank
- 160

Running hours based
on low load with
2000l external DEF
tank - 858

Size L 6.06m x
W 2.44m x H 2.89m

Combination DEF tank (380L DEF, 3000L Diesel) & Single purpose DEF tank (2000L DEF)



- Dramatically improves the run time of Stage V generators
- External Diesel Exhaust Fluid (DEF) Tank to support all Stage V assets which consume DEF/AdBlue in Europe (>100 kVA)
- Compatible with 100, 200, 300, 600 and 1200kVA Stage V generators with standardised connections across the range for quick setup
- Combi tank (3000l) supports simultaneous filling of 2 gensets
- Dedicated larger tank with onboard pumps to limit contamination, and heating to ensure year round performance. DEF/AdBlue quality is actively monitored by the generator to protect the aftertreatment system from damage
- Single purpose tank (2000l) supports simultaneous filling of 4 gensets

Features

Benefits



Superior

Bespoke high
specification
standards

Flexible 50 and 60 Hz units

Designed and assembled to Aggreko's bespoke high specification standards:

- Arc Flash detection and ingress protection moisture louvres
- Forklift pockets in base frame and lifting beam on top

Ability to use in multiple regions

Giving better protection of the internal components of the canopy from the environment

Bolted, galvanised, alloy steel canopy with lockable doors

Secured units for peace of mind

New aftertreatment system to adhere to latest emissions legislation

Greater efficiency than the previous generation of diesel engines

Suitable for alternative fuels, such as HVO and B10

Further minimising emissions



Smart

Data driven for
actionable insights

Acoustically designed equipment

Quieter sound

Range of warnings and shutdowns on control system

Protects generator set from electrical and mechanical damage, helps identify and rectify faults before they occur

Smarter servicing with condition based monitoring of key systems

Reduced service intervals

Standardised internal/external fuel and DEF connections

Faster and more secure site set up with range extending external fuel and DEF fill intervals

Low fuel level warning sensor in fuel tank

Allowing you to schedule fuel deliveries more effectively

Remote monitoring

Allows you to easily optimise, control and manage your on-hire fleet



Sustainable

Reduced emissions
as standard

Installation of a Diesel Particulate Filter

Reduces fine diesel emissions

Selective catalytic reduction system

Reduces NOx emissions

Added injection technology

Further neutralises harmful particulates

Diesel Oxidation Catalysts

Reduces CO2 emissions through oxidation

The positive effects of batteries

Regardless of your load profile, our lithium-ion battery systems have been designed to offer a robust and highly mobile solution for customers with varying needs. Due to their compact footprint and weight, they are easy to transport and can accommodate the smallest of spaces. All this whilst substantially lowering fuel costs and emissions too.

There are many ways that batteries can be introduced into your operations. As a hybrid solution working alongside our generators, batteries are a reliable energy source should load fluctuate, or demand change. The systems work together to deliver a flexible approach to powering your site.

Uneven load profiles

Should your peak load fluctuate on-site due to machines with intermittent usage or motor starts, batteries can work in two ways to optimise your operations:

- A smaller battery can take care of the lower loads whilst the generator can handle the peaks
- A larger battery can handle the peak load and the generator can recharge the battery

Ideal for:



tower cranes



construction hoists



submersible pumps

Long periods of low load

If a generator isn't running at optimal capacity, utilising a battery can reduce the generator run time by up to 80% - saving emissions and fuel costs.

Ideal for:



refinery turnaround



live events



live equipment



servers

Critical power or redundancy

A battery can be the necessary back up power for your site, should your generator need to be powered down for servicing or other reasons.

Ideal for:



office trailers



site lighting



manufacturing



Remote locations

If availability of fuels and technicians is problematic due to a remote area, a battery can be the ideal equipment to fulfil your needs.

Ideal for:



drill rigs

Environmentally sensitive areas

When low noise and zero emissions are required, batteries are the perfect solution.

Ideal for:



live
events



greener
construction



residential
areas



inner-city
construction

Through the night

At night when loads may be low and power needs to be silent, hybrid batteries are the perfect solution.

Ideal for:



Construction
site at night



manufacturing

Supporting solar and wind technology

Batteries integrate seamlessly with your renewable technology to smooth out fluctuations caused by intermittent power supply from wind or solar.

Ideal for:



wind farms



solar

Introducing our battery fleet

Quiet. Quantifiable. Quality.

45 kVA

AC Input voltage range

400V

Energy capacity (nominal)

56.8 kWh

Energy capacity (usable)

48.0 kWh

Charge time (minimum)

3.5 hours

Size

L 1.14m x W 1.45m x H 1.58m

Weight

1440kg



90 kVA 400V Powr2

AC Input voltage range

400V

Energy capacity (nominal)

127.9 kWh

Energy capacity (usable)

115.1 kWh

Charge time (minimum)

3 hours

Size

L 2.25m x W 1.3m x H 2.07m

Weight

2800kg



150 kVA 72 kWh – exclusive to Aggreko

AC Input voltage range

400 - 415V

Energy capacity (nominal)

72 kWh

Energy capacity (usable)

61 kWh

Charge time (minimum)

1 hour 45 minutes

Size

L 2.15m x W 1.2m x H 1.7m

Weight

4000kg





Battery features and benefits

	Features	Benefits
 Quiet Minimal noise	Delivers minimal noise	Ideal for projects where sound needs to be kept to a minimum
 Quantifiable Proven savings on time, cost, emissions and fuel	Plug and play with the entire Aggreko eco-system	Fast installation and commissioning
	Allows for savings on fuel	Reduces both emissions and fuel costs
	Environmentally friendly	Helps in meeting emissions regulations
 Quality Exclusive intuitive features	Designed and assembled to Aggreko's standards: <ul style="list-style-type: none">• Flexible manoeuvrability options with forklift pockets, lift & drag skid and lifting ring• Wide ambient temperature range	High quality bespoke specification
	Intelligent onboard energy control module that communicates with the generator	Remote monitoring which allows optimisation through the technical support desk
	Increases reliability	Manages variable loads and eliminates light load periods



Systems in synergy

Our Stage V generators work in harmony with our battery hybrids. Smart technology in our kit detects when required power is low, switching off the generator to allow the battery to take the load. This efficiency delivers fewer emissions, low noise, and reduced fuel costs.

With government restrictions on red diesel effective for businesses from April 2022, saving fuel is essential for your bottom line. We explore the fuel and emissions savings that can be achieved with our Greener Upgrades solutions in two typical scenarios.



Scenario 1

Site set up plus crane 1 using 2kW average in the evening for site and aviation lights

Option 1

- Use 200kVA canopy
- Daytime – average fuel consumption of 26 litres per hour 50% load for 60 hours (daytime)
- Night-time – 6 litres per hour for 108 hours

Weekly stats

Fuel usage: 2088 litres **Emissions:** 5560 kg



Option 2 using Greener Upgrades®

- Use 200kVA canopy and 45kVA battery
- Daytime – average fuel consumption 26 litres per hour 50% load for 63 hours (3 hours charging)
- Night-time – 0 litres per hour for 105 hours

**Weekly
fuel saving**

approx.
522
litres

**Weekly
CO2 saving**

1399
kg





Scenario 2

Full cabin set up, using generator during day and 4kW on average in the evening

Option 1

- Use 60kVA canopy
- Daytime – average fuel consumption of 8 litres per hour 50% load for 60 hours (daytime)
- Night-time – 4 litres per hour for 108 hours

Weekly stats

Fuel usage: 937 litres **Emissions:** 2512 kg



Option 2 using Greener Upgrades®

- Use 60kVA canopy and 45kVA battery
- Daytime – average fuel consumption 8 litres per hour 50% load for 63 hours (3 hours charging)
- Night time – 0 litres per hour for 102 hours

**Weekly
fuel saving**

approx.
391
litres

**Weekly
CO2 saving**

1048
kg



Fuelling our technology

In addition to the right technology, one of the simplest and most effective choices you can make in reducing your local emissions and CO₂ is to switch to Hydrotreated Vegetable Oil (HVO). A new and superior type of biodiesel, HVO is made from biological material, making it one of the cleanest, greenest fuels on the market.

HVO can be used in all our generators as a drop-in fuel and can be distributed, handled and stored in the same way as traditional fuel, making it a convenient alternative to diesel. It does not contain any esters or contamination, like regular diesel and FAME, which means it can be stored for extended periods of time, with no adverse effects on performance.

The major advantages of using HVO fuel are significantly reduced harmful emissions. This is through improved burning efficiency and lower CO₂ emissions, which are better for the environment.

Benefits of HVO



Eliminates up to 90% of net CO₂ greenhouse gas



Significantly reduces nitrogen oxide (NO_x), particulate matter (PM) and carbon monoxide (CO) emissions



Biodegradable, non-toxic, and odour-free



High cetane number means HVO is more easily ignited for smoother running, greater power and cleaner performance



Safe to use in a wide range of applications



Real life savings

The scenarios below illustrate the real-life emissions and fuel savings you can make by combining Stage V technology, battery hybrid and a superior fuel.

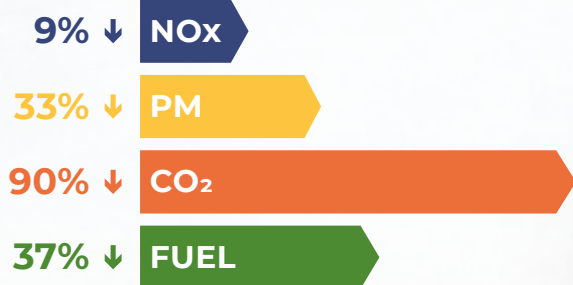
By using Stage V in a load on demand (LOD) configuration alongside a Battery and HVO, you can achieve the following savings in NOx, Particulate Matter, CO₂ and Fuel.

Scenario 1:

General site power: Power required 300kVA | Load required Variable | Power required at night 5%

HVO + Stage V + Battery Hybrid

Drop-in fuel + Load on demand configuration (LOD)

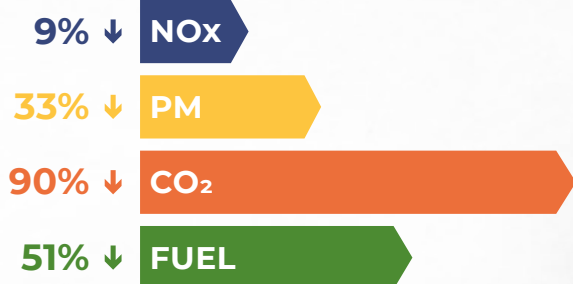


Scenario 2:

Tower crane: Power required 500kVA | Load required Variable | Power required at night 5%

HVO + Stage V + Battery Hybrid

Drop-in fuel + Load on demand configuration (LOD)



The Aggreko approach

Our team deliver a full service to our customers, from cables to kit, fuel to software. We work in partnership to help guide businesses through the energy transition delivering power solutions that lower harmful emissions and reduce fuel costs in the process.

In conjunction with the right technology, we are committed to innovation and continue to test our equipment to maximise efficiencies. This insight along with experience and knowledge of our industry allows us to deliver the right solutions with optimum operating capabilities.

Right sizing

Generators that are oversized or poorly matched for their chosen application will lead to inefficiencies. Aggreko apply innovative thinking to right sizing the right equipment to its application to ensure greater efficiency and further reduction in carbon emissions.

Load on demand

Load on demand power solutions replace a large constantly operating generator with a group of smaller generators which can power up or down automatically according to demand. If your site requires a total peak output of 1500 kVA, it is possible to use three smaller 500kVA generators together to achieve this when the site is operating at full capacity. As power demand fluctuates and reduces to 500 kVA, two of the generators can power down – minimising emissions and fuel usage.

Alternative fuels

We are exploring the viable options for greener fuel alternatives to diesel and the impact these can have to lessen global and local emissions. We have made the commitment to phase out offering diesel with our fuel management services from April 2022, instead solely providing HVO. We are also continuing to test methanol and hydrogen and have carried out multiple pilot projects with the latter including fuel cell technology which will run alongside our battery energy storage system.



Aggreko Connect

Aggreko Connect is a free online customer asset management platform providing access to all account information in one central place. It delivers insights into your business enabling you to maximise your operational efficiency. With speed and simplicity, you can view equipment on-hire, check your orders, and even review kit performance.

Aggreko Remote Monitoring (ARM)

With ARM we can monitor the health of our equipment from a central operation centre and remotely control it to ensure maximum efficiency, reducing emissions and saving fuel costs.

You'll benefit from:

- Round-the-clock remote monitoring services – 24/7 365 days a year
- Rapid response to emergencies
- Proactive equipment maintenance and fuel service

You can view the live data of any of your on-hire kit through ARM on Aggreko Connect at any site. It will also highlight should equipment stop or if a fault occurs so any issues can be remedied. These actionable insights at your fingertips prevent downtime and deliver peace of mind.

Talk to Aggreko today to see how we can support your business and deliver the following benefits:

- **Lower emissions** - helping you reach your carbon reduction targets
- **Reduced fuel usage and costs** - saving money on your bottom line
- **Low noise** - ideal for projects when sound needs to be kept to a minimum
- **Fast installation and commissioning** - plug and play with the entire Aggreko eco-system, saving you time and hassle
- **Actionable insights** - remote monitoring through ARM which allow you to optimise, control and manage your on-hire fleet through the technical support desk

aggreko



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