



Construction Management Plan

Sample Preparation Facility and Emissions Baghouse - CMP

Britannia Refined Metals Ltd.

Botany Road, Northfleet, Gravesend, Kent, United Kingdom, DA11 9BG

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	402.064683.00001.07.02a.P1 - Application Boundary
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REPORTS:	



	Flood Risk Assessment 23 July 2024
	Air Emissions Risk Assessment 21 May 2024
	Phase One Geotechnical and Environmental Desk Study 11 August 2023
	Phase 2 Ground Investigation Report 19 October 2023
	Planning Supporting Statement 19 February 2024
	Environmental Policy Statement January 2024
	Traffic Management Plan 11 June 2024
	Email from then agent received 26 April 2024
	Emergency Response Plan



1.0 Introduction

Planning Permission Ref.20240234 for the '*Erection of emissions management building consisting of a baghouse and stack*' was granted by Gravesham Borough Council (GBC) on the 27th September 2024 and was subject to 12 conditions.

Condition 4 states:

No development approved by this planning permission shall commence until a construction management plan has been submitted to, and approved in writing by, the Local Planning Authority.

The document will address the following requirements:

- a) The applicant should ensure the control of nuisances during construction works to preserve the amenity of the area and avoid nuisances to neighbours and to this effect:*
- b) No waste materials should be burnt on the site, instead being removed by licensed waste contractors;*
- c) Prior to the commencement of works a Dust Management Plan shall be submitted for approval. Work shall be undertaken in accordance with the approved plan which should make reference to current guidance on the 'Assessment of Dust from Demolition and Construction' (IAQM) or an acceptable equivalent. This must include asbestos investigation and handling.*
- d) Consideration should be taken to restricting the duration of noisy activities and in locating them away from the periphery of the site (this is notwithstanding any Prior Consent that exists for the site under section 61 of the Control of Pollution Act 1974).*
- e) A Construction Site Workers Risk Assessment to address working with potentially contaminated soils.*
- f) Hours of works: works should only be undertaken between 0800 hours and 1800 hours on weekdays; between 0800 hours and 1300 hours on Saturdays and not at any time on Sundays and Public Holidays (this is notwithstanding any Prior Consent that exists for the site under section 61 of the Control of Pollution Act 1974).*

The development shall be implemented in accordance with the approved construction management plan.

This document presents a Construction Management Plan (CMP) for the BRM Sampling Preparation Facility, including the Emissions Management Building, to discharge Condition 4 of planning permission Ref. 2204023).

The CMP will form part of the site induction which is mandatory for all employees, contractors and visitors attending the Site. All employees and contractors shall familiarise themselves with the contents of the CMP.

1.1 General

This CMP has been produced to ensure that the construction phase of the Sampling Preparation Facility and Emissions Management Facility is executed efficiently, safely, and within the established guidelines, including relevant planning and permitting regulatory requirements. It serves as a comprehensive document that outlines how the project construction phase will be managed from start to finish. Deviation from the plans set out within this document will require approval by BRM and, Gravesham Borough Council (GBC) if deviating from the planning conditions.

The development shall be implemented in accordance with the approved CMP, to ensure that the development does not contribute to, or is not put at unacceptable risk from, or



adversely affected by, unacceptable levels of ground contamination in line with Policy CS19 of the Gravesham Local Plan Core Strategy (2014).



2.0 Background

2.1 Site Description

The Britannia Refined Metals site, outlined in blue in **Figure 1**, is situated to the south of the River Thames and to the north of Northfleet.

Figure 1: Site Location & Surrounding Area



To the west of the Site lies undeveloped marshland protected by an SSSI designation. To the southwest, the Site is bound by industrial warehouses within the Northfleet Industrial Park; other neighbouring companies include sheet metal solutions; the London Bus Company; B & W Products; and Brett Aggregates & Brett Concrete.

The Site is accessed via Manor Way, which provides access to BRM and neighbouring industrial areas to the north. Manor Way, in turn, connects to Lower Road to the south, which then joins to the A226 which provides access to the wider national road network.

The area northeast of Manor Road is the working BRM metals recovery site, whilst the southwest includes an area of green space which is part of the wider Swanscombe Peninsula SSSI and under the ownership of the applicant.

Nearby settlements include Swanscombe (1.2km south) and Greenhithe (2.2km southeast). The A2 runs east to west at an approximate distance of 3km (south) connecting to the M25 (west).

2.2 The Development

The development as shown in **Figures 2 & 3** below would comprise a single storey Sample Preparation Building, with a footprint of 176m² and a height of 10.1m and an emissions management building which consists of a baghouse and a 20 m stack. The footprint of the



emissions management building would be 13.5m long by 8.1m wide, giving an area of 109m², excluding the vent which will link the emissions management building to the Sample Preparation Building.

Figure 2: Sample Preparation Building and Baghouse - aerial view

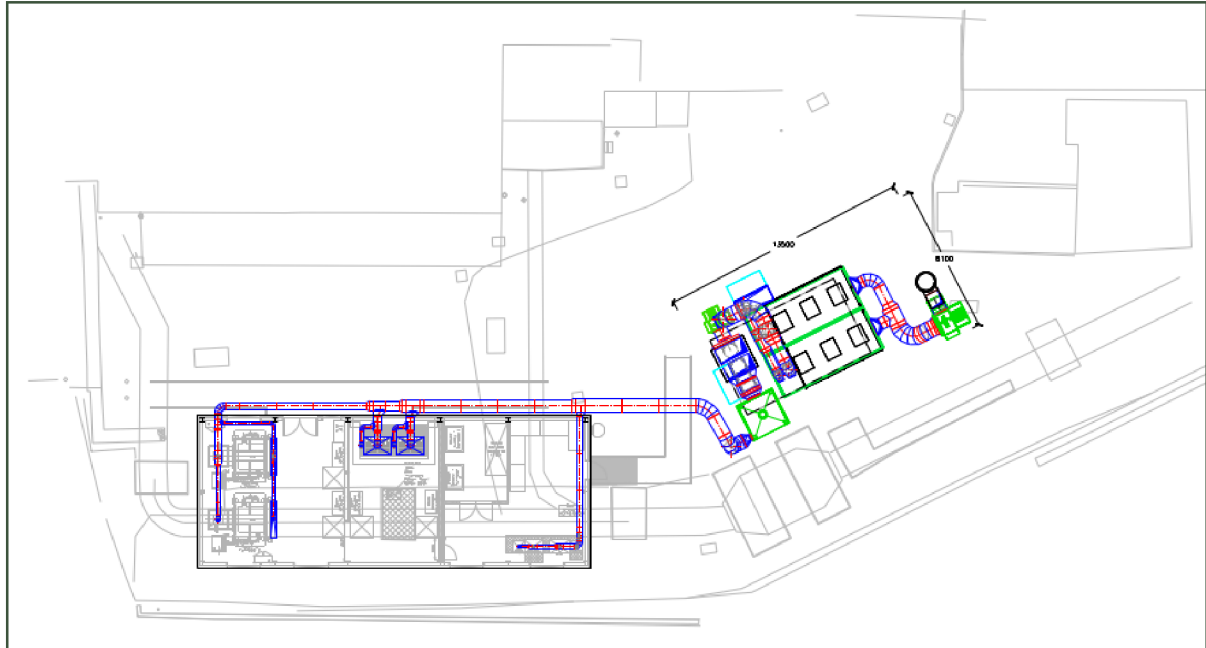
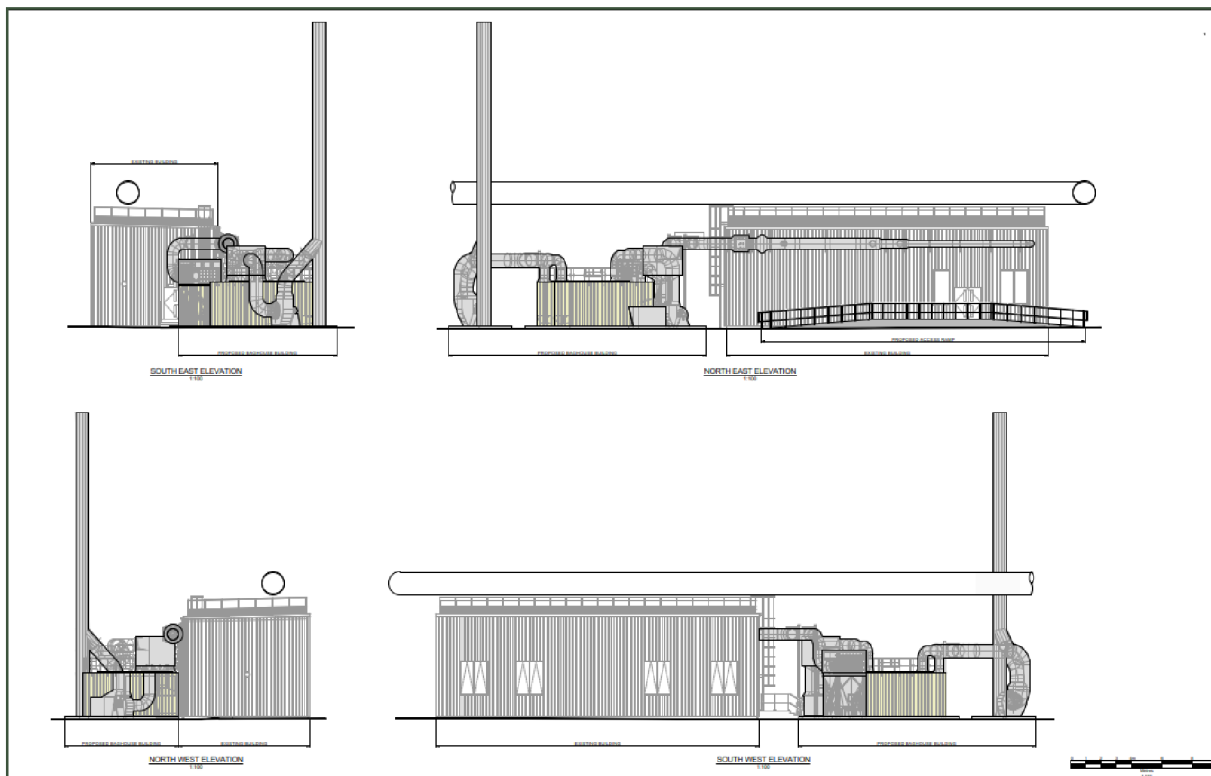


Figure 3: Proposed Elevations



2.3 Process Description

The BRM Sample Preparation Building will accommodate 4 furnaces and grinding/milling equipment associated with the furnaces to prepare the e-scrap samples for analysis via a third-party laboratory. The process emissions from the furnaces and equipment will need to be extracted via a ventilation system to an abatement unit, which is the emissions management building being applied for now. The abatement unit will include common dust extraction, high capacity dust pre-filters and a deep bed absorption unit that uses activated carbon to provide treatment of emissions prior to release via a dispersion stack. A 750 mm duct would link the Sample Preparation Building to the Emissions Management Building.

Additional ancillary structures are also required to support the operating of the Sample Preparation process such as a continuous emissions monitoring system (CEMS).

2.4 Description of Works

The following summary of works constitute a preliminary description and will be further detailed by the Project Manager and Principal Contractor and formalised in the Programme of Works:

2.4.1 Civil, Structural and Building

- Site Clearance and setting up of Contractor Compound. Construction access & parking arrangements,
- Excavation to form foundations and construction levels,
- Piles installed for Sample Prep Building and Emissions Management Building foundations,
- Import and installation of granular material, membranes and concrete to form the substructure,
- Installation of underground drainage & services as required to serve the proposed development,
- Import and installation of construction materials to raise the super structure,
- Building structure, including columns, beams, roofing, insulation, cladding, block work, flooring, painting and finishing
- Trimming to final levels and making good any surrounding surfaces,
- Site clearance and removal of any temporary items (Contractors Compound, fencing etc...)

2.4.2 Equipment Installation

- Installation of 2-off roasting ovens and associated electrical/control system (by CDS Contractor)
- Installation of 2-off induction ovens and associated electrical/control system (by Interpower Contractor)
- Installation of communiton equipment such as crusher, mill and sample dividers (by BRM)



- Installation of abatement / extraction system such as baghouse with filters, absorption unit with activated carbon, LEV ducting, stack and associated control system (by Exeon)
- Continuous emission monitoring system (CEMS) by Envea

2.4.3 M&E / Utility Services Installation

- Natural gas supply (by Lindfield / Apollo)
- Water supply (by Lindfield / Apollo)
- Power supply (by Lindfield / Apollo)
- Compressed air supply (by Lindfield / Apollo)

2.5 Emergency Contact

The 24-hour emergency contact will be:

Mr Nick Haskell

Britannia Refined Metals Ltd

Email: Nick.Haskell@glencore.co.uk

Tel: +44 (0) 7703717163

The Principal Contractor shall display this number on a prominent sign board at the entrance to the site. As the project mobilises a Site Manager will be appointed, and the sign board updated with the mobile phone number.

2.6 Communication of CMP

The CMP will be accessible for all staff and visitors to read in the site office. Information on the construction project will be available to local residents and businesses by way of signage. They will be able to view the CMP should they want to.

3.0 Responsibilities

3.1 Responsibility with respect to Health & Safety

The construction works shall be undertaken in accordance with primary health and safety legislation, namely:

- Health and Safety at Work Act 1974; and
- Construction (Design and Management) (CDM) Regulations 2015.

In addition, the project should be undertaken in accordance with any other relevant secondary legislation such as the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER),

- The Work at Height Regulations 2005



- Control of Substances Hazardous to Health Regulations 2002,
- Control of Noise at Work Regulations 2005,
- Control of Working at Heights Regulations 2005,
- Electricity at Work Regulations 1989,
- Provision and Use of Work Regulations 1998 and associated Approved Code of Practice (ACOP) L22,

The construction works for the development will fall under the CDM Regulations 2015. As such, the Principal Contractor will provide a Construction Phase (Health & Safety) Plan in accordance with the CDM Regulations. This plan shall include (but not be limited to) a construction programme, emergency procedures, site layouts and fire plans, method statements and details of the proposed induction programme. This induction programme will include the Principal Contractor's site-specific rules and will include instructions to all staff regarding all relevant procedures.

An induction will be required for all workers (permanent / temporary / contractor / subcontractor), site visitors, client representatives or other 3rd parties. Inductions shall be documented.

Plant operators and construction staff will be trained by the Principal Contractor with regard to spill prevention/mitigation measures and procedures and in the use of relevant mitigation material (e.g. spill kits).

The Principal Contractor will manage and coordinate all the site construction works set in this CMP. The Principal Contractor together with others appointed by the Client shall attend the monthly management meetings chaired by the Project Manager to review progress and other matters relating to the execution of the construction phase and overall project delivery. The Principal Contractor will prepare a written report for these monthly meetings and issue to the Project Manager not less than 2 working days prior to the meeting.

In addition to the above, the following meetings shall be held during the construction phase:

- Weekly programme coordination meetings to discuss health and safety, interfaces, sequence of works, contractors on site, deliveries and general programme update
- Daily site briefing to discuss ongoing works, health and safety / tool box talks.
- Safety tours.

3.1.1 The Project Manager

SLR Consulting Ltd

3rd Floor,
Brew House,
Jacob Street,
Tower Hill,
Bristol,
BS2 0EQ

Francys McBeth
Email: fmcbeth@slrconsulting.com
Tel: +44 (0) 7929 106341



3.1.2 The Principal Contractor

Apollo Civil Engineering Ltd

2nd Floor
168 Shoreditch High Street,
London
E1 6RA

Nick Brown
Email: nick.brown@apollocivilengineering.com
Tel: +44 (0) 7969326728

3.1.3 The Client

Britannia Refined Metals Ltd

Botany Road,
Northfleet,
Gravesend,
Kent,
DA11 9BG

Nick Haskell
Email: Nick.Haskell@glencore.co.uk
Tel: +44 (0) 7703717163

3.2 Responsibilities with Respect to Environmental Monitoring

3.2.1 Statutory Environmental Designations

Although the application site and wider BRM site are not subject to any statutory designations, the Swanscombe Peninsula Site of Special Scientific Interest (SSSI) is situated directly to the west of the BRM site, as shown on **Figure 4** below.

Within 5km of the Site, there are 8 SSSIs, these include:

- Gray's Thurrock Chalk Pit SSSI – approximately 2.7km north
- Globe Pit SSSI – approximately 2.6km northeast
- Hangman's Wood and Deneholes SSSI – approximately 3.8km northeast
- South Thames Estuary SSSI – approximately 5.9km east
- Darenth Wood SSSI – approximately 3.8km southwest
- Swanscombe Skull Site SSSI – approximately 1.4km southwest
- West Thurrock Lagoon and Marches SSSI – approximately 2.7km northwest
- Purfleet Chalk Pits SSSI – approximately 5.4km northeast
- Lion Pit SSSI – approximately 2.6km northeast

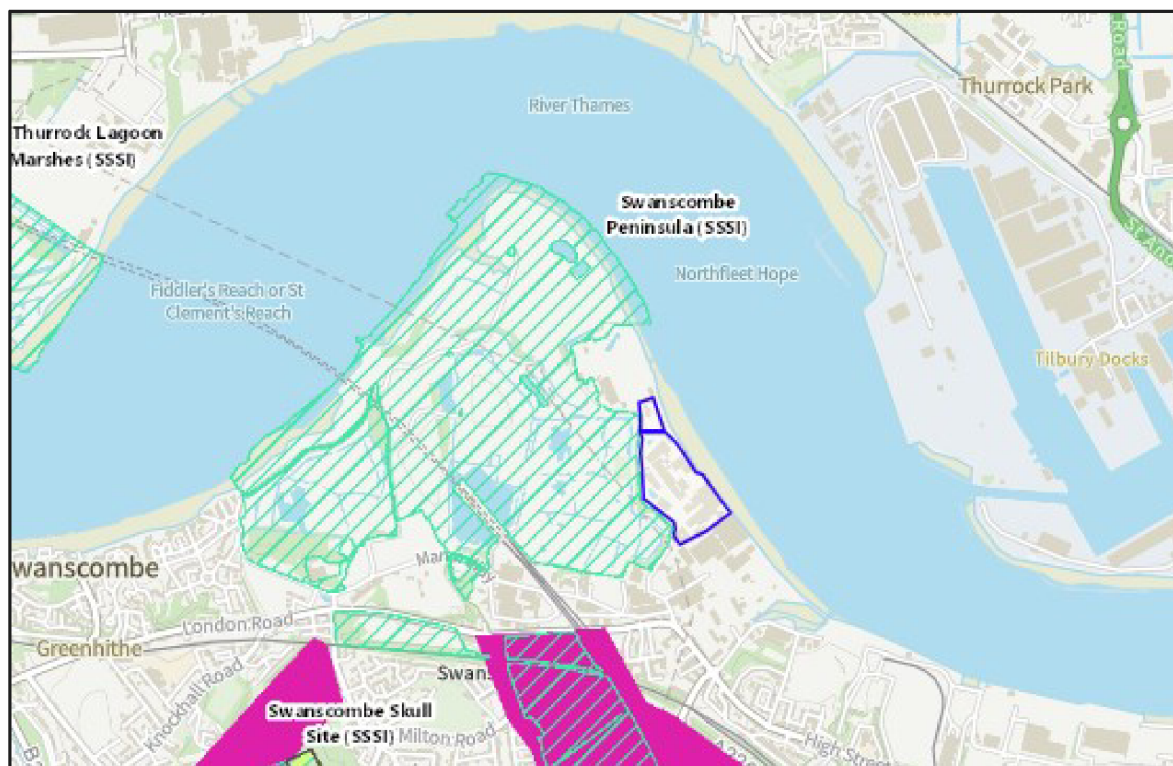
There are no Local Nature Reserves (LNR) located within a 5km radius of the Site, however, there is the Swanscombe Skull National Nature Reserve situated approximately 1.4km to the southwest of the Site.



There are no Ramsar Sites located within a 5km radius of the Site, however the Thames Estuary and Marshes Ramsar is located approximately 6.1km to the east. There are no Special Protection Areas (SPA) within the 5km study radius of the Site, nor are there any Special Areas of Conservation (SAC). The closest SPA is the Thames Estuary and Marshes SPA which is situated approximately 6.1km to the east of the site.

There are no Ancient and Semi-Natural Woodlands located near to the Site, nor is the Site situated within one of the designated buffer zones. The nearest area of ancient woodland is situated 3km away from the site.

Figure 4: Statutory Designations



3.2.2 Archaeology and Cultural Heritage

Figure 5 below presents the location of heritage assets in relation to the Site. Within a 5km radius of the Site there are

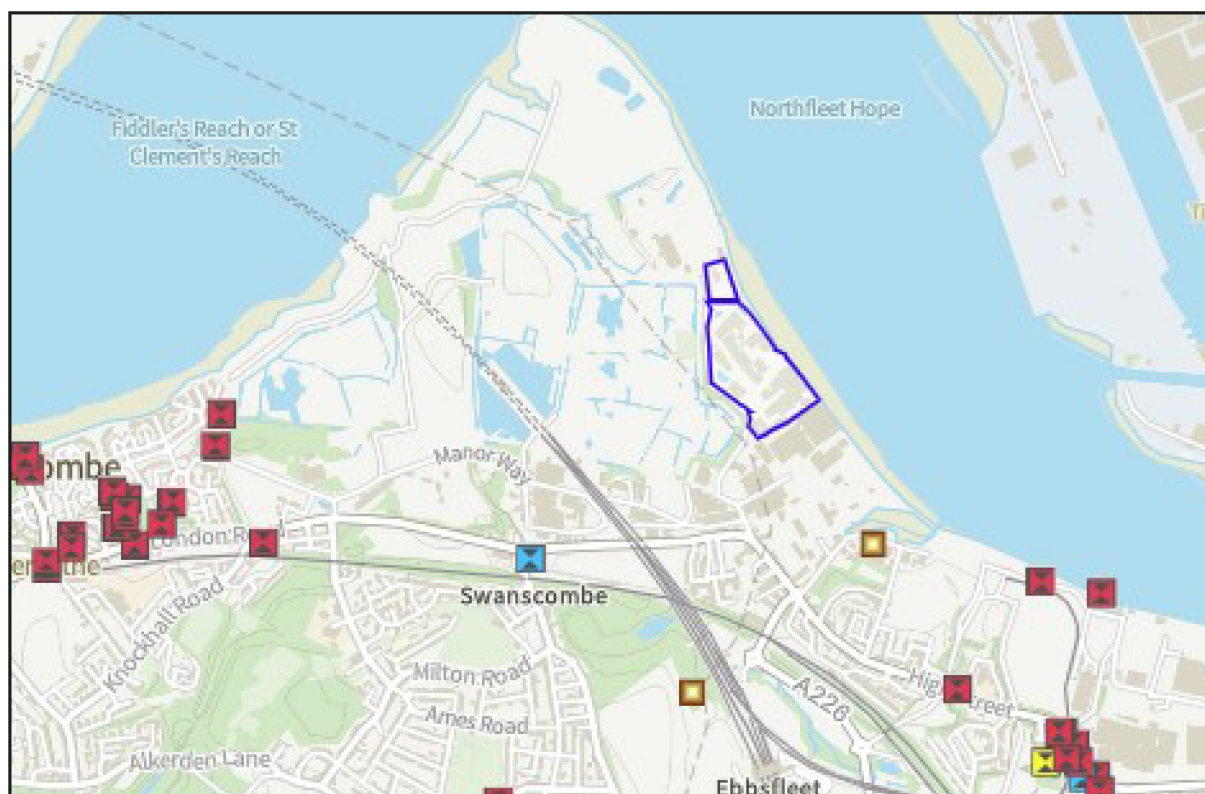
- 2 Grade I Listed buildings
- 50 + Grade II Listed buildings and 17 Grade II* Listed buildings.

There are two scheduled monuments within 1km of the site (shown as gold squares):

- Aspin's Kiln, ref. 1004227 – approximately 0.5km to the southeast from the site's southeastern boarder
- Palaeolithic Sites near Baker's Hole, ref 1003557 – approximately 0.7km to the south of the site



Figure 5: Location of Heritage Assets



3.2.3 Air Quality

The Site is entirely located within the Northfleet Industrial Area AQMA, which was declared in January 2002 due to Particulate Matter. There are 10 AQMAs within 5 km of the Site.

3.2.4 Water Environment

The Site lies within a Flood Zone Level 3, meaning that the area has a 1% or greater probability of flooding from rivers or 0.5% or greater probability of flooding from sea.

There are plans to increase the height of the seawall to the east of the Site in the future (Thames Estuary TE2100 Plan), this would potentially benefit the Site and decrease the risks of flooding.



3.2.5 Consultants appointed to oversee Environmental Monitoring

Air Quality:

SLR Consulting Ltd

Mr Rich Johnson

Email: rjohnson@slrconsulting.com

Tel: +44 (0) 7899 928502

Flood Risk:

SLR Consulting Ltd

Mr Chris Middleton

Email: cmiddleton@slrconsulting.com

Tel: +44 (0) 78909 71494

Land Contamination:

SLR Consulting Ltd

Mr James Appleby

Email: jappleby@slrconsulting.com

Tel: +44 (0) 77341 776363



4.0 Construction Phase

4.1 Construction Method

The construction works are expected to begin once pre commencement planning conditions are discharged, and the Principal Contractor will devise a Gantt chart to reflect this which will set out the detailed construction phasing.

4.2 Transport Access and Management

Construction traffic will access the site mainly through the existing site entrance gates off Manor Way.

As the construction of the development would not generate high levels of staff or operational traffic, or require additional parking spaces, the application is in accordance with Policy CS11.

HGV and visitor traffic shall be carefully planned and strictly adhere to the site rules in terms of dust, noise and working hours to minimise public disturbance.

Traffic Management will be in accordance with the following:

- To be managed by banksman while entering/leaving site.
- Vehicles to be accommodated onsite until charged/discharged, then loads moved by suitable construction plant such as cranes or forklifts.
- Designated storage areas will be formed.
- Whenever possible, logistics will be developed to avoid articulated vehicle traffic to site.
- Vehicles to be cleaned before leaving site (Mains water supply to be available from commencement of works).
- Wheel wash will be available at the site exit in a suitable location water will be contained through the use of a bund and tank. To be regularly emptied.
- Road sweeper will be commissioned at reasonable demand of the Local Highway Authority.
- Any damage resulting of the works to the public highway to be repaired at no cost and in a timely manner by the Principal Contractor.

4.3 On Site Construction Works

4.3.1 Civil, Structural and Building

Site Set-up

Following mobilisation, the Site can be fully established within two weeks. In addition to setting up the compound and site offices, Site staff induction will take place, into the unique working environment of the BRM site. A complete utilities survey of the Site will take place, including trial holes and the temporary supporting tower for the ducting system will be constructed.

Prior to the commencement of intrusive excavation works a MCERTS certified ES642 dust monitor has been set up by ES Monitoring Ltd on the boundary of the construction area. Data is being captured in 'real time' and summary reports issued to BRM monthly for discussion and review.



Site Clearance and Pile Mat

Site clearance will require breaking the existing concrete slab, undertaking general site clearance and installing the piling mat. The piling mat will be made from recycled aggregate placed on a geotextile layer. Precise details will be developed within the temporary design completed and approved during the mobilisation phase. A blinding layer will be placed over the imported aggregate to keep the site clean and protect the imported aggregate from being contaminated by the spoil resulting from the piling operation.

Piling, Drainage and Earthworks

Following the Site clearance, a seven-week period has been planned for undertaking drilling and casting the piles, excavating the site to the required level and placing the foundation layers of stone and blinding. New catchpits will be built and new foul and storm water pipes will be laid and connected into the existing system. By the end of this period, the construction will be at ground level in all areas and will have not more need for below ground excavations.

Casting Concrete Floor Slab

All floor level concrete pours will be undertaken over the same three-week period including the building floor slab, the new bag house slab and the surrounding pavement pours. There will be an overlap with the above activity as we will be able to install the new drainage system while the slab reinforcement and form work is being placed. The actual concrete pours will be focused on a single week which will be carefully planned to ensure we achieve the outputs required on each day with clear contingency planning for delays in delivery.

Erect Structure

The structure will be erected over approximately 5 weeks. This will include fixing the columns into the piles, erecting the columns and beams, casting the roof slab and installing the cladding, windows and doors.

External Works

An allowance of two weeks to undertake the finishing external works on the site such as fixing the Key-Klamp rails, attaching the ladder to the building and installing the new Armco barrier. These works have significant float as they can be carried out while the internal works to the building are being completed and before we finally clear the site.

Clear Site

An allowance of one week has been made to clear the site. This period will include the removal of all temporary fencing, compound and temporary signage. We will ensure during this time there is a comprehensive handover of the building to the site team including the provision of an O&M manual.

4.3.2 Equipment Installation

Equipment installation to include ovens (4-off), communiton (crusher, mill and sampling divider), extraction equipment (full abatement system to include dust filter, carbon beds, extraction ducting, stack and control system) and CEMS system will be done by the appointed contractors, and under full coordination by the Principal Contractor and The Project Manager to ensure the health and safety and other site requirements set in this CMP are followed and implemented by the various contractors. The programme allows for approx. six months for the full installation of all equipment, including testing and commissioning.



4.3.3 M&E / Utility Services Installation

The appointed M&E contractor (Lindfield) by the Principal Contractor will complete all the M&E and utility services as specified based on approved specification and drawings by the Client. This will include the interface points to existing utility services at BRM site.

The installation scope of the utility services will include:

- Installation of natural gas supply to the building and distribution to roasting ovens and induction area.
- Installation of water supply for induction ovens' cooling system
- Installation of compressed air system for extraction and CEMS systems
- Installation of HV works and LV panel and distribution
- Installation of power and control cabling, including containment trays
- Installation of fire alarm and detection system
- Installation of security and data system

4.4 Welfare Facilities and Services

Welfare facilities will be provided for the duration of the construction period in accordance with the CDM Regulations 2015 (or any future variation thereto), due to the BRM site policies in place for the protection of contractors to the potential for lead exposure, all contractors will be required to use the existing BRM welfare facilities.

4.5 Housekeeping

A good housekeeping policy will be established across the development site and will include:

- No fires on site, including the burning of waste during any demolition or construction phase, which is explicitly prohibited.
- Considerate behaviour of all contractor staff on and off site (i.e. on the local highway).
- Maintenance of staff welfare facilities, storage areas and waste segregation areas.
- Removal of waste and other rubbish from site at frequent intervals.
- Maintenance of road cleanliness and preventing mud on the surrounding highway.



5.0 Hours of Construction Working

The proposed construction hours of working are as follows:

- Monday to Friday 07:00 – 18:00 hours; and
- Saturdays 08:00 – 13:00; and
- there would be no working on Sundays or bank holidays.

Access to the Site or any machinery/plant operation outside of the above construction hours would not be permitted without the prior written agreement of the Project Manager and granted approval of the Gravesham Borough Council as Local Planning Authority.

6.0 General Construction Good Practice

6.1 Construction Site Workers Risk Assessment

Part e) of Condition 4 requests that the CMP includes a Construction Site Workers Risk Assessment to address working with potentially contaminated soils. The attached Construction Phase Health and Safety Plan has been prepared by the Principal Contractor and includes all information, arrangements for welfare and related items for the health and safety of staff working on the project.

6.2 Site Establishment

Facilities will be established to minimise risk to the environment and promote efficient use of resources. These measures will be in accordance with the Principal Contractor's Construction Phase Health and Safety Plan and this CMP and other operational site requirements, including:

- Use of protective fencing to separate working areas, site boundaries and protect sensitive features/receptors from disturbance.
- Temporary storage compound, welfare facilities and secure storage of equipment.
- Hazardous substances, including fuel and oil, will be stored in accordance with the Control of Pollution (Oil Storage) (England) Regulations 2001 (and any subsequent variation thereto).
- Refuelling and use of such hazardous substances will only be within designated areas, designed to contain run-off and only undertaken by trained personnel.
- Materials storage areas will be established, managed and maintained throughout the construction process.
- Any temporary compounds or storage areas will be removed from site following completion of the works.
- Waste segregation areas will be established utilising containers of an appropriate design to ensure they are fit for purpose and no waste can escape.
- Temporary lighting will be designed to minimise light spillage and orientated inwards to minimise light pollution.
- Establish proper procedures for keeping the highway clean and tidy (e.g. wheel cleaners, road sweepers) guaranteeing a safe environment for workers and the public.



6.3 Boundary Fencing

The site boundary will be enclosed with fencing for security and to prevent construction wastes from polluting the wider environment.

Appropriate signage for the construction compound, directing vehicles and pedestrians, and warning notices will be erected where necessary.

6.4 Dust Control and Management

Excessive airborne dust may result during import of materials and earthworks or other programmed works. Consequently, ES Monitoring Limited have been appointed to undertake dust monitoring during site works.

A hoarding will be built around the construction area, to contain airborne dust from site preparation works and construction. A MCERTS certified ES642 dust monitor has been installed on the hoarding that surrounds the construction area and the equipment was calibrated prior to on-site installation. If the monitoring confirms that the dust has reached a 'trigger level', daily checks will be made to identify the source of the dust and the measures required to bring the dust back to below trigger levels.

Following the available guidance, including:

- The Greater London Authority (GLA) Supplementary Planning Guidance (SPG) on the Control of Dust and Emissions During Construction and Demolition (2014)
- The Institute of Air Quality Management (IAQM) Guidance on the Assessment of Dust from Demolition and Construction
- The Institute of Air Quality Management (IAQM) Guidance on Monitoring in the Vicinity of Demolition and Construction Sites

a trigger level has been set as set out below:

Dust Trigger Levels:

	Receiver of Alert	Trigger level and integration period
RED	steve@nick-brownltd.co.uk	150 ug/m3 1 hour.

Source: ES Monitoring Limited Dust Monitoring Report Project Ref. 20683 04 March 2024 to 31st March 2024

No exceedances of the trigger level have been recorded during site working hours. Copies of the Dust Monitoring Reports are available upon request.

6.4.1 Dust from asbestos

The Phase 2 Ground Investigation Report (19 October 2023) confirmed that the sample of Made Ground recovered from BH01 at 0.5m bgl was identified as containing asbestos that was found to be in the form of fibre bundles and ACM debris of Chrysotile (white asbestos).

As a result of the findings, all excavations will be treated as contaminated and site workers will be protected from asbestos dust through the use of PPE (suits, respirators and eye protection, sealing the site with plastic sheeting and wetting the site, to prevent dust becoming airborne.



Additional protection measures will include the following:

- Minimising the need to break ground wherever possible through localised excavations and the use of piled foundations;
- Having the works areas fully segregated from the rest of the BRM site during excavations to prevent unauthorised access to the groundworks;
- Providing dust monitoring stations erected prior to the groundworks with results continually monitored and report;
- Ensuring all workers are given a full site induction which includes details of the potential of working with hazardous materials;
- Ensuring all workers wear total headcovers with filtered air flow units, gloves and full-length arm and leg during excavations works;
- Ensuring all workers wear cleaned overalls each day;
- Ensuring damping techniques are used during all excavation works;
- Ensuring all excavation plant is washed at the end of each shift; and
- Having individuals on site who are experienced and have received specific training on identifying traces of hazardous materials, including asbestos on site during all excavations.

The Principal Contractor will appoint a specialist waste company to manage the removal of all soils in accordance with the relevant regulations, to a licensed facility. The waste company will ensure that the waste soils carried are as per the waste transfer ticket, sheeting all loads and cleaning their wagons following transportation.

Day to day dust management will require all material removed from the site to be in covered vehicles. A mobile water bowser will be used to dampen the construction area and haul roads, in dry weather, to reduce windblown dust. There will also be provision to wash vehicle wheels, to reduce the amount of dust tracked out onto the highway.

6.4.2 Dust Reports and Complaints Procedure

The Principal Contractor will monitor the construction works and will apply dust minimising measures where needed, e.g. water spraying, internal traffic speed control etc The Principal Contractor must ensure that all dust complaints are recorded in the site daily diary, investigated and reported to the Environment Agency (where appropriate) and the source of the dust complaint must be identified and resolved before operations continue.

6.5 Surplus Material and Waste

Surplus materials will be collected, segregated and placed in containers for onward recycling at an appropriately licensed facility.

Prior to any disposal, the wastes will be appropriately classified and waste transfer notes with appropriate European Waste Coding (EWC) will be completed and issued to BRM monthly for their records. The BRM weighbridge will be used to confirm weights of materials being transported offsite.

6.6 Fuel Storage

Generally, re-fuelling of mobile plant and machinery will be carried out at a designated location within the site compound only.

Vehicle re-fuelling will take place within the compound at a dedicated position. The fuel will be bunded and equipped with a collection sump. Refuelling will be carried out using an



approved mobile fuel bowser with a suitable pump and hose. Absorbent material (spill kits) will be available on site and will be deployed to contain drips and small spillages. All other fuels, oils and potential contaminants, as well as waste oils, will be stored within the site compound in secure, fit for purpose containers within bunded containment as appropriate and in accordance with EA guidance. The bunded containment shall have a capacity of 110% of the volume to be stored and shall have impervious, secured walls and base. Maintenance of mobile plant will take place within the construction compound only.

There shall be no fuel storage outside the compound. Plant shall be maintained in good operational order and any fuel/oil leaks recorded for attention. Absorbent pads/granules in the case of an accidental leak/spillage shall be available.

6.7 Spillage

Spillage of fuel, oil and chemicals will be minimised by implementation of an Emergency Pollution Prevention Plan (EPPP) which will be prepared by the Principal Contractor. In the event of any spillage or pollution of any watercourse the emergency spill procedures as described in the EPPP shall be implemented immediately.

6.8 Site Inductions

An induction will be required for all workers (permanent / temporary / contractor / subcontractor), site visitors, client representatives or other 3rd parties. Inductions shall be documented. Plant operators and construction staff will be trained by the Principal Contractor regarding spill prevention/mitigation measures and procedures and in the use of relevant mitigation material (e.g. spill kits).



7.0 Disclaimer

This report has been prepared by SLR Consulting Limited with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

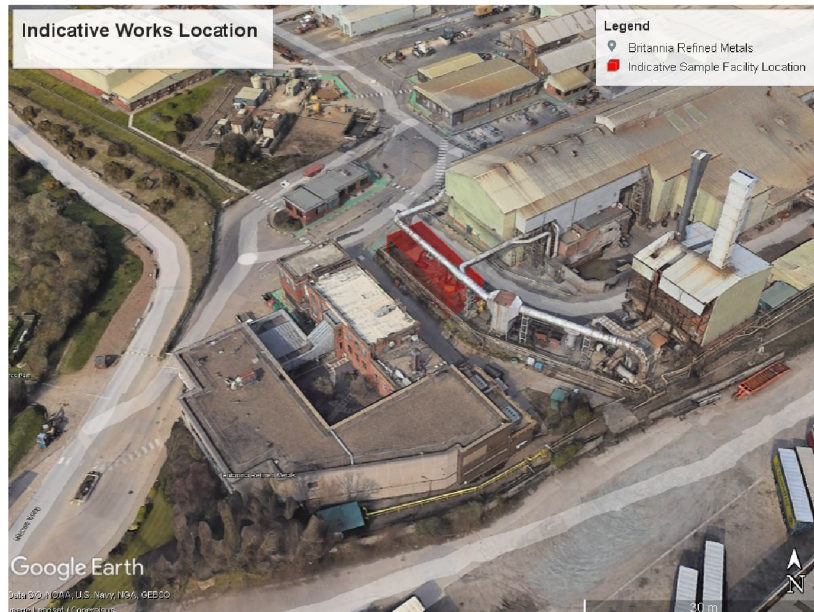
This report is for the exclusive use of Britannia Refined Metals Ltd, no warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.





Making Sustainability Happen



CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

For

Sample Preparation Facility Works

At

**Britannia Refined Metals
Botany Road,
Northfleet
Gravesend
Kent
DA11 9BG.**

Document Reference No: SPB01

The Construction Phase Plan is considered a live document, all changes to the project (work processes, design, documentation, records, data, change of personnel, site

details, updates, etc) must be added as required so that this document is up to date and specific to the project. Regular reviews should be conducted by the site and contracts manager to ensure that this document is sufficiently developed for all works to start and continue throughout the project. All revisions and amendments will be appropriately documented.

DOCUMENT HISTORY

Revision	Date	Changes	Initials
1	20/01/2024	Original Issue	KF
2	03/02/2024	Amendment according to Client and PD comments.	KF & SC
3	19/4/24	Amended to add subcontractors details & re-title as Apollo	SC

Prepared By	Name	Position	Date
	Kevin Fernandez	External H&S Advisor – KF Safety	03/02/2024
Signature			
Approved By	Name	Position	Date
	Steve Cochrane	Apollo Contracts Manager	
Signature			
Approved By	Name	Position	Date
	Lester Nankivell	SLR Consulting Ltd Principal Designer	
Signature			

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1. GENERAL STATEMENT OF H&S PRINCIPLES

‘As Principal Contractor, we (Nick Brown Ltd/Apollo civil engineering) are, in preparing this Construction Phase Health and Safety Plan, complying with Regulation 12 of the Construction (Design and Management) Regulations 2015 and are including all information, arrangements for welfare and related items for the health and safety of persons at work under our control while at work on this project’.

It is the aim of the client, client’s representatives and Principal Contractor to maintain a safe and healthy site and work environment for all those working on it and others who may be affected by work activities. Every sub-contractor and employee will be encouraged to play a part in achieving this objective. This plan is to be read in conjunction with the Pre-Construction Information Pack. (SLR Project No: 402.064683.00 – 29 September 2023).

It is the aim of Nick Brown Ltd/Apollo to achieve the highest level of Health & Safety before, during and after a project.

Nick Brown Ltd/Apollo shall co-ordinate the Health and Safety of all organisations and persons on site including utility companies and contractors appointed directly by the Client. This will include for formulation of specific site rules, training and dissemination of information to the workforce.

Health and Safety Goals for the project

- To have no accidents or near misses on site or adjacent to the site.
- To have Zero RIDDOR / Zero HSE enforcement
- To provide welfare facilities for persons at work in accordance with current legislation.
- To ensure all site operatives are inducted before starting on site.
- To maintain appropriate site security throughout the construction period.
- To provide safe access to and egress from workplaces.
- To have no occupational ill health arising from the project.
- To ensure that no environmental damage occurs.
- To ensure the least disruption to the local community as a result of the project or the day to day running of BRM activities.
- To ensure that manual handling tasks are reduced to the lowest level reasonably practicable.
- To provide working places that are free from risk to health and safety of persons at work or affected by the work, so far as is reasonably practicable.

Refer to tender documentation for further specific rules relating to planning and managing the construction work.

Client Health and Safety Goals

The overall project objective is zero harm to people and the environment during the project and the successful handover of the facility that is safe to operate and maintain within the agreed environmental planning conditions, licences, permissions, authorisations, and consents.

This project is to be implemented within the proposed timescale, to the specified design criteria and in accordance with the project specifications, whilst always considering the health, safety and welfare of all persons affected both directly and indirectly by the project.

The Contractor shall always ensure:

- a) A competent person is employed to manage health, safety, and welfare throughout all stages of the project.
- b) Risk assessments are undertaken where appropriate, and Method Statements containing safe systems of work are produced.
- c) Control of Substances Hazardous to Health Regs. (COSHH) assessments are undertaken where appropriate, and Method Statements containing safe systems of work are produced.
- d) Method Statements are complied with and communicated to all those affected.
- e) Persons employed on the Site, either directly or indirectly, are competent and appropriately trained for the tasks they are undertaking.
- f) All persons affected are made aware of potential hazards and risks that may exist on the Site.
- g) That the locations of first aid facilities, together with the identity of trained first aiders are made known to all persons on Site.
- h) That Health, Safety and Welfare issues remain a top priority and consequently that all persons employed on and/or visiting the Site are made aware of potential hazards and the Site rules as contained in Section 4.17 of this document.
- i) That appropriate and effective methods of reporting of unsafe acts and conditions are in place to allow the contractor to work towards an objective of zero accidents.

At all times, the Contractor shall adopt safe methods of working through the adoption of best practice. The Contractor's attention is therefore drawn to guidance that is given in publications such as the HSE Construction Series Information Sheets and the CITB Construction Site Safety – Safety Notes (GE700).

All permanent and temporary site operations shall comply with all appropriate Acts and Regulations, including but not limited to the following:

- Health and Safety at Work etc. Act 1974.
- Management of Health and Safety at Work Regulations 1999
- BS 7671:2008 Requirements for Electrical Installations, Seventieth Edition, incorporating all amendments current at date of Tender issue.
- Supply of Machinery (Safety) Regulations 2008 and the 2011 Amendments.
- Control of Substances Hazardous to Health Regulations 2002 (COSHH)

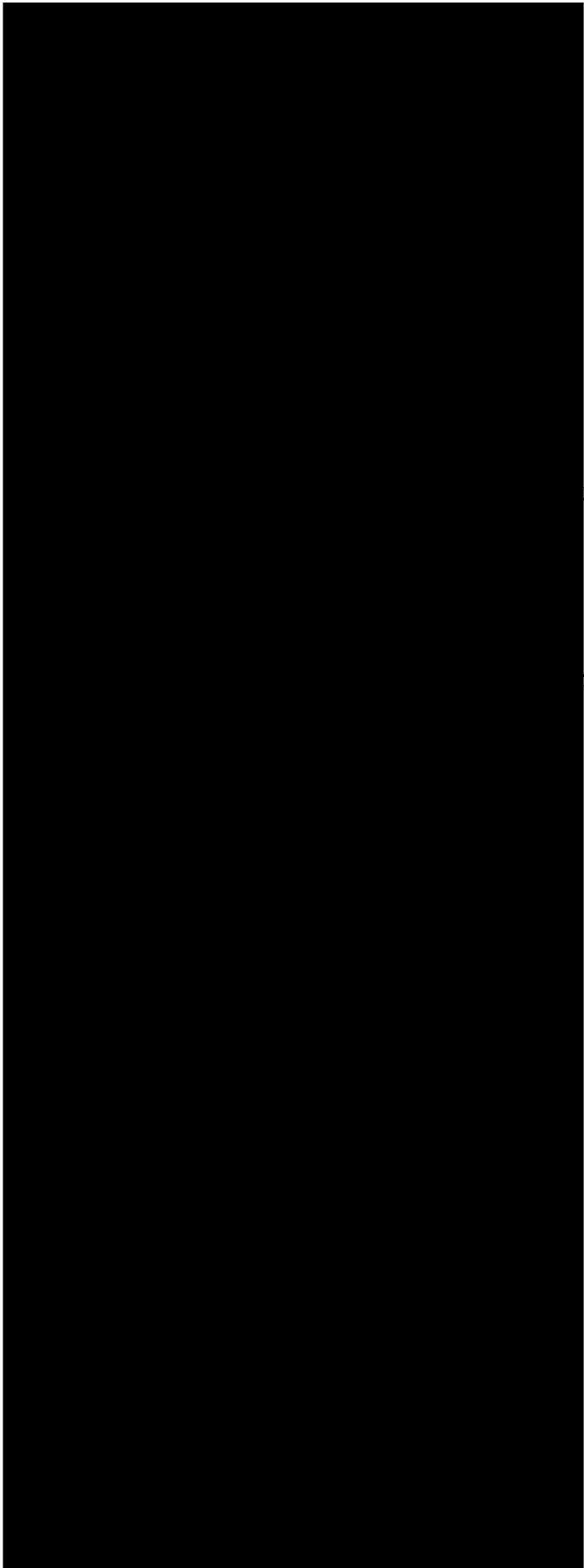
- Construction (Design and Management) Regulations 2015 (CDM)
- The Manual Handling Operations Regulations 1992
- The Provision and Use of Work Equipment Regulations 1998
- The Personal Protective Equipment at Work Regulations 1992
- The Confined Space Regulations 1997
- The Lifting Operations and Lifting Equipment Regulations 1998
- Health and Safety Executive Guidance Notes
- BS 5228:2009 Noise and Vibration Control on Construction and Open Sites
- BS6187:2011 Code of Practice for Full and Partial Demolition
- The Control of Lead at Work Regulations 2002
- BRM Site Specific Rules

2. PROJECT DIRECTORY

Client

Britannia Refined Metals Ltd,
 Botany Road,
 Northfleet,
 Gravesham,
 Kent
 DA11 9BG
 Nick Haskell
 Tel: 01474 528200

Somerset
 BS28 4UB



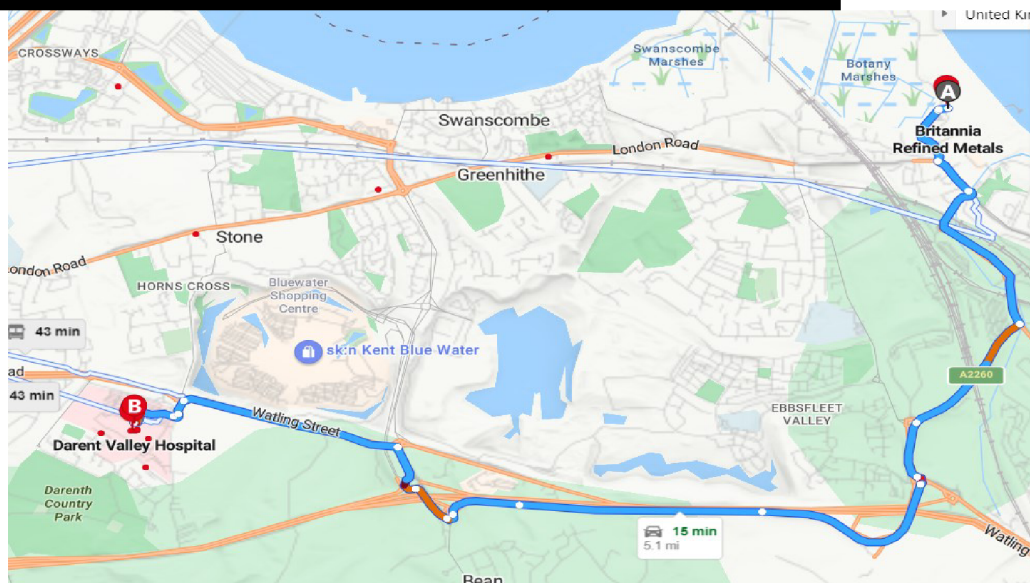
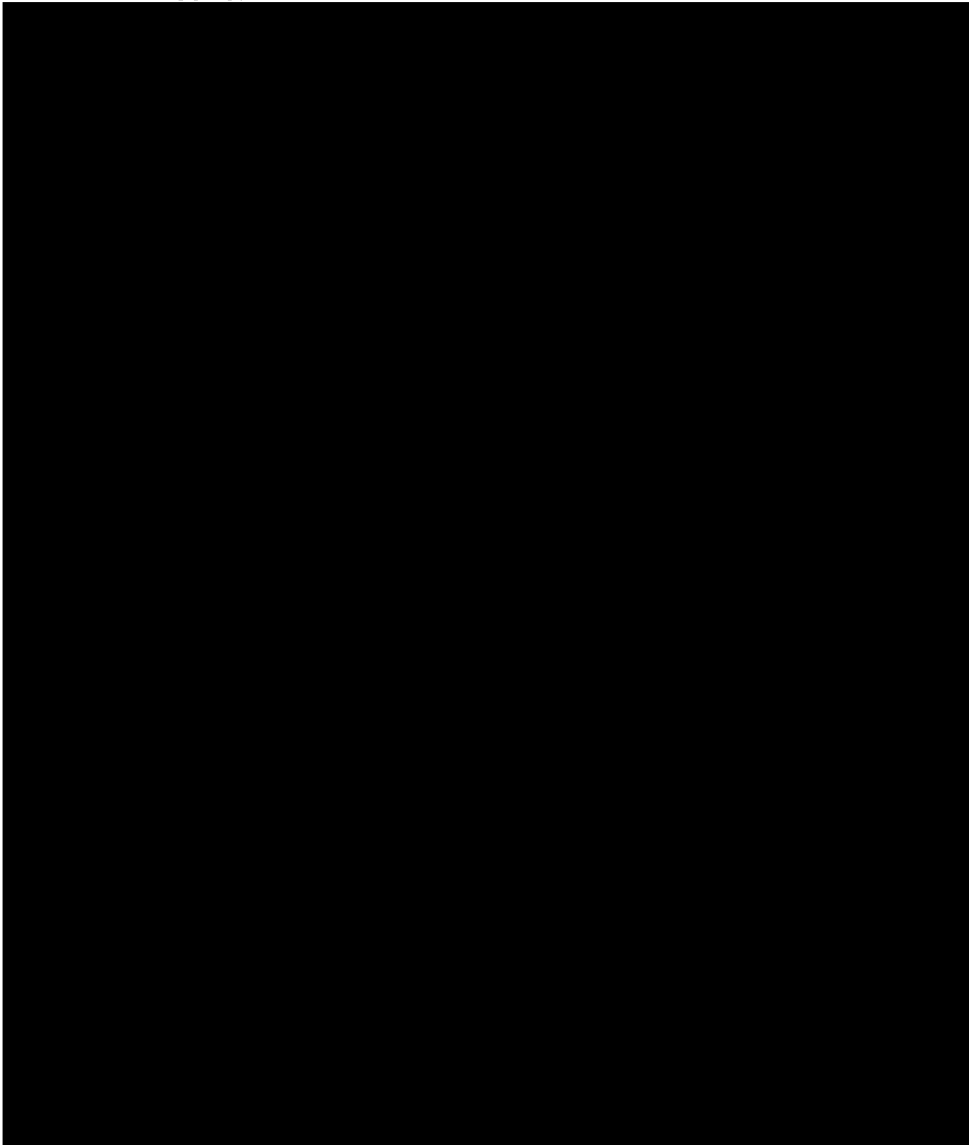
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KT9 IBD

Contact: Barry Braine

Tel: 0208 3975127
Mobile: 07717 211053



The link below provides a detailed route to the nearest emergency department;

3. SCOPE OF WORKS

The Project is: The construction of a sample preparation facility at Britannia Refined Metal's existing Northfleet Plant.

The planned scope of the facility's main elements of construction is briefly summarised below:

- Install piled foundations, reinforced concrete floor slab and external drainage works.
- General site clearance and localised minor demolition.
- Installation of new and modification of existing below ground level services.
- Temporary works including the construction of a piling mat
- Modification of the existing high-level duct support.
- Installation of piles.
- Construction of piled floor slab.
- Erect a structural frame, cladding, and internal walls.
- M&E first fix and finishing works.
- Specialist equipment installation including temporary access works.
- Finishing works.

Sequence of Works:

Site Set-up

- Following mobilisation, we have allowed a period of two weeks to fully establish the site. In addition to setting up our compound and site offices, we will also use this period to fully induct our site team into the unique working environment of the BRM site, undertake a complete utility and a UXO survey of the site including trial holes and construct the temporary supporting tower for the ducting system.

Site Clearance and Pile Mat

- Over the next two weeks we will break out the existing concrete slab, undertake general site clearance and install the piling mat. The piling mat will be made from recycled aggregate placed on a geotextile layer. Precise details will be developed within the temporary design completed and approved during the mobilisation phase. A blinding layer will be placed over the imported aggregate to keep the site clean and protect the imported aggregate from being contaminated by the spoil resulting from the piling operation.

Piling, Drainage and Earthworks

- We then have a seven-week period on site when we will be drilling and casting the piles, excavating the site to the required level and placing the foundation layers of stone and blinding. We will also use this period to construct the new catchpits, lay new foul and storm water pipes and connect into the existing system. This will ensure that by the end of this period we will be at ground level in all areas and will have not more need for below ground excavations.

Casting Concrete Floor Slab

All floor level concrete pours will be undertaken over an initial seven week period including the temporary works bases, floor slab, the new bag house slab not including the surrounding pavement pours. There will be an overlap with the above activity as we will be able to install the new drainage system while the slab reinforcement and form work is being placed. The actual concrete pours will be carefully planned to ensure we achieve the outputs required on each day with clear contingency planning for delays in delivery.

Erect Structure

- The structure will be erected in just over 5 weeks. This will include fixing the columns into the piles, erecting the columns and beams, casting the roof slab and installing the cladding, windows and doors.

M&E Works & Furnace / Air Extraction Installation

- At this stage we haven't been provided with the full details of the M&E installations that are required. We have therefore made a provisional allowance within our programme for a week to complete the first fix and two weeks to complete the second fix. This assumption is based on our experience of working on similar size buildings. We have also made a provisional allowance for a week to install the furnaces and air extraction units. There is float in these provisional allowances of a further week before the have shown the team leaving site as long as we can continue to construct the internal walls within the building as the same time as the second fix works.

External Works

- We have made an allowance of two weeks to undertake the finishing external works on the site such as fixing the Key-Klamp rails, attaching the ladder to the building and installing the new Armco barrier. These works have significant float as they can be carried out while the internal works to the building are being completed and before we finally clear the site.

Clear Site

- We have an allowance on our programme for a week to clear the site. This period will include the removal of all temporary fencing, compound and temporary signage. We will ensure during this time there is a comprehensive handover of the building to the site team including the provision of an O&M manual.

Detailed information of the project can be found in the scope documents which includes the Works Information. Client's Specifications and relevant drawings.

See Program of works

Works to be conducted in several phases as required, see attached subcontractor RAMS / COSHH Assessments.

A key factor in ensuring the works can be completed safely will be the preparation of a programme that dictates all working activities are conducted during site hours ie Monday to Friday 7.30am – 6.00pm Saturday TBC.

All direct contractors will be given ample opportunity to agree to the programme to ensure activities / deliveries etc. can be safely accommodated. Copies will also be issued to the Project Manager Nick Haskell (BRM) & Nick Brown Apollo and discussed.

All works to be conducted in accordance with the specific Design Specifications.

Works other than these specified, should be reported through the Principal Designer for review of any possible potential hazards and risks.

Timescale

The project is due to commence on site on **05/02/2024** and is expected to last for approximately **32** weeks.

Working Hours: 7.30am – 6.00pm Mon – Fri, Sat TBC, Sunday or Bank Holiday working TBC.

A F10 issued on 19/12/2023 by the Principal Designer and displayed on site as required. See appendix D.

All the above will be further discussed with Nick Brown Ltd/Apollo at the pre - commencement meeting to which detailed phases will be agreed.

4. THE EXISTING ENVIRONMENT

**Britannia Waste Metals Ltd
Botany Road,
Northfleet,
Gravesend,
Kent.
DA11 9BG**

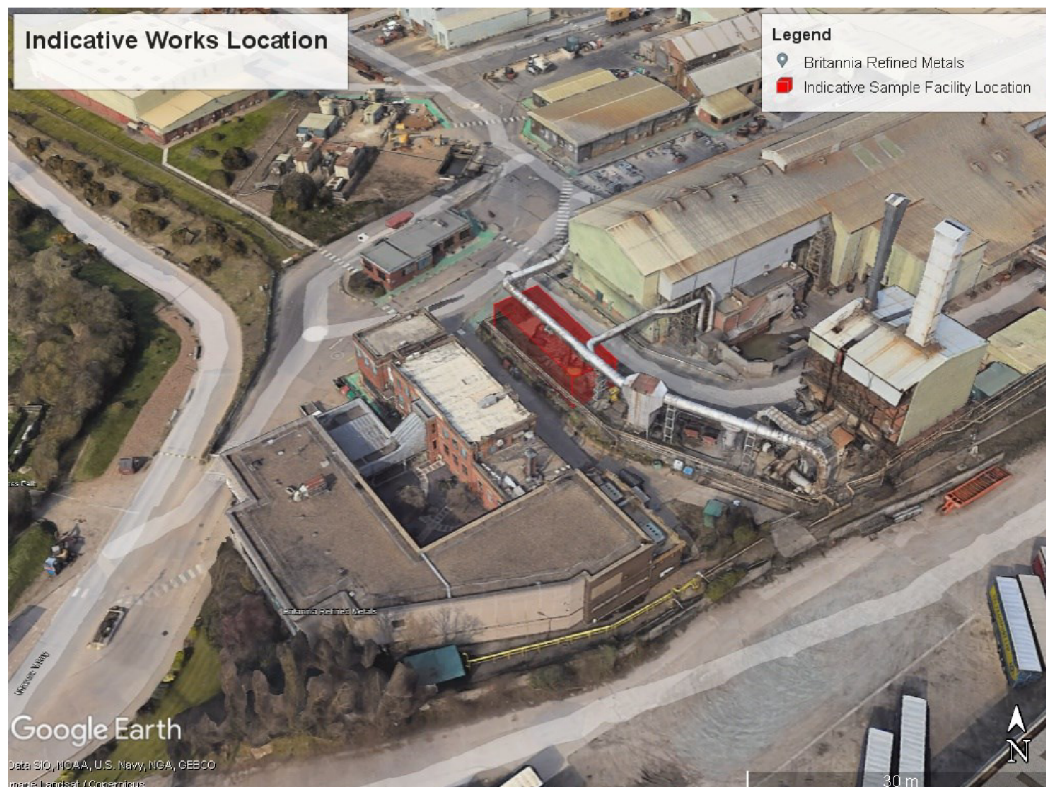
The site is located at National Grid Reference TQ 61380 75322
Further publicly available location information is shown at:

https://gridreferencefinder.com?gr=TQ6138075322|Point_s_A|1&t=Point%20A&v=r

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QR location Code1**



<https://gridreferencefinder.com/#>



EXISTING BUILDINGS ON / ADJACENT TO THE SITE

There are surrounding buildings and roadways around the BRM site. The Site is a Lead Refinery.

Particular care should be taken by contractors to minimise all vibration and noise from the site, in particular but not solely during any breaking out, excavation, compaction or similar works.

Apollo and their sub contractor's will satisfy themselves as to extent and nature of all existing buildings on or adjacent to the site, and will be deemed to have made due allowances for all matters in connection therewith that may result from the works.

Apollo will liaise with BRM site management at all times.

Related Restrictions

Restrictions on site working: To be taken as follows unless otherwise advised in the tender documents – No works of construction will be conducted outside the hours of 07.30 to 18.00 - Monday to Friday and on Saturday, Sunday or Bank Holiday working TBC

Notwithstanding the above the Apollo will confirm that there are no further restrictions imposed by the BRM site management.

Particular considerations:

- a) Proximity of BRM buildings and facilities to the front, rear and sides of the site.
- b) Provision of suitable and sufficient fencing to enclose the storage area.
- c) Protection of the general public and other contractors.
- d) The posting of appropriate warning signage.
- e) To plan and phase deliveries to prevent congestion on site and on-site access roads.
- f) Waste disposal / collection.
- g) Noise, vibration, and dust controls.
- h) A detailed temporary works design and temporary works co-ordination will be provided to support the excavation, structural supports and fencing works.

Environmental Concerns

Apollo will provide information on strategies to prevent:

- Noise, vibration, and dust pollution that may affect other contractors/BRM employees.
- Prevention of contamination entering water courses and drains – detail methods for preventing this will be required.
- Apollo will provide a detailed logistics plan to demonstrate how materials will be handled and distributed at all stages of the construction.

The Site is a Lead Refinery. See below site hazards from PCI:

Safety Hazards

Safety Hazards	Information Available
Site Boundary	<i>See site existing Layout & Plans Appendix A Section 1</i> <i>See site proposed Building Layout & Plans Appendix A Section 2</i>
Access Arrangements (Incl. Temp.)	<i>Access off Botany Rd and the shared access through the site will require careful consideration with regards to access when developing the Traffic Management Plan. PC to Liaise with Client on Deliveries.</i>
Existing Traffic Systems & Restrictions	<i>Careful consideration with regards to maintaining operational access along any shared routes. See Appendix C – Client's Existing Traffic Management Plan</i>
Telecommunications	<i>Mobile coverage Good. See Table 5-1</i>
Adjacent Land Use/Restrictions	<i>Authorisation for any work, including deliveries that may have the potential to affect adjacent business must be sought. Client & PC to confirm any planning restrictions that may affect the works prior to site mobilisation.</i>
Existing Storage of Hazardous Materials	<i>Works area to be cleared prior to commencement. Existing Storage areas shown in Appendix A Section 3</i>
Flammable Materials/Substances	<i>Works area to be cleared prior to commencement.</i>
Location of Existing Services (Incl. Overhead, Underground, Fire Systems)	<i>See Site's Existing Layouts & Plans - Appendix A. Section 1</i>
Ground Conditions	<i>Made ground overlying estuarine silts/clays – see Site Investigation Report - Appendix B</i>
Ground Water	<i>Potential for groundwater flooding – see Site Investigation Report Appendix B</i>
Ground Gases	<i>Normal PPE</i>
Uneven / Slippery Surfaces	<i>The existing mixture of paved and unbound surfaces may present a slip hazard during inclement weather due to standing water.</i>
Underground Structures	<i>Unknown</i>
Water Courses & Flood Risk	<i>See Appendix B –Site is within Flood Zone 3 area. The site does have flood defences (Wall & Gates) to the north & east Thame side. The remaining Site to the west is bordered by network of ditches.</i>
Trade Effluent Discharges	<i>None</i>
Mine Workings	<i>None</i>

Safety Hazards	Information Available
Existing Structures Affected	<i>See existing Proposed buildings layouts & Plans - Appendix A Section 1</i>
Previous Structural Mods	<i>Site has been developed previously and foundations may still exist below ground.</i>
Adverse Effects on Structures	<i>Not Known</i>
Plant & Equipment Restrictions	<i>Not Known</i>
Existing Lifting Equipment	<i>Not Known</i>
Existing Confined Spaces	<i>Below ground chambers associated with the existing drainage network exist on site. Therefore, the potential exists for these areas on site to have or collect noxious, explosive gases and anoxic environments.</i>
Pressure Systems	<i>Not Known</i>
UXO	<i>Desk study UXO to be undertaken , then probing if required</i>
MOD (E.G Low Flying Zone, etc.)	<i>Not Known</i>
Work at Height	<i>Refer to site layouts and proposed building layout plans Appendix 01 Section B</i>
Rotating Equipment & Machinery Guarding	<i>Not Known</i>
H&S Information from previous As-Built Data	<i>The Client may provide any existing H&S information pertinent to the works. Refer to Site's layouts and plans Appendix A</i>

Health Hazards

Health Hazards	Information Available
Existing Structures Containing Hazardous Materials	<i>Lead Dust – See Appendix G for Client's specific requirements</i>
Leptospirosis	<i>Infection through contact with, rats' urine or contaminated water. Note that surface water features exist at the boundaries of the site.</i>
Lyme Disease	<i>None</i>
Ionising Radiation	<i>None</i>
Dust & Fumes	<i>PC is to minimise any dust & fumes during the construction works.</i>
Lead	<i>Lead is present see Client's Requirements – See Section 6.4 Below. Further Client Information provided In Appendix G</i>
Noise	<i>PC to assess noise during the works. Reference to any planning consents should be made with regards to any noise and working time restrictions.</i>
Vibration	<i>PC to assess vibration hazard in planning their work.</i>
COSHH	<i>The existing site has historically stored chemicals at various locations. PC to request any updated information on their location if relevant to the works location..</i>

Health Hazards	Information Available
	<i>PC to maintain their own COSHH register. Guidance on Site layout good practice can be found in Ciria C762</i>

Lead

Several hazards exist with the removal of redundant plant, equipment and concrete structures associated with lifting, hot works and the creation of dust and noise associated with the works.

One of the main risks associated with work on this site is the presence of lead dust within the buildings and on the plant and equipment to be removed.

Therefore prior to any work commencing:

- (a) Work should be undertaken in a way that avoids as far as is reasonably possible undue disturbance of the dust contaminated with lead reducing the potential for making it airborne.
- (b) The contractor should manage the exposure of staff to lead by staff rotation, careful monitoring and spreading of exposure time evenly across staff to avoid the potential for the concentration of lead levels to build up within individual staff on site.

Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Workplace Exposure Limits, Control of Lead at Work Regulations and the BRM Lead Policy.

Specific hazard on this site arises from Lead and Lead dust. Common hazards not specifically listed should be controlled by good management and site practice.

Lead can enter the body by ingestion or inhalation. Correct use of protective and respiratory equipment combined with good working practices, avoiding hand-to-mouth contact and personal hygiene will minimise any absorption.

The Client will undertake and provide monitoring by means of a blood sampling the Contractor's site staff. Full details are available in the BRM Lead Health Management Procedure. This includes how and when blood sampling takes place.

All Contractor staff working on site will be expected to give a blood sample on the first working day and thereafter at 4 weekly intervals.

It is the responsibility of the Contractor to ensure that all site staff are tested every four weeks whilst working at the BRM site. This sampling frequency is increased on high exposure work.

Control of Lead at Work Regulations (CLAW 2002)

Guidance on the application of these regulations should be sought from the Blood Lead Management Standard.

BRM's objective is to ensure that Contractors' exposure to lead is minimised as far as is practically possible and to achieve this objective the Responsible Officer (RO) bringing the Contractor on site will ensure: -

- He/she has seen and approved the Contractors method statement.

- He/she is aware of the area in which the task is to be carried out, and what the task entails.
- The RO will ensure he is aware of the lead exposure potential in the area where the Contractor will be working.

Where any technical assistance is required in the process, he may contact the Health and Safety Department for advice.

Using the above information, a written risk assessment must be carried out by the BRM Responsible Officer to ensure the task is carried out safely and the Responsible Officer must ensure that the correct personal and respiratory protective devices are both issued and correctly used.

BRM Lead Policy

Lead can enter the body by ingestion or inhalation. Correct use of protective and respiratory equipment combined with good working practices, avoiding hand-to-mouth contact and personal hygiene will minimise any absorption. Monitoring is by means of a blood sample.

Full details are available in the BRM Lead Health Management Procedure. This includes how and when blood sampling takes place.

All Contractors working on site will be expected to give a blood sample on the first working day and thereafter at monthly intervals – It is your responsibility to ensure that you are tested every four weeks whilst working at BRM. This sampling frequency is increased on high exposure work.

If you are a contractor (man or woman) who has not worked at BRM within the last 3 months, you will be subject to an on-site blood test to determine your approximate blood lead level. If this level exceeds 15ug/dl you will not be allowed on site.

If you are a contractor who has undertaken work in an associated industry within a 6-week period, then you will be subject to an on-site blood test to determine your approximate blood lead level.

If this level exceeds 20ug/dl (10ug/dl for women) you will not be allowed on site.

If the work involves exposure to high levels of lead, then the Contractor will require a re-test on the last day of each working period.

If a male contractor on routine testing has a blood lead level of >24ug/dl, he will be overtime restricted and should not work for more than 45 hours a week.

If a male contractor on routine testing has a blood lead level of 27ug/dl and over, he will be excluded from site, and re-tested within a 2-week period. The contractor will not be allowed back until the BRM Company Doctor has given approval, and their result is below 20ug/dl (below 10ug/dl for women).

Female contractors cannot work on site if their blood lead level is at or above 10ug/dl. Any Contractor who fails to attend for their monthly blood test will be removed from site and not allowed to return.

Further information regarding blood lead health can be found in Appendix G of PCI.

Renewable Energy

Every effort will be made to source materials from local manufacturers to reduce fuel miles for delivery purposes. The proposal will also make use of materials with high

sound and heat insulation characteristics together with the use of low energy electrical fittings and energy efficient heating systems to comply with Building Regulations.

Existing Health and Safety File Information

None known. All existing site information is detailed in the pre-construction information pack.

Existing Drawings / O & M Manuals or Other Documentation

Drawings issued by SLR Consultants Ltd.

- 402.064683.00001 Series

Full and final drawings and specifications to be agreed and finalised prior to commencing works and will be further discussed at pre-start meeting between all parties.

The Design Team and Apollo will review all documentation available prior to commencement of the works as below from the Principal Designer:

Temporary Works

“Temporary works” is a widely used expression in the construction industry for an “engineered solution” used to support or protect an existing structure or the permanent works during construction, or to support an item of plant or equipment, or the vertical sides or side-slopes of an excavation, or to provide access.

Any temporary works or structures, erected to assist during the construction works, must be sufficiently designed and inspected by suitably qualified persons with sufficient knowledge to the category of risk associated with the temporary works and in accordance to BS5975:2019.

Any temporary works or structures, erected to assist during the construction works, must be sufficiently designed, and inspected by suitably qualified persons.

Temporary works are required to support the erection and maintenance of site scaffolding construction, excavations, and fencing. These temporary works will be suitably highlighted within the CPP, and the relevant Method Statements and drawings will be submitted for review.

To comply with best practice, a proportionate Temporary Works Register will be set up to allow continuous monitoring, and the register will also assist in categorising, design criteria, and checking all the relevant Temporary Works, as cited in BS5975:2019 Section 6.2 / page 39.

Temporary Work Co-ordinator / Supervisor (Tim Champion) will be responsible for all Temporary Works on site.

Structural installations:

All structural installations will be in accordance with the Structural Engineers’ specification and sequential recommendations. Detailed RAMS / COSHH

Assessments and procedures will be compiled prior to this element of the works commencing.

Storage and delivery space is severely limited – use of the slab will be required but note must be made of maximum loadings.

Rodents

Operatives may come into contact with rodents and rodent waste, so good welfare and washing facilities will be provided by BRM for the Apollo site team.

Existing Services

All existing site drawings will be consulted, a GPR survey, UXO survey and a CAT scan conducted to clearly identify all services. All existing services that may impact on the works will be isolated and terminated at the site boundary if / as required. See attached GPR and UXO Contractor RAMS.

Overhead ducting / pipe work has been seen but should not impact on these works as additional structural steel support works will be conducted by the steel working contractor. See attached Steel Working Contractor RAMS.

A Permit-to-Dig will be issued by the Nick Brown/Apollo site management prior to any breaking of the ground or excavation works, in addition to appropriate Cobra Air Stream helmets being worn.

BRM and the M&E Contractor will provide temporary electrical services as required, in the event this cannot be undertaken Apollo to supply a generator

Where works are expected to take place adjacent to these mains services the appropriate notices and protective measures should be put in place and where possible services isolated at the intake points during the works until the commissioning phase of the works is reached.

Particular consideration:

Any electrical equipment used on site should be battery powered or 110V via CTTE transformer.

240V appliances and tools are NOT permitted without prior approval from Nick Brown/Apollo site management, and where authorised for use, must be used with a Residual Current Device.

All 110V (and any approved 240V) electrical equipment should be electrically tested prior to use on site, and the Site Manager should confirm this has been done.

Apollo will ensure any temporary electrical supplies, including distribution and transformer units, cables, plugs, sockets etc. are adequate, and will be regularly examined, inspected, and maintained throughout the works.

It is expected that the site cabin / office will be connected to the existing BRM power supply.

M&E specialist sub-contractors will detail how any existing equipment is to be electrically isolated safely, and how new equipment is to be electrically connected and commissioned safely - Details will include NICEIC testing as applicable.

Competent persons only shall work on electrical systems, and proof of IET 17th / 18th Edition Training must be maintained on site.

When excavating, underground cables and pipes must be supported where necessary and protected from mechanical impact damage, strain and vibration. The appointed contractor should not rely on exact locations of pipes and cables as shown on drawings, but use them as a guideline to concentrate searches with suitable detection equipment and from hand dug trial pits in line with requirements of the relevant utility company.

Considerations

- Drainage connections which may be required
- Any temporary electrical mains to be installed must be tested and certificated as requirements including provisions for site welfare and facilities.
- Work on or near services will be identified before any works are conducted.

5. ACCESS / EGRESS ROUTES

The site is accessible from Botany Road.

All operatives on site will be advised and instructed of the significance of the access / egress route at induction stage.

Controls will be applied to segregate the works and secure from any unauthorised access by third parties during the works.

Appropriate site perimeter fencing will be erected. See Section 20 Heras Fencing Sections.

Access to any potentially hazardous areas, potential falling of materials and or structures must be secured and controls applied to ensure site areas and conditions are as safe as possible to all attendees.

Consideration must be given to ensuring site remains safe in event of no contractors on site, in event that unauthorised third parties enter the site.

Suitable signing in and out of site via site register will be enforced, controlling authorised site attendance and to fully determine who is present on site at any one time.

All site access / egress routes will be kept clear and un-obstructed at all times during the works.

6. TRAFFIC MANAGEMENT

Existing Traffic Systems and Restrictions:

Apollo will adhere to the existing BRM traffic management system.

Safety of the public and pedestrians will be always considered. Adequate consideration needs to be taken for non-construction traffic.

Banksman will be required when taking receipt of deliveries and manoeuvring in and out of unloading area.

Vehicle Movements

Delivery and removal of larger items of construction equipment will be scheduled to minimise disruption to BRM daily activities. The proposed dates and times of these movements will be notified to BRM by the site manager on weekly basis, in advance of deliveries /collections. Comments and feedback received will be considered before finalising dates and times.

All sub-contractors and suppliers will be required to plan for and provide a schedule of deliveries to the Apollo site manager (Tim Champion). Tim Champion will then collate these and co-ordinate an overall delivery schedule to ensure as far as is practicable:

- Deliveries are made with the smallest size of the vehicle required.
- Opportunities to combine deliveries can be explored to reduce vehicle movements; and
- The identity of the delivery vehicle can be established in case of any incidents.

Apollo shall establish appropriate control measures to ensure that roadways and building entrances are kept clear for vehicles to pass at all times, clearly signed and members of the public are adequately protected at all vehicle crossovers. Large / multiple vehicle site extraction / delivery movements are too be booked in advance to ensure that the site does not become constricted with materials and so impeding safe movement on site.

Parking:

- Parking is available in the main car park on Botany Way.
- There is limited onsite parking, but if necessary, can be accommodated for essential equipment.

Pedestrian and Vehicle Traffic:

The works are to be carried out and segregated so as not to produce any risk of harm to any third parties as a result of the contractor's undertakings.

Apollo site management will detail how pedestrians and site vehicles are to be segregated during the works, and how a safe access / egress route in the site specific Traffic Management Plan. Care and consideration will be taken to ensure that there is no parking across designated walkways of emergency evacuation routes.

As the project progresses the site could become very congested, the control of material delivered to site and planned storage of materials on site will be critical to the success of good site safety conditions throughout the project.

Access to plant

- All plant must be unloaded within the site to protect the public – note that access and turning areas are limited.
- Banksman / traffic marshals will be appointed and will direct all vehicle and plant movements outside and within the site working areas.

The Traffic Management Plan

Traffic routes within the boundaries and across the construction site will be planned to segregate pedestrian and vehicle movements so far as reasonably practicable and to minimise reversing and other dangerous vehicle manoeuvres. All traffic and designated pedestrian routes shall have clear appropriate signage displayed around site.

The Site Supervisors / Appointed Persons will undertake the role of banksman where there is movement of vehicles.

Proposed traffic routes will be indicated on a site-specific sketch traffic management plan, which will be regularly updated / changed according to site development and progress. See appendix B Site Traffic Management Plan.

This site-specific traffic management plan will be displayed in prominent places of site, communicated at induction stage and a copy included in / attached to this Construction Phase Plan.

It is expected that the existing BRM site traffic management plan will be followed.

Deliveries / Collection

Apollo will control all deliveries and collections to and from site.

Apollo will inform any supply, delivery and / or sub contractor vehicle on initial entry to site of traffic / vehicle movement restrictions and about the traffic management plan, parking arrangements and of the designated unloading / loading areas.

Current delivery times as follows:

- Mon – Friday: 7.30am to 6.00pm
- Sat: TBC
- Sun: No deliveries

Special arrangements may be necessary for the delivery of specialist materials or equipment or the removal of materials from site:

Deliveries: on a ‘just in time’ principle to minimise disruption to the continuing operation of the facility.

- This will be under the guidance of the site supervisors / site management.
- The parking of delivery and construction vehicles will be by prior agreement with the site supervisor. Space is very limited.

- All delivery vehicles will be made aware of the correct site address.
- All traffic movements and deliveries will be under the direction of a competent banksman.
- If necessary, specific method statements and risk assessments will be written to address the work involved and identify and eliminate / reduce any risks therein.
- The site supervisors will also ensure that at all times during the operation, a clear and unobstructed access is maintained before, during and after any deliveries to ensure continued free access for emergency vehicles.
- Any materials and equipment removed from site during the project must be authorised by site Supervisor.
- Emergency service access to and around site must be maintained throughout the project.
- All operatives working outside, or around moving plant / vehicles will wear Hi-viz clothing.
- Information will be provided to all contractors and delivery / collection companies of the height restrictions within the working area.
- A lifting plan will be provided for any Hiab use as required.

Storage Areas

Storage of materials, containers or equipment will be stored within the working areas as / where required or stored on a 'Just in Time' principle. See the attached site-specific Traffic Management and Logistic Plan for the exact locations.

The planned building occupies a very large proportion of the available ground space Apollo site management will manage and co-ordinate all logistics / storage / waste removal provision.

There is very limited room for materials storage across the site for all stages of the build and material deliveries must be very carefully managed noting maximum loadings on site.

Lifting Operations

A Forklift Truck / Telehandler and excavator may also be used to assist with the lifting of any heavy materials or equipment as required. Only competent and experienced will operate / drive the Forklift Truck / Telehandler. An inspection of all relevant competency and plant test certification will be conducted before any works are conducted. All records will be held by site management on site.

Working at Height / MEWPs Use: (Cherry Picker / Scissor Lift / Boom Lift Use)
(Mobile Elevated Working Platforms - MEWPs) will be provided and a competent driver utilised for the works as required.

The MEWP will be hired from an established company, which will provide handover information, including how to deal with power failure emergencies, how to operate, check and maintain the equipment, stating its Safe Working Load and 'Next Test Date'.

All ground and load bearing capacity surfaces will be assessed before works are conducted and protected / covered as / if required to prevent any damage.

Site Management and operatives shall ensure:

- That all equipment is used correctly.
- That all equipment is in good working order.
- That all operatives are trained in the correct use of equipment.
- The MEWP shall be operated only in areas where there are no overhead cables or obstructions, with which it may make contact.
- It must only be operated on firm and level ground, its tyres must be properly inflated, and any outriggers are extended and chocked as necessary, before raising the platform.
- No operatives shall work beneath access equipment to avoid being injured by falling objects.
- That all work will be conducted within and behind the fitted edge protection only and fall restraint equipment worn by operatives.
- Keys to be removed from the ignition when the cherry picker is not in use.
- At the end of each day, checks will be made to ensure that the platform is cleared of tools and equipment, all power has been switched off, the MEWP is secured and not accessible to vandals or trespassers.

When working outside and around the building at height, pavement and road areas appropriate signage and solid barriers / fencing will be erected. Good marshalling and supervision will be maintained to prevent and protect all passers-by, public, visitors or other trades from the moving MEWP and potential falling objects from height.

Note: A full body harness (BS EN361) and lanyard (BS EN 354) will be worn by operatives and attached to designated lanyard anchor point within the basket of the cherry picker / scissor lift whilst conducting all works at height.

[Note: All working at height access equipment to be removed at the end of working day to comply with security and safety building arrangements.](#)

Site Scaffolding

Site scaffolding handrails will be erected around the roof working area perimeter to prevent potential falls from height. A Haki staircase will be erected to provide access to the roof working area.

No roof works will be conducted until the roof perimeter scaffolding handrail and Haki staircase are handed over and scaff tagged by the scaffolding contractor. Regular good working order checks will be conducted by the site manager / competent person / scaffolding contractor on weekly basis. This will be formally recorded and scaff tags update as required.

In addition, the scaffolding handrail and Haki staircase will be informally inspected on a daily basis and after any severe (windy) conditions.

See attached RAMS / COSHH Assessments.

Roof Construction

It is expected that during roof construction that safety netting will be fitted to the steel frame structure to prevent potential falls from height. Only FASET certified operatives will fit and remove the netting.

During the pouring and construction of the concrete roof slab handrails will be fitted as required to prevent potential falls from height.

See attached RAMS / COSHH Assessments.

Concrete Works

It is expected that all concrete for the construction of slabs and drainage will be poured from a concrete pump / lorry or from a skip within the site boundaries as required. As above site banksmen and supervision will direct and marshal all concrete and vehicle movements as required.

See Concrete Contractor / Company RAMS / COSHH Assessments.

Waste

Includes:

- Rubbish, debris, spoil, surplus material, containers and packaging.
- Piling spoil to be stored in a designated area and contained within skips before collection
- General: Minimize production. Prevent accumulations. Keep the site and works areas clean and tidy.
- Handling: Collect and store in suitable containers.
- Remove frequently and dispose off site in a safe and competent manner.
- Non-hazardous material: In a manner approved by the Waste Regulation Authority.
- Hazardous material: As directed by the Waste Regulation Authority and in accordance with relevant regulations.
- Recyclable material: Sort and dispose at a Materials Recycling Facility approved by the Waste Regulation Authority.
- Voids and cavities in the construction: Remove rubbish, dirt and residues before closing in.

All soil, debris and spoil at the ground work excavation stage will be removed by waste / muck away Lorries which will be loaded by the site excavators and dumper trucks or Grab Lorries utilised as required, Apollo site team to monitor all collections

All further waste during drainage and slab construction will be stored at a designated area of site storage for disposal via waste carriers as required. It is anticipated that skips will not be located within the site compound area. Any waste skip must be secured from unauthorised access by members of the public and staff.

Any waste skip will be secured from unauthorised access by members of the general public and staff.

A Waste Transfer Note will be issued by the waste removal contractor driver and received by site management. A Site Waste Management Plan may be implemented if the set financial threshold is passed (£300,000). See attached the Site Waste

Management Plan if required, site specific Traffic Management and Logistic Plan for the exact locations.

Apollo Site Management and the Waste Carrier will provide the following information to BRM Management:

1. Waste carrier registration details
2. Environment Permit of the receiving site
3. The proposed waste recovery or disposal method – with R&D code

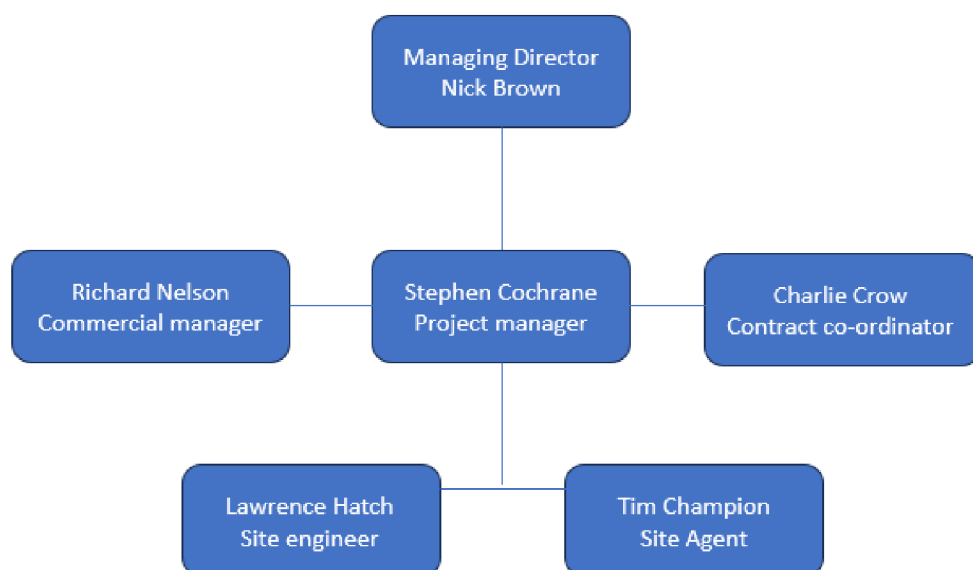
Documented waste transfer notes should be retained controlling the waste removal from site by competent waste transfer provider, this will be issued at each monthly site meeting.

7. SITE MANAGEMENT

Apollo Management shall comply with all statutory enactments and obligations to ensure as far as is reasonably practicable that the Health and Safety of employees and / or others may not be at risk as a result, or in direct consequence, of works to be carried out. Special consideration must be also given to aspects that fall within the Environmental Protection Act.

All works must be executed in accordance with current Health and Safety Legislation and HSE Guidance, including inter alia, the relevant sections of:

- HSG 151 – Protecting the Public
- HSG 168 – Fire Safety in Construction Work. Nick Brown/Apollo must also ensure full compliance with the Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation, issued by the Loss Prevention Council.
- HSG 144 – Safe Use of Vehicles on Construction Sites



Apollo as the Principal Contractor will be responsible for all construction site works and planning for the duration of the project. The Site agent (**Tim Champion**) will

manage and monitor the site on a day-to-day basis. The project manager (**Steve Cochrane**) will also contribute to this process.

All subcontractors will provide their own supervisors / foremen daily and will assist with the management of the site and their own site working areas.

All operatives on site will receive a site specific induction from Apollo Site Management before starting work and on their first day on site. See Section 17.

Permit to Work Systems

Site Management will issue and operate permits for:

- Hot Works (angle grinder / disc cutter and heating torch use).
- Use of working at height equipment (MEWP, mobile tower, ladder use).
- Permit-to-Dig.

Signing in and signing out:

- All will report to the BRM site reception / security point, sign in and receive a visitor or site contractor pass, which will be worn at all times when working on the BRM site on a daily basis.
- Every contractor and visitor will sign in and sign out of building on a daily basis using the Signing In / Out book, which will be held in the site office / welfare cabins at the designated area of site.

Personal Protection Equipment (PPE)

Apollo will ensure that for as a minimum and in line with the site rules that a Hard Hat, Safety Footwear and Hi-Viz vests will be worn.

Additional requirements for these works will be:

1. Appropriate gloves, eye protection, ear protection and dust masks (FFP3)
2. Other PPE may be required if conditions change (wellington boots, disposable overalls, cold / wet weather clothing, etc.).
3. Any PPE items issued must be recorded in site register.
4. There will be 2 spare sets of PPE at the site office for any visitors.
5. BRM site specific PPE (Cobra Air Stream Helmets) to be worn when the breaking ground.

8. INFORMATION TO SUBCONTRACTORS

All contractors will be given details of the project and informed of the potential hazards identified during the design and planning stages. Preliminary meetings with contractors will be held on site to pass information and discuss their work prior to their commencement on site and during the duration of the project. Contractors will be updated on a daily basis if necessary, of any changing circumstances on site that could affect the health and safety plan.

Apollo site management will review the Sub Contractors documents regularly to ensure that the work being carried out is relevant.

Statutory Notices, e.g. Health & Safety Law 'For your information', Notification of Project (Form F10 rev) and Employers Liability Insurance Certificates will be posted on the site notice board so that it can be seen by site operatives and visitors. General notices / posters will be displayed as is found relevant relating to the hazards / risks present.

9. SELECTION PROCEDURES

All sub-contractors will have proved their competence by either providing up to date information on their Health and Safety resources, procedures and or demonstrated their competence on previous projects carried out for Apollo.

Apollo Site Management will ensure that all operatives working on site have the appropriate skills, knowledge and experience for the works to be conducted.

Confirmation of competence, i.e. Supervisory, Technical, Health & Safety training requirements will be witnessed, recorded and maintained on site by the Site Manager - e.g. SSSTS/SMSTS, IET 17th / 18th Edition, JIB, IPAF / PAL, CSCS, CISRS etc. All Plant licences MUST be specific to the Plant in use and to the operator using them.

Apollo will examine the contractor's Health and Safety documentation and safety record to ensure their competence. Suppliers of material / plant and equipment will be required to provide adequate Health and Safety information to support their products.

All RAMS will be written up before works are conducted. All RAMS will be reviewed and approved by SLR, H&S Advisor and Site Management before any works are conducted.

The Site Manager will keep all risk assessments and method statements in a file on site. The Site Manager will not allow any works to commence until all relevant information is in position. Contractors are to be briefed by site management / subcontractor manager before starting work on their method statements / risk assessments. Risk assessments and method statements are to be updated by site management / subcontractor manager to incorporate changes of design and any relevant information identified by any party during the Construction Stage.

All contractors are required to work within the site rules and client requirements.

Material Safety Data Sheets and COSHH Assessments are required for the use of all hazardous substances.

10. COMMUNICATION, CO-ORDINATION & COMMUNICATION

All on site must co-operate with each other and co-ordinate their work effectively to ensure health and safety. They must also communicate with each other to make sure everyone understands the risks and the measures to be put in place to control those risks. Doing this underpins compliance with most of the duties placed on particular duty holders. For example, clients should regularly liaise with principal designers and

principal contractors to ensure they have the time and resources to plan, manage, monitor and coordinate the pre-construction and construction phases of the project.

Information from the clients or their representatives will be issued to contractors on a need-to-know basis. It follows, that where modifications to the original approved design parameters cannot be followed, this will be brought to the attention of the Principal Designer without delay.

The Principal Designer and other designers will conduct regular design meetings and further develop the Design Risk Register, any changes will be communicated to Apollo site management and the relevant contractors as necessary.

Regular meetings will be conducted with all site operatives / trade contractors to discuss and agree work activities, program, processes, and any design changes as required.

All relevant information will be made available and provided to contractors for site specific RAMS to be written and revised as required.

It is expected that daily awareness briefings (DABs) will be delivered to site operatives to advise and inform of any site changes, conditions, activities and all known hazards.

At initial project review and periodic meetings, Health and Safety will be a topic on the agenda, therefore ensuring that Health and Safety matters which may affect one or more subcontractors can be discussed and resolved.

Apollo will as part of their progress report include a section on CDM.

Copies of site inspections / audits carried out by Apollo external H&S Consultant – KF Safety are to be provided to the Client, Project Manager and Principal Designer, this will aid the client and the Principal Designer in the fulfilment of their duties.

Director (Nick Brown, The Contracts Manager (Steve Cochrane) / Site Manager (Tim Champion) will stay in constant communication with the Client's Representative, Designers and the Principal Designer in order to ensure that they are kept fully up to date with all current risks on site.

Apollo Site Management will liaise with various parties as part of the ongoing requirement within the regulations and keep everyone up to date of forthcoming works that may affect the site, adjacent area and local properties.

Communications shall also consider the possibility of foreign workers who have little or no understanding of the English language, either written or spoken, working on the project. Health and Safety signage, site-specific safety inductions and other documentation may be required in a number of foreign languages. A translator may be required.

11. ACTIVITIES WITH RISKS TO HEALTH & SAFETY

Significant hazards or work sequences identified cannot be avoided or designed out, shall where appropriate, have some indication of the safe systems that should be in place for dealing with them:

- ❑ Site Access / Egress
Control Measures: Traffic Management / Logistics Plan, appropriate pedestrian segregation, signage, and good housekeeping.
- ❑ Noise / Dust / Vibration
Control Measures: Elimination and reduction as far as possible, monitoring of exposure rates, appropriate PPE worn as required and toolbox talks given to all on site.
- ❑ Temporary Works
Control Measures: Temporary Works Designer recommendations to be followed, all temporary works to be monitored and controlled by the Temporary Works Supervisor / Co-ordinator, the Temporary Works register to be compiled and updated as required.
- ❑ Working at Height
Control Measures: Edge protection (handrails) and safety netting to be fitted to roof areas, appropriate working at height equipment (ladders, mobile towers, step ladders, MEWPs, scaffolding, netting) utilised, in good working order, used correctly and toolbox talks given to all on site.
- ❑ Manual Handling
Control Measures: Avoidance where possible, lifting aids utilised (MEWPs, telehandler / forklift truck, trolleys, wheelbarrows, etc.), team lifting, appropriate PPE worn and toolbox talks given to all on site.
- ❑ Hot Works
Control Measures: Hot permit-to-work system operated, appropriate firefighting media made available, all flammable items removed from working area and PPE worn.
- ❑ Working with electricity / live services
Control Measures: All live services isolated, and appropriate certification issued, competent operatives utilised only, all equipment PAT certified and only 110 volt powered.
- ❑ Working with concrete
Control Measures: Appropriate PPE worn to cover all skin and eyes, operatives to wash thoroughly and toolbox talks given to all concerned on site.
- ❑ Moving vehicles / plant
Control Measures: Traffic Management / Logistics Plan, appropriate pedestrian segregation, signage, only qualified operatives utilised and all plant / vehicles in good working order.
- ❑ Excavations

Control Measures: Good signage displayed, barriers / fencing erected to prevent any unauthorised access, identification of all hidden live services / CAT survey and excavations inspected on a daily basis.

❑ Heavy Lifting

Control Measures: Forklift truck to be utilised. All heavy lifting planned, controlled and supervised, all lifting equipment in good working order / certified and only qualified operatives utilised.

❑ Slips, trips and falls

Control Measures: Good housekeeping, regular monitoring of working areas and access / egress routes.

❑ Portable hand tool use

Control Measures: All tools / equipment to be in good working order, all trained in correct use and used correctly.

❑ Protection of the public

Control Measures: Traffic Management / Logistics Plan, appropriate pedestrian segregation, signage and good housekeeping.

See all Apollo- Sub Contractor Risk Assessments, Method Statements and COSHH Assessment sheets.

12. FIRE / EMERGENCY PROCEDURES

It is expected that the existing BRM and the Site Fire Plan will be followed. See appendix A.

Fire escapes:

The fire exits from the site working areas must always remain clear and unobstructed.

All fire exit and fire directional signage is to be provided / displayed by Apollo site management on fencing as required.

Any front or side shared / common exits from the site must be always kept clear.

Appropriate controls are to be applied following the assessment and suitable fire points located on site and welfare areas with the provision of competent fire marshal to ensure safe evacuation in event of emergency.

Smoking:

Following the implementation of the new smoking laws in 2007 smoking is not permitted anywhere inside any building. There will be a designated site smoking area, which all on site will be informed of at the induction stage. No smoking permitted on the plant side of the BRM site. There is a smoking zone in front of the BRM premises, as detailed in the Logistics Plan, also as the BRM policy.

These items are to be carried out in line with the Regulatory Reform (Fire Safety) Order 2005 and the Construction (Design & Management) Regulations 2015 (CDM Regs 2015)

Site Specific Emergency Arrangements:

Subcontractors will familiarise themselves with the Emergency precautions / procedures established by Apollo. Emergency precautions / procedures will be discussed at the pre-start and review meetings.

Apollo shall draw up emergency procedures for the site, which should be explained to everyone during the induction and will be shown in a pictorial fire plan of the site and according to the site specific Fire Risk Assessment. The pictorial fire plan will be displayed at prominent locations around site and a copy attached to this Construction Phase Plan.

The fire plan will clearly identify emergency exit points, emergency evacuation directions / routes, the location of fire points and the assembly / muster point. Apollo site manager will update / change the fire plan according to site development and progress.

Apollo site management shall ensure that adequate procedures to raise the alarm in case of fire / emergency evacuation, appropriate fire extinguishers / media is in place, maintained, have test dates clearly displayed and in date. In addition, the Emergency Action Plan will be displayed on the site and welfare areas notice boards to advise all on site of the fire / emergency evacuation procedure as below:

13. FIRST AID & ACCIDENT / RIDDOR REPORTING

All accidents or incidents must be reported to the Site Management / Manager, who shall maintain and record the accident in the accident book (BL510).

All RIDDOR notifiable accidents, ill health and dangerous occurrences will be reported the HSE using form F2508 / F2508A under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013.

Additionally, all accidents and incidents will be reported to the Client / CDM advisor / Principal Designer at this same time by the fastest method.

RIDDOR notifiable accidents and incidents may be reported by any of the following methods:

Telephone – 0845 3009923

Internet – <http://www.riddor.gov.uk>

There is no longer a paper form for RIDDOR reporting, since the online system is the preferred reporting mechanism. Should it be essential for you to submit a report by post, it should be sent to:

RIDDOR Reports, Health and Safety Executive, Redgrave Court, Merton Road,
Bootle, Merseyside, L20 7HS.

A fully stocked first aid kit and sterile eyewash bottles / ampoules shall be made available on site and maintained by the Appointed Person / First Aiders (FAW / EFAW) on site at all times. More than one kit may well be required depending on the location and type of work undertaken. First Aid kits will be located in the site office.

A brief outline of procedures for administering first aid and calling for paramedical services, particularly where work is being undertaken outside of store opening hours –

for access purposes will be explained at the Induction stage. First Aid facilities will be established on site by Nick Brown site management and other sub-contractor First Aiders. The site First Aider (Tim Champion) contact details will be displayed in prominent places (site notice board, site office and welfare areas); in addition to any other known first aiders on site.

14. WELFARE ARRANGEMENTS

It is expected that the BRM existing welfare (washing, shower, dining, toilets and rest areas) facilities will be utilised by site operatives as required. All will be informed of facilities on site at induction stage. No dirty footwear to be worn inside the building, procedure will be made clear at Apollo induction

Separate office and storage cabins will be provided by Apollo site management and positioned within the heras fenced off site compound and working area. This area will not to be used for eating or drinking or as a clean / welfare area.

All on site will be instructed that only the designated clean BRM welfare area will be used due to the potential risk of lead contamination in the working areas.

See the attached Site Logistics Plan (appendix C).

15. CONSULTATION WITH PEOPLE ON SITE

All operatives will be encouraged by both the Contracts Manager and Site Manager to take the opportunity to discuss health, safety and welfare matters with them.

Workplaces where workers are consulted and engaged in decisions about health and safety measures are safer and healthier. Consultation about health and safety is a two-way process. It involves giving information to workers, listening to them and taking account of what they say before making decisions.

For example, meetings between managers and workers could be held before work starts to discuss the work planned that day, identify all the health and safety risks and agree the appropriate control measures.

This will be achieved by site inductions, daily awareness briefings, toolbox talks and regular meetings as required.

16. SITE RULES

Safety rules should be complied with as a minimum.

These instructions are conditional on your employment with the Company and are in the interest of your safety and the safety of those working with you. Failure to understand and to work to these instructions may result in your dismissal or termination of your contract and as such is to be taken as your first warning.

You must obey the Site Rules and instructions of the site, for the duration of the time you are working. Whether the Company is operating on the site or not.

- PPE: Hard hats, safety footwear, eye, ear protection, dust masks etc. must be used and worn correctly as required.
- No machine, item of plant or equipment is to be operated by any person, unless they have been trained and are authorised to do so.
- No repairs, maintenance or adjustments to machines, plant or equipment are to be carried out, unless you are authorised to do so.
- All substances are only to be used in accordance with the written instructions.
- All substances are to be stored in accordance with the written instructions.
- Access equipment, ladders, mobile tower, step ladders, etc. shall not be left accessible when work is not being carried out.
- Works must be programmed in order that fire exits are always maintained.
- No Smoking unless in a designated area.
- No burning of rubbish on site.
- Good housekeeping will be always maintained.
- No radios, mobile phones, earphones, Ipods, or other social media items / entertainment devices, etc. to be used on site and essentially when operating any tools and plant.
- Any situation you find unsafe, such as gaps or holes in floors, dangerous machinery or unsafe access must be reported to the site manager immediately.
- No alcohol or drugs allowed on site. Any person found under the influence of these will be dismissed.
- Fire extinguishers must not be moved, used to prop open fire doors or negligently discharged.
- You must familiarise yourself with the site emergency procedures. If in doubt, ask.

17. SITE INDUCTION

Site: Britannia Refined Metals Ltd, Botany Road, Northfleet, Gravesham, Kent, DA11 9BG.

1. Names of project and site managers or site foreman.
2. The description of the project.
3. The specific hazards and high risk involved in the job.
4. Description of site layout, the access/egress location(s) including high risk areas.
5. Emergency and fire evacuation procedures/arrangements to be explained i.e. location of fire extinguishers, blankets, assembly point, and method of raising the alarm.
6. Location of the first aid box and the name of the First Aider on site.
7. Smoking is not permitted except in designated areas in the compound/mess area.
8. All accidents must be reported to the site foreman/manager.
9. PPE must be worn by all on site as required.
10. Only authorised and operatives with relevant certification are permitted to operate plant or machinery.
11. Damaged or faulty equipment must not be used.
12. No misuse of anything provided in the interest of health and safety welfare.
13. Scaffolds must not be altered other than by persons appointed.
14. Good housekeeping will be always maintained.
15. Waste materials must be taken to designated areas daily.
16. Location of welfare facilities. (Toilets, canteen and drying/changing room).
17. Method Statement, COSHH and Risk Assessment to be signed off as read and understood by all personnel and also they must sign daily attendance sheet.
18. Inform site management of any medical condition.
19. Procedure for keeping mud out of the welfare facilities : Change/clean all dirty PPE before entering welfare area

Signature.....Print.....

Company.....

CSCS / CPCS / PASMA / IPAF / CISR Certification Numbers:

.....

Nick Bown/Apollo

Site Manager : Tim Champion

Date.....

18. THE HEALTH & SAFETY FILE

The Contracts Manager will be responsible for passing all relevant documentation to the Principal Designer for inclusion in the Health and Safety File. This information, if requested by the Principal Designer, will be set out in a certain format so that all such information is in a manner that the Client / Client's representatives will find useful and user friendly, when required.

Apollo and designers must provide information about each of the following where they are relevant to the health and safety of any future construction work. The level of detail should allow the likely risks to be identified and addressed by those carrying out the work:

- A brief description of the work carried out.
- Any residual hazards which remain and how they have been dealt with (for example surveys or other information concerning asbestos; contaminated and; water bearing strata; buried services etc);
- Key structural principles (for example, bracing, sources of substantial stored energy -including pre- or post-tensioned members) and safe working loads for floors and roofs, particularly where these may preclude placing scaffolding or heavy machinery there;
- Hazardous materials used (for example lead paint; pesticides; special coatings which should not be burnt off etc);
- Information regarding the removal or dismantling of installed plant and equipment (for example any special arrangements for lifting, order or other special instructions for dismantling etc);
- Health and safety information about equipment provided for cleaning or maintaining the structure;
- The nature, location and markings of significant services, including underground cables; gas supply equipment; fire-fighting services etc;
- Information and as-built drawings of the structure, its plant and equipment (for example, the means of safe access to and from service voids, fire doors and compartmentalisation etc.)

The Health and Safety File will be submitted in the format as detailed in the Pre-Construction Information pack.

- **1 hard copy, ring bound in display front folder – drawings in transparent sleeves to index supplied by index from CDM 2015**
- **1 electronic copy, all drawings as pdf files, all certificates etc scanned.**

20. ARRANGEMENTS FOR MONITORING

There will be continual active monitoring of the contract by the Contracts Manager who during his regular visits will systematically check standards of safety achieved. He will also review the safe system of work and safety method statements on a regular basis. In addition, the Apollo site Manager will also conduct and record weekly safety inspections as required.

Apollo Site Management will work in partnership and co-operation with the client and subcontractors on a daily basis.

Apollo external H&S Consultant – KF Safety will conduct regular site visits (fortnightly) involving site inspections and audits on any relevant site documentation, in addition to assisting with accident investigations and ensuring a safe system of work.

21. SITE WIDE ELEMENTS

Lighting

Apollo will outline how they will ensure that the site lighting provided is sufficient and will be regularly inspected and maintained throughout the works. An assessment for the requirements for providing emergency back up lighting should this be required, details will be identified and attached to this CPP as / were required.

General

Every subcontractor will be responsible for ensuring that his workplace is maintained in a clean and orderly fashion and on completing work in a specific area, must clear all rubbish and excess material before vacating that area and starting work elsewhere.

Security of the site

In order to safeguard contractor's plant, machinery and tools and materials, Apollo will ensure that the site working area and compound is secure at all times.

There is also BRM 24-hour site security which will prevent any unauthorised access to the BRM facility.

- Apollo shall ensure that unauthorised persons are excluded from all working areas.
- Apollo shall ensure that steps are taken to limit the number of people on site to those directly concerned with the construction work and to ensure that the security of the construction site is not compromised. This must be strictly enforced to prevent accidents.
- Liaise with client and Principal Designer to agree security arrangements.
- The site compound will be fenced off and securely locked when there are no works are being conducted to prevent unauthorised access.
- A set of keys will be made available to BRM site security for any of hours / emergency access.

- Pedestrian lighting will be installed along the footway. All site materials will be stored within this boundary fence.
- During working hours, access gates will be kept closed except when vehicles are accessing or leaving the site.
- The site entrance will be clearly marked.

Heras Fencing Lines:

All internal and external work areas will be secured from unauthorised access at all times, and sufficient signage posted to indicate the works, access restrictions, PPE requirements, and any alternative pedestrian/vehicular routes.

Heras fencing will be erected and securely clipped together around the site compound and working areas.

Considerations must be made and documented as to necessary controls required to safeguard any persons (BRM staff, visitors or contractors) who interface as a result of the site fencing requirements.

Particular considerations

- BRM site access / traffic routes.
- BRM site pedestrians around and at the side of the fenced off works area (it may be required to close the pedestrian route and divert pedestrians around the recognised hazard).

Signage

- Appropriate signage will be displayed warning of 'construction site, keep out'.
- Site management contact details.
- Site office, welfare and emergency warning signage shall be provided at the entry point / signing in and out point of site and other prominent areas as agreed with the client.
- Signage warning of areas of danger – men working above, moving vehicles, live electrics, etc will be clearly displayed on fencing immediately before these areas.
- Site management will ensure that all signage is consistently displayed and replaced where required.

Environmental

Strong winds

Apollo shall ensure that loose materials that could be blown away during these works are suitably secured.

Consideration should be given to other elements of work, working at height that could be affected by high winds.

All MEWP or Telehandler / Forklift Truck use will be assessed and monitored by the crane driver, who will advise if it is safe to conduct any heavy lifting in windy conditions. These details will be detailed in the MX Metals Lifting Plan.

Cold weather

Apollo will ensure that operatives working outdoors have suitable cold / wet weather clothing.

PPE is to be selected and issued in line with the Personal Protective Equipment at work Regulations (PPE Regs 1992).

It is expected that the working area will be gritted as / where required.

Dust Suppression

Apollo will take reasonable steps to suppress dust, dirt and debris generated by the scheme, working to the relevant British Standards and best working practices.

The following on-site measures will be adopted:

- ▶ Ensuring that the area around the site, including the public highway, is regularly and adequately swept using wet sweeping methods only to prevent any accumulation of dust and mud.
- ▶ The use of a hose at the entrance/exit to wash wheels for all vehicles accessing the site.
- ▶ Muck-away trucks will be covered to prevent wind effects on contents.
- ▶ The application of dust suppressants to the hard surfaces on and around the site; and,
- ▶ Methods of work to prevent dust from becoming airborne at source, including enclosure of fixed plant, addition of moisture, and provision of effective exhaust ventilation and filtering.

During works the main air pollution emissions are the dust generated when building materials are broken up and the fumes from machinery.

Heras fencing will be erected around the site. Along with reducing the visual impact and providing protection for the construction workers and public, this will also act as a barrier for dust originating from within the site.

A portable dust / air quality monitor will be used by the site manager to measure and monitor the air quality on a regular basis throughout the project. This will involve regular visual observations and record-keeping. A fully trained Manager will be on site throughout the construction period to ensure this is adhered to.

Noise:

All high noise activities must have been appropriately assessed and be covered by a noise assessment as in accordance with the Control of Noise at Work Regulations 2005.

Work Related Noise:

Apollo will ensure that all operatives are aware of the risks involved and the precautions to be taken in relation to exposure to work related noise and potential hazardous effects that could result in industrially related hearing loss. Suitable controls must be applied and available when the first action level of 80dba is reached and then enforced when second action level of 85dba is reached.

All noise will be measured and monitored by the site manager using a noise monitor throughout the project. Regular communication and liaison will be maintained with the nearby BRM offices to monitor and to receive possible feedback on noise exposure.

Noise Suppression

Before works commence, the site workforce will be fully briefed on the need to keep all noise generated to a minimum. Shouting and raised voices are not permitted other than in cases where warnings of danger must be given. Noise monitoring will be undertaken at the start of each new activity. A record of noise monitoring results will be maintained.

Construction noise is predominantly controlled by restricting the hours of work to:

- ▶ Monday – Friday, 07:30 – 18:00 hours.
- ▶ Saturdays, Sundays or bank holidays TBC.

All plant and equipment, including any on hire, is checked to ensure it is in good working order and conforms to the manufacturers' standards.

Noise suppression measures to support the Noise and Vibration Assessment include:

- ▶ Plant will be maintained in good workmanlike condition so that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum.
- ▶ Plant will be well maintained and measures taken to ensure that it is shut down in the intervening periods between work.
- ▶ Before works commence, the site workforce will be fully briefed on the need to keep all noise generated to a minimum. Shouting and raised voices are not permitted other than in cases where warnings of danger must be given.
- ▶ Noise monitoring will be undertaken at the start of each new activity, throughout the project. A record of noise monitoring results will be maintained.
- ▶ When working within a building, wherever possible, all openings (i.e. windows and doors) are closed.
- ▶ Plant, equipment, site offices, storage areas and worksites will be located away from the adjacent residential properties; and

Machines and equipment in intermittent use will be shut down or throttled down to a minimum when not in use.

Vibration:

Apollo will ensure that all operatives are aware of the risks involved and the precautions to be taken in relation to Hand Arm Vibration Syndrome (HAVS). The HSE have provided guidance on this hazard. The free leaflet "Health Risks from Hand Arm Vibration, Advice for Employees" (INDG 175) is available from HSE books on the HSE website.

Protection of the Public and BRM staff.

It is imperative that members of the public and BRM staff are not exposed to hazards created by the construction works during the project.

Suitable controls will include:

- Displaying suitable safety signage warning of any hazards.
- Maintaining safe access routes around the perimeter of the site.
- Planning high noise activities to times when least people can be affected.

- Undertaking daily inspections of the construction site perimeter.

All contractors work areas will be suitably protected with a physical barrier / fencing and have suitable safety signage displayed warning of works taking place.

Apollo will provide arrangements to prevent the public being exposed to any significant hazards created as a result of construction activities.

Apollo and their sub-contractors risk assessments and where applicable written safe systems of work will detail any specific arrangements necessary to complete the works whilst ensuring the safety of any third party.

Particular Considerations may include but not be limited to:

- The provision and use of all necessary fencing and barriers to protect pedestrians.
- Maintenance of safe pedestrian and vehicular passage around scaffold structures.
- Pedestrian / vehicle segregation whenever practicable.
- Prevention of building materials, debris and rubble falling onto persons beneath.
- Timing of material deliveries and rubbish removals.
- Prevention of unauthorised access into the site

Consideration to be given to:

- Passing pedestrians and vehicle traffic when working close to footpath
- Plant maintenance (grease oils);
- Brick / block / concrete dusts.

COSHH assessments will be carried out for hazardous substances and communicated to those likely to be affected. Consideration and controlled measures will be given and not limited to:

- Provision of dust suppression, collection systems when cutting man-made fibre boards.
- Provision of water suppression when cutting silica/cement-based products.
- Use of adequate PPE for operatives and fellow workers in proximity.
- Containment and or segregation where practicable.
- Maintaining and implementing safety systems safety guards and equipment.
- Provision of appropriate warnings and safety information.

Protection of Visitors / BRM staff

Apollo will ensure that BRM visitors and staff are not exposed to the machinery or groundwork operations. Exclusion zones and defined pedestrian routes will be created to protect the public and any passers-by.

Considerations:

- The delivery of materials/removal of waste, (these operations should be programmed for when the least number of persons are likely to be affected).
- Maintenance of safe pedestrian/vehicular routes around the site perimeter.
- The suppression of noise and dust emissions, so far as is reasonably practicable.

- Erection and dismantling of hoardings restricting unauthorised access.

Apollo will create a safe work space, in which to move around, to store tools, excavated materials, equipment and plant. Sufficient working space will be provided to ensure that the movement and operation of plant (e.g. swinging jibs and excavator arms) is clear of passing traffic.

Plant and Equipment

- All plant and equipment must be kept in a safe condition when not in use. All mobile plant should have the keys removed when left unattended.
- Tipper/dumper truck drivers should dismount their vehicles when being loaded unless protected cabs are provided (FOP).
- Evidence of operator training (CPCS, Plant Master, CSCS, IPAF, Telehandler / Fork Lift Truck, etc.) and plant testing (Thorough Lifting Examination certification) will be maintained on site for inspection during all phases of the works. A competent Banksman should be used to control the transportation of plant or equipment to work areas, in the event that access through public areas is required.