

Horniman Museum
CUE Green Roof Replacement
100 London Road, Forest Hill, London SE23 3PQ

Pre-Construction Information



12 June 2023

Revision A - 14/06/2023



71-75 Shelton Street, Covent Garden, London WC2H 9JQ

mick@nononsensecdm.com

07932 657934

<http://www.nononsensecdm.com/>

Contents

Introduction

1. The Project

Existing site
Brief scope of work
Intended use of completed structure
Programme details
Minimum mobilisation period allowed for by the client
Extent and location of existing records and plans
Client brief
Project team

2. Planning and management of the Project

General arrangements
Health and safety aims of the project
Risk Assessments and Method Statements (RAMs)
Continuing design work
Co-operation between duty holders and co-ordinating the work
Welfare provision
Fire precautions and emergency procedures
Security of the site

3. Health and safety hazards at the site

Safety hazards

- Adjacent land use
- Occupied premises
- Restrictions on deliveries, waste collection or storage
- Falls from height
- Location of existing services and electricity
- Plant and equipment
- Storage of materials and work equipment
- Hot Works
- Collapse of structure

Health hazards

- Asbestos containing material
- Contamination
- Building dust
- Exposure to lead
- Manual handling
- COSHH and flammable/dangerous substances
- Noise and vibration
- Exposure to UV rays

Design considerations

- Significant design assumptions
- Arrangements for co-ordinating on-going design work
- Significant risks identified during design
- Materials requiring particular precautions
- Protecting the general public

4. Construction Phase Plan

Suggested contents

5. The Health & Safety File

Relevant information in the existing Health & Safety File
Project information required

Appendix

Site Logistics Plan

Introduction

This Pre Construction Information (PCI) has been produced, on behalf of the Client and Principal Designer, to satisfy the requirements contained in the CDM²⁰¹⁵ Regulations. It provides information required by Statute and should be read carefully in conjunction with the Tender Documents.

The Industry Guidance documents for Duty Holders produced by CONIAC (Construction Industry Advisory Committee) have been used as guidance in the preparation of this document.

The PCI includes material which is in the client's possession or which is reasonably obtainable by, or on behalf of the client, and includes proportionate information about:

- The project, such as the client brief and key dates of the construction phase
- The planning and management of the project such as the resources and time being allocated to each stage of the project and the arrangements to ensure there is co-operation between duty-holders and that the work is co-ordinated
- The health and safety hazards of the site, including design and construction hazards and how they will be addressed
- Any relevant information in an existing Health & Safety File

The information is provided to help other duty-holders involved in the project to carry out their duties.

The Principal Contractor must develop their own Health and Safety Plan in accordance with the Regulations and maintain it until the end of the construction phase.

The Principal Contractor is required to have a reasonable degree of competence for health and safety matters, in accordance with the Health & Safety at Work Act 1974 and Subsequent Regulations. Therefore, detailed H&S procedures which are common knowledge to a Principal Contractor experienced in the nature of the work proposed are not specifically referred to in this document.

The intention of this document is to identify areas of risk or hazards that may reasonably be foreseen. No warranty can be given that other hazards will not be encountered during the works and due care should be given to assessing risks and hazards as work progresses, especially where opening up, demolition or other exposure of previously covered construction takes place.

Any queries or clarification needed on the application of this document should be referred to the Principal Designer or CDM Consultant.

1. The Project

Existing Site

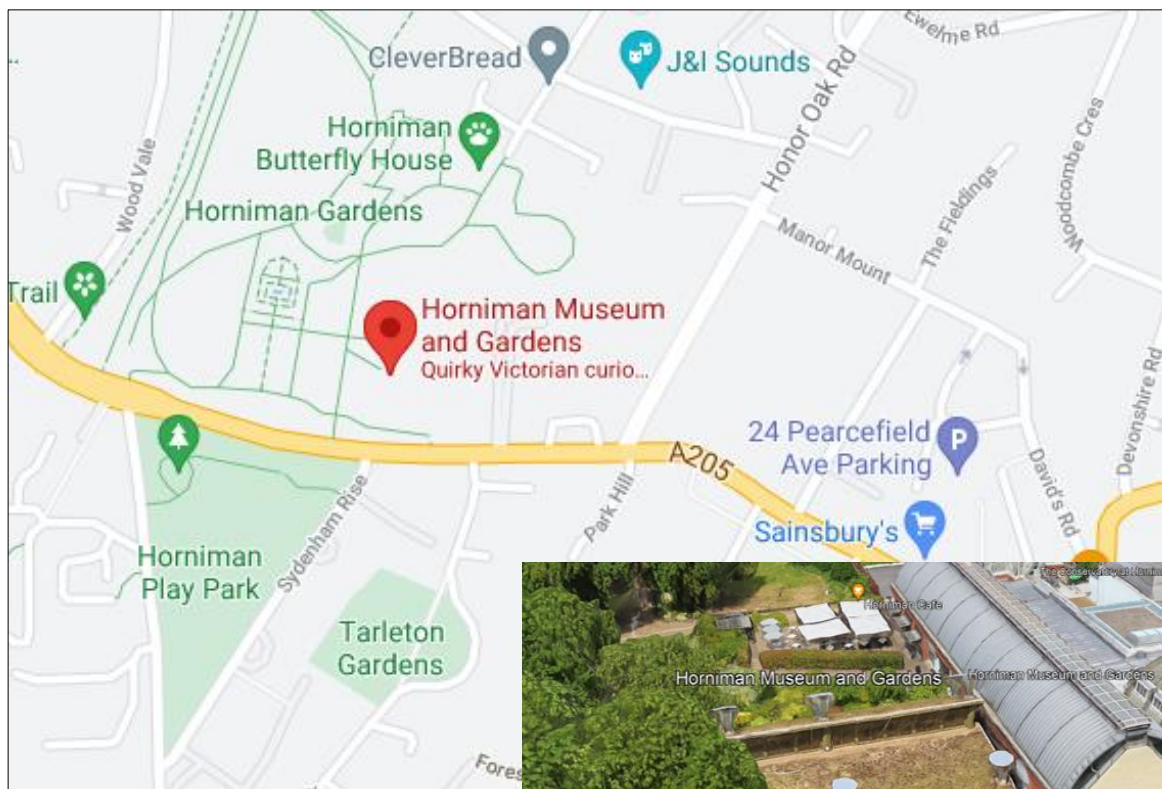
The Horniman Museum and Gardens is located in Forest Hill in the London borough of Lewisham.

The Museum opened in 1901 with an additional building constructed in 1911, to the west of the main site. A new extension was opened in 2002.

Works are to the green roof of the CUE building (the Centre for Understanding the Environment), a single storey building housing a library, staff office and education facilities.

It is a timber framed building with plywood roof structure and softwood framing. The existing roof comprises a single ply waterproof membrane on plywood substrate, with soil growing medium.

The CUE was constructed in 1994 and modified in the early 2000's.



The main access route to the site runs through the Museums public gardens which are open to the public from 10am each day.

1. The Project (*continued*)

Brief scope of work

Works include:

- removal of existing green roof growing medium, waterproof membrane and associated cappings and rainwater goods
- repair and replace rotten eaves timbers and barge boards
- provision of new 3 layer felt roofing system with lead flashings and rainwater spouts
- installation of new drainage mat, growing medium and planting layer
- provision of gravel margins around all roof perimeters and penetrations to assist drainage
- installation of edge protection handrail on east face of roof
- testing of existing mansafe cables
- re-fixing of lightening protection tape
- installation of roof irrigation pipework (using existing roof-level water feed connection)
- repair and replacement of timber open balcony on London Road elevation if instructed by the Museum

Programme details

Start on site is provisionally August 2023 with a contract period of 13 weeks.

Expected number of people on site: to be confirmed.

Expected number of Contractors on site: to be confirmed.

Minimum mobilisation period allowed for by the client

4 weeks.

1. The Project (*continued*)

Extent and location of existing records and plans

F10 Notification

Notification will be submitted to the HSE on appointment of the Principal Contactor if appropriate.

Health & Safety File

There is no existing Health & Safety File relevant to these works.

Asbestos Containing Material (ACM) Information

An Asbestos Management Survey was carried out by Lucion Services Ltd on 27 May 2020, reference 407367.

Drawings

Existing and planned drawings are held by all parties.

Client brief

A written client brief has not been prepared however, the designer has been made aware of the clients' aims including budget, the design requirements for the Project and end use.

The client has confirmed a single point of contact during the execution of the Project.

The main function of the finished building is educational and offices.

The client's expectations is that the project runs in an efficient manner, within budget and realistic time-scales and with all due care and attention paid to welfare and health & safety issues. The project must be run considerately to avoid any inconvenience to other occupants or members of the public.

1. The Project (*continued*)

Project team

Client:

The Horniman Museum and Gardens
Horniman Museum
100 London Road
Forest Hill
London
SE23 3PQ

Tim Hopkins - Head of Estates
thopkins@horniman.ac.uk

Adele Harrington - Project Coordinator
aharrington@horniman.ac.uk

020 8699 1872 (ext 116)

Principal Designer:

Landolt + Brown Ltd
501 Cocoa Studios
The Biscuit Factory
Drummond Road
London
SE16 4DG

Adam Brown
abrown@landoltandbrown.com
07776 131574

Principal Contractor:

To be confirmed.

Site Manager:

To be confirmed.

Structural Engineer:

Conisbee Consulting Engineers
1- 5 Offord Street
London
N1 1DH

Simon Wilkinson
simon.wilkinson@conisbee.co.uk
020 7700 6666

1. Description of the Project (*continued*)

Project team *continued*

CDM Consultant:

No Nonsense CDM Ltd – Jennie Storey
71-75 Shelton Street
Covent Garden
London
WC2H 9JQ

jennie@nononsensecdm.com

07958 475458

2. Planning and management of the Project

General arrangements

The client (via the CDM Consultant) will require the Project Team to confirm and explain their management arrangements for the project, in particular:

- clarity of roles and responsibilities
- allocation of sufficient time and resources
- good communication between team members
- confirmation from contractors that Health and Safety on site will be controlled and monitored
- provision of welfare facilities

Checks will be made (by the CDM Consultant) to ensure that these arrangements are maintained throughout the Project.

Health and safety aims of the project

The health and safety aims of the Project are:

- an accident free contract
- co-operation throughout the workforce to ensure safety is everybody's responsibility
- a pro-active approach to health and safety by the Contract Management Team
- safe working environment as a condition of employment



To help achieve this:

All site operatives to hold the CSCS Green Card (or equivalent) and/or have the appropriate skills, knowledge and experience to carry out their work safely.

Everyone working at, or visiting, the site to receive Site H&S Induction.

Regular consultation to be held with workforce on site H&S issues.

Daily site inspections to be carried out by the Site Manager.

Health and safety performance to be managed, monitored and reviewed on an ongoing basis. Reports of implementation and performance to be sent to the Principal Designer.

Health & Safety and CDM to be an agenda item at each site progress meeting.

2. Planning and management of the Project (*continued*)

Risk Assessments and Method Statements (RAMs)

The Principal Contractor must identify and specify safe systems of work designed to eliminate or introduce controls to minimise the relevant risks.

Risk assessments must:

- identify the hazards
- identify who might be harmed and how
- evaluate the risks and decide on precautions
- record significant findings
- be reviewed and updated as necessary

Where necessary, Method Statements must:

- name the person taking control of the works
- identify known and anticipated hazards
- identify control measures
- include details of plant and equipment to be used
- detail the sequence of works

Continuing design work

Design input during the construction phase must comply with the requirements placed on Designers under CDM. Where design alterations, amendments and additions are undertaken, the persons carrying out such tasks must ensure consideration is given to the hierarchy of risk control i.e.

- avoid a risk altogether e.g. design the works to be undertaken using a different approach without introducing greater risks.
- assess the risk and combat it at source, e.g. utilise different lifting procedures, relocation of plant requiring maintenance etc.
- adapt the workplace to the requirements of the workers e.g. provide collective protection to all affected by the project.
- if collective protection cannot be provided, personal protective equipment (PPE) to be used as a last resort.

2. Planning and management of the Project (*continued*)

Co-operation between duty holders and co-ordinating the work

CDM and health and safety matters may be communicated to the client through the Principal Designer or CDM Consultant.

CDM and H&S must be an agenda item at each Design Team Meeting and Site Progress Meeting.

The Principal Contractor will be required to maintain suitable communication with all works contractors.

Welfare provision

The Principal Contractor must provide facilities which are clean, warm, properly ventilated and fully functional from day 1 of the project to include:

Mains plumbed WCs.

A Messing area with:

- a means of heating food and preparing hot drinks
- a place to sit and consume food and drink
- chairs with backrests
- a supply of fresh drinking water

Washing facilities with hot and cold running water

A space to change, store and dry clothing

First Aid facilities to include:

- provision of first aid box and eyewash
- signage
- information for site operatives
- adequately trained first aiders



Fire precautions and emergency procedures

A Site Fire and Emergency Plan must be included in **the Principal Contractor's** Health & Safety Plan. This is to detail management duties, the method of raising the alarm, means of escape, alternative access routes as may become necessary and muster points. It must also take account of existing arrangements, neighbouring properties and access for emergency vehicles.

The latest guidance from HSE - Fire Safety in Construction (HSG168) must be followed.

2. Planning and management of the Project (*continued*)

Security of the site

The site and any contractors' plant, machinery and materials must be kept secure at all times.

The site area must be fully secured at the end of each working day by **the Principal Contractor**.

Hoardings, perimeter/Heras fencing to be checked at the start and end of each day to ensure it remains in good order.

A site visitors' book to be kept on site at all times.

Sleeping on site must not be allowed under any circumstances.

All fixed external access scaffolding to be alarmed with all access points secured against unauthorised entry.



3. Health and safety hazards at the site

Safety hazards –

Adjacent land use



Horniman Museum will be in occupation for the duration of the works and the Principal Contractor must take reasonable steps to ensure the health, safety and welfare of occupants and members of the public.

Access to the site is via public footpaths through the Museum's Gardens.

Vehicular delivery access is via Horniman Drive – through the public gardens.

Vehicle delivery exit is via London Road (A205) main entrance.

Site vehicle movement adjacent to the site is to be controlled using trained banksmen.

3. Health and safety hazards at the site (*continued*)

Safety hazards –

Occupied premises

The Principal Contractor must ensure regular liaison with the Museum's Management to ensure they are aware of the work to be undertaken and segregations and any restricted access requirements.
The roof is in two parts and it is proposed to relocate staff to one side of the building while the other is re-roofed.

Suitable hoarding, barriers or other means of segregation must be in place to ensure access to the work areas is prohibited

Adequate signage must be displayed.

Fire exit doors must be kept clear and in normal use.

Site specific risk assessment and method statement to be prepared prior to the start of the project.

Restrictions on deliveries, waste collection or storage

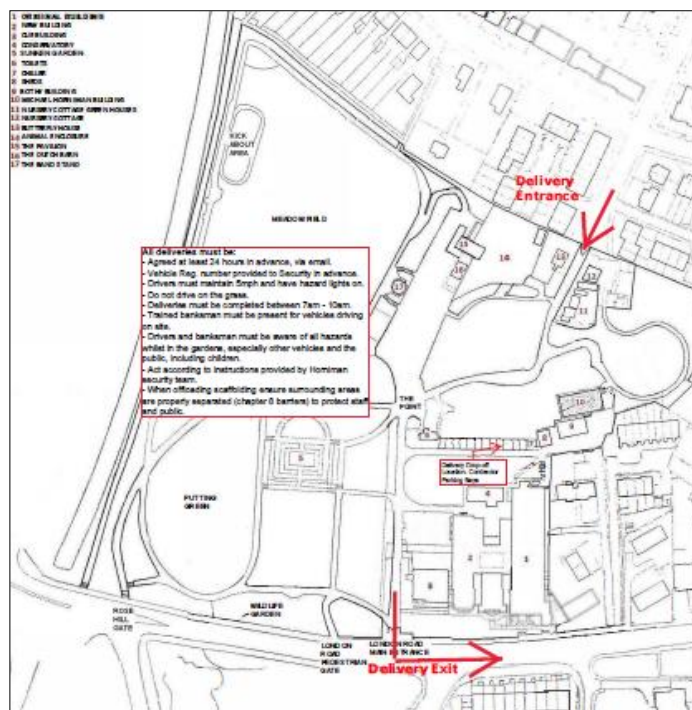
Delivery of materials and access equipment will be via the Gardens, which are open to the public during the day.

Deliveries must be managed and agreed with the Museum, in advance, to ensure there is no conflict with routes used by the public, or if unavoidable an agreed management strategy.

Delivery Logistics Plan at Appendix.

The Principal Contractor is to allocate storage space for materials and waste within the site compound.

Waste is to be removed from site daily.



3. Health and safety hazards at the site (*continued*)

Safety hazards –

Falls from height

All areas from which a person may fall must be adequately protected by barriers or other preventative measures.

All fall prevention measures must in place and be monitored throughout the project.

Suitable access and/or edge protection must be provided to all areas where there is a risk of an operative falling.

A suitable access point to be created enabling safe movement of personnel, tools and materials between the scaffolding and the working area.

Scaffolding must have guard-rails, mid-rails and toe-boards to prevent people or materials falling. The edge protection must have a rail at 950mm with an intermediate rail at 470mm and toe board at 150mm. There must be suitable ladder access for personnel to gain access.

Work from scaffolding must not commence until a hand-over certificate has been received from the scaffolding contractor.

The scaffold structure must be checked and recorded by a competent person:

- after any substantial addition, dismantling or other alteration
- after any event likely to have affected its strength or stability
- weekly



The type of tower scaffolding selected must be suitable for the work and erected and dismantled by people who have been trained and are competent to do so.

Those using tower scaffolds must be trained in the potential dangers and precautions required during use.

Tower scaffold provision is to be properly managed and include rigorous scaffold inspection arrangements.

All ladders are to be checked to ensure they are in good condition, the right type of ladder for the job is to be used and HSE guidance on the 'Safe use of Ladders and Stepladders' (INDG455) is to be followed.

3. Health and safety hazards at the site (*continued*)

Safety hazards –

Location of existing services and electricity

All existing services remain live and must be:

- accurately identified and located
- where appropriate marked with warning signage/warning tape on site.

Any diversion work of existing services to be carried out by competent persons.

All work to mains electricity must be carried out by appropriately qualified contractors/sub-contractors.

Electricity supply and other services to be isolated before any drilling into walls

Electrical tools must be battery operated or run off a 110v transformer or a Residual Current Device.

Plant and equipment

All work plant and equipment must be maintained in an efficient state, kept in good repair, and inspected before use each day.

Storage of materials and work equipment

Materials must only be stored on site where it is practical to do so. Materials must be delivered to the site at frequency and in quantities to avoid excessive stockpiles. No materials to be stored on emergency routes, welfare areas or loading/unloading areas.

Hot Works

All hot works such as welding, cutting, soldering and any activities that involve using open flames or excessive heat must be planned and exact hazards identified.

A thorough risk assessment must be carried out and effective control measures put in place to ensure a safe system of work.

A Hot Works Permit must be in place.

Where possible hot works should be avoided, and alternative processes considered.

3. Health and safety hazards at the site (*continued*)

Health hazards –

Asbestos containing materials (ACM)

An Asbestos Management Survey by Lucion Services Ltd on 27 May 2020, reference 407367.

No ACMs were identified.

To note: the following areas were not included in the survey albeit they not expected to impact on the works:

- office void within low level boxing
- crawl space (physically restricted space)

The Principal Contractor must ensure that all site operatives have received relevant asbestos awareness training and are aware of the requisite procedures to be adopted if any Asbestos Containing Materials (ACMs) are suspected.

In all cases of suspected ACMs, the Principal Designer must be notified, and further instructions sought.

Contamination

The Principal Contractor must assess the risk of harmful micro-organisms such as bacteria, viruses and fungi and ensure that all workers are aware of the associated hazards and are encouraged to wear all necessary PPE and to practise good hygiene.

Building dust

Any dust generated by the works must be adequately suppressed by damping down or other appropriate method such as on-tool extraction.

Dust levels must be regularly:

- Assessed
- Controlled
- Reviewed



Good ventilation must be maintained at all times.

Appropriate and suitable Respiratory Protection Equipment/Personal Protection Equipment must be worn as necessary.

3. Health and safety hazards at the site (*continued*)

Health hazards –

Exposure to lead

The Principal Contractor must assess the risk of lead and ensure that all workers are aware of the associated hazards and are encouraged to wear all necessary PPE and to practise good hygiene.

HSE guidance 'Lead and you - working safely with lead' - indg305 must be followed.

Manual handling

Manual handling operations will be necessary during the works. Risks must be managed by:

- use of mechanical aids where appropriate
- suitable training, instruction, information and supervision of all operatives.

COSHH and flammable/dangerous substances

The Principal Contractor must ensure any hazardous/flammable substances are suitably stored in well ventilated, secure areas away from combustible materials. A COSHH assessment must be carried out and all items will be stored with MS Data sheets.



At the end of the working day, any items such as gas must either be taken away by contractors or returned to the COSHH area.

Noise and vibration

Vibration must be reduced to the lowest practicable level and controlled to safeguard against the risk of hand-arm vibration syndrome (HAVS) and carpal tunnel syndrome (CTS).

Where possible the lowest noise and vibration producing plant and equipment must be used. Employees must not be exposed above the exposure limit value and HSE guidance L140 'Hand-arm vibration' must be followed.

Noise Assessments must be carried out for each task where judged to be necessary, in accordance with the Control of Noise at Work Regulations 2005.

PPE must be provided and worn as necessary.

3. Health and safety hazards at the site (*continued*)

Safety hazards –

Exposure to UV Rays
Sun block must be available if works are undertaken in hot weather periods and excessive rays are expected from the sun. Tops must be kept on and operatives must be encouraged to keep hydrated.

3. Health and safety hazards at the site (*continued*)

Design considerations

Significant design assumptions

It is believed the design has eliminated or reduced foreseeable health and safety risks so far as reasonably practicable and that the tendering contractors will be experienced and competent at this type of work and will apply well known and widely practised methods of safe working.

Arrangements for co-ordinating on-going design work

The Principal Contractor must liaise with the Client and Principal Designer re any design in-put.

Any design changes must be discussed and reviewed by the project team to ensure the changes are clearly understood and that they do not introduce any significant hazard or risk that could be avoided.



Significant risks identified during design

None beyond those regularly encountered and managed by competent contractors working on this type of project.

Materials requiring particular precautions

None.

Protecting the general public

The work site must be securely segregated from areas accessed by occupants and the general public by the erection appropriate robust hoardings.

4. The Construction Phase Plan

Suggested contents

- a description of the project including:
 - key dates and details
 - project team
- the management of the work including:
 - the health and safety aims for the project
 - the site rules
 - arrangements to ensure co-operation between project team members and co-ordination of their work, e.g. regular site meetings
 - arrangements for involving workers
 - site induction
 - welfare facilities
 - fire and emergency procedures
- the control of any of the specific site risks



5. The Health & Safety File

Information required

The first draft of information for the Health & Safety File is to be given to **No Nonsense CDM Ltd** two weeks before Project Completion.

The information should cover the following topics, **where this may be relevant to the health and safety of any future work:**

- A brief description of the work carried out. **Bullet points only, no more than 1 side A4**
- Any hazards that have not been eliminated through the design and construction processes, and how they have been addressed (for example, surveys or other information concerning asbestos, contaminated land or buried services). **If any**
- Key structural principles (for example, bracing or sources of substantial stored energy including pre or post-tensioned members) and safe working loads for floors and roofs. **If any**
- Hazardous materials used (for example, lead paints and special coatings). **If any**
- Information regarding the removal or dismantling of installed plant and equipment (for example, any special arrangements for lifting such equipment). **If any**
- Health and safety information about equipment provided for cleaning or maintaining the structure. **if applicable**
- The nature, location and markings of significant services, including underground cables, gas supply equipment and fire-fighting services. **Marked on as-built drawings**
- Information and as-built drawings of the building, its plant and equipment (for example, the means of safe access to and from service voids, and the position of fire doors)

Please note the File is NOT an O&M Manual, neither does it need to include information which will be of no use in further construction work such as:

- **the Pre Construction Information or Construction Phase Health & Safety Plan**
- **designers' or contractors' risk assessments or method statements**
- **contractors' COSHH assessments or suppliers MSDS**
- **details about the normal operation of the structure**
- **contractual documents**
- **information contained in other documents, but relevant cross-references should be included**

Appendix

Site Logistics Plan

