CDM Pre-Construction Information

Construction (Design and Management) Regulations 2015

Athlone House,
Hampstead Lane,
London,
N6 4RU

Foreword

The purpose of this document is to support the pre-construction information that is supplied to duty holders as laid out in the Construction (Design and Management) Regulations 2015

The Pre Construction Information contained within this document has been developed for the proposed work at Athlone House, Hampstead Lane, London, N6 4RU as required under Regulation 4(4) of the Construction (Design and Management) Regulations 2015.

Pre-construction information provides the health and safety information needed by:

- designers and contractors who are bidding for work on the project, or who have already been appointed to enable them to carry out their duties;
- Principal Designers and Principal Contractors in planning, managing, monitoring and co-ordinating the work of the project.

Information should be added to as the design progresses and give new information about the management of risks to health or safety.

The absence of reference in this Pre-Construction Information to a hazard does not mean that such a hazard does not exist or may not arise. Any 'Method of Working' described in the Pre-Construction Information Pack may be varied by the Contractor as long as he provides an acceptable alternative method to the client prior to works commencing.

Design often continues throughout the construction phase of a project and where these designs have a significant health and safety implication the Principal Designer needs to liaise with the Principal Contractor and the design team to ensure that adequate regard is given to those implications. This is reflected in the continual updating to the Principal Contractor's Construction Phase Plan throughout the project, with the changes being brought to the attention of all the Contractors.

Statement of Intent

This document has been developed to provide health, safety and welfare information to Designers and Contractors in order to fulfil the Clients and Principal Designer duties within Regulations 4 and 11 of the CDM Regulations 2015

This Information provides a general description of the project, the proposed project organisation, and the design philosophy relating to construction Health and Safety issues. It also provides details of the project Health and Safety management and the information that is required to be provided by the Contractors within their Construction Phase Plan in order to demonstrate that appropriate account will be taken of the project Health and Safety arrangements during construction.

The prospective Contractor shall review this information and provide, where appropriate, a Construction Phase Plan to demonstrate Health and Safety arrangements which will be implemented during the construction works.

The principal aim of the Construction Phase Plan is to record Health & Safety arrangements for the project for the management of construction operations together with monitoring procedures for compliance with the relevant statutory provisions.

Failure to provide this information within the required period, or to the required standard, may result in a rejection of the Construction Phase Plan.

Any conflict between the details contained in this document and any other contract document should be brought to the attention of the Principal Designer or project manager for resolution prior to the tender submission.

The Principal Contractor will also provide information for incorporation into the Health & Safety File. This will be in accordance with the CDM Regulations 2015 with which the Principal Contractor must make himself aware.

At the completion of the Contract, the Health & Safety File is to be returned to the Principal Designer or if his appointment has finished to the Client.

The Principal Contractor must ensure that his Health & Safety Policy is in accordance with, as a minimum:

a. Construction (Design and Management) Regulations 2015

b. Health & Safety at Work Act 1974

c. Management of Health & Safety at Work Regulations 1999

The Principal Contractor may be called upon to provide evidence of competence checks carried out on his designers and contractors.

CONTENTS

APPENDICES

Appendix 1: Project Directory

Appendix 2: Health Safety and Environmental Outline Design Review

Appendix 3: Construction Phase Health & Safety Plan (to be inserted by the Principal Contractor)

Appendix 4: Health & Safety File

Supporting PCI Information - SHH File Transfer Protocol service

Document	SHH – FTP Location
Design & Access Statement	Home Architecture DAS
160603 1480 Athlone House - Appendix A - Basement Impact Assessment - GEA.pdf	Home Structure FINAL SUBMISSION
160603 1480 Athlone House - Appendix B - Basement Construction Sequence Drawings - eHRW.pdf	Home Structure FINAL SUBMISSION
160603 1480 Athlone House - Appendix C - Structural Interventions Report - eHRW.pdf	Home Structure FINAL SUBMISSION
160603 1480 Athlone House - Appendix D - Structural Drawings - eHRW.pdf	Home Structure FINAL SUBMISSION
160603 1480 Athlone House - Appendix D - Structural Inspection Report - Mann Williams.pdf	Home Structure FINAL SUBMISSION
160603 1480 Athlone House - Appendix F - Flood Risk Assessment - Infrastruct.pdf	Home Structure FINAL SUBMISSION
160603 1480 Athlone House - Appendix F - Flood Risk Assessment - Infrastruct.pdf	Home Structure FINAL SUBMISSION
160603 1480 Athlone House - Construction Sequence Methodology - eHRW.pdf	Home Structure FINAL SUBMISSION
Draft Construction Management Plan April 2016 - Athlone House CMP-Draft April 2016.pdf	Home CMP FINAL SUBMISSION

1. DESCRIPTION OF PROJECT

1.1 Project Description & Programme:

The project is at Athlone House, Hampstead Lane, London, N6 4RU (See Fig, 1 & 2) and involves the renovation of the existing property which will include removing non-original partitioning and alterations. A single storey extension has been proposed to the North end of the existing building where the walls have already been damaged.

Two smaller properties (Caenwood Cottage and The Gate House) are located within grounds and they will be included within the renovation project.

Caenwood Cottage will undergo restoration and will act as a security gate house whilst also providing self-contained accommodation. A single-storey extension will be made to the south of Caenwood Cottage to accommodate a four car garage. The design of the extension will be kept modest, in matching brickwork to the house and will not be seen from Hampstead Lane.

The Gate House which is very dilapidated will have its' Tudor style facade and terrace decor restored as part of the renovation. No external additions or extensions are proposed and the internal space will be re-fitted with some self-contained accommodation.

The project has extensive grounds including a lake with feed system connected to water run-off within the grounds. The grounds will be subject to hard and soft landscape working during the project.

The renovation and extension works include but not limited to:

- Deconstruction
- Excavation and potential piling
- Ground work and drainage
- Underground services
- Brick, block & rendering
- Mechanical and electrical services
- Glazing
- Roof working
- Wet and dry trades
- Finishing trades
- carpentry

Figure 1 - Location Map

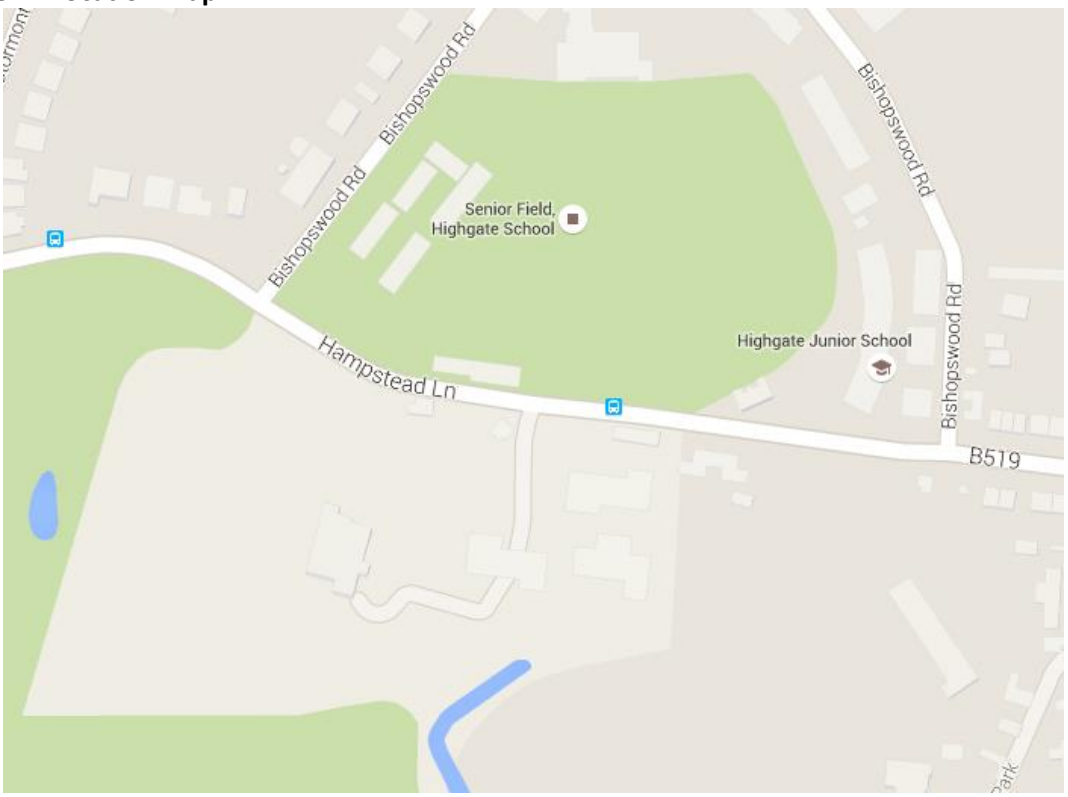
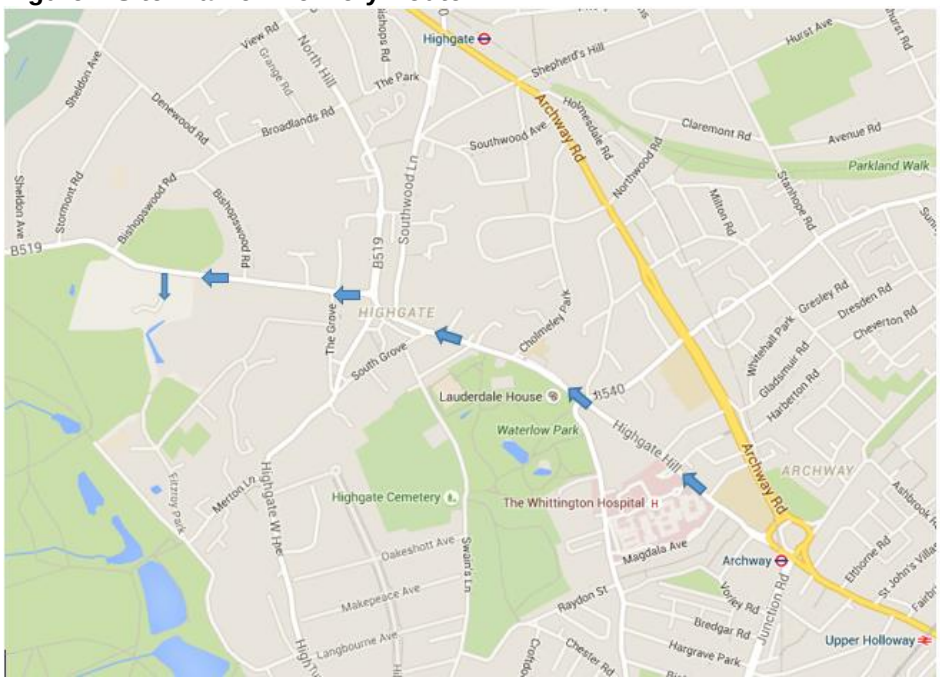


Figure 2 – Landscape Layout

1.2	**Key Dates**
	TBA
1.3	**Project Directory:** **See appendix 1**

1.4	Existing H&S Site Conditions:
Item	
Site	
Access to the Property.	To be confirmed but It is expected that the site will be accessible for construction work Monday to Friday 08:00 – 18:00. Saturday working between the hours of 08:00 – 13:00 at the discretion of the Principal Contractor. **Access for Site Traffic** **Figure 2 Site Traffic - Delivery Route**  The site coordinates are 51°34'17.4"N 0°09'32.4"W. Access the site from the B519 Hampstead Lane. Commercial vehicles should approach from the A1 at Archway heading North East up Highgate Hill joining Hampstead Lane. The access to Athlone House is currently shared with neighbours though it is intended for the house to have its own driveway. This will be constructed during the course of the works. The B519 Hampstead Lane is a TfL Bus Route and is subject to a 20 MPH speed restriction outside of Athlone House. There is also a school opposite the premises for which Duty Holders must be mindful particularly during term times and expect increased traffic in the mornings and afternoon. A traffic management plan must be in place by the Principal Contractor with provision for vehicle /pedestrian separation and one-way movement of traffic where practicable Vehicles and plant manoeuvring and/or reversing to be assisted by a signaller or banksman.

	Waste Disposal and Deliveries Principal contractor will establish an effective system for the management of deliveries and waste. Construction waste and refuse is to be removed from the premises in appropriate containers e.g. covered skips.
Party Walls/Planning Permission	Duty holders must comply with Local Authority & Building Regulations. Party wall / boundary arrangements for the development to be advised.
Adjacent Land Use	The Northern boundary runs parallel to the B519 Hampstead Lane, the opposite side of Hampstead lane is Hampstead School. Caenwood Court is a residential development to the East of the property. The site area covers 7.11 acres. Public park/heath make up the other boundaries. (See Figures 3&4)

Figure 3 – Local Area

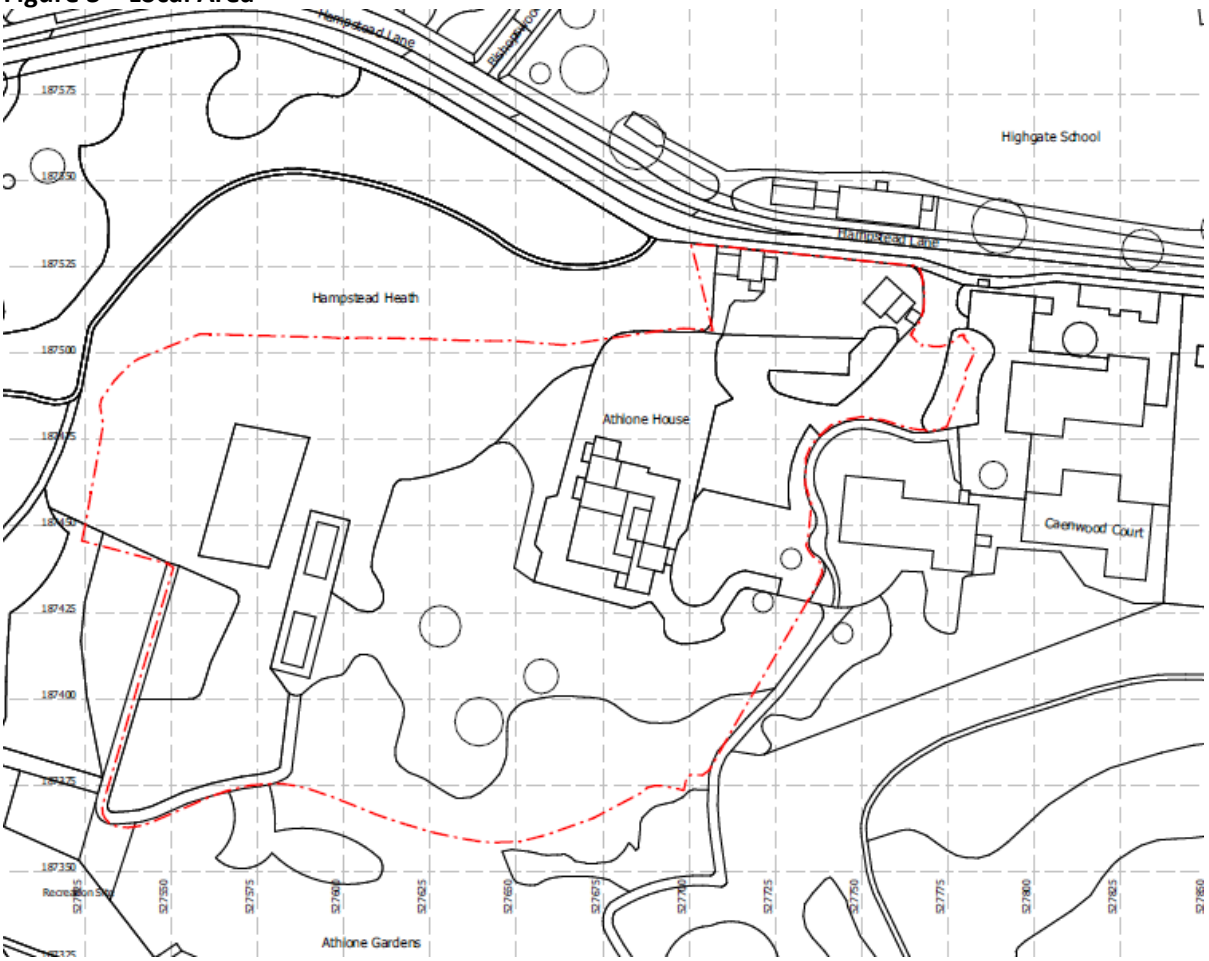


Figure 4 – Local Area

Adjacent Land Use Cont.	**Community Relations** The Client requires that good relations are established and maintained with neighbours and local residents throughout the project. i. Principal Contractor will participate in Considerate Contractors scheme ii. Neighbours have been contacted by the client during the planning process iii. It is expected that regular updates will be required by stakeholder groups and to this end the contractor is to produce monthly newsletters relating to progress, works and traffic issues. Also see the Draft Construction Management Plan for proposed consultative arrangements.

TFL Underground services or national rail networks	There are no LU or National Rail Networks in the vicinity of the project.
Adjacent rivers and Water Courses.	Flood Risk Assessment has been undertaken, see “160603 1480 Athlone House - Appendix F - Flood Risk Assessment - Infrastruct.pdf” the report takes into account existing and proposed drainage issues. The Environment Agency’s indicative Flood Map for Planning shows that the proposed development site is located in flood zone 1 which is classified as land at low risk of flooding.

	Contractors must ensure that the surface water flow is protected during the project from contamination i.e. cement based products, solvents etc. from cleaning tools and equipment.
Structural	
Existing H&S File	No H&S File proffered.
Building Condition	Traditional brick and tile building dating from the 1870s. The exterior and interior is in various states of dilapidation. Duty holders should refer to "160603 1480 Athlone House - Appendix D - Structural Inspection Report - Mann Williams.pdf" which is located in the PCI Pack. Health and Safety Considerations include: • Dangers associated with falling from height particularly through failing flooring and higher level joists. • Bio-hazards associated with pigeons, stagnant water and moulds. Leptospirosis should be considered when undertaking remedial work of lakes, ponds and water features. • COSHH assessments will be needed on timber treatments which will be used in the renovation as well as hazardous substances used in Victorian building practice i.e. lead piping, paints, animal (horse) hair in plaster work and asbestos used in later alterations and repairs, **Figure 5: Typical Ceiling Damage – Water Ingress** 
Asbestos	As the building pre-dates 2000 a Refurbishment and Demolition Survey has to be undertaken prior to demolition/deconstruction of the existing property.

	At all times the requirements of the Asbestos Regulations 2012 must be adhered to and it is essential that members of the public, employees and contractor are not exposed to free asbestos fibres. It is understood that an Asbestos pre-demolition and Refurbishment Survey is to be undertaken.

Ground	
Soil Investigation;	Geotechnical and Environmental Associates Limited (GEA) has undertaken geo-technical surveys (See Reports in PCI Pack). The Basement Impact Assessment (BIA) concludes that the proposed single storey basement will not intercept the groundwater nor increase surface run-off and as such will not have an impact on the hydrological or hydrogeological setting of the site. Therefore it is not considered to pose a risk to the stability of the surrounding natural and built environment. **Ground Stability**: Open cut excitations should have an angle of repose not exceeding 25degrees ie. excavated at 1 (vertical) to 2 (horizontal). Open excavations should be subject to daily inspections, particularly during periods of heavy rainfall and plant and equipment should be prevented from moving in the area. **Piling:** If piling is to be considered the BIA recommends continuous flight auger (cfa) techniques as the most appropriate choice of pile. **Contamination:** The site investigation contamination analyses have not indicated any elevated concentrations of the tested contaminants.
Habitat/ Environmental & Tree Preservation Orders	An Arboriculture Report was prepared by Catherine Bickmore Associates Ltd who are qualified arboriculture consultants. It is proposed that trees away from any works are left unchanged and that any near works are protected. Design and Construction will follow the recommendations in the preliminary tree protection plan covering the demolition and construction period for the works. **Tree Removal** It is not proposed that any trees near the existing building or proposed extension are removed.

Building Services	
Gas	The Principal Contractor is to ensure that all gas supplies on the premises are identified and where required isolated. There is a need to ensure the highest levels of gas safety and contractors must participate in the Gas Safe Scheme. It is a legal requirement in the United Kingdom that any company carrying out gas related work (including flues) must be on this register.
Electricity	The Principal Contractor is to ensure that all electrical works are carried out by a competent person. Design and specification to be undertaken in line with IET Wiring Regulations 17th Edition (BS 7671: 2008).

	Temporary electrics for power tools during the construction phase should be using power transformers with a voltage rating of 110V and earthed so that the maximum voltage an individual may receive as a shock is 55V.operating through a centre tapped transformer. Power-tools, along with the cables and plugs that would be used in a residential setting should not be used on a construction site. All 13/16 amp sockets must be protected by a RCD.
Sewerage	The current system serving Athlone House and the lodges consists of a gravity drainage system which connects into the public sewerage network in Hampstead Lane. A CCTV survey is to be undertaken on the drainage system and a report will be made available. The drain is present in the basement of Athlone House. See:"160603 1480 Athlone House - Appendix C - Structural Interventions Report - eHRW.pdf" located in PCI Pack for further information. Contractors must ensure that the sewage system is protected during the project from contamination i.e. cement & gypsum based products, solvents etc. The Principal Contractor must ensure that any works undertaken to the sewerage system are carried out by competent persons.
Telephone/Cable	Care must be taken when works are undertaken which can cause disruption to any communication system. If necessary, the Principal Contractor will seek clarification from the local communication provider if necessary.
Overhead Cables	Not applicable.

Health Hazards	
COSHH (Chemical)	Designers will ensure that the Principals of Prevention (MHSWR 1999) are used when specifying chemical treatments or materials in any design. The Principal Contractor is to ensure that all COSHH Data sheets are available for operatives to review. Where a safer alternative is available this must be considered. The Principal Contractor must provide details of known hazardous substances used during construction to the Principal Designer -CDM advisor for inclusion in the project Risk Register & Health and Safety File.
Legionella (Water)	Old sanitation and plumbing will be removed during the demolition. Whilst the risk is low all equipment associated with pluming (pipes, tanks, water heaters etc. can harbour legionella bacteria - suitable precautions need to be included in a safe system of working (see HSE Approved Code of Practice L8 “Legionnaires' disease. “The control of legionella bacteria in water systems“ and HSE GuidanceHSG274 “Legionnaires’ disease A brief guide for dutyholders”).
Weils (Rodents); Ornithosis - (Pigeons) Tetanus.	The interior and loft spaces of Athlone House show evidence of pigeon roosting activity as well as decayed pigeon carcasses. Contractors and staff working on the project need to be aware of biohazards which should be included in induction meetings and site toolbox talks. Exposed wounds increase the risk of infection and suitable hygiene facilities must be provided for the workforce in addition to PPE and Respiratory Protective Equipment when needed i.e. evidence of pigeon or bird fouling. There is an increased risk of workforce encountering bio-hazards during the demolition/de-construction of the building. • Suitable welfare arrangements are to be agreed before works commence. • Discarded food and wrappers are to be disposed of at the end of each working shift and removed from the working areas. • Protective clothing which includes eye and mouth protection must be available and worn where there is evidence of pigeon fouling.

Actions After Appointment	
Securing the Working Area	The Principal Contractor is: i. to ensure that only authorised persons are given access to the premises; ii. responsible for the wellbeing of persons in the area where construction works is taking place, for those working within it and the public/persons in occupation or transit; iii. To ensure smoking and inappropriate behaviour is prohibited by the workforce. The Construction Phase Plan is to demonstrate how this will be achieved.

Cautionary Signage	If required warning and hazard signs/barriers must be clear and effective. Signage must be used to indicate “No go areas” and barriers used to keep residents and visitors separate from working areas.
Site Clearance	The Principal Contractor is to ensure that the work place is left tidy, with no tripping hazards, etc., at the end of each working shift. The working areas are to be returned to their original condition upon completion of all the works determined in the contract.

2. CLIENT'S CONSIDERATIONS & MANAGEMENT REQUIREMENTS

2.1 Clients H&S Goals and Objectives:

H&S Goals and Objectives:
The Client expects the contractor to maintain high standards of health and safety throughout its Organisation. These standards, and the relevant statutory requirements of the Health and Safety at Work Act 1974 and The Construction (Design and Management) Regulations 2015 are expected to be achieved and maintained during all phases of the project.

2.2 Project arrangements for the monitoring and review of health & safety

2.2.1 The appointed Principal Contractor must be able to demonstrate how they would manage the health & safety of those working on the contract, and develop procedures that recognise current Government and Health and Safety Executive Strategies for the reduction of accidents on construction sites and to equal or better these targets.

Furthermore, they should be able to demonstrate how they intend to show:

- Commitment - to higher standards of health and safety.
- Competence - ensuring everyone is trained and competent to do his or her work.
- Communication - ensuring the health and safety messages permeate throughout the project - involving workers as well as managers in solving problems that arise.
- Co-operation - building up relationships of trust and partnership so that things are done right first time, every time.

2.2.2 The Client expects, as part of the Principal Contractors progress reporting, the submission of a Health & Safety report that details site performance.

Designer contractor meetings as deemed necessary –minimum are expected to be carried out fortnightly.

2.3 Permits and Authorisation Requirements:

The Principal Contractor must put in place appropriate permits to work system to ensure the safety of those undertaking the construction works and residents of adjoining properties. These permits need to be regularly reviewed and updated as the works progress to ensure that they are job specific.

High risk activities should be designed out where possible. Where this is not possible then the method statement should include where relevant an appropriate permit to work scheme

None of the following shall be undertaken without the relevant Permits to Work following approval of the contractor's risk assessment and method statement:

- The use of flame, naked lights or the application of heat in activities such as welding and burning,
- high and low voltage electrical work.
- work on roofs/balconies,
- the use of highly flammable solvents or materials containing highly flammable solvents,
- or work within confined spaces.

2.4 Emergency Procedures and Means of Escape:

The Principal Contractor must prepare a suitable Emergency Plan detailing the procedures to be taken in the event of serious and imminent danger, (fire and/or explosion, collapse of excavations/building, flooding in basements). The procedures may require evacuation of the site or involve the rescue of an injured person. Details should be included in the Health and Safety Plan. A sufficient number of competent persons should be nominated to implement those procedures.

2.5 Security Arrangements:

The Principal Contractor is responsible for the security of the 'site', the area where construction works is taking place, for those working within it, the public and persons in occupation.

Further advice can be referenced from (HSG 151 Protecting the Public – Your Next Move, and the New Roads and Street Works Act).

2.6 Site Welfare Facilities:

The Principal Contractor must ensure that suitable and sufficient welfare facilities are provided for the duration of the construction phase and that they comply with Schedule 2 of the Construction (Design & Management) Regulations 2015.

Further guidance can be obtained from L153 the Guidance on The Construction (Design and Management) Regulations 2015.

It is understood that welfare facilities are being provided at a nearby premises provided by the client/landlord.

2.7 Site Rules

Principal Contractors should include any necessary rules for the management of construction work within the Construction Phase Plan. These rules should be brought to the attention of all those who will work on the site PRIOR to them starting. This should be undertaken during the 'Site Induction'.
The site rules should be:

- In writing
- Understandable to those they affect
- Brought to the attention of all those they affect
- Enforced

The Client reserves the right to impose further reasonable rules so as to satisfy legal requirements and ensure the safety and comfort of residents, visitors and the general public.

3. SIGNIFICANT DESIGN & CONSTRUCTION HAZARDS

3.1 Design assumptions and control measures:

If a designer or contractor identifies significant and or abnormal hazards, work sequences or precautions which need to be undertaken they should be adequately addressed and/or included in the project health and safety file and recorded in the Design Risk Register.

3.2 Arrangements for co-ordination of on-going design work and handling design changes:

The Principal Contractor, contractors and Principal Designer and designers are to ensure compliance with the Construction (Design and Management) Regulations 2015 during the design development and construction stages of this project.

3.3 Information on significant risks identified during design (health and safety risks):

Any significant design changes are subject to review by the Principal Designer and CDM Advisor. These changes will be advised to project duty holders as specified by CDM 2015.

3.4 Construction materials requiring particular precautions:

Workers / Employees / Authorised visitors to the project are liable to be exposed to:

- Cement and gypsum based products,
- Wet concrete/cement,
- Hardwood & softwood dust,
- MDF Board dust,
- Adhesive for floors and tiles,
- Silica dust from masonry working,
- Glass wool or similar mineral fibre insulation,
- Chemical paints, thinners, varnishes etc.
- Timber preservation treatments,

The Principal Contractor's and designers' attention is drawn to the Control of Substances Hazardous to Health (COSHH) Regulations 2002 (with amendments). Consideration should be given to the use of alternative products.

Designers have a duty to observe the general principals of prevention as outlined in app. 2 of the CDM 2015 and must include any hazards which they cannot eliminate in the design risk register along with details of the steps they have taken to reduce or mitigate the hazard.

The Principal Contractor has a duty to obtain manufacturers data sheets for any of the aforementioned materials or those specified in the contract documents and is to provide Risk Assessments and Method Statements based on the warnings or hazards specified therein for the benefit of persons carrying out the work and subsequent users of the premises.

4. THE HEALTH & SAFETY FILE

4.1 Format and content:

The health and safety file contains relevant health and safety information to be taken into account during any subsequent project.

The file must contain information about:

a) a brief description of the work carried out;
b) any hazards that have not been eliminated through the design and construction processes, and how they have been addressed (e.g. surveys or other information concerning asbestos or contaminated land);
c) key structural principles (e.g. bracing, sources of substantial stored energy – including pre- or post-tensioned members) and safe working loads for floors and roofs;
d) hazardous materials used (e.g. lead paints and special coatings);
e) information regarding the removal or dismantling of installed plant and equipment (e.g. any special arrangements for lifting such equipment);
f) health and safety information about equipment provided for cleaning or maintaining the structure;
g) the nature, location and markings of significant services, including underground cables; gas supply equipment; fire-fighting services etc;
h) information and as-built drawings of the building, its plant and equipment (e.g. the means of safe access to and from service voids and fire doors).

There should be enough detail to allow the likely risks to be identified and addressed by those carrying out the work and be proportionate to those risks.

4..2 Duty Holder Responsibilities

The designer	Where it is not possible to eliminate health and safety risks designers must ensure appropriate information is included in the health and safety file about the reasonably practicable steps they have taken to reduce or control those risks. The designer must liaise with the principal designer or where necessary the principal contractor to prepare, updates, review and revise the health and safety file. Information should be provided to the principal designer and principal contractor as early as possible before the designer's work ends on the project.
The principal designer	The principal designer is accountable to the client and is responsible for preparing the health and safety file. Cooperation is required between the project team and the principal designer and particularly with the principal contractor in agreeing the structure and content of the information included in the file. The principal designer with other members of the project team must also ensure that the file is appropriately updated, reviewed and revised as necessary to ensure it takes account of any changes that occur as the project progresses.

	At the end of the project the principal designer must pass the updated file to the client and ensure the client understands the structure and content of the file.
The principal contractor	If the principal designer's appointment finishes before the end of the project, they must pass the file to the principal contractor who must then take on responsibility for reviewing, updating and revising the file. The principal contractor. At the end of the project the principal contractor must take on responsibility for ensuring that the file is reviewed, updated and revised for the remainder of the project.

Further information relating to the Health and Safety File is contained within app 3 of the document.

APPENDIX 1

Project Directory.

Project Directory

Client Private Client		
Architects SHH Architecture and Interior Design 1 Vencourt Place Hammersmith W6 9NU	Stuart Mclauchlan James Hart Graham Harris Henry Smith Office	mailto:StuartM@shh.co.uk jameshart@shh.co.uk GrahamH@shh.co.uk henrys@shh.co.uk 020 8600 4171
Planning Consultants Savills 33 Margaret Street London W1G 0JD	Dominic O'Loghlen Office	DOLoghlen@savills.com RHepher@savills.com; 020 7499 8644
Landscape Architects JFA Landscape & Ecology 9 Plantation Wharf, Square Trigger Row London SW11 3TY	Natasha Newbury Lauren Popplewell Office	natasha@jfa.co.uk lauren@jfa.co.uk Jackie@jfa.co.uk; 020 8673 2419
Heritage Consultant Dr Mervyn Miller 11 Silver Street Ashwell SG7 5QJ	Dr Mervyn Miller	mail@mervarch.co.uk;
Ecology, Historical Landscape and Arboricultural Consultant Catherine Bickmore Associates 11-13 Leathermarket Street London SE1 3HN	Catherine Bickmore Office	catherine@bickmoreassociates.co.uk 020 7357 6700
Principle Structural Engineers Engineers HRW 237 Long Lane London SE1 4PU	Brett Scott Office	BrettS@engineers-hrw.co.uk CiaranM@engineers-hrw.co.uk simon@engineers-hrw.co.uk 020 7407 9575.
MEP Engineers SWP ltd Consulting Engineers The Old School, London Rd Westerham Kent TN16 1DN	Chris Rowe Office	CRowe@swpltd.co.uk pdunk@swpltd.co.uk 01959 564777
Specialist Structural Engineers MannWilliams 7 Old King Street Bath	 Office	jna@mannwilliams.co.uk 01225 464419

BA1 2JW		
Acoustic Consultants Hann Tucker Associates 1-2 Duke Street Woking Surrey GU21 5BA	 Office	a.fermer@hanntucker.co.uk j.mackenzie@hanntucker.co.uk 01483 770595
Construction Management Plan Consultants Walter Lilly 17 Addiscombe Road Croydon CR0 6SR	Shaun Frampton John Nolgrove Office	Shaun.Frampton@WalterLilly.co.uk John.Nolgrove@WalterLilly.co.uk 020 8730 6200
Transport Consultants Motion 8 Duncannon Street London WC2N 4JF	 Office	psturgeon@motion-uk.co.uk 020 7031 8141
Quantity Surveyors Jackson Coles 5-23 Old Street London EC1V 9HL	Leslie Fair Office	leslie.fair@jacksoncoles.co.uk 020 7608 8600
CDM Advisor Approved inspector Services 14 Berkley Street London W1J 8DX	Robin Corbett Office Mobile	rcorbett@approvedinspector.co.uk 0207 4911914 07584 135519

APPENDIX 2

Health Safety and Environmental Outline Design Review

HSE Outline Design Review - Introduction

1. Introduction

The proposed project is the renovation of Athlone House, Hampstead Lane, London, N6 4RU a late Victorian building and two external buildings within the grounds.This will involve removing non-original lightweight partitions, creating new openings in walls and new staircases to improve circulation. Externally, this involves returning the gable end brickwork and tower parapet to their 1880's appearance.

The construction of a new single storey extension to north of the site is proposed. As part of the new extension, a swimming pool will be built requiring excavation to a lower basement level.

2. The Works will include but not limited to:

- Demolition/Deconstruction
- Piling and excavation
- Ground work and drainage
- Underground services
- Brick, block & rendering
- Mechanical and electrical services
- Glazing
- Roof working
- Wet and dry trades
- Finishing trades
- Carpentry

2. Scope

This review examines the project as required by the Construction (Design and Management) Regulations:

i. Regulation 12 Schedule 3 – Work involving particular risk;

ii. Regulations 9 & 11 (Duties of a Designer and Principal Designer) taking into account:
   - the general principals of prevention Reg. 9(2) and;
   - the industry guidance produced by CONIAC (Construction Industry Advisory Committee) see publication "The Construction (Design and Management) Regulations 2015 - Industry guidance for Designers" ISBN 978-1-85751-392-9
   - Initial Risk Register which should be updated as the project develops.

3. Regulation 12 Schedule 3 – Work involving particular risk

Regulation 12 sets out the duties on either the principal designer or principal contractor for the preparation, review, revision and updating of construction phase plans and health and safety files when certain risks are encountered. There are four areas of particular risk within Schedule 3 that require special consideration.

3.1 Risks of falling from Height - Reg.12. (2)(1)…

- Roof and upper floor construction
- Demolition/de-construction
- Lift shaft working
- Work associated with ceilings and ceiling fittings including, lights, fan, alarms etc.
- Work associated with façade paneling
- Glass/window installation cleaning

3.2 Risks from chemical/biological substances - Reg.12. (2)(2)

Use of:

- Cement and gypsum based products,
- Wet concrete/cement,
- Silica, hardwood & softwood dust,
- Timber preservation treatments,
- Fillers, putty, paints and solvents
- Potential for mould spores & animal hair in old plaster work.

3.3 Work on wells, underground earthworks and tunnels. Reg.12. (2)(6)…

- During the course of site investigations additional cellars have been discovered. It is expected that these have been used for storage. However given their unknown provenance or past usage suitable risk assessments must be undertaken prior to excavation.

3.4 Work involving the assembly or dismantling of heavy prefabricated components. Reg.12. (2)(10)…

- Plant and equipment
- Steel frames
- Window assemblies
- Lift assembly

The regulations require that the construction phase plan must set out the health and safety arrangements and site rules which must include specific measures for the above mentioned Schedule 3 Works.

4. Design Review – Following CONIAC/HSE Red, Amber and Green Lists.

Some of the hazards and risks can be avoided or mitigated through design process through the General Principals of Prevention whereas others require controls to be implemented and managed during the construction phase of the project.

Designers will work to reduce/mitigate risks to the lowest possible levels in line with Regulation 9 of the CDM Regulations 2015.

Principal contractors and contractors will identify the project specific risks, manage them through the Risk Assessment / Method Statement process, and ensure that risks are promptly communicated to other parties.

Table 1 "RAG Matrix" summarizes a review of the work to be undertaken on the project. The following were identified as particular risks associated with the project following the CONIAC RAG Sheet methodology:

- **Working at height**
- **Heavy Steel components**
- **Cleaning transparent and translucent surfaces.**
- **Work place congestion**

Health associated issues include:

- **Inhalation of dusts and fumes associated with masonry and carpentry**
- **Manual Handling**
- **Contact with hazardous substances.**
- **Potential construction work involving use of solvents.**
- **Biological hazards, stagnant water, rodents, moulds.**

The purpose of the RAG matrix is to focus attention on the most important health and safety issues in design choices. They are founded on the Pareto or 80/20 rule and must not be considered exhaustive.

Designers should include these items in the design risk register with details of the actions taken to overcome the risk or suggested mitigation measures.

Principal Contractor should ensure that the Construction Phase Plan adequately address the risks outlined in the pre-construction information.

Risks to users or persons undertaking maintenance of the premises after construction must be included in the health and safety file and brought to the attention of the client.

Table 1: RAX Matrix -

Red Lists: Hazardous procedures, products and processes that should be eliminated from the project where possible. **Amber Lists:** Products, processes and procedures to be eliminated or reduced as far as possible and only specified/allowed if unavoidable. Including amber items would always lead to the provision of information to the Principal Contractor. **Green Lists:** Products, processes and procedures to be positively encouraged. **HAZARD**	Drawing	Deconstruction & Enabling		Construction work Buildings		Landscape/ Roadway
Schedule 3 Hazards						
Schedule 3						
1. Work which puts workers at risk of burial under earth falls engulfment in swampland or falling from a height. Roof and ceiling working						
2. Work which puts workers at risk from chemical or biological substances constituting a particular danger to the health or safety of workers or involving a legal requirement for health monitoring. Timber treatments, lead, asbestos, micro-organisms, spores…						
3. Work with ionizing radiation requiring the designation of controlled or supervised areas under regulation 16 of the Ionising Radiations Regulations 1999(1).						

Red Lists: Hazardous procedures, products and processes that should be eliminated from the project where possible. **Amber Lists:** Products, processes and procedures to be eliminated or reduced as far as possible and only specified/allowed if unavoidable. Including amber items would always lead to the provision of information to the Principal Contractor. **Green Lists:** Products, processes and procedures to be positively encouraged.	Drawing	Deconstruction & Enabling		Construction work Buildings		Landscape/ Roadway
HAZARD						
4. Work near high voltage power lines.						
5. Work exposing workers to the risk of drowning.						
6. Work on wells, underground earthworks and tunnels. Unknown cellars…						
7. Work carried out by divers having a system of air supply.						
8. Work carried out by workers in caissons with a compressed air atmosphere.						
9. Work involving the use of explosives.						
10. Work involving the assembly or dismantling of heavy prefabricated components. Steelwork, Lift Assemblies						
RAG LIST						
Lack of adequate pre-construction information, e.g. asbestos surveys, geology, obstructions, services, ground contamination etc.						
Potential- Hand scabbling of concrete (‘stop ends’, etc.);						
Potential - Demolition by hand-held breakers of the top sections of concrete piles (pile cropping techniques are available);						
Potential - fragile roof-lights and glazing assemblies;						
Process giving rise to large quantities of dust (dry cutting, blasting etc.);						
Potential for on-site spraying of harmful particulates / substances;						
The specification of structural steelwork which is not purposely designed to accommodate safety nets;						
Potential- Designing roof mounted services requiring access (for maintenance, etc), without provision for safe access (eg. barriers).						
Potential - Glazing that cannot be accessed Safely, All glazing should be anticipated as requiring cleaning and replacement, so a safe system of access is essential.						
Entrances, floors, ramps, stairs and escalators. Etc. not specifically designed to avoid slips and trips during use and maintenance, incl. effect of rain water and spillages.						

Red Lists: Hazardous procedures, products and processes that should be eliminated from the project where possible. **Amber Lists:** Products, processes and procedures to be eliminated or reduced as far as possible and only specified/allowed if unavoidable. Including amber items would always lead to the provision of information to the Principal Contractor. **Green Lists:** Products, processes and procedures to be positively encouraged.	Drawing	Deconstruction & Enabling		Construction work Buildings		Landscape/ Roadway
HAZARD						
Design of environments involving adverse lighting, noise, vibration, temperature, wetness, humidity and draughts or chemical and/or biological conditions during use and maintenance operations.						
Potential Designs of structures that do not allow for fire containment during construction						
AMBER RISK						
Potential chasing out of concrete / brick / blockwork walls or floors for the installation of services;						
Potential - Internal manholes / inspection chambers in circulation areas;						
Potential - External manholes in heavy used vehicle access zones						
The specification of “lip” details (i.e. trip hazards) at the tops of pre-cast concrete staircases;						
The specification of shallow steps (i.e. risers) in external paved areas;						
The specification of heavy building blocks i.e. those weighing > 20kgs						
Large and heavy glass panels;						
Potential - The chasing out of concrete / brick / blockwork walls or floors for the installation of services;						
The specification of heavy lintels (the use of slim metal or hollow concrete lintels being alternatives);						
The specification of solvent-based paints and thinners, or isocyanates, particularly for use in confined areas;						
Specification of curtain wall or panel systems without provision for the tying (or raking) of scaffolds;						
Specification of blockwork walls >3.5 metres high using retarded mortar mixes.						
Potential - Site traffic routes that do not allow for ‘one way’ systems and/or vehicular traffic segregated from site personnel						
Potential Site layout that does not allow for adequate room for delivery and/or storage of materials, including specific components.						
Potential Heavy construction components which cannot be handled using mechanical lifting devices (because of access restrictions / floor loadings etc)						
Need to use large piling rigs and cranes near ‘live’ railways and overhead electric power lines or where proximity to obstructions prevents guarding of rigs						
Potential for on-site welding, in particular for new structures.						

Red Lists: Hazardous procedures, products and processes that should be eliminated from the project where possible.

Amber Lists: Products, processes and procedures to be eliminated or reduced as far as possible and only specified/allowed if unavoidable. Including amber items would always lead to the provision of information to the Principal Contractor.

Green Lists: Products, processes and procedures to be positively encouraged.

HAZARD	Drawing	Deconstruction & Enabling		Construction work Buildings		Landscape/ Roadway
GOOD PRACTICE						
Adequate access for construction vehicles to minimize reversing requirements (one-way systems and turning radii);		■		■		■
Provision of adequate access and headroom for maintenance in plant rooms, and adequate provision for replacing heavy components;						
Thoughtful location of mechanical / electrical equipment, light fittings, security devices etc. to facilitate access and away from crowded areas;		■		■		■
The specification of concrete products with pre-cast fixings to avoid drilling;		■		■		■
Specify half board sizes for plasterboard sheets to make handling easier;		■		■		
Early installation of permanent means of access, and prefabricated staircases with hand rails;						
The provision of edge protection at permanent works where there is a foreseeable risk of falls after handover;				■		
Practical and safe methods of window cleaning (e.g. from the inside);				■		
Offsite fabrication and prefabricated elements to minimize on site hazards.				■		■
Appointment of a Temporary Work Coordinator (BS 5975);		■		■		
Encourage the use of engineering controls to minimize the use of Personal Protective Equipment		■		■		■

5. Design Risk Register

Project: Athlone House

Project Number: 0700186

Designer: SHH

Review: June 2016

Design Function: Initial Outline Review

CDM AIS: R Corbett

DESIGN RISK REGISTER

	Activity	Hazard	Persons at Risk	Risk - Design Review	Mitigation Measures taken to eliminate or reduce the risk	Action required by date	Date Actioned
	Demolition / De-construction	Broad Spectrum	Contractor Staff Public	It is acknowledged that workforce is at higher risk during deconstruction activities. Specific risks include : • Premature collapse of building or part of building • Falls from the working place or access • Falls of material • Explosion, fire or electrocution • Health hazards to operatives and others e.g. Contaminants, asbestos, lead, dust etc.	The building or part of building to be demolished must be surveyed and a report, in writing, prepared. A detailed Method Statement to be prepared and submitted for approval of project management before work commences to cover: •method of demolition, •access, •protection of workforce and members of public, •arrangements for making safe gas, electric supplies, •methods for dealing with flammable or other hazardous materials, •dust suppression, •transport and disposal of waste, Health and Welfare arrangements and COSHH Assessment A competent person to be appointed to supervise work.	TBA	

					Only competent and trained operatives are to be permitted to carry out demolition work and certificates of competence to be inspected and kept on site.		
	Continuous flight auger (CFA) piling (Potential Use)	Broad Spectrum	Contractor Staff	**Piling Rigs operation** •Clearing spoil •Noise •Hit by flying or falling materials •Slips, trips & falls •Projecting reinforcements •Entanglement with rotating auger •Contact /entanglement with moving parts of rig (e.g. track) . **Concrete Pumping (General)** • Burns & irritation from contact with wet concrete • Entanglement in moving parts of plant • Fall from height when operating mixer drum • Manual handling • Hit by moving hose • Slips, Trips and Falls		•Personnel may only be close to the auger while it is not rotating. •A supervised system of work must ensure that unauthorised approach during rotation does not occur. (5M exclusion ideal) •Certificated Thorough Examination of rig. •The auger should not normally be cleaned by hand. Hand cleaning may only be done while the auger is not rotating.	TBA	
	Excavations	Collapse, engulfment falls from height	Contractor Staff	• Full or partial collapse • Contact with underground services • Being struck by machinery • Workers/vehicles/equipment falling into the excavation • Objects falling into the excavation • Undermining nearby structures • Fumes within the confined space		Method Statement proposes the following for stabilising the excavation: •Temporary steel props spanning between pile caps will be installed and pre-loaded before excavation proceeds below pile cap level. •Supplementary diagonal braces will be fitted across the corners of the excavation. •Dewatering points will be bored outside of the line of the basement if Groundwater conditions prove it necessary. •Any dewatering scheme will be regularly monitored to ensure there is no excessive draw down of the water table.	TBA	
	Underpinning	Collapse, engulfment falls from height	Contractor Staff	Hazards Associated with Underpinning • Structural instability of the building to be stabilised, or surrounding structures		'Before underpinning is commenced, an investigation should be carried out by an experienced and competent person, to determine whether an underpinning procedure will achieve the object intended, ie, to transfer	TBA	

				• Collapse of temporary works equipment Instability of excavations, slopes or spoil mounds • Operation of machinery for excavation, piling or jacking • Work in confined spaces, eg, basements • Working in contaminated ground • Working in the vicinity of services • Falls from height and into excavations		the load carried on a foundation from its existing bearing level to a new level at a suitable lower depth.' All work should be suitably supported during excavations.		
	Working at Height	Falling from height, Injury caused by falling objects	Contractor Staff	Inherent risk and hazard with legislative implications. Greatest cause of death and serious injury in UK construction. HSE requirement - design consideration for collective safety measures. It is a requirement of CDM 2015 that designers consider health and safety risks associated with post build maintenance and usage. For example maintenance light fittings requiring step ladders on stair wells or proximity to edge protection/balustrading should be avoided. Injury caused by falling objects.		Develop safe system of working using work at height hierarchy of controls – avoid, prevent, arrest. Principal contractor to ensure that risk assessment is undertaken and clear method statements are issued for everyone who will work at height. See HSE guidance http://www.hse.gov.uk/construction/safetytopics/workingatheight.htm Provide suitable scaffolding / Tower -Access with appropriate Health and-Safety precautions and safety equipment. -Suitable notices of warning and if necessary an alternative protected walkway to be used by employees during construction period. -Long-term maintenance – minimise the use of high maintenance materials. Control measures to ensure: •Adequate lighting •Safe Zones and Fire Strategy •PPE (goggles, gloves, boots and helmets) are to be worn at all times. •Method statement and programme of works required. •Ensure lifting equipment is well-maintained and adequate provision and training for tasks to be undertaken.	TBA	

	Fit-out Installation & Maintenance of Ceiling Level Fixtures Lighting	Working at Height	Contractor Staff	Injury cause from falling Working at Height		-Assessment of method statements by sub-contractors and correct working procedures on site. -Provide suitable scaffolding and/or moveable Working Platform with appropriate Health and Safety precautions and safety equipment. -Suitable notices of warning to be employed for residents of building. Thoughtful location of mechanical / electrical equipment, light fittings, security devices etc. to facilitate access and away from crowded areas	TBA	
	Fit-out Installation of M&E	Electricity safety	Contractor Staff	Manual handling leading to injury. Danger from electrocution		-PPE (goggles, gloves, boots and helmets) are to be worn at all times. - Risk assessment and method statement required. -Consideration of permit to work system incorporating lock out tag out methodology. -Only suitably trained, experienced and knowledgeable persons to undertake installation and maintenance work. BS 7671 – 17th Edition. Electrical Safety to be included in site induction and toolbox talks. Further information - http://www.hse.gov.uk/toolbox/electrical.htm	TBA	
	Construction masonry and carpentry	Silica, hard & softwood dust.	Contractor Staff	**Dust: Masonry/Wood/Timber** Processes giving rise to large quantities of dust e.g. cutting, sanding etc.; Risk of inhalation, exposure. COSHH Sawdust MEL 5.0mg/m2 Risk of inhalation, exposure.		-Principal contractor to include in Construction Phase Plan and Method Statements. -Mitigation through localised extraction and PPE/RPE. Consideration should be given to collective before individual protection. -The specification of concrete products with pre-cast fixings to avoid drilling;	TBA	
	Broad Spectrum Construction Activities	Fire safety	Contractor Staff	CDM dutyholders, clients, principal designers, principal contactors & contractors must participate in the management of fire risks on site. The risks associated with the construction process are different to normal operations and suitable arrangements must also be put in place.		Duty holders should make themselves familiar with Fire safety in construction - Guidance for clients, designers and those managing and carrying out construction work involving significant fire risks. http://www.hse.gov.uk/pubns/priced/hsg168.pdf	TBA	

						Production of a fire risk assessment covering the construction phase. Ongoing site management to cover: i. Reducing ignition sources. ii. Reducing potential fuel sources. iii. General fire precautions. iv. Emergency procedures.		
	Construction work involving use of solvents.	COSHH	Contractor	Work with solvent-based construction products is subject to the Control of Substances Hazardous to Health Regulations 2002 (COSHH), which require the health risk to be assessed and then prevented or controlled.		Consider whether the solvent-based products need to be used at all. Can they be replaced by an alternative, less hazardous material? For example, use a water-based formulation if possible. Consideration to brush application rather than spraying.	TBA	
	Construction	Chemical inhalation	Construction Personnel	Potential for solvent-based paints and thinners, or isocyanates, particularly for use in confined areas; concentration of solvent - chemical fumes including toluene, xylene or similar substances carries a risk of long term health problems if exposure is not properly controlled.		Suggested action / mitigation: i. See- Health & Safety Executive's Guidance (Construction hazardous substances: Solvents). http://www.hse.gov.uk/construction/healthrisks/hazardous-substances/solvents.htm ii. Eliminate or substitute hazardous substance with a less hazardous compound. iii. Ensure CDM Advisor is advised of any substance which has a statutory Workplace Exposure Limit (WEL). –Replace hazardous substance with a less hazardous compound. iv. Eliminated or reduced as far as possible at the design stage, details to be included in risk register..	TBA	
	Construction traffic management.	Site Congestion	Construction Contractor Staff	CDM Regs require suitable and sufficient arrangements for safe movement of pedestrian and vehicles on construction sites.		- separate pedestrian and vehicle access. - designated access routes from TLRN for site traffic & scheduled deliveries outside of peak periods -traffic marshal to safeguard pedestrians - Arrangements for mobile crane - Suspension of street parking - Use of traffic management 'stop/go' boards	TBA	

	Manual Handling	Lifting and working in awkward / confined spaces.	Construction Contractor Staff	Potential for lifting and working with heavy/large/awkward components. Risk of falling objects, collisions. Back injury and strain, injury generally		Consideration to be given to Manual Handling Operations Regulations 1992 (as amended) ACOP L23 “Manual Handling - Guidance on Regulations” http://www.hse.gov.uk/pubns/priced/l23.pdf Control measures to ensure: -Adequate lighting -Safe Zones and Fire Strategy -PPE (goggles, gloves, boots and helmets) are to be worn at all times. -Method statement required. -Suitable notices of warning and if necessary an alternative protected walkway/pavements to be used by employees and the Public during construction period.	TBA	
	Kneeling for prolonged periods on hard or uneven surfaces	Manual Handling	Construction Contractor Staff	Activity: Health risk: Chronic knee pain and permanent damage -		Use kneeling pads, kneeling mats or cushions and padded trousers	TBC	

APPENDIX 3

Principal Contractor's

Construction Phase Plan

Construction phase plan
The following gives guidance on the requirements for the construction phase plan and the actions that each dutyholder needs to take in relation to them.

What is a construction phase plan?
A construction phase plan is a document that must record the:

a. health and safety arrangements for the construction phase;

b. site rules; and

c. where relevant, specific measures concerning work that falls within one or more of the categories of CDM 2015 Regulation 12(2) Schedule 3 i.e..

- Work which puts workers at risk of burial under earth falls, engulfment in swampland or falling from a height, where the risk is particularly aggravated by the nature of the work or processes used or by the environment at the place of work or site;
- Work which puts workers at risk from chemical or biological substances constituting a particular danger to the safety or health of workers or involving a legal requirement for health monitoring;
- Work with ionizing radiation requiring the designation of controlled or supervised areas under regulation 16 of the Ionising Radiations Regulations 1999;
- Work near high voltage power lines;
- Work exposing workers to the risk of drowning;
- Work on wells, underground earthworks and tunnels;
- Work carried out by divers having a system of air supply;
- Work carried out by workers in caissons with a compressed air atmosphere;
- Work involving the use of explosives;
- Work involving the assembly or dismantling of heavy prefabricated components.

The plan must record the arrangements for managing the significant health and safety risks associated with the construction phase of a project. It is the basis for communicating these arrangements to all those involved in the construction phase so it should be easy to understand and be as simple as possible.

In considering what information is included, the emphasis is that it:

a. **is relevant to the project;**

b. **has sufficient detail to clearly set out the arrangements, site rules and special measures needed to manage the construction phase; but**

c. **is still proportionate to the scale and complexity of the project and the risks involved**.

The plan should **not** include documents that get in the way of a clear understanding of what is needed to manage the construction phase, such as generic risk assessments, records of how decisions were reached or detailed safety method statements.

The following list of topics should be considered when drawing up the plan:

a. a description of the project such as key dates and details of key members of the project team;

b. the management of the work includes:
   - the health and safety aims for the project;
   - the site rules;

- arrangements to ensure cooperation between project team members and coordination of their work e.g. regular site meetings;
- arrange welfare facilities; and
- fire and emergency procedures:

a) the control of any of the specific site risks listed in Schedule 3 where they are relevant to the work involved.

What must dutyholders do?

The client

The client must ensure a construction phase plan is drawn up **before** the construction phase begins. For projects involving more than one contractor, the principal contractor is responsible for drawing up the plan or for making arrangements for it to be drawn up. For single contractor projects, it is the contractor who is responsible for ensuring that the plan is drawn up.

The client must ensure that the principal contractor (or, where relevant, the contractor) is provided with all the available relevant information they need to draw up the plan, for example the pre-construction information (see Appendix 2).

The client must also ensure that:

a. when it is drawn up, the plan adequately addresses the arrangements for managing the risks; and

b. the principal contractor (or contractor) regularly reviews and revises the plan to ensure that the plan takes account of any changes that occur as construction progresses and that it continues to be fit for purpose.

The designer

The designer has no specific duty in relation to the construction phase plan. However, the designer must take all reasonable steps to provide with the design sufficient information about aspects of the design to help contractors (including principal contractors) to comply with their duties. This should include information about the risks that designers have been unable to eliminate through the design process and the steps designers have taken to reduce or control those risks. They must continue to cooperate with contractors and principal contractors as the construction phase progresses to ensure that they are kept up to date with any design changes.

The principal designer

The principal designer must help the principal contractor to prepare the construction phase plan by providing any relevant information they hold.
This includes:

a. the pre-construction information given to them by the client and which they have an important role in pulling together and

b. providing any information given to them by designers about the risks that designers have been unable to eliminate through the design process and the steps they have taken to reduce or control those risks.

Before the start of the construction phase, the principal designer should regularly check that the principal contractor has the necessary information to prepare the plan. They must continue to liaise with the principal contractor as the construction phase progresses to share any information that is relevant to the planning and management of the construction phase.

The principal contractor

For projects involving more than one contractor, the principal contractor must take the lead in preparing, reviewing, updating and revising the construction phase plan. They must draw up the plan or make arrangements for it to be drawn up during the pre-construction phase and **before** the construction site is set up.
The principal contractor should expect help from both the client and principal designer in doing this. The client's duty is to ensure that the plan is drawn up and the principal designer's duty is to help the principal contractor by providing any relevant information they hold

This information should include:

a. the pre-construction information that the client must provide to every designer and contractor involved in the project and which the principal designer will have been involved in preparing; and

b. any information provided by designers about the risks that designers have been unable to eliminate through the design process and the steps they have taken to reduce and control them.

The principal contractor must also liaise with the contractors to ensure that the plan takes into account their views on the arrangements for managing the construction phase.

Where the plan includes site rules, the rules should cover (but not be limited to) topics such as personal protective equipment (PPE), parking, use of radios and mobile phones, smoking, restricted areas, hot works and emergency arrangements. The rules should be clear and easily understandable. They should be brought to the attention of everyone on-site who should be expected to follow them. The principal contractor should also consider any special requirements, for example, it might be necessary to have translations of the site rules available.

The principal contractor must ensure that the construction phase plan is appropriately, reviewed, updated and revised from time to time. The plan is a working document and will need to be reviewed regularly enough to address significant changes to the risks involved in the work or in the effectiveness of the controls that have been put in place. This means that the principal contractor must monitor how effective the plan is in addressing identified risks and whether it is being implemented properly. Ensuring the plan remains fit for purpose must also involve co-operating with:

a. the contractors who are most likely to see if the arrangements for controlling health and safety risks are working; and

b. the principal designer and designers when changes in designs during the construction phase have implications for the plan.

The contractor
For projects involving more than one contractor, the contractor must follow the parts of the construction phase plan prepared by the principal contractor that are relevant to their work. The contractor should also liaise with the principal contractor to pass on their views on the effectiveness of the plan in managing the risks.
For single contractor projects, the contractor has the responsibility for ensuring that a construction phase plan is drawn up. They must either draw up a plan themselves, or make arrangements for it to be drawn up, as soon as practicable **before** setting up the construction site. In preparing the plan they must cooperate with the client and any designers involved in the project and take account of sources of relevant information such as the pre-construction information.

APPENDIX 4

Health & Safety File

Content & Format

Health and Safety File

The following gives guidance on the preparation, provision and retention of a health and safety file and the actions that each dutyholder should take.

What is the health and safety file?

The health and safety file is defined as a file appropriate to the characteristics of the project, containing relevant health and safety information to be taken into account during any subsequent project. **The file is only required for projects involving more than one contractor.**

The file must contain information about the current project that is likely to be needed to ensure health and safety during any subsequent work such as maintenance, cleaning, refurbishment or demolition. When preparing the health and safety file, information on the following should be considered for inclusion:

a. a brief description of the work carried out;
b. any hazards that have not been eliminated through the design and construction processes, and how they have been addressed (e.g. surveys or other information concerning asbestos or contaminated land);
c. key structural principles (e.g. bracing, sources of substantial stored energy – including pre- or post-tensioned members) and safe working loads for floors and roofs;
d. hazardous materials used (e.g. lead paints and special coatings);
e. information regarding the removal or dismantling of installed plant and equipment (e.g. any special arrangements for lifting such equipment);
f. health and safety information about equipment provided for cleaning or maintaining the structure;
g. the nature, location and markings of significant services, including underground cables; gas supply equipment; fire-fighting services etc;
h. information and as-built drawings of the building, its plant and equipment (e.g. the means of safe access to and from service voids and fire doors).

There should be enough detail to allow the likely risks to be identified and addressed by those carrying out the work and be proportionate to those risks. The file should **not** include things that will be of no help when planning future construction work such as pre-construction information, the construction phase plan, contractual documents, safety method statements etc. Information must be in a convenient form, clear, concise and easily understandable.

What must dutyholders do?

The client must ensure that the principal designer prepares the health and safety file for a project. As the project progresses, the client must ensure that the principal designer regularly updates, reviews and revises the health and safety file to take account of the work and any changes that have occurred. The client should be aware that if the principal designer's appointment finishes before the end of the project, the principal designer must pass the health and safety file to the principal contractor, who then must take on the responsibility for the file.

Once the project is finished, the client should expect the principal designer to pass them the health and safety file. In cases where the principal designer has left the project before it finishes, it will be for the principal contractor to pass the file to the client.

The client must then retain the file and ensure it is available to anyone who may need it for as long as it is relevant – normally the lifetime of the building - to enable them to comply with

health and safety requirements during any subsequent project. It can be kept electronically, on paper, on film, or any other durable form.

If a client disposes of their interest in the building, they must provide the file to the individual or organisation who takes on the client duties and ensure that the new client is aware of the nature and purpose of the file. If they sell part of a building, any relevant information in the file must be passed or copied to the new owner. If the client leases out all or part of the building, arrangements should be made for the file to be made available to leaseholders. If the leaseholder acts as a client for a future construction project, the leaseholder and the original client must arrange for the file to be made available to the new principal designer.

The designer

Where it is not possible to eliminate health and safety risks when preparing or modifying designs, designers must ensure appropriate information is included in the health and safety file about the reasonably practicable steps they have taken to reduce or control those risks. This will involve liaising with:

a. the principal designer in helping them carry out their duty to prepare, update, review and revise the health and safety file. This should continue for as long as the principal designer's appointment on the project lasts; or
b. the principal contractor where design work is carried out after the principal designer's appointment has finished and where changes need to be made to the health and safety file. In these circumstances, it will be the principal contractor's duty to make those changes, but the designer must ensure that the principal contractor has the appropriate information to update the file.

This information should be provided to the principal designer and principal contractor as early as possible before the designer's work ends on the project. @ 9 January 2015 81

The principal designer

The principal designer is responsible for preparing the health and safety file and should expect the client to provide any health and safety file that may exist from an earlier project.

The principal designer, in cooperation with other members of the project team must also ensure that the file is appropriately updated, reviewed and revised as necessary to ensure it takes account of any changes that occur as the project progresses.

The principal designer must pass the updated file to the client at the end of the project. In doing this, they should ensure the client understands the structure and content of the file and its significance for any subsequent project. If the principal designer's appointment finishes before the end of the project, they must pass the file to the principal contractor who must then take on responsibility for it. In doing this, the principal designer should ensure the principal contractor is aware of any outstanding issues that may need to be taken into account when reviewing, updating and revising the file.

The principal contractor

For the duration of the principal designer's appointment, the principal contractor plays a secondary role in ensuring the health and safety file is fit for purpose. They must provide the principal designer with any relevant information that needs to be included in the health and safety file.

Where the principal designer's appointment finishes before the end of the project, the principal contractor must take on responsibility for ensuring that the file is reviewed, updated and revised for the remainder of the project. At the end of the project the principal contractor must pass the file to the client. In doing this, they should ensure the client understands the structure and content of the file and its significance for any subsequent project.

The contractor

The contractor has no specific duties placed on them in relation to the health and safety file.