

DEPARTMENT FOR TRANSPORT

Electrical Infrastructure Works

Works Information

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Introduction

This Works Information document is organised into the sections outlined under the works information structure. These sections provide clear and precise statement of the Employer's requirements.

WI 100 Description of the Works

WI 110 Project Objectives

The objectives of this project are to incorporate various electrical upgrades to the building including:

- Low Voltage Upgrades
- Emergency Lighting Upgrades
- Control Panel (VSD) Replacement
- Sump Pump Replacement

The above works will include making safe, decommissioning, disconnections, removal, disposal of the redundant plant, equipment and associated infrastructure and replacement with new as required by the Drawings and Specifications at the IMO, 4 Albert Embankment, London. The project is to be delivered on time and within budget.

WI 115 Provision of Temporary Construction Supplies

The Contractor shall maintain the security of the sites at all times and ensure that no mains services or security services are disrupted during the works.

WI 120 Construction Site Welfare Facility

The Contractor shall:

- Provide a proposal for the temporary minimum needs of the welfare facilities to enable the contract works to be complete. The Contractor shall confirm exact proposals with the Project Manager.
- Supply, install and maintain in line with the approved proposal, welfare facilities, including equipment and consumables to support these works.
- Coordinate the location and usage of space of the Construction Site Welfare facilities with his works and relocate as is necessary to meet the Approved Programme.
- Maintain and clean the welfare facilities.
- On completion of the works, disconnect and remove from site all temporary welfare provisions to the satisfaction of the Supervisor.



WI 125 Miscellaneous Scope of Works

The Contractor shall:

- Ensure that all internal and external paths and roads are kept clean from any Construction arising.
- The Contractor shall provide robust hoardings constructed from a minimum of 13mm plywood. The hoardings will fully enclose the landing door entrance and will be firmly fixed to prevent movement. The hoardings shall be from floor to ceiling or have a robust top fitted. An access door shall be provided to each hoarding. The Contractor will provide site lighting to the internal of the hoarding. Hardboard floor covering will be provided to the floor of the hoarding to protect the floor finishes. The hoardings shall not be removed without the permission of the Supervisor or engineer.
- Once removed the Contractor shall clean and make good walls, ceiling and floor finishes.
- Manage the loading, distribution across site, horizontal movement of all the Contractors own construction materials within the site,
- Develop and submit to the Project Manager for his approval prior to start on site a Site Waste Management Plan for these works,
- Provide all necessary skips to accept waste produced as a result of the works. Disposal of wastes must comply with the approved Site Waste Management Plan. The Contractor shall advise on the preferred strategy for segregation of waste, i.e. on site, or at a recycling depot and confirm exact proposals with the Project Manager,
- Ensure all skips are covered at all times to prevent rainwater ingress, dust release and flying debris,
- Supply, position and maintain all necessary CoSHH storage containers, flammable materials storage, fuel containers, tool storage, spill kits and fire extinguishers.

WI 130 Permanent Works

The Contractor shall undertake the works as detailed in the specification, and all other contract documents.



WI 200 General Constraints on how the Contractor provides the Works

WI 205 General Constraints

Use of the Site

Do not use the site for any purpose other than carrying out the Works.

Access to the Site

For the access to each of the plantrooms within the building the Contractor will be accompanied by an IMO employee. The works are to be sequenced on a plantroom-by-plantroom basis. All access is via main entrance and the Principal Contractor is to operate a signing in/out procedure in addition to the main IMO reception.

Deliveries

Delivery of all major equipment shall be out of normal working hours, preferably on a Saturday. All deliveries should be directed to the loading bays at the rear of the building (Lambeth High Street).

Noise and Vibrations

The Contractor shall ensure that in providing the Works noise prevention is maximised and the Contractor shall comply with the following in addition to applicable law:

- Noisy works are to be restricted Mon- Fri. Any noisy works required during this time must first seek approval from the Project Manager.
- Equipment where practicable is to be electrically powered,
- Noise from compressors used on the Site is minimised, either by using only models fitted with effective silencers and properly lined and sealed with acoustic covers all to the design of the manufacturers of the compressors, and/or by the use of effective acoustic screens around the noise,
- Ancillary pneumatic percussion tools used on the Site are fitted with silencers of a type recommended by the manufacturers of the tools,
- All compressors, silencers or other equipment are maintained in good an efficient working order and not have been altered in such a way that the noise caused in operation is made greater by the alteration and
- It does not contravene the relevant provisions of the Control of Pollution Act and reduces noise and vibration levels to a minimum at all times, and have regard to BS 5228 Noise and Vibration levels to a minimum at all times, and have regard to BS 5228 Noise and Vibration Control on Construction and Open Sites and the Noise at Work Regulations 2005.
- The Contractor shall minimise the effect of any vibration by utilising non-percussive construction methods (where reasonably practicable and unless otherwise agreed with the Project Manager. If any cessation of activities is required due to excessive vibration or noise, then the Contractor stops work immediately and re-plans his work in agreement with the Project Manager, such agreement shall not be unreasonably withheld.



Working Hours

The working hours on site limited to 08:00 – 17:00 Monday to Friday and 09:00 - 16:00 Saturday and Sunday. No weekend working will be permitted without the prior written agreement of the Project Manager. Flexible working arrangements may be agreed with the prior written consent of the Project Manager to suit the Client's operations.

Tenderers are reminded that the works are due to be completed within an occupied building. Any work that involves disruption to electrical services, lifts or other facilities within the building shall be completed outside the programme of main events (please refer to the target delivery programme in Appendix E). Typically during event weeks the building will be in occupation Monday – Friday between 8am-8pm, occasionally there will be functions that run later into the evening (specific dates will be confirmed at progress meetings). The bidder should make all necessary allowances within their offer for the required management and coordination and working out of hours as necessary to deliver the contract works within an occupied building.

Parking

The International Maritime Organisation cannot guarantee any parking on site for use of the Contractor or his employees, but there will be times when some parking may be available. The Contractor is to liaise daily with the building management as to the availability of onsite parking. In the event that no parking is available, the Contractor is to assess local parking provisions and make local arrangements for parking, unloading materials etc.

Use (or non-use) of Explosives

Use of explosives will not be permitted.

Restrictions on the use of Hazardous Materials

The Contractor shall comply at all times with the Control of Substances Hazardous to Health (COSHH) Regulations.

The Contractor shall ensure that any refrigerant used in air conditioning units is non-ozone depleting.

Where COMAH (Control of Industrial Major Accident Hazards) relevant materials are to be stored at the Employer's site the Contractor shall provide the Project Manager with full details of such materials prior to storage or use on site in line with the relevant requirements identified in the regulations and produce a Contractors COMAH Control plan being issued in duplicate for acceptance by the Project Manager.

All waste materials shall be segregated, where possible, to permit recycling. Hazardous waste shall be stored and disposed of in accordance with the Contractors Site Waste Management Plan.

The Contractor shall put in place suitable emergency response arrangements for accidental and unplanned leakage/spillages.

Pollution, Ecological or Environmental Impacts

The Contractor shall prevent the occurrence of pollution within the boundaries of the Site, the works and the general environment including nearby surface water sewers and waterways. If pollution occurs, the Contractor informs the Project Manager without delay and provides all the relevant information.

The Contractor shall comply with all applicable law including the Environmental Protection Act 1990, Special Waste Regulations 1996 (amended 1997, 1997, 2001, 2001), and The Control of Asbestos at Work Regulations 2002.



The Employer expects, as a minimum, that the Contractor will conserve material and energy resources, reduce waste, minimise use of substances damaging to health and environment, minimise pollution (including that of material, light and sound), establish an effective environmental management plan system and publish a statement of environmental performance.

Use of pesticides is not permitted.

The Contractor shall use best practicable means to control and suppress levels of dust generated by operations performed by the Contractor on the Site. Tools with dust capture equipment shall be used at all times where such equipment is commercially available.

The Contractor shall be responsible for all necessary temporary measures on Site, in order to minimise the migration of dust from the Site and as far as reasonably practicable prevent dust arising from the works from getting into adjacent areas.

The location and siting of any fume emitting devices adjacent to fresh air inlets or ventilation plant is not permitted. The Contractor shall remove on a regular basis accumulated dust and debris within the Site during the works.

The Contractor shall report immediately to the Project Manager any suspected asbestos based materials discovered during the works. The Contractor shall avoid where possible disturbing such materials and shall agree with the Project Manager methods for taking samples for analysis and the measures required for safe removal.

Where instructed to remove material affected by fungal/insect attack from the building, the Contractor shall minimise the risk of infecting other parts of the building and carry out and keep records of appropriate tests to demonstrate that hazards presented by concentrations of airborne particles, toxins and other micro-organisms are within acceptable levels.

Interface between the Works and Existing Building

The IMO building will remain in occupation throughout the works, and will be used by IMO staff and visitors.

The building is extremely busy and hosts international visitors and representatives who attend conferences and technical committees regarding international maritime law and standards. Some conferences have many hundreds of attendees. The main conference areas and meeting rooms are on the lower levels Ground, First and Second, with the restaurant facilities on the fourth floor where delegates take both mid-morning and afternoon breaks and lunch.

Damage will be prevented to existing buildings, fences, gates, walls, roads, paved areas, existing works, structures or any other property or site features which are to remain in position during the execution of the works.

The Contractor is to check proposed methods of work for effects on adjacent structures inside and outside the site boundary before and during the execution of the works. This can include but is not limited to:

- Providing and maintaining all incidental shoring, strutting, needling and other supports as may be necessary to preserve stability of existing structures on the site or adjoining, that may be endangered or affected by the Works,
- Not removing any of the above until new work is strong enough to support existing structure,
- Preventing overstressing of completed work when removing supports and
- Monitoring and immediately reporting excessive movement of adjacent structures.



Occupied Premises and Users

Existing buildings will be occupied as stated above. It is imperative that the Contractor discusses and understands the needs of occupants and users and matters regarding to the relationship of the works with occupants and users and any specific working arrangements or directions before starting on site. A meeting is to be set up by the Project Manager before starting on site with the Employer, Contractor and other relevant parties.

The Contractor is to carry out the works without undue inconvenience and nuisance and without danger to occupants and users.

Notwithstanding any of the Contractor's obligations, the Contractor shall comply with all instructions or directions given by the Employer in these matters.

WI 210 Confidentiality and Freedom of Information

The Contractor has the right to use the Works Information or any other material provided by the Employer only to provide the Works and subject to the limitations set out in the Works Information.

The Parties do not disclose to others information obtained in connection with the works/service except to the extent required by the law of the contract or when necessary to carry out their duties under this contract.

The Contractor may publicise the works/service only with the Employer's written agreement.

WI 215 Security and Protection of the Site

Following occupation of site the Contractor shall take full responsibility for setting up, maintaining and removal upon completion of the security of the site. The Contractor shall address the following items immediately in accordance with their requirements under the CDM Regulations 2015:

- Secure all boundaries to prevent unauthorised access,
- Provide bulkhead lighting at no less than 2m high to light adjacent entrances,
- Provide site signage. Size and content to be approved by the Employer,
- Provide separate vehicular and pedestrian gates,
- Ensure that all employees and visitors sign in and out. All visitors are to wear Main Contractors branded corporate clothing and PPE.

WI 220 Security and Identification of People

All visitors initially visiting the site are required to provide photo identification ideally passport or driving licence.

The Contractor shall provide all workmen including sub-contractors with an identity badge or corporate clothing which must be worn at all times when on site to allow easy identification.

The Contractor shall put in place a robust strategy for the control of access to the site compound. The exact specification of the measures to be put in place will be agreed with the Project Manager and CDM-Advisor.

A formal signing in procedure will be utilised to allow a record of all personnel on site to be maintained throughout the duration of the construction phase.



WI 225 Protection of existing Structures and Services

Damage will be prevented to existing buildings, fences, gates, walls, roads, paved areas, existing works, structures or any other property or site features which are to remain in position during the execution of the works.

The Contractor is to check proposed methods of work for effects on adjacent structures inside and outside the site boundary before and during the execution of the works. This can include but is not limited to:

- Providing and maintaining all incidental shoring, strutting, needling and other supports as may be necessary to preserve stability of existing structures on the site or adjoining that may be endangered or affected by the Works.
- Not removing until new work is strong enough to support existing structure.
- Preventing overstressing of completed work when removing supports.
- Monitoring and immediately reporting excessive movement of adjacent structures.
- Notify all service authorities, statutory undertakers and/or adjacent owners of proposed works not less than one week before commencing site operations. Before starting work, check and mark positions of mains/services. Where positions are not shown on drawings obtain relevant details from service authorities, statutory undertakers or other owners.

Work Adjacent to Services:

The Contractor is to comply with service authority/statutory undertaker's recommendations and adequately protect and prevent damage to services. Do not interfere with their operation without consent of service authorities/ statutory undertakers or other owners.

Identifying services:

Below ground; use signboards, giving type and depth.

Damage to Services if any results from Execution of the Works:

The Contractor shall immediately give notice and notify appropriate service authority/statutory undertaker and make arrangements for the work to be made good without delay to the satisfaction of service authority/statutory undertaker or other owner as appropriate. Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability. Marker tapes or protective covers must be replaced, if disturbed during site operations, to service authority's/statutory undertaker's recommendations.

Building Interiors

The Contractor shall prevent damage from exposure to the environment, including weather, flora, fauna, and other causes of material degradation during the course of the work.

WI 230 Protection of the Works

Safeguard the Works, products and materials from damage and theft. Take all reasonable precautions to prevent unauthorised access to the site, the Works and adjoining property. The exact measures put in place for security of the site will vary dependent upon the nature of the scheme being carried out. All costs associated with security shall be met by the Contractor.



WI 235 Cleanliness of Roads

Ensure that all public areas and site entrance are kept clear and clean of building or other materials and free from mud, dirt, debris and other deleterious matter at all times and that all vehicles leaving the site are clean and properly loaded. Protect at all times public access, to the site and make good any damage at the Contractor's expense. The Contractor shall comply with the requirements of the planning consent.

Where applicable the Contractor shall ensure that all surfaces, gullies and drains are kept free of debris and rubbish from their works at all times and are left in good order and in a condition acceptable to the Project Manager and Local Authorities.

Provide all necessary temporary crossovers, ramps etc. all of sufficient strength to protect the existing floors and stairs from damage.

Make good to the satisfaction of the Employer, Local Authority or other owner any damage caused by site traffic or otherwise consequent upon the Works.

WI 240 Traffic Management

Contractor's parking shall be as discussed in WI 205. Parking on adjacent roads and highways shall not be permitted.

Where required by the Local Planning Authority, undertake a traffic impact assessment of the site for construction phase. Implement practices, signage and temporary routing as recommended.

Report any restrictive condition imposed by the Highway Authority, LA or Police. Do not accept on behalf of the Employer any restrictive parking or access conditions unless instructed to do so by the Employer.

Generally, undertake the following in respect of vehicle routing and access:

- Transport contractors should be instructed as to the most suitable route to the site, avoiding residential areas, schools, narrow lanes etc.
- Ensure adequate areas are available for waiting/parked delivery vehicles away from properties and off any public rights of way. Such vehicles should turn off engines whilst waiting,
- Wherever possible do not accept part loads to minimise transport requirements,
- Restrict deliveries to out of hours where possible, unless specifically agreed in advance with the Project Manager.

Delivery of Materials:

Site access should be controlled.

Vehicles which are poorly maintained, in particular any with oil/hydraulic leaks or those emitting smoke, should be refused entry to site,

Deliveries should be supervised, especially where hazardous materials, fuels and other liquids are involved,

Vehicles should turn off engines whenever possible, especially when parked on site and

Do not use horns, sirens etc. unless absolutely required to do so, due to the nature of site.



WI 250 Consideration of Others

Noise (both Constructional and Operational)

Address by removing or attenuating the level of noise produced by the site (the contractor is reminded that noise is a Statutory Nuisance under The Environment Protection Act 1990, and abatement notices can be served to control noise controlled by the Local Authority). The Contractor is encouraged to use noise modelling software to mitigate any problem. As a minimum whilst on site the Contractor shall instigate the following:

- Place machinery on hard surfaces to avoid ground borne vibration,
- Locate noisy equipment far away from offices area in use and/or sensitive areas if possible,
- Make sure engine doors are closed at all times on plant machinery to minimise their noise emissions,
- Ensure vehicles are not left running unnecessarily,
- Investigate the use of noise insulation equipment in the body of noisy machines,
- Survey the local area for evidence of damaged structures which may be affected by vibration and

Odour (both Constructional and Post Constructional)

Allow for removing or mitigating the production of noxious or offensive smells legally known as Malodour (the Contractor is reminded that malodour may constitute a Nuisance under The Environment Protection Act 1990, and abatement notices can be served to control noise controlled by the Local Authority).

Plant Operation

Vehicle use and operation of plant (e.g. including standby backup generators and spraying or evaporating volatile odorous materials such as paints or solvents) will produce fumes which can be considered as offensive or a nuisance. Provide design to mitigate impact of operation.

Dust

Key Legislation and Guidance:

- Environmental Protection Act 1990,
- Air Quality Limit Values Regulations 2003 and
- Control of Pollution Act 1974 (COPA 1974) as amended 1989.

Consider all forms of dust generation, which may occur on site. In order to limit the build-up of dust on site and transportation to neighbouring areas the following steps should be taken where applicable:

During prolonged dry periods, damp down vehicle routes or pedestrian routes, and materials stores. This should be done with a fine spray and needs to be carefully managed to ensure that silty water and run off isn't produced.

Cover any loose materials,

Ensure that dust generating activities such as cement mixing, grinding, and cutting are carried out in enclosed or shielded areas and where possible using wet cutting techniques and

Burning waste on site should not be permitted.



Vehicles

Ensure that all loads are covered, site speed limits are set and enforced on site (more dust is generated at higher speeds) and if possible using a hard surface at the entrance to a site will reduce the dust generated when vehicles enter and leave a site.

Land Contamination (both site and adjacent sites)

Storage of oil for any oil storage tank, drum on other container exceeding 200 litres above ground is governed by the following key legislation and guidance:

- The Control of Pollution (Oil Storage) (England) Regulations 2001,
- Water Resources Act 2007,
- Control of Pollution Act 1974 (COPA 1974) as amended 1989,
- PPG 1 General guide to the prevention of pollution,
- PPG 2 Above ground oil storage tanks,
- PPG 8 Safe storage and disposal of used oils and
- PPG 26 Drums & intermediate bulk containers.

It must be sited on an impervious base within an oil-tight bund with no drainage outlet. There must not be any damp course in the bund wall structure. The bund area must be capable of containing at least 110% of the volume of the largest tank or drum. All fill pipes, draw pipes and sight gauges should be enclosed within the bund. The tank vent pipe should be directed downwards into the bund. Individual drums must be stored on drip trays and located away from watercourses

WI 260 Control of Site Personnel

The proposals for the control of site personnel are to be agreed with the Project Manager and as a minimum the Contractor shall be responsible for compliance with the Employer's site specific requirements detailed below:

Admission to the Building

When requested by the Organization, the Contractor shall furnish to the IMO Building Manager a list of the names, addresses, dates of birth and nationalities of all persons who are or may be at any time concerned with the work or any part thereof, specifying the capacities in which they are so concerned, and giving such other particulars as the IMO Building Manager may reasonably require.

Passes when issued by the Organization are required to be produced on demand by the Organization's security personnel or by the IMO Building Manager. Any distinguishing badges which may be issued by the Organization shall be prominently displayed at all times. Passes shall be returned at any time on the demand of the IMO Building Manager and in cases when the Contract has been terminated or when an individual to whom a pass has been issued ceases to be employed on the Contract.

If the Organization gives the Contractor notice that any person is not to be admitted to the building, the Contractor shall take all reasonable steps to prevent his being admitted.

The decision of the Organization as to whether any person is to be admitted to the building, and as to whether the Contractor has furnished the information or taken the steps required of him by this Condition, shall be final and conclusive.



Standards of Conduct

The Contractor's employees will be required to conduct themselves at all times in an appropriate manner, compatible with and with due regard to the international status of the Organization. In particular, they should conform to conditions and regulations required by such status as may be specified from time to time by the IMO Building Manager.

It should also be assumed that:

- The contractor will put in place and maintain a robust site induction procedure for all operatives and visitors and record the details of all individuals who have been inducted and
- All provisions for the above shall be detailed in the Construction Phase H&S Plan.
- Where appropriate, a permit-to-work system is to be adopted for works on electrical services, hot works, and works in confined spaces or any other high risk activities identified. Daily 'hot work permits' will be required where welding, cutting, grinding and the use of naked flames are undertaken. Plant, equipment or flammable materials must be covered with flame retardant materials (or removed) in areas where 'hot work permits' are in operation. In this case, continuous flammable atmosphere monitoring may be required and a fire watch maintained both during and for a period after the hot works have ceased.

WI 265 Site Cleanliness

The site is to be kept clean and tidy at all times. The Contractor is to clear all rubbish, arising from his or his subcontractors' activities, from the site at regular intervals as appropriate and upon completion of work and keep the building in a tidy condition. Redundant materials may only be removed from the site on the authority of the IMO Building Manager.

WI 270 Waste materials and Site Waste Management Plan

The Contractor shall remove all rubbish, dirt and residues from voids and cavities in the Construction before closing up and sealing.

The Contractor shall comply with the site waste management plan for the works in terms of segregation of waste.

The Contractor will provide skips into which waste shall be deposited.

To the extent that the Contractor is the producer of any waste material arising from the works he shall comply with all relevant legislation. The Contractor shall provide relevant information to the Project Manager to demonstrate compliance with these obligations.

The Contractor shall reduce waste wherever possible during construction, through any design requirements of the project and also ensure good practice in segregation and minimisation of waste is maintained through re-use and recycling and the identification of sourcing and use of environmentally and socially responsible materials.

Storage bins/skips should be covered where possible and situated away from office areas. The Contractor shall control volatile or highly odorous materials, control/minimise the storage of organic wastes on site and undertake regular collections and removals.

The Contractor shall provide protected and secure waste storage areas, including facilities for recycling for completed development and waste separation skips and actively encourage the careful separation of waste by employees and sub-contractor alike.

A Site Waste Management Plan is a legal requirement under The Site Waste Management Plans Regulations 2008, for all construction projects worth more than £300,000. The scheme should have one SWMP in place prior to construction and shall remain a 'live' document throughout the project.



The plan should be submitted with the tender by the Contractor so that consideration can be given at an early stage to waste reduction and recycling of existing materials for use as part of the project. Identifying waste materials at an early stage that cannot be reused on the project will make it easier to find alternative uses for them.

Contractor's responsibilities:

- Produce the initial SWMP prior to construction work commencing,
- Obtain relevant information from sub-contractors,
- Keep and maintain the SWMP on site during the project,
- Ensure other contractors know where the SWMP is kept,
- Allow other contractors and client access to the SWMP during the project and
- Retain the SWMP for a minimum of 2 years after the completion of the project.
- The plan should be updated regularly by the Contractor to accurately reflect the progress of the project.

Level of Detail

The level of detail of the plan is dependent upon the estimated construction cost. For projects between £300,000 - £500,000 the SWMP should contain the following:

- Types of waste removed from the site,
- Identity of the person/company who removed the waste and
- Site that the waste is to be taken to.
- For projects which exceed £500,000:
- Types of waste removed from the site,
- Identity of the person who removed the waste and their waste carrier registration number,
- Description of the waste,
- Site that the waste was taken to and
- Environmental permit or exemption held by the site where the material is taken.

Upon completion of the project, the plan must be reviewed to understand actual progress against planned progress and record any differences.

WI 275 Burning on Site

The Contractor shall not burn materials on Site.

WI 290 The Contractor's key People

The Contractor shall provide competent and appropriately experienced personnel to undertake the roles of key people identified in the Contract Data. The Contractor shall submit his proposal, providing evidence of the competency of personnel identified for responsible roles to the Project Manager for his acceptance.

Acceptance by the Project Manager of the key people stated in the Contract Data does not constitute acceptance that such individuals are suitable for the roles assigned to them or serve to relieve the Contractor of its duties or obligations under the contract.



WI 291 Sign Boards

The Contractor shall be responsible for installing sign boards for their own work area. The location of such boards, their layout, content, format and size is agreed with the Project Manager prior to erection. This will include as a minimum the notification of the following information:

- A copy of their Company Safety Policy,
- Valid employer's liability insurance certificate,
- Name, contact details and photograph of key site personnel,
- Current accident statistics,
- Local site rules of both the Employer and Contractor,
- Names, contact details and photographs of nominated first aiders,
- Relevant Contractor safety alerts,
- Relevant employer safety alerts and
- Any other pertinent information relevant to the roles and responsibilities of all Contractor personnel and or information pertinent to the Works.

WI 292 Schedules of Condition prior to Works by Others

Where others require access to finished areas or make use of access ways prior to completion the Contractor and the Supervisor shall agree schedules of conditions for the purposes of identifying any damage by others.

WI 293 Site required good Neighbour Policy

The Contractor shall co-operate with any requirement of the Employer to ensure the generation of a 'good neighbour' policy and with particular regard to noisy operations, taking into account the interests of adjacent and nearby building users and residents and in accordance with any planning conditions.

The Contractor shall work with the Employer in co-ordinating and maintaining local resident and occupant liaison during the contract with the aim of promoting and maintaining excellent relationships with adjacent facility users, local residents and the general public.

WI 294 Discrimination

The Contractor shall not unlawfully discriminate either directly or indirectly on such grounds as race, colour, ethnic or national origin, disability, sex or sexual orientation, religion or belief, or age and without prejudice to the generality of the foregoing the Contractor shall not unlawfully discriminate within the meaning and scope of the provisions of relevant legislation including the Race Relations Act 1976 as amended, the Sex Discrimination Act 1975 as amended, The Sex Discrimination (Gender Re-assignment) Regulations 1999, The Employment Equality (Religion or Belief) Regulations 2003, The Employment Equality (Sexual Orientation) Regulations 2003, The Employment Equality (Age) Regulations 2006, the Disability Discrimination Act 1995 as amended, the Equality Act 2010, the Equal Pay Act 1970, the Human Rights Act 1998, the Fair



Employment and Treatment (Northern Ireland) Order 1998 or other relevant or equivalent legislation, or any statutory modification or re-enactment thereof.

The Contractor shall adhere to the current relevant codes of practice or recommendations published by the Equality and Human Rights Commission, and the codes of the three legacy commissions, the Commission for Racial Equality, Disability Rights Commission and the Equal Opportunities Commission and any Codes of Practice introduced by the Equality and Human Rights Commission to replace or supplement the above Codes of Practice. The Contractor shall take all reasonable steps to secure the observance of these provisions and codes of conduct by all contractors, employees or agents of the Contractor and all suppliers and Sub-contractors employed in the execution of this Contract.

The Contractor will comply with any request by the Authority to assist the Employer in meeting its obligations under the relevant legislation and to allow the Employer to assess the Contractor's compliance with its obligations under the relevant legislation.

Where any investigation is concluded or proceedings are brought under the relevant legislation which arise directly or indirectly out of any act or omission of the Contractor, its agents or sub-contractors, or staff, and where there is a finding against the Contractor in such investigation or proceedings, the Contractor will indemnify the Employer with respect to all costs, charges and expenses (including legal and administrative expenses) arising out of or in connection with any such investigation or proceedings and such other financial redress to cover any payment the Employer may have been ordered or required to pay to a third party.

WI 295 Government Skills and Apprenticeship Initiative

In line with the UK government commitment to expand apprenticeships in the public sector, the Contractor is encouraged to provide training and apprenticeship opportunities in their workforce and with their suppliers where it is appropriate to do so. Sub-contractors should also be encouraged to offer such opportunities as appropriate.

WI 296 Fire

The Contractor shall prevent personal injury, death, and damage to the works from fire. The Contractor shall comply with the Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation, known as the Joint Fire Code, published by the Construction Confederation and the Fire Protection Association that is current at any particular time.

The Contractor shall be responsible for the observance by himself and his workpeople or agents and by any sub-contractor of all safety precautions necessary or desirable for the protection of himself, his workpeople and any other person, including all precautions required to be taken by any Act of Parliament (whether general, local or personal) or any regulation or by law of any local or other authority, whether or not these are binding on the Organization.

The Contractor shall take all reasonable precautions to prevent loss or damage and to minimize the amount of such loss or damage or loss or damage caused by any other person. The Contractor shall comply with all fire instructions from time to time issued by the Organization.

The Contractor shall strictly comply with any statutory regulations whether or not binding on the Organization which govern the storage of explosives, petrol, fuel oil, chemicals and other materials brought on to the site.

The Contractor shall comply with any existing fire management system notified to it prior to commencement of the works on Site save to the extent that local arrangements may be entered into by the Contractor subject to agreement by the Fire Authority.

The Contractor shall ensure that in the carrying out of the works, fire engine access routes and fire exit routes to all structures on the Site are kept unobstructed, clean and clear at all times.



The Contractor shall participate in detailed discussions with the Supervisor to ensure that the interim arrangements for such access are maintained during the construction phase. The Contractor shall copy the minutes of any such meetings to the Project Manager.

WI 297 Smoking

Smoking is not permitted on the Site under any circumstances. The Supervisor will monitor these areas on the Site and carries out regular inspections to guard against the risk of fire including inspections and audits of all fire extinguishers.

WI 298 Surface, Storm and Foul Water

The Contractor shall prevent unauthorised discharge from his works into storm, surface and foul water sewers. The Contractor shall provide the works with the installation of adequate controls if discharging any storm, surface and foul water and apply to the Project Manager with an appropriate risk assessment for permission.



WI 300 Contractors Design

Refer to the Troup, Bywaters + Anders Specification and Drawings section 1.2 in Appendix C of the Tender Document.

WI 320 Employer's Requirements

The project shall conform as a minimum with the Employer's Work Information and performance standards described herein and set out below.

The following list sets out applicable standards that apply to this design. This contains a list of statutory codes, standards, regulations etc., current at the time of printing. These are not necessarily full, accurate or complete but are included to provide the Contractor with details on the scope and range of compliance with advisory, legal and statutory documentation and legislation that will be required.

In addition, the Contractor is to comply with all relevant statutory health and safety legislation and other good industry standards, including British, European and International Standards. Compliance with these regulations and guidelines shall be taken as those being in force or published as at the date of contract signature or foreseeable at the date of contract signature.

Statutory Legislation

The Building Regulations of England and Wales,
Occupiers Liability Act 1957 and 1984,
Town and Country Planning Legislation 1990 (with 1994 amendment),
Environmental Protection Act 1990,
Disability Discrimination Act 2005 and
Local by-laws.

Health and Safety Regulations

Corporate Manslaughter and Corporate Homicide Act 2007,
Fire Precautions Act 1971,
Highly Flammable Liquids & Liquid Petroleum Gas Regulations 1972,
The Dangerous Substances and Explosive Atmospheres Regulations 2002,
Health and Safety at Work Act 1974,
Working at Height Regulations 2005,
Asbestos (Licensing) Regulations 1983 (as amended 1998),
Workplace Exposure Limits; Health and Safety Executive,
Ionising Radiations Regulations 1999,
Gas Act 1986 (as amended 1995),
The Control of Noise at Work Regulations 2005,
Pressure Systems and Transportable Gas Containers Regulations 1989,
Electricity at Work Regulations 1989 - Health & Safety Executive 1989,
Food Safety Act 1990,



The Construction Products Regulations 2013,
The Personal Protective Equipment at Work Regulations 1992,
The Health and Safety (Display Screen Equipment) Regulations 1992,
Manual Handling Operations Regulations 1992 (as amended 2002),
The Workplace (Health, Safety and Welfare) Regulations 1992,
The Simple Pressure Vessels (Safety) (amendment) Regulations 1994,
Construction (Design and Management) Regulations 2015,
The Food Safety (General Food Hygiene) Regulations 1995,
Disability Discrimination Act 2005,
Disability and the Equality Act 2010,
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) Regulations 1995,
The Health and Safety (Safety Signs and Signals) Regulations 1996,
The Construction (Health, Safety and Welfare) Regulations 1996,
Gas Safety (Management) Regulations 1998,
The Work in Compressed Air Regulations 1996,
The Confined Spaces Regulations 1997,
The Provision and Use of Work Equipment Regulations 1998,
The Lifting Operations and Lifting Equipment Regulations 1998,
The Gas Safety (Installations and Use) Regulations 1998,
The Control of Asbestos Regulations 2012,
The Control of Lead at Work Regulations 2002,
The Management of Health & Safety at Work Regulations 1999 (as amended 2006),
The Fire Precautions (Workplace) (Amendment) Regulations 1999,
The Control of Substances Hazardous to Health Regulations (COSHH) 2002,
The Pressure Systems Safety Regulations 2000,
The Construction (Design and Management) Regulations 2015,
The Control of Asbestos at Work Regulations 2012,
The Control of Vibration at Work Regulations 2005,
The Health and Safety (Consultation with Employees) Regulations 1996,
Environmental Protection Act 1990,
The Control of Major Accident Hazards Regulations 2015,
The Electricity Safety, Quality and Continuity Regulations 2002 (as amended 2006 and 2009),
Health & Safety in Construction guidance from the Health and Safety Executive,
Relevant EU Directives on Health and Safety matters,
Current Relevant British Standards and EU Regulations and
All Relevant British Standards, codes of practice, European Standards and Agreement Certificates.



WI 325 Design Coordination

The contractor is fully responsible for design coordination of their design proposals across all disciplines. In addition, the Contractor is to make sure that their design takes due account of and coordinates with the requirements of specialists with design input into the scheme.

WI 330 Requirements of Others

All relevant planning approvals have been obtained.

WI 335 Copyright/Licence

The Employer will reserve the right to use and copy the Contractor's design for any purpose connected to the construction, use, alteration or demolition of the works.

WI 340 Access to information following completion

At Completion the Contractor is to provide the Employer with access to the following information in the format described below;

Maintenance Manual / Operating Instructions

The Contractor shall furnish to the Project Manager **2 weeks prior to completion** draft copies of the O&M manuals and provide **final copies on the day of completion**. The O&M manuals shall contain all relevant material in hardback form and on CD ROM / USB memory stick. Retention up to the value of work outstanding will be retained until the record drawings and manuals are checked and accepted by the Client or his authorised representative. The specific requirements for the quantity and format of drawings and O&M manuals are detailed in Section 3 of the specification document.

The Project Manager will comment upon the Operating and Maintenance Manuals. Following inclusion of comments, the Contractor shall issue the required number of copies, fully bound, for issue to the Client.

Special Tools and Accessories

Special tools and accessories required for the proper running and maintenance of the plant shall be supplied by the Contractor and handed to the Client on completion of the Works. The Contractor will be responsible for obtaining a signed receipt for all equipment passed to the Client.

Specialist Trade Attendance on Plant and Equipment

The Contractor shall arrange and make payment for specialist tradesmen to visit site, adjust and put into working order all items of specialised plant and equipment supplied under the Contract.



The Health and Safety File

Content: obtain and provide the following, including all relevant details not included in other parts of the manual, including:

Residual hazards and how they have been dealt with.

Hazardous materials used.

Information regarding the removal or dismantling of installed plant and equipment.

Health and safety information about equipment provided for cleaning or maintaining the structure.

The nature, location and markings of significant services.

Information and as-built drawings of the structure, its plant and equipment.

Presentation

Format: A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.

Selected drawings needed to illustrate or locate items mentioned: Where larger than A4, to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings.

As-built drawings: The main sets may form annexes.

Information for Commissioning of Services

The Contractor shall be required to employ fully qualified and competent commissioning engineers for final testing and commissioning. The commissioning shall be carried out to a programme agreed with the Supervisor.

Following agreement and approval to the commissioning and test results they shall form part of the "Operating and Maintenance Manuals".

Training

The Contractor shall allow for the provision of one skilled man for ½ working day, during normal working hours for the purpose of instructing the Client's staff in the operation of the plant.

The Contractor shall include for all costs in connection with specialist training for the Client's staff on operation and maintenance of particular plant or systems.

The Contractor shall allow for two such instruction periods on an agreed date, one in the morning and one in the afternoon.

The Contractor shall also allow for a two further periods of half an hour during maintenance visits when he will provide any further instruction of the Clients staff as required.



WI 345 Design Requirement

The Contractor shall provide:

- All working/manufacturing drawings associated with the works, in Native file format and paper copies at both A3 & A1/A0 as dictates,
- Tolerances with other trades,
- Drawings to demonstrate spatial & sequential coordination has been achieved. The aim is to ensure spatial and sequential co-ordination is integrated into the detail design, ensuring that the drawings produced are practical and co-ordinated thus ensuring that the risk of 'clashes' on site during installation are eliminated,
- As fitted drawings in auto cad format, in the scale of the drawing produced but with an A3 "pdf" as back up.
- Manufacturing drawings to be redlined as the works progress with the final drawings being revised to as-fitted & issued in the standards specified for AutoCAD drawings,
- Standard details taken from manufacturing or equipment literature,
- All Drawings of 'off the shelf' equipment (i.e. having a catalogue or part number) shall be classed as Vendor Drawings and shall be included in the Operating and Maintenance Manuals. These Vendor Drawings shall be to the Vendor's own standard and will not require to be produced in accordance with the requirements of the Drawing Standards within this document,
- In the event of the Contractor not providing "As Installed" record drawings as detailed, prior to the issue of the Completion Certificate for the Works, the Employer reserves the right to have these prepared by others and deduct the costs from the Contractor's final account,
- The Contractor is to produce all necessary drawings relating to development of the design and installation. The Contractor is to produce the working drawings, coordinated installation drawings, pre-fabrication drawings, completing the works by recording as progress is made all information required to produce the as-installed drawings and
- The Contractor is to ensure that all the drawings will include accurate dimensions and sizes.

WI 350 Electronic Data

Copies of data furnished by the Project Manager that may be relied upon by the Contractor are limited to the printed copies or electronic media format of text, data and graphics. If there is a discrepancy between the electronic media files and the printed copies, the electronic media files shall take precedence.

When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

WI 355 Designs, Drawings and Specifications

The Contractor submits Designs, Specifications and Drawings electronically to the Project Manager for acceptance in accordance with the accepted Schedule of Submittals set out in the submittal procedures

Data shown on the Drawings shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show the Project Manager the services, materials, and equipment the Contractor proposes to provide and to enable the Project Manager to review the information for acceptance.



Each submittal of a Design, Drawing or Specification shall include the following as a minimum;

- Contractor shall electronically submit PDF files capable to legibly print at A0, A1, A2, A3 and A4 scale,
- Identify and Indicate where appropriate:
- Residual, unusual risks listed on the drawing SHE Box, with a full design hazard register issued with drawings,
- Applicable drawing and detail number, products, units and assemblies, and system or equipment identification or tag numbers,
- Plant and component title: identical to title shown on drawings,
- Critical field dimensions and relationships to other critical features of Work. Note dimensions established by field measurement,
- Setting out points,
- Drawings or document references that the issued drawing or document is based upon,
- Project-specific information drawn accurately to scale and
- Metadata for documents included above.
- Manufacturer's standard schematic drawings and diagrams as follows:
- Modified to delete information that is not applicable to the works,
- Supplement standard information to provide information specifically applicable to the works, inc. for temporary works and
- Product Data, provided as specified in individual Specifications.
- Manufacturers: When proposed, include following additional information:
- Names and addresses of at least two companies that maintain technical service representatives close to the Project and,
- Complete list of spare parts and accessories for each piece of plant.

WI 360 Record Documents

Record Documents are determined as documents residing within the Document Management System.

The Contractor shall maintain at Site one copy of all Drawings, Specifications, Compensation Events, Submittals, and other Modifications in good order and accurately marked depicting all changes as they occur in providing the Works. The as-built records shall be available at all times to the Project Manager and the Supervisor. The Drawings shall be clearly marked in colour during the works recording all alterations made including such supplementary notes and details necessary to clearly and accurately represent as built construction.

At Completion the Contractor shall provide all Project as-built documentation to the Project Manager along with the Health & Safety File and the O&M Manuals as defined within the pre-construction information.

WI 365 Design Submission Procedures

The Contractor shall comply with the following submittal procedure:

- Each submittal shall be made in an electronic format as follows:
 - » The files shall be set up to print legibly at A0, A1, A2 A3 and A4 scale,



- » All documents for electronic submittal combined in one zip file,
- » New electronic files will be required for each re-submittal,
- » Each electronic file will also include an electronic copy of the Transmittal of Contractor's submittal form and
- » All files are to permit copying including copying into other documents.
- In processing the submittal, the Contractor shall:
- Identify each submittal with the following:
 - » Project Title and agreed contract descriptor,
 - » Specification section and paragraph to which submittal applies,
 - » Date of transmittal,
 - » Names of Contractor, Subcontractor, and manufacturer as appropriate and
 - » Numbering and Tracking System.
- Prior to submittal of Drawings or Samples, the Contractor shall determine and verify:
 - » All field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalogue numbers, and similar information with respect thereto,
 - » Fabrication, shipping, handling, storage, assembly, and installation information pertaining to the works,
 - » All information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto and
 - » Drawings and/or Samples have been reviewed and co-ordinated with other Drawings and/or Samples and with the requirements of the works and the Contract Documentation.

Each submittal shall bear a stamp or specific written certification that the Contractor has satisfied the Contractor's obligations with respect to review and written acceptance of that submittal.

The Contractor's acceptance stamp shall include Project Name, Submittal Number, Specification Number, Contractor's Reviewer name, Date of Contractor's Acceptance, and statement certifying that submittal has been reviewed, checked and approved for compliance.

The Contractor shall give the Project Manager with each submittal, specific written notice of any variations that the Drawing or Sample may have from the requirements of the Contract. This written communication is separate from the Drawing of Sample Submittal and in addition to a specific notation made on each Drawing or Sample submitted.

The Contractor's prices shall include for the cost of the samples identified in the Works Information, including all re-submittals and as built documentation.

WI 370 Schedule of Submittals

The Contractor shall submit a Schedule of Submittals shown on the Accepted Programme and obtain the Project Manager's acceptance of the Schedule of Submittals prior to processing any submittals. The Contractor shall revise and resubmit as required.



WI 375 Project Manager's Review

The Project Manager shall review Drawings and Samples in accordance with the Accepted Programme. The Project Manager's review and acceptance will only be to determine that the items covered by the submittals will, after installation or incorporation into the works, conform to the information given in the Works Information and are compatible with the design concept of the completed project as a functioning whole.

WI 380 Re-submittal Procedures

The Contractor shall make corrections required by the Project Manager and re-submit electronically, as required, for review and acceptance. The resubmittal process shall take 2 weeks for the Contractor and 2 weeks by the Project Manager, unless agreed otherwise between the Contractor and the Project Manager. The Contractor shall specifically identify in writing the revisions other than the corrections called for by Project Manager on previous submittals.

Re-submission of submittals shall identify the original submittal number with sequential numeric suffix.

WI 381 Format of Submittals

The Contractor shall comply with format of submittals as follows:

- Drawings issued in the Works Information shall not be rebadged,
- Package submittal information by individual specification section. Different specification sections are not combined in a submittal package, unless otherwise directed in specification and
- Presented in a clear and thorough manner and in sufficient detail to show type, size, dimensions (field-verified, where practicable), arrangement and function of components, materials, devices, fasteners, connections, supports, co-ordination with related work and substrates, and compliance with the Works Information.

The Contractor shall ensure that all fields within the Submittal are completed.

WI 382 Timeliness

The Contractor shall issue submittals in accordance with the Schedule of Submittals, and the requirements of individual specification sections.

Time for review commences upon issue of the submittal by the Contractor.

WI 383 Incomplete Submittals

The Project Manager requests a re-submittal if a preliminary review deems the original submittal not capable of acceptance.

A Submittal will be deemed incomplete when the Contractor's review of Submittal Form does not comply with the Works Information.

WI 384 Action Submittal Dispositions

The Project Manager retains the original electronic file and will distribute for review and comment. A copy of the marked up file will be noted and distributed electronically.



Submittal responses will be classified as follows:

- Rejected: The Contractor may not incorporate product(s) or implement work covered by the submittal for the reasons indicated, the Contractor makes a resubmission incorporating the Project Manager's responses.
- Accepted: The Contractor may incorporate product(s) or implement work covered by the submittal, in accordance with the Project Manager's instructions.

As required from the following notations will be used for working drawings issued to the Project Manager or from a sub-contractor to the Contractor:

- A – Approved or Reviewed (state which) – work may proceed,
- B – Approved or Reviewed (state which) with comments – work may proceed once the comments have been incorporated on the document and the document has been re-issued with the next revision or
- C – Rejected – work may not proceed. Drawing to be re-issued; the reason for the rejection must be listed on the drawing issued.

WI 385 Information Submittals

Information Submittals are submittals made by the Contractor for the Project Manager's information and which do not require acceptance. Information Submittals are submitted to the Project Manager unless specific alternatives arrangements are made and acceptable to the Contractor and the Project Manager.

The Project Manager shall review each submittal as follows:

- If the submittal complies with the criteria for submittals the Project Manager notifies the Contractor and forwards a copy to the appropriate parties,
- If the Project Manager determines the submittal does not meet the criteria for submittals and is considered unacceptable, the Project Manager sends an electronic notification of the file with review comments to the Contractor, and requires that the submittal is corrected and resubmitted and

WI 386 Submittals not required by the Contract

Submittals not required by the Contract will not be reviewed by the Project Manager but will be filed as 'For Record Only'.

WI 387 Manufacturer's design data

The Contractor shall provide Manufacturer's Design Data in PDF format including but not limited to the following:

- Summary of loads or load diagram, if applicable,
- Fully comprehensive calculations,
- Information requested in individual Specification section,
- Residual risks for Health and Safety,
- Drawings,
- List of Assumptions,



- List of performance and design criteria,
- List of applicable codes and regulations,
- Name and version of software,
- Operation information and
- Maintenance information, including but not limited a periodic maintenance schedule for all supplied goods.

WI 388 Manufacturer's instructions

The Contractor shall provide written or published information that documents manufacturer's recommendations, guidelines, and procedures in accordance with individual specification.

WI 389 Manufacturer's guarantee

The Contractor shall provide Manufacturer's written guarantee as required by the individual specification.

WI 390 Submittals required by laws, regulations and governing agencies

The Contractor shall submit prompt notifications, reports, certifications, and the like as required by any applicable governing agency or their representative.

Other than in the case of data relating to individuals, which shall be dealt with in accordance with the Data Protection Act the Contractor shall electronically transmit to the Project Manager one copy of correspondence and transmittals (including enclosures and attachments) between the Contractor and any applicable governing agency concerning the works.

WI 391 Inspections and test plans

The Contractor's Inspection and test plans shall contain the signature of the person responsible for the test or report.

The Contractor shall comply with the following:

Factory tests & inspections shall cover:

- Identification of product and specification section, type of inspection or test with referenced standard of code,
- Date of test, project title and number, and name and signature of authorised person,
- Test results,
- If the test or inspection deems that the material or equipment is not in compliance with Works Information, the Contractor identifies and implements any corrective action necessary to bring the material or equipment into compliance,
- Provide interpretation of test results, when requested by Project Manager and
- Other items as identified in individual sections of the Specification.

Field tests & inspection Reports – as a minimum shall include the following



- Project title and number,
- Date and time,
- Record of temperature and weather conditions,
- Identification of product and specification section,
- Type and location of test, sample, or inspection, including referenced standard or code,
- Date issued, testing laboratory name, address, and telephone number, and name and signature of laboratory inspector,
- If the test or inspection deems that the material or equipment is not in compliance with the specification, the Contractor identifies and implements any corrective action necessary to bring the material or equipment into compliance,
- Provide interpretation of test results, when requested by Project Manager,
- Other items as identified in individual sections of the specification and
- The procedure for developing Inspection and Test Plans is detailed in WI 391.

WI 392 Maintenance of Documents and Samples

The Contractor shall ensure that Documents and Samples are:

- Filed, racked and securely stored on Site and kept apart from documents used for construction,
- Labelled and filed in accordance with agreed format. Label each document 'PROJECT RECORD' in neat, large printed letters,
- Maintained in a clean, dry and legible condition completely protected from deterioration and damage,
- Not used for construction of the works. If loss of recorded data occurs, use any means necessary to secure the data, including, if necessary in the opinion of the Project Manager removal and replacement of concealing work at the Contractor's expense and
- Available for inspection by the Project Manager and the Supervisor, as necessary.

WI 393 Recording

The Contractor shall ensure all entries are complete, dated, and accurate enabling future reference by owners or occupiers, in use of the information.

Record information concurrently with construction progress. No works are to be concealed until information is recorded.

Drawings shall be legibly marked to record actual installed construction and as-built information including:

- Measured depths of elements of foundation in relation to finish first floor datum,
- Measured horizontal and vertical locations of underground utilities and appurtenances, reference to permanent surface improvements,
- Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction,
- Field changes of dimension and detail,
- Changes made by Modifications and
- Details not on original contract drawings.



WI 394 Conversion of Schematic Layouts

Drawings schematically indicating the arrangement of conduits, circuits, piping, ducts, and similar items, are not intended to portray precise physical layout.

Final physical arrangement shall be determined by the Contractor, subject to the Project Manager's review.

Design of future modifications may require accurate information as to the final physical layout of items which are shown only schematically on the drawings. This information is to be provided by the Contractor.

The Contractor shall ensure that record drawings are dimensionally accurate to within the tolerances specified for the construction of that element and clearly identify the item by accurate note, show (by symbol or note) the vertical location of the item and the like and make all descriptive identification so that it may be related reliably to the Specifications.

The Project Manager may waive the requirements for conversion of schematic layouts, where in the Project Manager's judgment, conversion serves no useful purpose.

WI 395 Other Documents

The Contractor shall maintain manufacturer's certifications, inspection certifications, and field test records required by individual specification sections. All copies of electronic files shall be transferred for review by the Project Manager upon receipt. The issue of these documents does not constitute acceptance of the submissions required for a hard copy of the Health and Safety file, Operation and Maintenance Files and inspection and test plan files, and or any other documentation required for this contract.



WI 400 Completion

WI 405 Completion Definition

Completion is when the following has been done by the Contractor by the Completion date:

- Provision of Testing Certificates, Commissioning Results and/or Reports in accordance with the Works Information,
- Provision of Operation & Maintenance (O&M) Manuals in Draft by the Contractor 8 weeks prior to the Completion Date in a format for acceptance by the Project Manager containing the information required by the Works Information,
- Provision of Operation & maintenance (O&M) Manuals in Final Draft by the Contractor 2 weeks prior to the Completion Date in a format for acceptance by the Project Manager containing the information required by the Works Information,
- Provision of Accepted Operation & Maintenance (O&M) Manuals in by the Contractor 4 weeks after the Completion Date containing the information required by the Works Information,
- Provision of documents and information for the Health & Safety File in accordance with the Works Information,
- As Built Information in accordance with of the Works Information,
- Training has been provided to the Employer's representatives by the Contractor as set out in the Works Information and
- A completion strategy has been provided by the Contractor to the Supervisor and accepted by the Supervisor.

WI 410 Procedure leading up to Completion

The Supervisor is responsible for checking the following at the Completion of the works or section thereof:

- That all witnessing/commissioning as required by the Works Information have been completed,
- That a strategy for Defect correction has been agreed between the Contractor and Supervisor.
- That a co-ordinated Defects Schedule is produced in conjunction with the Contractor,
- That the Contractor has provided full training for users as specified in the Works Information and,
- That the O&M Manuals contain the information required by Works Information.

WI 415 Health and Safety File

It is a requirement of the CDM Regulations and so that of the Employer, that record documentation in the form of a Health and Safety File is handed to the Project Manager at Completion of the works. Completion and takeover cannot be granted unless record documentation is handed over within the prescribed period set out below:

- Provision of the Health & Safety File in Draft by the Contractor 8 weeks prior to the Completion Date in a format for acceptance by the Project Manager containing the information required by the Works Information,



- Provision of the Health & Safety File in Final Draft by the Contractor 2 weeks prior to the Completion Date in a format for acceptance by the Project Manager containing the information required by the Works Information and,
- Provision of the Accepted Health & Safety File by the Contractor 4 weeks after the Completion Date containing the information required by the Works Information
- The Contractor is to provide the Health and Safety File in the format specified in the pre-construction information.

WI 420 Operation and Maintenance Manuals

The Contractor shall provide an O&M Manual containing all the appropriate information to enable the Employer and his staff properly to operate and maintain the works in accordance with the manufacturer's recommendations. The Contractor shall submit for acceptance, at the time of issue of any technical submittal, the accompanying manufacturer's literature detailing the maintenance requirements. The Contractor shall collect such information during the course of the project to achieve a progressive build-up of the completed O&M Manual. The O&M Manual will contain step by step starting and stopping procedures, which the Employer and Project Managers' staff can follow, indicating where checks are to be made at each step. Where appropriate an emergency shutdown procedure will also be described. It is not sufficient to provide an unrelated and ad hoc collection of manufacturer's catalogues or leaflets, and it is important that the O&M Manual should relate to the installation provided.

The O&M Manuals shall be prepared to a standard not less than the requirements of the Building Services Research and Association's (BSRIA) BG 1/2007 Handover O & M Manuals and Project Feedback and in the format specified in the pre-construction information.

WI 425 Provision of Documents after the Completion Certificate is Issued

The Contractor retains all documents electronically relating to the design of the works for a period of not less than 5 years after Completion and, upon the written request of the Employer, shall provide to the Employer, copies of such documents at the Employer's expense.

WI 450 Re-use of Documents

The Contractor and any Subcontractor or contractor or other individual or entity carrying out the works, shall not:

- Have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by the Employer, Employer's consultants or Project Manager, including electronic media editions or
- Re-use any of such Drawings, Specifications, other documents, or copies thereof without written consent of Employer and Project Manager.

WI 455 Extended Warranties

Product warranties will be required from the date of completion for the entire scheme.



WI 460 Final Clean

On completion of the works or each section and before handing over the works to the Employer, the Contractor, shall clean down all the surfaces after removal of all equipment, tools, temporary structures, materials, protective casings and coverings etc. leaving the works and the Site in a condition acceptable to the Project Manager and in accordance with the Handover procedures approved by the Project Manager.

WI 465 Completion Meetings

The Project Manager arranges and the Contractor shall attend pre-completion meetings to plan and co-ordinate completion of the works. The pre-completion meeting will take place 5 working days before the proposed handover date. The agenda for the pre-completion meeting will broadly follow that of the final handover meeting detailed below. The contractor is to provide copies of all handover documentation for review by the Project Manager to make sure that all required documentation is in place in advance of formal handover.

On the proposed handover date a formal handover meeting will be held on site to inspect the completed works and check that all required paperwork is available.

WI 470 Meetings Post-Completion

If necessary after completion the Supervisor arranges defect correction meetings with the Contractor. The Contractor shall provide a written report on the status of the Defects and the remedial works undertaken or being undertaken by the Contractor. Such meetings will be held at the discretion of the Supervisor.

WI 475 Security at Completion

On Completion of the works the Contractor shall leave the works secure with all accesses locked. The Contractor shall account for and adequately label all keys and hand the same to the Project Manager with an itemized schedule, retaining a duplicate schedule signed by the Project Manager as a receipt.

WI 480 Training

As detailed in section WI 340 of this document, before Completion, explain and demonstrate to designated maintenance staff the purpose, function and operation of the installations including items and procedures listed in the Building Manual. The timing of this training is to be agreed in advance between the Contractor and the Employer. The Contractor is to obtain written confirmation from the Employer/End User staff that training has been provided.

WI 485 Correcting Defects

Prior to completion the Contractor is to touch up minor faults in newly painted work, carefully matching colour and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions. The Contractor is to correct a notified Defect before the end of the defect correction period. Arrange site access at a convenient time agreed with the Project Manager.



WI 490 Spares

The Contractor shall complete, as appropriate, a form detailing the items which have been handed over and obtain a signature of receipt from the Caretaker/Officer in Charge. A copy of the completed and signed form shall be included in the Operation & Maintenance Manual.

WI 495 Take Over

Refer to the Contract Data.



WI 500 Programme

The Employer and the Project Manager promote the use of consistent project management and control methodologies across the programme structure for the successful delivery of the Programme. Successful programme delivery depends on accurate and timely information to support informed and effective decision making as set out in the Contract.

WI 505 Programme Requirements

The Contractor is required to submit a Tender Programme prior to Contract Award for review by the Project Manager. The purpose of this programme is to demonstrate the Contractor's proposal for the delivery of the works by identifying the specific sequencing of the construction of various sections of the works and the interrelationships with specific procurement, design, commissioning, testing and other key activities and identifying the critical path from commencement through to completion. This Tender Programme is required to address the following:

- Identify the outline requirements for the works with particular reference to interfaces with and any requirements that the Employer (including his agents or other appointed contractors) will be expected to provide, to enable the Contractor to effectively carry out his works,
- The Contractor shall produce an outline method statement to support the Tender Programme. This outline method statement should describe the construction sequence, anticipated resources (labour, plant and materials) and shall illustrate the constraints associated with the key dates and works required by Others,
- The Contractor shall identify with the key dates the conditions to be met and any restrictions that will be imposed on Others accessing the working areas beyond these key dates and up to the completion date.

The programme shall be structured in accordance with the Activity Schedule and provide sufficient detail to identify the critical path. The programme shall identify, periods for the production of the contractor's design and manufacturing drawings, approval periods and QA procedures and the duration of procurement, manufacturing, construction/installation operations, setting to work, commissioning, handover and training periods and

The Tender Programme shall identify critical dates for the release of information and any necessary approvals. The Tender Programme shall be developed in accordance with the details identified above and on the basis of the key dates contained within the Contract Data – Part One.

WI 510 Accepted Programme

General

The Contractor's Programme shall be used by the Contractor to plan and execute the Works.

The Programme will also be used by the Project Manager to monitor progress and be the basis for the assessment of extensions of time and the effect of delay on the progress of the Works.

Accepted Programme (AP)

A programme for the totality of the Works, which shall be submitted to the Project Manager for its acceptance. If the Project Manager does not accept it in line with the Contract, this programme shall be revised and resubmitted for acceptance as set out in the Contract and Works Information.



Updated Programme

The Accepted Programme shall be updated with actual progress and saved on at least a fortnightly basis for record purposes. The Contractor may submit for acceptance by the Project Manager other revisions to the Accepted or Updated programmes.

The Contractor at all times remains responsible for the construction of the Works in accordance with the obligations as set out by the conditions of contract.

The Contractor shall make allowance for all costs associated with the preparation and submission of revised Programmes attributable to Compensation Events, within the Compensation Event quotation/costs. In the absence of a Compensation Event the Contractor shall provide a programme at a period frequency stated in the contract data.

Submission of Programmes

Within four weeks of the Contract date and in accordance with Clause 31 of the Contract, the Contractor shall submit to the Project Manager for its review and acceptance a programme for the whole Contract showing the order of procedure in which the Contractor proposes to carry out the Works.

An Accepted Programme Review (APR) with the Project Manager shall take place within the period for reply after the submission of the AP to assess the acceptability of the submitted programme. This programme becomes the Accepted Programme upon acceptance by the Project Manager. The Accepted Programme shall have regard to the contract completion dates and any other milestones, and/or restraints set out in the Contract or Works Information. Thereafter, if the actual progress does not conform with the Accepted Programme, and is not as a result of an Early Warning Notice or Compensation Event, the Project Manager is entitled to require the Contractor to submit to the Project Manager for acceptance a revised programme showing the order of procedure and periods necessary to ensure completion of the Works by the contract completion dates.

The Contractor shall furnish the Method Statement and such other details and information as the Project Manager may reasonably require to accept the submitted Programme.

The Contractor shall supply the Project Manager with an electronic copy of each programme, together with a print-out bar chart or tabular report in a pre-agreed format. The programme shall be submitted electronically in Microsoft Project (.mpp) and Adobe PDF format.

By agreement, the Contractor and the Project Manager may dispense with printouts of the various forms of the Contractors programme, but under no circumstances may they dispense with the submission of the required electronic copies.

Preparation of Programmes

The Contractor shall establish the first AP for the works consistent with the Contractor's proposal (Tender Programme) to provide the works in line with the detailed Activity Schedule.

Key components of the submitted AP in respect of the works shall include:

- A Programme incorporating all relevant work packages and programmes,
- The activities in all work packages including those by the principal sub-contractors and suppliers, statutory undertakers, those contractors and suppliers directly employed by the Employer and others,
- The earliest and latest start and finish dates for every activity in each work package. Activities shall include all scope activities and any activities or time durations expected in addition to scope activities,
- Milestones, Interface Milestones and Key Dates,



- Health Check Milestones, to identify any potential slippages and or risks evident to the Project Budget,
- Access dates for each phase or section,
- The earliest and latest start and finish dates for each phase or section, including dates when the Contractor plans to complete work to allow the Employer and others to do their work,
- Holiday periods,
- Dates by which design work or drawings to be produced by the Contractor or sub-contractors or suppliers will be submitted to the Project Manager for acceptance and dates by which acceptance of such design work or drawings will be required by the Contractor, allowing time for submittals, re-submittals and reviews,
- Procurement periods and delivery dates for the major items of goods, plant and materials,
- Dates by which work will be ready for testing by the Project Manager,
- Details and dates of any information required from the Project Manager and
- Provisions for float, time risk allowances, quality control procedures, health and safety requirements (and any other requirements that may be set out in the Contract or Works Information).

The Programmes submitted for Acceptance shall be produced in accordance with Clause 31 of the Contract and the following:

- The AP is to be an integrated design, procurement, construction and commissioning programme for the works,
- The AP shall be developed, maintained and reported by the Contractor using Microsoft Project software or other compatible software as agreed with the Project Manager,
- The AP shall be logic linked, with each activity having predecessor and successor dependencies, critical paths, free float and total float will be identified. A list will be provided showing reasons for all activities without predecessors or successors or activities that have constraints with the AP for acceptance by from the Project Manager,
- The Contractor will submit a budget cost profile which aligns directly with the Contractor's Activity Schedule. The Contractor will submit a Cost forecast of as part of the monthly progress report to the Project Manager,
- The AP, method statements and any associated diagrams shall identify the overall timing, sequence and direction of work and,
- Once the programme has been accepted, the Contractor shall employ the appropriate level of resource to maintain progress against the AP and maintain updates to the programme in order to ensure true and accurate reporting of progress of the Works.

The Contractor shall continuously review the AP and report at monthly intervals or as requested by the Project Manager.

WI 515 Performance Reporting

Every month, one week after the Assessment Date, the AP will be progressed by the Contractor. All activities are updated with actual programme progress, forecasted durations, percent complete performance, and actual metric quantities to date and reported to the Project Manager in an agreed format, detailing actual costs and prices for work done to date (PWDD). The Accepted Programme shall be progressed up to the Assessment Date, with a forecast of progress up to the next assessment date for committed costs.



In addition to the updated programme, the Contractor shall provide a Key Milestone Log. This log shall list the following:

- Current Accepted Programme Key Milestone Dates,
- Actual and Current Forecast Key Milestone Dates,
- Variance (working days) between Current Accepted Programme and Actuals/Forecast and
- Commentary on any variances, including root cause, impact, recovery actions.

The progressed programme shall be submitted in PDF file format (using an agreed layout) and also the native planning software file format. The Key Milestone Log shall be submitted in MS Excel or other agreed format.

The Project Manager will use the updated programme (in conjunction with other contractor programmes and internal programmes) to assess the overall integrated programme status. Four days after submission of the Progressed AP, the Project Manager will hold a meeting with the Contractor to provide a revised Key Milestone Log and Programme which identifies any impacts to the Contractor Key Milestones following integration into the overall programme. The Contractor shall take any integration impacts into account and shall re-submit the updated programme no later than 2 days after the meeting as instructed by the Project Manager in accordance with the Contract.

WI 520 Methodology Statement

The Contractor shall issue their method statements in accordance with their Accepted Programme to the Project Manager for acceptance.

Outline Method Statement

The Contractor shall issue to the Project Manager for acceptance as part of the Accepted Programme an outline method statement for the works detailing the logic and methodology upon which the planning and programming of the works is based. It shall include general information about resources the Contractor plans to use for each operation.

The aim of the outline method statement is to establish the logistical and practical parameters within which it is intended that the works will be carried out.

Where the outline method statement changes substantially this will be revised and re-issued for acceptance by the Project Manager as work progresses and as the Contractor establishes in greater detail the methods, resources and equipment to be used. Comments from the Project Manager and Supervisor are incorporated where appropriate.

The outline method statement is a document which develops alongside the design, procurement and construction of the works and which will be reviewed and updated on an ongoing basis.

Detailed Method Statement

Detailed method statements for each work activity will be identified on the programme and will be submitted for acceptance to the Project Manager prior to commencement of any works

The method statements issued by the Contractor shall set out the detailed construction methodology for each operation of the work, including risk assessments, working at height justifications where applicable, COSHH assessments and any other risk based or hazard based tasks.



Method Statements cover the entire process from beginning to end, addressing key safety areas, stating the required controls in detail to allow work to be completed safely and without risk of environmental damage and shall:

Address specific tasks or jobs which may mean breaking down a works package into its constituent elements,

Address all aspects of the job – programme, method, sequence, engineering, interfaces etc.,

Include the identified hazards, respective controls measures and interface hazards and

Generally, in accordance with the constraints and parameters set out within the outline method statement.

WI 525 Revised Programme

The Contractor shows on each revised programme:

- The actual progress achieved on each operation and its effect on the timing of the remaining work,
- The effects of implemented compensation events,
- How the Contractor plans to deal with any delays and to correct notified defects and
- Any other changes which the Contractor proposes to make to the Accepted Programme.

The Contractor submits a revised programme to the Project Manager for acceptance:

- Within the period of reply after the Project Manager has instructed him to and
- When the Contractor chooses to and, in any case, at no longer interval than the interval stated in the Contract Data from the starting date until Completion of the whole of the works.



WI 600 Quality Management

This section of the Works Information describes the quality standards to be achieved by the Contractor.

WI 605 Samples

Where applicable, the Contractor shall submit the number of Samples as defined in specifications.

The Contractor shall clearly identify each Sample as to material, contractor, pertinent data such as catalogue reference numbers and the like, the use for which intended and other data as Project Manager may require.

The Contractor shall mount, display, or package Samples in the manner specified to facilitate review of quality and attach a label on an unexposed side that indicates the following:

- Manufacturer name,
- Model number,
- Material and
- Sample source.

Where a Drawing of Sample is required by the Schedule of Submittals, any related works performed prior to the Project Managers review and acceptance of the submittal will be at the Contractors sole expense, risk and responsibility.

WI 610 Quality Statement

The contractor is to be responsible for the constant management and supervision of the Works and all significant types of work must be under the close control of competent trade supervisors to ensure maintenance of satisfactory quality and progress. Where necessary the Contractor is to provide maximum possible notice before changing person in charge or site agent. The Contractor's Site staff must include one or more persons with appropriate knowledge and experience of mechanical and electrical engineering services to ensure compatibility between engineering and the Works generally.

WI 615 Quality Management System

The Contractor shall provide the Works in accordance with Contract quality requirements specified herein.

The Contractor shall establish, maintain and implement a Quality System in accordance with BS EN ISO 9001:2008. This Quality System shall manage and control quality during all stages of the project and identify how the Contractor will address all aspects of quality control including the roles and responsibilities of project personnel and the process by which all records associated with quality control are generated and managed.

The Contractor shall appoint a quality representative who shall have the appropriate authority and shall be the focal point of contact and co-ordination for all matters relating to quality during the performance of the Works.

The Contractor shall develop and submit to the Supervisor a detailed Quality Plan as to how he intends to provide the Works, in line with the requirements identified in a format to be approved by the Project Manager.



The Contractor shall develop and submit to the Supervisor detailed Inspection & Test Plans for the varying stages of the Works. The Contractors involvement shall be fully annotated and provision made within the plans for the Employer's involvement to be clearly identified and understood.

Where the Employer has given acceptance, either expressly or implied, to Quality Documents, they shall not be changed, revised, altered or amended without the further acceptance of the Supervisor.

The Contractor shall prepare and implement throughout the duration of the Works an audit schedule for all aspects in connection with providing the Works. The audit schedule should include as a minimum:

- Quality Plan,
- Quality Check lists,
- Quality Inspections process in the field,
- Record keeping,
- Records of SQEP and,
- Filing systems.

The Contractor shall submit to the Employer an authorised copy of the Audit Schedule.

The Contractor shall provide to the Employer, copies of all reports, including corrective actions, as a result of the audit and review activities undertaken.

The Contractor shall agree and subsequently implement any corrective action resulting from any visit to the Contractor's, sub-contractors or vendor's premises, carried out for the purpose of evaluation, or inspection of any part of the Contractor's arrangements.

The Contractor shall provide the Employer's representative with access to their premises and those of their sub-contractors and/or vendor's at any reasonable time for the purpose of evaluation, audit or inspection of any part of the Contractor's arrangements.

The Contractor shall maintain suitable and appropriate quality records, which shall provide documentary evidence that performance of the Work complies fully and satisfactorily with the requirements of this Contract.

Records and record indexing systems shall provide sufficient information to uniquely identify each record to the item and/or activity to which it relates. Record storage shall be safe and secure so as to prevent damage, deterioration or loss. Filing systems shall ensure that all records are readily retrievable.

The Contractor shall prepare two identical sets of the quality records. The original set shall be retained by the Contractor for a period of at least 12 years, or longer where identified by regulatory or statutory requirements, from the completion (i.e. the last payment) of Contract.

The second set of quality records shall comprise certified copies of the original certification, and shall be submitted to the Employer for acceptance within 14 days of Contract completion. This second set of quality records shall be provided in both hard copy and electronic format.

When the specified minimum period for retention of records by the Contractor has elapsed, the Contractor shall request written consent or agreement, as confirmation, for disposal instructions from the Employer with regard to the records.

The Contractor shall prepare a Project Quality Plan (PQP) and submits this to the Project Manager for acceptance 4 weeks after the Starting Date.

The PQP addresses the controls required and deemed appropriate.



Reasons for not accepting the Contractor's PQP can be that it is inadequately prepared or is not practicable, it does not incorporate the information which the Works Information requires and/or it does not represent a realistic approach for providing the Works

The Contractor shall ensure that any Subcontractor appointed by the Contractor shall operate a quality system allowing it to comply with the Contractor's quality management system and the Employer's quality requirements, in compliance with the Accepted PQP.

WI 620 Quality Meetings

Quality Meetings shall be held at intervals shown in section WI 835 of this Works Information.

The meeting shall be attended by the Project Manager, the Contractor, the Supervisor and Subcontractors (if required).

The meetings shall be chaired by the Supervisor and provide a forum for the Project team to make key decisions and report to the Employer. These meetings shall typically be a forum for all parties to raise any quality concerns, agree actions for resolution and then monitor the resolution through the Early Warning process.

The Supervisor shall issue reports to the attendees 3 working days prior to the date of the meeting. The format of such reports is determined by the Supervisor.

Minutes shall be issued by the Supervisor within 3 working days of the date of the meeting.



WI 700 Tests and Inspections

WI 701 Testing and Commissioning

Prior to the handing over of the project the Contractor shall carry out all tests as specified and issue the appropriate Certificate to the Supervisor.

WI 705 Inspections

For any commercial off the shelf item which is to be modified in any way the Contractor shall liaise fully with the Supervisor to permit examination, inspection or witnessing by the Supervisor of any manufacturing related activity. This may well include activity from placement of orders for raw material through to final packaging. Minimum notice of 7 working days shall be provided.

The purpose of the examination, inspection or witnessing is to permit the Supervisor to gain first hand assurance that all aspects of the scope of supply are being executed to meet the Works Information.

Any unsatisfactory performance shall be brought to the attention of the Supervisor immediately. The visibility of unsatisfactory performance shall be cascaded to the Contractor's suppliers.

WI 710 Tests and Inspections before Delivery

Inspection and testing requirements shall be in accordance with the Contract Specifications which are based upon relevant British and European Standards.

The frequency of inspection and testing shall be as defined within the relevant clauses of the Works Information and Specifications or the appropriate British and European Standards referenced therein. Where the frequency of testing is not defined within the Specification or British and European Standards, good engineering judgement is to be exercised in determining a suitable frequency.

WI 715 Tests of Equipment, Plant and Materials

Inspection and testing requirements shall be in accordance with the Works Information and Specifications which are based upon relevant British and European Standards

WI 720 Access for inspecting the Works

The Contractor shall allow the Supervisor access for the inspection and testing of the quality of the work, materials, exposed surfaces and spoils from the works. Access shall be arranged as necessary to any place of manufacture or process within the Working Areas, on or off-Site. Similar access shall be arranged for Subcontractor works. This inspection may include photographic and video recording of the works.

WI 725 Inspections and Test Certificates

The Contractor shall provide inspection/test certificates in accordance with the specification included within the Works Information Inspection and Test Plans (hereafter I&TPs) and quality assurance documentation.

In addition to inspection and test certificates, the Contractor provides certificates of compliance for completed areas of work, sections of work and at Completion.



WI 730 Tests and Inspections

The Contractor shall carry out and control its work in accordance with the accepted I&TP prepared as part of the Contractor's PQP of this Works Information. The Contractor shall record the completion of each Quality Control activity against the I&TP prepared for the project. I&TPs are to be agreed by the Project Manager prior to authorisation to commence works being granted.

The Contractor shall be responsible for and shall carry out all inspections, testing, commissioning and demonstrations required under these Work Instructions or by statutory regulations and for any related work for which it is considered to be normal custom and practice.

An examination of all Plant and Materials shall be carried out by the Contractor prior to the commencement of any test and inspection to ensure that it is in a suitable state to enable the test and inspection to be undertaken.

All inspections, testing and commissioning of new plant and equipment, systems and facilities shall be undertaken in accordance with procedures which are to be prepared by the Contractor and endorsed by the Project Manager.

The Contractor shall maintain a register of competent persons identifying the qualifications, approvals and experience for all of the personnel employed on the site by the Contractor or any of their subcontractors.

The format of the Inspection and Test Plans are to be as defined by the Employer and shall be in a style consistent with that used within the approved quality management system, providing that the I&TP makes clear reference to:

- Procedures and Method statements needed to carry out the work,
- Acceptance of standards in accordance with specifications, national standards and legislation,
- Requirements for samples, benchmarks, trials and prototypes,
- Records and other deliverables generated as part of the inspection and test process (including any document/form templates to be used),
- Who is responsible for implementing the planned arrangements,
- Who is responsible for certifying that compliance with requirements has been achieved and
- Include for hold, witness, review, inspections, notification points and any independent interventions/verifications by the Project Manager, Supervisor, Design Team, Subcontractors, third parties and stakeholder.

This section is to be read with the requirements for ITP's as stated in the section regarding Quality.

I&TPs are to be fully reviewed, specific interventions identified and then endorsed by the Project Manager, Contractor or Subcontractor as appropriate, throughout the course of the Works.

The Contractor shall give a minimum of 5 working days' notice of 'Primary Hold Point' inspections. A minimum of 72 hours' notice will generally be required for on-Site inspections for standard Hold points unless agreed otherwise by the Supervisor.

The Contractor shall submit to the Employer a Client Inspection/Test Witnessing Programme incorporated with a 5 week look ahead to enable the Employer's resources to be planned. The programme shall provide a checklist and summary of all key witnessing dates for the inspection, testing, commissioning and demonstration of equipment and plant.

All test results shall be logged by the Contractor on suitable test forms and procedures supplied by the Contractor. All test forms and procedures supplied by the Contractor shall be submitted for the approval of the Project Manager prior to use.



The Contractor shall prepare and implement a register of Inspection and Test Plans.

The energising of equipment shall only be undertaken, after, visual examination, statutory inspections mechanical insulation, continuity and earth integrity tests as appropriate are completed, by a competent person under the supervision of the Project Manager.

The Contractor shall undertake and be responsible for repeating any inspection, testing and commissioning procedures that may be required where this is necessitated due to a Defect.

WI 735 Management of Tests and Inspections

The Contractor shall implement the following inspection procedure:

- The Contractor shall maintain a record of all inspections carried out. This record shall be updated on a regular basis and issued to the Supervisor by the Contractor. This will be in the form of an Excel spreadsheet issued every two weeks and contain details of the inspections, discipline/trade, unique reference and the status,
- Each inspection item on the record shall reference back to the Accepted Programme,
- The Inspections recorded are those undertaken mutually by the Contractor's Supervisor as deemed necessary to monitor that the Works are provided in accordance with the Works Information. The inspections undertaken will include those which the Contractor has requested the Supervisor to undertake,
- The Supervisor shall include comments/observations on the record against each item. Where the element of work is clearly not completed and/or the Contractor has not requested an inspection the Supervisor only includes comments on the record in relation to significant Defects observed. Otherwise the Supervisor shall provide comments as necessary, including any Defects that have been observed and
- In updating the record on a regular basis this is intended to give the Contractor the opportunity to respond to comments raised in order to agree remedial actions as necessary, which the Project Manager must confirm in writing is acceptable.

If the Supervisor identifies a defect, he shall notify the Contractor by means of a Notification of Defect Certificate (NDC). The Contractor shall investigate the reported defects identified on the NDC and where appropriate raises its own NCR (Non Conformity Report) and records it on the NCR Register. The Contractor shall advise the Supervisor of his proposed action. Provided the Supervisor is satisfied with the Contractor's proposed action he closes the NDC. If the Supervisor is not satisfied with the Contractor's proposed action, he shall notify the Contractor accordingly, in writing.

If the proposed action constitutes a change to the Works Information, the Contractor shall raise a Compensation Event Notice (CEN) to the Project Manager in accordance with the Contract.

If the Contractor identifies a Defect, the Contractor shall notify the Supervisor, the Supervisor shall record it on the NCR Register and follow the procedure of proposed action as detailed above, being issued directly to the Project Manager for his information.

If the Employer identifies a Defect it shall be submitted to the Supervisor for review and the process where the Supervisor identifies a Defect shall be followed.

Where the Supervisor/Project Manager identifies and instructs a Hold Point, so that he/she can witness a test or inspection, the Project Manager or Supervisor shall accept or otherwise any inspection sheet or other record submitted by the Contractor in accordance with the Contractor's PQP.

The Supervisor shall produce and distribute initial site inspection reports following each site visit within 48 hours. Formal reports shall be issued within 7 working days of each site visit to the Contractor and Project Manager.



WI 740 Covering up Completed Work

The Contractor shall give at least 72 hours advance notice of such inspections unless a shorter period is agreed by the Contractor and the Supervisor. The Contractor shall not cover up such work until authorised to do so. Where the Supervisor fails to inspect the works within the agreed notification period, the Contractor shall notify the Project Manager should he wish to proceed.

WI 745 Opening up Works

As soon as possible after any part of the works or any materials or goods are known or appear to be not in accordance with the Works Information, the Contractor shall submit proposals to the Supervisor for opening up, inspection, testing, making good or removal and re-execution of such work. If the works are in accordance with the specification, then the Contractor shall submit costs in accordance with a compensation event



WI 800 Management of the Works

WI 805 Contractor's Management of the Works

The Contractor shall be responsible for the co-ordination, supervision and administration of his works including managing and co-ordinating the interfaces between all Subcontractors as may be necessary. The Contractor shall arrange and monitor a programme with each Subcontractor and Contractor as may be required and shall obtain and supplies information as necessary for co-ordination of his works.

The Contractor shall work with the Project Manager to ensure his works are co-ordinated with the works of Others.

The Contractor shall ensure that all Subcontractors are provided with copies of all relevant documentation including drawings and instructions issued by the Project Manager which relate to or affect the respective Subcontractor's work.

The Contractor shall co-ordinate the works of any two or more Subcontractors in connection with the Contractor's design portions with particular regard to the sequence and setting out of such work and any conflicts which may arise as a consequence of the detailed interpretation of Drawings by operatives on Site.

The Contractor shall supervise each element of the Contractor's design portions, to ensure that the design is being provided in accordance with the Accepted Programme and thereafter to ensure that the work comprised in each element is being undertaken in accordance with the design.

WI 810 The Contractor's Integration with the Project Manager's core team

The Contractor shall demonstrate though the Accepted Programme where required by the production of construction management strategies and plans, on how he proposes to manage the works.

WI 815 Communications

The following provides an overview of the project structure and communication arrangements for the project.

Communication Framework

Generally

All communications are to be as clear and concise as possible. To avoid loss or confusion regarding written correspondence all letters and emails should have as the accepted name of the project as their primary reference. They should be addressed for the attention of the identified key person within each organisation and must clearly indicate the distribution that has taken place. Sub-titles identifying the subject of the correspondence are to be used as appropriate.

Email/Facsimile transmissions should be used where speed of communication is important, but 'hard copy/copies' should be sent where requested by the Employer or his Project Manager.



Circulation/Lines of Correspondence

The lines of communication for the project shall be as follows:

- The Employer will communicate with the Project Team members via the Project Manager,
- All correspondence with the Employer from the Project Team (unless specifically requested otherwise) will be from or via the Project Manager,
- The Contractor and their team will communicate directly with each other and copy all relevant correspondence to the Project Manager and,
- Sub-consultants, suppliers and manufacturers will (unless specifically requested otherwise) communicate directly with and through the Contractor.

Communications originating from the Contractor

The Contractor shall generate all its communications using approved pro-forma's. Documents will then be uploaded onto the Contractors own document management system, as necessary.

All forms of communication shall have a unique reference and be issued in an electronic format by way of e-mail and hard copy to both the Employer and the Project Manager.

Communications originating from the Employer

The Employer will generate all its communications using its own Document Management System and will issue all forms of communication by way of e-mail or in hard copy.

The Contractor shall be responsible, upon receipt of such communications for uploading these into its own Document Management System.

The Contractor shall ensure that an accurate record is kept of dates of receipt for communications. All communications shall be signed and returned by the Contractor within two weeks of receipt.

Hard copies of communications will only be issued under the following circumstances:

- When required to do so by the Works Information or the Contract and,
- When issuing documents that cannot easily be electronically transferred and as agreed between the Employer and Contractor.

The name of the Project shall be the only project title stated on all documentation including all communications, meeting notes, and drawing title blocks. All communications should be entitled; PROJECT NAME: SUBJECT.

Communications originating from the Project Manager

The Project Manager shall generate all the Employers communications using its own document management system. All email correspondence shall be issued electronic format by way of e-mail or in hard copy.

The Contractor shall be responsible, upon receipt of such communications for uploading these into its own Document Management System.

The recipient shall ensure that an accurate record is kept of dates of receipt for communications. The originator is to keep a record of every communication issue date. All transmittals shall be signed and returned within 2 weeks of receipt.



Hard copies of communications will only be issued under the following circumstances:

- When required to do so by the Works information and,
- When issuing documents that cannot easily be electronically transferred and as agreed between the Project Manager and Contractor.

The name of the Project shall be the only project title stated on all documentation including all communications, meeting notes, and drawing title blocks. All communications should be entitled; PROJECT NAME: SUBJECT.

File Formats

The Employer has the capacity to view the following file formats:

- Microsoft Office Suite,
- Microsoft Project,
- Adobe Acrobat PDF and,
- AutoCAD DWG.

If the Contractor proposes the use of any other file formats for documents to be shared with the Employer, it will be the Contractor's responsibility to ensure that such files are converted to one of the above formats or that a suitable viewer is supplied to the Employer (with sufficient number of licences to meet the Employer's requirements).

Drawing Distribution and Approvals

The Contractor will be responsible for distributing design team drawings and other construction information to the Employer's Project manager and Supervisor.

The Contractor shall maintain a full set of up to date drawings on site to be available at all times for reference.

All drawings shall be issued along with a drawing transmittal sheet showing the following information:

- Project Title,
- Drawing numbers including revision reference,
- Date of Issue,
- Distribution and
- Number of copies issued and format of issue (Electronic, hard copy etc.).

Project Records & Files

All members of the Project Team should maintain their Project Records and files in accordance with the requirements of their respective organisations quality assurance procedures. Each party should hold a register of all incoming and out-going documentation, etc. issued or received by them.



Project Meetings

In order to maintain effective communication, it is important that regular meetings are conducted.

Meetings will be minimised in both duration and frequency. Careful consideration is to be given to the necessary attendees at each meeting. It is an aim that all meetings should have a brief agenda circulated to all participants at least 48 hours in advance and that minutes (preferably containing action notes) be distributed within five working days of any meeting. All minutes will be issued via email to all attendees and other relevant parties. Where corrections or clarifications are required to minutes these shall be forwarded to the meeting chair who shall issue amended versions of the minutes if required.

Generally, in respect of meetings, if team members wish to incorporate items on an agenda or table documents for discussion, then they should advise the Project Manager at least 48 hours prior to the meeting. Wherever possible, noted actions are to have realistic time limits put against them.

The Employer's Project Manager shall set up and distribute a schedule of all meetings for the project after discussion with the Employer and other members of the project team. This schedule shall be reviewed on a regular basis and amended as necessary. The intention is to hold all meetings with the same team on the same day of the week throughout the project and to plan meetings so that they are evenly distributed across the calendar. All project team members shall keep the Project Manager aware of any changes to the personnel attending the meetings.

It should be noted that in addition to formal meetings there will be an expectation from the Employer that the Contractor and relevant members of their sub-contractor team will attend all other meetings as required. The Contractor is to allow for attendance at these meetings.

Project Core Team

The Core Team will comprise, as a minimum, the following members:

- Employer,
- Employer's Project Management Team including Cost Manager and CDM-C
- Project Engineer
- Contractor including sub-consultants as required

The Core Team will meet formally every month to review progress and discuss key issues relating to the scheme. The fortnightly progress meetings will be arranged, chaired and minuted by the Project Manager. The meetings will generally be held on the same day of the week and at the same time for the duration of the project with all dates and times for meetings agreed at commencement.

In addition to the formal meetings there will be ongoing and regular communication between members of the team.

WI 820 Public Relations and the Media

The Department for Transport shall be the only interface between the Employer and the media with regards to this project.

Employees, Project Staff, Contractors and any subcontractors shall not, under any circumstances accept invitations to speak on TV or radio programmes, make statements to the press or any other media including the Internet or contribute to publications which may be deemed to be commenting on Company business without prior Acceptance from The Department for Transport.



Any media enquiries and requests that come directly to an Employee, Project Member, the Contractor or Subcontractor of the Contractor shall be passed immediately to the Project Manager and Employer's Representative who will immediately alert the Department for Transport. At no point will any Employee, Project Member, the Contractor or Subcontractor of the Contractor deal directly with the media, interact or talk to the media.

WI 825 Data Protection

With respect to the parties' rights and obligations under this Contract, the parties agree that the Employer is the Data Controller and that the Contractor is the Data Processor. "Data Controller", "Data Processor", "Data Subject" and "Personal Data" shall have the meaning as set out in the Data Protection Act 1998. "Process" shall also have the meaning given to it under the Data Protection Legislation but, for the purposes of this Contract, it shall include both manual and automatic processing.

The Contractor shall:

- Process the Personal Data only in accordance with instructions from the Employer (which may be specific instructions or instructions of a general nature as set out in this Contract or as otherwise notified by the Employer to the Contractor during the Term),
- Process the Personal Data only to the extent, and in such manner, as is necessary for the provision of the Services or as is required by Law or any Regulatory Body,
- Implement appropriate technical and organisational measures to protect the Personal Data against unauthorised or unlawful processing and against accidental loss, destruction, damage, alteration or disclosure. These measures shall be appropriate to the harm which might result from any unauthorised or unlawful Processing, accidental loss, destruction or damage to the Personal Data and having regard to the nature of the Personal Data which is to be protected,
- Take reasonable steps to ensure the reliability of any Staff who have access to the Personal Data,
- Obtain prior written consent from the Employer in order to transfer the Personal Data to any sub-contractors or Affiliates for the provision of the Services,
- Ensure that all Contractor's Staff required to access the Personal Data are informed of the confidential nature of the Personal Data and comply with the obligations set out in this clause WI 820,
- Ensure that none of Contractor's personnel publish, disclose or divulge any of the Personal Data to any third party unless directed in writing to do so by the Employer,
- Notify the Employer immediately if it receives:
 - » A request from a Data Subject to have access to that person's Personal Data or,
 - » A complaint or request relating to the Employer's obligations under the Data Protection Legislation.
- Provide the Employer with full cooperation and assistance in relation to any complaint or request made, including by:
 - » Providing the Employer with full details of the complaint or request,
 - » Complying with a data access request within the relevant timescales set out in the Data Protection Legislation and in accordance with the Employer's instructions,
 - » Providing the Employer with any Personal Data it holds in relation to a Data Subject (within the timescales required by the Employer) and
 - » Providing the Employer with any information requested by the Employer.



- » Permit the Employer or the Employer's Representative (subject to reasonable and appropriate confidentiality undertakings), to inspect and audit the Contractor's data Processing activities (and/or those of its agents, subsidiaries and Sub-contractors) and comply with all reasonable requests or directions by the Employer to enable the Employer to verify and/or procure that the Contractor is in full compliance with its obligations under this Contract,
- » Provide a written description of the technical and organisational methods employed by the Contractor for processing Personal Data (within the timescales required by the Employer),
- » Not Process Personal Data outside the European Economic Area without the prior written consent of the Employer and, where the Employer consents to a transfer, to comply with the obligations of a Data Controller under the Eighth Data Protection Principle set out in Schedule 1 of the Data Protection Act 1998 by providing an adequate level of protection to any Personal Data that is transferred and any reasonable instructions notified to it by the Employer.

The Contractor shall comply at all times with the Data Protection Legislation and shall not perform its obligations under this Contract in such a way as to cause the Employer to breach any of its applicable obligations under the Data Protection Legislation and

The Contractor shall indemnify and keep indemnified, the Employer fully against any financial penalties arising from or in connection with any breach by the Contractor or its Staff of any of the provisions of this Supplementary Condition No. 5 (Data Protection), or any misuse, loss or unauthorised use or disclosure by the Contractor or its Staff of any Personal Data or sensitive personal data (as defined by the Data Protection Act 1998) relating to any person, where such misuse arises in connection with the Contractor's provision of the Services or the performance of its obligations under this Contract.

WI 830 Reporting procedures

Contractor's requirements

The Contractor shall report to the Project Manager on the following items during the execution of the works on a monthly basis. Some of the items listed below are covered under other sections of the Works Information, however, this section is aimed at providing an executive summary of the requirements.

The Contractor's report contains Contractor and Subcontractor information including the following as appropriate:

- Health, Safety and Environmental Reports including registers, schedules, and corrective action/initiative plans in line with the requirements detailed within this Works Information,
- Contractors Design Progress Report including reports from each of the design consultants,
- Status of programmes, working drawings and Acceptance status is to be provided,
- Overall Programme and Progress Reporting for all activities,
- Construction Progress Report,
- Quality Reports including progress of inspections, Acceptances and auditing,
- Financial/Cost/Contract Administration Reports,
- Procurement Programme and Reports for design and Subcontract packages,
- Testing and Commissioning Report,
- Subcontract Execution and Status Reports,



- Risk Register Updates and Status Reports,
- Handover Plans and Reports,
- Health and Safety File Compliance Registers and Reports,
- O&M/As Built/Asset Information Schedules, Registers and Reports and
- Disputes.

WI 835 Meetings to be attended by the Contractor

Meeting Topic	Frequency of meeting	Timing of meeting & location
Progress Meeting	Every two weeks	Normal Working Hours – TBA Site. A maximum of 1.5 Hours per meeting.
Environmental Health & Safety Meeting	As required	Normal Working Hours – TBA Site. A maximum of 1 Hours per meeting.
Quality Meeting	As required	Normal Working Hours – TBA Site. A maximum of 1.5 Hours per meeting
Commercial Meeting to include Compensation Events/ Change Control/ Risk Reduction	As required	Normal Working Hours – TBA Site. A maximum of 3 Hours per meeting

WI 840 Liaison Meetings

The Supervisor shall hold liaison meetings, as required, with the Contractor’s site staff to assist in the timely resolution of ongoing quality issues, including those recorded on the record of inspections. The frequency of these meetings is determined on the record of inspections and it is envisaged that they would be on a weekly basis. No formal minutes are taken but action notes shall be recorded for outstanding quality issues requiring resolution.

WI 845 Risk Management for the Project

Risk is associated with every project, and the successful management of a project cannot rely on the absence of all risk. Risk is managed by an iterative process of identification, assessment and response. Risk Management is also the joint responsibility of the Project Manager and the Contractor, and the risk management process comprises several integrated and iterative processes.

The project team works together to identify risks (future opportunities, risks and threats) and issues which exist as uncertainties.

The Contractor and the Project Manager identify risks and issues for the Project Risk Register.

The Risk Register is a standard format applied uniformly across the Project.

Risks are categorised by type, source and impact and assigned a Risk Owner responsible for managing the response and monitoring status of the risk and response actions.



WI 850 Risk Assessment

Risks and issues are qualitatively and quantitatively assessed as soon as possible following identification to determine their inherent exposure. Risks and issues are assessed for their potential to affect the Contractor's ability to provide the works or affect the Project Programme. These assessments shall be reported immediately by the Contractor to the Project Manager and vice versa.

Qualitative assessment includes determination of probability and impact, in terms of time (programme) and cost,

Qualitative assessment is also performed in terms of Quality/Fitness for purpose, (as defined in the Contract), Sustainability, Legacy, Health & Safety, Security and Reputation,

Quantitative assessment is performed in time to support costing of the design and

Ongoing re-assessment is undertaken as required by the Contractor and Project Manager to determine current exposure, at regular intervals.

WI 855 Risk Response

Risks and issues on the Risk Register are managed jointly by the Contractor and Project Manager in a pro-active manner.

A response strategy and action plan is identified for each risk by the Project Manager in liaison with the Contractor,

An assessment based on the response strategy and action plan is performed to determine target residual exposure by the Project Manager,

Control actions are identified for, and implementation responsibility assigned to the person (Action Owner) best placed to undertake the action(s). The Project Manager instructs accordingly,

Post-Control action assessments are performed to determine if further actions are required by any party and

Contingency plans are developed for risks that cannot be reduced to an acceptable level.

WI 860 Risk Reviewing and Reporting

Risk status, including response action progress, is reviewed at least monthly at risk reduction meetings or as required by the Contract.

The timing and frequency of Contractor updates of risk status and for risk reduction meetings is specified by the Project Manager.

The Risk Register is updated following the risk reduction meeting.

Performance Status Reports are made to the Employer to inform him of the status of risk exposure in respect of the works and document observed trends in performance and emerging or resolved issues, changes in the assessment of risks, and to forecast planned and actual reductions in exposure, over time.

WI 865 Risk Management

The Contractor produces a Risk Management Plan to describe the process and responsibilities for its implementation. The Plan is updated as key dates of the project are reached, or as requested by the Project Manager and the Plan describes how the processes of early warning notices and compensation events are integrated.



The Risk Management processes continue until completion of the works with ongoing identification, assessment, response and review/reporting.

WI 870 Prohibited and Controlled Items

Prohibited Items

The Contractor's Personnel are not permitted to bring any of the following items onto any of the Employer's sites and or any of the construction areas:

- Explosives, firearms and offensive weapons and/or
- Alcohol and controlled substances that are not prescribed.



WI 900 Working with the Employer and Others

The Contractor will cooperate and coordinate the Contractor's own works with the Employer and Others.

WI 905 Sharing the Working Areas with the Employer and Others

In accordance with requirements of Clause 25.1 of the contract, the Contractor co-operates and shares the site and/or the working areas with various parties, including authorities and utilities providers, as may be required.

The Contractor will work with the Project Manager through weekly planning meetings to ensure effective and efficient working and access to the site and/or working areas.

The Contractor shall co-ordinate and co-operate in all aspects of the works as required by the Project Manager and will work with the Project Manager's team to interface, co-ordinate and complete the works.

WI 910 The Contractor's Personnel at the Employer's Establishment

The Contractor shall have no claim against the Employer for any additional cost or delay occasioned by the closure of the Employer's facilities, for public holidays, industrial action, or Stand Down Days, where these are made known to him prior to placing the Contract.

The Contractor shall, except as otherwise provided for in the works, make good or, at the option of the Employer, pay compensation for all damage occurring to any of the Employer's property, which includes land or buildings, occasioned by the Contractor or the Contractor's Personnel, arising from his or their presence on the Employer's establishments in connection with the works, provided that these requirements shall not apply to the extent that the Contractor is able to show that any such damage was not caused or contributed to by any circumstances within his reasonable control or of that of the Contractor's Personnel.

All property of the Contractor while at the Employer's Establishment shall be at the risk of the Contractor, and the Employer shall accept no liability for any loss or damage howsoever occurring thereto or caused thereby, except as follows: -

- Where any such loss or damage was caused or contributed to by any act, neglect or default of any of the Employer's, agent or contractors. The Employer shall accept liability therefore to the extent to which such loss or damage is so caused or contributed to as aforesaid; and
- Where any property of the Contractor has been taken on charge by the Employer, and a proper receipt has been given therefore, then the Employer shall be liable for any loss or damage occurring to that property while held on such charge as aforesaid.
- The Contractor shall pay to the Employer the cost of damage incurred by the Employer in excess of normal wear and tear caused by the execution of the Contract.

For the duration of the work on the Employer's site by individuals from the Contractor, such individuals shall follow all processes, procedures and policies of the Employer and any and all additional instructions the Employer may issue from time to time.

The Contractor shall ensure that property belonging to the Contractor or subcontractors to the Contractor engaged in the performance of the Contract (including plant, equipment and tools etc) brought onto the Employer's site, is safe, used in line with the Employer's site rules and procedures and shall be marked with the Contractor's name (or the name of the hirer in the case of hired plant). Any equipment not marked in accordance with this condition may be deemed to be the property of the Employer.



The Contractor shall not remove, procure, arrange or otherwise facilitate the removal of property from the Employer (unless with the prior written consent of the Employer) other than property belonging to the Contractor and engaged in the performance of the Contract.



WI 1000 Services and Other things to be Provided

This section of the document explains the facilities and services to be provided by the Contractor and the Employer to allow the works to be executed between the starting date and the completion date.

WI 1005 Services and other things for the use of the Employer, Project Manager or Others to be provided by the Contractor

Facilities and services to be provided by the Contractor for use by the Employer from the starting date until the completion date are as follows:

- Provision of waste skips and emptying,
- Utilisation of first aiders,
- General access scaffolding and edge protection to all work areas,
- Delivery of safety training in conjunction with the Employer,
- Temporary electrical works,
- Signage and
- Cleaning the works area and welfare facility.

The contractor shall ensure the security of the site is maintained, and shall provide all necessary padlocked entrances and ensure they are closed when not in use and locked whenever the site is unattended. The Contractor shall also ensure that no access is gained to the site during working hours by unauthorised persons and the contractor will maintain a pass system and keep daily records of site access.

Lighting and Power

Power will be provided free of charge to the Contractor and should be taken from the agreed suitable points in the building close to the areas of work.

Location of supply point: to be identified by the contractor.

Point of supply: to be identified by the contractor.

Available capacity: TBA.

Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

Additional lighting and power requirements will be provided via temporary power supplies organised and paid for by the contractor if required.

Water

Water will be provided free of charge to the Contractor and should be taken from the agreed suitable points in the building close to the areas of work.

Source: to be identified by the contractor.

Location of supply point: to be identified by the contractor.

The Employer will not be responsible for the consequences of failure or restriction in supply.

Additional water supply requirements will be provided via temporary supplies organised and paid for by the contractor if required.



Telephones

The Contractor is to provide a suitable number of mobile telephones as soon as practicable after the start on site for joint use by the Contractor and Subcontractors and pay all charges.

Beneficial use of Installed Systems

Unless specific permission is given by the Employer and installer, the Contractor is not to use permanent systems for any purpose other than running in, testing and commissioning.

If permission is given for any other use of a system before the Works are accepted as complete, it must be subject to a separate written agreement between the parties.

Personal Protective Equipment

The Contractor is to provide for the sole use of those acting on behalf of the Employer, in sizes to be specified:

Safety helmets to BS EN 397, neither damaged nor time expired, high visibility waistcoats to BS EN 471 Class 2, safety boots with steel insole and toecap to BS EN ISO 20345, disposable respirators to BS EN 149.FFP1S, eye protection to BS EN 166, ear protection - muffs to BS EN 352-1, plugs to BS EN 352-2 and hand protection - to BS EN 388, 407, 420 or 511 as appropriate.

Site Accommodation

There is no requirement for the Contractor to provide a site office for Contractor's purposes. No dedicated office is required for the Employer's representative. Toilets for Contractors will be allocated in the basement area of the front wing.

Other

The Contractor shall provide all required medical and first aid facilities required to comply with statutory requirements.

The Contractor is to provide a full colour site signboard in accordance with WI 291.

The format and appearance of the signboard shall be approved by the Project Manager.

The Contractor is to provide all directional signage required to allow sub-contractor vehicles and deliveries easily find the site.



WI 1100 Health and Safety

WI 1105 Introduction to Management Arrangements

This project will adopt an Incident Injury Free/Target Zero initiative.

WI 1110 Management Arrangements

The Contractor shall take all reasonable precautions to work in a safe manner, prevent, reduce and control risks to health, safety and the environment in all-working practices and activities pursuant to the Works and ensure or secure compliance with any relevant statutory provision. The Contractor and all of its Subcontractors as a minimum shall comply with the requirements as detailed therein and set out in the Construction Phase Health & Safety Plan.

The Contractor shall only nominate, appoint or otherwise engage any Sub-contractor or Self-employed person for the performance of, or in relation to, the Works with the acceptance of the Project Manager. The Contractor shall ensure and fully demonstrate, with due regard to the nature and extent of the Works, that such work or operations are only carried out by competent persons.

WI 1115 Health, Safety and Environment Requirements

The emphasis is on effective planning, communication and team work to ensure risks are identified and managed. The Employer actively promotes a culture whereby there is no activity carried out on its sites which cannot be undertaken with full regard and adherence to its Safety Requirements Documents.

Safety, Environment, Health, Quality and Security issues at the Employer's site are paramount. The Employer requires that all activities undertaken on the Employer's site or goods supplied to it are done so in a safe, efficient and environmentally conscious manner.

The Contractor shall ensure the reduction of HS&E risk and impact through design, by identifying options, Design Hazard Risks in compliance with the CDM Regulations 2015 and evaluating them by taking Health, Safety and Environment implications fully into account.

The Contractor shall also optimise positive and minimise any potential adverse impacts on land, water, noise and air quality through design and site operations and good practice.

The Contractor shall comply with approved Site Waste Management Plan which will confirm the waste streams and waste objectives and requirements.

WI 1120 Health, Safety and Environment Requirements

The Contractor shall obtain the prior written acceptance of the Project Manager to the introduction or disposal of any dangerous or hazardous (or potentially dangerous or hazardous) substances or processes to or from the Site and shall comply with all arrangements specified by the Project Manager in this respect.

WI 1125 Assurance Events Reporting

All incidents, accidents, near misses and injuries, no matter how trivial, shall be reported in accordance with the to the Project Manager. The Contractor shall use the Employer's arrangements as supplementary to their own incident reporting arrangements. Where the incident or accident is reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (1995) RIDDOR the Contractor shall supply to the Employer, a copy of statutory notifications, Form 2508, 2508A or otherwise, within ten calendar days of the Occurrence of the



reportable incident or accident. The Contractor is also to produce an OSHA report on a monthly basis.

WI 1130 Environment

The Contractor shall comply with requirements of ISO 14001 in addressing environmental aspects.

The Contractor shall issue to the Project Manager for approval 2 hard copies and 1 electronic copy of an Environmental Management Plan and Site Waste Management plan for the Works.

WI 1135 Registration, Evaluation and Authorisation of Chemicals (REACH)

Where REACH (Registration, Evaluation and Authorisation of Chemicals) Regulation applicable substances, preparations or articles are to be supplied, the Contractor shall ensure that the appropriate and accurate REACH pre-registration or registration is underway or complete and that the appropriate and accurate REACH documentation is made available to the Employer.

WI 1140 Work Authorisation

A Safe System of Work (SSoW) shall include (as required) but not be limited to and will be produced & presented by the Contractor in the following sequence:

- Title of Task; with unique reference & the date issued,
- Index,
- Location of work by level & area,
- A brief outline of the work to be done,
- Emergency Arrangements. This section contains the names, telephone numbers and building location of persons to be contacted in the event of an emergency. More importantly it also includes the telephone numbers of the emergency services for the site. It could also indicate who is responsible for contacting help in the event of an emergency and the location of the nearest telephone other communications devices, fire-fighting equipment and first aider,
- Supervisory arrangements are to be made clear and state who is responsible for supervising the task and any competence requirements for the operatives,
- Brief programme for the works including anticipated start date, duration etc.,
- Scope of work/task/operation and specific method statement (not generic). The method statement covers the work to be carried out. It does not cover the core skill of the operator carrying out the works; i.e. it may call for a weld to a specific standard but it will not describe how to weld to that standard. Details of the task/operation/process referred to in the scope of work, sequence of work/task/operation and work area are to be clearly identified with references to drawings, sketches, grids, elevations, etc. In brief, this section describes exactly how the work will be done so that supervisors or operatives can read through the sequence of events and ensure that where any Hold Points have been identified, they are observed and verified prior to moving on to the next work step.
- Risk Assessment.
- Risk assessments specific to the works,
- Manual Handling,



- COSHH assessment,
- COSHH data,
- Personal Protective Equipment (PPE) requirements are identified here through the information provided on the PPE Assessment. Where multiple work phases are expected, it should clearly define what PPE is required for each activity,
- RPE,
- Noise exposure,
- Existing services identified,
- Details of temporary services required,
- Excavation measures required and
- Confined space method statement risk assessment included.
- Environmental Controls. Included within this section is information regarding any necessary control measures relating to the protection of the environment such as bunding for the bulk storage of hazardous substances or clearance certificates for the disposal of contaminated spoils or arrangements for dealing with flammable materials and waste,
- Schedule of plant and Plant/Equipment Inspection. The inspections are to form a hold points within the SSoW,
- Lifting Study, any special lifting attachments, crane certification, plant operators certification, plant certification, equipment data and crane method statement risk assessment included,
- Scaffolding Method Statement Risk Assessment,
- Permits to work required,
- Demarcation, schedule of arrangements for demarcation, controls for the safety of third party. Is the assessed high risk or safety critical phases identified with controls specified? Assessment of the risk due to overlap with other Subcontractors, visitors, client personnel, members of the public, clients' operation,
- Schedule of Hold points and
- Acknowledgement of SSoW by the operatives signed and dated correct.

ALL personnel are to wear the correct and defined Personal Protective Equipment (PPE) whilst visiting or working on the Construction Site.

WI 1145 Health and Safety Requirements

The Contractor must comply at all times with the Health and Safety at Work etc. Act 1974, the regulations made under the Act including but not limited to the Management of Health and Safety at Work Regulations 1999, and all other health, safety and welfare requirements applicable to the works subject of this contract.

Product data sheets giving details of any hazards associated with products used in providing works under this contract must be supplied on request to the Project Manager.

The Contractor's health and safety policy together with specific risk assessments (or method statements incorporating risk assessment or safe working procedures as the case may be) submitted to the Employer form part of the contract and the Contractor is to comply therewith at all times when carrying out the works.

Whilst on premises controlled by the Employer, the Contractor is to ensure that his employees, Subcontractors and agents comply with the lawful requirements of the Employer, including the Project Manager's requirement to monitor the Contractor's health and safety periodically. The



Contractor also ensures that his employees, Subcontractors and agents observe any local arrangements for fire, health, safety, welfare, hygiene and security.

The Contractor is to ensure that a suitably competent person is responsible for health and safety matters as required by law, for the duration of the contract.

The Contractor is to report all serious accidents and incidents (including those reportable to the Enforcing Authority under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995) that occur as a result of carrying out of the contract to his employees, sub-contractors, agents, or members of the public, to the Project Manager and CDM-C.

The Project Manager is empowered to suspend the provision of the works if the Contractor fails to comply with any legal requirements stated in the above clauses or within any contract specifications.

The Contractor is not to resume provision of the works until the Project Manager is satisfied that the non-compliance has been rectified. In respect of any such period of suspension, the provisions for default as set out in this contract shall apply.

The Employer will not incur any liability under the contract as the result of any action taken by the Project Manager to suspend provision of the works in the event of non-compliance by the Contractor.

Communication and Liaison

All those in control of construction work are required to provide workers (including the self-employed) under their control, with any information that they require to carry out the work safely and without risk to health.

The Contractor shall ensure that all workers are provided with a suitable, site specific induction to inform them of the arrangements for health, safety and welfare at their work site. This should include any relevant findings resulting from risk assessment, including risks arising from activities of other operatives working nearby. Site rules should be explained along with the procedures to be followed in the event of any worker finding themselves in a position of serious and imminent danger.

Arrangements for worker engagement on site should always be tailored to the size and nature of the project and risks involved. On smaller sites, informal arrangements for collecting workers' views can be effective; e.g. by arranging reviews of method statements immediately before the work itself is carried out.

Contractors may need to make special arrangements for workers for whom English is a second language, or who are unable to read English/have literacy difficulties. These could include provision of translation, use of interpreters or replacing written notices with clearly understood symbols or diagrams.

The Contractor has a specific duty to make and maintain arrangements to enable effective co-operation and consultation between themselves, contractors and workers. Arrangements made in respect of co-operation and consultation with workers on site should be recorded by the Contractor and included in the construction phase plan. Such arrangements will require regular review and updating, as circumstances on site change.

Such arrangements need to cover all workers effectively, including those who may only be on site for brief periods. The arrangements should be proportionate to the size and complexity of the work, the scale of hazards and the size of the workforce.

The Contractor shall implement a range of mechanisms to ensure that on-site consultation is effective. This could include regular consultation meetings, consultation during inductions, daily briefings, toolbox talks, etc.



Site Security

The Contractor shall have sole responsibility to ensure the sites are secured throughout the duration of the works.

In order to protect the general public from on-site activities, a detailed description of security arrangements including; hoarding, fencing, signage, signing in and out procedures etc. are to be included in the construction phase plan. The Contractor shall provide suitably robust demarcation between the works and public and office areas. All site security measures should be in accordance with HSG151 – 'Protecting the Public – Your Next Move'.

Site security procedures are to be included within the Contractor's construction phase plan.

Welfare Provision

Welfare arrangements are to be in accordance with the CDM2007 Regulations and are to be commensurate with the site undertaking.

The Contractor shall provide a proposal for the temporary minimum needs of the welfare facilities to enable the contract works to be complete. The Contractor shall confirm exact proposals with the Project Manager.

All facilities are to be accessible and are to have adequate heating, lighting and ventilation. Proposals for the location and layout of temporary site accommodation, welfare facilities, storage and loading/unloading areas etc. are to be included within the Contractor's construction phase plan.

Site Access and Egress Points

Proposals for Contractor site access and egress points are to be included within the Principal Contractor's construction phase plan.

Consideration should be given to the existing access or means of escape for other users at any time.

No Go Areas and other Authorisation Requirements

Third party properties within close proximity to the site will require special consideration when compiling the construction phase plan.

Where necessary the local authority should be consulted and under the Control of Pollution Act 1974 a Section 61, 'Consent to Statutory Nuisance' should be submitted as required.

The Contractor shall ascertain any pertinent restrictions from the local authority prior to commencing works (i.e. any restrictions on times authorised for works which are audible at the site boundary).

The Principal Contractor must specify, in the construction phase plan, any details relating to authorisation requirements including associated road and pavement closures (if applicable).

Site Transport Arrangements and Vehicle Movement Restrictions

Movement of onsite vehicles is to be closely monitored and a suitable and trained banksman employed.

Assessments are to be made where the movement of vehicles on site affects either public activities or other site activities. Suitable demarcation should be maintained by the Contractor to separate vehicle and pedestrian routes at all times throughout the duration of the project. The Principal Contractor shall confirm access routes and parking areas on site with the local authority prior to works commencing.



Fire Precautions

A competent person shall be appointed to act as a Fire Marshal and the proposed fire emergency procedures included within the construction phase plan. The adopted procedures are to be brought to the attention of all workers and visitors to the site. The Contractor is to provide suitable fire-fighting equipment and is to maintain an emergency evacuation procedure throughout the progress of the works. Note must be taken, when formulating the fire plan, of any existing systems that are operated within third party properties. The fire plan should comprise, but not be limited to:

- Means of escape indicating escape routes (to be displayed),
- Means of extinguishing fire (operatives to be trained),
- Means of minimising risk,
- Hot work permit procedures,
- Emergency procedures, including details relating to site employees, if any and
- Name of the Fire Marshal (to be displayed).

All works undertaken on the premises should be in accordance with the article 'Joint Code of Practice Fire Prevention on Construction Sites and Buildings Undergoing Renovation'.

Fire precaution procedures are to be included within the Contractor's construction phase plan.

Emergency Procedures and Means of Escape

The site emergency routes and exits are to be marked on a plan of the site, included by the Contractor in the construction phase plan and communicated to all operatives and visitors. All emergency routes are to remain open throughout the duration of the works.

An Emergency First Aid Notice shall be displayed on site.

Procedures in respect of other emergencies are also to be described in the construction phase plan and communicated to all operatives and visitors. These should include (but not be limited to):

- Location and telephone number of local hospital Accident and Emergency (A&E) department,
- Location and telephone number of local police station,
- Location and telephone number of local ambulance station,
- Location and telephone number of local fire and rescue station,
- Emergency telephone numbers for statutory services and
- In the event of an environmental emergency, the Environment Agency should be contacted.

Confined Spaces

Where it is necessary to undertake work in confined spaces, as defined by the Work in Confined Spaces Regulations, the appropriate controls as set out by these regulations must be strictly observed. The Contractor shall implement a safe system of work for any operation to be undertaken within a 'confined space'. This must be communicated to all operatives engaged in the task and a permit-to-work system introduced. The Contractor shall also refer to the HSE publication INDG258, 'Safe Work in Confined Spaces'.

Confined space procedures are to be included by the Contractor within the construction phase plan.



Smoking Restrictions

The Health Act 2006 (amended 1 July 2007) requires that all enclosed premises in England be smoke free.

The Contractor must ensure that all requirements of the aforementioned Act are adhered to at all times.

Parking Restrictions

The Contractor shall make themselves aware as to whether there are any specific parking restrictions imposed on contractors by the local authority.

Boundaries and Permanent/Temporary Access

The Principal Contractor shall ensure that residential third party boundaries to the site are clearly understood prior to works commencing.

Delivery, Waste Collection or Storage Restrictions

In accordance with environmental legislation, all waste generated from the works shall be, where practicable, segregated and disposed of to a licensed tipping facility utilising registered and licensed waste disposal contractors.

A site waste management plan must be in place, prior to works commencing, for all projects with construction cost in excess of £300,000. All waste removed from site must be recorded, and the plan retained for two years, following practical completion.

In the case of hazardous waste, all products shall be removed and disposed of in accordance with relevant local enforcing bodies.

All licenses obtained and transfer notes shall be retained as proof of correct disposal.

Arrangements for storing, removing and the location of skips are to be included within the construction phase plan.

The Principal Contractor shall ensure, so far as is reasonably practicable, that site deliveries and collections are scheduled at suitable times during the day so as to avoid anti-social hours, school rush hours, work rush hours and local organised events where the volume of local traffic may increase.

Road and Traffic Systems adjacent to the Site

The Contractor shall take into consideration the health and safety implications posed by variations in the traffic systems. The following is a list of items for consideration; however, this list is merely indicative and not exhaustive:

- Double or single yellow lines,
- Blind corners,
- Narrow roads,
- Junctions,
- Bus stops,
- Pedestrian crossings and
- Parking bays.



The Principal Contractor shall be mindful of the need to work in harmony with the local community and observe local traffic restrictions which must be adhered to at all times. Where applicable, a pavement licence/consent must be obtained prior to erecting scaffolding and/or placement of a waste skip on the public highway.

Design Assumptions, Work Methods and Control Measures

The Principal Contractor, where applicable, shall take note of information provided by all designers and develop safe systems of working. Risk assessments and method statements shall be incorporated within the construction phase plan prior to executing any high risk/ hazardous operation.

Materials requiring Special Precautions

Materials to be incorporated in the works are subject to the requirements of the Control of Substances Hazardous to Health Regulations (COSHH) as amended. The Principal Contractor shall perform risk assessments for hazardous materials. The requirement is applicable to subcontractors and must be co-ordinated by the Contractor.

Caution should be exercised, however, when handling the various 'hazardous substances' which are commonly used. The Principal Contractor shall ensure that Material Safety Data Sheets (MSDS) are available and COSHH assessments undertaken. This information should be read and understood, plus, all control measures, as described within the COSHH assessments, should be put in place.

Particular activities involving materials which are hazardous to health need to be assessed. Method statements should be established prior to works commencing.

The Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) aim to protect people from the risks from fire, explosion and other similar events that may occur as a result of the presence or use of dangerous substances. DSEAR is principally concerned, therefore, with the safe use of substances that can create thermal radiation effects (burns) and over-pressure effects (blast injuries).

In summary, a 'dangerous substance' is any natural or artificial substance which is explosive, extremely flammable, highly flammable or flammable, including liquids, vapours, gases, dust and equipment that might leak or generate a dangerous substance. Such substances that are bought in commercially will be recognised by the standard pictograms on the container, e.g. Explosive – Oxidising – Flammable.

WI 1200 Sub-Contracting

WI 1205 Restrictions or Requirements for Sub-Contracting

Within 3 weeks of the Contract Date the Contractor shall provide to the Project Manager a schedule that clearly states which activities are to be subcontracted together with the name of potential suppliers and those that are to be undertaken directly. The Contractor may only revise this schedule with the approval of the Project Manager or when required by the Project Manager.



WI 1300 Title

WI 1305 Marking

The Contractor shall prepare Equipment Plant and Materials for marking as follows: (Clause 71.1)

- Separately identified, stored and marked as 'Property of IMO',
- The location where the Equipment Plant and Materials are stored in an area sealed off from the rest of the Contractors' production runs,
- Prepares and issues a detailed list of Equipment Plant and Materials,
- Takes out insurances on the Equipment Plant and Materials as required by the Project Manager and
- Provides appropriate vesting certificates for the Equipment Plant and Materials.

The Contractor shall take digital photographs for transmission to the Supervisor as proof of marking.

WI 1310 Materials from Excavation and Demolition

In accordance with Clause 73.2 of the Contract the Contractor has no title to any materials arising from excavations and/or demolition undertaken on Site, unless as expressly identified in the Works Information. Any need for removal will be only as instructed by the Project Manager.

The Contractor shall not salvage/reclaim materials unless prior acceptance of the Project Manager has been received which shall not be unreasonably withheld. The re-use/recycling of materials for providing the works which have been excavated or have been recycled as a result of demolition are permitted, with the acceptance of the Project Manager.



WI 1800 Contract Amendments

WI 1805 Retention (Option X16)

The retention percentage is 5%.

The Project Manager will release the final 2½% retention when the Defects Certificate is issued. The Project Manager will not be issuing the Defects Certificate until all 'As Built drawings and Operating and Maintenance Manuals' and all test procedures and certification required by the Works Information have been accepted by the Project Manager.

WI 1810 Limitation of Liability (Option X18)

Refer to the Contract Data.



WI 2000 Employers Work Specifications and Drawings

Please refer to the following information: –

- Troup, Bywaters + Anders Drawings and Specification in Appendix C

List of Drawings and Specifications:

Reference	Revision	Description	Dated
SPECIFICATIONS			
SpecT1	T1	Mechanical, Electrical and Public Health Design Specification	15 June 2017
DRAWINGS			
LV DISTRIBUTION UPGRADE			
18080-DB-B-00	T1	Basement Strip Out Works	15 June 2017
18080-DB-B-01	T1	Basement Proposed Works	15 June 2017
18080-DB-G-00	T1	Ground Floor Strip Out Works	15 June 2017
18080-DB-G-01	T1	Ground Floor Proposed Works	15 June 2017
18080-DB-01-00	T1	First Floor Strip Out Works	15 June 2017
18080-DB-01-01	T1	First Floor Proposed Works	15 June 2017
18080-DB-02-00	T1	Second Floor Strip Out Works	15 June 2017
18080-DB-02-01	T1	Second Floor Proposed Works	15 June 2017
18080-DB-03-00	T1	Third Floor Strip Out Works	15 June 2017
18080-DB-03-01	T1	Third Floor Proposed Works	15 June 2017
18080-DB-07-00	T1	Seventh Floor Strip Out Works	15 June 2017
18080-DB-07-01	T1	Seventh Floor Proposed Works	15 June 2017
18080-DB-08-00	T1	Eighth Floor Strip Out Works	15 June 2017
18080-DB-08-01	T1	Eighth Floor Proposed Works	15 June 2017



Reference	Revision	Description	Dated
EMERGENCY LIGHTING			
18080-EL-B-01	T1	Basement Proposed Works	15 June 2017
18080-EL-G-01	T1	Ground Floor Proposed Works	15 June 2017
18080-EL-01-01	T1	First Floor Proposed Works	15 June 2017
18080-EL-02-01	T1	Second Floor Proposed Works	15 June 2017
18080-EL-03-01	T1	Third Floor Proposed Works	15 June 2017
18080-EL-04-01	T1	Fourth Floor Proposed Works	15 June 2017
18080-EL-05-01	T1	Fifth Floor Proposed Works	15 June 2017
18080-EL-06-01	T1	Sixth Floor Proposed Works	15 June 2017
18080-EL-07-01	T1	Seventh Floor Proposed Works	15 June 2017
18080-EL-08-01	T1	Eighth Floor Proposed Works	15 June 2017
CONTROL PANEL WORKS			
18080-CP-02-00	T1	Second Floor Strip Out Works	15 June 2017
18080-CP-02-01	T1	Second Floor Proposed Works	15 June 2017
18080-CP-03-00	T1	Third Floor Strip Out Works	15 June 2017
18080-CP-03-01	T1	Third Floor Proposed Works	15 June 2017
18080-CP-07-00	T1	Seventh Floor Strip Out Works	15 June 2017
18080-CP-07-01	T1	Seventh Floor Proposed Works	15 June 2017
SUMP PUMP WORKS			
18080-SP-B-00	T1	Basement Strip Out Works	15 June 2017
18080-SP-B-01	T1	Basement Proposed Works	15 June 2017
18080-SP-G-00	T1	Ground Floor Strip Out Works	15 June 2017
18080-SP-G-01	T1	Ground Floor Proposed Works	15 June 2017



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