Scope of Works

The works comprise the demolition of the existing house and the erection of a replacement dwelling.

Delivering the above will involve:

- Demolition of the existing house.
- Foundations
- Erection of superstructure
- Use of external scaffolding around all four sides.

The scheme will provide a replacement dwelling.

The challenges for the construction team which are specific to this project are identified as:

- Ensuring demolition is handled safely.
- Achieving the quality of construction and workmanship required to realise the project's design concept and to meet the client's aspirations.
- Coordinating and liaising with the design team throughout the project to achieve the completion date.
- Ensuring that any disruption and disturbance to the adjacent property and the general public are identified at the earliest juncture and are suitably managed to ensure the safety of all effected parties.

This method statement sets out to demonstrate the Principle Contractor's ability to carry out the works in the optimum time, in the most viable and safe manner to achieve a completed project to the satisfaction of all parties involved.

General

This method statement has been prepared on the basis of the information issued to date and gives an indication of the general approach to the construction and management of the project.

The following text sets out the Principle Contractors intentions for managing and supporting the project and the particular approaches that will be taken for certain key aspects.

Certain areas of operation may be the subject of specialist considerations, and more specific and detailed method statements relating to these operations may be required at a later stage and as the project proceeds. If required these additional key method statements will comply with the requirements of the relevant regulatory bodies and will be prepared by the specific contractors involved.

Planning & Programme

The Project has been programmed to be completed within the 52 weeks in accordance with information set out in the design documents.

The project Construction Programme has been prepared and developed in consultation with the client, architect, structural engineer and current occupiers.

This is a critical path based system which allows the contractor to co-ordinate design, trade contractor design, design reviews, procurement, equipment/material orders, deliveries and site installation period as part of the Principle Contractors standard procedures.

The construction programme will be monitored, tracked and updated on a regular basis and any corrective action applied as necessary.

No phasing is required.

PRE-START INVESTIGATIONS

Site Logistics

The way in which the site is established and managed is critical to the success of the project.

In acknowledgement of the proposals the contractor will set up the site access arrangements as appropriate to this site.

It is proposed to erect scaffolding where works are to be carried out at height.

Loading towers will be erected to transfer building materials to the upper floor / roof levels to construct the roof. Where possible all lifting to upper levels is to be carried out within the site boundary and avoided being carried outside of the site boundary adjacent to the neighbouring houses.

Mobile elevating platforms will be utilized, where conventional scaffolding is unsuitable, to provide access for installation.

Site Management Establishment

The site management for the project will comprise a Site Manager who will lead the site team.

The Site Manager will be assisted and supported by appointed site based construction management personnel and will be responsible for Health & Safety (CDM 2015).

The site team will be supported and assisted by head office based staff.

Management and co-ordination of Services installations and trades onsite will be achieved by the Site Manager appointing approved qualified professionals to the project in consultation with the client and design team.

Security and Site Establishment

Plywood hoarding or Heras fencing will be erected on the site boundary, shown on the enclosed Site Logistics plan, to secure it during the contract period. These hoardings or fences will be maintained and adapted during the contract to suit any phasing of the works as required.

Temporary site accommodation and welfare will comprise of the Site Managers office, Meeting and Induction room, Canteen and Welfare facilities and will be formed within the contractor's working area, utilising the existing servicing points identified in the documents and shown on the drawings.

Further accommodation for sub-contractors will be sited as required.

Site Operational Hours

The site will operate strictly between 8am to 6pm on Monday to Friday and 8am to 1pm on Saturday. Sunday and Bank Holidays will have no on site operations.

Personnel

All personnel will be inducted prior to gaining access to the site. They will be informed of the specific site rules required in the preliminaries relating to this project as well as the site rules and the companies method statements.

Construction Personnel Parking

All personnel will be encouraged to use public transport. Bus time tables will be made available to all site staff.

Construction Traffic Management

The site benefits from good transport links and its vehicular access is off The Drive. Considering the wider road network context London can be accessed via a number of 'A' roads.

Construction service vehicles will access and leave the site from The Drive directly onto the B467.

It is considered appropriate, wherever possible, to avoid routes where vulnerable road users and construction vehicles could conflict.

The proposed works will not affect the existing access for refuse and emergency vehicles.

A banksmen will be employed throughout the course of the project to ensure safety of pedestrians and road users.

Site Access and Deliveries

Vehicular and pedestrian access to the site compound will be from The Drive. Delivery vehicles will be provided with directions to the site and be required to turn off engines to avoid nuisance upon arrival.

Delivery time will be limited between 9.30am and 3.30pm to avoid peak hour traffic in the area.

No construction vehicle shall be permitted to queue on the B467.

Delivery constraints will be identified to all suppliers and trade contractors.

Deliveries of materials, plant and equipment will be strictly controlled and co-ordinated to prevent congestion and disruption to traffic using The Drive.

Where deliveries overlap, a holding area in the local area will be established to prevent the local residential roads becoming blocked.

Signage

Adequate signage will be installed such that vehicle deliveries and access to the site are clearly defined within the general site geographical area.

A main construction signboard will be positioned in agreement with the Client.

Site signage will be provided within the curtilage of the site as necessary to advise operatives/visitors and delivery staff of safety requirements within the confines of the site and where to report on arrival. Such signage will include: -

- Accommodation / Access requirements
- Speed Limits
- Overhead / Underground Services
- Safety Helmet and Footwear Requirement
- Noise
- Danger Construction Site, etc.

Movement and Hoisting of Materials

Hoisting provisions will be as described under the logistics section of this method statement.

All vehicle movements and deliveries will be subject to the control of the contractor.

The storage of materials on site will be kept to an absolute minimum and therefore delivery scheduling will be carried out to ensure supply is on a 'just in time' basis only.

All concrete and screed deliveries will be proposed as 'ready mixed' and will be delivered to site in appropriate vehicles.

Concrete and screed placement techniques will be changed and adapted to suit the location and suitability of the equipment for its placement.

Storage and Handling

The contractor's site area, on the frontage, will provide the storage area for all plant and materials delivered to site.

Materials will be stored within the building, ready for the finishing trades, once the shell has been constructed.

More vulnerable materials/equipment will be stored in the secure containers or programmed on to site to be incorporated directly into the construction.

Waste Management

A waste removal strategy will be developed during the pre-commencement period. This strategy will be incorporated within all trade contractor orders.

It is proposed that rubbish skips will be provided within the contractor's site area, which will be removed and replaced on a regular basis. All trade contractors will be required to transport and deposit their rubbish within this provision.

Through continual professional development on each project the Principle Contractor is working towards a better understanding of waste management so the volume of waste to be disposed is reduced and segregation enables as much as possible to be recycled.

Scaffolding

Conventional scaffolding, where required, will be independent with boarded lifts to suit the nature, location and type of the particular operations.

All scaffolding will be securely tied to the structure and will include suitable ladder access.

Scaffolding will be provided, erected and maintained in accordance with all current statutory regulations. In addition brick guards will be provided on the 'live' lifts.

Suitable guard railing will be utilised to prevent falling from unprotected edges of the excavations, upper floors and staircases as applicable.

No person(s) other than a suitably certified and competent person(s) will be permitted to erect, alter, adapt or dismantle any conventional scaffolding.

Temporary Services

- Power supply will be provided from a builder's supply electric main.
- 110v power will be utilised throughout the building.
- Water will be provided direct from the mains system for use in the welfare facilities.
- All drainage will be connected to existing foul main.
- The site manager will be contactable via mobile telephone and data transfer capabilities.

Dust and Debris

The site will be kept clean and tidy at all times and will accord with all statutory requirements.

Particular attention will be given to preventing the contamination of adjoining roadways and existing water courses.

Wheel washing facilities will clean vehicles before they leave the site.

A road sweeper will be employed to remove debris on the pavement and road frontage.

Safety

Full recognition and regard will be taken in the management and execution of the project of the Construction Design and Management Regulations 2015.

All trade contractors are obliged to provide safety policies, plans and method statements and will be interviewed prior to order placement on all aspects of safety, health and welfare.

All sites are subject to random site safety checks, inspection and reports.

Employer's direct contractors will be required to accord and be subject to the same safety procedures and requirements as our own trade contractors and operatives, as outlined above.

Safety inspections will also include the works of the employer's direct contractors if appropriate.

Noise Control

Management of noise pollution and vibration control will be given a high priority.

Where the works are near occupied buildings we will ensure that acceptable levels of noise are adhered to as well as statutory levels imposed by the Environmental Health Officers.

Tree Protection - Preparation and Demolition

Method 1: WELFARE FACILITY (Aim of method: to facilitate compliance with HSE regulations whilst providing protection for trees during demolition operations and construction).

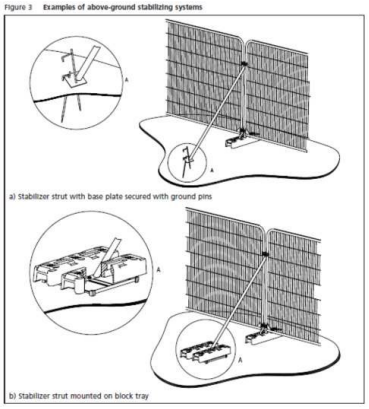
The placement in terms of whereabouts on site of the structure is flexible: no pruning of tree branches to accommodate the superstructure shall take place. No reduction whatever in existing ground levels shall take place in RPAs (orange shape/circles on plans). Timber bearers such as modern or re-purposed railway sleepers shall be laid directly on the ground surface.

Alternatively the floor and superstructure supporting frame shall be supported by micro-piles such as Stop Digging or Great British Ground Screw Company Ltd. proprietary or similar micro-piles inserted with hand tools only. Trial pits to determine micro-pile locations shall be dug with hand tools only. N.B. The precise location of piles is flexible. Probes such as screwdrivers or steel rod <10mm diameter to determine root presence ahead of digging shall be used. The work shall proceed cautiously. No roots over 20mm diameter shall be cut. No connection to services of any kind shall be made below ground level in RPAs (orange shape/circles on plans): all services in and out shall be above ground level.

Method 2: TREE PROTECTION FENCING (Aim of method: to provide protection for trunks, branches and roots during demolition operations and construction).

Tree protection fencing shall be erected, consisting of 'Heras' type fencing (weld-mesh panels), each section securely attached to uprights driven at least 0.6m into ground, as per the layout as shown on the plan (pink lines). No ground levels reduction or excavation shall take place within (the tree side of) the fence lines. The standard rubber supports ('elephant's feet') shall if used, be as per BS 5837:2012 section 6.2.2, figure 3, below; that is, pinned to the substrate with re-bar. No construction machinery on tracks or wheels shall enter the fenced-off zone(s).

Below the crowns of trees with branches extending to less than 2m above ground level, in order to avoid unnecessary pruning, it is permissible to replace sections with manufactured boards at least 11mm thick (hoarding), attached securely to timber uprights driven at least 0.6m into the ground, providing the finished fence stands at least 1.5m above ground level.



Where required to infill odd sections, tree protection fencing may be varied to >1.8m high hoarding of >11mm thick manufactured board and timber uprights >50mm x 100mm, no part of any of which is to be attached to any tree.

No fires shall be made on any part of the site, or within 20m of any tree to be retained. No storage of materials shall be made within (the tree side of) the protective fences. No breaching or moving of the protective fences shall take place without the approval of an arboriculturist.

Method 3: DEMOLITION (Aim of method: to prevent asphyxiation and contamination of roots during demolition operations).

This method shall apply generally. Any demolition shall be carried out with hand tools or hand-held power tools only. Arisings shall be removed for disposal off site. None shall be spread over roots of trees.

Tree Protection – Construction

Method 4: CONCRETE and MORTAR MIXING

This method shall apply generally near any tree. No concrete or mortar mixing shall take place unless within a fully bunded area with no outflow to any part of tree root system. Any slurry arising shall be pumped to an IBC or similar container and removed from site for disposal.

Method 5: SERVICE TRENCHES

This applies to ALL services: Electricity, gas, water, etc. Existing services shall be utilised wherever possible.

1) The trench shall be opened with an air-spade to required depth. Roots 20mm or more in diameter unearthed shall be temporarily protected with bubble-wrap and insulating or gaffer tape while rest of trench is dug. Services shall be worked under/over/around/between roots so as not to cut or damage any larger than 20mm diameter.

   Or

2) The trench shall be dug with hand tools only. Probes such as screwdrivers or steel rod <10mm diameter to determine root presence ahead of digging shall be used. The work shall proceed cautiously. No roots over 20mm diameter shall be cut. Roots 20mm or more in diameter unearthed shall be temporarily protected with bubble wrap and insulating or gaffer tape while rest of trench is dug. Services shall be worked under/over/around/between roots so as not to cut or damage any larger than 20mm diameter.

Tree Protection – Landscaping

Method 6: LANDSCAPING PREPARATION IN ROOT PROTECTION AREAS

This method shall apply after completion of main build only. Operations shall take place only after a minimum of 3 days after heavy rain, and shall where possible be carried out 7 days or more after such rainfall. Ground preparation within root protection areas shall entail use of hand tools only. The ground surface shall be thoroughly hand-forked over in vertical mode only to one spit's depth (250mm). Care shall be taken not to damage tree roots greater than 20mm diameter. Weed treatment if required shall be via BASIS qualified operatives. Surface debris shall be removed by hand to barrow and disposed of off-site. No wheeled or tracked plant shall be used: hand-held power tools may be used. (Outside root protection areas, mechanical cultivation shall be permitted.) The finishing soil horizon where additional planting medium is required shall be composed of biochar (see: https://www.soilfixer.co.uk/biochararticle) mixed with topsoil (to BS3882:2015 topsoil) - 5% by volume (equating to 20 kgs of product per cubic metre of topsoil), which shall be laid by hand-barrow: no mechanical plant shall over-run the loose-tipped material. All handling of soils/soil-mix shall take place only after a minimum of 3 days after heavy rain, and shall where possible be carried out 7 days or more after such rainfall. The mix shall be laid to finish to required levels and allowed to settle via mist irrigation / watering-in / natural rainfall. The ground surface shall be worked to a fine tilth with hand tools prior to planting. No mechanical compaction whatever shall be used. Levelling and minimal consolidation shall be by hand tools / foot and board only, or naturally. Earthworm Inoculation Units (see: https://www.wormsdirectuk.co.uk/product/wormcolonies-lawn-areas/) shall be placed with their tops 150mm below ground level at 5m intervals in all soil build-up areas. The units, which are typically cardboard, shall be earthed in and irrigated.

CONSTRUCTION

Initial Work

Prior to the commencement of the project works, the preliminary Health and Safety and Fire Safety Plan will be prepared. This plan will be progressively refined and developed as trade package contractors and specialists are appointed, and more specific and detailed methods, techniques and requirements are established.

The Principle Contractor's offices and welfare facilities, within the existing external storage room, will be set-up as shown on the Site Logistics Plan.

The temporary hoarding and fencing, as indicated on this plan, will be erected around the site before work commences and maintained throughout the Project. There will be separate site vehicles and pedestrian gates into the Principle Contractor's site compound area.

Strip-Out and Demolition

Internal services within the existing buildings will be isolated before stripping-out and demolition operations commence. Any existing fixtures or fittings to be retained will be clearly identified and arrangements made to place these in secure storage before work starts.

Demolition of existing internal partitions and ceilings will be carried out by hand. Operatives will be provided with appropriate personal protective equipment to prevent injury from dust and abrasion.

Noise and dust generated by the demolition works will be confined within the contractor's site area.

Where necessary temporary support will be installed before any demolition commences.

Temporary screens or dust protection at existing door openings will be provided within the existing structure to prevent the contamination of surrounding areas.

<u>Sub-Structure</u>

Trench foundations will be utilised on site.

If a foundation depth of more than 1,500mm is required, the excavations will be propped to allow for safe working at depths.

The excavation and installation of new drainage connections will be formed into the existing system in accordance with the drainage engineers design.

Superstructure

A new three-storey masonry and steel building will be erected. The ground floor will be a suspended insulated beam and block concrete floor. The first and second floor slabs are to be beam and block with screed.

Envelope

The walls will commence with the steelwork as required. External independent scaffolding will be erected where required to provide safe access for the roofing works. The brick walls will be built progressively in 1.5m lifts to full height, from new foundations up.

Hoisting would be by hand for the wall construction and roofing works, to pre erected scaffold platforms.

Internal Work

Internal carcass and first fixing by the finishing trades will commence once a weather tight environment has been achieved within the new roof, as indicated on the construction programme. Where necessary temporary weathering will be provided to window openings to prevent the ingress of wind and rain into the working area.

The ceilings are to be installed once the high level internal service pipework and trunking has been completed and tested.

The wall and ceiling finishes will be completed ready for final fixtures and fittings before the floor finishes are laid.

Mechanical / Electrical Services

A detailed fabrication, delivery and installation schedule will be prepared by the Mechanical and Electrical contractor, upon instructions to proceed, to ensure compliance with the overall contract programme. Builders work required for the new services will be defined at this stage for inclusion on the structural engineer's construction drawings.

Any high level conduits and pipework above ceiling level will be installed using safe access equipment.

Installation of light fittings, smoke detectors and fire alarm systems will be co-ordinated with the ceiling works. Where necessary some areas will be omitted at this stage to permit access for testing and commissioning purposes. Key dates for power and water supplies to be available within the building will be identified on the programme.

Testing and commissioning of specialist systems will be carried out by the specialist system supplier/installer and all test certificates will be issued.

On completion of the commissioning activities the complete system will be offered for demonstration and witness testing to the client.

Fitting-Out and Handover

Temporary protection to floor and wall finishes will be removed once the installation of all fixtures and fittings has been completed.

The building will be handed over to the Client during the last two weeks of the construction period.

Snagging, cleaning and inspection will be undertaken room by room and once completed each room will be secured in advance of the final handover.

The site offices will be demolished and the site compound will be removed during the last two weeks of the project.

Temporary site services will be isolated, equipment cleared, offices and plant removed prior to handover.

External Works

The hard and soft landscaping will be undertaken once the building envelopes have been completed and all access scaffolding has been removed.

CONSTRUCTION MANAGEMENT

Traffic and Transport Management

Access to and from the site is only available from The Drive which is an access road.

There is no onsite parking on this project during the construction period and any delivery of plant and materials will have to be planned and programmed accordingly with locals and traffic times.

The contractor will ensure that the planned deliveries of heavy plant and equipment will be coordinated will the locals so that there is minimal disruption and inconvenience to local traffic.

Load Booking and Management Scheme

Strict procedures for deliveries will be in place as queuing of delivery vehicles is not an option for this site.

The contractor will coordinate deliveries and collections to optimise the frequency of vehicle movements and reduce congestion. This will make more efficient use of the delivery vehicles.

The Site Manager will produce a programme of deliveries.

All companies delivering to site are to contact the Gateman one hour prior to departing their depot to confirm their allocated delivery slot.

If deliveries/vehicles arrive outside their allocated time, they may be turned away and the delivery organised for a different time. The contractor's representative will contact the supplier and reschedule an alternative slot.

Suppliers who abuse the system will be reprimanded and if they continue to abuse the system their contract will be terminated, and an alternative supplier will be sourced.

Suppliers and contractors are encouraged to optimise transport efficiency and minimise the impact from transport by adhering to the delivery plan. The contractor will maintain a register of approved suppliers that are used on its projects.

Avoiding Peak Hour Deliveries

As part of the procedure for the allocation of delivery times to suppliers, care will be taken to restrict the amount of vehicle travelling time to site within peak periods. The last delivery to site will be scheduled such that it can be offloaded and leave the site before the evening peak commences.

There will be times when deliveries will only be allowed to arrive on site early / late in accordance with local Lorry Control Schemes e.g. heavy plant (abnormal loads). These vehicles will be offloaded during the peak period and then leave the site once the peak period has ended. This allows greater efficiency in predicting delivery times. The local council will be given reasonable notice when these infrequent movements will be required.

Monitoring

Monitoring and the review of the procedures proposed in this plan will be carried out on a monthly basis or as required during the Health and Safety inspection carried out by the SHEQ Manager. This report will identify failures to comply with this plan and discussed with the Site Manager to action to ensure ongoing compliance.

Banksmen

The contractor's Banksmen will be posted at the site entrance to protect pedestrians or warn approaching traffic whilst marshalling wagons or delivery vehicles on/off the site.

The Banksmen will then temporarily halt traffic if required, to allow the vehicle to enter the site.

The Banksmen will adopt the same procedure when vehicles leave the site.

If at any time the number of Banksmen is considered inadequate the process will be reviewed and then number of banksmen increased, or the procedures adapted.

Unloading

Unloading of equipment and materials will be controlled and in accordance with the Manual Handling Operations Regulations 1992.

Flatbed delivery vehicles will have a handrail / edge protection system to be used when loading / unloading. Prior to leaving site the contractor's banksman will liaise with all delivery drivers and ensure records (waste tickets etc) are in place.

All containers will be totally enclosed or covered by nets/tarpaulins to prevent escape of dust or waste materials during transfer from site to authorised waste recycling/disposal centres.

Local Roads

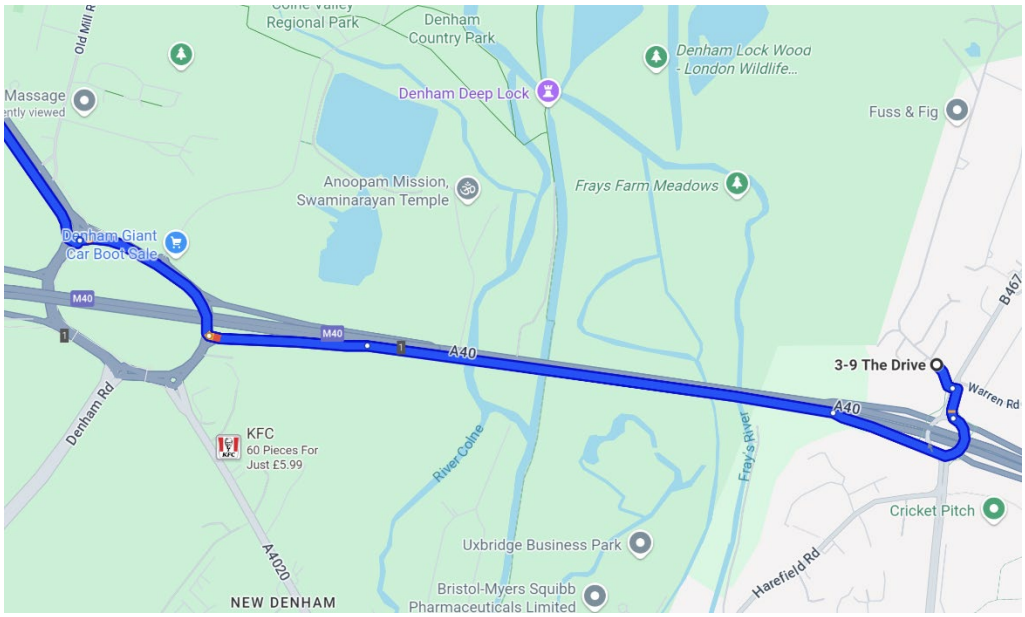
The roadway to the site will be regularly swept and monitored during the course of the working day to maintain cleanliness and to minimise the mess that vehicles leaving the site can cause.

Site and road conditions will be continuously monitored, and adequate facilities will be provided for wheel washing (jet wash) inside the site entrance on an area of hardstanding and road cleaning should it be necessary.

The water runoff will be contained within a bunded area and drain naturally through holes punctured in the hardstanding. No water from the wheel washing will enter the local highway drainage system.

Routes to Site

The route to site off The Drive which itself it just off the B467. The B467 is accessed from the wider road network as shown below.



FROM M25 / M40

FROM CENTRAL LONDON

Public Transport

The contractor will communicate the advantages of using public transport to all site personnel.

Details of the local bus and rail networks – identifying key routes to the project will be posted on site notice boards and will be covered in the site induction to promote the use of public transport if practicable.

Construction Programme

DEMOLTION	June 2025	Aug 2026
SUB-STRUCTURE	Aug 2025	Sept 2026
SUPERSTRUCTURE	Sept 2025	Mar 2027
FIT-OUT, TESTING & COMMISIONUNG	April 2026	May 2027

Handover Documentation and Client Training

In parallel with the construction phases we will put in place procedures for monitoring the progress of information production relating to the handover documentation to ensure it is available for handover.

Post Contract Support

Periodic monitoring by the Principle Contractor will enable early attention to unforeseen issues during the warranty period.

Protection of Completed Works

The sub-contractors will adequately protect all materials, equipment and finishes to the satisfaction of the Principle Contractor. To prevent damage arising from weather conditions, construction activities, or any other cause whatsoever during the progress of the sub-contract works and until the completion of the Project.

The required level of, and type of protection required to protect completed works will be agreed by all parties, in advance of any works commencing.

Contract Administration and Handovers

Throughout the contract the Principle Contractor will maintain the updated, tracked and monitored Construction Programme for the works. In order to ensure that the programme is adhered to the Principle Contractor will hold regular on-site progress meetings with Trade-contractors. At these meetings, other issues such as quality and safety will be discussed in detail to ensure that they fully comply with the contract requirements.

Prior to handover of sections of works the Principle Contractor will carry out their own snagging of the works, with the aim of achieving 'zero' defects at practical completion.

As built drawings, commissioning records and operation and maintenance manuals will be prepared prior to completion of the works.

Reporting Procedures

The following will be tabled for discussion at each internal site meeting;

- The status and progress recorded against the contract programme.
- Current updated Construction Programme with, if necessary, actions for bringing works into line with the Construction programme.
- Weekly labour and plant returns.
- A rolling schedule of approvals of all design, detailing and materials yet to be approved will be produced. This schedule will be updated on a weekly basis.
- A schedule of materials and projects manufactured off site, with status of percentage manufactured and anticipated delivery dates

Conclusion

The above method statement has been developed specifically to demonstrate the Principle Contractors understanding of the project requirements and the detailed methodology required to carry out a project of this nature.

It is not however all encompassing and prior to the commencement of each stage or phase of the construction works specific method statements will be produced, discussed and agreed with the relevant parties involved.