

Higgins Construction PLC

Construction Management Plan

67-72 Plender Street NW1 0LB

Revision 1

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Construction Management Plan

Authors

Nick Koster Contracts Manager, Keith Fisher Senior Project Manager & Shaun Nudd Design Manager

Higgins Construction; One Langston Road, Loughton, Essex. IG10 3SD.

Contact number; 0208 508 5555.

Introduction

This statement sets out Higgins PLC's approach to managing the construction-related impacts arising from the proposed development of a community centre, retail space and 31 apartments. The existing buildings on the site will be demolished and replaced by to new blocks 5 storeys high on behalf of the London Borough of Camden.

The focus of the Construction Management Plan (CMP) is to address the construction processes that will be used and also how to manage the impact of the project on the local/surrounding community. The plan will address issues such as construction methodology but more important for the local community such issues as impacts on air quality from dust and vehicle emissions, noise impacts, traffic impacts, hours of operation and site security and hoarding.

As a company Higgins PLC takes its responsibility to our clients very seriously but more importantly we recognise the fact that we are guests working in a community. We are aware that our presence though a temporary one will have an impact on the surrounding community and are committed to ensuring those impacts are minimised.

Brief Description

The existing site currently consists of five retail units, one doctors surgery, sports changing rooms and Bayham Place Garages.

The Planning approved scheme consists of the demolition of the existing shops, doctors surgery, changing rooms and garages, new construction of two number 5/6 storey blocks (A & B) consisting a total of 31 new residential apartments, one number retail unit (shell and core), a community centre and open space / play area.

The existing site is located adjacent to existing residential buildings, Richard Cobden Primary School and Community facilities. The site fronts onto Plender Street and the junction with Camden Street.

1 - Managing Construction Impacts

Higgins PLC will take the following steps to ensure the potential impacts on neighbours and the community are appropriately managed. Each of these steps will be managed on both sites in a similar manner but each site will have specific conditions that will need to be addressed to suit the site in question.

1.1 - Good Neighbour Policy

Higgins strive on all sites to be 'Good Neighbours' and put systems in place to ensure we understand any local issues and effectively communicate with the local population. The communications will commence before construction starts with a letter to all local residents giving information on the planned construction including time periods and contact details of a senior manager.

All Higgins sites are individually registered with the Considerate Constructor Scheme with the audit of each site being reviewed by senior management. A good neighbourly policy is viewed as one element of our obligation to act responsibly and help to elevate our Corporate Responsibility profile. Higgins PLC prides itself on how seriously we take the Considerate Constructor Scheme and this is borne out by the fact that our sites consistently win awards and recognition for our efforts from Considerate Constructors.

In addition to the Considerate Constructors Scheme Higgins PLC have a robust system of site management systems and protocols covering everything from initial site set up, through the construction process and right into the handover of the completed projects.

1.2 - Conduct of Operatives

Site specific inductions will focus on not only the onsite construction works but also the surrounding community. Operatives will be advised on how to behave on site and whilst interacting with the local area and its people. They will be advised that they will be representing the site. If they misbehave off site then it is a reflection on our site and they will be asked to leave project and not come back. Operatives will also be encouraged to engage the local community by using local public transport and amenities such as local cafes, shops, community gymnasiums etc. It has been the experience of Higgins PLC that our projects have a positive effect on the community as the onsite operatives spend money in local businesses and can often help to give community services a much needed short term financial boost.

1.3 - Working Hours

0800hrs – 17300hrs – Monday to Friday 0900hrs – 1300hrs – Saturdays No work on Sundays or bank holidays

As a rule Higgins PLC sites do not operate outside these hours unless site specific activities dictate that we must.

If we do need to work outside of the normal hours we speak to Camden Council in order to get their guidance on how best to approach out of hours working. It also ensures that if there are any concerns in the local community the Council Officer is aware of our site and our works and is able to answer their questions.

As a matter of course we always inform neighbours who will be directly affected or inconvenienced by our works in order to minimise the impact on them and to ensure that the have been considered in the process, via our monthly newsletter.

1.4 - Noise

In addition to controlling our working hours we also adopt a policy of keeping noise levels as low as we can manage for the specific work being carried out. We run a policy of consideration for our surrounding community by asking our operatives that come to site early and delivery drivers that come to site early to take into account that the surrounding community may still be in bed and that we do not want to disturb our neighbours. Simple considerations such as:

- Keeping voices and conversations outside of site offices and perimeters to a minimum and low in volume. No shouting or swearing.
- No banging of doors, gates, scaffolding.
- No machinery starting up on site before the designated site start times.
- No engines left running on vehicles waiting to be allowed onto site.
- Using low impact and low volume machinery and tools where possible. Noise suppression for all equipment to be a prime consideration not only for the operative occupational help but also reduce the noise impact for the surrounding community.
- Piling Please refer to section 1.8 below for specific construction methodology. The piling will be timed to cause the minimum disruption to the surrounding community. In addition the locals will be advised when our piling will be commencing and it's duration. The dates for starting and finishing will be highlighted in our month newsletter.

1.5 - Dust and Mud

Control of onsite dust during the warm weather and offsite mud in wet weather is a prime concern for all construction projects. As part of our occupational health systems Higgins PLC run a dust suppression policy for all of our projects. This applies to the single operative drilling a hole to dust being blown about the site in hot weather. We will constant patrol and review the site to ensure proper dust suppression is being used.

During very hot weather even the neatest of sites will generate dust that blows around the site. Higgins PLC use hoses to wet the site down in order to keep the site dust from being blown about and causing a nuisance not only on site but to the surrounding community. Water must not be sprayed profligately though, we are conscious of conserving water and also of creating mud by over-watering.

We will ensure that at all times vehicles leaving our site do so with clean wheels and make sure that mud is not tracked onto local roads causing both a nuisance and a danger to local motorists. All of our sites have a designated loading and offloading area which is also used as a wash down area for all vehicles. Vehicles are not allowed to leave our sites with dirty or muddy wheels.

The one way system will be constructed of hard standing (concrete and tarmac) and vehicles, either picking up waste or making a delivery will not be able to leave this access way, all waste will be moved around the site using machinery and then loaded onto the lorries for its removal, all deliveries will be off loaded from the access way using either hiab or tower crane, however should any spillage occur a mobile jet wash will be available at all times.

1.6 - Site Security and Hoarding

The site boundaries to the South, West, East and North will require full height hoarding to the length of Plender Street (1.4 meters of the footpath used to be used), 16m section of Camden Street (1.4M of the footpath to be used) finishing at the existing gates (licences will be obtained through LBC & TFL). Bayham Place on the south and west boundary will be hoarded off with no access from site.

The hoarding will have-

- One pedestrian access gate (Off Camden Street). A controlled and monitored access will be provided on to the site. This entry point will provide access and egress to/from the site set up area which is segregated from vehicle movements and the site works.
- One way vehicle access route will be provided access from Plender Street and exit on to Camden Street. Controlled by security/traffic marshals and locked when not in use with all unloading of vehicles taking place within the secure segregated areas within the site boundary. No loading / unloading will take place from the highway. Lorries will not be allowed to wait in the vicinity of the site.

1.7 - Highways, Traffic and Deliveries

Prior to the works starting consultation was held with both LBC & TFL in regards to egress onto the scheme (via Plender Street) and access off the scheme (via Camden Street) both parties have met with Higgins on site and agreed the proposed one way system method of vehicular movement (as noted on the logistic plan within appendix 1) Following agreement with LBC highways, Higgins Construction contractor on completion of piling works will be carrying out the widening of the existing bell mouth off Plender Street (the site access gate) no works are needed to the egress apart for the temp removal of one bollard onto Camden Street.

Local traffic, transport and parking impacts are very sensitive subjects for all construction projects, and managing the potential impacts is a key priority for Higgins. Potential impacts include on-street congestion causing traffic delays and potentially increasing road hazards, noise from vehicles and air quality impacts from vehicle exhausts and dust.

Parking for Cars and Delivery Vehicles

The site will be unable to provide any onsite parking due to its size and location. All of the surrounding streets are either controlled by parking permit systems or parking meters. The site will therefore have a designated short term loading/offloading/delivery area, located within the site to enable ready ingress and exit from the site.

We will ensure all deliveries to site are planned with all sub-contractors obliged to co-ordinate their deliveries through the works manager. Deliveries planning will consider the following:

- All deliveries to site will be subject to our site hours of working
- Defined unloading areas on site will be formed.
- Plans will be formulated to properly store materials on planned deliveries.
- Numerous vehicles arriving at the site all at once and having to queue adversely affects local
 amenity and transport conditions, and potentially elevates any highway hazards. The Higgins
 policy is therefore to encourage deliveries to be staggered and to be made to site outside of
 rush hour times so that we do place any additional burden on local traffic.
- All contractors and sub-contractors operating large vehicles over 3.5 tonne must meet all of the following conditions:-
- 1) Operators must be a member of TfL's Fleet Operator Recognition Scheme (www.tfl.gov.uk/fors) or similar at the Bronze level.
- 2) All drivers must have undertake cycle awareness training such as the Safe Urban Driver module through FORS or similar.
- 3) All vehicles associated with the construction of the Development must:
- i. Have Side Guards fitted, unless it can be demonstrated to the reasonable satisfaction of the Employer, that the Lorry will not perform the function, for which it was built, if Side Guards are fitted
- ii. Have a close proximity warning system fitted comprising of a front mounted, rear facing CCTV camera (or Fresnel Lens where this provides reliable alternative), a Close Proximity Sensor, an in-cab warning device
- (visual or audible) and an external warning device to make the road user in close proximity aware of the driver's planned manoeuvre.
- iii. Have a Class VI Mirror
- iv. Bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.
- Higgins operates a "just in time" delivery system which maximises site storage space and distribution, and provides greater control of vehicular deliveries and scheduling.
- Planned deliveries ensure the correct lifting procedure is in place complying with the manual handling assessment.
- We intend to apply for a road closure to Plender Street for the erection and dismantling of the tower crane which is intended to be carried out over a weekend subject to liaison with the local community and L B Camden.

• Parking bay suspension is not envisaged during the build process, the only requirement for any short term suspension will be needed for the erection and dismantling of the tower crane and any new utility works and these closures will be made via LBC.

Frequency of deliveries

- **Demolitions and Site Clearance**; 8 wheel tipper trucks 10-12 visits per day, articulated low loaders for plant deliveries 2-3 times a month.
- **Substructures**; 6 wheel concrete delivery vehicles maximum 10 deliveries per day. There will also need to be a road closure to Plender Street for the erection of the tower crane which will be arranged and licenced with L B Camden plus a closure for dismantling 2 days per each event.
- Frame; 6 wheel concrete delivery vehicles 10 deliveries per day, 20 ton ridged wheel base flatbeds delivering reinforcing bar.
- **Envelope**; 10-20 ton ridged lorries delivering bricks, blocks, insulation, and sheet materials 2-3 times per week.
- Internal Fitting Out;10-20 ton ridged lorries delivering; timber, doors, kitchen fitting, sheet materials plus smalls vans for sundry items 3-4 times per week
- External Works; 6 wheel concrete lorries, 20 ton ridge wheel base delivering; kerbs paving blocks, and aggregates, 2-3 times per week.

Unplanned deliveries

Unplanned deliveries will be dealt with by the site gateman. If the delivery area is clear and space available they will be taken onto site. If however there is no room and the site cannot accept delivery then the vehicle will be turned away and advised to return to site at their prearranged delivery time. If no pre-arranged delivery time has been made then the driver will be told to arrange a delivery time through their company. Unplanned deliveries will not be allowed to wait outside the site boundary or impede any of the surrounding roads.

Staff Transport

Operatives will be encouraged to use local public transport. They will also where possible be encouraged to walk or cycle to site. If possible the site will endeavour to provide showering facilities that operatives cycling or running to work can avail of.

Air Quality

Dust impacts are referred to separately in section 1.5

Vehicle Emissions

All vehicles used on site will only be running during use. If a vehicle or piece of equipment is not being used then it is to be turned off to reduce both emissions and on site noise levels.

With proper planning and delivery schedules unnecessary vehicle trips to site can be kept to a minimum.

Conflict with our Construction works

Higgins Construction have surveyed the local surrounding area and have noted that there are currently on other developments taking place, so do not envisage any potential transport issues.

1.8 - Local Authorities, Services, and Schools

The introduction of any large construction project to a community must identify the possible impact to local services, particularly emergency services. To this end we will directly contact the local fire station, police station and hospital before construction commences. We will appraise them of the site, its location, how long it will be in operation, working hours, labour levels and the type of work being carried out.

As part of our on-going liaison with the local community we have often offered the local fire stations the use of our tower cranes for emergency practice drills where they simulate rescues from tower cranes. The intention to use tower cranes on this site would lend itself to this type of interaction with the local fire station.

A meeting has been held between Higgins Construction and The Local Fire Brigade Officer to discuss and agree the Fire Brigades access requirements to the existing flat blocks located in Bayham Place.

Higgins PLC has a good track record interacting with local schools. We do presentations to the students on aspects of our business and often where appropriate/possible we have had small groups of students on site view our construction processes and methods. These have always been positive and fun experiences for both the students and the site. In some cases where possible we have offered limited work experience placements to local students and in fact some of our permanent staff joined the company after an initial work experience placement on site.

1.9 - Piling

Piling is used due to its speed of use and its versatility on restricted sites. In addition it reduces the amount of spoil created on site and hence the amount removed from site. Piling also reduces the amount of vehicular plant being used on site and the amount of removal wagons needed to remove spoil form site. However despite these benefits Higgins acknowledges that piling causes adverse effects due to noise and vibration.

The Continuous Flight Auger (CFA) method of piling is being used due to its reduced noise and vibration levels which ensure minimum disruption to the surrounding area. The piling rigs will be controlled by the same onsite working hours and noise control restrictions as the rest of the site.

Where the piling comes close to specific sections of the site boundary Higgins PLC will speak directly with the local residents that may be affected and where appropriate dilapidation surveys will be carried out to ensure vibration impacts do not cause harm to property.

1.10 - Tower Cranes

The tower crane will be a 'luffing jib' type so as not to over sail beyond the boundary of the site, it will only be in use during site hours. Outside of site hours the crane will be left free to rotate for safety reasons, but the jib of the crane will be restricted so that it does not swing outside of the site boundary. The crane will be controlled by the driver and banksman at all times whilst in use and there are strict protocols and guidance for crane use that we have to adhere on site. Whenever the crane is not is use it will be left in a safe neutral position as if it were out of use for the evening or weekend.

1.11 - Community Liaison Meetings

Contact with the local community is vital for any project. Higgins PLC will make contact with the local community liaison officer and establish protocols for community interaction and communication that will carry on throughout the life of the projects. The Higgins on site team will form the core of any interaction with the local community with back up from the client, the designers and Higgins senior management.

1.11 - Community Liaison Meetings (continued)

Higgins PLC will provide regular newsletters and updates that inform the local community of our progress and more importantly what our upcoming works will be. Typically these types of newsletters are issued quarterly during the sub structure and main frame work and then bimonthly as the project heads into the finishing stages. This helps to keep the local community engaged and allows them to monitor progress and removes the element of surprise. Each newsletter is a brief single A4 page and will contain pertinent site information such as names of the site managers and contact numbers.

Higgins PLC and Camden Council have set up a Community Working Group in accordance with Planning condition 23 in which quarterly meetings are being held to discuss the progress of the works and to address any possible issue that may arise.

In addition to the above Higgins PLC also operate an open door policy whereby members of the local community can speak to the site management if they have specific concerns or complaints. This type of interaction is taken very seriously by Higgins PLC. We maintain a complaints register throughout the life of the project and at our monthly Directors' Contract Review this register is discussed and all complaints will be closed out to the satisfaction of both the Higgins directors and the person who made the initial complaint.

Simple devices such as vision panels in the site hoarding and viewing points help to remove the mystery of the site as it allows people to look in on the site without actually having to come onto the site. It helps to remove the element of suspicion regarding what exactly is happening behind closed site hoardings.

1.12 - Compliance with Construction Management Plan

The agreed contents of the Construction Management Plan must be complied with unless otherwise agreed with the Council. The project manager shall work with the Council to review this Construction Management Plan if problems arise in relation to the construction of the Development. Any future revised plan must be approved by the Council and complied with thereafter.

2. Approach to Construction

2.1- Development Approach

The site works has been planned to commence in the west corner of the site working towards the site entrance at the east corner.

The works will be sequenced with the community centre being brought to a completion at the same time thereby facilitating a complete service commission and allowing a single handover process.

2.2 - Site Logistics

The topography of the site prompted the logistical decision to deploy a tower crane from the R.C frame of the construction programme. The decision to deploy the tower crane will enable strategies and regimes to be put into place that will greatly facilitate the safe movement of materials around the site and minimise the sites impact on the surrounding area. A hardstanding area to the south of the site allowing a one way site traffic system will greatly improve traffic safety and negate the need for vehicle's to reverse within the site with a designated and segregated unloading area.

The site offices have been situated to the south of the site easily accessible from Camden Street and have been sized to accommodate the anticipated workforce of 30 to 75 personnel.

Plan Higgins PLS 01 shows our proposals for the site set up and is provided and attached to this at Appendix 1. The plan has taken full account of site security, access control, traffic management, welfare, temporary power and water supplies, emergency procedures, deliveries, waste removal, storage and safe access to all work areas with a full perimeter scaffold included in the plan.

2.3 - Sequence of Works

The outline, planned sequence of works is described below and will be subject to review and amendment. Currently the projected site start date is early March 2014; the total programme of constructions works is 90 weeks.

A description of the components of the Construction Programme is given below:-

2.3.1 - Demolition 12 weeks (31.3.14 - 29.6.14)

Demolition to the existing doctors surgery and retail units, including the grubbing up of obstructions and disconnection of existing services.

The demolition works are complete and the resultant crushed material is stockpiled on site.

2.2.3 - Enabling Works & Site Set Up - 3 weeks (3.3.14 - 24.3.14)

We have not specifically identified the Enabling Works and Site Set Up; the works are standard to any contract and will, as a minimum, consist of-

- **Existing Services** Trace and accurately mark out and plot the existing services terminated by others and drains crossing the site.
- Party Wall Agreements Assist the putting into place of the party wall agreements by providing required information initially to enable the piling works to be fully completed.
- **Licences** Ensure all hoarding, scaffold licences required to complete the security hoarding to the site are in place.

2.2.3 - Enabling Works & Site Set Up (continued)

- Permissions Ensure all dispensations and permissions to suspend/close footpaths to Maitland Park Road are sought and agreed with the London Borough of Camden and communicated to the local residents.
- Accommodation Place and install temporary connections to the site accommodation targeting early completion to ensure the site welfare is to a good standard within the first days on site. A temporary generator will be used should the temporary builder electrical connection be delayed. On day one, an Oasis unit will be delivered to guarantee good welfare in the short interim period.
- Security, Access and Traffic Management Erect the site hoarding to control site access and egress, ensuring the safety of the public, and implement a Traffic Management Plan controlling safe pedestrian and vehicular access and egress to/from site.
- **Signage** Erect signage to clearly show the extent of any permissions/closures agreed with the London Borough of Camden's Highways Department.
- Resident Liaison Being aware that we are new to the area and ensuring our actions minimise the impact our works have on the local residents.
 - Being considerate, and try and think of all of the interfaces that are likely to occur between us, and the local residents and ensure we implement all measures to minimise our impact.
 - Being quiet. Ensure all plant is well maintained, properly baffled and that the site working hours are strictly adhered to.
 - Clean and tidy. Make sure all vehicles and personnel leaving site are properly cleaned to avoid muddy boots for example being scraped on kerbs and that the site appearance portrays a company that cares. Because we do!
 - o Being safe. Carry out the works safely and with care.
 - Being responsible. Control the site activities and ensure site personnel work to the site rules.
 - Being accountable. Erect a large contact board and activity communicate with the public.
 - Site inductions. Make sure that all persons working on and visiting the site are made aware of the site rules with the site rules embedded within the site induction.

2.2.4 - Piling - 2 weeks block A (14.7.17- 26.7.14), 2 weeks Block B (8.9.14 - 22.9.14)

The first construction operation when taking possession of the site will be the shaping of the general contours of the site to 2 or 3 level plateaus on which the engineered piling mat will be formed using the crushed hardcore stockpiled on site following the demolition.

The piling mat design will be checked by the Higgins Engineering Services Department following receipt of the Plate Bearing Tests on the soil beneath the piling mat. During this period, soil samples will be taken from various locations and depths to ascertain the classification of the spoil to be removed from site.

The piling works will be carried out using a Continuous Flight Augered (CFA) piling rig working from the engineered piling mat.

The spoil removed from site during the piling process will have been categorised and if required separated from other material (as the London clay arising are expected to be 'inert') prior to removal and tracked recorded disposal by a licensed haulier.

The piling works will generally commence at the north-west corner (the highest point on site) and work towards the site entrance on Maitland Park Road.

2.2.5 - Substructure Works - 8 weeks (28.7.14 - 22.9.14)

Once the piling activity has progressed and the rig, service crane and other equipment has been removed from the north-west corner of the site the work will be segregated thereby safely allowing the sub-structure groundworks to start on site. The groundwork contractor will commence excavating for and forming the pile caps leading directly to the formation and installation of the ground beams, retaining walls and drainage works up to and including the ground floor concrete oversite slab.

The sequence will be maintained, by commencing in the northwest corner and progress across the site towards the entrance on Maitland Park Road.

Any spoil removed from site will again have been tested and properly categorised prior to removal by a licensed haulier.

As early as possible during this process we intend to erect a tower crane which will greatly assist in the distribution and placement of materials.

2.2.6 - Superstructure Works - 32 weeks 1.9.14 - 15.4.15)

At the point in time when the tower crane is erected the superstructure works will be able to safely start.

The superstructure works from ground to roof is an in-situ concrete construction with the columns and support walls generally carefully positioned in walls etc. External scaffold is not required for this element of the work with proprietary edge protection incorporated as a component of the formwork system. The safe system of works will identify that another proprietary edge protection system must be in place near the slab before the formwork system is struck, and moved. During this element of work, the site engineer and managers will implement the_

- Permit to load check. The formwork will be checked to ensure it has been erected as per the manufacturers requirements and is adequate to support the load of insitu concrete.
- Permit to strike check. Permission will only be given to strike the temporary concrete support
 when cube results have been received on site and come within pre agreed parameters set by
 HigginsEngineering Services.

It is envisaged that the works will initially start with some elements on the upper ground level as again the sequence of works will be from the north-west corner towards Maitland Park Road at the east of the site.

As the groundworker completes his works the concrete superstructure sub-contractor will sequence the works to level the site and prioritise the lower level.

When the roof slabs are constructed additional temporary measures will be undertaken to provide a temporary waterproof environment to the floors below.

2.2.7 - External Envelope - 16 weeks (5.1.15 - 4.5.15)

As the concrete works complete at roof level the proprietary edge protection will have been placed to all slab edges thereby permitting the scaffolder to start safely erecting the external scaffold. In addition to the roof level scaffold a scaffold working lift will be provided at each floor level allowing the removal of the edge protection and providing a safe working platform for the installation of the Metsec framing element of the external wall envelope.

The Metsec framing will be loaded from the floor slab and fixed from the scaffold platform. The system will be insulated and the windows and doors fitted before the scaffold is adapted to suit the construction of the outside leaf of the external envelope. Scaffold adaptions will be undertaken to suit the construction process, ie facing brickwork, cladding, insulated render etc.

2.2.8 - External Envelope (continued)

The tower crane has been sized to distribute these materials around the site from the offloading/forklift zone.

The temporary waterproofing measures to the roof slab have allowed the construction of the external envelope to be completed and a scaffold working platform erected around the roof area before the permanent roofing works commence. This sequence of works avoids the roofers edge protection being compromised.

2.2.9 - Internal Fit-Out Works - 28 weeks (5.2.15 - 20.7.15)

The construction of the internal blockwork walls is able to commence once the floor zone has been cleared of formwork. The intent being to construct as much as possible before the zone is watertight to-

- Avoid the chasing of the blockwork for services being undertaken by a 'dust less' chaser in a closed environment.
- Avoid the bricklayers with internal scaffolds interfacing too closely with other trades
- Provide easier and safer distribution of block materials on pallets using hydraulic trolleys or air mats.

Once the 2 layers of plasterboard are fixed to the Metsec framing in the external envelope the blockwork will be completed the 1st fix services installation take place and the wet plaster system started.

A wet plaster system will be applied to all internal masonry areas with the dry-lined sections receiving a plaster skim and screed finish to the floor areas. The mechanical & electrical installations will be coordinated with the building works, by the Site Management Team with the aid of the Services Manager. These key packages will be let as early as possible to ensure that the specialists are fully involved in the construction planning.

Second fixing will commence as soon as each floor is available, so as to leave sufficient time for inspection and commissioning at the completion of the project.

Final floor finishes will be left as late as possible in the traditional sequence to allow ceiling activities to be sufficiently advanced to minimise the risk of damage. Once floor finishes are installed they will be protected by suitable fire resistant sheeting material.

2.2.10 - External Works & Soft Landscaping - 6 weeks (1.6.15 - 20.7.15)

The completion of the external works, including hard and soft landscaping will be undertaken when the temporary offices are removed towards the end of the on-site works and to suit the completion of the project.

2.2.11 - Completion & Commissioning- 4 weeks (22.6.15 - 20.7.15)

Inspection and commissioning of the new Care and Extra Care home will need to be carefully coordinated to allow the maximum time to prove the systems and check the building before the systems are put to use.

A detailed commissioning programme from the specialist contractors, integrated and coordinated with each other, and complementing the main programme will be produced in consultation with our M&E Manager and is crucial to the successful commissioning of the buildings systems.

3. Managing the Works

The following sections outline our approach to 'Managing the Works' giving a brief outline of the structure of Higgins PLC and the personnel who will be directly responsible for developing and delivering the project.

We have also developed a sketch logistics and traffic management plan for the project. The plan is appended-

Drawing No Higgins PLS01 – Appendix 1

3.1 Project Team

Higgins PLC is an autonomous company within the Construction Division of the Higgins Group and is responsible for delivering projects in London within the M25 enclosure. Higgins PLC serves the London area from the Loughton head office and is thereby able to provide local support to both planned and working sites leading on to the bespoke aftercare service.

The Camden HOPS scheme is to be managed and supported from the 'local' Loughton Office and the following pages provide details of the Management within the Higgins PLC Loughton Office.

3.2 - Personnel with Key Roles and Responsibilities

Senior Project Manager - Keith Fisher

Keith will be resident on site throughout the construction process and has full responsibility and authority for the day-to-day management of the works, as well as the delivery of the project to the client on time and to the specified standards.

Senior Quantity Surveyor - Tom Stone

Tom will initially be responsible to the Project Manager for the procurement, and supporting the site team in procuring the best value sub-contracts for the Project. Thereafter responsible for the day to day financial management of all sub-contract packages, managing the site quantity surveying team and liaising with the client's PQS.

Contract Manager – Nick Koster

Nick has the overall responsibility for the contract delivery and is the link between site and head office. Nick will provide support where needed but also using his experience to ensure our compliance in all areas. Throughout the project Nick will be reviewing the performance of the team integration and take a rounded view of our service delivery.

CV's on the following pages;

Keith Fisher Project Manager





Qualification and Accreditations

City and Guilds Carpentry and Joinery (Advanced) ONC / HND Building Management

Profile

Keith has over 30 years experience in the construction industry. His early experience was as an apprentice carpenter and joiner, where he contirnued to work as a carpenter on new build social housing projects after he completed his apprenticeship.

Keith's proactive and logical approach to projects ensures that he successfully manages the site works, and maintains a positive working relationship with the client and/or their consultant.

His main role is to oversee and ensure a high quality product is produced in accordance with the specifications and all relevant legislation and codes of practice. Keith also monitors the project in line with the programme requirements, through the careful planning and programming of the works. He liaises with the client and other stakeholders throughout the duration of the project to ensure the smooth running of the project on a day to day basis. He also ensures the compliance of subcontractors on production and quality, through site and work inspection throughout the duration.

Employment History

2008 to PresentHiggins Construction PLCProject Manager2005 to 2008John Laing PartnershipSenior Site Manager1998 to 2005Apex Contractors LimitedProject Director

Relevant Experience

• Commercial Road a2dominion £46,000,000
A mixed tenure scheme of 215 private, 32 shared ownership and 72 units for rent for Dominion in South East London.

Mill Road Swan Housing Group £9,600,000

The construction of 6 and 12 storey mixed tenure apartment blocks in Ilford, Greater London.

Benwell Court Notting Hill Housing Trust £5,500,000

29 residential units and day care centre over 5 storeys using fusion system.

Southwold Road Intro Homes £9,100,000

Design and construction of 1 and 2 bedroom private sale apartments.

Larner Road Orbit Housing Association £6,000,000

Decent Homes works - Kitchens and bathrooms on 1500 occupied properties.



Commoraid Bood



Mill Road



Banwall Court



Larner Road



Southwold Road

Tom StoneContract Surveyor





Qualification and Accreditations
BSC (Hons) Quantity Surveying (First Class)

Profile

Tom has 6 years experience in the construction industry, within a survying role. His main role is to monitor, control and report cost and value of a project, including management of subcontractor accounts and client valuations. He is also responsible for preparing applications for payments on a monthly basis and monitoring all preliminaries, subcontract and material costs.

Tom is used to working to tight deadlines and delivering projects within time and to budget. He has worked on a number of different contracts from NEC, JCT Design and Build and JCT Bills of Quantities.

His experience in various sectors has involved working on refurbishment of social housing, new build social housing, demolition and extension and alteration projects.

Employment History

2012 to Present 2007 to 2012 Higgins Construction PLC Hutton Construction

Contract Surveyor Assistant Surveyor

Relevant Experience

Franciscan Road
 Viridian Housing Association
 £6,400,000

New build block of 45 extra care apartments.

Leigh Road Islington Council £2,800,000

New build block of 13 flats for adults with autism & learning difficulties including associated communal areas & externals.

Juniper Close Family Mosaic £2,600,000
 New build, 15 terraced houses for social housing with an additional 4 Shared Ownership houses & associated external works.

Russet House School London Borough of Enfield £2,300,000

New build extension to provide extra teaching facilities at existing school for autistic children.

• Waltham Forest College Waltham Forest College £2,600,000

Structural alterations and refurbishment to existing classrooms to form new Heart of Campus.



Franiscan Road



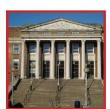
Leigh Road



Juniper Close



Russet House School



Waltham Forest College

Nick Koster Contracts Manager





Qualification and Accreditations

City and Guilds Bricklaying Site management Certificate and Diploma

Profile

Nick has 25 years experience in the construction industry, mainly within a delivery based leadership role. Nick is an all round team player and possesses excellent management and customer skills. He also has excellent communication skills both written and verbally and uses these skills to encourage and motivate his project teams in successfully delivering good projects, time and time again.

Nick plans his time well and takes control of all aspects of contracts management by being involved in the project from preconstruction stage right into the aftercare service. His role also involves interfacing with the Client and key stakeholders on a regular basis. His main role is to coordinate and oversee the project through the various stages of preconstruction, planning, surveying, quality, health and safety and aftercare.

Nick has worked on many contracts throughout his career, notably social housing and education.

Employment History

2004 to Present Higgins Construction PLC Contracts Manager
2000 to 2004 Higgins Construction PLC Site Manager / Project Manager
1998 to 2000 Higgins Construction PLC General Foreman

Relevant Experience

•	Pollards Hill Estate	Pollards Hill Housing Association	£36,000,000
	The regeneration of the Pollards Hill	mixed-tenure estate in the LB of Merton, providing 1,000 ne	ew and refurbished homes.
	Forest Gate PEI	Swan Housing Association	£40 000 000

• Forest Gate PFI Swan Housing Association £40,000,0

PFI funded Decent Homes scheme to carry out occupied refurbishment to over 1000 units.

North Cray
 New Build Social Housing Comprising 103 number mixed tenure flats and houses
 £9,000,000

• Silwood Estate Phases 1- 4 London & Quadrant Housing Trust £52,000,000

The comprehensive regeneration of the Silwood Estate to provide in excess of 600 homes across two London boroughs.

Kensington and Chelsea Decent Homes
 Internal refurbishment of 2,000 properties to meet the Decent Homes standard.

Whitmore Estate Canalside £3,500,000

Reference to the first term of the first

Part new build part refurbishment, complex access to service site.



Pollards Hill Estate



Forest Gate PFI



North Cray



Silwood Estate



Whitmore Estate

3.3 – Other Key Support Site Management Roles

Site Manager

The Site Manager - an experienced construction manager - will be resident on site during the envelope construction and fit out phase project, supporting the Project Manager and directly managing the onsite work activities and personnel.

Foremen

The project has planned for two trade foremen/supervisors, during the construction phase. Foreman 1 – Will be based on site and directly overseeing the structural and external envelope elements of the construction.

Foreman 2 – Will be based on site and directly overseeing the internal works from 1_{st} fix through to final commissioning of the community centre.

Senior Engineer

The Senior Engineer will be visiting the from site commencement through to the completion of the main structural elements of the project and will be of sufficient standing to undertake some management functions in addition to his engineering duties.

M&E/Commissioning Engineer

The M&E Manager will have an involvement in the projects from commencement initially visiting one day per week but as the works near completion, their presence on site will significantly increase up to a full time attendance during parts of the commissioning process.

Other Site Management

The managers identified above will be reinforced by:-

- 1. Other managers directly employed by the trade sub-contractors who are specialists in their aspect of the works and integrated into the site delivery team to ensure the level of safety, production and quality required are clearly understood and achieved.
- 2. Other experienced trained construction personnel ranging from, Crane Supervisors, Banksmen, Traffic Marshalls, Security and Gatemen. They will be fully inducted on to the site and made aware of specific site issues and are key to us delivering a successful project. These people will be our daily contact with the public and must be aware of, and be sensitive to local requirements.

Head Office Support

The site management will be supported from Higgins PLC's offices at Loughton, in Essex, with the full range of back-up services including buying, costing, subcontract procurement, health and safety advice and guidance and assistance with setting up quality assurance, environmental and management procedures. The Project Manager will report to the board of directors through a Contracts Manager who has the specific responsibility of overseeing the contract from the receipt of the tender enquiry documents through to the issue of the final certificate and beyond.

4 - Project Management Arrangements

4.1 - Accommodation and Welfare

The welfare accommodation will be provided for a mixed work force of up to 75 sited with the offices located to the south of the site n. Allowance has been made for the changing profile of the workforce with male and female facilities. The location allows all personnel and visitors to access/egress the site directly from Camden Street to a controlled area segregated from the main site works and vehicle movements that does not require the wearing of PPE.

4.2 - Temporary Power and Water

A temporary builder's power supply will be organised with the local power supplier sufficient to power the office and welfare accommodation and general site power and lighting. The tower crane will be powered by a sensitively placed generator.

Water for the site will be direct from the local mains with a builders supply agreement with Thames Water.

4.3 - Site Inductions and Training

All personnel planning to work on site will undergo a health and safety site induction tailored to their requirement that will conclude with our check of their understanding of the local issues ie neighbours, noise, parking etc. coupled with a check of their understanding of any method statement that have been formulated for their task/work. Should we be of the view that there understanding is limited they will not be allowed access on to site and further training planned and undertaken.

A separate visitors induction will also be given to any visitor requesting access to the site. Anybody accessing the site with a visitors induction only will have to be accompanied whilst on site at all times.

4.4 - Fire & Emergency Procedures

A comprehensive common emergency plan for a major incident will be prepared and regularly reviewed with particular emphasis placed on a separate fire plan that will indicate emergency escape routes, fire points, material storage, fire marshals etc.

4.5 - Waste removal

This is a process that will be defined prior to any subcontractor package being placed with a clear understanding of the level of waste anticipated and the best means of removal. This will be communicated to the site personnel by training, briefings, inductions and the understanding of method statements.

The general principle will be that all work areas will be kept free of debris. Waste will regularly be collected, sorted if agreed and taken to a defined collection point. The collection point will not obstruct any access or emergency escape route. The waste will be regularly moved to a collection skip that may be defined as general waste, metal, timber prior to collection and removal from site. All movement of waste on site will be in proprietary containers with personnel contact kept to a minimum to eliminate hazard. Hazardous waste will be taken to and separate hazardous waste area and be categorized prior to specialist removal.

4.6 – Management of Waste

The management of waste commences at the design stage of the scheme with a Site Waste Management Plan (SWMP) formulated and reviewed as the design develops and specialist trade input minimising the generation by trying to re-use off cuts etc. in other areas of the site. The SWMP will continue to the construction stage during which Higgins have adopted a web based measurement tool (Smart Waste) that aids the formation of targets and helps the site team accurately measure against the targets set.

4.7 - Storage

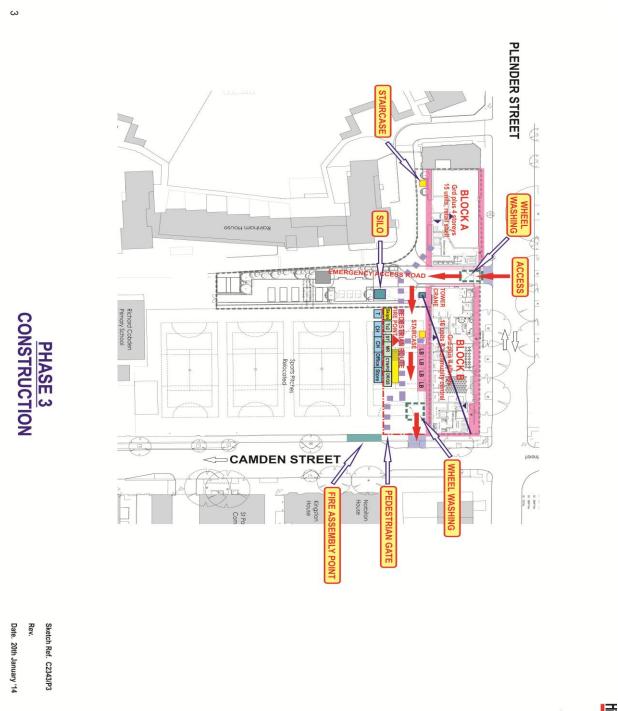
A storage plan will be developed for the site that will align the planned deliveries with the programme requirements and with the intention of placing as many materials as possible correctly in their final position when unloaded from the delivery vehicle. This is an added means of improving efficiency and minimising damage, and therefore waste.

Secure ventilated cages located in a safe area will be provided for the storage of gas bottles.

APPENDIX 1

Site Plan

Drawing Higgins PLS.01



APPENDIX 2

Community Working Group Minutes.

Plender Street construction works - Higgins meeting - 6th March 2014

Held at St Pancras Community Association – 30 Camden Street

Attendees

Robert Martin – Employers Agent, Phillip Pank Associates

Barbara Hughes – Chair, St Pancras Community Association Donald Preddy – Trustee, St Pancras Community Association Kenny Pryce – Director, St Pancras Community Association

Richard Caylor – Bayham Place TRA Matthew Saunders – Bayham Place TRA Kim World – Bayham Place TRA Carole Donnelly – Curnock Estate TRA

Nick Koster – Team Leader, Higgins Keith Fisher – Project Leader, Higgins Shaun Nudd – Higgins Polly Moona – Community Development, Higgins

Fiona Mckeith – Project Manager, London Borough of Camden

Jaishree Dholakia – Consultation and Engagement Officer, London Borough of Camden

1. Introduction

Meeting convened to provide an update on the Plender Street construction works and explore opportunities for wider communications and engagement with the local community before major works start on the site. Contracts for the construction work to commence on Plender Street were exchanged last week and the Higgins team is now co-ordinating utilities cut-off and other exploring soil investigations.

2. Roles and responsibilities

The Higgins project team for the Plender Street works will include:

- Nick Koster Team Leader
- Keith Fisher Project Manager on site
- Shaun Nudd- Project co-ordinator (design, maintenance & electrics)
- Jeff Jones Community Development
- A site manager
- A foreman
- A maintenance and electrics co-ordinator
- A traffic marshal
- A general site operative

3. Construction activity

There will be three phases to the construction works:

<u>Phase 1</u>: Enabling works – temporary changing rooms set up on sports pitches - now completed

<u>Phase 2</u>: Set up and demolition – site compound put in place, traffic management plan which allows for one way access from Plender Street only, isolating power networks, raising hoardings

<u>Phase 3</u>: Construction – for the block on the changing room site, the work will take place within the existing boundary i.e scaffolding will not take up any footpath. The block where the retail is will required a reduction in the footpath width to accommodate the scaffolding behind the hoarding. The highways and hoarding licence is under negotiation with Camden.

There will be no long term parking suspensions but the odd suspension may be required to allow for electricity / gas cut off. There will also be a two day closure of part of Plender Street to bring in the crane – this usually takes place at the weekend – Highways department at Camden will inform residents through notices and the alert will also be placed in Higgins newsletter.

The disconnection of gas will take place on 22nd / 23rd March, other utilities within six weeks. Disabling of changing rooms and demolition will take place thereafter. The fire brigade confirmed entry to the secondary access onto Bayham Place is not required. The site will be a secure, self-contained island - all storage on site, one way system, lorries in from Plender and out onto Camden Street. The team will also try to ensure deliveries take place after 9.30am and before 3.00pm i.e. outside school-times . The team have also met with the school to discuss the changes to the pitch and logistics. Lorries may need to arrive earlier when concreting takes place. Weekend working will be exceptional.

Following discussion with parking and resident representatives from the Bayham estate is was decided not to provide two temporary parking spaces during the construction parking. This is due to the two disabled badge holders deciding to take garages rather than spaces. The spaces will be introduced at the end of the works and one space will be made available for Mr Tatla, whom it is hoped will return to take the general store.

As much green roofing as is possible will be installed on the new buildings, however the majority of the roofing is taken up with solar panels to meet the planning requirements for renewable energy.

Recycling bins – Fiona Mckeith and the Higgins team will visit the site to ascertain the location of the recycling bins, and re-locate if necessary.

Open space – although access to the open space will be managed by the community centre to alleviate concerns about anti-social behaviour, the open space is for everybody to use. The new play equipment will be towards the community centre end of the open space. The cost of this and the proposed table tennis tables are included in the project budget. The proposals for the open space as a whole are not set in stone and suggestions and proposals from local residents for the use of the space are very welcome. Responding to safeguarding comments made in previous community meetings, the current proposal is to divide the space into two sections, with the far section nearest the school a more semi-private area. Ideas about the space can be discussed at the next community meeting.

Traffic – A marshal will direct traffic. Signage is also possible. A holding area for traffic is under discussion with Camden although there is sufficient space on the site to accommodate lorries while they wait to off-load by crane. A request was made to ensure standing engines are turned off.

Asbestos inspection – recent inspection did not reveal any asbestos either air-borne or sheet material.

4. Communications

A meeting has taken place with the school and there will be further communications activity with pupils about keeping safe around building sites (presentation at school assembly, colouring competition).

<u>Newsletter</u> – Higgins will also distribute a monthly newsletter to residents containing contact details for hotline, updates, Questions and Answers and factsheets – distributed by hand and posted on estate noticeboards both external and internal including Trimdon. Possibility of translating the newsletters will be explored – however, a number of community languages including written Bengali are not always accessible with English more commonly used as a language of communication.

A central email address will also be provided, plus suggestions box on site. Full details will be inserted in the newsletter including an out-of-hours emergency contact number. Photographs of the development as it progresses will be provided at monthly meetings held with the community centre, school and residents.

<u>Complaints</u> – the first and main point of contact is Keith Fisher who is on site 7.30am – 5.30pm, Monday – Friday. A referral can also be made to the Considerate Constructor scheme – but residents are advised to contact Keith/Higgins in the first instance in order to resolve matters.

Security - will include CCTV. Alarmed scaffolding is not planned as the buildings are shell.

<u>Garages</u> - Richard Caylor confirmed pressing need to resolve leak issues in two garages before tenants could be expected to move from Bayham place. Kim World confirmed she is able to move by next Wednesday.

<u>Community projects</u> – future community involvement that will form part of this project will involve sports activities and a school hoarding project. Three apprenticeships and work placements are also planned.

5. Timeline

Higgins confirmed the current end date for completion of the community centre build is November 2015. This date may be brought forward but much will depend on when possession of the site will be obtained and when the services will be cut off. The contract contains a penalty clause should the construction run beyond November.

The new shops will be finished in March 2015— allowing Mr Tatla to return as soon as possible. Mr Tatla and the launderette owner have been sent letters offering first choice of the new retail units. Mr Tatla is happy to take on an expanded unit that also offers newspapers. An alternative vacant property for the halal butcher could not be found to accommodate a fast food offer.

Kenny Pryce confirmed the need for SPCA to be provided with a specific deadline as soon as possible because the community centre has to make plans for relocating its services and future financial projections which rely on the end completion date.

6. 'Meet the Contractor' community meeting

A date will be set for the local community to meet Higgins in an informal, open forum once the timelines are clearer, site is secured and utilities have been cut off. Architects drawings of what the new development will look like will be available at this meeting. The possibility of holding this dropin session on Bayham Place will also be explored but access is difficult for those not on the estate.

The notes of this meeting will also be circulated.