



## CONCRETE WORKS

### TRADE PRELIMINARIES AND PREAMBLES

#### 1 Introduction

- 1.1 This document is for the Reinforced Concrete Contractor's (hereinafter referred to as the Contractor) guidance in pricing and should be read in conjunction with the other tender documents including the General Preliminaries and Preambles and specification and drawings relating to Reinforced Concrete Works.
- 1.2 These documents are not intended to be a definitive list of works and the Contractor is to allow for items normally be expected to be fitted by a Contractor, or for items, which could reasonably have been foreseen at tender stage.
- 1.3 Barratt Homes and David Wilson Homes are all trading names of BDW Trading Limited hereafter known as "the Company".
- 1.4 Any anomalies between this specification and current safety regulations should be notified to the Surveying Department in writing prior to tender being returned to this office.
- 1.5 The tenderer is deemed to have included for all work on contract drawings and this specification and any omission on his part will not be accepted as an extra to the contract by the Company.
- 1.6 All variations are to be agreed in writing before the commencement of the works. No payment will be made for variations without a written instruction being issued or where a working drawing has been issued, which is at variance with the tender drawings. It should also be noted that the fact that an instruction has been issued for work to be carried out does not mean that it constitutes a variation to the order.
- 1.7 Any surplus materials or equipment should be returned and stored neatly to a designated storage area, where space permits, or alternatively removed from site at no cost to the Company. No claim will be accepted by the Company for loss or damage of equipment regardless of its location on site.  
  
The Contractor must ensure that as works progress and on completion of their works that all work areas are left clean, tidy and free of slip hazards so that they and following trades can work in a safe environment.
- 1.8 The cost of removing any equipment, which is left lying around the site, will be charged to the subcontractor if not carried out immediately after each section of work is completed.

#### 2 The Works, Temporary Works and Access

- 2.1 The Contractor is to provide all the necessary design, labour, plant and materials for the proper execution of the contract works in accordance with the sub-contract documentation.



- 2.2 In-situ reinforced concrete works including upper floors slabs, roof slabs, balconies, columns and walls; pre-cast concrete stair landing and floor units including connections to slabs, cast in accessories, pre-forming all builders work holes as indicated on the drawings and temporary works designs.
- 2.3 All labour, plant, materials, design required for the proper execution of the contract works that the Contractor through experience, the undertaking of similar works, recognition of good building practice, Building Regulations, Statutory Requirements and NHBC requirements would deem as being necessary to facilitate the contract being fulfilled to the entire satisfaction of the Site Manager. No claim arising for compliance with this requirement will be entertained if not identified by the Contractor prior to the award of contract.
- 2.4 The Contractor shall attend the Site Logistic Meeting in order to understand site restrictions and access arrangements allowing for the provision of all concrete pumps, both mobile and static, required for the construction of the in-situ concrete works.
- 2.5 The Contractor shall allow for installing protective floors / decks to risers and other openings to prevent personnel or objects falling into the opening. This protection can be either the installation of temporary decking or casting in of a GRP mesh protection grillage.
- 2.6 The Concrete Frame Contractor shall provide temporary works solutions for all allow for all required temporary support and access necessary for their works. The Contractor is to allow for all back propping including additional requirements in isolated areas as required by the Structural Engineer.
- 2.7 The Contractors designs for temporary works are to be provided to the Technical Manager in sufficient time for comment and at least 2 weeks prior to the works commencing on site. This review period will be required in order to any adaptations as necessary to meet the requirements of the Company's Structural Engineer and any safety organisation.
- 2.8 The Contractor shall allow for controlling surface water and ground water during installation of their works. The Contractor should liaise with the Technical Department in order to consider is a Discharge Licence will be required.
- 2.9 The Contractor is to provide and maintain all necessary hard-standings, access ramps, plating over openings / trenches as required to undertake their works and shall remove the same upon completion.
- 2.10 The Contractor shall allow for the proper cleaning and maintenance of the formwork during the progress of the works and for supplying and applying formwork release agents where required. Such agents must not discolour the concrete where exposed / finished surfaces are to be provided.

In addition, where finished surfaces are to be provided, the Contractor must allow for preparing the reinforcement / formwork as required to prevent discolouration from any rust deposits, dirt or the like being present in the finished concrete surface.

- 2.11 The Contractor is to include for all day joints, design joints, spacers, stop ends, kickers, notching around obstructions, upstands, etc. as necessary for the execution of the works

and where necessary to receive additional concrete work. The Contractor is also to include for all materials such as water-stops, welded joints and water sealing in Pudlo waterproof concrete works.

- 2.12 The contractor is to allow for all making good to the reinforced concrete frame including but not limited to boltholes in all concrete works whether in a finished surface or not. All boltholes shall be fully filled to the complete depth of the element. The contractor must make allowance for the concrete finishing for all visible elements.
- 2.13 The Contractor shall allow for the provision of all necessary plant and equipment, including consumables, for the complete execution of these works such as but not limited to: compressors, hoses, breakers, scabblers, vibrators, pokers, mobile craneage, lifting equipment for mobile and static cranes, concrete pumps, concrete skips, screed rails, power floats, scaffolding, weather mats, concrete curing materials, reinforcement cutting and bending equipment.
- 2.14 The Contractor is to include for any necessary nominal cutting and bending of reinforcement on site and the removal of any reinforcement waste.
- 2.15 The Contractor is to take all necessary measures to avoid grout loss and concrete leakage to formwork.
- 2.16 The Contractor is deemed to include within the tender; casting in all brick ties, abey slots, fixing blocks, channels, bolts and the like as necessary. In addition the Contractor is to include for the removal of any laitance / polystyrene to slots etc. to expose the same for others to fix to.
- 2.17 The Contractor is to allow for casting in all required free issue items from other trades – if required by the scope of works.
- 2.18 The Contractor is to allow for any additional works necessary to pile reinforcement including straightening and bending of the same. If applicable then appropriate design must be submitted for approval by the structural engineer.
- 2.19 The Contractor is deemed to have included for the close working arrangements necessary with other Specialist Contractors and in particular the ground-worker. The Contractor is to ensure that the interfaces are closely co-ordinated for the execution of their works. For example, the Contractor shall include for working in and around the temporary works and earthwork support and is to allow for making adaptations to suit the construction of these works.
- 2.20 The Contractor is to allow for all curved work. The Contractor is deemed to have included for forming any steps / slopes in level to floor slabs including formwork. The Contractor shall allow for forming all pockets, sinking's, rebates, service holes, box-outs and the like necessary for the installation of other trades works.
- 2.21 The Contractor shall allow for constructing machine and plant bases e.g. tower cranes, hoists etc. The Contractor shall allow for all permanent formwork required to construct these works.
- 2.22 The Contractors scope of works shall include the construction of all reinforced concrete chambers and the like below basement slab level / outside of the basement.



- 2.23 All materials and sundries necessary to undertake the works shall be provided by the Contractor including couplers, water-bars, chairs / spacers etc., waterproofing materials, tying wire, mould release agents, tape, polythene, protection materials.

The Contractor is to clean and blow out shutters prior to the placing of concrete.

- 2.24 The Contractor shall allow for all necessary measures to cure the concrete. The Contractor is to provide a detailed method statement for curing of all concrete elements for the Site Managers approval.
- 2.25 The Contractor is to allow for a site engineer to ensure all works are as per specification and drawings other than that expressly stated otherwise.
- 2.26 Lines and levels are to be checked subsequent to the placing of concrete for plumbness/vertically of falsework.
- 2.27 The Contractor is to ensure that the reinforcement is clean prior to and during placing.
- 2.28 The Contractor shall include for transporting concrete to its final location and placing in accordance with the Engineer's specification.
- 2.29 The Contractor shall allow for all necessary making good of concrete resulting from poor placement / compaction of the concrete. Exposed concrete is required to be fair-faced unless specified otherwise.
- 2.30 The Contractor is to allow for all lifting beams, hoists and concrete skips to carry out the works. The Contractor is to allow for any necessary kickers or hung kickers needed to carry out the works.
- 2.31 The Contractor shall protect all their works from seasonal and adverse weather until proper curing has been completed.
- 2.32 The Contractor is to allow for reasonable protection to their works until they are handed over to the Company.

### **3 Design**

- 3.1 The Contractor is to be responsible for the design as indicated within the contract documentation. If there is any ambiguity in regard to the extent of the contract design the Contractor is to seek written confirmation from the Technical Manager prior to returning their tender or entering into a contract. Failure to do so is confirmation from the Contractor that they are fully compliant with the requirements of the contract.
- 3.2 The Contractor is responsible for producing all necessary installation drawings. These drawings are to be issued to the Technical Manager prior to the commencement of the installation, leaving sufficient time for comment/approval.

The Contractor must not commence works prior to receipt of comment/approval of their drawings. No claims for delay due to poor or late issue of drawings will be entertained.

- 3.3 The Contractor is responsible for producing as-built drawings for inclusion within the O&M manuals. The Contractor is to note the statement regarding the production of this



information and its relationship to payment as covered under the „Preliminaries and Preambles“ document.

- 3.4 The Contractor is responsible for reviewing the design methods and sequence to eliminate safety risks where practicable or reduce them to a minimum.
- 3.5 The design will include any temporary or permanent works and the Contractor where required must provide a full assessment of the design risks which will pay particular attention to;

Footprint of the structure and access and egress between existing structures or future structures.

Consideration to space of the development during construction (i.e. neighbouring access roads, public interfaces and development constraints). Consideration of storage space during construction phases, lifting equipment requirements.

Design of falsework and/or formwork.

Floor layout, columns and walls, repetition of the placement of falsework and formwork. Reducing openings in each floor of the structure, such as service risers etc. by using “cast in service openings” devices.

Design of reinforcement, size and weight of individual re-bar, manual handling, depth of reinforced concrete slab, access for steel erector during construction. Concrete specification, structural loads and back propping requirements must be taken into consideration.

- 3.6 All design works must be reviewed by a qualified temporary works coordinator or structural engineer in accordance with the Company’s standard for temporary works.
- 3.7 The Contractor shall be responsible for ensuring that all falsework used on site is constructed and installed in accordance with manufacturer’s requirements and British Standards.
- 3.8 Back propping where required must be installed as per design requirements and maintained in place as per details contained within the design specification.

#### **4 Materials and Plant**

- 4.1 The Contractor is responsible for the provision of all plant and materials required for the proper execution and completion of the sub-contract works. All materials and plant are to be in accordance with those specified within the sub-contract documentation and are to be installed in the correct manner in compliance with the same and the relevant codes of practice.
- 4.2 The Contractor is to ensure that, all materials incorporated into the works conform to the requirements of the specification and are fit for their intended purpose.
- 4.3 The Contractor is to purchase all materials in accordance with the Company’s Group Suppliers Procurement Agreements.



## **5 Protection**

- 5.1 The Contractor will be required to provide protection to the adjacent works/structures as required and to the finished installations (notwithstanding remaining responsible for their materials if permitted to be stored on site). The Contractor remains responsible for all materials until incorporated into their final position and the Site Manager accepts the unit or phase being complete.

## **6 Setting Out**

- 6.1 The Contractor shall be responsible for the setting out the works and must be included for in the tender. The Site Manager will provide a datum and reference point. It is the Contractor's responsibility to verify the accuracy of any given reference and datum points.
- 6.2 The Contractor shall be responsible for ensuring that all concrete works including measurements, setting out, verticality of elements, level and line, concrete finishes to faces and edges etc. All works shall be constructed to comply with the current tolerances for concrete works within the British Standards at the time of construction.

## **7 Clearing Waste / Surplus Materials**

- 7.1 Work environment must be kept clean and clear at all times. The Site Manager has the authority to arrange for the removal of any materials left lying about the site or for cleaning out materials left by the Contractor (at the Contractor's expense).
- 7.2 The Contractor is deemed to include for clearing all waste and surplus materials from site on a daily basis or as directed by the Site Manager.
- 7.3 The Contractor is deemed to include for washing down of any concrete trucks, pumps, etc. The Contractor will provide proprietary skip wash out racks in order to contain skip wash out waste. Under no circumstances are the skips provided by the Company to be used for this purpose.
- 7.4 The Contractor is responsible for all road sweeping as may be required in keeping site roads and roads leading to and from the site clean and tidy to the satisfaction of the Site Manager and the Local Authority. Wheel washing facilities may be required. This is applicable to all site traffic not just that of the Contractors.

## **8 Cranes**

- 8.1 The Company will provide a crane. However, due to use by other trades, inclement weather and crane downtime, continuity of work cannot be guaranteed, and therefore liability for costs incurred due to unproductive / inconsequential work will not be accepted. The Contractor must make due allowance for this in their tender.
- 8.2 The Company will provide a qualified banksman at point of delivery (1 banksman per crane only). It is the Contractors responsibility to provide qualified slingers at the point of off-load.



## **9 Plant**

- 9.1 The Contractor is to allow for the provision of all plant necessary for the proper execution and completion of the works.
- 9.2 No day-work will be paid for standing time due to the breakdown of any equipment provided by the Contractor or the Company.
- 9.3 The Contractor shall ensure that all plant and equipment is regularly inspected and maintained at all times. All plant and equipment provided to site shall comply with the requirements contained in the PUWER & LOLER regulations.

## **10 Tools**

- 10.1 The Contractor is to allow for the provision of all tools necessary for the proper execution and completion of the sub-contract works.
- 10.2 No day-work will be paid for standing time due to the breakdown of any equipment provided by the Contractor or the Company.

## **11 Loading Out/Unloading**

- 11.1 The Contractor is required to carry out all necessary unloading of deliveries to a storage area (if permitted by the Company within their scope document) and/or directly distribute to where they are to be finally incorporated into the scheme.
- 11.2 The Contractor is responsible to ensure in a timely manner that the correct materials are available before work commences.
- 11.3 The Contractor shall remain responsible for all materials and the Company accepts no liability for any loss or damage however occurred.
- 11.4 Any double handling of materials on site is deemed to be included in the Contract.

## **12 Scaffold**

- 12.1 The Contractor is to refer to the schedule of attendances within the tender documentation to determine the extent of scaffold that they are to provide (labour and plant) and remain responsible for the erection, maintenance, dismantling and removal from site.
- 12.2 Where required the Contractor should include, within the tender, for the collection, erection and dismantling of internal proprietary fall protection.
- 12.3 Where any scaffold or fall protection is required as part of the works, the BDW Trading Ltd Scaffolding trade specification must be complied with, including the provision of appropriate training for those to erect or dismantle the structures.
- 12.4 Trestles must only be used internally up to a height of 1 metre on firm level ground. The use of trestles externally is **STRICTLY PROHIBITED**. The trestles, which are to be used, must conform to the Working at Height Regulations and shall include handrails and toe boards.

- 12.5 The Contractor is to include for all making good to the entire satisfaction of the Site Manager following dismantle of any scaffold or fall protection.
- 12.6 The Contractor shall provide edge protection to areas under their control during the construction of structures to prevent falls. All edge protection must comply with the Work at Height Regulations and be installed by suitably trained operatives.
- 12.7 In the event that system panel edge protection is erected, this must be installed as per manufacturers or suppliers requirements. All operatives installing edge protection must be suitably trained and must protected from falls during their works.

### **13 Testing and Commissioning**

- 13.1 The Contractor is deemed to include and is responsible for concrete cube testing at defined frequencies, in controlled conditions and in accordance with the specification and all British standards. A register of all cube testing shall be completed, logging batch number and location for concrete used in the structure and made available for review by the Project Surveyor.
- 13.2 The Contractor is responsible for all testing and commissioning of the installation by suitably trained engineers in accordance with the tender documentation and British Standards. All certification is to be provided to the Site Manager.
- 13.3 The Contractor is responsible for ensuring that all reinforcement and concrete used during the construction of the reinforced structure meets the requirements contained within the design specification.
- 13.4 Prior to loading any falsework or formwork must be inspected to an agreed process with the Company's Site Management. This will include but not be limited to the receipt of Permits to Load, Permits to Pour and Permit to Strike control documentation.
- 13.5 The Company's standard for temporary works is the minimum standard that must be applied to the works. The Contractor is permitted to utilise their own systems of control i.e. Permit to load or strike on the basis that it complies or exceeds the requirements of the Company's standard.

Controls for the work must be reviewed and agreed with the Company's Site Management prior to the commencement of any work. Any inspection process must take into consideration the loading of the structure, correct use of materials, safe access and egress and suitable edge protection.

- 13.6 Prior to any striking of temporary works a competent person must inspect the structure and confirm that the structure has reached sufficient strength to support itself. The inspection must identify any requirements for back-propping in the distribution of any loadings from the construction of upper floors.





## **14 Power and Lighting**

- 14.1 The Contractor is to include for all necessary power leads/cables etc. to carry out the works. In addition the Contractor is to provide all necessary task lighting for the execution of the sub-contract works.

## **15 Contract Sum**

- 15.1 The Contractor will be deemed to have priced all items within these trade preliminaries and preambles whether indicated on the Tender Summary or not.
- 15.2 The pricing document should be submitted fully completed, each item being priced individually. Where applicable Bills of Quantities and/or Schedules of Rates are to be submitted.
- 15.3 The Contractor is to allow within his tender for all necessary investigations and notifications. All specified tests are to be allowed for in the Contractors tender.

## **16 Health & Safety**

- 16.1 The Contractor shall be issued with a copy of the Pre Construction Safety, Health & Environmental Information Pack as part of the tender documentation, including all known specifications, drawings to be able to provide their quotation / price.
- 16.2 The Contractor should prepare a safety method statement before work starts on any reinforced concrete frame structure. It needs to be appropriate to the scale and complexity of the work. In all cases, the Contractor should make sure that hazards are identified, risks are assessed, and that appropriate control measures are implemented.

The contents of this document **must** be briefed to all of the operatives before they commence work on site and records of these briefings should be issued to the Barratt Development PLC Site Management Team.

The Contractor must also complete a manual handling assessment of the task and should determine control measures to reduce risk of injury to the lowest level reasonably practicable. Mechanical means should be utilised where possible and operatives should receive instruction in safe manual handling techniques.

- 16.3 The Contractors operatives must use the Sign In/Out Book or alternatively the electronic bio-metric security entry system. They must then complete a Site Induction before commencing work on site. During the Site Induction, they should provide the Site Managers with a Trade Specific Skilled Workers CSCS card.
- 16.4 The Contractors Supervisor should also provide the Site Manager with any additional training certificates that are relevant and which will allow the Contractor to carry out their works safely e.g. Vehicle Banksman, Work at Height Safety Harness Training etc.,
- 16.5 The Contractor shall ensure that operatives comply with the Personal Protective Equipment requirements i.e. Safety Helmets, Hi-visibility vests, and safety boots need to worn by all concrete frame operatives. In addition, operatives should also follow their own Company's procedure if a higher standard is stipulated. Operatives should be provided with task specific PPE including eye, ear, respiratory protection and water proof clothing in order to prevent concrete burns.

16.6 It is the Contractor's responsibility to provide all tools as required, for the execution of the works. Any tools/plant brought onto site must not be of a greater voltage than 110v, and must have the relevant certification.

16.7 The Contractor must ensure supervision trained to CITB Site Supervisor Safety training Scheme (SSSTS) is in place to keep progress with the building programme, to ensure health and safety standards are maintained at all times. The Contractor shall ensure that that suitable numbers of Supervisors, and where appropriate sufficient numbers of Translator in order to allow effective health and safety information to be communicated to the Non-English speaking workforce.

The nominated Black Hat Site Supervisor should hold a minimum of a SSSTS Supervisory qualification. Where more than 20 concrete frame operatives are employed then they should ensure that there is also a minimum of one SMSTS qualified Supervisor for every 20 additional operatives.

16.8 Contractors must comply with the defined Traffic management plan for the development and contribute to its development and control. Sufficient numbers of suitably trained Vehicle Banksman will be provided by the Contractor in order to control their vehicle movements on to, around and off site.

16.9 The Contractor will attend Logistics Co-ordination meetings with the Site Manager in order to determine the delivery vehicle schedule. The Contractor will provide sufficient numbers of suitably trained Vehicle Banksman in order to control their delivery vehicles inside and outside the site boundary.

In the case of static pumps, the Contractor is to allow for positioning the same to avoid restricting the construction of following trades works. Robust stop blocks must be placed around the concrete pump work area and "No Reversing without a Banksman" warning signage should be displayed at the temporary concrete pump location.

Important – the Contractor must ensure that they have as part of their safe system of work a blockage clearance procedure, which prevents operatives being struck by a discharge of concrete.

The concrete pump operator must have suitable training in the safe operation of the pump and also in the procedure to be followed in the event of a blockage and possible build-up of pressure. The Contractor must ensure that the concrete pump works are suitably supervised in order to ensure that the correct procedure is being followed by the operator.

16.10 Contractors requiring storage of materials on site must ensure that any materials are stored in a safe and controlled manner at all times. Storage areas must be agreed with the Site Management prior to materials being delivered. Usually at least 24 hours notice is required prior to a delivery arriving. This will enable delivery vehicles to be scheduled against other materials being delivered by other Contractors and prevent disturbance to neighbouring buildings and organisations.

16.11 When shutters are stored vertically on site a designed frame is required, which provides safe access for the slinger/signaller to attach the lifting accessories to the top of the shutter. Wall shutters must not be stored against walls or scaffolding where there is a risk of collapse.



- 16.12 The Contractor is to allow for all leading edge or fall protection and for installing proprietary leading edge fall protection systems, with integrated mesh to all slab edges, risers, stairs and the like and for maintaining the same for the benefit of following trades.

The Company's Site Supervisor should review the work areas in order to ensure that suitable leading edge fall prevention is in place before works commence.

The temporary handrails / guardrails shall include double-rails, toe boards and mesh guards as necessary. The handrails / guardrails shall be secured to the structure back from the slab edge so as not to impede the installation of the building envelope. The leading edge protection should be retained on a minimum of three floors and should only be removed when authorisation has been obtained from BDW Trading Limited.

The Company shall allow for removing the edge protection / handrails only once the permanent works or scaffolding are in place such that the temporary protection is no longer require.

**Access to un-hook and secure shutters in stored location Designed "A" frame**

- 16.13 Contractors wishing to store reinforcement, shutters and equipment must ensure that suitable provisions are made to ensure that pedestrian routes are maintained at all times. A minimum of 600mm wide access route is required in all storage areas.
- 16.14 The area where the construction of reinforcement is taking place on site must be clear of materials and any obstruction likely to cause injury, trips or slips. Steel fixers must be able to access their work area without being impeded or affected from other construction operations.
- 16.15 Particular attention must be made to ensure that lifting operations are not directly completed over these areas. Steel fixers are permitted to use trestles to form a raised type bench but must ensure that they are not overloaded when constructing reinforced beams, cages etc prior to them being lifted into position. *Note: Trestles are not permitted to be used as working platforms as they do not provide appropriate fall protection.*
- 16.16 The Contractor shall comply with the Company's standard for lifting operations including use of Tower, Mobile and Pedestrian operated cranes.
- 16.17 Only operatives who are trained as Slinger/Signallers and hold valid CPCs/NPORS accreditation are permitted to assist in the lifting operations. These operatives will be subject to random drug and alcohol testing.
- 16.18 The Contractor will need to ensure that where required that trained Lift Supervisors, Slinger/Signallers etc. will be provided. All lifting operations must be in accordance with the Lifting Plan developed by the designated Appointed Person.

Where prefabricated beams, cages are required to be lifted on site, the Contractor is responsible for ensuring that the maximum Safe Working Loads are observed for all lifting equipment and that accessories are not overloaded.

Special attention must be given to "lifting points" on the beams, cages etc. with additional reinforcement provided to these areas. Additional support methods must be introduced through the beam or cage to prevent collapse. Details of all proposed lifts must be issued



to the appointed person for approval and should be included in the Schedule of Common Lifts.

- 16.19 The Contractor will ensure that the hierarchy of control for the prevention of falls is considered during all works. The Contractor must provide full assessment of the system, which will be utilised on site, and they must ensure that proof of training is issued to the Company prior to the commencement of works.

The Contractor must provide the Company in advance of the commencement of works with a safe system of work which details the proposed fall prevention systems so that a review and comment can be provided.

- 16.20 Where fall restraint/prevention equipment is used, all operatives must be appropriately trained in its correct use including inspection and storage. Records of inspection must be maintained on site.
- 16.21 All access points to lift shafts must be fully protected (floor to upper lintel) with a lockable gate which prevents possible internal falls in to the lift-shaft opening. The gate must be secured to prevent unauthorised access and must be appropriately signed to inform others of the hazard.
- 16.22 All service rise floor openings will be provided with GRP protection as the concrete works progress. Smaller holes will be protected with recessed plywood covers which finish flush with the top of the slab. Any deviation from these requirements will result in remedial works being completed at the concrete frame contractors cost. Service vent pipe openings will be fitted with fire collars with robust lids e.g. Hilt Fire Collar.
- 16.23 Access towers/stairways should be the prime method of access to working platforms or work areas where practicable. Where required a structural engineer should provide details of required tie details for temporary access platforms.
- 16.24 If internal ladders are provided the access points through the working platform should be designed as such to prevent unprotected openings. Where openings are unavoidable these should be protected with appropriate rails or hatch. Where a ladder protrudes through a working platform, the remaining width of the platform must be at least 430mm (two boards)
- 16.25 When constructing walls and columns the Contractor will ensure that appropriate edge protection is provided to temporary access platforms and access can be provided via a secured ladder where appropriate. Operatives are not permitted to access or work on top of a column or wall without suitable edge protection.
- 16.26 Staircases which are under construction must not be used as means of access until false work or formwork has been struck and inspected by a competent person.
- 16.27 The Contractor is provided full details of the concrete pump that they propose to use to ensure that the intended location will provide suitable stability during pumping operations. It is the Contractors responsibility to maintain safe access around the pump at all times and they should display suitable warning signage.



- 16.28 If access ramps are required in order to, discharge concrete into the concrete pump hopper then the sides of the access ramp must be suitably protected in order control reversing vehicle movements. A suitably trained Vehicle banksman should be provided by the Contractor in order to control their concrete delivery lorries. The concrete pump area should be bunded where practicable to prevent cross-contamination during refuelling etc.
- 16.29 All concrete delivery lines must be kept to a minimum and supported to prevent damage. The line must also be secured at every change of direction and retaining pins must be used in all joint collars.
- 16.30 The thickness of the wall of the supply pipe lines must be checked every 3 months in order to ensure that there is not excessive wear from aggregate materials. There must be clear lines of communication in place between the pump operator and the operatives at the work face. If a blockage in line occurs, pressure in the line must be relieved before any attempt is made to break the joints.
- 16.31 The Contractor must ensure that the operatives are trained and competent in the safe use of the angle grinder. The need to cut should be kept to a minimum in order to reduce the potential for sparks or airborne dust.

Where required a suitable dust suppression system e.g. battery pump or manually operated and/or hot works permit should be utilised. The operatives should wear suitable eye safety goggles, ear defenders and suitable respiratory dust mask protection. The work area must be regularly cleaned in order to reduce the potential for slips and trips.

The Contractor must limit the operative's exposure to silica dust during the tile cutting process by ensuring that all operatives wear a FFP3 disposable mask or half face respirator with a P3 filter. All operatives involved in the work must be face fit tested and records made available to site management.

- 16.32 The Contractors operatives may be exposed to hand-arm vibration (HAV) when operating hand-held power tools such as cut-off saws or hammer drills. Regular and frequent exposure to HAV can lead to permanent ill health. Where workers are exposed to HAV dangers the extent of that exposure should be assessed and eliminated, or reduced to as low a level as reasonably practicable.
- 16.33 The Company reserves the right to test any persons on our sites for alcohol and drugs. Anyone who refuses to participate in any sampling being undertaken on site, will be asked to leave the site immediately and prohibited from working on any of the Company's sites until non-negative tests have been provided.

The Contractor must have an appropriate policy in place and have a programme of sampling of their workforce. From the 1 January 2023, 25% of the Contractors workforce on the Company's sites must be randomly tested every 6 months. The Contractor is to make reference to SHE form 09 for policy on those individuals who provide non-negative samples.



DAVID WILSON HOMES  
WHERE QUALITY LIVES



BARRATT  
DEVELOPMENTS PLC

## CONCRETE WORKS

### TRADE PRELIMINARIES AND PREAMBLES AGREEMENT

This Trade Preliminaries and Preambles Agreement relates specifically to the Company's development at .....

I confirm that I have read and understood the foregoing Preliminaries and Preambles and that my prices include for all items contained therein and will "remain fixed" for a period of:..... as outlined in the Enquiry letter.

**SIGNED:** .....

**FOR AND ON BEHALF OF:**

.....

**DATE:** .....

N.B. The Contractor is to sign this Agreement and return it with his Quotation. Any prices received without this Agreement will be excluded from consideration.

Revised: Rev H – 1 August 2022