

**FORM 2**  
**SINGLE PROJECT**  
**CONSULTANT APPOINTMENT**

DATED ..... 2014

**(1) BDW TRADING LIMITED**

and

**(2) GRAVITY CONSULTING ENGINEERS  
LIMITED**

---

**APPOINTMENT**

of

**GRAVITY CONSULTING ENGINEERS LIMITED**

Relating to a Project at

**Kidderpore Avenue Development**

**PHASE 2**

**West Hampstead**

---

**Our Ref: MR/W1229 R2**

Date: 2<sup>nd</sup> October 2014

Mr Mark Watson  
**Barratt West London**  
Wallis House  
Brentford  
Middlesex  
TW8 9BS



Dear Mark

**RE: KIDDERPORE AVENUE PHASE 2**  
**Civil and Structural Engineering Services**

Thank you for your call on Monday last week, in which you invited us to tender for the detailed civil and structural engineering design on Phase 2 of Kidderpore Avenue. Congratulations to you all for securing the site.

In determining the fee for this project we have referred to drawings produced by Allies and Morrison which I asked them to send to us last week. We do have some knowledge of this phase of the scheme. We were required to review the basement structure in particular, and advise on load paths. It would appear that the layouts have moved on significantly since we reviewed them in 2012. There will be a great deal of work required to try to stack everything, as you mentioned on the phone.

**Comments Relating Structural Elements**

We would anticipate an RC framed construction for all blocks, and you have agreed that this would be the case bar elements of the roofs. We have calculated our fee on this basis.

With reference to Block J, this block appears to be a mirror image of Block H. However, we priced Phase 1 on the basis that Blocks F and G were the same, and in the end they were different. We have made an allowance for some differences between H and J at the -02 and -03 levels on this phase.

The basement under Blocks K, L and M is a double basement, and given the groundwater regime and ground conditions in the area we will need to coordinate the design of the basement with CGL to make sure we accommodate all of the required design parameters. The basement will be below the ground water table, and therefore we should make you aware that two layers of protection against water ingress will be required by the NHBC. This requirement applies to basement car parks as well as dwellings. Typically the two layers of protection comprise a waterproof admixture, and an external tanking system.

## **Comments Relating Civil Engineering Elements**

From our previous involvement with the planning application support and detailed design of Phase 1, we are aware of the site's complexities due to the existing topography, restricted access to the existing drainage connections and the redevelopment proposals themselves. In addition to the above, there is a two-storey basement under Blocks K-M. We have therefore allowed for providing support to advise on the car parking proposals to ensure that the basement to ground floor layouts evolve appropriately.

In terms of the vehicular access, we note that a new access is required off Kidderpore Avenue to serve Blocks K-M, and we have allowed for preparing a detailed design package for these off-site highway works and securing technical approval from the Highway Authority.

## **Design Programme**

With sufficient resourcing we would anticipate a minimum structural and civil engineering design programme of 12 weeks for the delivery of a construction level issue of tender drawings on this phase of development. It would be our intention to freeze the design by the end of week 4, and commence RC detailing during week 7 in order to see that we deliver the RC details for the tender submission at the end of week 12.

As for the tender submission, we would prefer to make this a 'construction' issue if possible. In order for this to happen we would like to see a 'pre-construction handover' meeting where we present our design to members of your construction team (maybe with some input from a frame contractor). That way the design can be agreed, and any issues that they see can be raised at the meeting and addressed before we make our issue. This is the way we work on the vast majority of our projects. Everybody buys in to the design and it results in fewer queries during construction.

The design will require close coordination with Allies and Morrison at the outset so we can set the structural lines and progress with our drawing work at an early stage. We would like your help to ensure that construction level architectural details are worked up by Allies and Morrison at the early stages in the design rather than just before or after the tender delivery. This should reduce the potential for changes. We would also like to emphasise the importance of having accurate M&E input during our drawing production stages. In the event that Whitecode are appointed to do the work they will insist on receiving frozen layouts from A&M before they make a start.

The programme is linked with our cost, so if we can all work together to hit this programme then we will all benefit. You get construction issue drawings with cost certainty for the tender and the right level of information to take pressure off the programme. Your construction team is aware of the design and is happy with it. And we get to control our costs, with our full focus on the project up until our drawing delivery.



**KIDDERPORE PHASE 2**

**A. Structural Engineering**

Task Description	Cost Ex VAT
Scheme design and Early Coordination with architect.	
Design	
Drawings	

**B. RC Detailing**

Task Description	Cost Ex VAT
RC details and Bar Bending Schedules – Maximum 75 Drawings	

**C. Civil Engineering**

Task Description	Cost Ex VAT
Site Visit	
Design concepts and coordination with team	
Obtain highway record plans (note: costs received from highways to be charged as a disbursement)	
Review of basement layout in Blocks K-M – One initial layout review only.	
Design finished footpath levels for Part M, finished ground levels for rear gardens.	
General Arrangement layout	
Private foul water drainage strategy to Building Regs standards	
Private Surface water drainage strategy to Building Regs standards	
Kerbing and pavement construction plan, adopting finishes specified by architect.	
Setting out coordinates	
Typical construction details for external areas such as parking bays, footpaths, paving, drainage etc.	
Application for S106 drainage connection consent from Thames Water	
S278 works – stage 2 technical design pack for submission to the Highway Authority	
Off-street lighting design	
Negotiation of technical approvals	
Road Safety Audit (RSA)	
Address matters arising from RSA	

**D. Supplier Drawing Reviews**

Task Description	Cost Ex VAT
Pile Schedule Review	
Wind Post Drawing Review (assume no wind posts required – Metsec Inner leaf)	
Lintel Schedule Review	
Ancon / other shelf angles	



**E. Site visits / Meetings**

Site visits / meetings required:                    per visit / meeting. We have made an allowance in the fee below for 20No. meetings as you requested. Either Tony Watkin or I will attend the meetings, and we will be representing both civil engineering and structural engineering disciplines.

The total cost for civil and structural engineering design is                    including RC details and 20No. meetings.

Please note that the work we have priced is as per the foregoing fee schedules. A list of exclusions is attached at the rear of this letter. This fee is based on the assumption that the drawings are fixed at the end of October, after which we commence detailed design and drawing production with a view to submitting construction drawings for your tender submission.

We hope this offer is competitive and that it is of interest to you. We have done our best to keep the cost down to the bare minimum. We would, however, emphasise the importance of avoiding changes in the design, otherwise we may need to recover the costs of the changes, particularly in respect of the civil engineering work.

Yours sincerely,



**MARK RYAN**  
Director

---

**e-mail: [mark.ryan@gravity-ce.co.uk](mailto:mark.ryan@gravity-ce.co.uk)**  
**mobile: 07889 084577**

