



## **Enclosed Documents: 2<sup>nd</sup> February 2015**

**Mr & Mrs Jeffreys Revised JAN0150098 11 Rosslyn Hill, London**

MAIN CONTRACTORS WORK AND METHOD STATEMENT

AIR HANDLING SPECIFICATION

FACILITIES TO CLEARWATER BY MAIN CONTRACTOR

### **METHOD STATEMENT WORKING WITH THE MAIN CONTRACTOR**

1. Drawings to be agreed

2. Main Contractor to mark out and excavate the Pool to the correct levels and shape.

The Pool area and basement must be kept free of ground and rain water at all times, throughout the Contract by the Main Contractor to stop the possibility of floatation / also kept dry to enable rendering and fitting our Lining **(MAIN CONTRACTORS RESPONSIBILITY)**.

Construction of Pool shell by the Main Contractor (liaising closely with Clearwater)

Site safety around the excavation to be installed by the Main Contractor and access into the excavation to current Health and Safety Standards

3. Clearwater will visit the site to install pipework to the Main Drain.

4. Clearwater will return again to site when the Pool base steel work is in position to install

The main drain sumps and pressure test the pipework and give Certificate to Main Contractor

5. Clearwater to come to site as the Pool walls are about to be constructed and give instructions on where all the Pool fittings are to be located and leave all the fittings with the Main Contractor so he can install as the block work is being carried out.

6. Clearwater to come to site to inspect all the Pool fittings are in the correct position (BEFORE THE CONCRETE WALLS AND FLOOR IS POURED), great care must be taken that the Pool fittings do not get filled with concrete or get broken.
7. Clearwater to come to site when the Pool is constructed to install all the pipework back to the Plantroom
8. Clearwater to test all pipework  
(Certificate to be given)
9. Clearwater to install the overhead insulated ductwork (We have allowed for 4No Silencers in the Four Spigots from the Air Handling Unit, but it will be the responsibility of **Your Acoustic Engineer** to calculate the required attenuation through our ductwork) (as per our drawings)
10. All builders openings, Scaffold, Lighting, heating to be provided by the Main Contractor. All Grilles will be provided by Clearwater for installation by Main Contractor including cutting of all spigots. The grilles can be powder coated if a RAL colour is given
11. CLEARWATER NOW OFF SITE.
12. In programme Clearwater to return to site when programme permits, it should be when the Plant Room is finished, to install all the Filtration and connect the Air Handling machine
13. UNLOADING OF AIR HANDLING MACHINE AND POSITIONING IN THE PLANT ROOM BY THE MAIN CONTRACTOR  
FINAL POSITIONING BY CLEARWATER
14. The Main Contractor then to complete all ceiling work & plastering above the pool
15. WITHIN PROGRAMME THE MAIN CONTRACTOR SHOULD CLEAN THE POOL OF ALL IT'S DEBRIS AND CHLORINE WASH. THERE SHOULD BE NO TRACES OF MOULD OIL ON THE SURFACE OF THE CONCRETE. THIS WORK SHOULD BE CARRIED OUT PRIOR TO CLEARWATER'S ARRIVAL  
CLEARWATER NEEDS A STRICT PROGRAMME FOR THIS STAGE.
16. Render the Pool walls and Screed their floors (Main Contractor)  
As per Specification in the Estimate
17. Drying time for the Screed

18. Clearwater to lay Alkor Plan Lining when walls dried

19. Fill pool

20. Commission and Heat Pool

**21. Automatic Top Up**

Clearwater to install an Automatic Top – Up

Overflow to be installed by the Main Contractor  
**See typical drawing**

**Backwash**

Backwash to terminate in a 100mm pipe above the Plantroom floor and trapped to a local drain, drainage pipe by Main Contractor.  
**See typical drawing**

**Flow Rates**

1 x  $\frac{3}{4}$  Hp Pumps on a bacwash cycle for 3 minutes will discharge 600 litres

**ALL OF THESE SERVICES BELOW BY THE MAIN CONTRACTOR**

**22.**

**Services Required**

Backwash drainage installed to within 1m of the filter position

Overflow from the Top – Up Unit plumbed to a suitable discharge position

Area within 1m of Spa Shell to install an air break pipework loop above Spa water level, and an area just outside 2m range of Spa (and Pool water) for 240v air switch relay contacts

15mm Cold water main terminated with a 15mm stop tap to within 1m of the top – up supply pipework.

100A Single phase electric supply terminated into a fuseboard, situated above and within 1m of Pool filtration equipment, incorporating a 30mA RCD and motorated MCB's with all earth bonding and earthing protection as required for a Pool and /or Spa

**MCB's Required**

3 @ 6A

1 @ 10A

1 @ 55A

**Pool water, Air Handling and Dehumidification**

AIR HANDLING UNIT WILL REQUIRE A CONSTANT DEMAND PRIMARY HEATING FLOW AND RETURN CONNECTED WITH ANY BYPASS, ELECTRICAL INTERLOCK OR DIVERTING VALVE AS THE HEATING SYSTEM MAY REQUIRE WITH CONDENSATE PIPEWORK PLUMBED TO A SUITABLE DRAIN. IT MAY ALSO REQUIRE A REMOTE SWITCH INSTALLED AND CONNECTED TO THE MACHINE FOR NIGHT SET BACK MODE ALL AS AIR HANDLING UNIT SPECIFICATIONS.

THE AIR HANDLING INCORPORATES A PAIR OF VOLT FREE SIGNAL CONNECTIONS FOR ANY ELECTRICAL INTERLOCK

IN PRINCIPLE YOUR POOL WATER TEMPERATURE HAS BEEN DESIGNED AT 29oC UNCOVERED FOR 2 – 6 HOURS IN USE FOR 1 – 4 HOURS

THE AIR TEMPERATURE HAS BEEN DESIGNED AT 30oC

THERE IS A NIGHT BACK SWITCH IN THE AIR HANDLING UNIT THAT CAN BE OPERATED WHEN THE POOL IS COVERED

THE BACK UP BOILER SIZE 20K<sub>w</sub> THE PIPE SIZE FOR THE FLOW AND RETURN ON THE AIR HANDLING UNIT IS 28mm TO BE CONNECTED BY THE MAIN CONTRACTOR BOILER FLOW MUST BE 70°C THE RETURN 60°C THE BOILER PUMP UPS 15 – 60 FLOW RATE REQUIRED 0.24L/SEC @ 9.0KPA RES LINEAR SOUND POWER FREQUENCIES HZ LWDB RETURN AIR 67.9 SUPPLY AIR 65.1 FRESH AIR 65.6 EXHAUST AIR 67.7 CONDENSATE OVERFLOW TO SUITABLE DRAIN BY THE MAIN CONTRACTOR 7.6 L / HR AIR HANDLING UNIT IS ONLY AVAILABLE IN SINGLE PHASE

### **STRUCTURAL DETAILS TO BE CHECKED BY ARCHITECT**

EXTERIOR WALLS 47.8SQM U VALUE 0.30  
EXTERIOR WALL GLASS 10.0SQM U VALUE 2.00  
INTERIOR WALLS 14.5SQM U VALUE 0.20  
INTERIOR WALL GLASS 17.2SQM U VALUE 1.80  
ROOF / CEILING 84.4M<sup>2</sup> U VALUE 0.20  
FLOOR 43.9SQM U VALUE 0.25  
POOL HALL VOLUME 203SQM

The Air Handling Unit is delivered to site on a tail lift lorry it must be unloaded by the Main Contractor and placed into the Plantroom, the door openings must be a minimum of 900 x 2m, the unit weighs 265Kg,

Final fixing by Clearwater

The Air Handling Unit must be connected to a suitable heat source by Main Contractor (see specification).

**Part 'P' inspection and certification by Main Contractor**