

SEPTEMBER 2009 ISSUE 14

NEWSFLASH

RECENT CONTRACT AWARDS

Dunne Building and Civil Engineering Ltd

90156

Project: Friarton Recycling Depot
Package: Extension of existing depot to provide additional bulking shed, lorry park and attenuation pond
Client: Perth & Kinross Council



THE NEW ARR CAMPUS

90157

Project: Ayr Campus
Package: PT Concrete Frame
Client: Bovis Lend Lease

Dunne Concrete Flooring Ltd

50075

Project: New Unit, Whitehill Industrial Estate
Package: Factory floor slab
Client: Warrington Property Maintenance

50077

Project: Tesco, Annan Site
Package: Ground Floor Slabs Internal & External
Client: Barr Construction

Conforce Ltd



ATHLETES VILLAGE, LONDON

70029

Project: N07 Athletes Village, London
Package: Supply and install pt to 10 floors of athletes accommodation; total slab area 28,500m²
Client: Mitchellson FCE Ltd

70030

Project: Inverclyde Schools
Package: Design, supply & installation of p/t to 2 schools, total area of p/t 11,600 m² approx
Client: Dunne Building & Civil Engineering Ltd

70031

Project: Ayr Campus
Package: Design, supply & installation of p/t to ground floor, 1st floor, 2nd floor and roof
Client: Dunne Building & Civil Engineering Ltd

JOB DUNNE AT BOLTON!

New Community College Nears Completion



Bolton Co-location Project

The Community College concrete frame is a 4 storey structure with over 12000m² of Post Tensioned slabs with all 4 levels significantly different in layout and area. Within the community college itself, there are 7 cores, 5 stairs, 2 lifts and 350 columns with 21 different sized columns. With strict planning restrictions dictating the working hours of 8.00am to 6.00pm and the close proximity of a live fire station and regional command centre, getting the 10,000m³ of concrete onsite and placed has been an enormous challenge for everyone involved. This has been delivered by utilising CLR Plant Hire's concrete placing boom fixed to a 14m freestanding mast, rotary concrete spider and static pump. This chosen methodology ensured that vital lay down area and logistical routes were maintained.

Working closely with Conforce for the post-tension works and Tier Consult for the pre-cast and reinforcement detailing, the blend between Pre-cast, Post-tension, RC and Structural steel has worked well given the multitrade interfaces. A first for Conforce was the 500m² circular rotunda which incorporates arched and elliptical openings to allow for a light and spacious environment to be achieved in line with the architect's overall vision.

With Pre-cast columns over 8m, concrete filled steel columns topping 7m and pre-cast stairs close to 5t the three luffing jib cranes onsite have truly been tested to the limits and with areas of suspended slabs having 3 and 4 Storey high decking and 25m long shear walls having a 30 degree slope key, partners RMD and Peri have been regular visitors to site and have been crucial in maintaining momentum. Externally over 1 mile of drainage has been installed on the project and a huge

1000m³ attenuation tank has been installed at a depth of over 4m deep with materials being re-cycled at Leigh.

The 6th Form College is also a 4 storey frame but constructed from steel with the integrity taken from the 2 large cores, single lift shaft and huge feature walls. Within the foundations geothermal pipes are installed and will provide the building with heated water. The installation of the pipes and loops involved close co-ordination with Geothermal International and needed a 3 sequence phase of delicate pile cropping, foundation stubs and full trench preparation to allow the ¾ mile of pipes to be installed whilst under pressure.



Architectural features are derived from the 2 exposed drums and the 12m long cantilevered stairs. The drum shutters were made off site in Bathgate and delivered ready for assembly in a 'just in time' manner. To facilitate the architects requirements all electrical conduit have been cast within the drum walls leaving minimal components exposed and in order to keep both buildings water tight and Gas proof some 5000m² of membrane has also been installed.

In conclusion, we have coped admirably with the various challenges presented on this project whilst maintaining our original 32 week contract completion date. Another important project delivered on time.

Conforce Ltd continued



70032

Project: ECC Aberdeen

Package: Post tension slab calculation packs to 4 no

floors of the Hospital building for Building Warrant

Client: Robertson Construction

PT AT THE VILLAGE

Conforce secures first contract at the London Olympics



At the London Olympics 2012 site there will be a large number of medium rise buildings with apartments to house the athletes during the Games. The Olympic Delivery Authority is overseeing the works with property group Lend Lease, together with its construction arm, Bovis Lend Lease, appointed as the development and construction manager. This contract (N07) was let by them to Mitchellson.

N07 comprises 7 Blocks, A – G inclusive, all having 12 floors, with post tensioning starting at level 1, 2 or 3 depending on the Block and then on all floors up to level 12. The total area of post tensioned slabs is 26,500 m² approx. The Consulting Engineers, Robert Bird Group, have designed these slabs as post tensioned in order to provide the thinnest and most efficient design; most are 225mm thick. The systems used in their design are mostly bonded tendons of 3 and 5 no 12.9mm strands.

Mitchellson chose ConForce as their preferred subcontractor at an early stage in the process and awarded the subcontract to ConForce to supply and install the P.T. system into N07 in July 2009.

Contract works for the delivery of the RC frame at the new Easterbush Research Facility in Edinburgh have now been successfully completed and this milestone in the overall development was recognised with a topping out ceremony on Wednesday 26th of August 2009. In attendance was our own Managing Director, Mr Gordon Dunne and BAM Construction's Scottish Regional Director, Mr Kenneth McAlpine.

Also on Friday the 28th of August 2009 we saw the University of the West of Scotland's £70 million Ayr Campus move another step closer following an official turf cutting ceremony at the new campus site. Shown here from left to right is; Mrs Winifred Sloan, Provost South Ayrshire Council, Professor Seamus McDaid, Principal and Vice Chancellor of the University of the West of Scotland and Professor Bill McKelvey, Chief Executive and Principal of the Scottish Agricultural College.

A REPORT FROM DUNDEE HOUSE



Dundee House

Dunne's packages on the new landmark Dundee city council office block which includes the sub and superstructure works commenced on 1st of July and have a programme of forty four weeks.

The logistics of the works have the extra challenge of being co-ordinated around a retained structure to 60% of the perimeter of the building on an already constrained site. The building is to consist of a lower ground floor plus nine levels of a floor plate of 1,350m² and six no. cores, four of which are to be climbed using the bespoke Peri RCS lite system which has only recently been developed for mid height buildings in the UK. This is only the second time the system has been used in Scotland.

The other two cores are to be constructed floor by floor and the floor slabs are to be constructed using the RMD tables system to give the design team the required board pattern layout as 90% of the floor soffits of the building are to be exposed. The works commenced with the removal

of 4,500m³ of material to the southern area of the site where the lower ground floor is constructed. Running concurrently to the bulk excavation was the removal of the existing ground floor slab and the underpinning of the existing walls to allow the core foundations to be constructed adjacent to the existing structure.

These works along with the adjacent drainage, the lower ground floor and the foundations to the static pump & the south and central cores have been completed. The two tower cranes for the project were erected prior to week three to service the site as Stent began piling works to the Northern third of the site on week three.

Works ongoing presently are the internal excavations for the drainage and foundations in the existing building, excavations for the pad foundations and ground beams for the main structure and the preparation works for the first lift to the South cores walls which again have a board pattern & skirting feature in the finished concrete.

AS ONE JOB FINISHES, ANOTHER ONE STARTS!

