

## Case Study – Miller Homes, Park View

**Project:** Miller Homes North East, Park View Development, Gateshead

**Client:** Miller Homes

**Architect/ Contract Administrator:** Miller Homes

**Contract Value:** £45,000

**Contract dates:** Feb 2012 – October 2014

### **Brief Description of the work:**

Miller Homes Limited is the developer of a residential development on the grounds of the former Gateshead College. The site lies to the west of Durham Road and approximately 2.4 miles south of the River Tyne.

The development comprises of approximately 175 houses, made up from 25 house types, two four storey residential flatted dwellings over a part basement car parks and a refurbished listed building.

Zenith Consultants provided all the structural engineering services for both the flatted developments and the housing. The structural form of the house types is that of traditional loadbearing masonry, pre-cast concrete 'beam and block' ground floors, engineered timber joists to the first floors and roofs, supported where necessary by structural steelwork.

Foundations comprise of strip foundations, retaining walls and ground bearing slabs in the case of partial basement garages.

Of particular note was the adaption of a semi-detached dwelling to form the open plan temporary Sales Office, with an aim of being able to revert to two separate houses with minimum time and effort.

Zenith Consultants were initially tasked with establishing appropriate structural forms for the first flatted development Herrington House, with a view of 'rolling' out this type of design onto a second, Saltwell House. A number of factors had to be considered in such proposals, not least costs, build-ability and 'comfort' borne out of the developer's extensive residential house building experience.

The developers preferred structural form for Herrington House was that of load bearing masonry from ground level with a structural steel frame and reinforced concrete retaining walls forming the basement.

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**Park View Development - Photos.**



**Over view of the site – looking South from Herrington House**



**Phase 1 – Construction**



**Phase 1 – Construction with Herrington House in the background**



**Construction of the Retaining Walls**



**West Elevation**



**Sales Office**