

**Location:** Croydon

**Client:** Barratt

**Frame Contractor:** Lancsville Construction Ltd

**Main Contractor:** Lancsville Construction Ltd

**Post-tensioning Design:** CCL

**Post-tensioning Installation:** CCL

**Year of Completion:** 2009



New South Quarter is a £160m contemporary urban village on the Purley Way, Croydon, within easy travelling distance of London. CCL supplied its XU and XF systems and supervised installation in the first two residential blocks to be constructed.

A huge regeneration project, this urban village of 800 apartments is set on a 13-acre site and consists of one-, two- and three-bedroom apartments and studios along with workshops, business start-up units, a medical centre, nursery school, café and convenience store. The River Wandle was de-culverted and returned to the surface to flow along its original course next to development.

Barratt awarded the first phase of the development to Lancsville Construction who commissioned CCL to undertake the post-tensioning because of CCL's competitive price, enthusiastic approach and track record of delivering outstanding solutions.

CCL used bonded multistrand post-tensioning on the first-floor transfer beams and unbonded post-tensioning was used at all floors from level 1 through to 6 of the new residential areas. Nearly 200 tonnes of high tensile cable was installed, along with approximately 19,000 anchors and wedges. The design objective for the development was to achieve a flat soffit and minimal floor thickness. The use of a bonded multistrand system allowed the thinning down of transfer beams while unbonded post-tensioned slabs allowed the structures to maintain a minimal slab thickness throughout. The project had very tight timescales and CCL was chosen for its ability to react in a short period of time to mobilise and execute both the bonded multistrand transfer beams and commence the unbonded flat slabs.