

Stratford City Olympic Village

Our Services

- Contaminated Land Assessment
- Numerical Modelling
- Earthworks Design



Earthworks

CGL is advising O'Keefe on the earthworks at the site of the new Stratford City which will house most of the 2012 Olympic athletes and ultimately become one of the largest mixed-use developments in the UK, with more than 100 shops, three big department stores, cafés, schools, hotels, parks and health centres. There will be a commercial district with landmark towers and facilities for 11,000 residents and 30,000 workers.

The site, covering 73 hectares of largely derelict land, is on infilled raised ground derived from the construction of CTRL and in particular the "Stratford Box" rail head.

Some 850,000m³ of infill material needs to be regraded prior to development and much of it needs to be removed to achieve site formation levels.

Calculation of earthwork volumes and waste

classification of spoil for removal is particularly complex task. O'Keefe turned to **CGL** for assistance. **CGL** has developed a computer 3D model of the site to provide a "fly through" visualisation of the existing site revealing the various layers of waste.

By superimposing the planned earthworks and development levels on the 3D model it is possible to generate cross-sections and earthworks cut and fill balance volumes. The balance can be optimised in terms of the waste classification of spoil materials thereby allowing O'Keefe to save millions in unnecessary waste disposal costs.

As the earthworks proceed the model will be updated with WAC test data so that a Validation record of the works is produced "*in the model*".

Client: O'Keefe Civil Engineering (Greenwich) Ltd