

## McBains leverages field layout automation with Ideate BIMLink

“Ideate BIMLink provides a level of accuracy in siting concrete pile caps that is 100% reliable. We gained enormous benefit from Excitech collaborating with the Ideate team directly to give us a solution and an approach that responded precisely to our identified operational need.”

**Montana Yeomans, BIM Manager  
McBains**



### Meet McBains

McBains is a standard-setting go-to property and construction consultancy providing a bespoke range of services to corporate clients and public bodies across the UK and Europe, and with wider global capability.

As one of the longest established consultancies in the UK, McBains provides a broad range of services which include cost and project management, architectural design, mechanical and electrical engineering, civil and structural engineering, building surveying, cost management and sustainability advice.

With projects ranging from minor works to major contracts in excess of £1 billion, McBains covers all major sectors, from education to retail, custodial to residential, health to commerce, infrastructure to transport and industrial to conservation.

Whether working as part of an externally sourced team or as an entire in-house inter-discipline team, McBains is always capitalising on the broad and diverse skills, knowledge and expertise that exist within the Group to offer its clients an exceptional level of service.

Committed to advancing the way the industry operates, McBains strives to continually evolve and find a better way.

### Services provided:

Needs assessment and provision of workflow solutions  
Software  
Technical Support

### The Challenge

#### Improving accuracy through effective data manipulation between Revit and site operations

BIM is bringing collaboration into the heart of the construction industry. It's helping to drive better outcomes through greater understanding of all parties where their part of the project picks up from and passes on to other parties in the project lifecycle. It's still subject to interpretation issues, however, among some companies.

In the UK, fewer than 1% of professional property or construction firms have achieved BIM Level 2 certification<sup>1</sup>. McBains is one of the first firms to gain BIM Level 2 certification, as the company website states:

<sup>1</sup> McBains – Accreditations. Available at <https://mcbains.co.uk/about-us/accreditations>

McBains was an early adopter of the BIM process and has been aligning to PAS 1192-2:2013 standards and PAS 91 construction Pre-Qualification questionnaire, along with the ability to meet the UK Level 2 BIM requirements for employers and clients.

The scheme has been designed to enable BIM certificated businesses to demonstrate compliance and avoid having to provide evidence of competence each time they tender for large-scale public projects.

### Reducing risk and accelerating construction processes

One of the strategic goals for the McBains team is to optimise the use of BIM between the design team and the construction site; providing consistent and accurate information.

As more companies work with 3D models incorporating data, the more they appreciate how easy it becomes to pass on the baton between parties; with numerous associated benefits in terms of faster project completion –

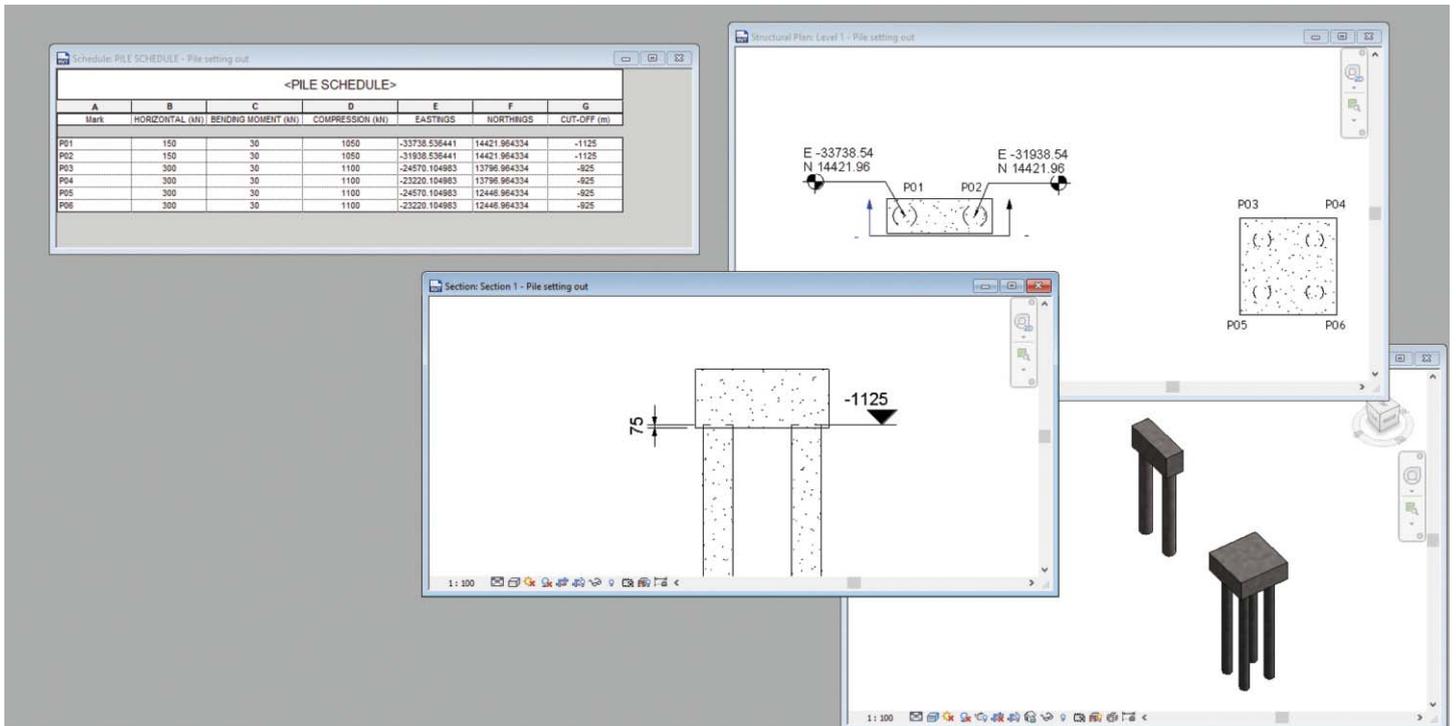
and the associated favourable impact this has on costs – and improved accuracy when projects commence on site.

McBains was looking to use the BIM data in Revit in a specific aspect of construction. This was the incorporation of data from Revit into the advanced coordinate-based calculations of the total station in pile setting out.

### “The next important leg of our BIM journey”

“We had been using Ideate for a while to import and export data at the design stage to make it easy for non-Revit users to effectively interact with the design model without having to completely get to grips with how to use Revit themselves. This was one of our core approaches”, explains Montana Yeomans, BIM Manager.

“We suggested to Excitech that it would be extremely valuable to us if we could manipulate data the other way and use data from the building information model as direct information in the field. We said it would be great if we could use Ideate for structural nested families. Excitech said we could. It was one of those ‘Eureka!’ moments. We felt like we were on the next important leg of our BIM journey.”



## The solution – Ideate BIMLink to leverage coordinate data

Excitech have long been a partner to McBains on its BIM journey and saw the opportunity with McBains' request to bring in guidance from Ideate experts. The Ideate team is based in San Francisco however and the meeting could not be convened immediately.

In order for McBains to lose no time, Ideate's Director of Software Development, Glynnis Patterson, got her team together to create an explanatory video for McBains. The video is viewable here.

**Patterson explains: "We've collaborated with Excitech for many years and love the chance to support their customers when they face fresh challenges. We got the video together quickly so that McBains could start to explore this use of Ideate BIMLink ahead of us getting together. We've now adopted the video as a valuable aid on our website for all customers."**

Back in the UK, Excitech met with Montana and his team to advise on how to use BIMLink on the coordinate workflow

and how to structure files and families to support it. In supporting coordinate workflows, Ideate BIMLink makes it easy to export points for use in the field by creating points within the building information model itself. Coordinate data can then be published within a schedule. The result is improved accuracy and a reduction on construction time.

Without the use of Ideate BIMLink, McBains' concrete contractors would spend significant time calculating the relative heights of the pilings, impacting the schedule and the level of accuracy.

Montana summarises the project: "BIMLink eliminates this effort by allowing us to take the data directly from the 3D model and bring it into the field with the use of a total station, which can read the coordinates.

Our business depends on strong relationships as much with our suppliers as with our customers. McBains believes in a human approach to business relationships and it gelled with us when we saw that Excitech shares such beliefs as do the vendors it works with."

**Excitech is the exclusive distributor of Ideate Software solutions in the UK.**

