

## A Best Practice Case Study

# **Business and Law Building – ISG**



#### **Project Profile**

Project: Bristol Business School

Client: University of the West of England

Value: £40M

Contract Type: Single stage

Procurement Route: Competitive Tender

#### **Project Overview**

ISG was appointed on a £40m contract to construct the new Bristol Business School for UWE Bristol. ISG delivered this project to the level 2 BIM principles set out by the UK Government. Completed early 2017, this project was presented with the CCS Gold award for working towards improving the image of construction.



ISC



University of the West of England

### CONSTRUCTING EXCELLENCE IN THE SOUTH WEST

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#### **Best Practice**

**Use of BIM:** BIM played a significant role throughout every stage, and the project is a showcase for what is possible through effective use of the technology: from clash detection, procuring via model take off, collaborative working, model iteration validation, data validation, COBie capture & validation all the way through to BSRIA soft landings. The steps taken by ISG to ensure BIM was utilized to its full potential included developing a monthly BIM dashboard which reported on outstanding clash detection, technical queries, model changes etc. Clash detection workshops and webinars were also set up to review highlighted issues and assign responsibility for close out.

**Value engineering:** The use of value engineering processes helped ISG to make savings of over £2M on the project, with 28,277 clashes identified and avoided. For example, the omission of structural steelwork to the lecture theatre and addition of post tensioned concrete saved almost £0.5M and significantly protected the programme.

**Soft landings:** A soft landings 'champion' was appointed from the project team User Group Consultation, and a lessons learned approach was employed. For example, by reviewing lessons learnt with the Soft Landings consultant (Hoare Lea), early instruction of AV installations was highlighted as a key priority. ISG also engaged with the university's user groups by showing a 3D construction simulation and meeting at their Campus Development Roadshow and meeting with the building's users, answering queries on the design, phasing, programme and the transition.

**Collaborative working:** All parties across the project used ISG's common data environment to share project files, ensuring everyone had access to the most current information. New software was also implemented to allow the project team access to the BIM models, which allows data to be extracted. This data was then used by QSs with collaborative input from the supply chain as part of 5D process to check. A monthly dashboard was developed and sent to the whole team, which showed the issues captured within the models, provoking further questions and encouraging collaboration between consultants and teams.



#### Added Value

**Stakeholder engagement:** ISG worked with UWE to create an extensive rota of site tours and lectures used to create a sense of engagement and ownership. A bespoke micosite was created to keep stakeholders engaged with the project as it developed on site - www.isgatuwe.com

**Whole life costing:** Within the Contractor's Proposals, ISG presented the client with detailed predictions of whole life costings over a 60 year period, considering the following: utilities, cleaning, facilities management, planned and preventative maintenance, refurbishment and repair costs. Real costs and discounted costs based on the Social Time Preference Rate from the Treasure Green Book were calculated and presented, optimising the calculations.



