Constructive Thinking : Hallmark Hotels

Constructive Thinking
www.constructivethinking.co.uk

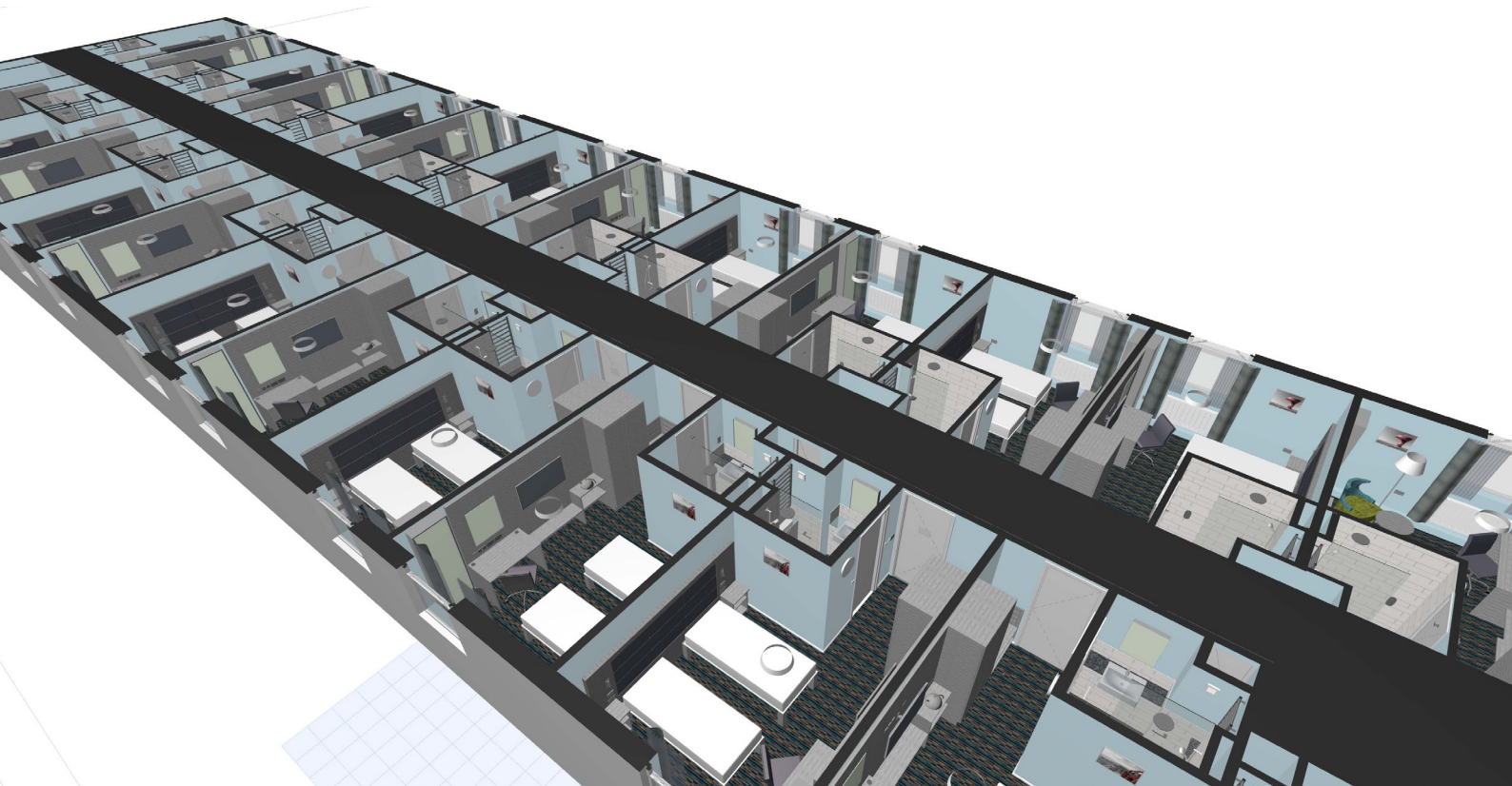**Tightened workflow helps to halve hotel refurb lead time**

Liverpool-based Constructive Thinking was contracted to refurbish several of Hallmark Hotels' properties. Not content with standard refurb workflows, the practice devised an ingenious, time-saving process to speed up the project and dramatically cut revenue loss for Hallmark.

With Hallmark's hotels spanning a vast range of styles and eras, from the 1840s through to the 1980s, the design challenge was how to give this eclectic mix a consistent look and feel.
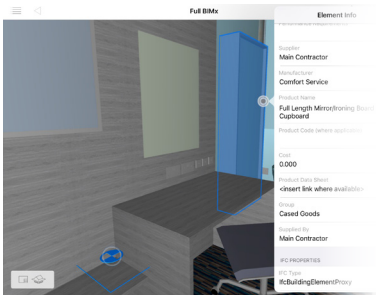
Constructive Thinking devised a suite of finishes for the hotel bedrooms that work across the whole hotel group, from loft style rooms in Manchester through to 1970s rooms in Preston, providing the same quality and feel across a variety of different backdrops.

Completing the work quickly and with minimal disruption were also important factors for the hotel chain. Jon Moorhouse, director at Constructive Thinking, says the practice could meet all requirements thanks to its streamlined workflow.

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Point scanning for fast and accurate surveys

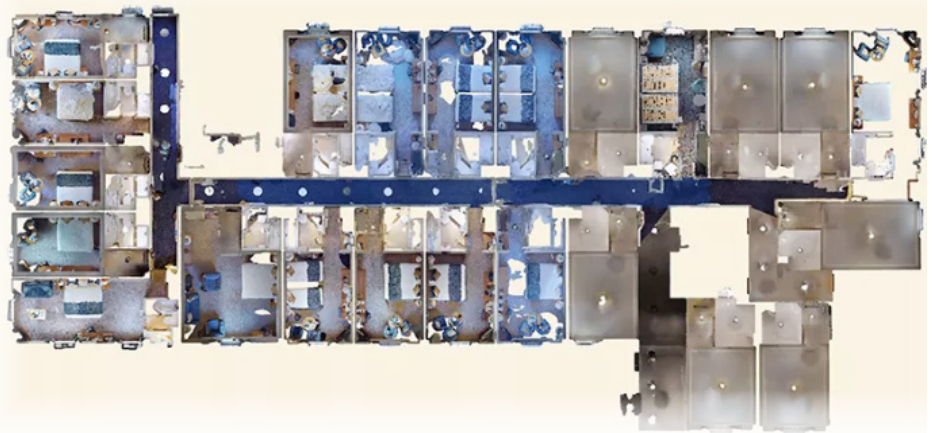"We only visit each hotel once," said Jon. "We use point scanning to take an accurate picture of every room that needs refurbishment and the 3D scans are imported into ARCHICAD as a point cloud model. From those, we are able to create 3D models of every room very quickly.

"The scans are an essential part of our workflow as they mean we don't miss things we might with a 2D survey. For example, we can also see the condition of a room, whether there are cracks in the ceiling or whether the windows are in good condition."

Refurbishing with parametric objects

Constructive Thinking created a library of models for each piece of furniture and carpet for the rooms. Every item is saved as a parametric object within ARCHICAD, meaning it can be stretched to fit the room perfectly, while retaining all of its core properties.

Jon said: "We created an interior design package which enables us to apply a similar style across the hotels, while also retaining the unique character of each property. To speed up this process, we developed a template in ARCHICAD that we could apply to each room."

Lead time halved with close supplier collaboration

Throughout the project, Constructive Thinking has worked in close collaboration with its furniture and carpet suppliers, to understand whether the designs can be altered to help speed up the project and make it more cost-effective.

Jon said: "By sharing information with furniture suppliers digitally in IFC or other 3D format, we're able to work to incredibly tight timescales. Once designs are finalised and details sent to the manufacturer's CNC machines, the furniture is cut to size and can be delivered to site within just four days.

"With the carpets, the exact sizes required for each room are extracted from the ARCHICAD model and the carpet woven to fit."

Sharing information with BIMx

Constructive Thinking uses Graphisoft's BIMx application extensively throughout each hotel refurbishment to communicate with the client, the contractor and the hotel's technical manager.

Jon explained: "For one of the hotels, we simultaneously did the point scanning at the hotel, transferred the data to our architects in the office who quickly dropped the information into ARCHICAD and then used BIMx to immediately share our ideas with our client, who was in another city.

"What's more, we're using BIMx to store a detailed log of information about each of the sites. We've been working with the contractors to capture and retain information about each of the hotels, such as details about air conditioning, building surveys, fire plans etc. Effectively, we are creating a detailed facilities management resource that the hotel group will be able to use into the future."

Every Hallmark hotel is very different and each comes with its own unique design challenges. For example, the Prince Regent Hotel was created from a former Barnardo's home, a chapel and a purpose-built extension.

"There's pipework everywhere," said Jon. "The contractor is taking detailed site logs and we are modelling these in the ARCHICAD model. In this way, we can capture and retain this vital information and use BIMx for sharing.
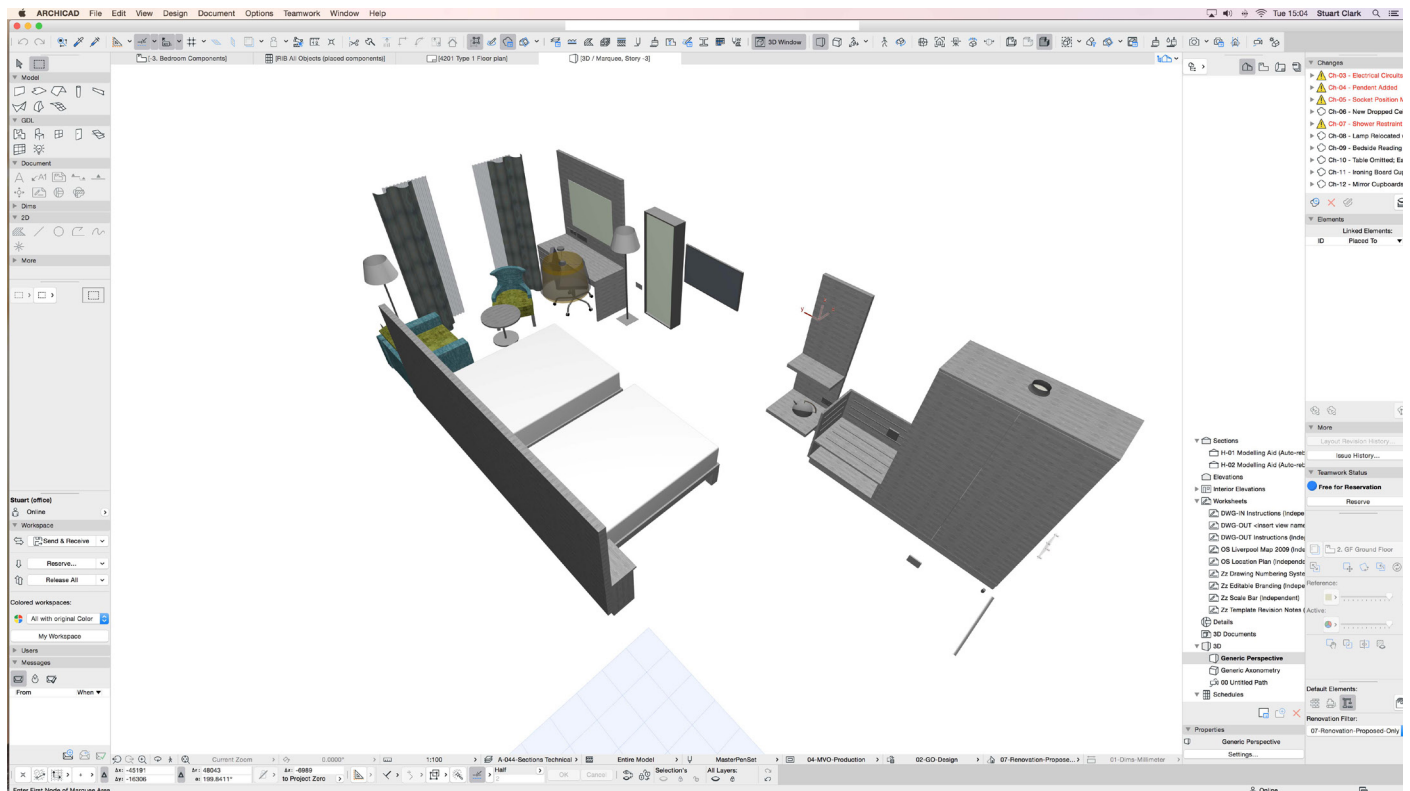
"The contractor loves the information we are able to provide. With the help of 3D scanning, we're able to spot and plan for any potential problems in advance which in turn enables the contractors to plan more effectively."

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Delivering a successful refurbishment with minimal disruption

With a well-established workflow in place, Constructive Thinking has been able to undertake the refurbishments with minimal disruption to Hallmark's business, closing just a few rooms for the minimal amount of time while keeping the hotels open.

Jon concluded: "With our tight workflow and by liaising closely with our suppliers, we have managed to halve the lead time from eight weeks to just four, from the room scan through to a completely refurbished room."

About Constructive Thinking

Established in 2002, Constructive Thinking is a RIBA Chartered Architectural Practice based in Liverpool. It has a wide portfolio of work including sustainable architecture, housing, retrofit, hotels and leisure, Building Information Modelling (BIM), and interior design.

About Graphisoft

GRAPHISOFT® ignited the BIM revolution in 1984 with ARCHICAD®, the industry first BIM software for architects. GRAPHISOFT continues to lead the industry with innovative solutions such as its revolutionary BIMcloud®, the world's first real-time BIM collaboration environment, EcoDesigner® STAR, the world's first fully BIM-integrated "GREEN" design solution and BIMx®, the world's leading mobile app for BIM visualization. GRAPHISOFT has been a part of the Nemetschek Group since its acquisition in 2007.

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