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## *Pinewood House 3D Survey*

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**Project Value: £4,300**

**Project Start Date: 17<sup>th</sup> November 2019**

**Project End Date: 6<sup>th</sup> December 2019**

**Client: Residential Guest House**



**JBL Engineers Ltd**





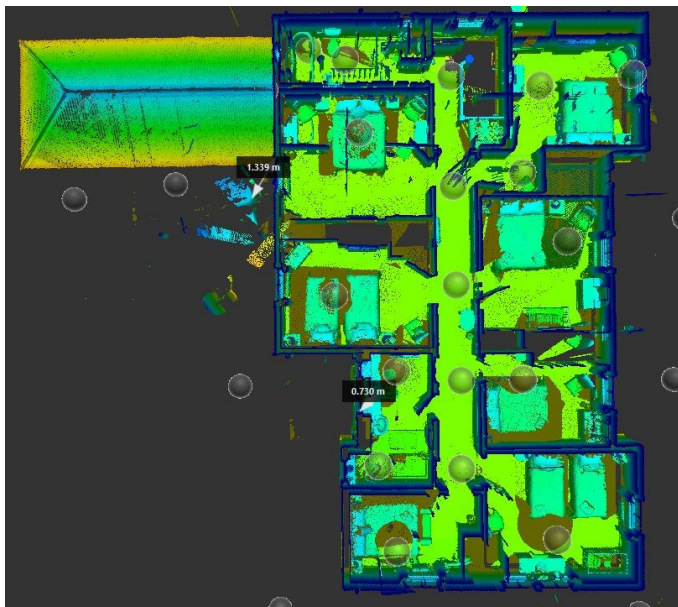
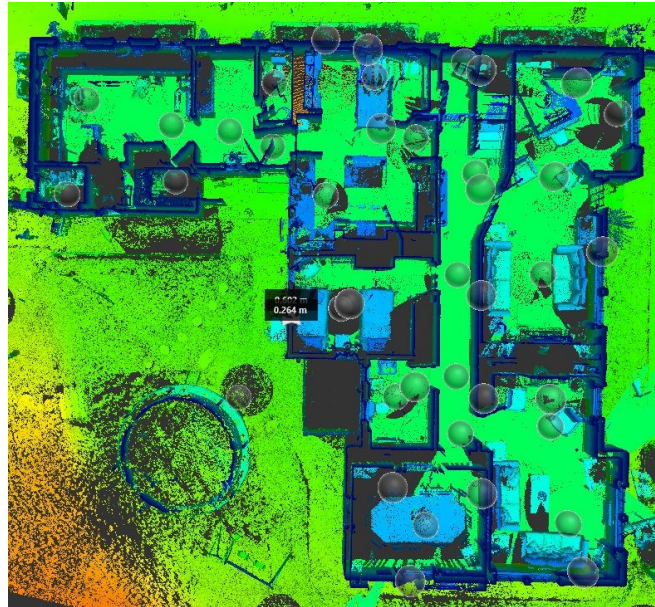
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JBL Engineers were engaged by the client to provide 3D Scans and modelling of a residential property, grounds and outbuildings. The client looking to renovate the principal property and seeking to develop the 2 outbuildings, required detailed plans and levels such that the design team could develop a planning application. The principal building was to be investigated to provide energy savings and whether low temperature heating could be utilised.

JBL Engineers mobilised to site having coordinated with the property owner due to the property being utilised as a holiday let. Coordination was essential such that works proceeded without interruption to the guest's occupation, and with minimal disruption to the property services team during changeovers. As such JBL Engineers were faced with conducting the internal scans during a short space of time circa 9hour intervals weekly.



During the surveys when unable to conduct internal scanning external scanning was conducted, inclusive of the internals of the outbuildings.

On completion of scanning, the scans were registered and collated into 2 distinct point clouds to mitigate file size. The first point cloud utilised the principal property and internal scans, the second point cloud incorporated the ground and outbuildings and principal building externals with the internal scans excluded.

The output scans as shown here demonstrate the building layout on each floor with sections taken at each level.

This enabled Layout drawings to be

produced from the point cloud data and thereby allowed detailed heat loss calculation for LZC low temperature heating systems and fabric upgrades.

