

## MASONRY PARTY WALL INVESTIGATION

Non-intrusive and intrusive methods for a comprehensive structural investigation of a party wall, delivering critical insights to guide renovation works with minimal disruption.

### OBJECTIVES

The client sought a meticulous understanding of the wall's structure to prevent any inadvertent damage to the adjacent property during the planned works. Understanding that standard inspection methods might not suffice for such a precise exploration, TRACE-SI was entrusted to devise a specialised strategy ensuring maximal accuracy and minimal interruption.

### SOLUTIONS

In response, TRACE-SI developed a bespoke investigation strategy, integrating non-intrusive and intrusive techniques. The process began with the use of high-frequency Ground Penetrating Radar (GPR), a non-destructive approach to assess the general construction and thickness of the wall. Following the GPR survey,

TRACE-SI performed intrusive boroscope examinations, drilling small holes at designated points for visual inspections, confirming the GPR findings and further detailing the wall's composition.

The conducted investigation generated precise insights into the masonry structure. The GPR data was substantiated by the physical measurements gathered from the boroscope work. Moreover, the boroscope holes' depth was determined by the GPR readings, ensuring the accuracy of the wall's thickness and structural make-up.

### BENEFITS

TRACE-SI's custom solution offered substantial benefits to the client. The in-depth understanding of their party wall was instrumental for their renovation project, mitigating the risk of unanticipated issues or damages and ensuring seamless operations. The combination of non-intrusive and intrusive methods guaranteed minimum disruption while maintaining the highest accuracy.

