



## Quantapoint Case Study

# Quantapoint and Herbert S. Newman and Partners Renovate the Troup Magnet Academy of Science

### *Helping to Restore a Historic Landmark*

#### **Situation**

Considered an important New Haven historical landmark, the Troup Magnet Academy of Science was included in a \$45 million dollar renovation project to restore several schools to their former beauty. Due to their expertise in historic renovations, Herbert S. Newman and Partners was selected as the architect.



#### **Challenge**

Herbert S. Newman and Partners understood that restoring the school in a respectful and historically accurate manner would require a detailed understanding of the structure, including exterior elevations and the very intricate brick patterns on the façade. Unfortunately, no existing conditions documentation was available and re-creating it manually had proven to be a time-consuming and costly manual process for the architects.

“Quantapoint provides a fast, cost-effective and accurate method to document complex or intricate buildings.”

*Tim Callahan  
Principal*

*Herbert S. Newman and Partners*

#### **Solution**

To develop accurate base-level drawings of the entire facade, the architects called upon Quantapoint Inc. of Pittsburgh, PA, the leading provider of as-built documentation using integrated laser scanning. Quantapoint rapidly collected, integrated and verified billions of highly accurate measurements to create a “digitized building” user laser scanning – without invasive manual measurement, purchasing costly hardware or time-consuming remodeling.

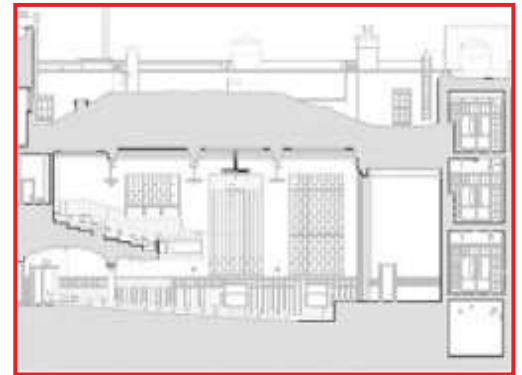


## Results

The digitized building provided more accurate and complete dimensional information that was used to create a variety of 2D drawings to fully document the building, including exterior and interior elevations, intricate brick work patterns and building sections. According to Tim Callahan, Principal at Herbert S. Newman and Partners, “Previously, an office field team member would complete the survey work with a tape measure and camera and document the building on paper to input into a CAD File. This was costly and labor intensive and the accuracy depended on the experience and knowledge of the survey team. Quantapoint provides a fast, cost-effective and accurate method to document complex or intricate buildings.”



Of special benefit to the architects in this assignment was Quantapoint’s ability to provide site visualization and dimensional data extraction. Quantapoint Q-Views™ software enables images of the digitized building to be accessed on the desktop. According to Mr. Callahan, “We found the Q-Views invaluable in understanding the detailing of the building. The design team could use the Q-View to perform a ‘virtual’ site visit by reviewing a 360-degree image of the space. I can’t tell you how many times our team had a question about the building and would simply open up the Q-View to fine the information needed, easily, accurately and quickly. This alone saved countless costly and time-consuming trips to the field.”



In short, Mr. Callahan and Herbert S. Newman and Partners could not be more pleased with Quantapoint, whom they consider an invaluable team member for restoration projects. For Quantapoint it could be said this was another win of "historic" proportions.