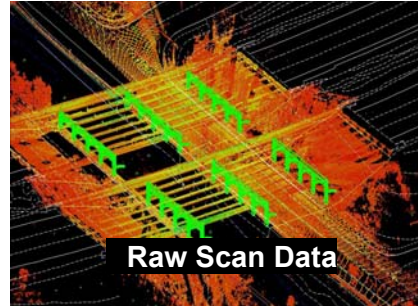
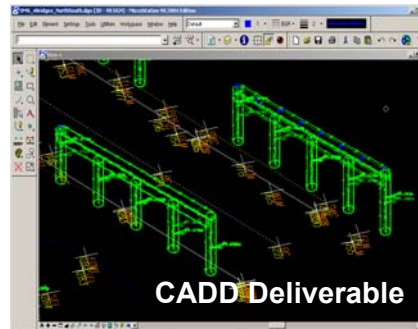

Woodbury Toll Barrier / 4 Bridges Rehabilitation Project



Digital Photo



Raw Scan Data



CADD Deliverable

3D Laser Scanning

Client/Owner: New York State Thruway Authority

Project Location: Sloatsburg, New York

GPI used its state of the art 3D Laser Scanning technology in conjunction with Low Altitude Precision Photogrammetry to provide design accuracy mapping, bridge clearance and as-built detail for a total of 7 bridges for Woodbury Barrier and 4 Bridges Rehabilitation projects along I-87, the New York State Thruway. The MicroStation CADD deliverables were produced in significantly less time and money than would have been required by conventional methods. No lane closures or traffic disruptions were required resulting in less disruption to the public and higher levels of safety to workers. The raw data files were archived to be available to prevent future call backs. This will result in additional savings of time and money, as well as the ability to “double check” items of question.

GPI was contracted to provide a survey for a total of 7 bridges on I-87. GPI also provided 15 miles of precision photogrammetric mapping, for the Right of Way. Traffic control and lane closures would have been a major undertaking and personnel safety would have been a concern because the road provided minimal shoulders or median to work in.

The decision was made to use 3D Laser Scanning to provide the survey and clearance information. All raw scan data was acquired from behind traffic barriers, eliminating the need for traffic control, ladders or bucket trucks. The raw data was registered to New York state plane coordinates utilizing GPS and Conventional Survey techniques. The deliverable included a 3D MicroStation drawing. Clearance elevations were also provided as a deliverable. With the raw data scans archived as the digital field book for the project, future inquiries about the structures could be addressed from the office without mobilizing a field crew and necessitating traffic control.

Completion Date: 2005