

2013 Recipients

Structural Engineering Project of the Year Awards

Buildings

Science Center at Hudson Valley Community College

Structural Engineer: Ryan-Biggs Assoc., P.C., Clifton Park, NY



Designed to achieve LEED Silver designation from the United States Green Building Council, the Science Center was constructed as an investment in the future of the college. The structure is an impressive 400-feet long, three-story, 100,000-square-foot building.

With a construction cost of nearly \$40 million, the building is home to the Biology, Chemistry, and Physics departments. Through the use of the building's numerous amenities, students prepare for careers in biotechnology, biological sciences, chemical technology, and environmental science. The building features 11 classrooms, two lecture halls, 25 laboratories, 60 offices, storage rooms, and several student gathering spaces.

Bridges

Main Span Rehabilitation of the Ogdensburg-Prescott International Bridge

Structural Engineer: Greenman-Pedersen, Inc. Albany, NY

The Ogdensburg-Prescott International Bridge, owned by the Ogdensburg Bridge and Port Authority, is an international bridge linking Ogdensburg, New York and Prescott, Ontario over the Saint Lawrence River. One of three U.S. bridge crossings over the St. Lawrence Seaway, the bridge provides a 900' x 125' barge clearance under the 1,150' main suspension span. Two 500' side spans complete the 2,150' suspension spans. In addition, 12 deck truss spans totaling 3,054', and 17 deck girder spans totaling 2,178.5', complete the 7,382.5' total length. In this project, the safety walks were eliminated and two 11' lanes with 4' shoulders were implemented on the suspension spans. New galvanized steel open grid deck was installed on new galvanized stringers across all of the suspension spans to mitigate cracked grid deck welds that were a constant maintenance issue.



Other Structures

Wilborn Temple Laylight Reconstruction, Albany NY

Structural Engineer: Spring Line Design, LLP, East Greenbush, NY



This historic 130 year old stained glass ceiling (laylight) was originally constructed with narrow riveted wrought iron bar stock mullions supported by iron hanger rods suspended from heavy timber beams. The client chose to replace the existing laylight structure. The laylight system is hung from 16 suspended steel hanger rods connected to the existing heavy timber roof trusses above. The hanger rods connect to the mullions through carrier beams. A novel use of open web bar joists around the four sides of the laylight provides a rigid "picture frame" at the perimeter. The entire new steel support assembly is pinned to the existing coffered ceiling soffit construction to accommodate future lateral movement of the wood coffered ceiling below.