



Welcome to the Winter edition of Structural News!

We are pleased to announce that Mark Otte has received his PE license in Indiana. RO Youker now has the ability to assist with projects in Nebraska, Arizona, Colorado, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Oklahoma, South Dakota, Virginia, Wisconsin, and Wyoming.

This issue is about creativity in structural design.

Creativity in Structural Design

As structural engineers, we are burdened with the stigma that we are unyielding, unimaginative, and that we lack creativity. It is a structural engineer's job to ensure that a building stands up and is safe for the public. The value-add is when the building can function more effectively and the architects vision is expanded or realized. Here are a couple of examples of our creativity.

The Stack Apartments is a 5-story apartment complex with retail space on the first floor and a roof top terrace for Bricks and Mortar Investments, LLC. The original building was a 2-story office building built in 1915 in downtown Lincoln, NE. The developer wanted to keep the front façade of the building due to its ornateness. However, the configuration of the original building structure could not be utilized for the intended use. Existing common walls were used as a cost savings measure. The new structure was generally masonry exterior walls up to the second floor with wood framing above. The elevator and stair shafts were constructed from masonry to be the lateral resistive system in the building as well as to provide the appropriate fire rating required for the building. The second-floor framing utilized steel post and beams with wood truss infill to maximize the usable space in the retail area.

Cornhusker Bank Headquarters is located in Lincoln, NE. We teamed with Sinclair Hille Architects for this project. The main lobby includes an exciting two-story atrium space with a cantilevered stair to the second floor. The stair is a scissor stair with both flights and the intermediate landing supported by a single column. A Hollow Structural Steel (HSS) beam cantilevers in two directions to support the stair stringers and the outer stair stringers in turn cantilever the depth of the landing to support the back of the landing. This gives the appearance of a floating landing. Careful attention was given to deflection control in the landing to prevent potential discomfort for the stair users. The bank also boasts a large cantilevered roof plate over the main entrance. Soaring nearly 60 feet above the entry, the steel-framed assembly provides cover at the entry and shade for the adjacent offices from the late-afternoon sun.

We strive to exceed the specialized needs of every project through extraordinarily creative and cost effective designs.

As always, your questions and comments are welcome. Do not hesitate to contact me via phone or email: mike@royouker.com

Mike

What's Happening

Lexington Headworks Building

Architectural Design Associates & Miller and Associates

New masonry and concrete waste water treatment plant headworks building. The building has main and lower levels. The building footprint is approximately 1,900 square feet.

NDOT Gering Wash Bay

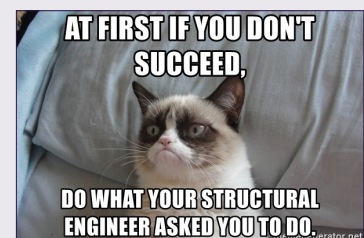
Erickson Sullivan Architects

Addition of a 31'x56' wash bay to the existing maintenance facility. The addition is a pre-engineered metal building that is similar to the existing building.

GBSI Building

Kingery Construction Co.

New 12,600 pre-engineered steel building foundation. The building includes a light-storage mezzanine approximately 2,350 sf in size.



RO YOUKER
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1201 O Street Ste 310 • Lincoln, NE 68508 • 402.477.7640