



TD2 DIFFERENCE-MAKERS

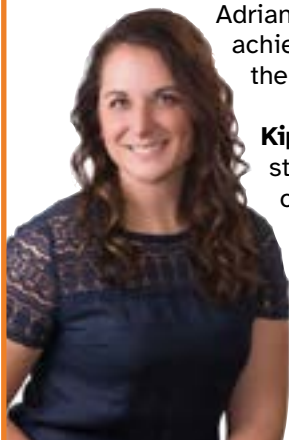
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Feeling fatigued by negative press? Well, you can relax with some positive stories we'd like share about TD2 people and projects in the news.

DOING GOOD

PEOPLE MAE INDUSTRY MENTOR AWARDS

OMAHA — TD2 structural engineer **Kelley Clouse, S.E.**, received an Outstanding MAE (Master of Architectural Engineering) Industry Mentor Award at the Durham School's 19th Annual Architectural Engineering Awards & Recognition Banquet and 25th Anniversary Celebration on February 29th, 2024. Presented by the Architectural Engineering Student Leadership & Advisory Committee, the student-nominated award recognizes a student mentor participating in the UN AEI competition. "This is an honor I never expected to receive. Mentoring seems easy with hardworking students who care so much about what they do and genuinely want to learn. I'm so proud of the students (Jordan and Adrianna) and how much they have achieved for themselves throughout the year."



Kip Squire, P.E., S.E., the structural department lead, said of her, "Over her tenure at TD2, Kelley has been a great team member, an excellent engineer, an encouraging mentor, and an inspiring role model for future structural engineers. We are proud of her."

CONGRATULATIONS

PEOPLE AEI INTERNATIONAL STUDENT DESIGN COMPETITION

SAN JOSE - More good news includes TD2 structural intern **Drue Pequet** and his team from the University of Nebraska - Lincoln, who were winners in multiple AEI International Student Design Competition 2024 categories. Announced April 10th at the AEI 2024 Forum awards ceremony, his multi-disciplinary team won 1st Place in the Electrical category, 2nd Place in the Mechanical category, 1st Place in the Structural category, and the Challenge Award for Modularity. The competition focused on the Omaha VA Ambulatory Care Center in Omaha, NE. And showcased the knowledge and application of design and construction principles to a real-world project scenario. Congrats!

OPENING ANNOUNCED

PROJECT JOSLYN ART MUSEUM EXPANSION

OMAHA — We covered the Joslyn Art Museum Expansion in our Winter edition. In the meantime, Joslyn has announced they are nearing completion of the massive transformation and scheduled a grand reopening on Tuesday, September 10, 2024.

The opening will showcase the new acquisitions from the Phillip G. Schrager Collection in the new Rhonda & Howard Hawks Pavilion. We will also be able to revisit old favorites with the complete reinstallation of the Joslyn permanent collection in the remodeled Memorial building and the Suzanne & Walter Scott Pavilion.

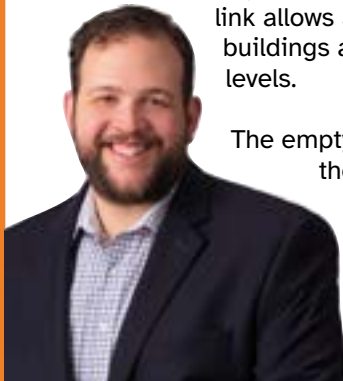
BIG TOWN AFFORDABLE HOUSING

PROJECT THE DUO - CENTRAL PARK PLAZA

OMAHA — The Omaha skyline landmark Central Park Plaza's twin towers will soon become "The Duo." Announced at a March 14th City Hall news conference, the 15-story office towers conversion to 700 residential units by Todd and Mary Heistand of NuStyle Development will bring more affordable market-rate apartments to the downtown core. The Heistands, spurred on by the earlier City of Omaha announcement of the streetcar, have plans to complete the project in three phases by 2027.

TD2 has been involved in many of NuStyle's creative urban core projects, and these buildings are very familiar to **Adam Steinbach, P.E.**, the TD2 structural engineer assigned to the project now for the second time. "This is my first NuStyle building, and I look forward to working on it. NuStyle has a reputation for getting going and getting it done."

A big part of the project is the replacement of the adjacent Park Fair Mall with a new 8-story parking garage with commercial space at the 16th Street level and 5 stories of apartments with a pool above. This new structure attaches to the towers at a steel and glass curtainwall connection. The link allows access between the tower buildings and the new structure at all levels.



The empty south tower is where the project begins. The new structure will be built next, and finally, the north tower. Resident amenity spaces are planned for the roof decks.

SMALL TOWN AFFORDABLE HOUSING

PROJECT LOFTS ON MAIN - PLATTSMOUTH HIGH SCHOOL

OMAHA — Articles in regional newspapers, radio, and social media have shared the excitement about the historic Plattsmouth High School on Main Street conversion into affordable apartments.

Finding affordable housing is problematic in large and small communities. Developers took a chance on the vacant, deteriorated 1918 Plattsmouth High School, saving it from demolition and renovating it into 25 apartments alongside a new 4-story building with an additional 16 apartments. Of the 41 units, 32 will be restricted to residents who earn up to 60% of the area's median income.

At the March 4th ribbon cutting and grand opening, former students reminisced about their high school days in the building. Now called the "Lofts on Main," the units are available for lease. TD2 Structural Engineer **Matt Walstrom, P.E.**, has his own connection to the community. His grandfather, Robert Dietz, MD was the town doctor, and Matt remembers riding his bike all over Plattsmouth.

Now, as the project's structural engineer, he had to do some diagnosing of his own to resolve various structural issues revealed during demolition and reconstruction, like crumbling concrete joists and collapsing staircases. With a restoration like this, problems are uncovered one at a time, sometimes challenging the original design assumptions and requiring creative problem-solving.



"The Duo" converts commercial office space into downtown housing with spectacular views and modern amenities.



"Lofts on Main" is another adaptive reuse of a historic structure into future affordable housing.



These dramatic before, during, and after photos are courtesy of Alley Poyner Macchietto Architecture and Matt Walstrom. The main first floor hallway outside of the original offices was crumbling and full of debris. Reconstruction radically transformed the main corridor and community spaces.



A close-up of the vandalized and collapsed grand staircase and landing before and the elegant after.



The deteriorated skylights and roof structure caused by years of moisture intrusion required extensive reconstruction. New wood framing members were installed to support the historic skylights.

TALLEST MASS TIMBER RESEARCH BUILDING PROJECT UNIVERSITY OF MICHIGAN COLLEGE OF PHARMACY

ANN ARBOR — The University of Michigan's goal of a carbon-neutral campus drives sustainable choices in its building projects. Architect RDG Planning and Design and TD2 Structural Engineering have designed the new College of Pharmacy building as a concrete, steel, and mass-timber hybrid. Aiming for LEED Gold Certification, the building now under construction will be the world's tallest mass timber research building.

Mass timber as a building type is widespread in Canada and growing in the US. It is an umbrella term covering a class of engineered wood building materials, including glulam beams/columns and CLT or cross-laminated timber panels created by layering and bonding wood. While a fraction of the weight of concrete buildings, mass timber buildings can withstand the same seismic forces and high winds.

An April 3rd [article](#) in *The University Record* cites mass timber's sustainable benefits, notably reducing greenhouse gas emissions by 40%.

This isn't TD2 structural engineer **Trevor Larsen's** first mass timber rodeo. You can see a local example on display surrounding the Papillion Landing pool. The visually appealing mass timber and wood-wrapped steel beams will also be exposed in the public portions of the bottom two floors of the U-M College of Pharmacy. At 142,000 SF and 6 stories, the building sits on a conventional podium base.

"Working on big, complex projects like this requires intense choreography between all the disciplines, contractors, and suppliers. I've been impressed with how experienced and relatable the project team professionals have been." For instance, Trevor coordinated with the French-speaking Quebec timber manufacturer Nordic Structures using their software and beam shapes to deliver a seamless structural package.



Screenshot from the project's web camera on 4/16/2024. It has been fascinating to watch the construction progress via webcam at the U-M Architecture, Engineering, and Construction website. It is going up fast as they place the CLT panels on the steel and glulam columns/beams from floor to floor. See for yourself at the link below.

<https://umaec.umich.edu/projects/major-projects/new-building-for-the-college-of-pharmacy/web-camera/>



Progress as of 4/30/2024.

Original article:

<https://record.umich.edu/articles/timber-construction-begins-at-college-of-pharmacy-building-project/>

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