

Local 1 Makes Engineering History

Largest Truss Bridge Moved Into Place after Assembly

S & J Construction Company, along with Local 1 (Chicago) ironworkers, completed assembly of the Torrence Avenue Railroad Truss Bridge, believed to be the largest truss bridge assembled, then rolled into place in North America.

The structure is about 395' long, 43' wide, and 68' tall, and weighs 4.3 million pounds. It has over 67,000 bolts, one-third a mile of weld, and 5,069 structural parts. The chords were shored at 14 locations to ensure proper camber as the structure was assembled. Once assembled, the truss was jacked 24' in the air and loaded onto self-propelled modular transporters (SPMTs) supplied by the Sarens Group.

The structure took about four months to build, working six to seven days a week, ten hours a day, in order to meet the schedule. Local 1's finest prevailed, working through one of the hottest summers on record, and completed the project on its scheduled completion date, one week ahead of the completion milestone.

On a Saturday, within an eight-hour railroad outage, the railroad truss was moved 700' into position. It took approximately two hours to move into place, two hours to fine-tune the alignment, and two hours to adjust the 35,000-pound expansion bearings for the proper temperature to camber deflection. Once again, Local 1's efficiency and skill prevailed, finishing one and half hours earlier for the railroad, allowing traffic to open on Torrence Avenue 36 hours ahead of schedule.

Backing up the statistic of our government--whether it's federal, state or local--being the number one construction consumer, the truss bridge is part of an \$102 million, three-level grade-separation CDOT project, which is also part of the CREATE program. CREATE is a first-of-its-kind partnership between U.S. DOT, the State of Illinois, City of Chicago, Metra, Amtrak, and the nation's freight railroads. A project of national significance, CREATE will invest billions in critically needed improvements to increase the efficiency of the region's passenger and freight rail infrastructure and enhance the quality of life for Chicago-area residents.

CREATE Program Goals:

- Improve passenger rail service
- Reduce freight rail congestion to boost regional and national economic competitiveness
- Reduce motorist delay due to rail conflict at grade crossings
- Enhance public safety
- Promote economic development
- Create and retain jobs
- Improve air quality
- Reduce noise from idling or slow-moving trains

Alfred Benesch is the design and construction manager; Walsh Construction Company is the general contractor; K&K Iron Works did some miscellaneous steel work on the job. AC Iron supplied and installed the reinforcing steel totaling over 2,909,506 pounds for the substructure and decks of the six bridges, 15 retaining walls, and pump station with an underground concrete reinforced detention chamber with an approximate capacity of 80,000 cubic feet. AC Iron also installed 67,000 shear studs on the project.

Leading the project was Bob Kapovich as general foreman, Scott Starceovich as the raising gang boss, and Martin Mora as the job steward.

S&J's owner and President Simone Kapovich is quite familiar with Local 1, as her husband, brother, four sons, two nephews, and hopefully grandson (who recently took the apprenticeship test) are all present or retired members of Local 1.

Congratulations to Local 1 for a job well done!