

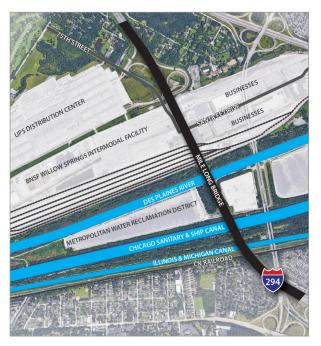
## Central Tri-State Tollway BUILDING FOR TOMORROW

## **INNOVATIVE GANTRY SYSTEM FOR MILE LONG BRIDGE CONSTRUCTION**

To construct the new southbound Mile Long Bridge on the Central Tri-State Tollway (I-294), the Illinois Tollway is using an innovative gantry system to move and install bridge beams.

The massive gantry system will be used in place of traditional construction cranes to install beams in the area adjacent to and over the Chicago Sanitary & Ship Canal.

The gantry system allows four lanes of traffic to remain open in both directions on the bridges currently carrying northbound and southbound traffic during construction of the new bridge structure.



## MILE LONG BRIDGE PROJECT

\$500-million Mile Long Bridge Project anticipated to continue through 2022

Two, new side-by-side **4,800-footlong beam structures**, increase capacity to five lanes in each direction

Each bridge features **27 spans supported by 26 piers**, compared to the previous structures with 53 piers

The new southbound bridge structure will include **250 concrete beams** and **165 steel beams** 

- Steel beams measure up to 10 feet tall and range in length from 57 to 134 feet long
- Concrete beams measure nearly 8 feet tall and up to 187 feet long

## **HOW IT WORKS**

The gantry system includes three main gantry frames, each approximately 28 feet tall and 145 feet long, extending between the existing southbound bridge across to the new northbound bridge.

A rail system installed on both existing bridge structures allows gantries to deliver beam segments into place.

Each gantry is equipped with overhead movable hoists and cranes that can lift up to 30 tons. Cranes pick up beams from the delivery trucks below and hoists lift the beams and move across the gantries to position the beams on the bridge piers.

Two gantries are positioned on each end to hoist beams, and the third gantry secures beams in place while the other two gantries move.

