

Annual Contractor Case Studies

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RailWorks Track Systems/ L.K. Comstock National Transit: Communication and coordination key to completing Tucson's ambitious streetcar project

Faced with construction delays and logistical challenges as part of a complex transit project in Tucson, Ariz., RailWorks Track Systems needed a friend. But RailWorks officials had something more in L.K. Comstock National Transit: another RailWorks Corp. subsidiary that knew what to do to smooth over some rough patches and help get Tucson's ambitious Sun Link Modern Streetcar project closer to completion.

"[L.K. Comstock] was willing to jump in and start their work sooner than they might be willing to if we were not part of the same parent company," says RailWorks Track Systems Project Manager Roger Boggess. "This allowed us to make up time on the overall schedule, over the traditional way of the track contractor completing their work 100 percent, and then handing off the area to the systems contractor."

That assist helped RailWorks Track Systems and joint venture partner Granite Construction finish their \$56 million construction portion of the \$196 million overall project on time and on budget.

Although streetcar delivery delays pushed the launch of Sun Link service back to mid-2014, officials at RailWorks and L.K. Comstock can reflect on a successful, yet challenging project that highlighted the benefits of sister companies working together.

A veteran manager at RailWorks, Boggess knew early on he would have his hands full trying to keep the project on an already tight schedule. It was RailWorks' task to construct 3.9 miles of double track running between the sprawling University of Arizona campus and downtown Tucson, encompassing busy shopping, entertainment and residential districts. Construction began in April 2012.

KATHY SIMPSON/RAILWORKS CORP.



Earlier this year, L.K. Comstock National Transit (a RailWorks Corp. subsidiary) installed the overhead contact system to power the streetcars for the ambitious Sun Link Modern Streetcar project in Tucson, Ariz.

One of the first and most significant challenges? Where to weld the rail into the 320- to 720-foot lengths of continuous-welded rail (CWR) necessary, then developing a way to stage and move that rail when it was ready for installation.

"Normally, the job right-of-way is not down the middle of city streets," Boggess says.

What resulted was the creation of a special roller that was attached to the rails and then rolled along the city streets into the work sites, using police escorts ahead and behind the rail-moving operation. The rollers enabled crews to negotiate 90-degree corners, a necessity given the streetcar alignment, Boggess says. In some cases, the CWR was moved as far as one-and-one-half miles into installations sites, requiring careful coordination to ensure city streets could be quickly cleared for vehicular traffic.

The urban setting also caused some concerns for L.K. Comstock, which was charged with installing overhead catenary systems, signaling, power cables and six traction power substations.

"It was very challenging to schedule the optimum number of field people because of the uncertain access to the scheduled job areas," says L.K. Comstock Project Manager Zafar Arif. "Bringing those resources too early when there was not adequate access would have resulted in wasted cost. On the other hand, not bringing the resources at the right time would have delayed the project."

Moreover, the late delivery of the streetcars required L.K. Comstock to schedule testing without knowing when the cars would be delivered, Arif says. Constant communication between L.K. Comstock, RailWorks and the subcontractors was needed to keep the project on schedule.

And it was that company familiarity between RailWorks and L.K. Comstock that helped make up for some of the scheduling shortfalls.

"It made both the communication and coordination efforts easier," Arif says. "We had better access to information, which helped me to make better decisions on bringing in resources. And we had better cost and budget management because the billing was internal."

And with 15 different contractors and hundreds of workers on site at any given time for more than year, anything that was easier to accomplish was welcome.

"Our job team managed this well, and this was a large part of us completing the work on time," Boggess says. ■