

Third-Party Construction Management for Unique Design-Build Project

Carollo provided third-party construction management services on a unique design-build project for the Western Riverside County Regional Wastewater Authority (WRCRWA). The project included construction of a new 8-mgd tertiary treatment facility that meets stringent discharge guidelines for the Santa Ana River. In an effort to control costs, the WRCRWA was interested in a different approach to project delivery than the traditional design, bid, construct method.



A partnering approach helped to maintain excellent communication with all stakeholders during construction of Western Riverside County's Regional Wastewater Treatment Facility.

Team and Services

Carollo's construction management team provided issue resolution procedures, design review, review/approval of "or equal" substitution specifications, and quality control. In addition to a full-time construction manager, the construction management team included an on-site resident engineer and specialty inspectors. A key feature of the team was the dual design and construction management expertise of the construction manager and resident engineer. The construction management team identified issues and established procedures during the review/approval process to move the project from owner-furnished to contractor-furnished design. Expedition software helped to manage submittals, requests for information, change orders, correspondence, and all other related documents.

With WRCRWA providing overall direction, Carollo used a partnering approach to construction management to establish goals and promote teamwork. Through formal partnering sessions and quarterly partnering updates, our construction management team maintained excellent communication with all stakeholders in the project.

Alternative Project Delivery

The WRCRWA adopted a design-build concept and selected Carollo to provide construction management and design/review services. The most unique feature of the design-build concept was the substitution of bid document specifications with specifications developed by the contractor's design engineer during the first four to six months of the construction period.

Project Elements

The project includes a headworks, biological secondary treatment, solids handling, and tertiary treatment. Secondary treatment includes a Carrousel process with anoxic chambers for nitrogen removal and gravity return to recycle mixed liquor. Aerobic digestion and centrifuges are used to stabilize, thicken, and dewater solids. The facility provides tertiary treatment in conformance with California's Title 22 requirements.

Highlights

- ▼ \$25 million tertiary treatment facility.
- ▼ Unique design-build project.
- ▼ Partnering approach.

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