

Environmental Award Nomination
City of Oxnard
Water Resources Division
Blending Station No. 3 and Well Pumping Facility

The City of Oxnard Water Resources Division has implemented their motto "Meeting the Challenges of Tomorrow Through Better Planning Today" in every step of planning, design, construction and facility operation of the Blending Station No. 3 and Well Pumping Facility project.

Background

Originally, Blending Station No. 3 (BS#3) existed as a basic water production facility at the Rose Shopping Center that combined supply water from Calleguas Municipal Water District and United Water Conservation District under pressure for delivery of blended water to the City's distribution system. The City had envisioned adding local groundwater supply at this site and proceeded with drilling groundwater wells onsite in the early 1990's.

Design and implementation of an upgraded facility which included iron and manganese treatment was terminated due to MTBE and petroleum hydrocarbon contamination of the area surrounding the existing location. This resulted in the need for the existing and planned facilities to be relocated.

Project Purpose and Attributes

The relocated and upgraded Blending Station No. 3 and Well Pumping Facility is a state of the art blending facility with a 36 MGD capacity. The facility pumps and disinfects local groundwater and blends it with municipal source water (CMWD & UWCD) to reduce TDS levels before delivering water to the City's distribution system. This facility has increased the City's source water capacity, improved hydraulic deficiencies, and has helped achieve a balance between quality and cost. The ASR well will be used for storage of seasonally-available water from CMWD for extraction during peak demand periods. The facility includes:

- Three (3) 2,000 gpm extraction wells
- One (2) 3,000 gpm extraction/injection well for aquifer storage and recovery
- Emergency Power System via 900 KW diesel engine generator
- Chloramination System
- Chemical/Operations Building



- Generator/Electrical Building
- 7,000 feet of conveyance pipeline (24, 27, and 36-inch)
- Provisions for a future onsite reverse osmosis desalination facility
- Onsite stormwater retention and detention basin
- Convert 4,500 feet of CMWD Oxnard conduit to a UWCD water supply pipeline to BS#3

To optimize the overall project outcome, the City of Oxnard Water Division implemented extensive multi media public outreach programs and community involvement from planning and design through construction including:

- Construction updates with pictures, construction location, hours and contact information were regularly televised via the City of Oxnard's 24 hour a day Government Access Station aired on local cable TV (Adelphia - Channel 10)
- Construction notification letters including project description, construction phasing timelines, construction location maps and contact information were distributed to surrounding neighborhoods and businesses.
- Newsprint publications including project brochures and newsletters
- Community meetings
- Public hearings
- Meetings with surrounding business owners, property and office managers to facilitate information to impacted workers and customers
- Developing close working relationship with large community service providers including a child care center, St. Johns Regional Hospital and Verizon Communication, to create an augmented construction work schedules and in order to avoid negative construction impacts.

Additional Significant Project Attributes:

This project demonstrated expedited planning, design and construction and was completed in less than 36 months. The expedited schedule included completion of an alternative site study, property acquisition, design, well drilling, and complete facility construction. Conveyance piping and facility construction was completed in 12 months. The planning design and construction teams worked together with the same goals in mind: quality project, timely completion and owner satisfaction.

The successful construction of this project within a 12 month period is attributed to:

- Common Goals
- Good construction management
- Good communication
- Regular safety meetings

- Cognizant construction decisions
- Strong quality and time conscious site inspection
- Electronic based construction management (submittal reviews and approvals, documentation, etc.)

Planning, Design & Construction Team Members

City of Oxnard – Owner

HPS Mechanical - Contractor

Kennedy/Jenks Consultants – Design Engineers/Construction Management

Jordan, Gilbert & Bain – Landscape Architects

Leighton Consulting, Inc. – Geotechnical Investigations

Layne Christensen Company – Well Drilling

Hopkins Groundwater Consultants – Hydrogeology/Well Design

Prousys – Instrumentation Control/System Integration

Project Cost (Planning, Design & Construction)

\$15 Million

Schedule

Planning/Design – Start June 2003

Construction – Complete May 2006