

Prairie Waters OCIP, Aurora Colorado: A Case Study of Success

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Introduction

Water in the western third of the United States continues to grow in scarcity and importance. States and communities are always looking for ways to conserve, as well as searching for new sources and innovative ways to re-use and recycle. A cost-benefit project to address this concern and need was developed in Colorado for one of the fastest growing cities in the United States.

The Prairie Waters Project was a \$750 million, 5-year new construction, water transmission and treatment project for the city of Aurora, Colorado, scheduled to be completed in June of 2012. Nine simultaneously performed contracts collectively travelled 35 miles over several federal, state, county and city jurisdictions, and include 288 enrolled contractors covered through the Owner Controlled Insurance Program (OCIP). The project successfully and safely crossed a river, highways, railways, and private/public/protected lands, with both vertical and deep below-ground construction occurring. There were three intermediate pumping stations, a natural purification site with 18 wells, and a state-of-the art water purification facility constructed, tested and turned over to the city utility.

Project Statistics

1. Water purification facility on 80-acre site includes 4 lagoons, a raw water forebay, filtration, softening, UV disinfection, pre- and post-treatment facilities, along with a variety of pump station and control facilities.
2. North Campus consists of 40 shallow water wells, five bentonite slurry walls, and seven miles of large diameter piping.
3. Thirty five miles of 60" diameter pipeline constructed at depths up to 14'
4. Twenty four micro-tunneling crossings completed along the pipeline.
5. Three high-volume pump stations with concrete structure at depths of 30' along with circular concrete storage tank.

Session Learning Objectives

1. Building a successful OCIP and safety program into a project at the earliest stages
2. Monitoring and impacting performance from a broker and carrier loss control position
3. Leveraging loss control best practices for OCIPs

How Was This Accomplished?

Key components of successful OCIP construction projects are discussed below.

Develop a Solid Contract

Contract language should be specific to include safety requirements for the project, such as fall protection requirements, training expectations, claims reporting procedures, and safety responsibilities. Often, contracts only include general safety guidelines such as meeting OSHA standards, which may be minimum standards.

Contractor Selection and Qualification

It is no longer enough to look at a contractor's E-Mod and OSHA recordable rates when setting selection and qualification criteria. Overall safety organization and program must be considered, depending on the role the contractor will have on the project. Contractor's experience with the type of project and their track record in managing and interacting with subcontractors is crucial in the selection of the general or prime contractor.

Continuous and Effective Communications

The construction management team was leveraged through regular partnering meetings. Initial partnering and team building meetings play a key role in establishing communication and conflict resolution protocols. All stakeholders should be present during regular construction planning meetings to provide regular communication on environmental and safety issues. Established communication channels should be followed throughout each of the contracts as well as continuous follow-up of open items.

Training

Training requirements were established for the various contractors, owners and visitors. The level of training varied based on personnel roles and responsibilities. Contractor superintendents and foreman training included safety roles, such as claims reporting and management, project-specific safety rules, and job hazard analysis. General employee project orientation should be as specific as possible. Daily safety talks and weekly safety meetings conducted to address current safety issues as it related to job tasks. Finally, basic safety orientation for project visitors should also be addressed.

Oversight and Monitoring Conditions and Incidents

Each general/prime contractor had designated safety personnel onsite, responsible for overall project safety; however, roles and responsibilities for project management were clearly spelled out in the OCIP Safety Program. In addition, regular jobsite surveys conducted with OCIP partners included loss control personnel from both the broker and insurance carrier, as well as the owner safety director and contractor safety personnel.

Claims Management

Guidelines were established for claims reporting and management to include the owner, safety director, and broker OCIP administrator. Each subcontractor was provided with training on procedures and claims reporting packets with all pertinent information and forms. The broker

provided claims management support through a claims consultant and a workers' compensation (WC) injury counselor.

Routine Performance Monitoring and Reporting

Individual contracts reported performance during weekly project meetings. Quarterly performance reports presented to owner summarized overall project program administration, claims and safety/loss control. Program administration included enrolled contractor information, payroll and man-hours. Claims information provided number of claims and paid/ incurred costs for WC and GL, as well as reporting efficiency. Safety/loss control provided updates on the number of broker/carriers visits, first aid incidents, recordable incidents, and frequency rates as well as utility strikes.

Key components of the OCIP safety addendum to the prime contract are the following:

- 100% fall protection above 6 feet
- 100% return-to-work program.
- Broker provided OCIP administrator.
- Pre-work drug and alcohol screens.
- Uniquely identifiable hardhat decals.
- Mandatory safety orientations.
- Mandatory enrollment in OCIP.
- Solid stop-work and unsafe worker removal authority

Key ways to monitor and impact project performance by broker and carrier consultants are listed below.

Broker and Carrier Selection

Broker and carrier experience on public works projects should be considered as developing roles and responsibilities throughout the project is essential. Managing and understanding communication protocols with stakeholders and construction managers is a major role for both the broker and carrier consultants.

Early Broker Involvement

The broker partnered with owner early on to assist and direct the owner on key contract components, such as safety expectations, training requirements, claims handling and reporting criteria, and so on. The broker also played a key role in the development of contractor selection criteria.

Early Carrier Involvement

The carrier consultant worked with both the owner and the broker in establishing loss control service plan details and expectations. A customized report template was developed to hone in on key safety issues and provide stakeholders with summary of loss control job site surveys. Distribution of reports and electronic filing on the project management site was also developed early on. In addition, a protocol to review the report and document recommendation closure and action taken were established, so that the finalized report documented corrective action when needed.

Bid Package Partnering Meetings

Each project bid package had a partnering meeting prior to work beginning. These partnering meetings established communication protocols and key stakeholder responsibilities for each contract. As expected, owner, construction management team, prime contractor and subcontractor stakeholders were in attendance. In addition, the broker loss control consultant and program administrator, as well as the carrier consultant, also participated in each of these meetings, thus integrating themselves into the team.

OCIP Safety Manager

The broker played a key role in establishing hiring and qualification criteria for the fulltime safety manager position, which was filled by the owner. Later on in the project, the broker hired a fulltime safety consultant to take on this role when the city safety manager moved on.

Program Administrator and Injury Counselor

The broker filled these two roles throughout the project. The program administrator role involved managing OCIP enrollment by contractors and communicating to contractors their reporting responsibilities for both incidents and payroll. This person was also the go-to person for initial accident reporting and worked closely with the carrier's claims team. The injury counselor managed the day-to-day details of specific claims and also worked closely with the claims adjusters assigned.

Monitoring Performance

The carrier documented the jobsite surveys with the established report template and protocols. Periodic loss analyses were completed to determine accident trends for the project as well as individual bid packages or subcontractors. The broker provided quarterly reports, which included data on the overall program performance and safety statistics.

Project Safety Summits

The broker and the carrier developed a forum for all safety coordinators throughout the project to meet periodically to discuss and review various safety-related issues and share best practices.

Jobsite Presence

Frequency of job site visits by both the broker and the carrier were established and followed throughout the project. The broker and carrier presence consistently depended on the level of project activity. During peak construction activity, each bid package would receive team jobsite visits on a weekly basis, which could translate into daily project visits. These visits usually included the broker and carrier consultants, along with the construction manager safety personnel, city safety manager, and the contractor's safety personnel. These also coincided with the weekly project progress meetings, which allowed the team to report on safety issues and best practices. Jobsite visits also focused on the following major risk areas throughout the project:

1. Falls from Elevations:

- Forming and pouring walls
- Accessing trench boxes
- Excavation edges
- Floor openings
- Shoring for decks
- Micro-tunneling pits

2. Excavation Cave-ins
 - Laying bedding and pipeline
 - Compacting trench
 - Welding connections
 - Testing connections
3. Confined Spaces
 - Welding inside pipes
 - Working inside vaults and tanks
 - Boring and micro-tunneling
4. Electrical Exposures
 - Temporary construction power
 - Energized permanent power
5. Exposure to Vehicle and Equipment Traffic
 - Onsite
 - Residential
 - Highway
6. Contact with Existing Utilities
 - Excavating
 - Operating equipment beneath overhead utilities

Leveraging loss control best practices for OCIPs are discussed below.

Construction Manager

This role is crucial, especially on a public-works OCIP, and can be the difference between a successful and disastrous safety performance. A good CM not only ensures that the project is built in a timely manner but takes an integrated role in the safety aspects of the project. In this case, they were instrumental in maintaining the bar high as it pertained to 100% fall protection and finding innovative solutions to challenging situations.

OCIP Safety Manager

This role requires someone not only knowledgeable in safety but also in construction management. This person not only tied together lessons learned from one contract to the next but also help develop solutions to key risks. Communication skills were key in this role in order to motivate both project management and workers to perform work safely.

OCIP Program Administrator

The program administrator managed OCIP enrollment by contractors and communicated to contractors their reporting responsibilities for both incidents and payroll. This person was also the go-to person for initial accident reporting and worked closely with the carrier's claims team to determine if claims fell under the OVIP coverage. They also held contractors accountable for following up on accident investigations.

Injury Counselor

This person managed the day-to-day details of specific claims and also worked closed with the claims adjusters assigned to hold them accountable for claims protocols and closing claims. They were also the main contact and advocate for the injured worker.

What Was Accomplished?

Financial Success as of 4/1/11 and 90% Project Completion:

- At 17% of industry-expected losses
- At 25% of Lockton OCIP Program expected losses
- 97% of WC claims closed
- 100% of GL claims closed

Safety Success as of 1/11:

- 3424 Safety orientation completed
- .44 LTIR compared to industry rate of 2.0 to 2.6
- 2.02 RIR compared to industry rate of 3.5 to 4.5