



Job Order Contracting Best Practices and Principles

Award Winning Project Case Studies



The Harry H. Mellon Job Order Contracting Awards honors building owners, managers and contractors that use Job Order Contracting to complete repair and alteration projects. This annual award recognizes outstanding principles and practices while identifying unique and innovative ways of using the Job Order Contracting construction procurement method to complete facility and infrastructure projects. It honors those involved in the process, including facility owners, managers, contractors and Job Order Contracting consultants who achieved their repair and alteration goals with exceptional results.

Named for the creator of Job Order Contracting, the Harry H. Mellon Award of Excellence in Job Order Contracting is the industry's highest honor. Submissions were judged by a panel comprised of Job Order Contracting experts and past award winners from all facets of the industry, including project managers, contractors and consultants.

This booklet highlights the project case studies from the 2016 Award of Excellence winner and the five Award of Merit winners.





University of North Texas Child Development Lab Renovation







Key Project Factors: Time savings, limited scheduling window, value engineering, changing scope of work

Owner: University of North Texas

Project Scope

- Doubling the classrooms in comparison to the previous lab
- Building administrative and teacher workspaces
- Integrating play therapy and observation rooms
- Building assessment and research space
- Replacing 50+ year old cast plumbing throughout the whole building
- Building a playground to fit the existing outside footprint
- Re-alarming and re-installing fire and life safety systems

Contractor: LMC Corporation

Project Cost: \$1,800,000

Time Frame

Project Identified: March 29
Purchase Order Issued: May 4
Construction Completed: January 6

Challenge

The University of North Texas (UNT) decided to renovate an existing building on campus to accommodate the Child Development Lab, an early childhood program centered in the College of Education. Once the demolition phase began, it was soon uncovered the building was in fact several small buildings the previous owners had combined to look like one cohesive building. Structure damage from a previous unknown fire was also discovered.

Solution

With a continually evolving scope of work coupled with a tight time frame to complete the project, UNT employed Gordian's Job Order Contracting solution, an alternative procurement method, to streamline the construction process.

Results

Job Order Contracting ensured the project stayed on its tight deadline even with the changing scope of work. In addition to building new classrooms, a 50+ year old cast plumbing system not in the original scope was replaced, the entire building was refitted with an up-to-date fire and safety system and a playground was added to the existing outside footprint. Through value engineering, cost overruns were minimized and the Child Development Lab was completed in time for the beginning of the new year. Due to innovative use of Job Order Contracting surrounding the project's special circumstances, UNT and local contractor, LMC Corporation, were honored with the 2016 Harry H. Mellon Award of Excellence in Job Order Contracting.





Arizona Department of Administration Roof Replacement



Key Project Factors

- · Time-sensitive project
- Limited scheduling window
- Rapid response
- Value engineering
- Cost control/savings

Owner

Arizona Department of Administration - General Services Division

Project Scope

- Removal of existing roof
- Reinstallation of new roof

Contractor

SD Crane

Project Cost

\$659,355

Time Frame

Project Identified: May 22

Purchase Order Issued: June 10 Construction Started: August 1

Construction Completed: April 30

Challenge

Originally built in 1908 the Carnegie Library has been a mainstay in downtown Phoenix for nearly a century. The roof itself is one of the last of its kind in Arizona, so when it came time to replace this historic structure, the state wanted to ensure the renovation was managed properly. Initial bids for the project came in around \$1.3 million – way above the budget the Arizona Department of Administration (ADOA) had put aside.

Solution

ADOA approached Gordian to implement Job Order Contracting, an alternative construction procurement method which streamlines processes, helping keep projects under budget and on schedule. In conjunction with SD Crane, a local contractor, the bid price was cut nearly in half.

Results

At the end of the day, ADOA was able to save taxpayer over \$600,000 through the benefits of Job Order Contracting and the hard work of SD Crane. On top of which, the integrity of the historical landmark was kept intact. The library continues to be a multi-use facility which includes an exhibit of its own history. Due to collaboration, innovation and superior value engineering, ADOA and SD Crane were honored as Award of Merit winners during the 2016 Harry H. Mellon Job Order Contracting Awards.





San Diego County Animal Shelter Landscaping Updates







Key Project Factors: Time-sensitive project, limited scheduling window, rapid response, emergency circumstance, value engineering, cost control/savings

Owner: County of San Diego

Project Scope

- Replacement of all sprinkler heads with rotary heads
- Planting of drought tolerant plants on slope
- Installation of synthetic turf at entry
- Removal and replacement of all faucets with push faucets
- Retrofitting of all planters in the parking lot with bubblers

Contractor: ABC Construction Company

Project Cost: \$310,000

Time Frame

Project Identified: March 25 Purchase Order Issued: May 25 Construction Started: June 13 Construction Completed: August 4

Challenge

Once Governor Jerry Brown declared a drought emergency across the State of California, he released an Executive Order which called for a statewide 25 percent reduction in potable urban water usage. In response to the Executive Order, the County of San Diego Board of Supervisors directed their staff to take aggressive action to address the unfortunate situation, instituting the Drought Response Action Plan (DRAP) which put forth projects targeted at cutting water use. Consequently, the North County Animal Shelter was recognized as a site wasting water on landscaping.

Solution

Time was obviously a pivotal factor - the sooner these projects were completed, the more water was to be saved. The County selected Job Order Contracting since it allowed for a flexible approach to developing the scope and a quick execution of the projects. All sprinkler heads were replaced with rotary heads on the main northern slope of the property, providing improved water. Synthetic turf was also installed at the entrance of the facility which allowed for the removal of unnecessary sprinkler heads.

Results

ABC Construction Company, the local contractor, completed the project swiftly. Sprinkler replacements decreased water usage by 35 percent. Further improvements to the interior of the building such as push faucet sinks led to even more dramatic water savings. Aside from water savings, the improvements to the exterior provided even more benefits by increasing the facility's aesthetic appeal. The significance of these enhancements means better first impressions of visitors with aims on adopting dogs and safer and cleaner spaces for them to get to know the animals.

As a result of the county's quick action and partnership with local contractors, such as ABC Construction Company, on this and several other drought oriented projects, the County of San Diego was able to realize an average of 28 percent potable water savings during the height of the drought emergency. Due to the sensitive time frame, unique project circumstances and superior Job Order Contracting principles, the County of San Diego and ABC Construction Company were honored as Award of Merit winners in the 2016 Harry H. Mellon Job Order Contracting Awards.





Jackson Health System Medical Office Renovation







Key Project Factors: Limited scheduling window, rapid response, value engineering, cost control/savings, changing scope of work, M/WBE requirements

Owner

Jackson Health System

Project Scope

- Demolition of approximately 15,000 SF of interior space
- Installation of new waiting rooms, doctors' offices and exam rooms
- Renovate restrooms
- HVAC ductwork and controls
- Installation of new fire alarm system

Contractor

LEE Construction Group, Inc.

Project Cost

\$1,900,937

Time Frame

Project Identified: June 2

Purchase Order Issued: September 25
Construction Started: January 4
Construction Completed: June 3

Challenge

The Jackson Health System planned to demolish existing office spaces and restrooms to make space for the installation of four new suites comprised of waiting rooms, exam rooms, doctors' offices and renovated restrooms. To minimize disruption to patients and staff on the eight floors above and below, work was to be performed during both normal working hours and after hours. Special caution had to be taken to ensure patients were not compromised by transported debris and materials. If the project was to be finished by the date of its advertised completion, traditional construction procurement methods would not be acceptable.

Solution

Facing a tight deadline, the Jackson Health System utilized Job Order Contracting, an indefinite quantity procurement process. Through this project delivery method, the Jackson Health System was able to use a contractor it had a previous relationship with, allowing peace of mind for the project at the outset. With numerous clients and end users coordinating shut downs and schedules to make sure work was performed with minimal impact on surrounding areas, the inherent flexibility of Job Order Contracting was also extremely beneficial.

Results

Job Order Contracting allowed for quick turnaround and cost savings that otherwise would have been impossible with the standard project bidding process. Jackson Health System was able to capitalize on end of fiscal year funding it might not have gotten otherwise. Due to the sensitive time frame, unique project circumstances and superior Job Order Contracting principles, the Jackson Health System, and LEE Construction Group, Inc. were honored as Award of Merit winners in the 2016 Harry H. Mellon Job Order Contracting Awards.





Los Angeles Unified School District Modular Classroom







Key Project Factors: Time-sensitive project, limited scheduling window, rapid response, cost control/savings, changing scope of work

Owner

Los Angeles Unified School District

Project Scope

- Construction of stem walls and site utilities
- Delivery of eight modular containers
- Craning of containers into place
- Installation of fire alarm and security systems

Contractors

Fredrick Towers Inc.
Thomasville Construction Inc.

Project Cost

\$695,611

Time Frame

Project Identified: May 15
Purchase Order Issued: August 31
Construction Started: September 1
Construction Completed: March 29

Challenge

The Los Angeles Unified School District planned on installing a first of its kind building concept comprised of recycled shipping containers. The building itself was to be ADA compliant while also being up-to-date in fire alarm and security systems technology. The District needed an additional educational occupancy area prior to the students and staff returning from spring break, so an aggressive phasing schedule was required for this project. The District's traditional construction procurement process historically took 120 days from bidding to award, so an alternative project delivery method was required for this time sensitive project.

Solution

The District had a Job Order Contracting program in place, and the annual average from Job Order assignment to Notice to Proceed was 38 days. With that in mind, the District utilized Job Order Contracting to complete the modular classroom installation. Due to the streamlined nature and inherent flexibility of the process, the project faced only minor change orders and stayed both on time and within budget.

Results

Students and staff returned from spring break to find the new "green concept" building finished and fully outfitted with current technology. Without Job Order Contracting, the completion of the project would have been impossible within the required time frame. Due to the unique project circumstances, sensitive time frame and superior Job Order Contracting principles, the Los Angeles Unified School District, Frederick Towers Inc. and Thomasville Construction Inc. were honored as Award of Merit winners in the 2016 Harry H. Mellon Job Order Contracting Awards.





Cape Canaveral Warehouse Repair







Key Project Factors: Time-sensitive project, rapid response, grant/bond fund use, value engineering, cost control/savings, End of the fiscal year

Owner: Cape Canaveral
Air Force Station

Project Scope

- Cleaning and painting all interior masonry wall surfaces
- Resurfacing of concrete floors
- Demolition and removal of existing steel mezzanines, storage and office structures and all associated appurtenances
- Removal of all old shelving and storage unites
- Cleaning and refurbishment of walls and floors

Contractor: LEE Construction Group, Inc.

Project Cost: \$393,636

Time Frame

Project Identified: September 12 Purchase Order Issued: September 25 Construction Started: September 25 Construction Completed: January 15

Challenge

Cape Canaveral Air Force Station (CCAFS) needed to refurbish the interior of the Air Force Supply Warehouse during the last month of the federal fiscal year. This is a particularly challenging period to schedule projects since the government's contracting branch is often busy attempting to award multiple end of fiscal year contracts. Not being able to award by the end of the fiscal year can mean months of delay if a project has to be deferred to funds from another fiscal year, leading to a costlier project.

Solution

With time being such a pressing issue, CCAFS utilized Job Order Contracting, known as SABER in the Air Force. A localized and customized Construction Task Catalog® was used to execute task orders to manage the overall SABER program. Job Order Contracting allowed for a concise and clear proposal that was easy to review and confirm. The data and software tools provided by Gordian further permitted the project to be estimated and negotiated quickly during a compressed time period.

Results

The CCAFS SABER program allowed the government to specify the exact product desired, ensuring the warehouse will be able

to endure long-term, heavy-duty wear and tear. The Air Force consequently procured the project without the financial burden and time delays associated with the traditional design process. Transparency in pricing was also beneficial, and by procuring this project during the end of the fiscal year, the government was able to renovate this warehouse and capitalize on this sought after funding. The warehouse supply project was completed using outstanding principles and practices

Due to time frame complexities and superior Job Order Contracting principles throughout the supply warehouse project, CCAFS and local contractor, LEE Construction Group, Inc., were honored as Award of Merit winners during the 2016 Harry H. Mellon Job Order Contracting Awards.



About Gordian

Gordian is the world's leading provider of construction cost data, software and services for all phases of the building lifecycle. From planning to design, procurement, construction and operations, Gordian delivers groundbreaking solutions to contractors, architects, engineers, educational institution stakeholders, facility owners and managers in the local, state and federal government, education, healthcare, manufacturing, insurance, legal, retail and other industries. With our proprietary data, along with our RSMeans and Sightlines data, we offer the largest collection of labor, material and equipment data and associated costs in the world with over 275,000 construction tasks with costs for all areas of construction. Gordian also offers the most widely used construction procurement information management software available anywhere and cutting-edge facilities intelligence and life cycle costing software to assess initial installed costs versus long-term facility costs and improve long-term asset performance. For more information, visit www.gordian.com.

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