

Englewood Police Headquarters

Adolfson & Peterson Construction with DLR Group

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3. Meeting the Challenge of a Difficult Job – General Contractor

Why this project should win an ACE Award and why this project is unique

Englewood's Police Station was built almost 50 years ago and did not have enough holding cells, which caused overcrowding. The building had leaky roofs and walls, bug infestations and didn't meet ADA compliance. The police had outgrown the facility and were operating with inadequate storage and insufficient training areas. Maintenance costs were increasing, and repairs were not a long-term solution to continuously invest in a facility lacking appropriate security design and police standards. The City deserved and desperately needed a new facility.

The police station was connected to the fire station and part of the Public Safety Services Complex, a critical community area. The design and construction team faced their first project challenge – knowing the new facility had to expand while being built in the same location. Knowing the importance of both stations to public safety, the new facility also had to be constructed while current operations were still fully functional. In addition, the project required only the police station to be rebuilt, so critical elements of the structure would have to be reconstructed to enable the fire station to become a standalone building.

Using a complex phased approach to ensure operational functionality of both the police and fire departments, the completed 52,000-sf police headquarters is more than double the old 19,000-sf facility. Now a sustainable and high-quality facility, it's expected to serve as the headquarters for the next 50 years.

Excellence in Project Execution and Management/Team Approach and Solutions of Special Projects:

The design team worked closely with stakeholders to optimize the process flows within the building. The movement of visitors, staff, prisoners, and evidence within the building through different zones of security was carefully planned to maximize efficiency and building security. More than 10% additional space was added to the project during program validation.

Sequencing the project construction was critical. Through collaboration with multiple entities, construction started with building the new facility first. The new headquarters was constructed on the existing public safety block, replacing a parking area. This required construction to be performed only four feet from the operational existing building.

Move management after completion was a large undertaking for everyone involved and planning started nine months before the new building was completed. Operations such as dispatch required a quick turnover since the headquarters' system could not be a phased transfer. The team used their past expertise to assist the City, police and fire departments in understanding the details involved in the move – everything from utility transfer and vendor selection to public communications. Preliminary testing of systems was done two months before move-in as well to ensure operations were not disrupted.

After staff moved in, the old structure was demolished. Although demolition may seem simple, this project's proximity to the new structure and connected fire station complicated demolition. The team worked together to separate the fire station into a stand-alone structure, requiring utility resequencing without removing their power, sanitary and other infrastructure to maintain operations.

A main city storm line ran under the block and the existing sanitary system had to be maintained. The team constructed a temporary sanitary storage system to use in the months before final connections could be made. The new facility's design required water drainage to be encapsulated and cleaned in a stormwater fashion, however the underground storage couldn't be built until after demolition. Multiple systems were temporarily maintained until the permanent system was accessible, so coordination was essential in managing the sequencing, transfers and disconnections.

The completed tie-ins had to work for both the remaining fire station and the new headquarters, connecting both old and new systems. Just to give the fire station hot water, a new water heater was installed, and plumbing was updated. Long lead item management, BIM coordination and fully understanding existing conditions were key in the project's system integration.

The project was completed on budget and before contract completion.

Construction Innovations/State-of-the-Art Advancement:

With a community-gesture vision for design, this facility was different than a typical police station or office because of the high-quality materials, finishes and multi-use spaces in conjunction with the functional PD requirements.

State-of-the-art construction is reflected in the building's planning and execution in the complex circumstances for the allocated budget. Construction used the space from property line to property line, coordinating work-arounds for the underground water detention and the sanitary line that ran through the building which serviced multiple city blocks. The City received a modern upgrade on their current property without losing operations.

Skilled construction was necessary with the unique elements that make up the facility. The latest detention construction materials were used for the ten detention cells, while upstairs office spaces feature high-quality finishes. The dispatch center had to be fire rated. Bullet-resistant film on the windows and bullet-resistant drywall was required, each panel weighing almost three times the weight of a traditional drywall panel. This type of wall construction required coordinating pre-drilled hole screws and an increased attention on safety installation.

A monumental staircase, serving both a functional and aesthetic purpose, required precision in planning and quality craftsmanship. The wall tile framing the staircase required a delicate install, each tile being 5'x3' and only 1/8-inch thick.

With sustainability a focus, the vapor barrier required taped joints for increased energy. The highly-efficient new structure is designed with life-cycle costs in mind, reducing the City's energy consumption and maintenance costs.

Environmental/Safety:

There were no safety incidents on the 2 ½ year project.

The largest safety focus was on constructing a new structure within feet of an occupied building. Precautions and communication planning were essential. Preventative solutions included keeping people away from windows in the occupied structure, placing temporary protection around the windows and changing certain doors to emergency use only so people wouldn't exit into a potentially dangerous area. When steel was being set, construction-adjacent areas of the occupied structure were blocked off.

Heightened safety awareness was necessary on the masonry work, understanding the labor-intensity of time-consuming work was at a higher risk in the constrained work area. A smaller than normal scaffold was used because of the restrictive space.

Daily meetings with the masonry crew were a normal practice in understanding tasks to be immediately performed and where individuals were going to be working.

When demolition was ready to start, the construction team coordinated a unique opportunity for the City to practice explosive demolition in a safe and controlled environment. Coordinating with the SWAT team, the City and the construction teams, the event provided a real-life training opportunity.

During demo, plywood and 2x4s were used to brace and protect the current building, providing a layer of protection to the bricks.

Contribution to the Community:

The project models how both design and construction can come together to accomplish what some may consider an impossible feat – completely replacing a building without losing the operational services the municipality provides. Both the architectural and engineering components had to be continually aligned with logistics to sequence the build.

It also models how a City statement building, where appearance and architectural features were prominent, can balance the functionality of a police station. The preconstruction collaboration

was critical in the project's success in order to maintain the budget while delivering an inspiring civic facility.

The construction sequencing, scheduling and safety aspects of this project shapes how future buildings can be constructed when faced with close-quarter circumstances, representing to other municipalities that the location or services of a complete building replacement doesn't have to be compromised.

The police headquarters is an exceptional facility the community taxpayers can be proud of. The new booking and holding area is safer for officers and detainees, and the evidence-storage features — including an innovative drive-through evidence drop-off area —enables better prosecution of crimes. The new secured parking lot dramatically increases safety and protection of the police force and their vehicles, as the old parking was an open and unsecured lot. With the emergence of COVID-19, the technological and modern improvements such as cleanable surfaces and daylight-open spaces were graciously appreciated.

The facility exists for the community in more than one way. The main lobby can function as a public gallery space for civic functions. A new public plaza outside the front of the headquarters is intended to facilitate community events, designed specifically as a park connection to City Park across the street.

Excellence in Client Service

From initial design planning to construction execution, the vision was balanced to realistically meet the client's needs:

“AP was great at anticipating unforeseen risks, and always put in the time and attention in making sure that the concerns of the PD were addressed.” - Donovan Nolan, CBRE Project Management

“This Project has helped our police department achieve greater legitimacy within our community.”

- Sam Watson, Deputy Police Chief Englewood Police Department









