

# REPAIRS TO DENVER CHILDREN'S HOME: ICRI ROCKY MOUNTAIN CHAPTER INITIATES COMMUNITY OUTREACH PROGRAM

BY LEO WHITELEY

## INTRODUCTION

One of the objectives of the ICRI Rocky Mountain Chapter is to provide assistance to organizations that affect our daily lives but may not have the resources or methods available to improve the community we live in. From this desire to help the community, a committee composed of Design Professionals, Contractors and Material Suppliers was organized from the ICRI Rocky Mountain Chapter membership (Fig. 1). The Community Outreach Program (COP) committee issued the following mission statement: "To help non-profit organizations that own or have buildings or structures that require work and cannot afford to repair. Our work will be restricted to and focused on concrete and masonry repair and restoration. We

will form a coalition of Engineers, Contractors and Material Suppliers to assess, design and perform corrective work on selected projects."

To assist in determining if a project is eligible for assistance, the committee developed a Community Outreach Program Request Form. This Request Form verifies that the organization is a 501(c)3 non-profit organization and that the facility is owned by the organization. Along with the contact and insurance information, the Request Form asks for the mission statement and geographic area served by the organization. Finally, the Request Form asks for the type of repairs requested. The committee chose to limit the types of repairs to concrete, masonry, and waterproofing, in line with the mission of ICRI. All applications are reviewed by the committee, which selects the projects to be undertaken. The Community Outreach Program Request Form helps to ensure that the projects will maximize productivity while mitigating and sharing time commitments by all participants.

Additional committee responsibilities include assigning project managers for the various types of repairs, marketing, and publications. All members of the committee were tasked with recruiting participants in all phases of the project. To assist in the recruiting of chapter members, a Community Outreach Program Provider Information Form was developed and distributed to all Chapter members.

## DENVER CHILDREN'S HOME

For the initial Community Outreach Program, the Denver Children's Home (DCH) was selected for repairs. The Denver Children's Home has its roots back to the first non-profit organization in Colo-



Fig. 1: From the COP Committee and holding the ICRI Rocky Mountain Chapter banner are (left to right) Joe Kline (Co-Chair); Randy Diner (Co-Chair), Procoat Systems; Rebecca Hea, Executive Director of DCH; Lindsay Leuthod, Development Director of DCH; and Jake Holland (Co-Chair), Summit Sealants

rado, when the Ladies Relief Society formed Denver Orphans Home in 1876 in order to take care of the orphans being brought in to build railroads and work in the Colorado mines. In 1902, the Home moved to its current location at 1501 Albion Street (Fig. 2). The Denver Orphans Home was renamed the Denver Children’s Home in 1962. The mission statement of the Denver Children’s Home is to “restore hope and health to traumatized children and families through a comprehensive array of therapeutic, educational, and community-based services.”

## CONDITION ASSESSMENT

For the repair of the Denver Children’s Home, the committee’s first task was to perform a condition assessment of the historic building. The five primary areas of repair needs were identified as follows:

- One of the 5-story stair towers was pulling away from the building due to differential settlement of the foundation system. This was resulting in moisture infiltration into the building;
- Masonry archways in the building façade needed to be rebuilt;
- Deteriorated sidewalks along a major thoroughfare around the building needed to be replaced;
- Drainage issues on the west side of building were resulting in flooding at the handicapped entrance into the building; and
- The exterior masonry walls were in need of mortar repairs and surface cleaning.

For each of the identified repair needs, an evaluation was undertaken to identify the scope of work (Fig. 3). For the stair tower soil stabilization, exploratory excavations at the footings were performed to determine the existing condition of the foundation support system. A review of existing documentation of the stair tower was made to determine if any previous stabilization programs had been undertaken. For the deteriorated sidewalks, the quantity of the sidewalk to be replaced was identified along with maintaining adequate drainage. To address the exterior cleaning, a material supplier tested and developed cleaning procedures to establish a job process to protect the existing exterior masonry walls.

## RESTORATION LOGISTICS

To assist in the coordination of the renovations, a File Transfer Protocol (FTP) site was created as the project-central repository for all project related



Fig. 2: Vintage photograph of Denver Children’s Home, circa 1908

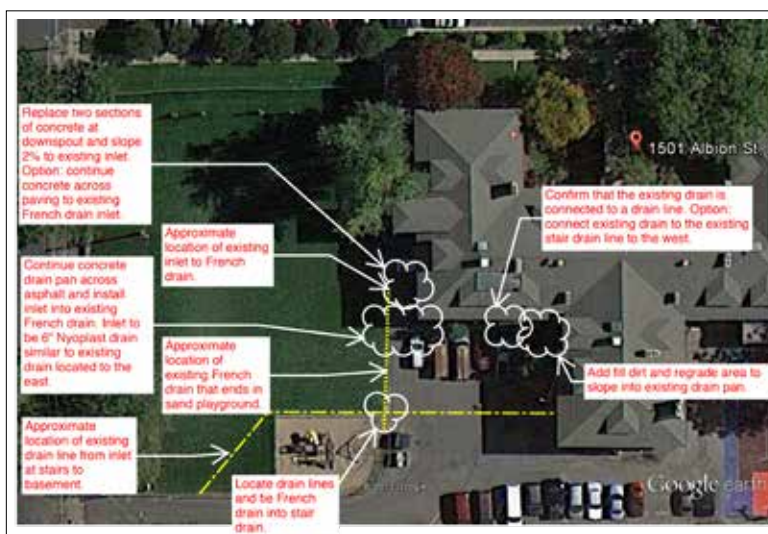


Fig. 3: Proposed drainage improvement for west side drainage issues. Plan development courtesy of Martin/Martin Consulting Engineers.

information, which included drawings, specifications, forms, photographs and contact information. The owner provided insurance to all parties who worked on the site. All involved parties cross-signed documents to hold each other harmless on all aspects of the project from design to workmanship. In addition, every worker and service provider who came onto the site was required to sign a waiver of liability form to hold harmless ICRI and The Rocky Mountain Chapter of ICRI, its officers, directors, employees and its technical experts from any liability in the event of any injury or damage of any nature. Because the building was an active live-in facility for at-risk children, security rules and regulations were developed outlining restrictions on the interactions between the residents and the workers. To assist in the identification of the



Fig. 4: Sidewalk replacement on north side of building



Fig. 5: Deteriorated brick and mortar replacement at masonry pilaster



Fig. 6: Rebecca Hea, Executive Director of DCH, is setting the first brick with Lindsay Leuthod, Development Director of DCH, recording it for prosperity

workers, all workers were given a non-company-specific ICRI team shirt to be worn while on site.

Because the building was on the Colorado State Registry of Historic Properties, approval was required from History Colorado for every modification planned to be undertaken on the building. To assist in the approval process, complete elevations of the exterior of the building were developed and the areas to be repaired were identified. Material testing of the existing mortar was conducted to develop the design of the new mortar mixture to match the existing mortar in composition and color to be utilized in the rebuilding of the masonry archways and general tuck pointing. Numerous meetings were held with History Colorado to attain the necessary building permit for the repairs to this historic building. Based on the results of the mortar testing, the recommended replacement mortar mixture, and the restoration protocol prepared by the committee, History Colorado approved the modifications and a permit for the project was issued.

## RESTORATION PROJECT

Joe Kline and Jake Holland acted as Project Managers for the renovation of the building. A project trailer was temporarily donated and placed on site where workers would sign in and out while on site. Equipment and material were securely stored in the trailer and appropriate contact information and safety signage were posted. The committee co-chairs were tasked with recruiting the teams needed to undertake each of the identified repair scopes of work (Fig. 4 and 5). Twenty-seven Rocky Mountain Chapter member companies came together to accomplish the project. The companies that contributed time to the project were Smalley and Company, Metro Mix Concrete, Rocket Supply, ProCoat Systems, Quikrete, US Mix, National Waterproofing, Sika, BASF, Syrup Restaurant, Restruction Corporation, NPW Contractors, I-Kota Construction, ASR Companies, McDonald Waterproofing, Summit Sealants, Wiss Janney Elstner Engineers, Walker Restoration Consultants, Haywood Baker, Atkinson-Noland & Associates, Concrete Stabilization Technologies, Martin/Martin, EB Structural, Nagel and Associates, ProSoCo, Rio Grande Company and Simpson Strong Tie. Volunteer members from these companies spent over 1100 hours on the project.

Initially, the Community Outreach Program committee requested a budget of \$6,000 from the Chapter's General Fund to perform the identified scope of work at the Denver Children's Home, purchase material, pay rental fees and to help

market the project. The final tally of \$1,600 was spent on equipment rental and to cover the traditional project kick-off ceremony with the “setting of the first brick,” (Fig. 6) and to host the recognition BBQ lunch celebration at the conclusion of the project. This final banquet was held at the Denver Children’s Home with the participating Rocky Mountain Chapter members, students, and staff in attendance.

The estimated construction cost of the time and materials provided by the volunteers and companies of the Rocky Mountain Chapter was \$350,000. The initial project of the Community Outreach Program was deemed a huge success by the committee and the ICRI Rocky Mountain Chapter is looking forward to undertaking the next project.



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