

**Project Title: 2014 East Façade Repair Program**  
**Property Name: Northwestern University – Ryan Field**  
**Location: Evanston, Illinois**  
**Entry Classification: Restoration**  
**Project Cost: \$700,000**  
**Duration: 70 calendar days**  
**Start Date: 06/16/2014**  
**End Date: 08/29/2014**

### **Scope of Work:**

The scope of work for the 2014 East Facade Repair Program project at Ryan Field included the following; concrete repairs, railing modifications, miscellaneous steel replacement, expansion joint repairs, application of new coating systems, and CMU wall repairs. Access to the east facade was done by a combination of swing stages, articulating lifts, and pipe scaffolding. Working in tandem with the Engineer of Record, and the University, to achieve a high standard of quality control, as well as complete the project in less than two months during summer break was an extreme challenge.

There were 11 different types of concrete repairs on this project. Concrete repair types included: top surface repairs, underside surface repairs, beam bottom/side repairs, vertical surface repairs, deep large are vertical surface repairs, small area surface repairs, column surface repairs, concrete surface repairs along expansion joints, beam pocket repairs, east facade parapet wall repairs, arch rebuild repairs, and deep large area vertical surface repairs at built-up steel beam.

### **Abstract:**

Ryan Field is a stadium in Evanston, Illinois, United States on the campus of Northwestern University. It is primarily used for American football, and is the home field of the Northwestern Wildcats football team. The field opened in 1926 and holds 47,130 people. Prior to 1997, the stadium was named Dyche Stadium, for William Dyche, Class of 1882, former Evanston mayor and overseer of the building project. In 1997, the field was renamed Ryan Field in honor of the family of Patrick G. Ryan, who was then the chairman of Northwestern's board of trustees. This project is worthy of an award because it involved the restoration of a community and University prominent structure in the heart of the town of Evanston. It was completed in less than two months using multiple crews on various working shifts.

### **Unforeseen Conditions:**

Unforeseen conditions on nearly all exterior restoration projects involve inclement weather. Unseasonable amounts of precipitation shortened what was already a difficult schedule to achieve prior to Opening Day for the Northwestern University Wildcats, but the deadline was met.

### **Problems/Challenges/Solutions:**

The stadium itself is not very tall, therefore, imperfections in the patching, coating, expansion joints, etc. were easily visible to the naked eye. As a result, much care was taken to blend the patches, and match the coatings as best as possible. Furthermore, the west elevation repairs were completed the year prior by another contractor. It is often difficult to matching 90-year-old concrete, as well as previous repairs done by various contractors.

There were 11 different types of concrete repairs on this project. Concrete repair types included: top surface repairs, underside surface repairs, beam bottom/side repairs, vertical surface repairs, deep large are vertical surface repairs, small area surface repairs, column surface repairs, concrete surface repairs along expansion joints, beam pocket repairs, east facade

parapet wall repairs, arch rebuild repairs, and deep large area vertical surface repairs at built-up steel beam.

**Safety Considerations:**

Nestled in the heart of the Evanston community, with an active hot dog stand to the west, and homes to the north, east, and south, pedestrian traffic (especially in the summer months) was difficult to control around the active jobsite.

Barricades, signs, fencing, crews, etc. were used, and weekly safety meetings with the Senior Safety Director for Bulley & Andrews Concrete Restoration resulted in an incident-free project.

**Community/Environment/Impact:**

Revitalizing a stadium prior to Opening Day for a community and University enable people to become re-energized in the area.

**Technology/Innovation:** n/a

**Site Constraints:**

An active parking lot approximately 20 feet to the east of the repair areas, as well as an active stadium, and buildings adjacent to the north, resulted in site constraints that all equipment and crews had to work around.

**Quality Control/Field Testing:**

A \$4,000 allowance was built into the project budget to allow for periodic quality control and testing of the concrete. Every pour, every batch of material was tested. Cores were pulled at intervals during the curing period.

**Rigging Approach:**

Swing stages, articulating lifts, and conventional pipe scaffold were used to complete the inspections with the Engineer of Record, as well as complete the repairs.

**Sustainment:**

The repairs and coating systems are expected to last for decades.

**Submitted By:**

Don Redar

Bulley & Andrews Concrete Restoration (formerly Takao Nagai Concrete Restoration)

[dredar@bulley.com](mailto:dredar@bulley.com)

773.235.2433

**Associate:**

Kevin Michols/Peter Nelson

Wiss, Janney, Elstner Associates

[kmichols@wje.com](mailto:kmichols@wje.com); [pnelson@wje.com](mailto:pnelson@wje.com)

847.272.7400

**Contractor:**

Don Redar

Bulley & Andrews Concrete Restoration (formerly Takao Nagai Concrete Restoration)

[dredar@bulley.com](mailto:dredar@bulley.com)

773.235.2433

**Manufacturer:**

Sean Meracle

MAP Paints/Sherwin-Williams

[Sean.m.meracle@sherwin.com](mailto:Sean.m.meracle@sherwin.com)

312.656.0622