

FLORIDA STATE COLLEGE at JACKSONVILLE RESTORATION PROJECT

Recognized for Excellence in the Repair of Low-Rise Structures – December 3, 2009 International Concrete Repair Institute – Great Plains Chapter



Structure characteristics:

FCCJ N Campus Building D is a 3-story structure built in the 1970's and constructed of reinforced castin-place concrete beams and columns. The project commenced on May 25, 2009 with a date of substantial completion of October 9, 2009 at a construction cost of \$148,000.

Problems that prompted repair:

The Owners were concerned about spalling concrete and exposed reinforcing steel, failing joint sealants and the overall appearance of the building. In addition, they were interested in having the building coated to mitigate water intrusion.

Repair system selected:

High-strength polymer modified repair mortars that contain corrosion inhibiting admixtures as well as epoxy bonding agents were used to replace sections of deteriorated failing concrete. In addition, joint sealants and coatings were applied to the building elevation to provide protection to the building envelope system.



Inspection/evaluation methods:

On-site structural investigations were performed to the entire structure to develop a set of repair drawings that would indicate the locations of and types of repairs to be completed. Structural deficiencies were identified during the condition survey thru destructive testing methods by manually removing loose delaminated concrete. Non-destructive testing included visual observations and soundings.

Special features of the project:

The project was a comprehensive restoration project that was completed while the building was occupied. It was successfully restored with structurally repaired load-bearing elements and coated with a complete waterproof coating system including clear-coat sealants on the brick veneer walls. This project was established to develop the repair process, repair materials, coatings, colors and textures of the restoration system for a future phase. The future phase included the restoration of the remaining three elevations of Building D as well as the restoration of Buildings A, B, C and E.