

Mizner Fountain Mortar & Paint Analysis —Private

PALM BEACH, FL

Work on the Town Hall Square Fountain Restoration began in February, 2015. During the dismantling and demolition of the pool walls and coping, field investigations were made into the original construction materials and structure of the fountain. The results of this investigation led to request for further analysis of the mortar used on the exterior of the pool walls and the finishes utilized for the pool lining.

Representative samples were chosen to reflect areas most likely to yield intact examples of historic material. The location of each sample was documented during extraction. Thin-sections of the mortar samples were prepared for microscopic examination. The thin sections were ground to the appropriate thickness and mounted on glass slides with glass cover slips. We examined these thin sections for structural features and inclusions within the materials not detectable through other means, such as acid digestion. This method also allows for basic visual characterization of certain mineralogical compounds using polarized light that may not otherwise be visible.

Portions of the mortar samples were retained for standard wet chemical testing. This characterizes the constituent components of the mortar, including the color and texture of binder and aggregate. The results informed general guidelines for repair mortars that would be compatible with the existing masonry.

Fresh broken surfaces of all paint/finishes samples were mounted and examined under reflected light. The chromochronology of paint layers were documented, and the early finish layers were visually distinguished from later finishes. The colors of original finish layers were then matched to standard color chips in the Munsell color book. From here, a commercial color in current Benjamin Moore colors were matched and identified.

MORE INFORMATION:

<https://evergreene.com/projects/mizner-fountain-mortar-paint-analysis-town-hall-square-palm-beach-fl/>

SERVICES PERFORMED

Investigation, Testing & Analysis
Mortar Analysis
Paint Studies
Surveys & Condition Assessments

PROJECT DETAILS

Architect/Engineer
Kimley-Horn

