



**Project Number**

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## Custom Mortar Matching Report

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**Project #** USHG311

**Analysis Date:** 7/2/03

**Site:** [REDACTED]

**Client Requirements:** Match Mortar / Package B

**Mortar Dating:** 1887

**Location/Function in Building:** Coach House Interior Mortar

**Condition of Sample Received:** Sample received consisted of 54 grams of mortar, largest piece measured 2"x 1-1/8 "x 1/8".

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### INTRODUCTION

The findings and recommendations presented in this report are premised on results of tests performed on a mortar sample delivered to our laboratory on July 2, 2003.

The scope of testing was limited to determination of physical mix proportions of major ingredients used in the mortar sample. The testing included visual examination, both with and without magnification, as well as aggregate void ratio and grain size analyses of sand extracted from the mortar sample. The sample's physical characteristics and the original date of construction were used to determine the proposed mortar components and aggregate ratios for the replacement mix.

U.S. Heritage Group interpreted and adjusted the proposed mortar formulation based on the information provided to us regarding: current site conditions; present condition and type of masonry (i.e., stone or brick); the function of the new mortar; and degree of weather exposure.

*Assuming the sample provided is representative of the original mortar, the analysis and mortar matching diagnosis detailed below will give a reliable indication of the original ingredients and allow U.S. Heritage Group to prepare a historically correct mortar match for your project.*