

## INTRODUCTION

years. Although systems have been well-maintained and are in good working order, they are not able to provide adequate temperature control primarily due to their design. It is recommended that a two-pipe, hot-water system be installed for heating in place of the existing 1-pipe system, so that a positive hot-water flow can be provided to the radiators. All piping to existing radiators should be replaced and new controls provided. Air-conditioning system equipment should be improved by eliminating and replacing condensers and associated air handlers with 4-pipe blower coils, and connecting the updated system to the campus chilled-water piping that was recently extended to Carr's Hill.

Plumbing supply piping consists of original galvanized pipe and a series of later copper replacements. Due to the tendency for internal corrosion and occlusion of galvanized piping, and indicative reports of low water pressure, it is recommended that remaining original piping be replaced with copper. New water closets should be provided along with this effort. In order to protect occupants and building contents, it is recommended that an automatic-sprinkler system be installed throughout the house.

The electrical system currently provides for adequate operation, but it is recommended that the outdated system components be replaced for added safety. This work includes replacement of all panel boards, installation of a grounding system for the main panel, new code compliant branch wiring, and new receptacles and switches. New light fixtures would be provided in the building with the exceptions of the basement and recently renovated kitchen area. Electric service to the building, which is located in the Bayley Art Museum, will be upgraded. The university should consider installing a lightning protection system as an assessment indicates a risk value of "severe" based on structure type, construction type, relative location, topography, occupancy, and contents.

Recommendations are intended to be inclusive of a wide range of scope items that could be considered for a proposed project undertaken by the university. Should the university decide to accept all recommendations, the current estimate of probable construction costs is \$3,868,000 to \$3,983,000. However, the cost could be impacted by factors such as the code analysis and/or inflation. It is anticipated that construction of the project could be completed within a timeframe of twenty-one months if the president was relocated. To meet the request of the university not to have construction underway during the last two years of the president's term, construction should begin in June 2007. These time frames are approximate and need to be refined following setting the scope of work of the project.

The building has been well-cared for and has served its generations of residents well. As the centennial of construction of the building approaches, the university has the opportunity to repair and update the President's House so it can be readied for it for the next century of service. The completed project can also be recognition of the building's ongoing role in the culture of the University of Virginia.