

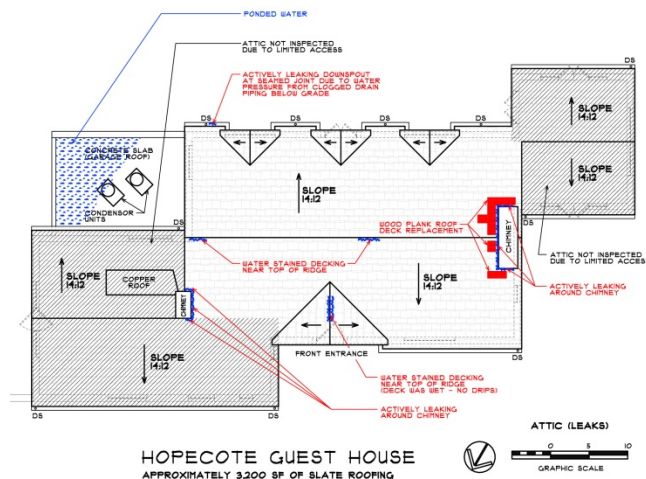


Hopecote Guest House Historic Slate Roof Restoration The University of Tennessee Knoxville, Tennessee

Roof Restoration	3,463 s.f.
Construction Cost	\$163,558
Cost/s.f.	\$47.23
Masonry Restoration	\$17,250
Completion Date	2014



The Hopecote house was constructed in 1924 and is listed on the National Register of Historic Places as an excellent example of residential construction from the Country House movement of the early twentieth century. In April 2011, a severe thunderstorm with large hail stones impacted the existing historic slate roofing tiles and Architects Weeks Ambrose McDonald was retained by the University to examine the damages and to develop a plan for restoring the existing historic slate roofing system.



The inspection of the existing slate roofing system revealed water had been entering into the dwelling at various locations where nail heads were exposed to the weather. Other findings included deteriorated masonry joints at the chimneys, pitted copper flashings, damaged wood plank decking, clogged gutters/downspouts, and drainage issues over the single car garage. Further investigation of the slate roofing system revealed fractured slate roof tiles, loose slate

roof tiles, and missing slate roof tiles at various locations. The investigation also revealed brass cut nails were utilized for the attachment of the slate roofing tiles, the organic felt underlayment was beginning to deteriorate, and improper repairs were made by unskilled workmen around the chimneys where galvanized nails and manufactured slate tile was found. Architects Weeks Ambrose McDonald summarized the investigation of the historic slate roofing in a report and recommended the total roof be restored to its original condition because of these additional deficiencies.



Existing Slate Removal



Masonry Restoration

The scope of work included removal and salvage of the existing slate tiles for reuse, repointing the masonry joints at the chimneys, complete replacement of the copper flashings, complete replacement of the copper gutters/downspouts, and waterproofing the single-car garage for positive drainage. Since this was a historic renovation/restoration project, the work would eventually be awarded to a prequalified contractor through the Best Value Option One procurement process by the State of Tennessee.



Existing Slate Cleaning



Salvaged Slate to be Reused

Some of the existing slate tiles could not be salvaged for reuse because of their existing conditions. New quarried tile was brought in from Vermont in varying, colors, sizes, and thicknesses to complete the historic graduated slate roof system.



Quarried Slate Samples



Newly Quarried Slate

The Tennessee Historic Commission and the University was quite pleased with the work and the overall project.