

## PROJECT

Coronado Trail Retaining Walls  
Greenlee County, Arizona

## CLIENT

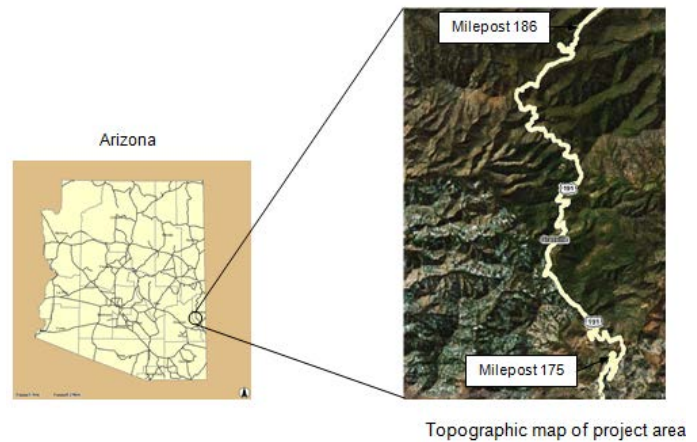
Arizona Department of Transportation

## PROJECT DESCRIPTION

Over 30 rubble stone retaining walls along a 16-mile length of highway were constructed approximately ninety years ago along the Coronado Trail Scenic Highway. Some of the historic masonry features are in precarious condition and nearing the end of their service life. Atkinson-Noland & Associates was part of a multi-disciplinary team that was assembled to consider both the structural and historic aspects of the rubble stone construction. Atkinson-Noland & Associates led the field work aspect of the project, including site evaluation of retaining wall sections and culvert headwalls, carried out radar scanning at a series of wall sections, conducted structural analysis of typical wall sections, and synthesized recommendations for approaches to address wall stability. The Collaborative, Inc., helped develop the evaluation methodology, assisted with field evaluation, and provided architectural preservation services.



*Typical stone masonry walls along the Coronado Trail*



Topographic map of project area

*Map of Investigation Area*

## SERVICES PROVIDED BY ATKINSON-NOLAND

- Review of prior work efforts, including reports describing cultural resources along the roadway and condition evaluation of individual wall segments
- On-site evaluation of the roadway and associated features
- Use of ground penetrating radar to obtain information at typical wall sections, including wall thickness, the makeup of internal wythes, and the nature of subsurface fill beneath the roadway itself
- Analysis of typical wall sections to understand which features possess sufficient integrity to express historic characteristics
- Generation of a prioritized listing of recommended approaches for preserving historic features



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