## Arlington to restore historic gates for future use

By Matt Bernfeld Public Affairs Office

Arlington National Cemetery is working with a Seattle-based team of forensic and preservation experts and the U.S. Army Corps of Engineers' Curation and Archives Analysis Branch, St. Louis District, to assess the condition and restore the historic stone columns that were once used for the Ord-Weitzel and Sheridan Gates. The gates were used as the cemetery's entrances on its eastern boundary for near 100 years.



The original Ord-Weitzel Gate included columns which will be restored for the cemetery's future use. Photo courtesy of the Library of Congress

Once restored, the columns will be reassembled and reused in the cemetery; the exact location future location is still being determined.

The columns were originally erected in the portico of the old War Department building in Washington, D.C. After that building was demolished in 1879, Brig. Gen. Montgomery Meigs, who was then the Quartermaster of the Army, had them moved to Arlington.



A crewmember carefully removes a column section from its outdoor storage area so preservation experts can further assess its condition. Photo by Devin Kelly

As the cemetery grew, so did the vehicles traveling in and out of its entrances. By the mid 1900s, the gates were no longer able to accommodate the trucks and construction equipment that were vital to the cemetery's expansion. When Arlington's boundaries were extended to include the south post area of Fort Myer in 1971, the gates became obsolete and the columns were placed in the cemetery's outdoor storage area located on the border of the cemetery and Joint Base Myer-Henderson Hall.

In July, contractors moved the disassembled columns from their former outdoors storage area to the cemetery's maintenance area for further evaluation.

Forensic investigators and historic preservation experts, Mark Liebman, and his son, Alec, then cataloged and assessed the condition of the columns. The team used several state-of-the-art techniques to extensively evaluate the columns and the integrity inside the stone, including ground penetrating radar, ultrasonics (uses sound waves), impact echo (uses stress waves) and microscopy. They also used a technique called drill resistance which has been used in restoration efforts on the Leaning Tower of Pisa in Pisa, Italy. The techniques showed that the columns were predominantly intact.

"Now that we know they can be reconstructed, we are documenting where repairs and replacements need to be made and cataloguing the pieces so they can be put it back together, like a jigsaw puzzle," said Mark Liebman.

Following the preservation analysis, the National Park Service's Historic American Building Survey will scan, measure, and develop drawings for the column restoration. A team of iron conservationists will also be brought in to assess the wrought iron components of the gates.

Dr. Michael Trimble, chief of the archives analysis branch, is overseeing the project and he, along with the other experts, will put together a report by October that includes a restoration plan.