

St. Joseph's Apache Mission Restoration Project
illustrated Progress Report: Spring 2000



The south transept of St. Joseph's Apache Mission. This area has some of the most severe interior deterioration. Bits of rock and old mortar fall from the wall regularly.

Scaffolding erected in December 1999. This scaffolding has been purchased, and will be used throughout the restoration project.

On February 2, 2000 restoration work was begun.





For many years water leaked through the roof, causing serious damage to this wall. This leak was repaired several years ago, now we are repairing the damage.

The water has caused the lime to separate from the mortar leaving loose, powder-like lime deposits on the surface and loose sand in the mortar joints.



After cleaning out the loose mortar and small stones. This is a place bats had access to the interior. Note the spot of blue sky seen through this 3 foot thick wall.

An old water leak caused this damage, washing out the mortar and actually causing the face of this stone to separate. This particular stone is located approximately 30 feet above the sanctuary floor. The stone face came off easily when we pulled it away.





Our current restoration project crew:

Harry Vasile, restoration project foreman
Tommy Spottedbird, student laborer
Peter Boegel, restoration chair

The first step in is to use a vacuum cleaner to remove the very loose, sandy mortar. In spots we have been able to simply vacuum out loose mortar 12 to 18 inches into the wall.



A small pick hammer is used to remove old mortar that is too crumbly to provide a base for the new mortar. In some places the old mortar is still quite good, while in other places the old mortar is very weak.

Cement mortar used to make repairs in the 1960's is removed with an air chisel. We usually found that the original lime mortar behind the cement mortar had deteriorated to loose sand, so the cement mortar comes out easily.



Years of accumulated dirt are scrubbed away.



The original mortar here was badly deteriorated. This hole was left after the deteriorated mortar was cleaned away. In places like this the wall is essentially rebuilt before the stonework can be repointed.

The hole is gradually filled with various sized stones. The work is done in layers to give the mortar time to cure.



The wall has been rebuilt. After some additional curing time the stonework can be repointed.



Repointing the stonework. The spaces between the stones are filled with mortar. Various tools are used to apply the mortar depending on the width of the mortar joint.

After allowing the mortar is partially dry or “cure” the surface of the mortar is scraped away. This technique produces a nicely textured, even mortar joint.



Before



After



St. Joseph's Apache Mission Restoration Project Progress Report for Spring 2000

April 29, 2000

Greetings of spring. The restoration of our beautiful church and veteran's memorial is going well, slow but well. On February 2, 2000 we hired Harry Vasile as the restoration project foreman. Harry is a former Franciscan Friar who is now married to a member of the Mescalero Apache Tribe. On March 1, 2000 we hired Tommy Spottedbird as a student laborer. The three of us have been working full time repointing deteriorated stonework of the interior of the church, on the south wide of the sanctuary. As a training program in historic stone building preservation, this project is off to a good start.

A solid foundation in the art of stone building preservation here at St. Joseph's Mission was obtained last summer through the efforts of *Bar-M Construction*, under the guidance of Pete Mold, restoration consultant from England. To further this training Harry Vasile and I attended a "Repointing Historic Masonry" workshop this past November. *U.S. Heritage Group, Inc.* conducted this workshop at their headquarters in Chicago, Illinois. The mission of the *U.S. Heritage Group* is,

"to eliminate the use of inappropriate mortar, stucco, and patching materials on historic buildings in the United States. *U.S. Heritage Group* assists in educating architects, masonry contractors, building owners, and government agencies in the benefits of using traditional materials and methods to preserve and restore America's masonry heritage. We work closely with government agencies in other countries offering valuable information on masonry preservation trends, traditional material research along with insight to old world craftsmanship. Lecturing on history and distributing technical information is only a first step. A strong emphasis is placed upon helping our trades people understand and appreciate traditional materials, their properties and performance characteristics. This is accomplished in part through our comprehensive training workshops."

Indeed, this training workshop was an invaluable aid in preparing us to teach local laborers the art of stone building preservation.

Restoration project fundraising efforts, thus far, have not made it possible to hire a contractor to oversee the restoration work and training program. Rather than wait, we decided to begin the program on our own. The Diocese of Las Cruces helped make this possible by providing the necessary liability and worker's compensation insurance.

After one month of working together, Mr. Vasile and I decided we were ready to take on our first student. Before taking the job as restoration project foreman, Mr. Vasile spent many years as a counselor at the local alcohol rehab facility, and for two years was the director of the "Drug Elimination Program" on the Mescalero Apache Reservation. Besides training local people in the art of stone building preservation, it is our hope to offer help to people needing a second chance in life. Toward this end we hired Tommy Spottedbird, a recent graduate of the local rehab program, and a man determined to get his life back in order. Tommy is experienced in construction work, came highly recommended from the rehab personnel, and has proven to be a quick learner and dedicated worker. We have a strict drug and alcohol policy that each employee must agree to and sign before they can work with us. We also have clear safety guidelines each employee must sign and abide by.

Enclosed with this letter is a series of photos illustrating the work currently underway. The damage to the stonework from a leak in the roof is, in places, severe. Before we do any repointing, we are actually rebuilding areas of the wall where the mortar holding the smaller stones has completely failed. Fortunately none of the larger stones has shifted. By the beginning of May we will have completed approximately half of the area enclosed by the scaffolding in the sanctuary of the church. As soon as the danger of frost is past we will recommence the repointing work on the exterior of the church, picking up where we left off last summer. We plan to hire another student for the summer months. In making repairs we are giving priority to the stonework most severely deteriorated. During this time of dry weather we will also be learning to make the necessary repairs to the roof. I am currently looking for an instructor to train us in window repair. We have discovered that the glazing of the windows is cracked and falling away in many places, leaving the glass loose and vulnerable to damage. We will make these repairs while the scaffolding is in place.

During the month of May, Mr. Vasile, Mr. Spottedbird and I will take a training course in scaffolding erection and dismantling. *Territorial Construction Company, Inc.* of Albuquerque will conduct this course. *Territorial C.C.I.* is the same company that sold and erected the scaffolding we are using in the interior of the church. This course involves approximately 15 hours of at-home study, followed by a day of hands-on training in Albuquerque. A certification test will follow the training, giving us the skills and certification necessary to safely and legally erect scaffolding at a job site.

Perhaps we are being overly cautious in bringing people into this restoration effort. However, I would rather err in favor of safety and allowing time to carefully develop a program that will provide good individualized instruction for the students we employ. Mr. Vasile will eventually take on more of the responsibilities of teaching this preservation work. In the future perhaps Mr. Spottedbird will also become an instructor. I believe the time we are taking now to develop preservation skills will eventually make possible a more extensive training program.

To date approximately \$120,000.00 has been raised for the restoration of St. Joseph's Apache Mission church. Enclosed is a summary of the restoration project income and expenses to date. The current balance in the restoration fund is \$64,909.03.

We continue to pursue grants from other charitable foundations so that our work may continue, and more laborers may be employed. Local fundraising efforts are providing a great deal of help as well, in the form of two raffles conducted over the past six months that raised nearly \$6,700. Clearly this project will take many years. As we save this important landmark of southern New Mexico, this project has the potential of becoming a first-rate training program, providing skilled laborers for the important work of preserving the rich architectural heritage of the Southwest. I believe we have made a good start. If you have any questions or comments please write.

Respectfully yours,

Peter A. Boegel, OFM
Restoration Chair