

Southern Trails Chapter Members Take On Repair Of Historic Marker

The monument at Navajo Springs, Arizona, honoring establishment of the first Arizona territorial government in 1863, was broken and ignored.

During the Civil War, President Lincoln created Arizona as a separate territory from New Mexico with the Organic Act in February, 1863. The new territorial government party finally set forth from Leavenworth, Kansas, in September, on a four-month overland journey to the new territory. By the time they reached Santa Fe, it was determined that their destination would be in the central mountains area, where valuable mineral deposits were being discovered, rather than Tucson, where Confederate sympathy still held sway.

Navajo Springs was a watering stop on the Beale Road, which runs across Northern Arizona approximately where Interstate 40 runs today. It was opened for emigrant travel by Edward Fitzgerald Beale in 1857, following the route originally explored by Lieutenant Amiel Whipple and other early explorers. Heading west on the Beale Road, the governor's party—which included some 60 wagons and 1,000 head of cattle—camped at Navajo Springs. Confident they were within the boundary of the new territory, they held a swearing-in ceremony on December 29, 1863.

The train continued west along the Beale road to a point near where Flagstaff is today. Angling south from there, another two weeks were required to reach the first Fort Whipple, at Del Rio Springs, north of today's Chino Valley, where they arrived in January, 1864.

In October, 1930, the St. Johns Stake of the Mormon church placed a sandstone marker at Navajo Springs to commemorate the event. The location of the site is about 40 miles east of Holbrook, and about several miles south of the Navajo Springs exit off Interstate 40, on Indian land. This marker stood there until a few years ago, when erosion and wind—and perhaps a few cattle rubbing against it—toppled and broke it.



Marker as it appeared in 2001



Marker after it was broken

Several years ago John Krizek learned that the marker had been broken and began searching for someone to undertake the repair. In February, Tracy DeVault and Richard Greene volunteered to repair the marker. With the assistance of Navajo Nation representatives Clarence Bedonie and Elwood "Al" Pahi they were escorted to the site, and removed the marker to Tracy's garage, where it is undergoing restoration.

The Restoration Process:

Although the original marker remained upright for nearly a hundred years it is clear why it got broken. The original marker was hauled to the springs site and set in a relatively small concrete footing that was poured on site. The result was a marker that probably weighed 700 pounds sitting on a concrete footing that weighed maybe 200 pounds. When erosion washed away some of the dirt supporting the footing, the marker fell over. The original marker was and is a very nice marker. When it fell over, the upright part of the marker separated from the original base.

Neither part was substantially damaged. Richard Greene and Tracy decided to repair it in such a way that it might last 200 more years. Trying to do this work in the middle of the desert, 175 miles from Prescott, would be really difficult. It was decided to travel to Navajo Springs, collect the marker and return it to Prescott where it could be properly repaired. The original marker pieces weighed about 350 pounds apiece. We used Tracy's four-wheel drive van and an engine hoist to load the marker pieces into the van.



Clarence Bedonie, Richard Greene and Al Pahi loading the marker base into Tracy's van

It was decided that a new base would be cast from concrete. The repaired marker, with its original base would sit on the new base. The new base would be substantially larger than the original 200-pound footing. The rendering below gives an idea what the repaired marker will look like. The new base will be even larger than that depicted in the drawing, probably weighing about 1400 pounds.



Drawing showing how the restored marker will appear

Although they were able to move the two pieces of the original marker it was soon clear that the repaired marker would weigh about 2100 pounds. In order to move the repaired marker around and transport it back to Navajo Springs, we were going to need a substantial cart. The first task was to construct such a cart. Since we will have to move it with a motorized vehicle, we also fabricated a trailer hitch for the cart.



The next step was to figure out how to attach the original marker base to the new base. It was decided to reinforce the new base with structural steel and attached the original marker base to the structural steel. The photo below shows the dolly with the form that will be used to cast the new marker base. Inside the form is the structural steel with the eye-bolts in place that are required to lift the marker when it is complete.



In order to attach the original marker base to the structural steel, four threaded rods were inserted into holes in the bottom of the original marker base and locked into these holes with industrial epoxy (see photo below).



The next step was to bolt the original marker base to the structural steel. A number of additional steps were needed to before we were ready to cast the new concrete base.



A lot of research went into understanding what goes into a high-strength, water-freezing resistant concrete mix. We also spent a lot of time reviewing the steps involved in placing, finishing and curing concrete flat work.

On April 19th the new concrete base was cast. We kept it wet for seven days as the concrete went through the initial cure phase. (Concrete takes twenty-eight days to fully cure.)





The new concrete base with the original sandstone marker base now weighs over a ton. It can only be moved on the cart with the muscle afforded by a quadrunner.

We are now ready to reattach the upright part of the marker to the original base. When the marker was originally constructed, the upright part was attached to the original base with some sort of cement. This worked well and it would probably still be attached if it had not fallen over. We plan to use three steel rods to attach the upright part of the marker to the original base. We will also fill the gap between the upright part of the marker and the original base with industrial epoxy. Once the epoxy has set up, it should be almost impossible to ever separate them again.

Up to this point we have been able to lift the marker pieces using an engine hoist and lift the cart carrying the new concrete base with a rolling floor jack. Neither of these lifting devices will work to lift the finished marker off the cart. What we're going to need is a gantry and a pair of heavy-lift chain hoists.

The next page shows photos of fitting the upright part of the marker to the original base and the gantry we will use to lift the marker/base off the cart.

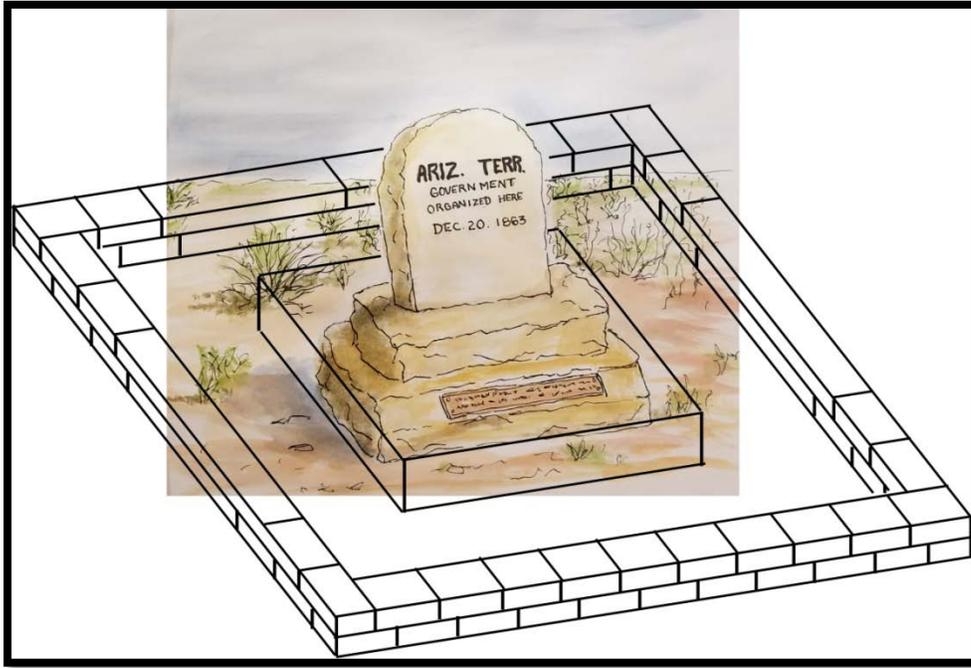


Checking the fit before attaching the upright part of the marker to the original base



Gantry for lifting the repaired marker and the new concrete base off of the cart

While the final repairs are being made to the marker, a trip will be made to Navajo Springs to prepare the site for the repaired marker. We plan to level an area of about forty square feet. We will then build a low retaining wall from precast concrete stones. The enclosure will then be filled with driveway gravel.



Finally, the new concrete base will be waterproofed. When the repairs are complete, the repaired marker, setting on the dolly, will be loaded onto a car-hauler trailer and taken back to Navajo Springs. The quadrunner will be used to move the marker/cart across the desert and back to where the marker was originally placed.

Future plans include putting a protective fence around the marker and placing an OCTA descriptive marker at the site.