



## MEMO

To: Chris Ann Gibbons, State of Nevada Indian Commission

From: Kristen Brown, Architectural Historian, SHPO

Date: October 24, 2016

Subject: Mortar at Building #6, Stewart Facility

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*Per the conditions found in the July 1982 Quitclaim Deed for the transfer of the Stewart Indian School, all work done to the historic resources in the complex must meet the Secretary of the Interior's Standards for Rehabilitation. To that end, the State of Nevada Indian Commission coordinates all proposed work with the SHPO to ensure that the conditions are met. The Indian Commission also coordinates reviews under the requirements of NRS 383.121.*

The Nevada State Public Works Division, Buildings and Grounds Section, has notified the SHPO that there are mortar cracks developing at Building 6 at the Stewart Indian School Facility. Buildings and Grounds inquired as to the best course of action for mortar joint repairs.

The SHPO does not recommend making repairs to deteriorating or cracked mortar joints until background investigations can be performed.

The first step should be identifying the underlying cause of the cracking or deterioration—the damage may have been caused by exposure, leaking gutters, misdirected irrigation sprinklers, differential settlement, or other causes.

The existing historic mortar should be analyzed so that its color, texture, vapor permeability, and hardness are appropriate for the building. Using the incorrect mortar recipe can cause damage to the historic masonry adjacent to the joints. The SHPO suggests that a mortar analysis be performed on Building 6, and that a basic survey of mortar types campus-wide be conducted to determine how many of Stewart's buildings appear to have the same mortar from the same time period. This will save Buildings and Grounds time and money in the long run.

Once the mortar recipe has been determined, future repairs will need to be done using the methods outlined in the NPS Preservation Brief *Repointing Mortar Joints in Historic Masonry Buildings*. The repointing project should be coordinated with SHPO once the full scope of work has been prepared.