

MARKER No. 07: SARAH (d. 1842 ?)

EXISTING CONDITIONS

- Marble headstone broken into two (2) fragments with the upper displaced fragment resting against the lower. Lower headstone fragment remains in its slotted sandstone base, however, loose and unstable.
- Headstone retains remnants of previous repair attempt at the current fracture line: epoxy, mortar, and copper wire fit into slots cut into the outer edge of the stone.
- The headstone is stained and contains biological growth. Minor erosion around the fracture line.
- The slotted sandstone base is in good condition with slight staining and biological growth.



Before (July 2008)



After (May 2009)

TREATMENT SUMMARY

- A. Excavation/Fragment Recovery
 1. Remove concrete berm from sandstone base.
- B. Cleaning
 1. For removal of biological growth and general soiling, the marble headstone and sandstone base were cleaned with D/2 Architectural Antimicrobial.
 - a. Clean water at low pressure (max 300 psi) and hand-pump sprayer.
 - b. Natural or nylon bristle brushes (varying stiffness and sizes).
 - c. Avoid dissolution or erosion of the stone.

► stones were successfully cleaned, however, slight biological staining and discoloration remain, which cannot be removed without harsh methods.
- C. Re-attachment and Repair
 1. Remove remnants from previous repair attempts, including mortar, epoxy and copper wire.
 - a. Use fine hand tools including detail rotary equipment (Dremel).

► bits of epoxy still remain around old repair.
 2. Re-attach two marble headstone fragments using two-part stone epoxy and two (2) threaded brass rods.

► fragment re-attachment clamped in place for 12 hrs.
 3. Patch resultant slots and voids with Type O mortar that is custom mixed to match adjacent marble.
 4. Point and infill where necessary around attachment seam.

► resultant seam and minor losses pointed with custom mixed Type O mortar (lime-based, with marble dust).
- D. Reset and Level
 1. Reset and plumb marble headstone into slotted sandstone base with a Type O mortar mix.

► binder-rich mortar (slurry) placed in bottom of slot and joint pointed with Type O mortar.
- E. Site Preparation and Repair
 1. Pull soil back from base of marker.
 2. Place pea gravel around base.