

5.0 REYNOLDS MILL (7S-C-99): FUTURE

While the excavations of Reynolds Mill (7S-C-99) may not have yielded new archaeological evidence about specific mill operations, the project contributed valuable information to other related concerns for the future. First and foremost is that with the completion of the excavations and accompanying documentation, FHWA's/DeIDOT's cultural resource compliance responsibilities have successfully been fulfilled as per the MOA. The archaeological compliance research was completed using a process, which considered the construction techniques necessary for the project, the type of archaeological resource expected, as well as budgetary and scheduling constraints. It allowed the cultural resource compliance research to be done concurrently with the demolition/construction without delays to the construction schedule. This method is clearly not appropriate for most transportation projects, but the successful use of this method for the Bridge 918 project demonstrates that when the need arises in the future, the process can work successfully.

Secondly, the project resulted in innovative sampling and curation methodologies. Due to the number of large architectural artifacts recovered at the site and curation facility space constraints, the collection and curation of artifacts uncovered at the site required streamlining. All of the recovered wood elements were described, photographed, and mapped while in the field. However, for collection purpose, sampling of the large wood elements and brick mill foundation walls served as the solution to the prohibitive traditional transportation and storage of these items. Instead of collecting every piece of wood available, samples of each type of wood element showing construction characteristics and unique features were taken. The samples were then collected for transportation to the laboratory for further analysis and speciation. At the end of the fieldwork, after all of the information had been collected, the uncollected wood was donated by the State of Delaware to the Challenge Program, a state-sponsored program, which provides training for out-of-school youth. The wood will be recycled by this group making Delaware's history part of its future.

Due to the nature of the wood samples and the attendant preservation issues surrounding them, an innovative way to protect and store the samples, away from exposure to air, was devised. After drying and tagging, the wood samples were encased in heavy plastic and ethofoam to keep any sharp edges and nails from poking holes in an outer plastic bag. The outer plastic bag used was a travel storage bag, which was then vacuum-sealed. While this is not a complete or true vacuum, it does allow the specimen to be stored in a relatively stable environment. Since the travel bags are clear, the sample and tag can be viewed through the

bag, making it easy to view the specimen without handling it directly. If the specimen needs to be removed from the travel bag for some reason, it can be put back into the same bag and resealed. In addition, a special wheeled cart with space for both millstone fragments was built to be used at the Delaware curation facility (Photograph 51). The cart was designed to minimize the footprint of the storage of these large objects by storing them vertically, and can be wheeled to various locations if necessary. The cart is enclosed by plexiglass allowing the millstones to be viewed but protecting them from accumulating dust.

Thirdly, the project resulted in the preparation of a Sussex County Mill Database as an alternative mitigation measure. The creation of the database served not only the needs of the current project, but also provides a path forward for future transportation planning decisions. The GIS-based database includes all known/documented mills in Sussex County and includes linked project text, references, and tables that can be searched, updated, and served over the internet for easier dissemination of the project information to project managers, researchers, and the interested public. The Sussex County Mill Database is described in detail in the following chapter and the database is included on CD.



Photograph 51. Cart constructed to store Millstones #1 and #2 at Delaware State Museum's curation facility.