

# Worcester State Hospital

BENEFICIAL USE DETERMINATION PROJECT

**Site Location:**  
**Client:**  
**Date:**

**Worcester, Massachusetts**  
**Worcester Division of Capital Asset Management**  
**2007 – 2009**

In 2007, the City of Worcester hired O'Reilly, Talbot & Okun Associates, Inc. (OTO) to perform services relating to the construction of the new Massachusetts State Psychiatric Facility, which was to be built upon the site of the existing Worcester State Hospital (WSH). Before construction could begin, the old, unused, and contaminated buildings of the old hospital had to be demolished. OTO designed an innovative beneficial use determination (BUD) plan to address the problems on site, which suggested that the demolished material from the old buildings be recycled and used as fill for the construction of the new facility. Implementing this plan would reduce costs for taxpayers and prevent 800 round trips of heavy truck traffic to and from the site. It would also conserve approximately 20,000 cubic yards of landfill capacity and another 20,000 cubic yards of natural soil backfill that would otherwise need to be transported from another location.

The plan calls for the abatement and removal of all contaminated material prior to building demolition. A small portion of brick and concrete will be separated from the reusable secondary material and disposed of at an off-site treatment facility. The rest of the BUD material, composed mainly of uncoated asphalt, brick and concrete materials, and granite block, will be carefully characterized by type of material, assessed for contamination, and managed on-site. The material will then be used to fill the demolished buildings of the WSH and to raise site grade to meet the construction requirements for the new hospital complex.

Phase 1 demolition is now complete and construction is underway for the new boiler house. The new facility is scheduled to be completed by 2012. The services provided in this project exemplify the commitment OTO brings to each project. The beneficial use determination provided not just a feasible solution; it provided the best solution, one that was optimal both economically and ecologically.

