

# CITY OF RUTLAND WATER TREATMENT FACILITY

RUTLAND, VT

## THE CHALLENGE

Immediately repair and replace the concrete roof on Rutland's water treatment plant filter structure, which was in danger of collapsing, without impacting the filters operating below.

## THE SOLUTION

PC Construction installed temporary shoring to protect the concrete roof from collapsing and reconstructed a new structural roof over the 54,000 square feet of operating filters.

## DESCRIPTION

The City of Rutland had seen signs of deterioration in the 180-foot by 300-foot concrete roof over the plant's filter structure. At the City's request, PC Construction immediately mobilized and installed 600,000 cubic feet of shoring. Upon the completion of the temporary shoring, PC Construction worked closely with the City and their design consultant to find the most cost and time efficient approach to replace the existing concrete roof structure. Once the plan was in place, PC Construction began the challenging process of removing the existing roof which included 6 to 8 inches of earth and membrane roof system consisting of over 220 pieces of precast concrete plank each weighing up to 15 tons. This was all accomplished while working over the operating filters.



After the removal of the existing roof structure, PC Construction proceeded with the installation of a new precast concrete roof over the operating filters and installed a new 54,000 square foot membrane roof system. The City's water supply was neither interrupted nor compromised during construction.



**CONSTRUCTION**

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