



FEMA

Winchester Culvert Upgrades Prevent Flooding

Winchester, MA - Major storm events repeatedly overwhelmed the culverts at Sylvester Avenue and at Canal Street in Winchester, Massachusetts. Finally, a 2001 storm brought substantial damage, which led to a hazard mitigation project for the Town of Winchester.

A March 2001 storm first brought snow and then rain to Winchester. In this storm, the slush developed into a mass which clogged Horn Pond Brook. A large mass of the slush broke loose and as it moved down stream, it gathered debris, limbs and acted as a massive destructive force.

When the water reached the Sylvester Avenue culvert, the force cracked the sidewalls, washed out the area embankments, and damaged the surrounding pavement. The Canal Street culvert was also negatively affected in similar ways. In addition, the flooding significantly impacted 14 neighborhood homes and a nearby school.

The Town of Winchester took immediate protective measures by installing Jersey Barriers to block the pedestrian walkway across the culverts. Concrete blocks were also placed along the eroded embankments as a short-term action to prevent continued erosion.

The proposed fix long-term was to enlarge the culvert capacity by 20 percent. New headwalls were also to be installed at the entrances and exits of the culverts to prevent erosion and scour. Construction would involve demolition of existing structures, casting new footings and then the installation of new culvert boxes.

With funding from FEMA's Hazard Mitigation Grant Program (HMGP), a \$230,018 grant was awarded. This hazard mitigation project for the Town of Winchester was completed in 2005.

A recent storm tested the new structures and the results were good.

Photos by Rebecca Poynter



Middlesex County,
Massachusetts



Quick Facts

Sector:

Public

Cost:

Amount Not Available

Primary Activity/Project:

Flood Control

Primary Funding:

Hazard Mitigation Grant Program (HMGP)