American Canal Society Canal Structure Inventory

Structure Millville Lock # 21		**Canal** Blackstone Canal	**HAER/CEHR**
			Condition Excellent
State/ Province Massachusetts	**County** Worcester	**Designer:** Holmes Hutchinson	
City/Town Millville		**Contractor:** Presume J.D. Allen	
Street Central St. then via Blackstone River Greenway		**Source of Material:** Quarry at Northbridge, MA1826-27	
Associated Waterway Blackstone River		**DATES OF CONSTRUCTION**	
Topographic Map Blackstone		**Start:** 1826-27	**Rebuilding:** Doubtful
UTM Coordinates 867 554		**Completion:** 1827-28	**Abandoned:** 1848

History & Use in Service (use since Abandonment):

This lock is the lower end of a short canal section of about 1/2 mile extending upstream to the former dam at Central St., Millville. The lock specification was written by Holmes Hutchenson and is on file at the American Antiquarian Society in Worcester. This granite lock is almost intact. The canal's chief engineer was Benjamin Wright (the chief engineer of the original Erie Canal which opened in 1825. Holmes Hutchenson was one of his assistants both there and here and later designed the enlarged Erie Canal Locks. Blackstone Canal Locks are 70' long and 10' wide as compared with the origibnal Erie locks of 90' x 15'. The later dimensions were used in later locks in New York, Ohio and throughout the midwest. But, those locks have short upper gates whereas the Blackstone Canal locks and the original Erie Locks all have full height upper gates. There are no surviving original Erie Canal Locks. As such, this lock is the best example of American lock construction at that point in time.

This lock is somewhat deceptive. First, just below the lock, a local stream enters the river with a large plume of silt that extends into the chamber and isolates it from the river. This causes the water in the lock to be higher than the river level. Second, the river level is higher than in the operating period as it is controlled by the Rolling Dam at the head of the Blackstone Gorge, downstream. This dam is five feet higher than the canal dam that is submerged just upstream of it. Third, a boat entering the lock drew four or so feet of water. Adding these up, the floor of the lock is probably 12' or 13' below the water surface.

This lock is owned by the Commonwealth of Massachusetts.

Description (Visible Remains at Site):

Millville Lock is at the lower end of a half mile section of canal. South of the lock, the canal was in slackwater for about 1-1/2 miles. North of the Central St. dam, the canal was also in slackwater for about 2 miles. To shift the towpath tothe river side of the canal for this short distance would haver required two change bridges and therefore costly construction and operating time. Therefore, the towpath was left on the west bank for this distance.

Other works or events associated with site:

Present Property Owners: Commonwealth of Massachusetts	**Location of Deed Description:** Worcester County Registry of Deeds

Bibliography, Published, unpublished, maps, photographs

Blackstone Canal map book, RI Historical Society, Hope St., Providence, RI
The Blackstone Canal by Col. Plummer
Map of the canal route in the book Blackstone Valley Line by Edward A. Lewis (1973)
American Antiquarian Society library, Worcester, MA

Agencies, Interested Blackstone River Valley National Heritage Corridor Massachusetts Department of Conservation and Recreation	**National Register, Other Recognition:** The entire canal is on the National Historical Register

Investigation made by: Original by: Alden W. Gould, 12 Shady Crest Drive, Nashua, NH 03060 6/15/73	**Date:** Retyped: 7/30/18
Address: Retyped & Edited by: David G. Barber, 16 Ballou Road, Hopedale, MA 01747	

A sketch map or illustration of the site should be included