

American Canal Society Canal Index

CANAL Pawtucket & Lowell Canals		STATUS In Lowell National Historical Park		ACS		
STATE/PROVINCE: Massachusetts				HAER		
COUNTIES: Middlesex		ENLARGEMENTS	DATES IN USE	CANAL LENGTH SLACKWATER TOTAL	LIFT LOCKS No./ SIZE	
LOCATION (Endpoints of Canal): Around falls of Merrimack River in Lowell			Pawtucket Canal:			
TOPOGRAPHIC MAPS: Lowell MA 7 1/2'			1796-1824	1 3/4 mi.	7/30x82 ?	
			1824-1841		5/25x115'	
		1841+		3/25x115'		
				2/12x115'		
HISTORICAL SIGNIFICANCE: <p style="text-align: right;">Northern Canal, 1848, 0.8 mi. 1/26x115'</p> <p>The 9000' Pawtucket Canal around the falls of the Merrimack through Lowell was completed in 1792-96 by the "Proprietors of Locks and Canals on Merrimack River," otherwise known as "Locks and Canals." There were 7 wooden locks: the guard lock, Minx Lock, two Swamp Locks and 3 Lower (or Concord) Locks. When the canal was enlarged in 1822-24 to function as a power canal in addition to transportation (thus establishing the mill city of Lowell) the locks were rebuilt of stone with wood planking, the Concord locks reduced to a 2-lock staircase, and the Minx Lock was completely removed. These stone locks were originally 25' wide but in 1841 lower Concord Lock was narrowed to 12' to save water (the old 25' walls are still there) and the upper Swamp Lock was completely rebuilt to the 12' width. All of the locks are still 115' long between gate posts. In 1850 James B. Francis, Chief Engineer for Locks & Canals, built the huge gate at the Guard Lock, known as "Francis' Folly." This 25x27 wooden guillotine gate could be dropped by knocking away wedges with a sledge hammer to</p>						
PHYSICAL DESCRIPTION: <p>close off the canal when floods threatened the city. Originally ridiculed, Francis was better appreciated when in 1852 his gate indeed saved Lowell from devastation, and again in 1936; it is still ready to be used again.</p> <p>Over the years 3 more miles of mill canals were added to the system, notably the Merrimack Canal (1822), Western Canal (1832), Eastern Canal (1836) and Northern Canal (1848). The Northern Canal has a lock at its upper end at the Pawtucket Dam, and the Western Canal had a stone 2-lock staircase near the outfall end (where the westernmost walls still remain - look for the gate recesses) just to take boats down to one of the mills. During this time the Pawtucket Canal was put to good use, first carrying building materials, and later, mill supplies and products. Today the locks and canals are in Lowell National Historical Park and should in time be restored to operating condition.</p>						
NAMES & ADDRESSES OF GROUPS CONCERNED WITH CANALS PRESERVATION/RESTORATION: Lowell National Historical Park, P.O. Box 1098, Lowell, MA 01853. (7 Merrimack Street, (617) 459-4136)						
BIBLIOGRAPHICAL SUMMARY: LOWELL: REPORT OF THE LOWELL HISTORIC CANAL DISTRICT COMMISSION TO THE 95th CONGRESS, USGPO, #022-001-00070-1, \$4.15 (1977). THE LOWELL CANAL SURVEY, HAER, 1976 (Selections from the HAER Survey) * Brochure on Lowell from the Lowell National Historical Park. See also AMERICAN CANALS 17:5 and 39:11. *\$1.00 from the Lowell Museum, P.O. Box 8415, Lowell MA 01853.						
UNPUBLISHED RECORDS, PHOTOS, DRAWINGS (CEHR, HAER, HABS, Local or Regional Historical Societies, Libraries, etc.): Maps and drawings from HAER Material from Alden Gould and Robert Weible						
EXISTING OR RECOMMENDED LANDMARK STATUS (CEHR, National Register, etc.): The Lowell Locks and canals are on the National Register.						
REPORTER'S NAME & ADDRESS: W.E.Trout, III, 1932 Cinco Robles Drive, Duarte CA 91010				DATE: 1 Feb 82		
RETURN TO: CANAL INDEX COMMITTEE, c/o T.K.Woods, 6939 Eastham Circle, Canton, Ohio 44708						