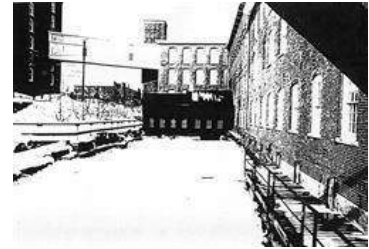


Appendix C –
Massachusetts Historical
Commission
Documentation

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.961
Historic Name:	Boott Dam and Gatehouse
Common Name:	Boott Dam and Dam House
Address:	Eastern Canal Eastern Canal opposite Kirk St
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	
Year Constructed:	1835
Architect(s):	
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related; Utilities Other
Significance:	Archaeology, Historic; Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Wednesday, November 6, 2019 at 3:56: PM

LOWELL CULTURAL RESOURCES INVENTORY

LOW. 961
 BE LHD 12/13/83
 RC NAD 61572
 C NML-12122177
 NAD 8/13/76

- IDENTIFICATION EASTERN CANAL opposite KIRK STREET MAP SHEET # 8
- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
- 2) HISTORIC NAME Boott Dam
- 3) CURRENT NAME same
- 4) PROPERTY TYPE canal structure 5) ZONING CLASSIFICATION B-3
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LHPD, LNHP, Locks and Canals HD

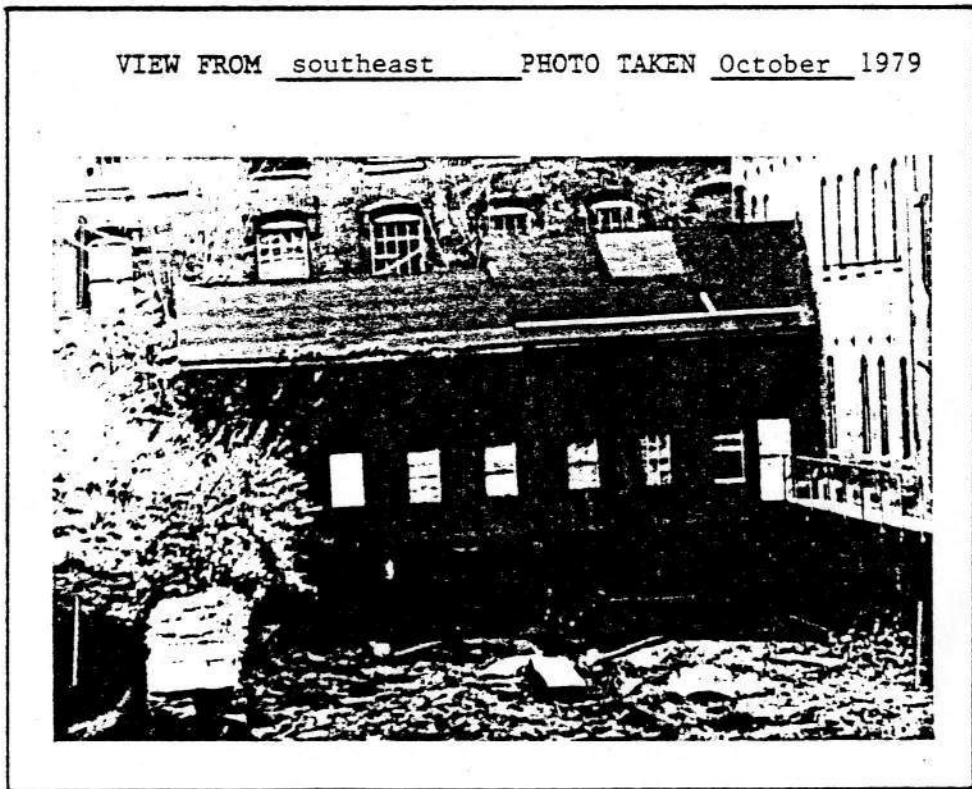
HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE 1835/1878/1892
 SOURCE documented: Lower Merrimack Valley...Inventory, pages 77, 78
- 2) ARCHITECT OR BUILDER unknown
- 3) HISTORIC OWNER Proprietors of Locks and Canals
- 4) ORIGINAL USE: GF canal regulation UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY no DATE _____
 SOURCE _____

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE utilitarian
- 2) PRESENT USE:
 GF canal regulation
 UF n/a
- 3) NO OF STORIES 1
- 4) PROP SQ FT n/a
- 5) PLAN curved front
- 6) ROOF end-wall gable
- 7) STRUCTURAL SYSTEM wood-frame
- 8) OUTBUILDINGS none
- 9) MATERIALS:
 FOUNDATION not visible
 FACADE all sides: vertical corrugated metal
 TRIM none
- 10) NOTABLE SURFACE SCAPE ELEMENTS none

VIEW FROM southeast PHOTO TAKEN October 1979



ADDRESS EASTERN CANAL, opposite KIRK STREETVISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC needs minor repair
- 2) IF DETERIORATED, CAUSES lack of maintenance
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact original fabric
 UF n/a
- 4) SURROUNDING LAND USES industrial, railroad, canal frontage
- 5) INTEGRITY OF PROP'S HIST SETTING intact with minor intrusions and/or losses
- 6) IMPORTANCE OF PROP TO HIST SETTING integral to character

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

The Boott Dam was built in 1835 to maintain the level of the Western Canal. Its distinctive curved face is shown on the 1835 indenture drawing for the Boott Mills (See Eastern Canal Inventory Form.) A sluiceway with a portcullis gate was cut into the dam in 1878, to assist in removing ice from the canal. The dam's stepped face probably dates to that period, as does its earliest sheltering structure. The present structure is a product of an 1892 rebuilding to accommodate hydraulic equipment to lift the sluice gate, equipment that is still in place. The three concrete siphon spillways were added in the 1940s.

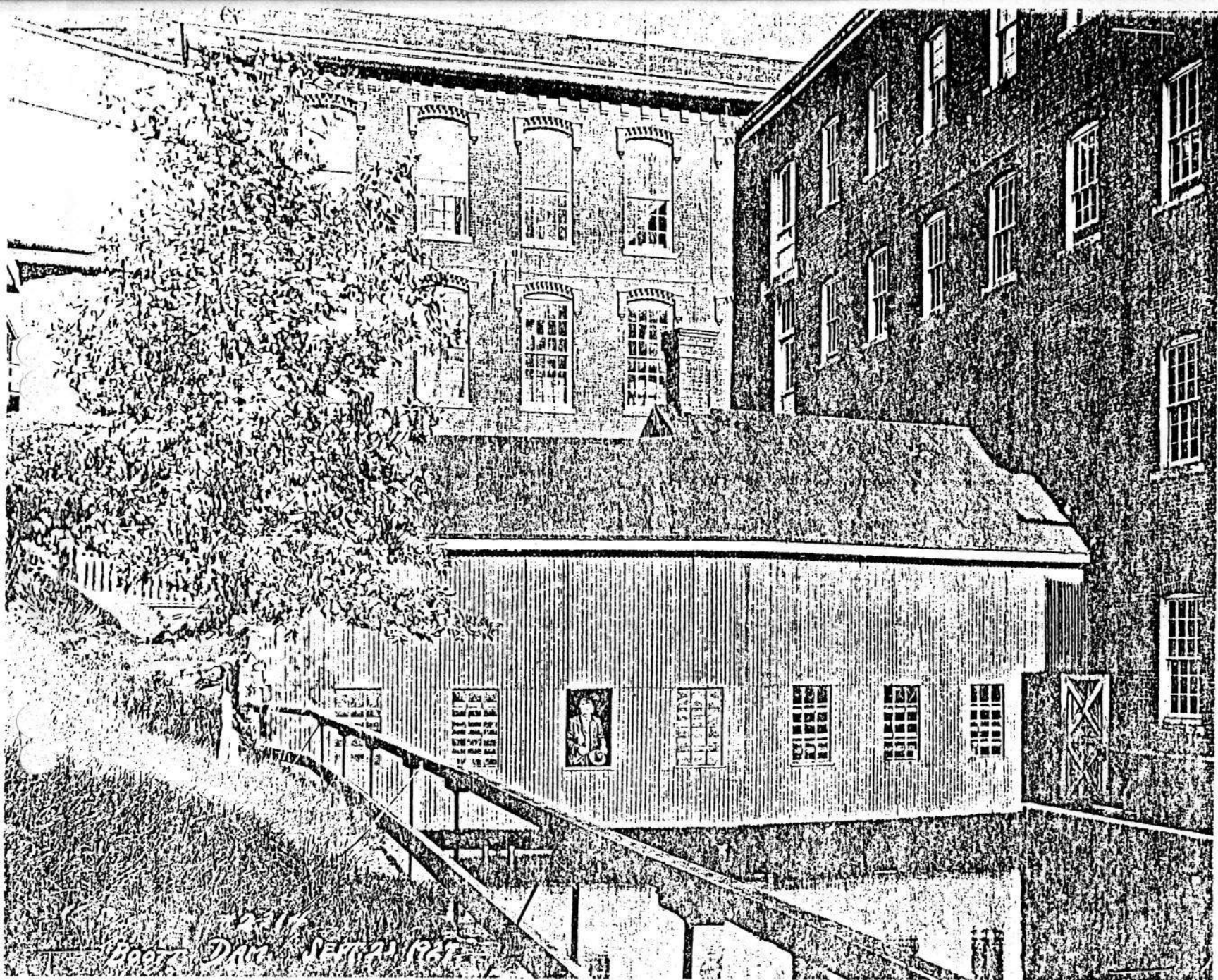
Source

Lower Merrimack...Inventory, HAER and MVTM, page 78.

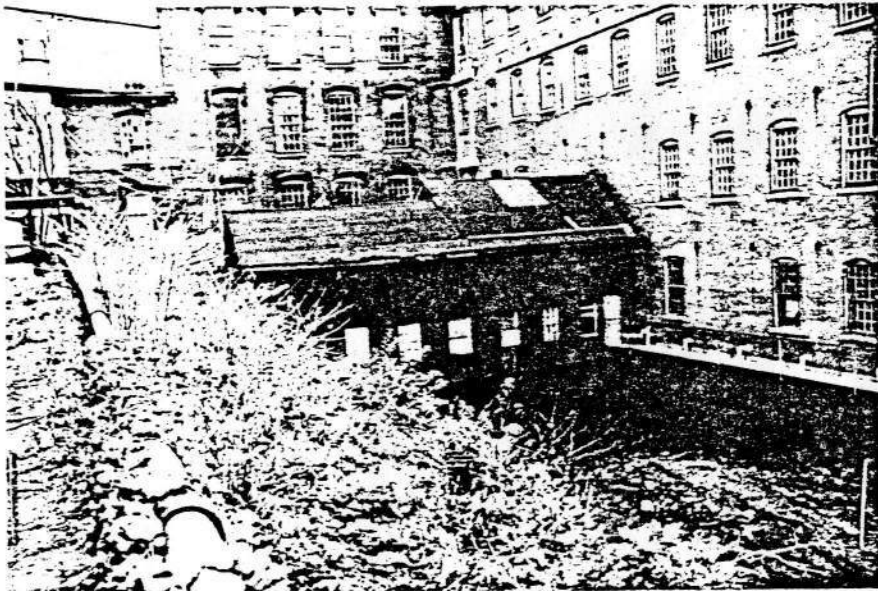
ARCHEOLOGICAL COMMENT

This canal feature has undergone several rebuildings. An archeological examination of the site might help elucidate the sequence of changes to the dam.

LOW.961



"Boott Dam. Sept. 23, 1927." University of Lowell Library, Special Collections, Locks and Canals photo #2314.



View of the Boott Dam from the southeast, with the water drained from the Eastern Canal. Photo taken in October 1979.

LOW. 961

PRE 1910 C	1800	1801	1810	1819	1820	1829	1830	1839	1840	1849	1850	1859	1860	1869	1870	1879	1880	1889	1890	1899	1900	1909	1910	1919	1920	1929	1930	PRESENT																																							
HAER	HABS	STATE	COUNTY	LOCAL	OTHER	DDD	FN	HIST	TECH	ARCH	TAPES	HAER	OTHER	FIELD	SLIDES	HIST	SURVEY	STEREO	MOVIES	LC	AL	AK	AZ	AR	CA	CC	CT	DE	FL	GA	HI	ID	IL	IA	IN	KS	KY	LA	ME	MD	MA	MI	MM	MS	MO	MT	NE	NH	NJ	NM	NC	ND	OH	OR	PA	RI	SD	SC	TN	TX	UT	VT	VA	WA	WI	WV	WY

EXISTING SURVEYS	DATA	DWGS	PHOTOGRAPHS	STATES
------------------	------	------	-------------	--------

HAER INVENTORY

1. NAME OF STRUCTURE BOOT DAM	2. DATE 1878; 1892	3. NATURE OF STRUCTURE DAM	4. INDUSTRIAL CLASSIFICATION SPEC STRUC:HYDRA (81.2)
5. LOCATION: STREET & NUMBER EASTERN CANAL NEAR INTERSECTION OF KIRK & FRENCH STS.	CITY OR TOWN LOWELL	COUNTY MIDDLESEX	STATE MA
6. USGS 7 1/2 QUAD & UTM GRID REF. LOWELL	7. OWNER OF PROPERTY PROPRIETORS OF THE LOCKS & CANALS		
ADDRESS FOOT OF JOHN STREET		LOWELL, MA.	
8. CONDITION: <input type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input checked="" type="checkbox"/> DETERIORATED <input type="checkbox"/> RUINS <input type="checkbox"/> UNEXPOSED <input type="checkbox"/> ALTERED <input type="checkbox"/> ACCESSIBLE TO PUBLIC			

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/ DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.

This dam was originally built in 1835 to control the level of the Eastern Canal, completed at the same time. Its face was in a curved configuration and its crest was topped with flashboards. In 1878, a sluice way with portcullis gate was built into the dam to facilitate the removal of ice from the Eastern Canal. The face of the dam was probably rebuilt into its present stepped configuration and the first enclosing structured built over it at that time. In 1892, the house was rebuilt to accommodate a hydraulic lift on the sluice gate. This house and its gate machinery are extant. Subsequently, three concrete siphon spillways were added. The pair on the south side of the dam was constructed in 1948, and the one on the north side at about the same time. (HYDR & PARROTT)

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.
11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS. <i>Records of Colles & Conroy Co, Lowell & BAKAR COMPANY</i>
See GREAT GATE

12. DANGER OF DEMOLITION OR DAMAGE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	13. PRIORITY
NATURE OF THREAT: Water damage from deteriorated roof.	
14. EXISTING SURVEYS AND DATES: <input type="checkbox"/> NHL <input type="checkbox"/> NR <input checked="" type="checkbox"/> HAER <input type="checkbox"/> HABS <input type="checkbox"/> STATE <input type="checkbox"/> COUNTY <input type="checkbox"/> LOCAL <input type="checkbox"/> OTHER 1974	
15. INVENTORIED BY: YOUR NAME Charles Hyde & Charles Parrott	ADDRESS HAER Lowell Survey
AFFILIATION	DATE August 26, 1974

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MFG)	UTILITIES (UTIL)	POWER SOURCES & PRIME MOVERS (PS & PM)	TRANSPORTATION (TRANS)	COMM	BRIDGES
--------------------------------	------------------	----------------------------------------	------------------------	------	---------

MACH	FABR	TEQUIP	INST	GMFG	WATER	SANI	GAS	ELEC	MUSL	WATER	WHEEL	WATER	TURB	WIND	STEAM	RECIP	STEAM	TURB	INT	COMB	DIESEL	ELEC	RR	ROAD	CANAL	MARINE	AIR	PIPE	TEL	R&TV	BEAM	ARCH	TRUSS	SUSP	AQUE	TRES	CANT	MOVE
------	------	--------	------	------	-------	------	-----	------	------	-------	-------	-------	------	------	-------	-------	-------	------	-----	------	--------	------	----	------	-------	--------	-----	------	-----	------	------	------	-------	------	------	------	------	------

DATES OF CONSTRUCTION

EXTRACTIVE INDUSTRIES (EXTRACT)

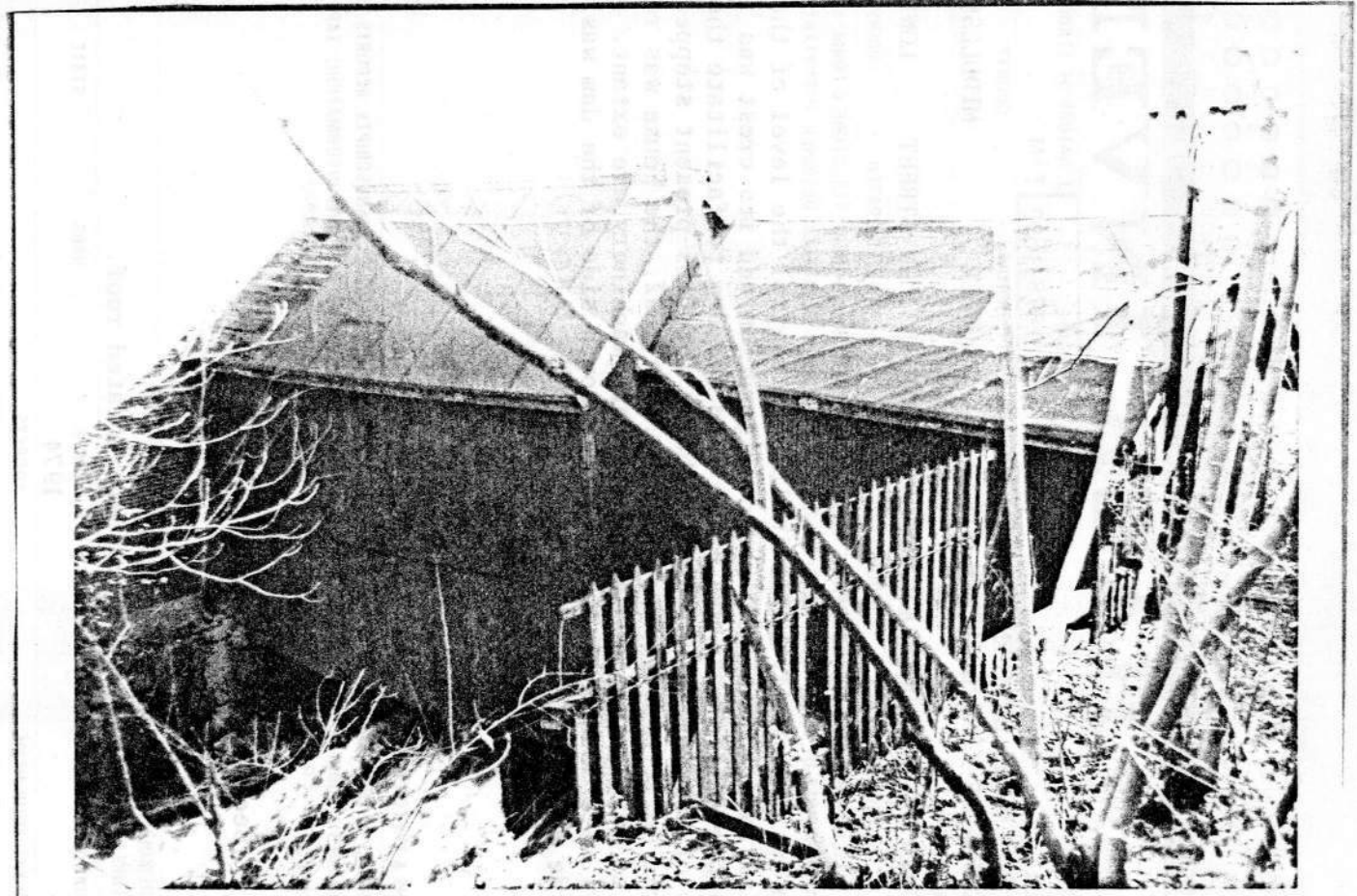
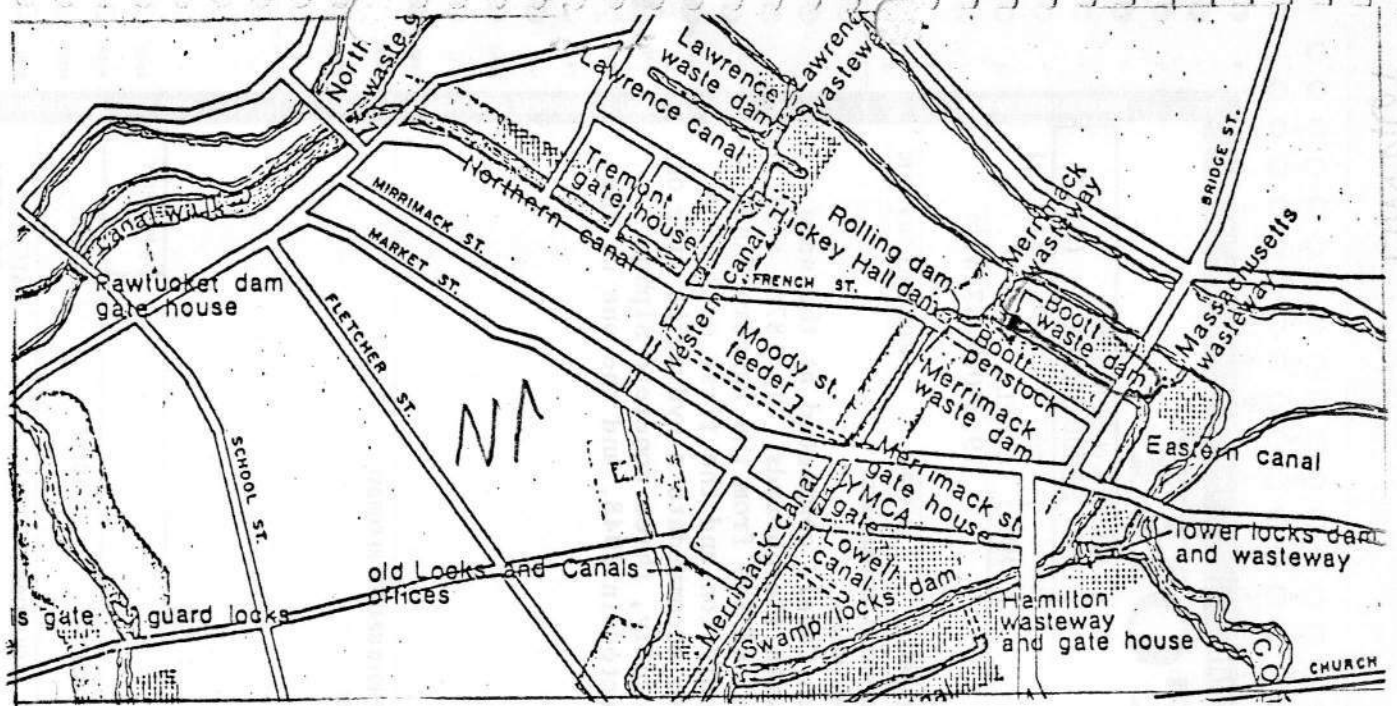
BULK PRODUCT INDUSTRIES (BULK)

SUB-CLASSIFICATION

SPECIALIZED STRUCTURES (SPEC STRUC)

BUILDING TECHNOLOGY (BLD TECH)

0
1
2
3
4
5
6
7
8
9
93
92
91
90
89 MUSEUM
88 ADAPT.
87 HOUS
86 P & ET
85 MATS
84 MATH
83 HEAT
82 CONST
81 HYDRA
80 TUNLS
79 DAM
78
77
76
75 ANCIL
74 MECH
73 FENES
72 ROOF
71 FLOOR
70 FRAME
69 FOUND



LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40598

Structure Number: BOOTT.GH

Structure Name 1: BOOTT DAM AND GATE HOUSE

Structure Name 2: BOOTT DAM & DAM HOUSE

Structure Name 3:

Park Alpha Code: LOWE

Name: LOWELL NATIONAL HISTORICAL PARK

ORGCODE: 1780

County: MIDDLESEX

State: MA

Regional Office: NORTH ATLANTIC

Subunit ORGCODE:

Name:

Alpha Code:

County: MIDDLESEX

State: MA

Number of UTM's: 0

Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED

Date: 10/18/85

Significance: NATIONAL

NHL: YES

Date: 12/22/77

Significance

DAM BUILT 1835 TO MAINTAIN WATER LEVEL @ WESTERN CANAL; SLUICWAY W/ PORTCULLIS GATE ADDED 1878 TO FACIL. ICE REMOVAL. PRESENT STRUCT. IS PROD. OF 1892 REBUILDING TO ACCOM. HYDRAULIC SLUICE GATE LIFTING EQUIP'T. CONC. SIPHON SPILLWAYS ADDED 1940s.

Historical Information

Period of Construction: HISTORIC

Date: 1835- (BU) Designer:

()

Date: 1878-1892 (AL) Designer:

()

Date: 1940-1950 (AL) Designer:

()

Date: 1990-1991 (RH) Designer: NPS

(0)

Functions, Uses, Materials, Impacts, and Condition

Historic Functions

Current Uses

DAM

DAM

UTILITY SERVICE STRUCTURE

UTILITY SERVICE STRUCTURE

Buildings — Materials — Structures

Foundation: STONE

Sub-structure: STONE

Framing: WOOD

CONCRETE

Walls: METAL

Super-structure: CONCRETE

Roof: SYNTHETICS

Other: BRICK

Volume: 2,001 - 20,000 CUBIC FT

Description

1-STORY GATE HOUSE W/ GABLE ROOF, CORRUG'D. MTL. SIDING, BRICK CHIMNEY STRADDLES STEPPED-FACE DAM & SLUICE GATE. STONE SPILLWAY, 3 CONC. SIPHONS, FLASH BDS. GATE HOUSE IS STRUCT'L. MISHMASH W/ STL. ANGLES & LALLY COLS.; SOME ORIG. PLANKING.

Impact Level: MODERATE Impact Types: INUNDATION (FLOODING)

STRUCTURAL DETERIORATION

Condition: FAIR

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40598 LOWE BOOTT DAM AND GATE HOUSE BOOTT.GH

Management Information

NPS Legal Interest: NONE - LOCAL GOVERNMENT OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: MA/DEM

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: REHABILITATION Doc: GMP Date: 08/00/81

Treatment Responsibilities Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. NPS DAM #144. REHAB. WORK PERFORMED BY CRC FOR LHPC.
FIRE/INTRUSION ALARMS INSTALLED 1993. NPS SHARES GROUNDS MAINTENANCE RESPONSIBILITIES W/ STATE.
ABUTS PRIVATELY-OWNED BOOTT MILL COMPLEX.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-7-A DAMS: MA
QTRS:

CLI	CRBIB	Other
1.	HRS 1. 010385	1. 400101 MALONE. CANALS & IND.
2.	HS ASSESS 2. 400107	2. 010390 GMP
3.	HSR 3.	3.
4.	CLR 4.	4.
5.	5. 400108	

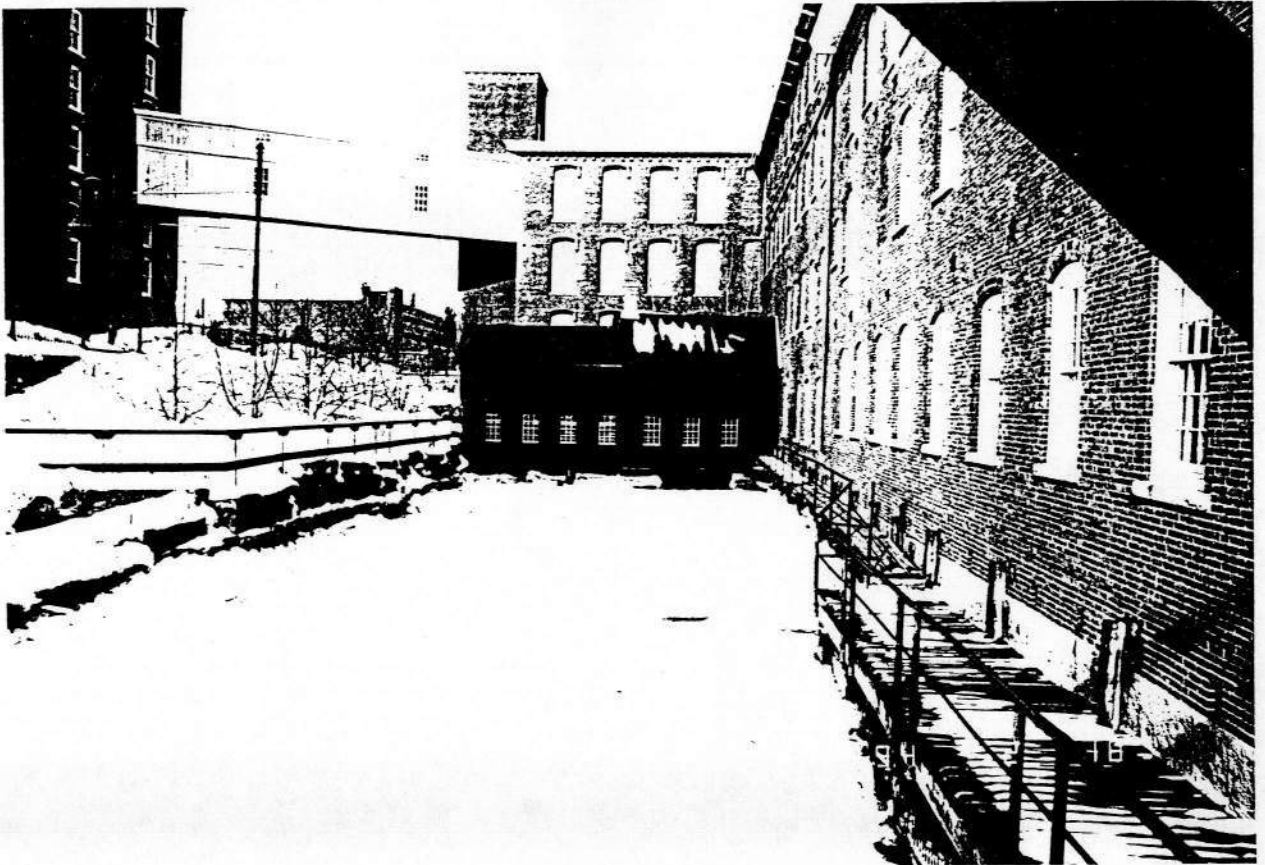
Documentation Level: FAIR

Date Entered/Updated: 07/20/94

Logger: JIG

Date of Report: 04/04/95

LOW. 961



Structure No. **BOOTT.GH**
IDLCS: 40598
BOOTT DAM AND GATE HOUSE

PHOTO ★ GUARD # 3224
LIGHT IMPRESSIONS
Rochester, NY



Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.923
Historic Name:	Eastern Canal
Common Name:	
Address:	Eastern Canal Bridge and French Sts
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	
Year Constructed:	c 1835
Architect(s):	
Architectural Style(s):	
Use(s):	Other Industrial; Utilities Other
Significance:	Archaeology, Historic; Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Thursday, November 7, 2019 at 9:28: AM

LOW.923 [923]

[BC] NRDIS-61578

[E] -8/13/76 - NRDD
12/22/77 NHZ

LOWELL CULTURAL RESOURCES INVENTORY

From LOWER LOCKS, parallel to

IDENTIFICATION BRIDGE STREET, then parallel to FRENCH STREET

MAP SHEET # 7, 8, 12

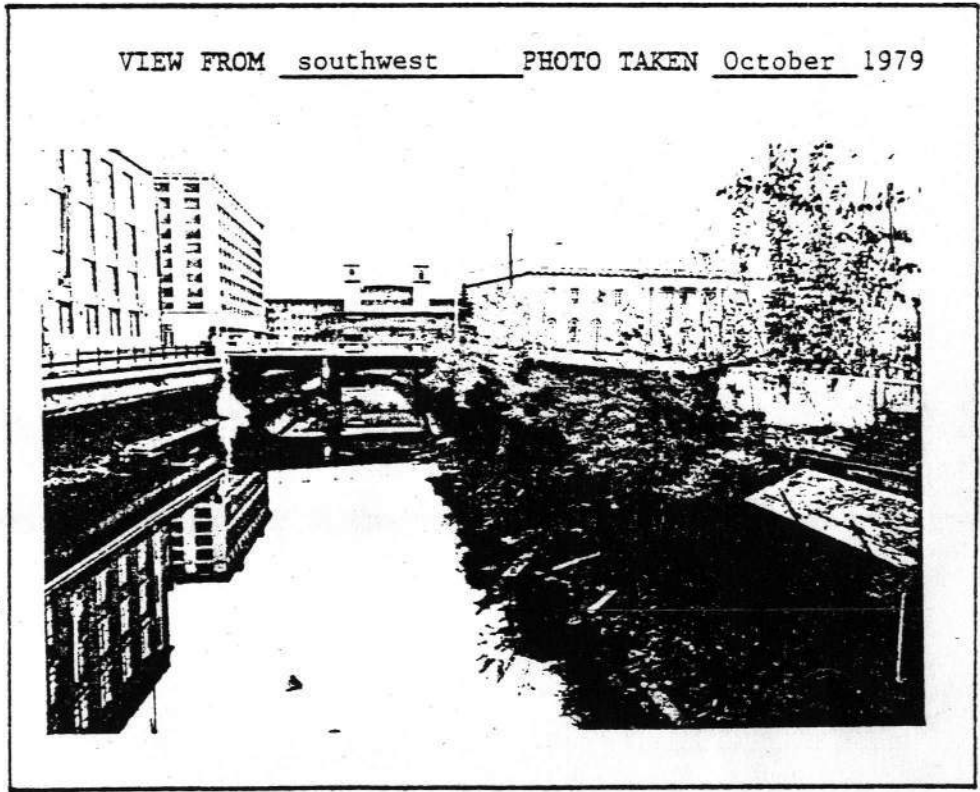
- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
- 2) HISTORIC NAME Eastern Canal
- 3) CURRENT NAME same
- 4) PROPERTY TYPE canal 5) ZONING CLASSIFICATION B3, B2-A
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP, LHPD, Locks and Canals HD

HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE 1835
SOURCE documented: See Research Report
- 2) ARCHITECT OR BUILDER unknown
- 3) HISTORIC OWNER Proprietors of Locks and Canals
- 4) ORIGINAL USE: GF power and navigational canal UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY yes DATE ca. 1800 (?) - 1835 ("Mansion House")
SOURCE circumstantial: maps

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE n/a
- 2) PRESENT USE:
GF power canal
UF n/a
- 3) NO OF STORIES n/a
- 4) PROP SQ FT n/a
- 5) PLAN n/a
- 6) ROOF n/a
- 7) STRUCTURAL SYSTEM concrete and ashlar masonry
- 8) OUTBUILDINGS Mass. Wasterway, Boott Dam, Boott Penstock
- 9) MATERIALS:
FOUNDATION n/a
FACADE granite ashlar, poured concrete
TRIM n/a
- 10) NOTABLE SURFACE : LANDSCAPE ELEMENTS various fences



ADDRESS From LOWER LOCKS, parallel to BRIDGE STREET, then parallel to FRENCH ST.

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC good
- 2) IF DETERIORATED, CAUSES n/a
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact with evolutionary alterations
 UF n/a
- 4) SURROUNDING LAND USES commercial, industrial, residential, railroad, canal frontage
- 5) INTEGRITY OF PROP'S HIST SETTING intact with minor intrusions and/or losses
- 6) IMPORTANCE OF PROP TO HIST SETTING integral to character

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

See Reserach Report, page 9.

The Eastern Canal follows an L-shaped course from the Lower Locks of the Pawtucket Canal to the wasteway it shares with the Merrimack Canal, along the northwestern boundary of the Boott millyard. The single-level canal is 2,037 feet long, forty to sixty-five feet wide, and an average of eight feet deep.

Built in 1835 to power the new Boott Mills with a seventeen-foot fall of water, the Eastern also supplied the Massachusetts Mills (after 1829) and the Prescott Manufacturing Company (after 1844). A problem of low water at the end of the Eastern Canal was alleviated by the construction in the late 1840s of a penstock that delivered water from the Merrimack Canal. (See Inventory Form on Boott Penstock.)

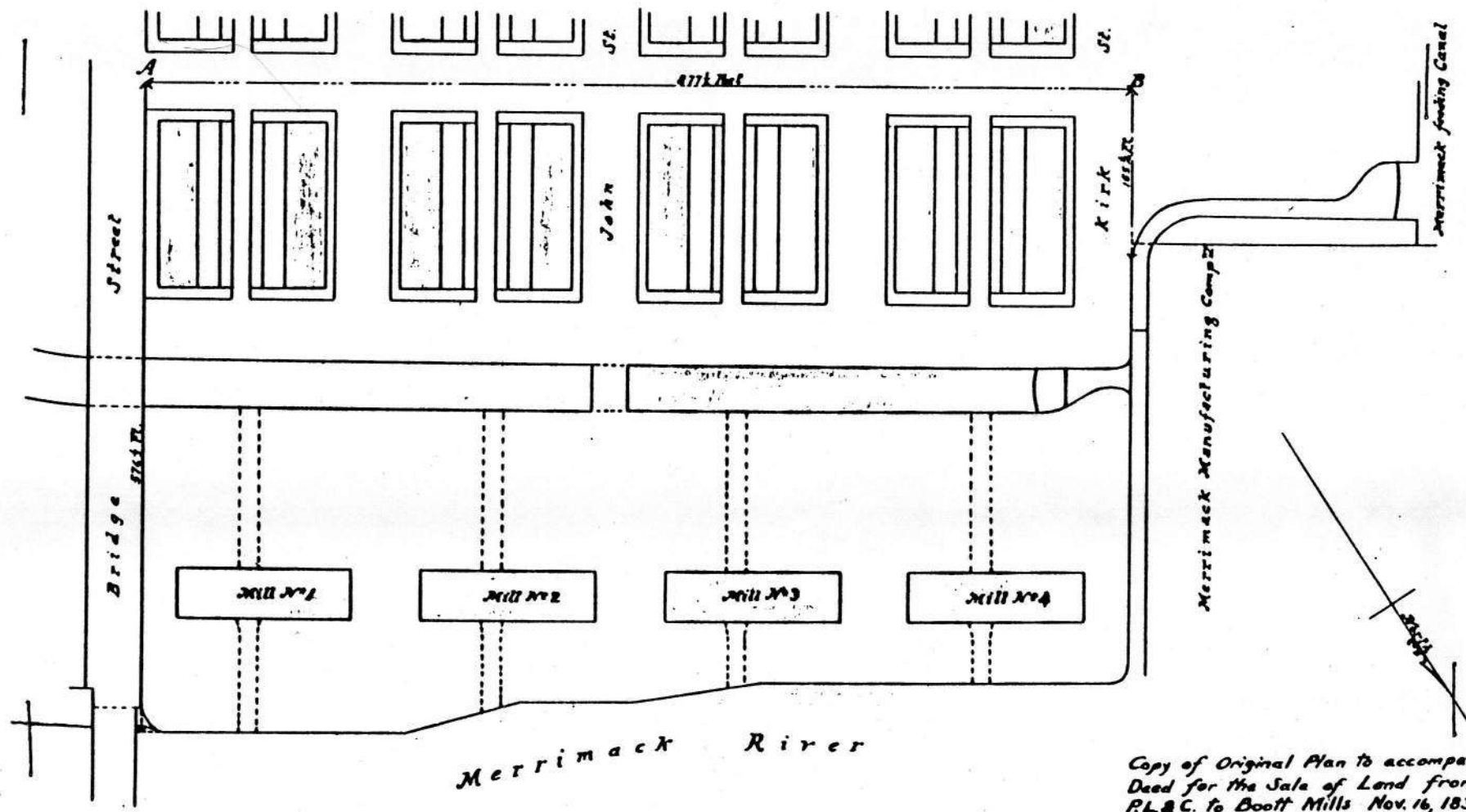
ARCHEOLOGICAL COMMENT

The Prescott millyard has been razed, but the site probably preserves below-ground elements of the waterpower system for the mill.

Sources

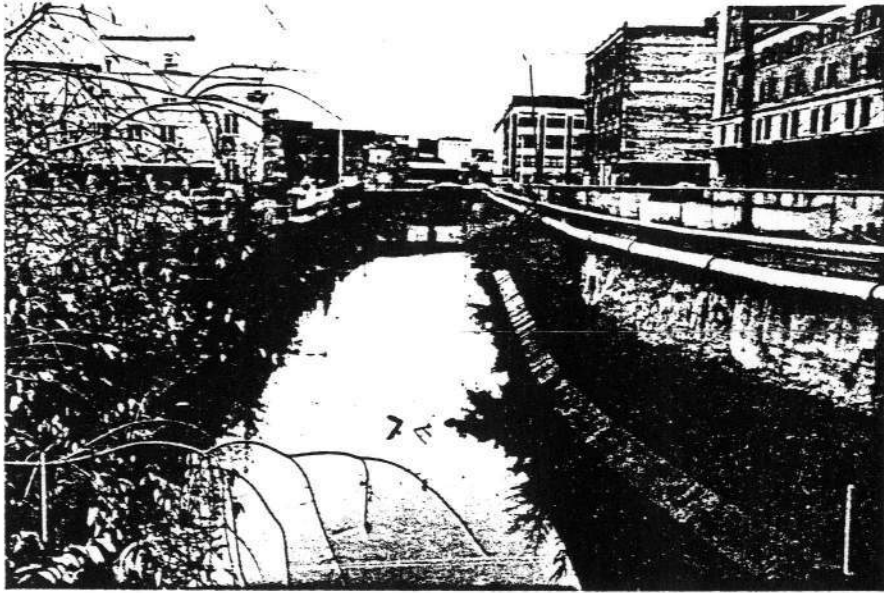
Research Report.

Lower Merrimack....Inventory, HAER and MVTM, page 77.

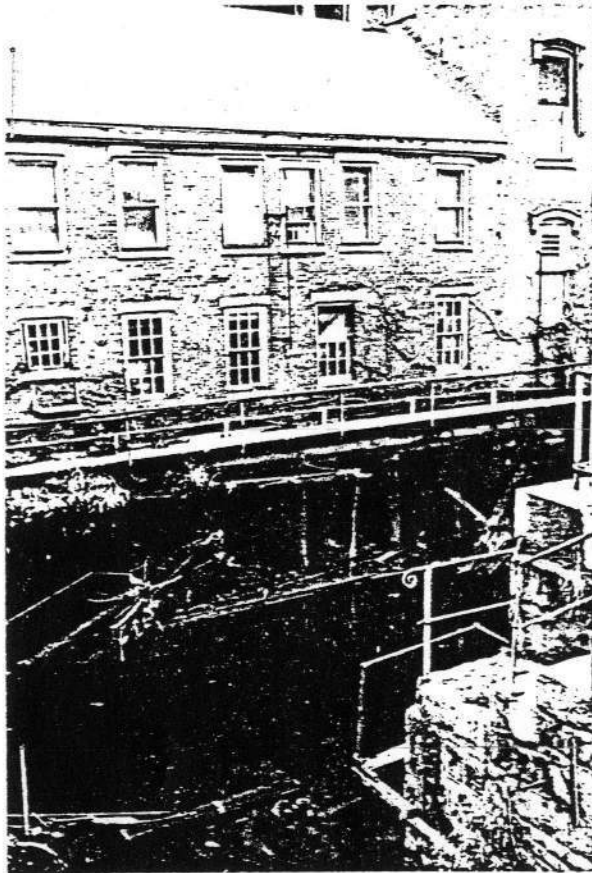


*Copy of Original Plan to accompany
Deed for the Sale of Land from
P.L.&C. to Boott Mills Nov. 16, 1835.*

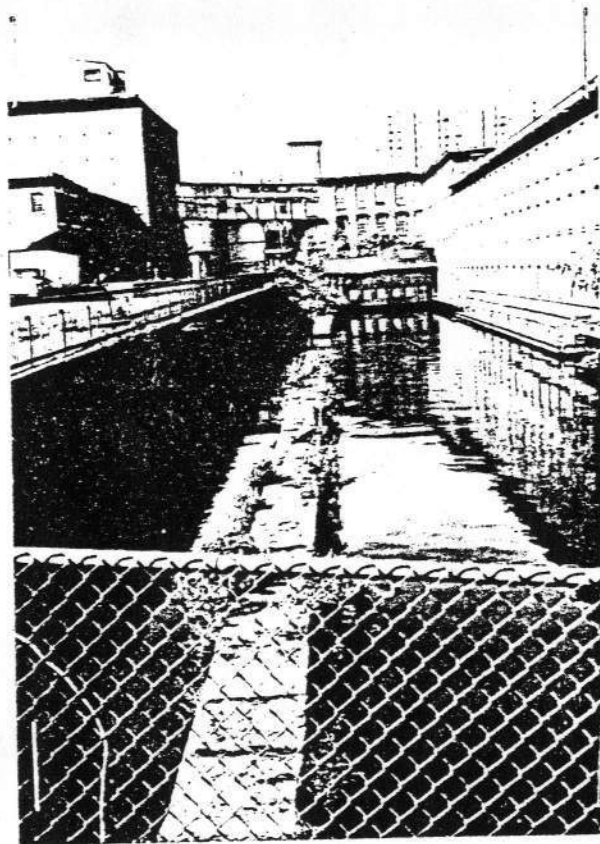
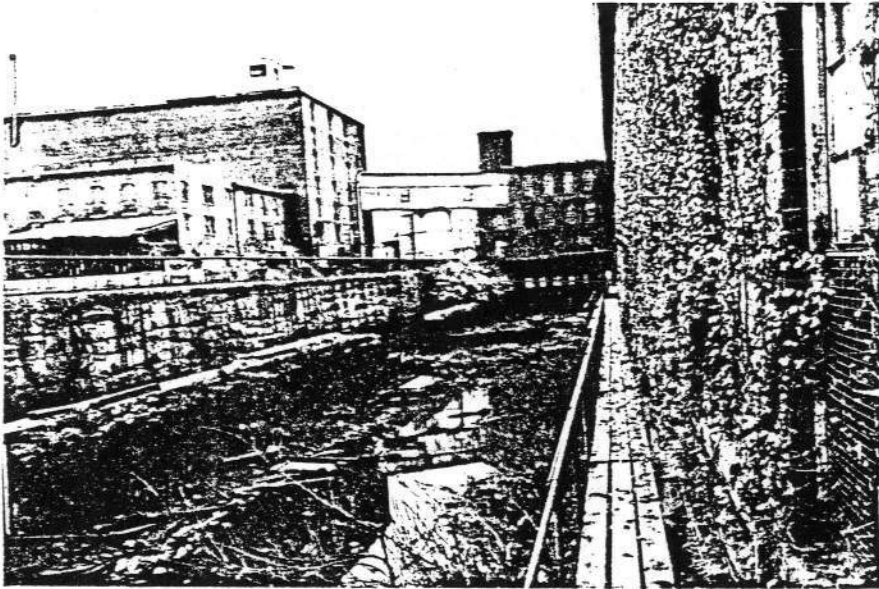
Copy of 1835 indenture drawing for Boott mill, showing the Eastern Canal, the Boott raceways, and the Merrimack wasteway. Proprietors of Locks and Canals Archive. Photo courtesy of HAER.



View of the eastern leg of the Eastern Canal, from the northeast.
Photo taken in October 1979.



Detail of the Eastern Canal
by the Boott Counting House,
showing the granite piers
which carry that building,
over an apparently inactive
penstock opening.
Photo taken in October
1979.



Two views of the final length of the Eastern Canal, looking northwest toward the Boott Dam. The low wall within the course of the canal is a part of the Boott penstock. Photographs taken in September (top) and October (bottom) 1979.

PRE 1914 C
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 PRESENT
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 03 OIL
 04 MNRL
 05 NON-FERROUS
 06
 07
 08
 09
 10 AGRI
 11 BPGC
 12 CHEM
 13 FOOD
 14 METAL
 15 TEXT
 16 WOOD
 17
 18
 19
 20

HAER
 HABS
 STATE
 COUNTY
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 TAPES
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EXISTING SURVEYS DATA DWGS PHOTOGRAPHS STATES

HAER INVENTORY

1. NAME OF STRUCTURE Eastern Canal		2. DATE 1835	3. NATURE OF STRUCTURE Power Canal	4. INDUSTRIAL CLASSIFICATION 812
5. LOCATION: STREET & NUMBER From lower locks of Paw-tucket, parallel to Bridge St., then parallel to French St., Lowell, Middlesex			CITY OR TOWN Lowell	COUNTY Middlesex
7. OWNER OF PROPERTY Proprietors of Locks and Canals, Boott Mills, Lowell, MA		6. USGS QUAD MAP & UTM GRID REF. Lowell 19.310750. 472368		
8. CONDITION: <input checked="" type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> DETERIORATED <input type="checkbox"/> RUINS <input type="checkbox"/> UNEXPOSED <input type="checkbox"/> ALTERED <input checked="" type="checkbox"/> ACCESSIBLE TO PUBLIC				

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.

The Eastern Canal was constructed in 1835 as a single level canal to power the Prescott, Massachusetts, and Boott Mills. The Eastern began just above the wasteway and locks of the lower Pawtucket Canal, and ran for ²⁰³⁷~~1,919~~ feet, providing water with a 17 foot drop to the Massachusetts, Prescott, and Boott^{Mills}, which discharged the water into the Concord and Merrimack Rivers. The Eastern averaged 8 feet in depth, 40 to 65 feet in width, and was rectangular in section. Additional water for the Eastern was supplied from the Merrimack Canal, which was connected by a penstock to the Eastern at the wasteway of the Eastern. Excess water from the Eastern flowed through this wasteway and into the Merrimack River.

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

U. S. Census of 1880, vol. XVI
 P. M. Malone, Water Power in Lowell, Mass (GPO, 1974)
 Mr. Mel Lesberg, Manager, Proprietors of Locks and Canals, Lowell, Ma.

12. DANGER OF DEMOLITION OR DAMAGE YES NO
 NATURE OF THREAT:

13. PRIORITY **1**

14. EXISTING SURVEYS NHL NR HAER HABS STATE COUNTY LOCAL OTHER

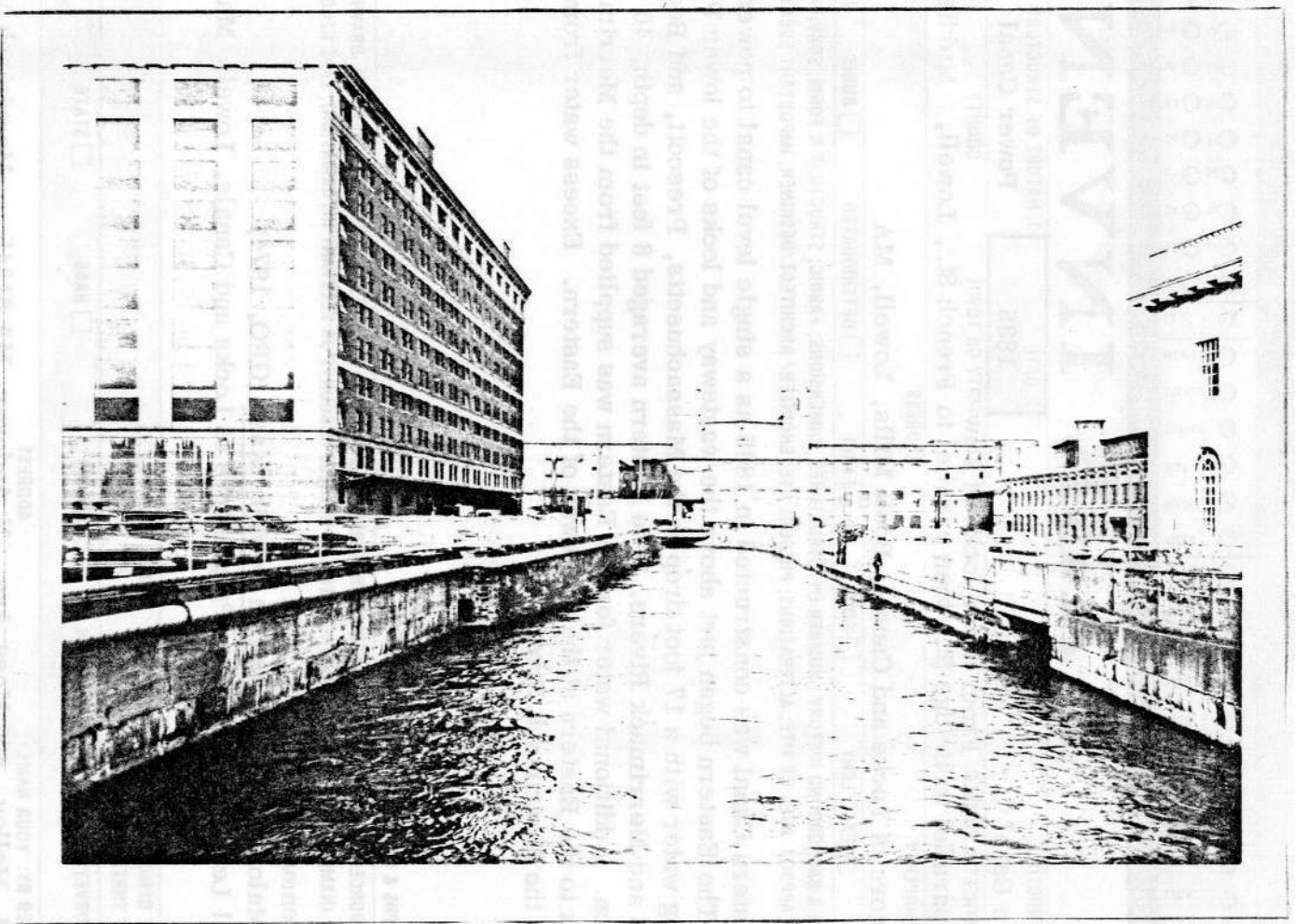
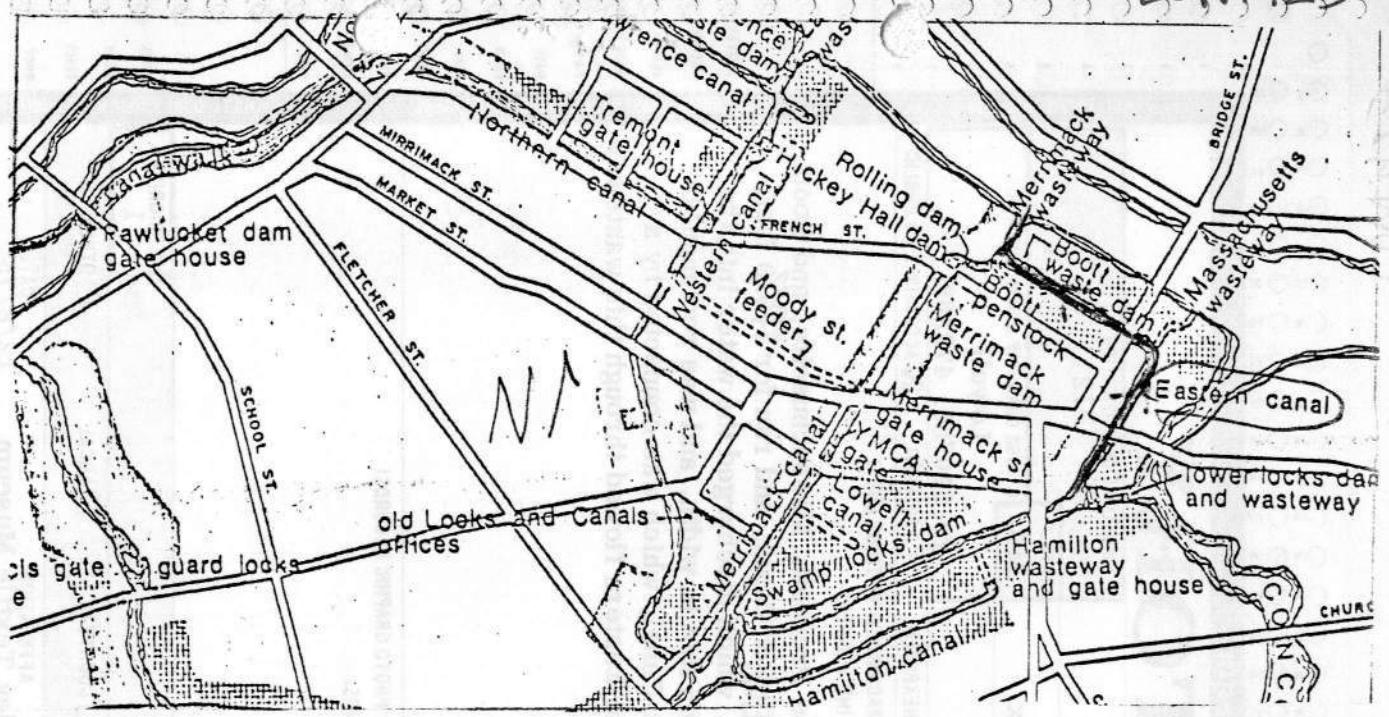
15. INVENTORIED BY: YOUR NAME **Peter M. Molloy** ADDRESS **800 Mass. Ave., N. Andover, MA 01845** AFFILIATION **Merrimack Valley Textile Museum** DATE **12/8/75**

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MFG) UTILITIES (UTIL) POWER SOURCES & PRIME MOVERS (PS & PM) TRANSPORTATION (TRANS) COMM BRIDGES

MACH FABR TEGUIP INST GMFG WATER SAWH GAS ELEC MUSL WATER WHEEL WATER TURB WIND STEAM RECIP STEAM TURB INT COMB DIESEL ELEC RR ROAD CANAL MARINE AIR PIPE TEL R&TY BEAM ARCH TRUSS SUSP ADUE TREES CANT MOVE

SUB-CLASSIFICATION
 SURVEY
 MUSEUM
 ADAPT
 HOUS
 P & UT
 MATS
 MATH
 HEAT
 CONST
 HYD
 TUNLS
 DAM
 ANCIL
 MECH
 FENES
 ROOF
 FLOOR
 FRAME
 FOUND



LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40570 Structure Number: EASTERN

Structure Name 1: EASTERN CANAL
Structure Name 2:
Structure Name 3:

Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
ORGCODE: 1780 County: MIDDLESEX State: MA
Regional Office: NORTH ATLANTIC

Subunit ORGCODE: Name:
Alpha Code: County: MIDDLESEX State: MA

Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED Date: 10/18/85
Significance: NATIONAL
NHL: YES Date: 12/22/77

Significance
DESIGNED TO POWER NEW BOOTT MILLS (WHICH HAD PURCHASED 9 MILL POWERS) w/ 17' FALL OF WATER; ALSO
SUPPLIED MASS. MILLS AND PRESCOTT MFG. CO. LOW WATER PROBLEM ALLEVIATED BY CONSTR'N. OF PENSTOCK,
LATE 1840s, THAT DELIVERED WATER FROM MERRIMACK CANAL.

Historical Information

Period of Construction: HISTORIC

Date: 1835-1836 (BU) Designer: ()
Date: 1839-1844 (AL) Designer: ()
Date: 1848-1849 (AL) Designer: ()
Date: - () Designer: ()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions	Current Uses
CANAL	CANAL
UTILITY SERVICE STRUCTURE	UTILITY SERVICE STRUCTURE

	Buildings	Materials	Structures
Foundation:			Sub-structure: STONE
Framing:			GRANITE
Walls:			
Roof:			Super-structure: STONE
Other:			GRANITE
Volume:			CONCRETE

Description
SINGLE-LEVEL CANAL FOLLOWS L-SHAPED COURSE FROM LOWER LOCKS NORTHWARD TO WASTEWAY SHARED w/
MERRIMACK CANAL. SWINGS WESTWARD AND RUNS PARALLEL - BUT OPPOSITE IN DIRECTION - TO MERRIMACK
RIVER. APPROX. 2037' LONG; 40'-65' WIDE; AVG. 8' DEEP.

Impact Level: MODERATE Impact Types: STRUCTURAL DETERIORATION
INUNDATION (FLOODING)

Condition: GOOD

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40570 LOWE EASTERN CANAL EASTERN

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: BH
Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96
Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities

Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS CANAL WALLS/FLOORS; NPS SHARES
MAINT. RESPONSIBILITIES W/ STATE ALONG CANALWAY. TROLLEY BRIDGE COMPLETE; CANAL WALKWAY PROPOSED.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO
HABS: BRIDGES:
HAER: MA-7 DAMS:
QTRS:

CLI

CRBIB

Other

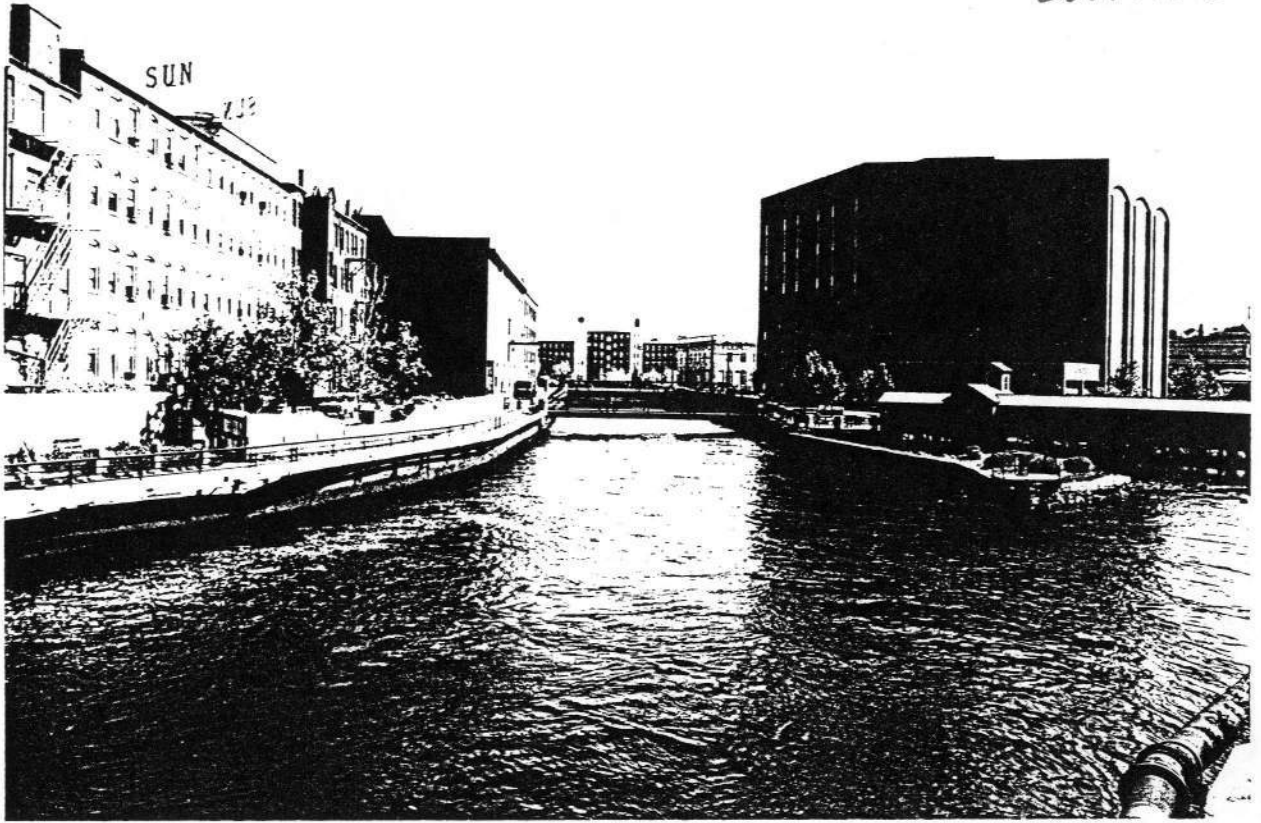
- | | | | | | |
|----|-----------|----|--------|----|------------------------------|
| 1. | HRS | 1. | 010385 | 1. | 400101 MALONE, CANALS & IND. |
| 2. | HS ASSESS | 2. | 400107 | 2. | 010390 GMP |
| 3. | HSR | 3. | | 3. | |
| 4. | CLR | 4. | | 4. | |
| 5. | | 5. | 400108 | | |

Documentation Level: GOOD

Date Entered/Updated: 07/20/94

Logger: JIG

Date of Report: 04/04/95



Structure No. EASTERN
 IDLCS: 40570
 EASTERN CANAL

PHOTO ★ GUARD // 3224
 LIGHT IMPRESSIONS®
 Rochester, NY



Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.9028
Historic Name:	Guard Locks - Francis Gate Locks
Common Name:	
Address:	Pawtucket Canal
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	C
Year Constructed:	c 1796
Architect(s):	Boott, Kirk
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related; Utilities Other
Significance:	Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



The Massachusetts Historical Commission (MHC) has converted this paper record to digital format as part of ongoing projects to scan records of the Inventory of Historic Assets of the Commonwealth and National Register of Historic Places nominations for Massachusetts. Efforts are ongoing and not all inventory or National Register records related to this resource may be available in digital format at this time.

The MACRIS database and scanned files are highly dynamic; new information is added daily and both database records and related scanned files may be updated as new information is incorporated into MHC files. Users should note that there may be a considerable lag time between the receipt of new or updated records by MHC and the appearance of related information in MACRIS. Users should also note that not all source materials for the MACRIS database are made available as scanned images. Users may consult the records, files and maps available in MHC's public research area at its offices at the State Archives Building, 220 Morrissey Boulevard, Boston, open M-F, 9-5.

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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Thursday, November 7, 2019 at 9:58: AM

XVASS 201578
LTD-12/13/83

NR011-5/11/76
NITL-12/22/77

LOW. 9008

① BC BE

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40602 Structure Number: FG.LOCK
Structure Name 1: GUARD LOCKS
Structure Name 2: FRANCIS GATE LOCKS
Structure Name 3:
Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
ORGCODE: 1780 County: MIDDLESEX State: MA
Regional Office: NORTH ATLANTIC
Subunit ORGCODE: Name:
Alpha Code: County: MIDDLESEX State: MA
Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED Date: 10/18/58
Significance: NATIONAL
NHL: YES Date: 12/22/77
Significance
PART OF PAWTUCKET CANAL TRANSP. SYSTEM; FIRST NAVIG. LOCK & DAM BUILT ON SITE 1796-98: SINGLE BOAT
LOCK, 1720 FROM CANAL ENTRANCE. ALSO INTENDED TO PROTECT CANAL BANKS & STRUCTURES FROM FLOOD.
REBUILT 1822-24 (MERRIMACK MFG. CO.) & SUBSEQ.

Historical Information

Period of Construction: HISTORIC
Date: 1796-1798 (BU) Designer: ()
Date: 1822-1824 (AL) Designer: BOOTT, KIRK (E)
Date: 1832-1900 (AL) Designer: ()
Date: - () Designer: ()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions Current Uses
CANAL LOCK CANAL LOCK
UTILITY SERVICE STRUCTURE INTERPRETATION FACILITY
UTILITY SERVICE STRUCTURE

Buildings Materials Structures

Foundation: Sub-structure: STONE
Framing: GRANITE
Walls: CONCRETE
Roof: Super-structure: STONE
Other: GRANITE
Volume: WOOD
Description

TAPERED, PROW-LIKE ISLAND (1881-1900 CONFIG.); ONCE-OVAL LOCK SIDES NOW STRAIGHT, BATTERED STONE
WALLS. SINGLE-CHAMBER LOCK W/ 2 PAIRS WD. LEVER GATES. UPSTREAM GATES SHELTERED BY LOCK HOUSE.
INCORPORATES FRANCIS' 1848-50 "GREAT GATE."

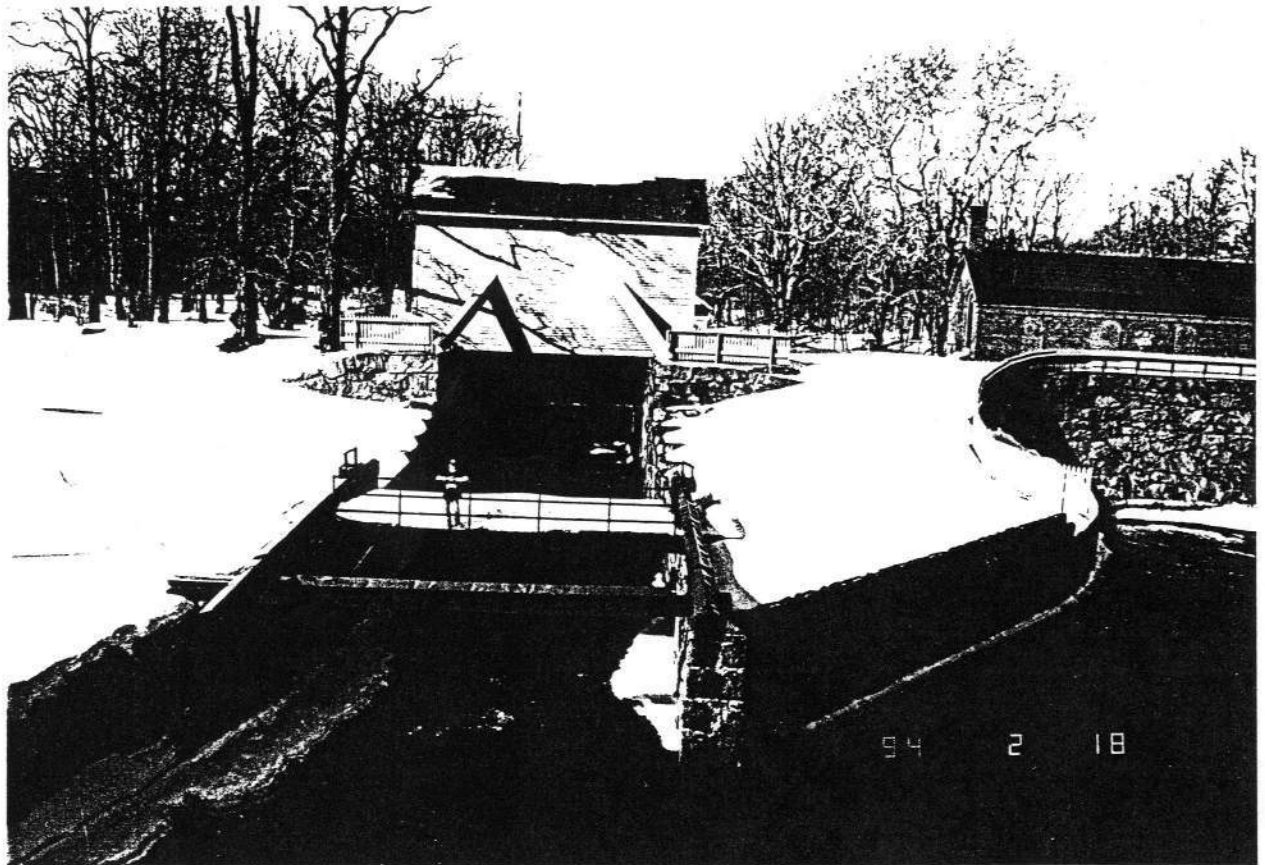
Impact Level: MODERATE Impact Types: INUNDATION (FLOODING)
STRUCTURAL DETERIORATION
Condition: GOOD PARK OPERATIONS

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS	Park	Structure Name	Number
40602	LOWE	GUARD LOCKS	FG.LOCK
Management Information			
NPS Legal Interest: NONE - PRIVATELY OWNED		Federal Owner:	
Life:	Exp. Date: / /	Local Owner: L&C	
Management Category: MUST BE PRES. & MAINT		Management Date: 10/16/87	
Management Agreement: MEMORANDUM OF UNDERSTANDING		Nat. Exp. Date: 04/03/96	
Proposed Ultimate Treat:		Doc:	Date: / /
Approved Ultimate Treat: PRESERVATION		Doc: GMP	Date: 08/00/81
Treatment Responsibilities		Treatment Costs	
Interim Treatment: OTH		Interim:	\$0 Date: /
Ultimate Treatment: OTH		Ultimate:	\$0 Date: /
Routine Maintenance: OTH Level of Estimate:			
Cyclic Maintenance: OTH		Estimator:	
Approved Ultimate Treatment Completed: YES			
Management Text			
LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS (BUT DOES NOT OWN) CANAL WALLS & FLOOR; NPS SHARES GROUNDS MAINTENANCE RESPONSIBILITIES W/ STATE. NPS DAM #594.			
Major Bibliographical References			
Nat. Reg.: 78003149		CSI:	Nat. Cat: NO
HABS:		BRIDGES:	
HAER: MA-2-A		DAMS: MA	
		QTRS:	
CLI	CRBIB	Other	
1.	HRS 1. 010385	1. 400108 MALONE, CANAL SYSTEM	
2.	HS ASSESS 2. 400107	2. 400101 MALONE, CANALS & IND.	
3.	HSR 3. 010625	3. 010390 GMP	
4.	CLR 4.	4.	
5.	5. 010674		
Documentation Level: GOOD			
Date Entered/Updated: 07/20/94		Logger: JIG	

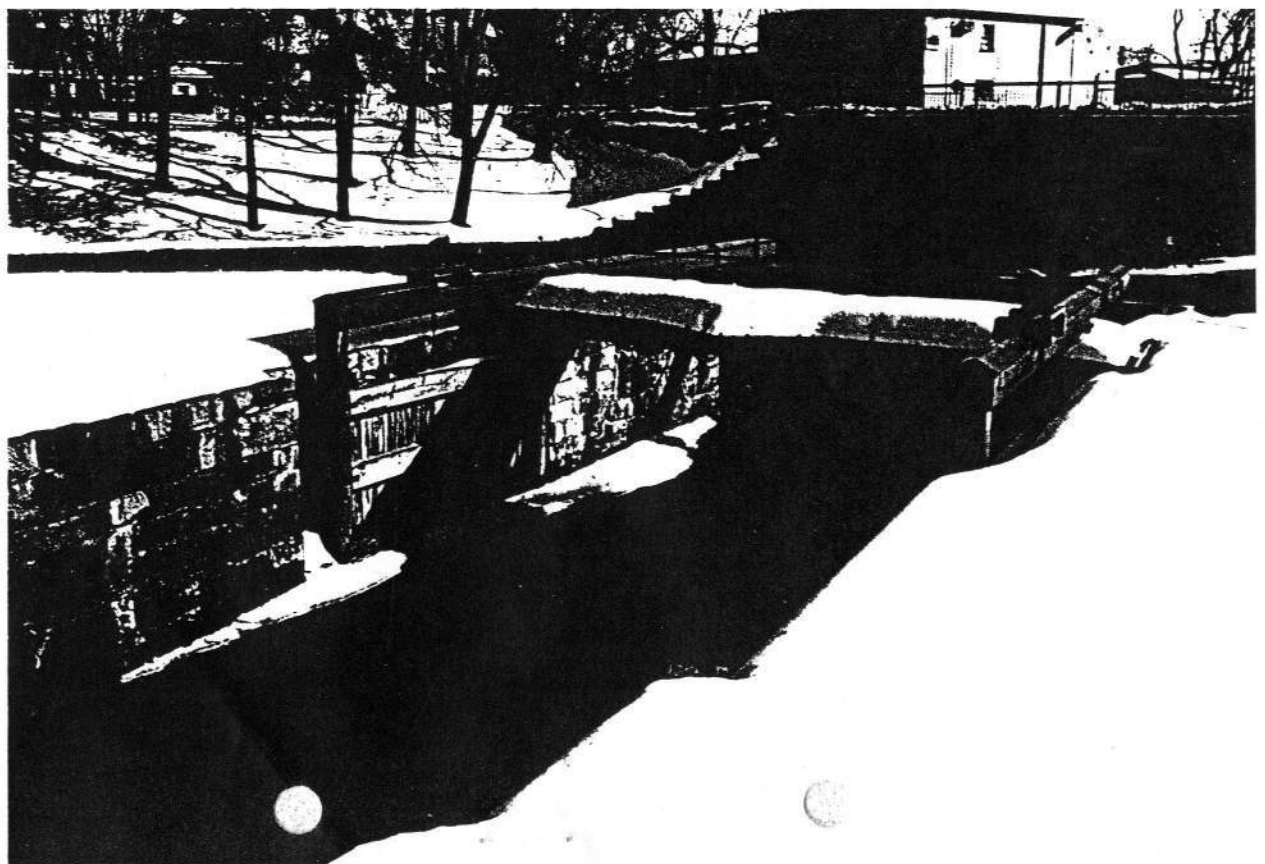
Date of Report: 04/04/95

LOW.9028



Structure No. FG.LOCK
IDLCS: 40602
GUARD LOCKS

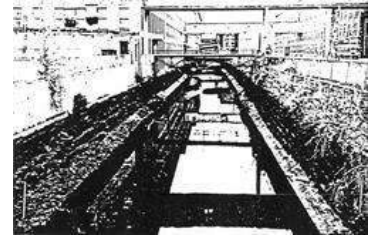
PHOTO + GUARD # 3224
LIGHT IMPRESSIONS
Rochester, NY



Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.930
Historic Name:	Hamilton Canal
Common Name:	
Address:	Hamilton Canal Parallel to Jackson St
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	
Year Constructed:	1826
Architect(s):	Batchelder, Samuel; Boott, Kirk
Architectural Style(s):	
Use(s):	Other Industrial
Significance:	Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Wednesday, November 6, 2019 at 3:58: PM

LOWELL CULTURAL RESOURCES INVENTORY

LOW. 930
 NADIS-61578
 NADIS-813176
 NHZ-12122177

- IDENTIFICATION Parallel to JACKSON STREET MAP SHEET #11, 12
- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
- 2) HISTORIC NAME Hamilton Canal LAD 12/13/83
- 3) CURRENT NAME same
- 4) PROPERTY TYPE canal 5) ZONING CLASSIFICATION A1
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP -- Locks and Canals -- LHFD

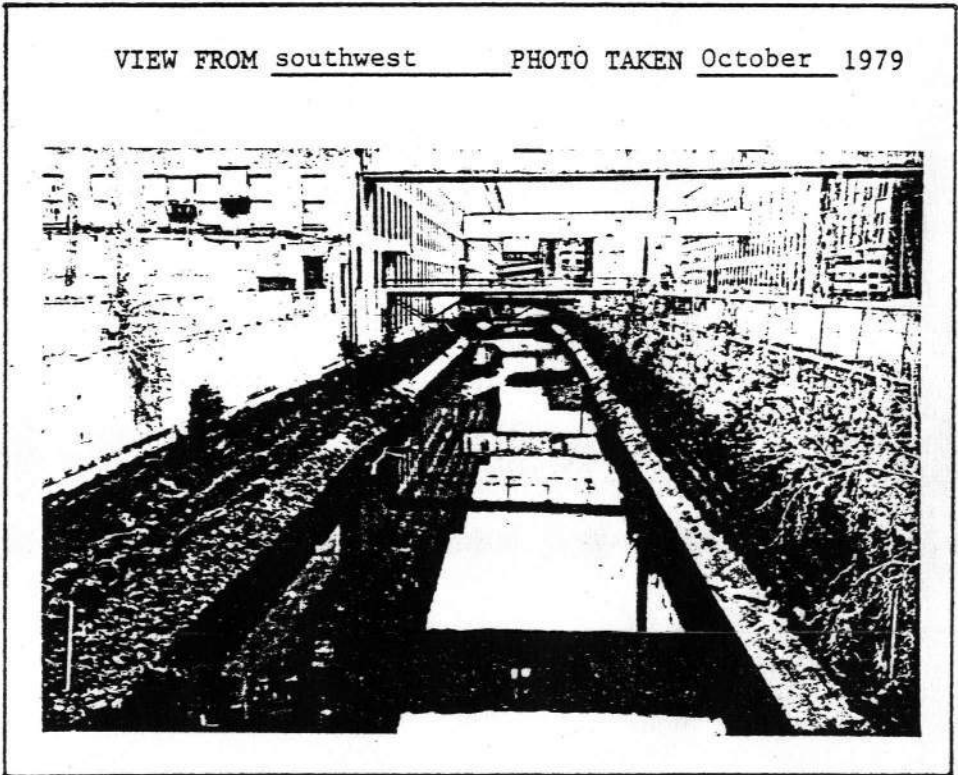
HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE 1826
 SOURCE documented: See Research Report
- 2) ARCHITECT OR BUILDER Kirk Bott and Samuel Batchelder
- 3) HISTORIC OWNER Proprietors of Locks and Canals on the Merrimack River
- 4) ORIGINAL USE: GF power canal UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY no DATE _____
 SOURCE _____

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE n/a
- 2) PRESENT USE:
 GF power canal
 UF n/a
- 3) NO OF STORIES n/a
- 4) PROP SQ FT n/a
- 5) PLAN n/a
- 6) ROOF n/a
- 7) STRUCTURAL SYSTEM masonry
- 8) OUTBUILDINGS guard gates and waste house
- 9) MATERIALS:
 FOUNDATION n/a
- 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS none

VIEW FROM southwest PHOTO TAKEN October 1979



FACADE ashlar and rubble stone

TRIM n/a

ADDRESS Parallel to JACKSON STREET

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC good
- 2) IF DETERIORATED, CAUSES n/a
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact with evolutionary alterations
UF n/a
- 4) SURROUNDING LAND USES industrial, railroad, canal frontage
- 5) INTEGRITY OF PROP'S HIST SETTING moderately disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING integral to character

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

See Research Report, p. 5.

The Hamilton Canal flows from the Pawtucket Canal above Swamp Locks and through the penstocks of the Hamilton and Appleton Mills, falling thirteen feet into the lower level of the Pawtucket.

The canal is 1,936 feet long, ten feet deep, and varies in width from thirty-five feet to one hundred feet. At the eastern end of the canal is a wasteway, to return excess water to the Pawtucket Canal.

Source

Lower Merrimack River...Inventory, p. 74.

ARCHEOLOGICAL COMMENT

Both of the major millyards originally served by the Hamilton Canal--the Appleton and the Hamilton--are extant, and their hydropower systems remain at least partially operational. For a brief span (ca. 1826-1835) the Hamilton Canal supplied a single mill power to another millyard--Thomas Hurd's on the Concord River, via a penstock that extended beneath Central Street from the eastern end of the Hamilton Canal. Remnants of that penstock may still exist below ground.



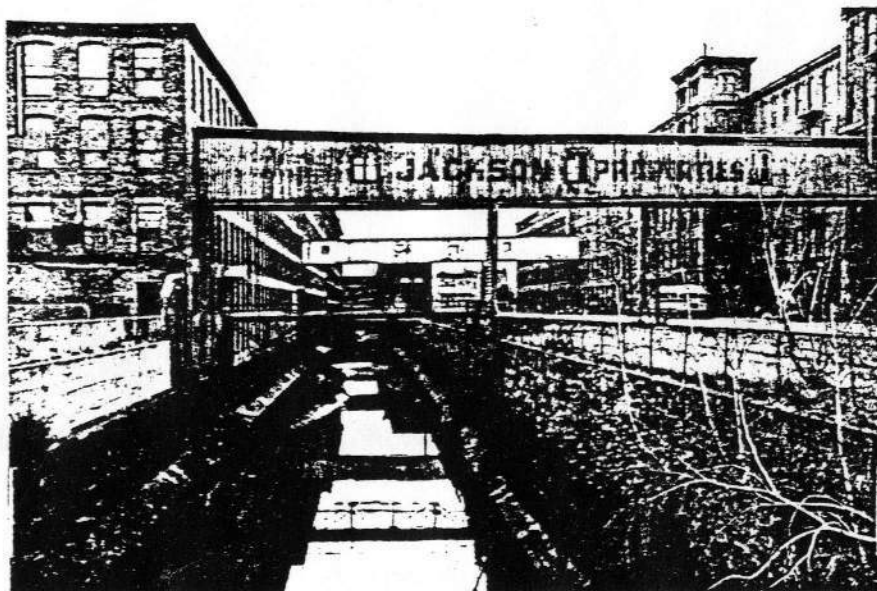
View from the south of the beginning of the Hamilton Canal above Swamp Locks. The canal flows from left to right in this view, which shows the canal nearly drained. Photo taken in October 1979.



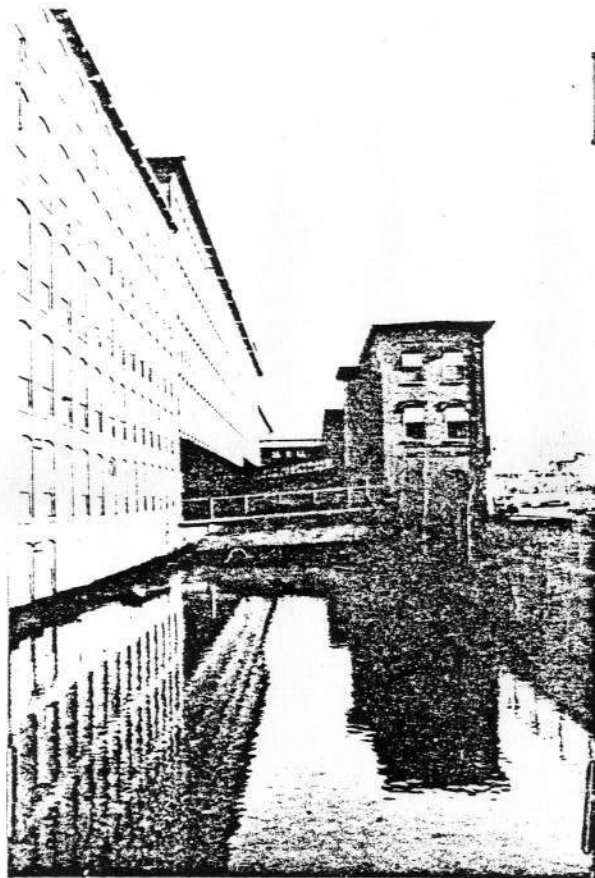
View from the west of the Hamilton Canal, looking toward Appleton "New Mill." Photo taken in October 1979.



View along the Hamilton Canal from the southwest. Photo taken in August 1979.



View along the Hamilton Canal from the southwest, showing the canal drained. Photo taken in October 1979.



View from the southwest along the Hamilton Canal, showing
(left to right) Appleton Mill #1, Hamilton Mill #6, and the
Hamilton Counting House. Photo taken in November 1979.

LOW. 930

HAER INVENTORY

EXISTING SURVEYS DATA DWGS PHOTOGRAPHS STATES

1. NAME OF STRUCTURE Hamilton Canal	2. DATE 1826	3. NATURE OF STRUCTURE Power Canal	4. INDUSTRIAL CLASSIFICATION 812
5. LOCATION: STREET & NUMBER parallel to Middlesex Street		CITY OR TOWN Lowell	COUNTY Middlesex
7. OWNER OF PROPERTY ADDRESS		STATE MA	6. USGS QUAD MAP & UTM GRID REF. Lowell 19.310210. 472334

8. CONDITION: EXCELLENT GOOD FAIR DETERIORATED RUINS UNEXPOSED ALTERED ACCESSIBLE TO PUBLIC

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.

The Hamilton Canal was completed in 1826 in order to provide a 13 foot fall of water to the Hamilton and Appleton Mills. The Canal begins at the Swamp Locks and draws its water from the upper Pawtucket Canal. The water flows through the penstocks of the Hamilton and Appleton Mills and is discharged into the lower Pawtucket Canal. Excess water flows from a wasteway at the end of the Hamilton Canal to the lower Pawtucket. The Hamilton Canal is 1,936 feet in length, 10 feet deep, 35 to 100 feet wide, and is rectangular in section.

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

U. S. Census of 1880, Vol. XVI
 P. M. Malone, Water Power in Lowell, Mass (GPO, 1974)
 Mr. Mel Lesberg, Manager, Proprietors of Locks and Canals, Lowell, MA

12. DANGER OF DEMOLITION OR DAMAGE YES NO
 NATURE OF THREAT: 13. PRIORITY
1

14. EXISTING SURVEYS AND DATES: NHL NR HAER HABS STATE COUNTY LOCAL OTHER

15. INVENTORIED BY: YOUR NAME ADDRESS AFFILIATION DATE
Peter M. Molloy 800 Mass. Ave., N. Andover, MA 01845 Merrimack Valley Textile Museum 12/8/75

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MFG) UTILITIES (UTIL) POWER SOURCES & PRIME MOVERS (PS & PM) TRANSPORTATION (TRANS) COMM BRIDGES

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OIL
MNRL
NON-FERROUS

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BPGC
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MACH
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INST
GMFG

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SAHI
GAS
ELEC

MUSL
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ELEC

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CANAL
MARINE
AIR
PIPE

T&T
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BEAM
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TRES
CANT
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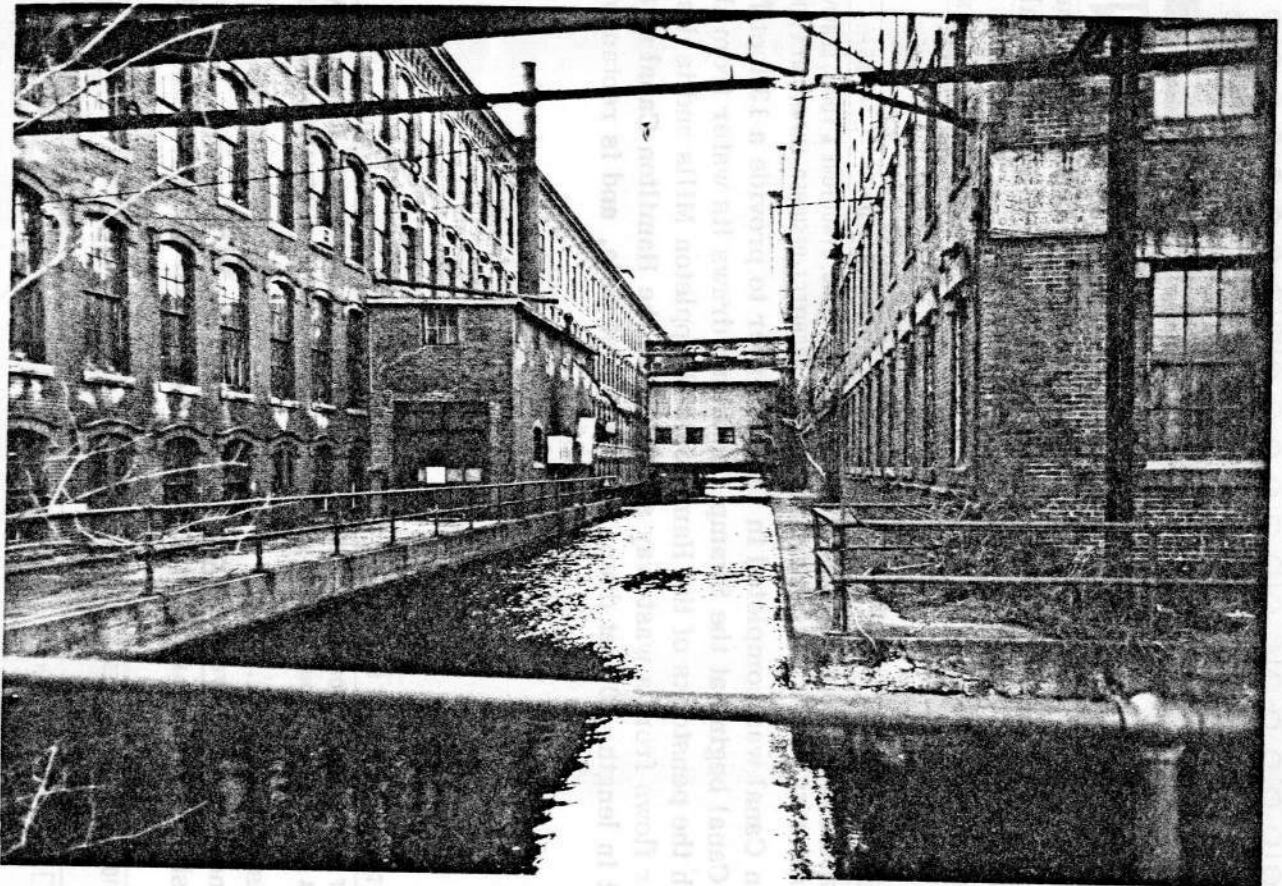
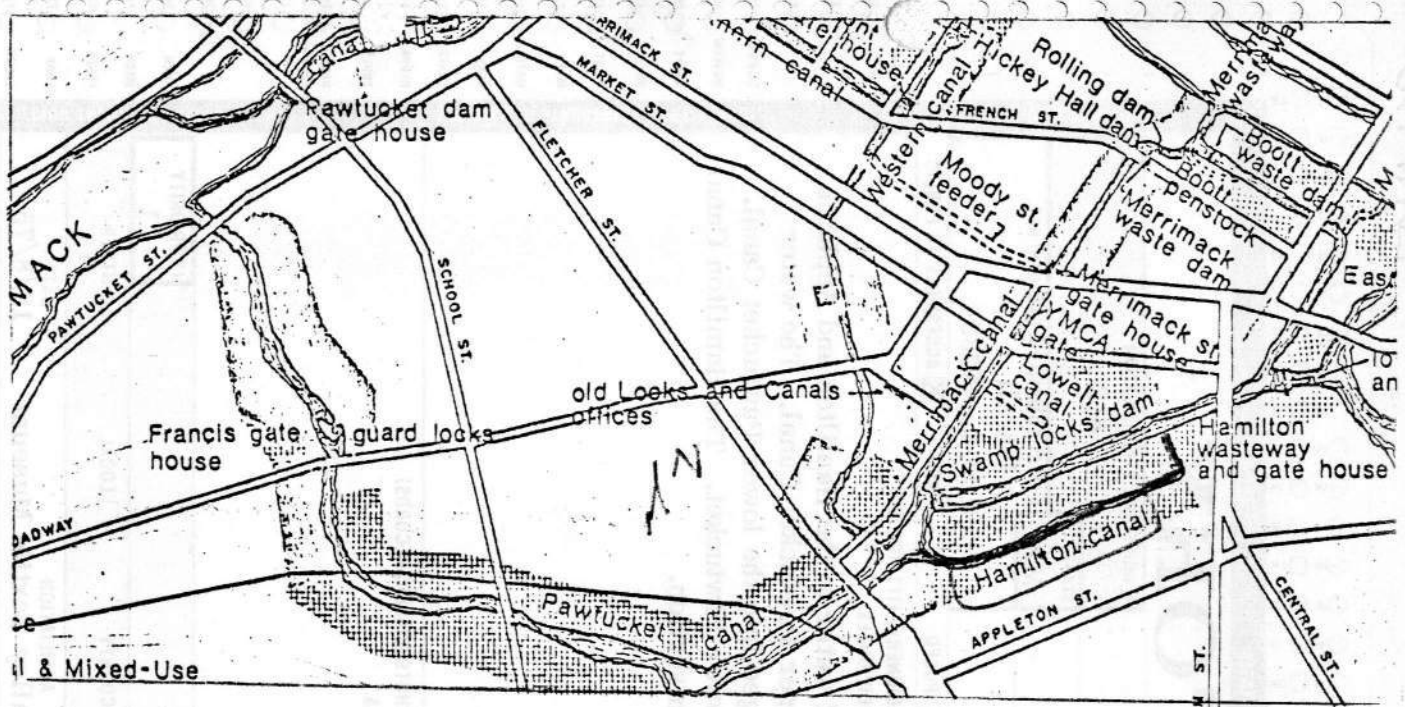
SUB-CLASSIFICATION

SURVEY
MUSEUM
ADAPT
HOUS
P & ET
MATS
MATH
HEAT
CONST
HYDRA
TUNLS
DAM

SPECIALIZED STRUCTURES (SPEC STRUC)

ANCIL
MECH
FENES
ROOF
FLOOR
FRAME
FOUND

BUILDING TECHNOLOGY (BLD TECH)



LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40571 Structure Number: HAMILC
Structure Name 1: HAMILTON CANAL
Structure Name 2:
Structure Name 3:
Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
ORGCODE: 1780 County: MIDDLESEX State: MA
Regional Office: NORTH ATLANTIC
Subunit ORGCODE: Name:
Alpha Code: County: MIDDLESEX State: MA
Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED Date: 10/18/85
Significance: NATIONAL
NHL: YES Date: 12/22/77
Significance
FOUNDED IN 1825, HAMILTON MFG. CO. WAS FIRST NEW CORP. SUBJECT TO NEW MILL POWER SYSTEM; TEXTILE
MACHINERY DESIGNED BY KIRK BOOTT & SAM'L. BATCHELDER. APPLETON MFG. CO. FOUNDED 1828. CANAL CUT
FROM PAWTUCKET CANAL @ SWAMP LOCKS.

Historical Information

Period of Construction: HISTORIC

Date: 1826- (BU) Designer: ()
Date: 1828- (AL) Designer: ()
Date: 1848- (AL) Designer: ()
Date: - () Designer: ()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions Current Uses
CANAL CANAL
UTILITY SERVICE STRUCTURE UTILITY SERVICE STRUCTURE

Buildings—Materials—Structures

Foundation:
Framing:
Walls:
Roof:
Other:
Volume:
Description
Sub-structure: STONE
GRANITE
Super-structure: GRANITE
CONCRETE
STONE

Flows from Pawtucket Canal above Swamp Locks & through penstocks of Hamilton & Appleton Mills; 13'
fall into lower level of Pawtucket. Covered wasteway @ E end returns excess water to Pawtucket
Canal. 1900' long, 11 1/2' deep, 35'-100' wide.

Impact Level: MODERATE Impact Types: STRUCTURAL DETERIORATION
INUNDATION (FLOODING)
Condition: GOOD

LOW.930

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40571 LOWE HAMILTON CANAL HAMILC

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: BH

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities

Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS CANAL WALLS/FLOOR; NPS SHARES MAINT.
RESPONSIBILITIES W/ STATE ALONG CANALWAY.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO
HABS: BRIDGES:
HAER: MA-4 DAMS:
QTRS:

CLI

CRBIB

Other

- | | | | | | |
|----|-----------|----|--------|----|------------------------------|
| 1. | HRS | 1. | 010385 | 1. | 400101 MALONE, CANALS & IND. |
| 2. | HS ASSESS | 2. | 400107 | 2. | 010390 GMP |
| 3. | HSR | 3. | | 3. | |
| 4. | CLR | 4. | | 4. | |
| 5. | | 5. | 400108 | | |

Documentation Level: GOOD

Date Entered/Updated: 07/20/94

Logger: JIG

Date of Report: 04/04/95

LOW.930



Structure No. HAMILC
IDLCS: 40571
HAMILTON CANAL

PHOTO * GUARD # 3224
LIGHT IMPRESSIONS®
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No: LOW.979
Historic Name: Lawrence Dam
Common Name: Lawrence Canal Waste Dam
Address: Western Canal
Western Canal Wasteway off Perkins St
City/Town: Lowell
Village/Neighborhood: Downtown
Local No:
Year Constructed: c 1840
Architect(s):
Architectural Style(s):
Use(s): Other Industrial; Other Water Related; Utilities Other
Significance: Engineering; Industry
Area(s): LOW.C: Locks and Canals District
LOW.BC: Lowell National Historical Park
LOW.BE: Downtown Lowell Historic District
Designation(s): Nat'l Register District (08/13/1976); Nat'l Historic
Landmark (12/22/1977); Nat'l Register District
(06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Thursday, November 7, 2019 at 9:51: AM

LOWELL CULTURAL RESOURCES INVENTORY

LOW. 979
 [BC] NRDIS - 61578
 [BE] LHD - 121318C
 [C] NHZ - 12122177

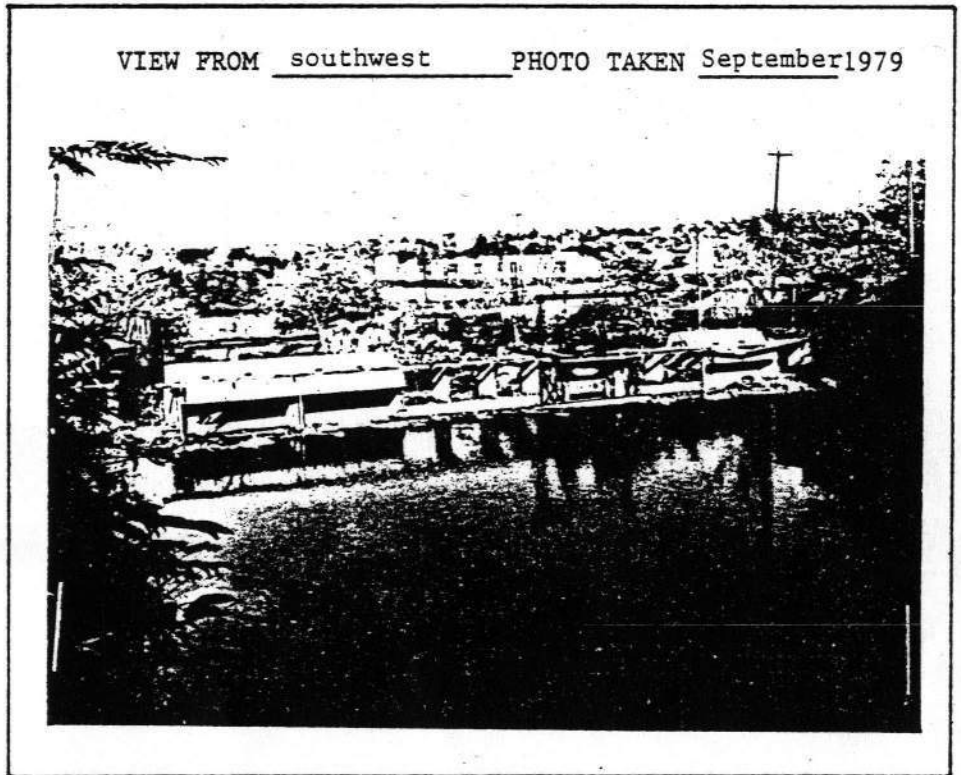
- IDENTIFICATION WESTERN CANAL WASTEWAY off PERKINS STREET MAP SHEET # 4
- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
 NRDIS 8113176
- 2) HISTORIC NAME Lawrence Dam
- 3) CURRENT NAME same
- 4) PROPERTY TYPE canal structure 5) ZONING CLASSIFICATION A1
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP -- Locks and Canals HD -- LHPD

HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE ca. 1840
 SOURCE circumstantial: Lower Merrimack...Inventory, p. 76
- 2) ARCHITECT OR BUILDER unknown
- 3) HISTORIC OWNER Proprietors of Locks and Canals
- 4) ORIGINAL USE: GF canal regulation UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY yes DATE 1831-ca. 1840
 SOURCE Lower Merrimack...Inventory, p. 76

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE n/a
- 2) PRESENT USE:
 GF canal regulation
 UF n/a
- 3) NO OF STORIES n/a
- 4) PROP SQ FT n/a
- 5) PLAN n/a
- 6) ROOF n/a
- 7) STRUCTURAL SYSTEM ashlar masonry
- 8) OUTBUILDINGS none
- 9) MATERIALS:
 FOUNDATION granite ashlar
 FACADE granite ashlar
 TRIM concrete siphons
- 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS none



ADDRESS WESTERN CANAL WASTEWAY off PERKINS STREET

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC good
- 2) IF DETERIORATED, CAUSES n/a
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF major & irreversible changes
UF n/a
- 4) SURROUNDING LAND USES industrial, railroad, canal frontage, river frontage
- 5) INTEGRITY OF PROP'S HIST SETTING moderately disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING compatible with character

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

The first dam at this location was built in 1831, during the construction of the Western and Lawrence Canals. The present stepped dam probably is a result of reconstruction in the 1840s, when the Swamp Locks, Lower Locks, and Hickey Hall dams were all rebuilt in a stepped form.

The function of the dam is to maintain the level of the lower portion of the Western Canal, in order to feed the Lawrence Canal at an adequate level. Three concrete siphon spillways were added to the dam in 1948-49. At the same time a house atop the dam was extended the full length of the crest, to shelter the siphons. That building burned in 1965.

Source

Lower Merrimack River Valley: Inventory, MVTM and HAER, p. 76.

ARCHEOLOGICAL COMMENT

Not applicable.

HAER INVENTORY

EXISTING SURVEYS DATA DWGS PHOTOGRAPHS STATES

1. NAME OF STRUCTURE **LAWRENCE DAM** 2. DATE **c. 1840's** 3. NATURE OF STRUCTURE **DAM** 4. INDUSTRIAL CLASSIFICATION **SPEC STRUC:HYDRA (81.2)**

5. LOCATION: STREET & NUMBER **LAWRENCE WASTEWAY AT INTERSECTION OF SUFFOLK & PERKINS ST.** CITY OR TOWN **LOWELL** COUNTY **MIDDLESEX** STATE **MA** 6. USGS 7 1/2 QUAD & UTM GRID REF. **LOWELL 19. 31030° 472446°**

7. OWNER OF PROPERTY **PROPRIETORS OF THE LOCKS & CANALS** ADDRESS **FOOT OF JOHN STREET LOWELL MA 01852**

8. CONDITION: EXCELLENT GOOD FAIR DETERIORATED RUINS UNEXPOSED ALTERED ACCESSIBLE TO PUBLIC

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.
 This waste dam was initially constructed in 1831 when the Lawrence and Western Canals were built. It maintained the level of the Lawrence Canal. It was probably rebuilt in its present stepped configuration in the 1840's, the period when most of the other dams on the system were similarly reconstructed. The sluice way probably dates from the same period. The frame house that was located over the sluice way was built in the latter part of the 19th century. In 1913, the cast iron flash board standards were replaced and raised one foot, as was the sluice gate house. The house was not extended the full length of the dam until the three siphon spillways, which required insulation, were built in 1948-1949. The entire building along the crest of the dam burned in 1965. (HYDR & PARROT)

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.
LOCKS & CANALS CO RECORDS, LOWELL & BALCAN LIBRARY

See GREAT GATE.

12. DANGER OF DEMOLITION OR DAMAGE YES NO
 NATURE OF THREAT: 13. PRIORITY

14. EXISTING SURVEYS AND DATES: NHL NR HAER 1974 HABS STATE COUNTY LOCAL OTHER

15. INVENTORIED BY: YOUR NAME **Charles Hyde & Charles Parrott** ADDRESS **HAER Lowell Survey** AFFILIATION _____ DATE **August 24, 1974**

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MFG) UTILITIES (UTIL) POWER SOURCES & PRIME MOVERS (PS & PM) TRANSPORTATION (TRANS) COMM BRIDGES

MACH FABR TEQUIP INST DMFG WATER SAHI GAS ELEC MUSI WATER WHEEL WATER TURB WIND WINDM STEAM RECIP STEAM TURB INT COMB DIESEL ELEC RR ROAD CANAL MARINE AIR PIPE T&T R&TY BEAM ARCH TRUSS SUSP AQUE TRES CANT MOVE

PRE 19th C 1800 1809 1810 1819 1820 1829 1830 1839 1840 1849 1850 1859 1860 1869 1870 1879 1880 1889 1890 1899 1900 1909 1910 1919 1920 1929 1930 PRESENT

DATES OF CONSTRUCTION

EXTRACTIVE INDUSTRIES (EXTRACT)

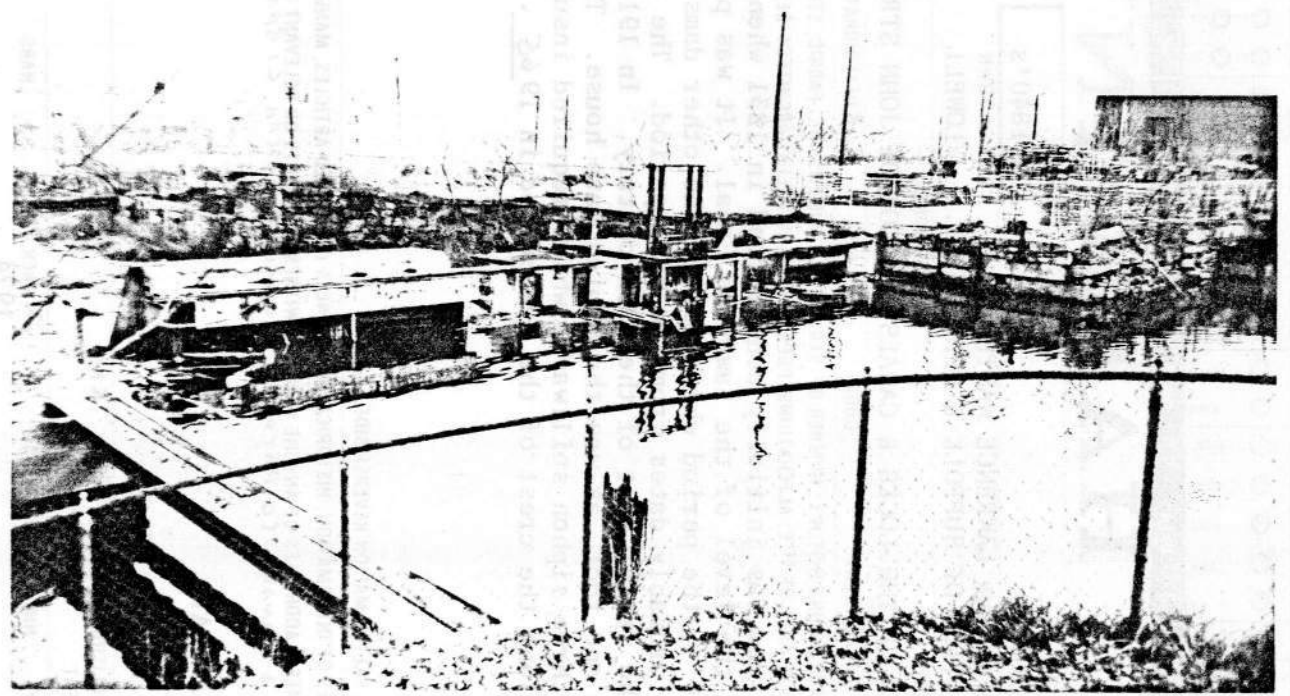
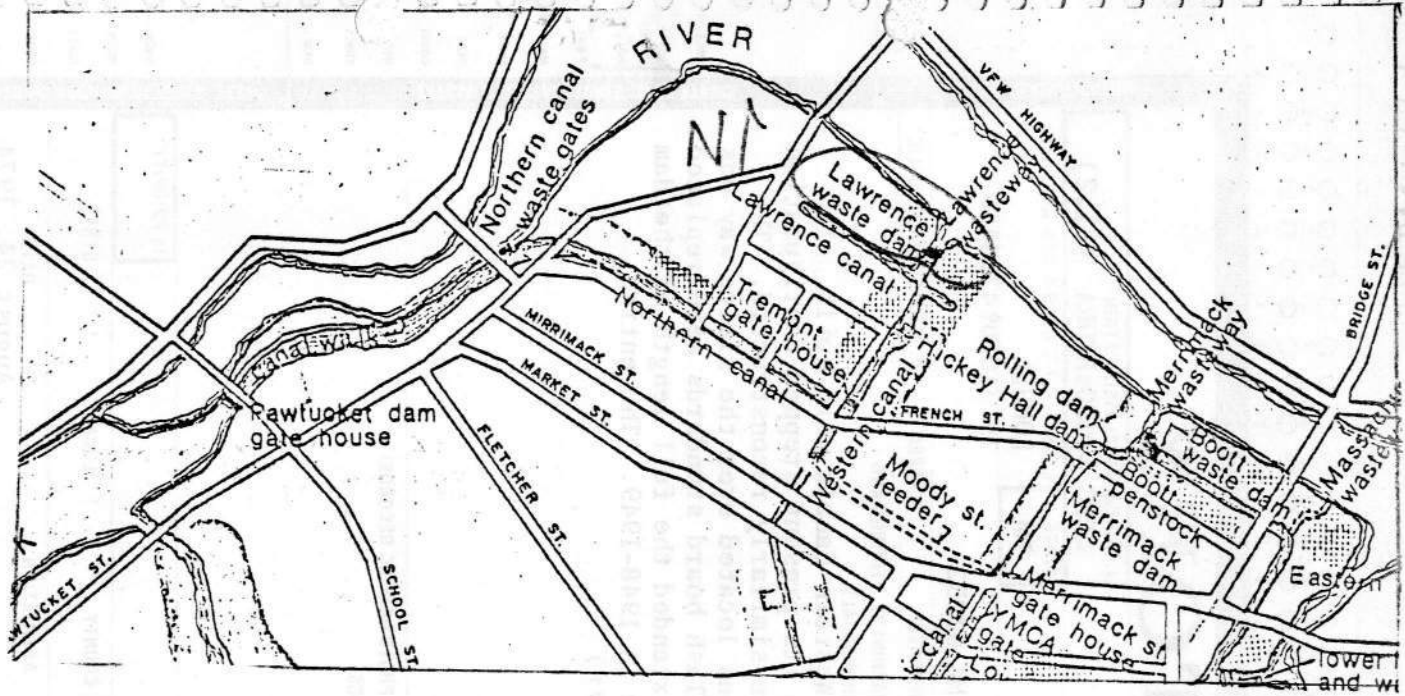
BULK PRODUCT INDUSTRIES (BULK)

SUB-CLASSIFICATION

SPECIALIZED STRUCTURES (SPEC STRUC)

BUILDING TECHNOLOGY (BLD TECH)

0 1 2 3 4 5 6 7 8 9 93 92 91 90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72 71 70 69



LIST OF CLASSIFIED STRUCTURES (LCS) SINGLE ENTRY REPORT

Identification

IDLCS: 40605 Structure Number: LAW.DAM

Structure Name 1: LAWRENCE DAM
Structure Name 2: LAWRENCE CANAL WASTE DAM
Structure Name 3:

Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
ORGCODE: 1780 County: MIDDLESEX State: MA
Regional Office: NORTH ATLANTIC
Subunit ORGCODE: Name:
Alpha Code: County: MIDDLESEX State: MA

Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED Date: 10/18/85
Significance: NATIONAL Date: 12/22/77
NHL: YES

Significance

CONSTR'D. TO MAINTAIN LEVEL OF LOWER PORTION OF WESTERN CANAL, IN ORDER TO FEED LAWRENCE CANAL AT AN ADEQUATE LEVEL. ENSURED THAT LAWRENCE MILLS REC'D. WATER EVEN WHEN TREMONT & SUFFOLK SLUICE GATES CLOSED. EXTANT DAM PROB. AN 1840s RECONSTR'N.

Historical Information

Period of Construction: HISTORIC

Date: 1840-1843 (BU) Designer: ()
Date: 1948-1949 (AL) Designer: ()
Date: 1965- (AL) Designer: ()
Date: - () Designer: ()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions Current Uses
DAM DAM
DAM - CONCRETE (GRAVITY) DAM - CONCRETE (GRAVITY)
UTILITY SERVICE STRUCTURE UTILITY SERVICE STRUCTURE

Buildings Materials Structures

Foundation: Sub-structure: CONCRETE
FRAMING: GRANITE
Walls:
Roof: Super-structure: CONCRETE
Other: GRANITE
Volume: WOOD

Description

3 CONCR. SIPHON SPILLWAYS (1948-49) OVER (CA. 1841?) GRANITE FOUND'N.; (FMR. HOUSE ATOP DAM BURNED 1965). ASHLAR GRANITE FACADE. 12 ACRE FT. MAX. CAP. APPROX. 9' DEEP, 90' LONG. REMNANTS OF WOOD SUPERSTRUCTURE.

Impact Level: MODERATE Impact Types: INUNDATION (FLOODING) STRUCTURAL DETERIORATION

Condition: POOR

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS	Park	Structure Name	Number
40605	LOWE	LAWRENCE DAM	LAW.DAM
Management Information			
NPS Legal Interest: NONE - PRIVATELY OWNED		Federal Owner:	
Life:	Exp. Date: / /	Local Owner: BH	
Management Category: MUST BE PRES. & MAINT		Management Date: 10/16/87	
Management Agreement: MEMORANDUM OF UNDERSTANDING		Agmt. Exp. Date: 04/03/96	
Proposed Ultimate Treat:	Doc:	Date: / /	
Approved Ultimate Treat: PRESERVATION	Doc: GMP	Date: 08/00/81	
Treatment Responsibilities		Treatment Costs	
Interim Treatment: OTH	Interim:	\$0	Date: /
Ultimate Treatment: OTH	Ultimate:	\$0	Date: /
Routine Maintenance: OTH	Level of Estimate:		
Cyclic Maintenance: OTH	Estimator:		
Approved Ultimate Treatment Completed: NO			
Management Text			
LOWELL LOCKS & CANALS HISTORIC DISTRICT. NPS DAM #148. BOOTT HYDRO MAINTAINS CANAL WALLS & FLOOR; NPS SHARES GROUNDS MAINT. RESPONSIBILITIES w/ STATE.			
Major Bibliographical References			
Nat. Reg.:	78003149	CSI:	Nat. Cat: NO
HABS:		BRIDGES:	
HAER:	MA-6-A	DAMS:	MA
		QTRS:	
CLI	CRBIB	Other	
1.	HRS 1. 010385	1. 400101 MALONE, CANALS & IND.	
2.	HS ASSESS 2. 400107	2. 010390 GMP	
3.	HSR 3.	3.	
4.	CLR 4.	4.	
5.	5. 400108		
Documentation Level: FAIR			
Date Entered/Updated: 07/20/94		Logger: JIG	

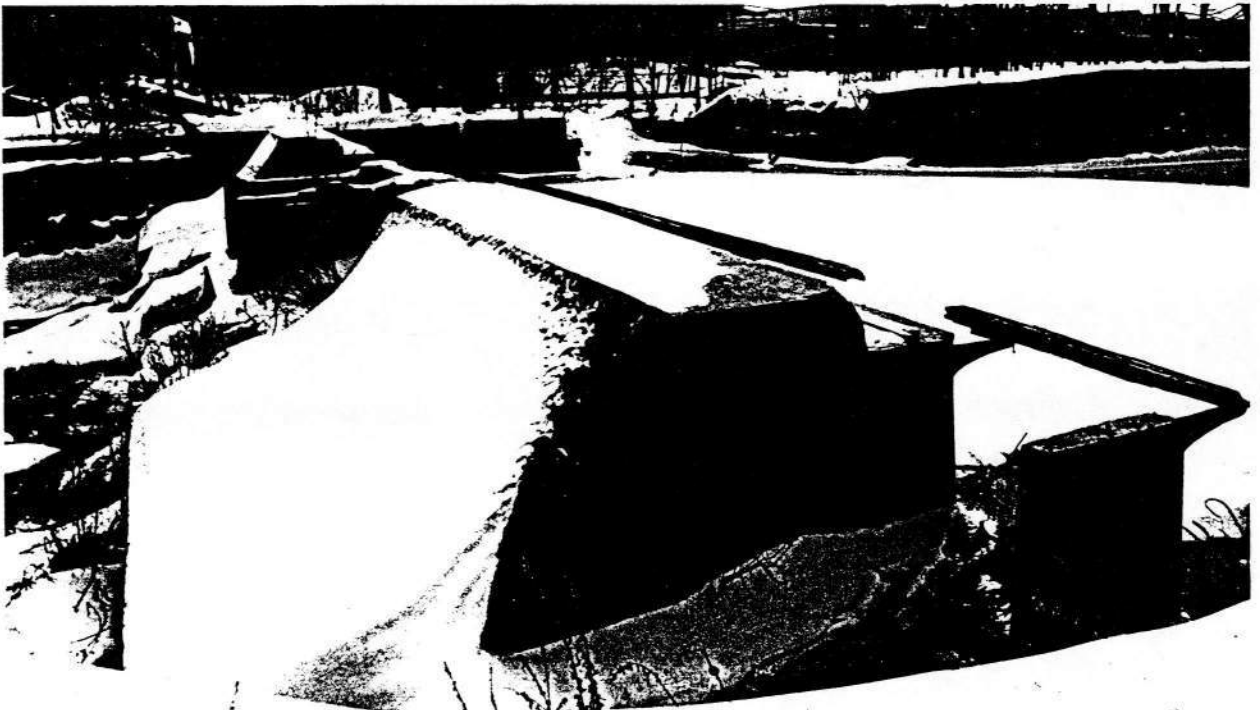
Date of Report: 04/04/95

LOW. 979



Structure No. LAW.DAM
IDLCS: 40605
LAWRENCE DAM

PHOTO * GUARD # 3224
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Rochester, NY



Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.935
Historic Name:	Northern Canal - River Wall Reach
Common Name:	
Address:	Northern Canal School to French and Suffolk Sts
City/Town:	Lowell
Village/Neighborhood:	
Local No:	
Year Constructed:	c 1846
Architect(s):	Baldwin, James F.; Francis, James B.
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related
Significance:	Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Massachusetts Historical Commission
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www.sec.state.ma.us/mhc

This file was accessed on: Friday, October 29, 2021 at 12:12 PM

LOW.935

BC

NADIS 6/5/78

C

NADIS 8/13/76
NHL 12/22/77

LOWELL CULTURAL RESOURCES INVENTORY

From MERRIMACK RIVER at SCHOOL STREET, to
FRENCH and SUFFOLK STREETS

MAP SHEET #3, 5, 7

IDENTIFICATION

- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
- 2) HISTORIC NAME Northern Canal
- 3) CURRENT NAME same
- 4) PROPERTY TYPE canal 5) ZONING CLASSIFICATION M3, B1
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LHPD, LNHP, Locks and Canals HD

8/13/73
BET LTD - 12/13/83

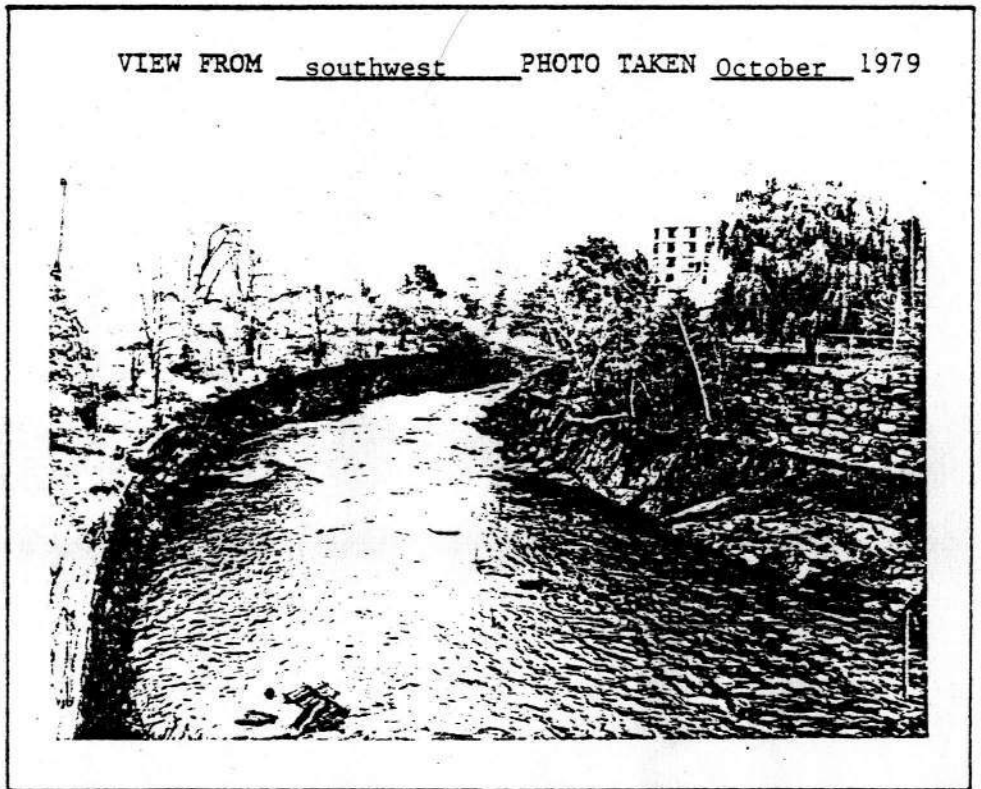
HISTORICAL ABSTRACT

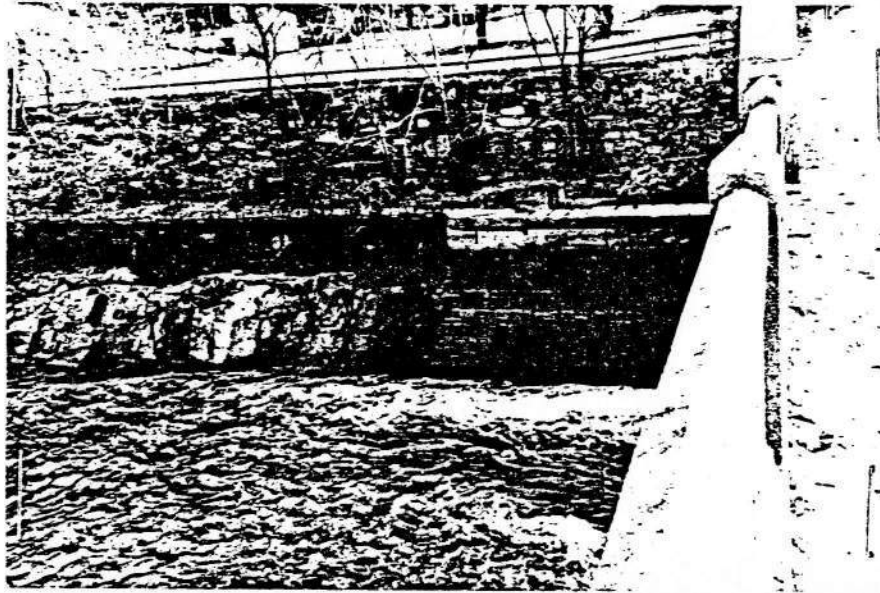
- 1) CONSTRUCTION DATE 1846-7
SOURCE documented: Research Report
- 2) ARCHITECT OR BUILDER James B. Francis et. al
- 3) HISTORIC OWNER Proprietors of Locks and Canals
- 4) ORIGINAL USE: GF power and navigational canal UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY no DATE _____
SOURCE _____

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE n/a
- 2) PRESENT USE:
GF power canal
UF n/a
- 3) NO OF STORIES n/a
- 4) PROP SQ FT n/a
- 5) PLAN n/a
- 6) ROOF n/a
- 7) STRUCTURAL SYSTEM
masonry
- 8) OUTBUILDINGS House
Gate House, Waste Gate
- 9) MATERIALS:
FOUNDATION n/a
FACADE ashlar and rubble stone
TRIM none retaining wall
- 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS Northern Canal Walk, mature trees,

VIEW FROM southwest PHOTO TAKEN October 1979





Detail of the Northern Canal at School Street, showing the combination of granite ashlar, coursed rubble stone, and cut bedrock that constitute its walls. Photo taken in October 1979.



View from the southeast of the Northern Canal opposite the Suffolk millyard. Note the breadth of this canal. At right are Suffolk's penstock openings. Photo taken in October 1979.

LOW 935

- PRE 1918 C
- 1800
- 1809
- 1810
- 1819
- 1820
- 1829
- 1830
- 1839
- 1840
- 1849
- 1850
- 1859
- 1860
- 1869
- 1870
- 1879
- 1880
- 1889
- 1890
- 1899
- 1900
- 1909
- 1910
- 1919
- 1920
- 1929
- 1930
- PRESENT

EXISTING SURVEYS DATA DWGS PHOTOGRAPHS STATES

HAER INVENTORY

1. NAME OF STRUCTURE Northern Canal		2. DATE 1847	3. NATURE OF STRUCTURE Power Canal	4. INDUSTRIAL CLASSIFICATION 812
5. LOCATION: STREET & NUMBER Begins above Pawtucket CITY OR TOWN COUNTY			STATE	6. USGS QUAD MAP & UTM GRID REF.
Dam, ends at intersection of Francis & Suffolk Sts. Lowell Middlesex			MA	19.309000, 472430
7. OWNER OF PROPERTY ADDRESS Proprietors of Locks and Canals, Boott Mills, Lowell, MA				
8. CONDITION: <input checked="" type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> DETERIORATED <input type="checkbox"/> RUINS <input type="checkbox"/> UNEXPOSED <input type="checkbox"/> ALTERED <input checked="" type="checkbox"/> ACCESSIBLE TO PUBLIC				

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.

The Northern Canal was designed by James B. Francis, Chief Engineer of the Proprietors of Locks and Canals, as a feeder to supplement the Pawtucket Canal. Built simultaneously with the dam across the Merrimack, the Northern was also intended to raise the total head available at Lowell by 3 feet, since it reduced velocity and friction losses throughout the canal system. The canal is rectangular in section, and has only one major curve, thus allowing the water to flow in as smooth a manner as possible. The canal is 4,373 feet in length, averages 100 feet in width and is 15 to 21 feet in depth, depending upon the width of the canal at a given point. (A wasteway in the retaining wall between the Canal and the Merrimack River can be used to drain the canal and to maintain a certain level of water. The only two mills directly supplied with water from the Northern are the Suffolk and Tremont Mills. The rest of the Northern water flows into the Western Canal, which in turn supplied the rest of the power canal system at Lowell.)

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

12. DANGER OF DEMOLITION OR DAMAGE YES NO
NATURE OF THREAT:

13. PRIORITY **1**

14. EXISTING SURVEYS NHL NR HAER HABS STATE COUNTY LOCAL OTHER

15. INVENTORIED BY: YOUR NAME ADDRESS AFFILIATION DATE
Peter M. Molloy 800 Mass. Ave., North Andover, MA Merrimack Valley Textile Museum 12/9/75

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

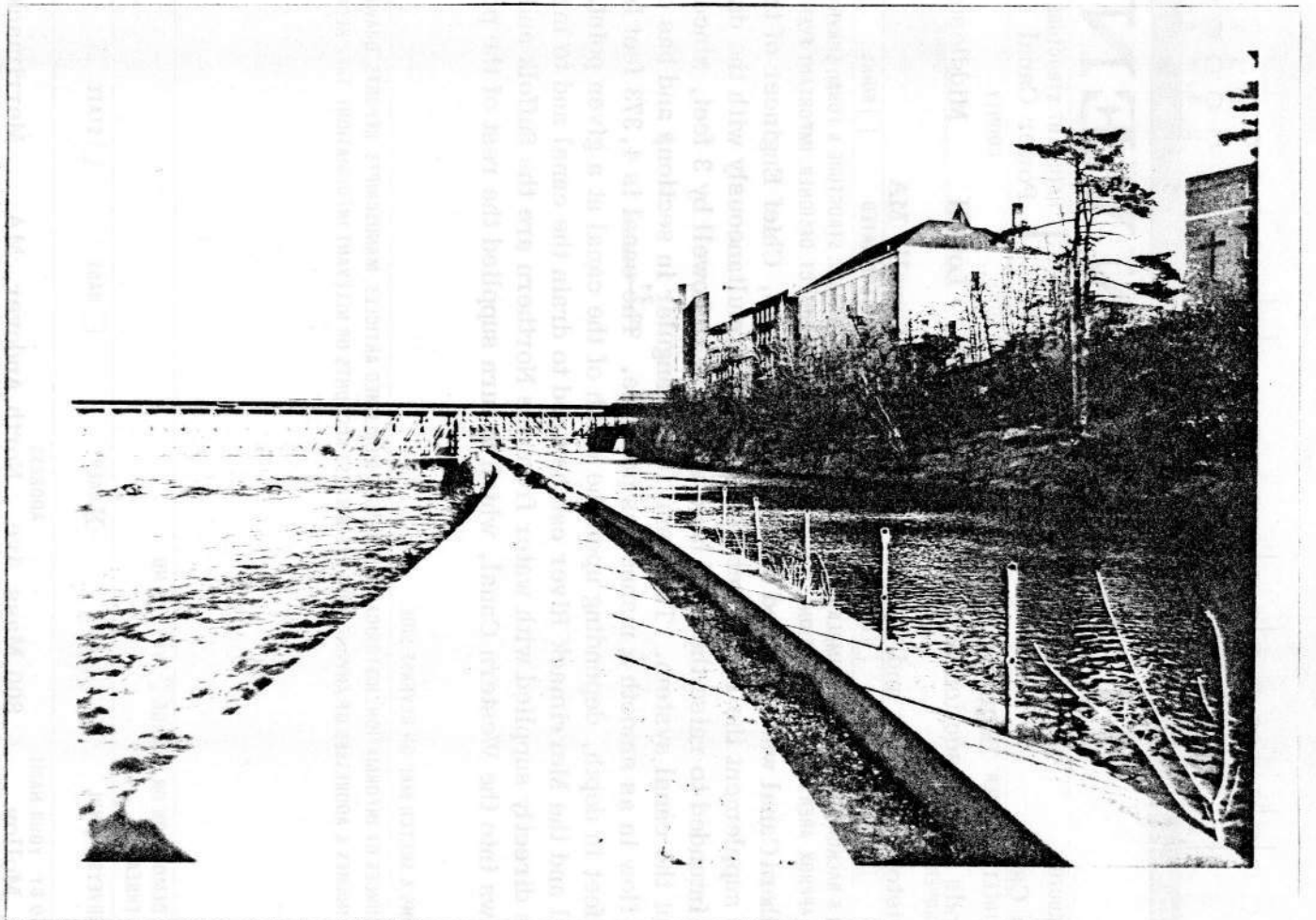
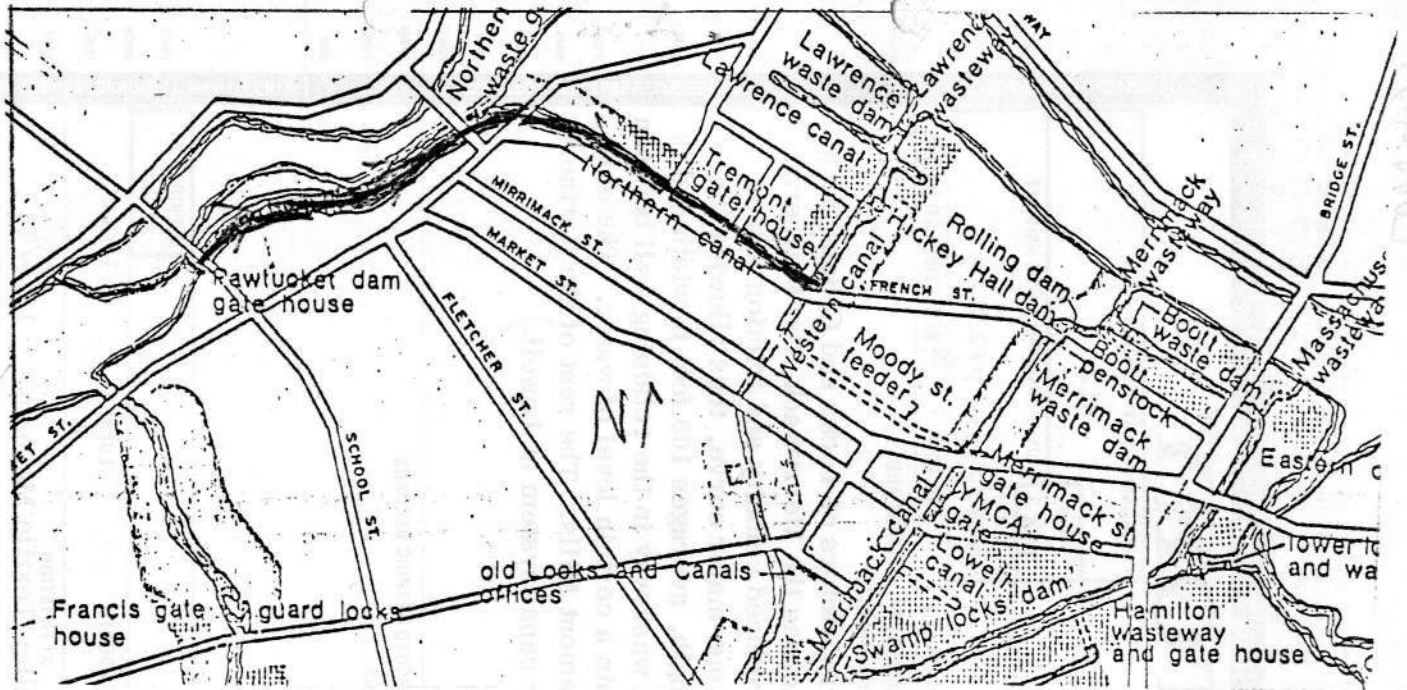
MANUFACTURING INDUSTRIES (MFG) UTILITIES (UTIL) POWER SOURCES & PRIME MOVERS (PS & PM) TRANSPORTATION (TRANS) COMM BRIDGES

- MACH
- FABR
- TEQUIP
- INST
- GMFG
- WATER
- SANI
- GAS
- ELEC
- MUSL
- WATER WHEEL
- WATER TURB
- WIND
- STEAM RECIP
- STEAM TURB
- INT
- COMB
- DIESEL
- ELEC
- RR
- ROAD
- CANAL
- MARINE
- AIR
- PIPE
- TEXT
- RTRY
- BEAM
- ARCH
- TRUSS
- SUSP
- AQUE
- TRES
- CANT
- MOVE

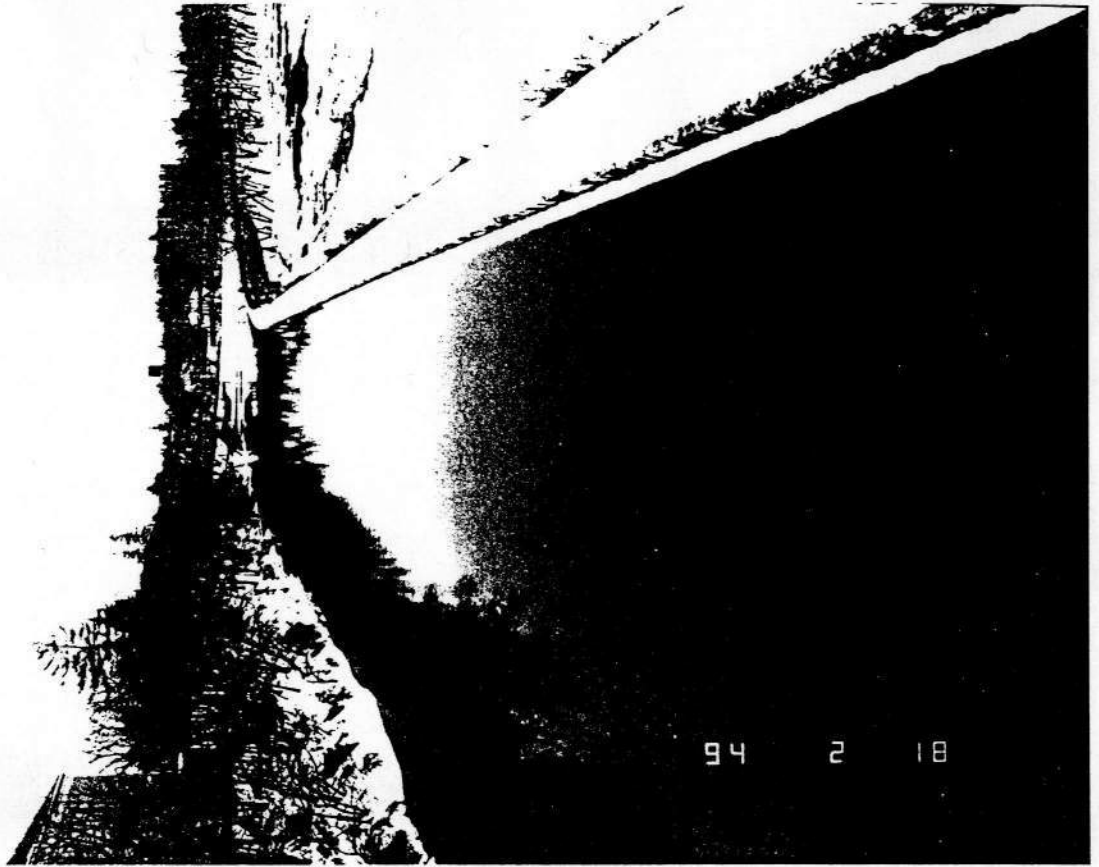
SUB-CLASSIFICATION

SPECIALIZED STRUCTURES (SPEC STRUC)

BUILDING TECHNOLOGY (BLD TECH)



LOW. 935



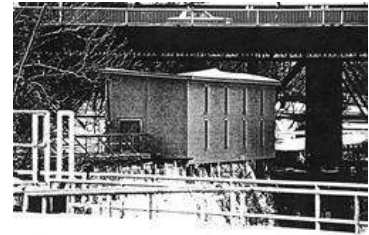
Structure No. NOR.RWR
IDLCS: 40580
NORTHERN CANAL - RIVER WALL REACH

PHOTO * GUARD # 1324
LIGHT IMPRESSIONS
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.981
Historic Name:	Northern Canal Waste Gates and Gate House
Common Name:	High Bridge Gate House
Address:	Northern Canal near Moody Street Bridge
City/Town:	Lowell
Village/Neighborhood:	
Local No:	
Year Constructed:	1847
Architect(s):	
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related; Utilities Other
Significance:	Archaeology, Historic; Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Friday, October 29, 2021 at 12:12 PM

LOWELL CULTURAL RESOURCES INVENTORY

LOW. 981
 PC NR013-61578
 BE W03 12/13/83

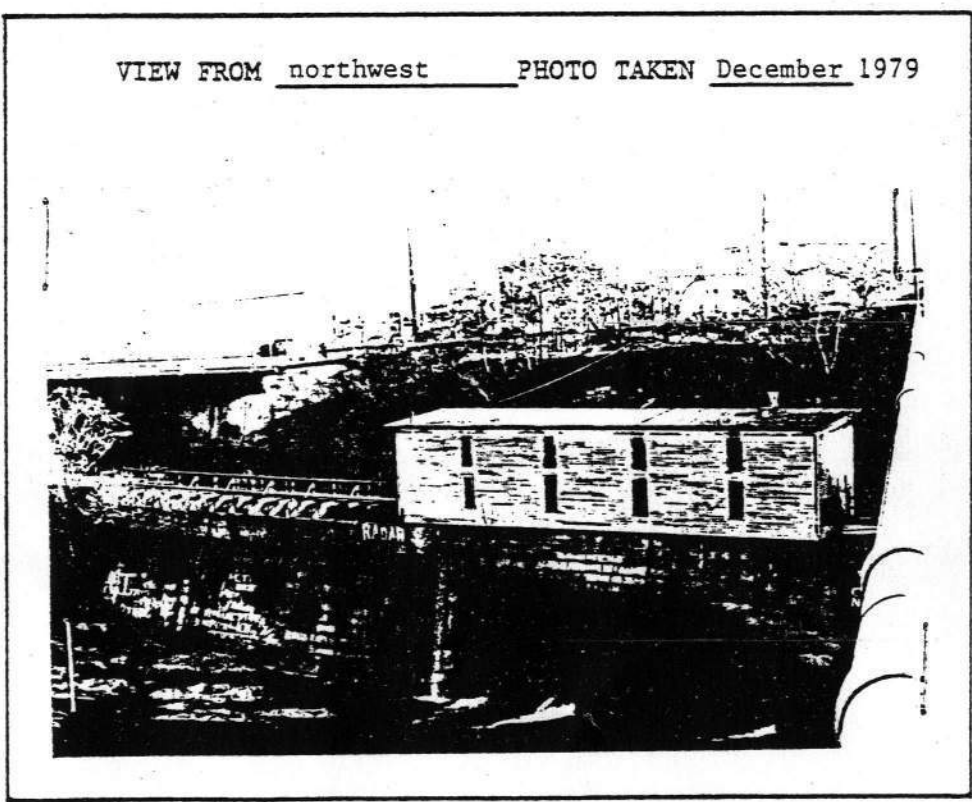
IDENTIFICATION NORTHERN CANAL, near MOODY STREET BRIDGE MAP SHEET # 3
 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
 2) HISTORIC NAME Northern Canal Waste Gates and Gate House
 3) CURRENT NAME same
 4) PROPERTY TYPE canal structure 5) ZONING CLASSIFICATION B1
 6) TAXES: PAYMENTS current STATUS clear
 7) WITHIN BOUNDARIES OF LNHP, LHPD, Locks and Canals Hd

HISTORICAL ABSTRACT

1) CONSTRUCTION DATE 1847, 1872
 SOURCE documented: Lower Merrimack River... Inventory, page 79
 2) ARCHITECT OR BUILDER unknown
 3) HISTORIC OWNER Proprietors of Locks and Canals
 4) ORIGINAL USE: GF canal regulation UF n/a
 5) PREVIOUS BLDGS ON PROPERTY no DATE _____
 SOURCE _____

DESCRIPTIVE DATA

1) ARCHITECTURAL STYLE utilitarian
 2) PRESENT USE:
 GF canal regulation
 UF n/a
 3) NO OF STORIES 1
 4) PROP SQ FT n/a
 5) PLAN rectangular
 6) ROOF shed
 7) STRUCTURAL SYSTEM
wood frame
 8) OUTBUILDINGS
none
 9) MATERIALS:
 FOUNDATION
granite ashlar
 FACADE all sides: wood clapboard
 TRIM none
 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS none



ADDRESS NORTHERN CANAL, near MOODY STREET BRIDGE

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC needs minor repair
- 2) IF DETERIORATED, CAUSES lack of maintenance
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact original fabric
UF n/a
- 4) SURROUNDING LAND USES residential, institutional, canal frontage, river frontage
- 5) INTEGRITY OF PROP'S HIST SETTING moderately disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING compatible with character

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

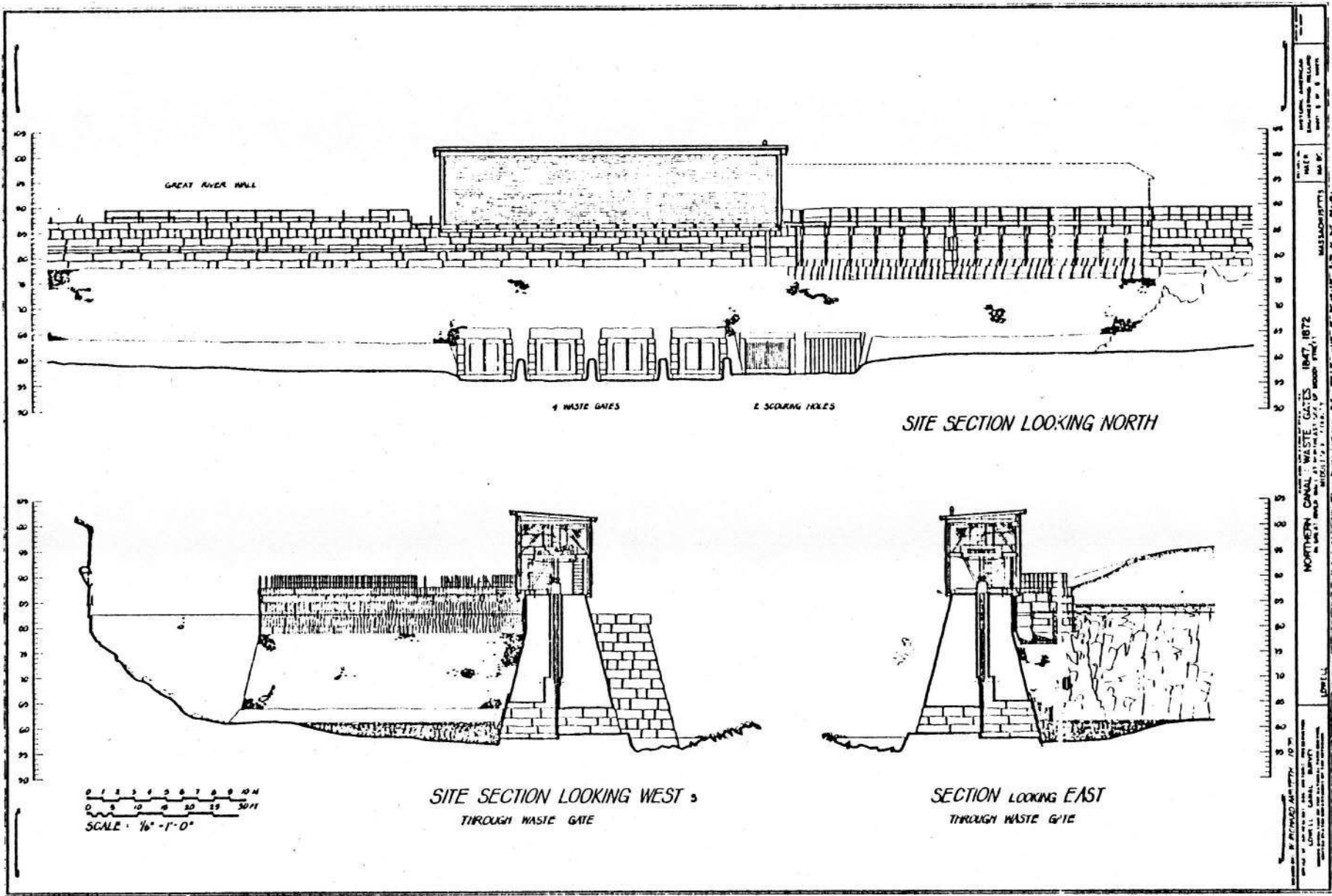
These canal works date from 1847 and were part of the Great River Wall project. Originally included on this site were four waste gates and their manually powered operating machinery. In 1872 a major modification occurred when "one of the scouring holes was converted into a wheelpit where a turbine was installed to power mechanical gate operating equipment." At the same time sheltering structures were built over both the waste gates and the waste weirs. Only the waste gate house still survives.

Sources

Lower Merrimack River...Inventory, HAER and MVTM, page 79.

ARCHEOLOGICAL COMMENT

Not applicable.



"Northern Canal Waste Gates," drawn for HAER in 1975.



View of the Northern Canal Waste Gate House, from the east.
Photo taken in December 1979.

HAER INVENTORY

1. NAME OF STRUCTURE **NORTHERN CANAL WASTE GATES (HIGH BRIDGE GATE HOUSE)** 2. DATE **1847** 3. NATURE OF STRUCTURE **WASTE GATES, SCOURING HOLES &** 4. INDUSTRIAL CLASSIFICATION **SPEC STRUC:HYDRA (81.2)**

5. LOCATION: STREET & NUMBER **NORTHERN CANAL BELOW MOODY ST. BRIDGE** CITY OR TOWN **LOWELL** COUNTY **WASTE WEIR MIDDLESEX** STATE **MA** 6. USGS 7 1/2 QUAD & UTM GRID REF. **LOWELL**

7. OWNER OF PROPERTY **PROPRIETORS OF THE LOCKS & CANALS** ADDRESS **FOOT OF JOHN STREET** **LOWELL, MA. 01852** 19.309504724536

8. CONDITION: EXCELLENT GOOD FAIR DETERIORATED RUINS UNEXPOSED ALTERED ACCESSIBLE TO PUBLIC

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ARCHITECT DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.
 This site, which comprises the downstream end of the Great River Wall, originally included four waste gates and their manually powered operating machinery, along with a waste weir divided into multiple bays by cast iron standards (which supported stop logs, and two scouring holes located downstream from and at the same level as the waste gates.) These works were completed in 1847 as part of the Great River Wall project. Major modification took place in 1872 when one of the scouring holes was converted into a wheel pit where a turbine was installed to power mechanical gate operating equipment which was added atop the original manually operated mechanisms. At the same time, a flat roofed heavy timber framed building was erected over the waste gates, and a hip roofed light timber framed building was built over the waste weir. (In 1899-1900, the entire floor system, catwalks and cast iron weir standards were replaced. Sometime after 1936, the house over the waste weir was removed and the stop logs replaced with concrete plugs.)

(Hyde & Parrott)

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

Records of Hyde & Parrott, Lowell Wakeley

See GREAT GATE.

12. DANGER OF DEMOLITION OR DAMAGE YES NO NATURE OF THREAT: 13. PRIORITY

14. EXISTING SURVEYS AND DATES: NHL NR HAER HABS STATE COUNTY LOCAL OTHER

15. INVENTORIED BY: YOUR NAME **Charles Hyde & Charles Parrott** ADDRESS **HAER Lowell Survey** AFFILIATION DATE **August 23, 1974**

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

PRE 1915 C 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

HAER HABS STATE COUNTY LOCAL OTHER DDD IN HIST TECH ARCH TAPES HAER OTHER FIELD SLIDES HIST SURVEY STEREO MOVIES LC AL AR AZ CA CO CT DE FL GA HI IL IN IA KS KY LA ME MA MI MN MO MS MT NE NY NH NJ NM NY ND OH OK OR PA RI SC SD TN TX UT VT VA WA WY WZ

EXISTING SURVEYS DATA DWGS PHOTOGRAPHS STATES

HAER INVENTORY

1. NAME OF STRUCTURE NORTHERN CANAL WASTE GATES (HIGH BRIDGE GATE HOUSE) 2. DATE 1847 3. NATURE OF STRUCTURE WASTE GATES, SCOURING HOLES & 4. INDUSTRIAL CLASSIFICATION SPEC STRUC:HYDRA (81.2)

5. LOCATION: STREET & NUMBER NORTHERN CANAL BELOW MOODY ST. BRIDGE CITY OR TOWN LOWELL COUNTY WASTE WEIR MIDDLESEX STATE MA 6. USGS 7 1/2 QUAD & UTM GRID REF. LOWELL

7. OWNER OF PROPERTY PROPRIETORS OF THE LOCKS & CANALS ADDRESS FOOT OF JOHN STREET LOWELL, MA. 01852 19.309504724536

8. CONDITION: EXCELLENT GOOD FAIR DETERIORATED RUINS UNEXPOSED ALTERED ACCESSIBLE TO PUBLIC

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ARCHITECT DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.
 This site, which comprises the downstream end of the Great River Wall, originally included four waste gates and their manually powered operating machinery, along with a waste weir divided into multiple bays by cast iron standards (which supported stop logs, and two scouring holes located downstream from and at the same level as the waste gates.) These works were completed in 1847 as part of the Great River Wall project. Major modification took place in 1872 when one of the scouring holes was converted into a wheel pit where a turbine was installed to power mechanical gate operating equipment which was added atop the original manually operated mechanisms. At the same time, a flat roofed heavy timber framed building was erected over the waste gates, and a hip roofed light timber framed building was built over the waste weir. (In 1899-1900, the entire floor system, catwalks and cast iron weir standards were replaced. Sometime after 1936, the house over the waste weir was removed and the stop logs replaced with concrete plugs.)

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.
Records of Hyde & Parrott, Lowell Wakeley
 See GREAT GATE.

12. DANGER OF DEMOLITION OR DAMAGE YES NO NATURE OF THREAT: 13. PRIORITY

14. EXISTING SURVEYS AND DATES: NHL NR HAER HABS STATE COUNTY LOCAL OTHER

15. INVENTORIED BY: YOUR NAME Charles Hyde & Charles Parrott ADDRESS HAER Lowell Survey AFFILIATION DATE August 23, 1974

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MFI) UTILITIES (UTIL) POWER SOURCES & PRIME MOVERS (PS & PM) TRANSPORTATION (TRANS) COMM BRIDGES

MACH FABR TEMPL INST DWTG WATER SANI GAS ELEC MUSL WATER WHEEL WATER TURB WIND STEAM RECIP STEAM TURB INT COMB DIESEL ELEC RR ROAD CANAL MARINE AIR PIPE T&T R&TY BEAM ARCH TRUSS SUSP ADQUE TRES CANT MOVE

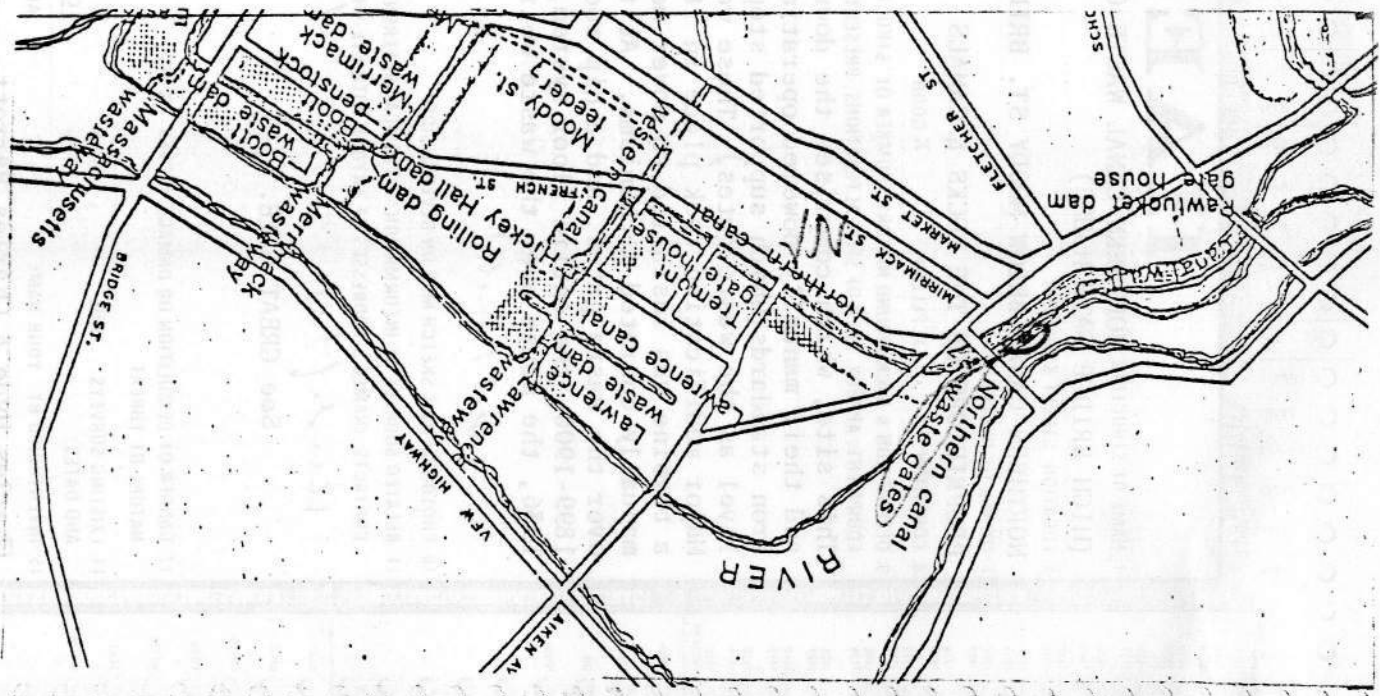
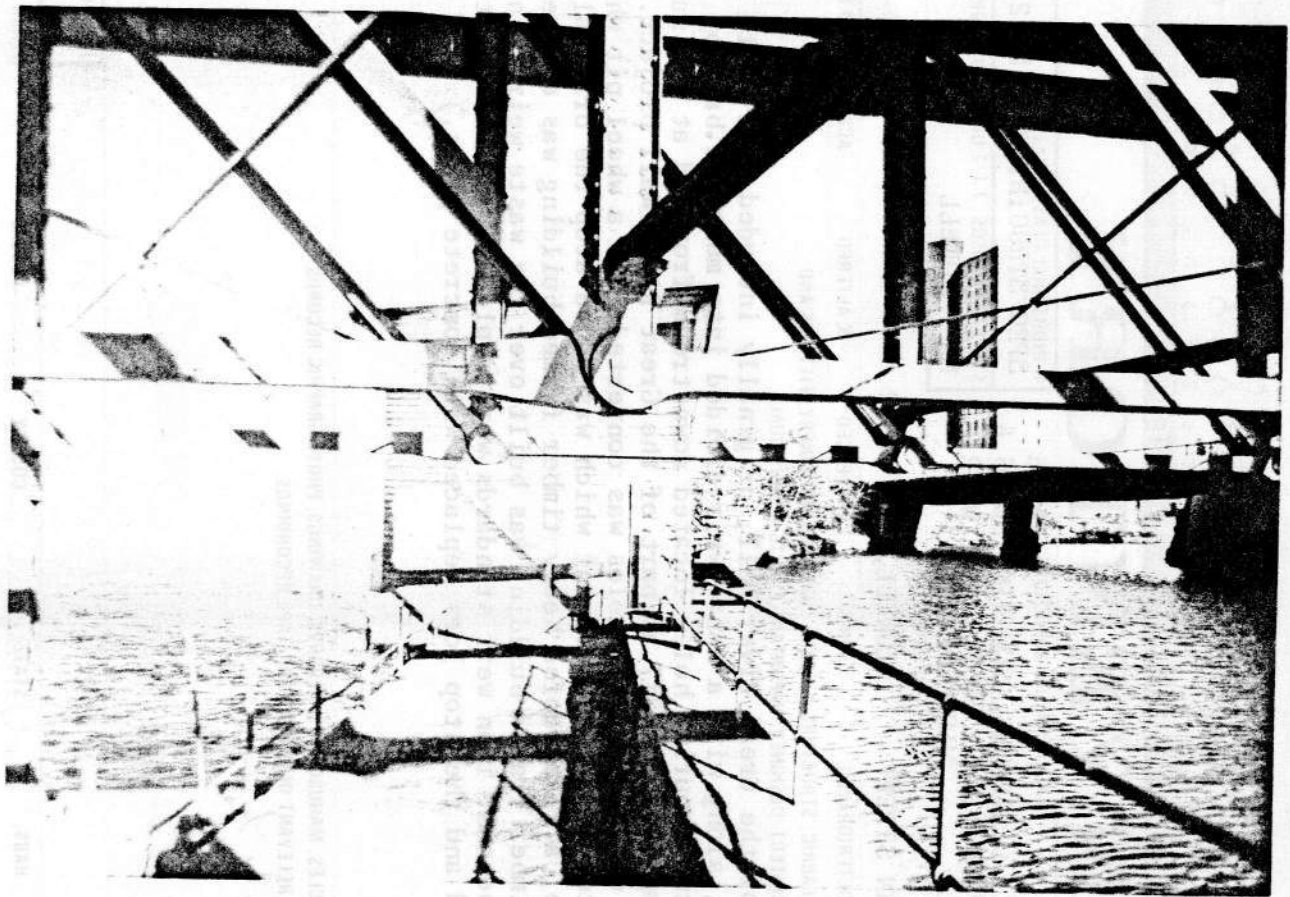
HAER INVENTORY

SUB-CLASSIFICATION

SPECIALIZED STRUCTURES (SPEC STRUC)

BUILDING TECHNOLOGY (BOLD TECH)

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 93
- 92
- 91
- 90
- 89 MUSEUM
- 88 ADAPT
- 87 HOUS
- 86 P & ET
- 85 MATS
- 84 MATH
- 83 HEAT
- 82 CONST
- 81 HYD
- 80 TUNLS
- 79 DAM
- 78
- 77
- 76
- 75 ANCIL
- 74 MECH
- 73 FENES
- 72 ROOF
- 71 FLOOR
- 70 FRAME
- 69 FOUND



LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40595

Structure Number: NC.WGH

Structure Name 1: NORTHERN CANAL WASTE GATES GATE HOUSE

Structure Name 2: NORTHERN CANAL WASTEWAY GATE HOUSE

Structure Name 3: HIGH BRIDGE GATE HOUSE

Park Alpha Code: LOWE	Name: LOWELL NATIONAL HISTORICAL PARK	State: MA
ORGCODE: 1780	County: MIDDLESEX	
	Regional Office: NORTH ATLANTIC	
Subunit ORGCODE:	Name:	
Alpha Code:	County: MIDDLESEX	State: MA

Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED

Date: 10/18/85

Significance: NATIONAL

NHL: YES

Date: 12/22/77

Significance

CONSTR'D. AS PART OF GREAT RIVER WALL PROJ.; 4 WASTE GATES & MAN.-POWERED OPERATING MACHINERY. IN 1872, ONE "SCOURING HOLE" CONV. INTO WHEELPIT FOR TURBINE TO OPERATE MECH'L. GATE EQUIP'T.; SHELTERS ALSO BUILT OVER WASTE GATES (AND WEIRS).

Historical Information

Period of Construction: HISTORIC

Date: 1847-	(BU) Designer:	()
Date: 1872-	(AL) Designer:	()
Date: 1991-1993	(RH) Designer:NPS	(0)
Date: -	() Designer:	()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions
UTILITY SERVICE STRUCTURE
DAM

Current Uses
UTILITY SERVICE STRUCTURE
DAM

Buildings—Materials—Structures

Foundation: GRANITE	Sub-structure: GRANITE
Framing: WOOD	
Walls: WOOD	
Roof: SYNTHETICS	Super-structure: GRANITE
Other: STEEL	
Volume: 20,001 - 2,000,000 CUBIC FT	

Description

2-STORY RECT. GATE HOUSE W/ SLIGHTLY-PITCHED (MEMBRANE) ROOF & CLAPBD. SIDING W/ CORNER BDS. SITS PRECARIOUSLY ATOP GREAT RIVER WALL (LCS #40602); CANAL & RIVER SIDES CANTILEVERED. 4 WINDOW BAYS @ RIVER SIDE; WINDOWS VARY: 4/4, 4/1, 1/1.

Impact Level: MODERATE Impact Types: INUNDATION (FLOODING)
WEATHER

Condition: GOOD STRUCTURAL DETERIORATION

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40595 LOWE NORTHERN CANAL WASTE GATES GATE HOUSE NC.WGH

Management Information

NPS Legal Interest: NONE - LOCAL GOVERNMENT OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: MA/DEM

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities

Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. FIRE/INTRUSION ALARM ADDED 1993. SOME CLAPBDS. REPLACED @
CANAL SIDE. STL. OUTRIGGERS FOR FOOTBRIDGE NEVER COMPLETED; SOME BENT - MISSING CLAPBDS. SHOULD BE
REPLACED/PATCHED. LEAKS REPORTED.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-8-C DAMS: MA
QTRS:

CLI

CRBIB

Other

- | | | | | | |
|----|-----------|----|--------|----|------------------------------|
| 1. | HRS | 1. | 010385 | 1. | 400101 MALONE, CANALS & IND. |
| 2. | HS ASSESS | 2. | 400107 | 2. | 010390 GMP |
| 3. | HSR | 3. | 010625 | 3. | |
| 4. | CLR | 4. | | 4. | |
| 5. | | 5. | 400108 | | |

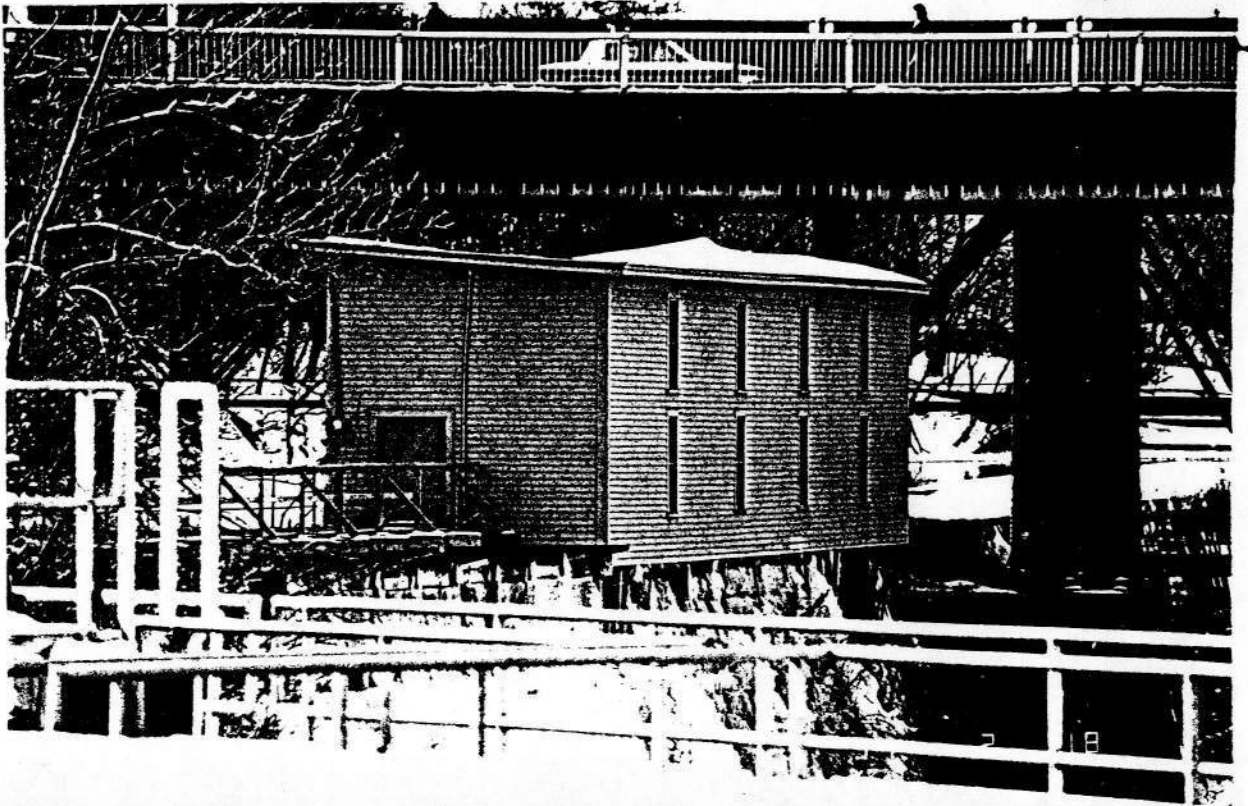
Documentation Level: GOOD

Date Entered/Updated: 07/20/94

Logger: JIG

Date of Report: 04/05/95

LOW. 981



Structure No. NC.WGH
IDLCS: 40595
NORTHERN CANAL WASTE GATES GATE HOUSE

PHOTO + GUARD
LIGHT IMPRESSIONS
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.990
Historic Name:	Hamilton Canal Guard Gates
Common Name:	Hamilton Canal Sectional Gates
Address:	Hamilton Canal Hamilton Canal off Jackson St, near Revere St
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	
Year Constructed:	1847
Architect(s):	
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related; Utilities Other
Significance:	Archaeology, Historic; Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Friday, October 29, 2021 at 12:34 PM

LOWELL CULTURAL RESOURCES INVENTORY

LOW. 990

BC MEDS - 6/5/78
BE LHD - 12/13/83

HAMILTON CANAL off JACKSON STREET.
near REVERE STREET

MAP SHEET # 11

- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
- 2) HISTORIC NAME Hamilton Canal Guard Gates
- 3) CURRENT NAME same
- 4) PROPERTY TYPE canal structure 5) ZONING CLASSIFICATION A1
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP -- Locks and Canals HD -- LHPD

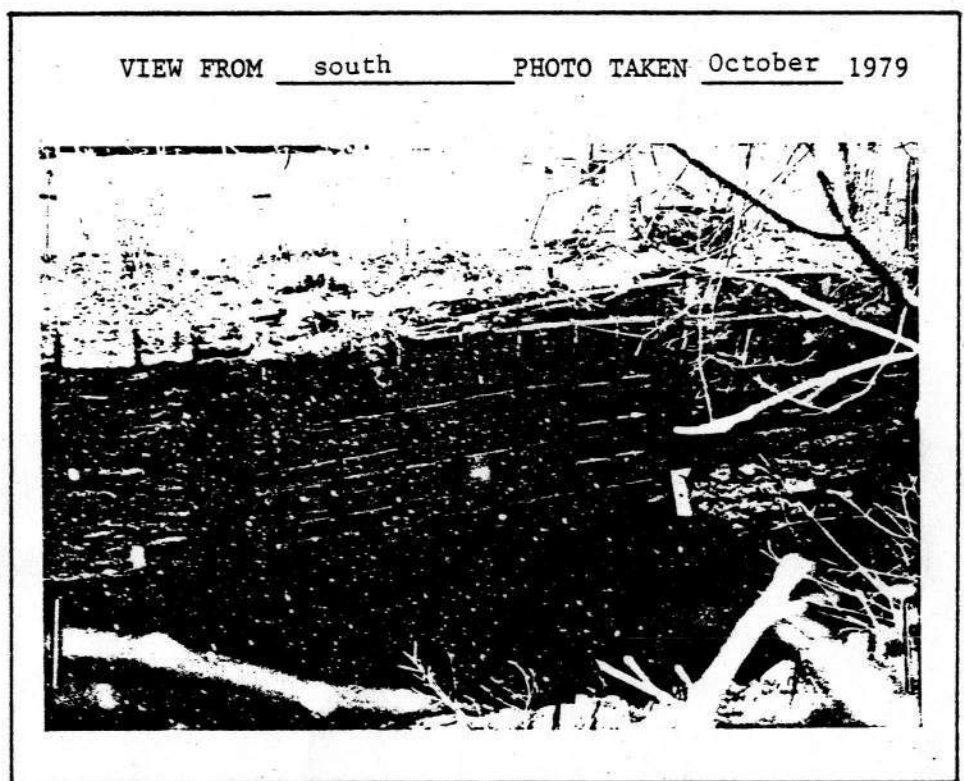
10 NH - 12/22/77
MEDS - 8/3/76

HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE 1847/1853
SOURCE documented: Lower Merrimack...Inventory, p. 74
- 2) ARCHITECT OR BUILDER unknown
- 3) HISTORIC OWNER Proprietors of Locks and Canals
- 4) ORIGINAL USE: GF canal regulation UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY yes DATE 1847-1853
SOURCE documented: Lower Merrimack...Inventory

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE n/a
- 2) PRESENT USE:
GF canal regulation
UF n/a
- 3) NO OF STORIES n/a
- 4) PROP SQ FT n/a
- 5) PLAN n/a
- 6) ROOF n/a
- 7) STRUCTURAL SYSTEM wood frame
- 8) OUTBUILDINGS chain & windlass
- 9) MATERIALS:
FOUNDATION n/a
FACADE heavy timbers
TRIM n/a



- 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS adjacent control equipment

HAMILTON CANAL off JACKSON STREET, near REVERE STREET
ADDRESS _____

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC needs minor repair
- 2) IF DETERIORATED, CAUSES lack of maintenance
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact original fabric
UF n/a
- 4) SURROUNDING LAND USES industrial, railroad, canal frontage
- 5) INTEGRITY OF PROP'S HIST SETTING severely disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING compatible with character

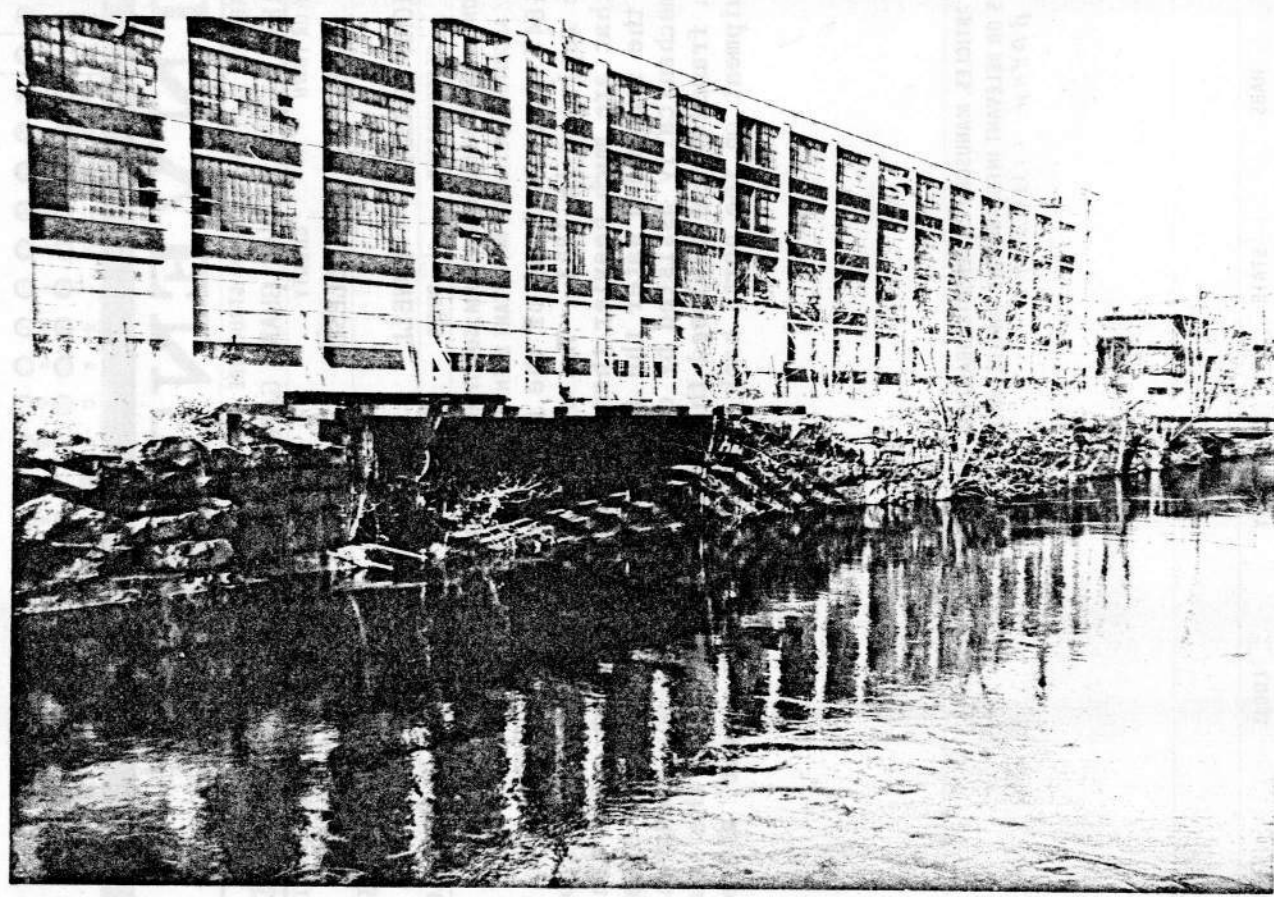
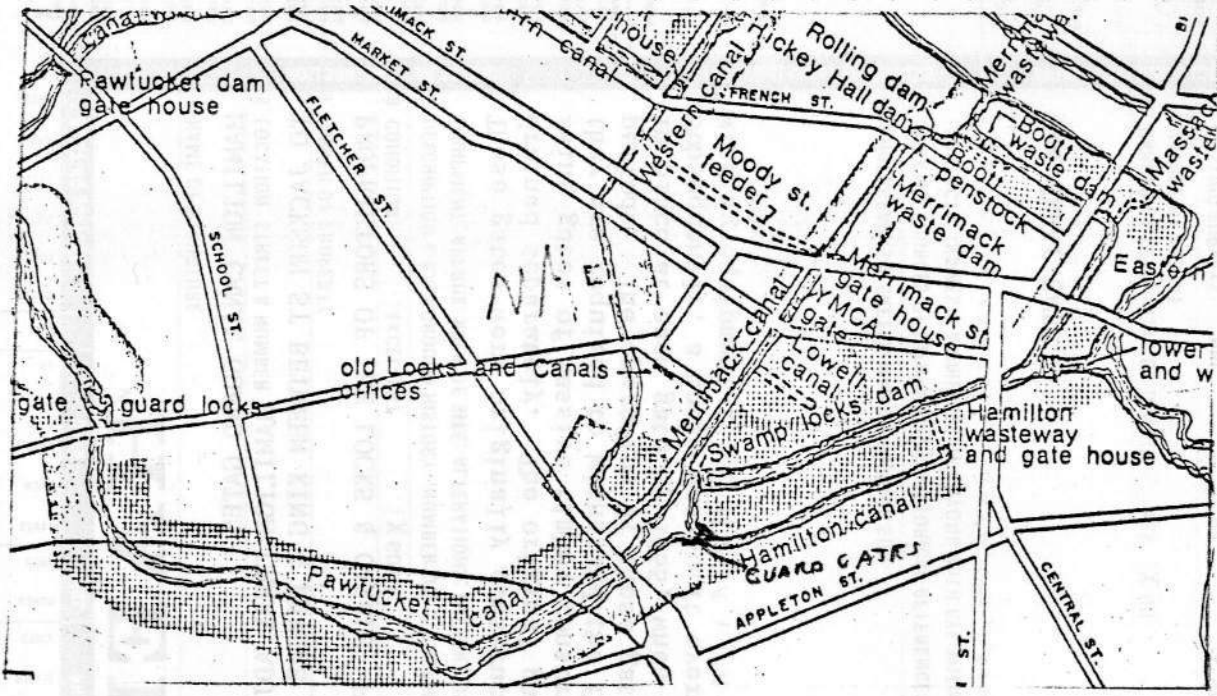
ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

Guard locks were installed in 1847 on the Hamilton Canal to allow it to be drained separately. In 1853 the original gates were replaced, perhaps with the present ones. This pair of swing gates is constructed of massive timbers, and appears to be in sound condition. On both banks there is chain and windlass equipment to assist in operating the gates.

ARCHEOLOGICAL COMMENT

The areas around the chain and windlass equipment on each bank may contain remains of the sheds that formerly sheltered these features.

LOW 900



NHL	HAER	HABS	STATE	COUNTY	LOCAL	OTHER	DDD	FN	HIST	TECH	ARCH	TAPES	HAER	OTHER	FIELD	SLIDES	HIST	SURVEY	STEREO	MOVIES	LC	AL	AK	AZ	AR	CA	CO	CT	DE	DC	FL	GA	HI	IL	IN	IA	KS	KY	LA	ME	MD	MA	MI	MN	MS	MO	MT	NE	NH	NJ	NY	NC	ND	OH	OK	OR	PA	RI	SC	SD	TN	TX	UT	VT	VA	WA	WV	WY	0
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HAER INVENTORY

1. NAME OF STRUCTURE HAMILTON CANAL GUARD GATES	2. DATE 1853	3. NATURE OF STRUCTURE CANAL GUARD GATES	4. INDUSTRIAL CLASSIFICATION SPEC STRUC: HYDRA (81.2)
-----------------------------------------------------------	------------------------	----------------------------------------------------	-----------------------------------------------------------------

5. LOCATION: STREET & NUMBER HAMILTON CANAL ADJACENT TO JACKSON ST BETWEEN KING & BEVERE STS	CITY OR TOWN LOWELL	COUNTY MIDDLESEX	STATE MA	6. USGS 7 1/2 QUAD & UTM GRID REF. LOWELL
------------------------------------------------------------------------------------------------------------	-------------------------------	----------------------------	--------------------	-----------------------------------------------------

7. OWNER OF PROPERTY PROPRIETORS OF THE LOCKS & CANALS, FOOT OF JOHN STREET	ADDRESS LOWELL	19.310170.4723340
-------------------------------------------------------------------------------------------	--------------------------	-------------------

8. CONDITION: EXCELLENT GOOD FAIR DETERIORATED RUINS UNEXPOSED ALTERED ACCESSIBLE TO PUBLIC

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.

These gates were originally constructed in 1847 near the head of the Hamilton Canal to allow it to be drained separately. The original gates were replaced in 1853. The extant gates are a single set of swing gates of massive timber construction that are much heavier than standard navigation gates since they are required to withstand the force of the impounded water the full depth of the gate for extended periods. The operation of these gates was mechanically assisted by chain and windlass equipment which was in place at each gate by 1855, when a wooden framed house enclosed the winding equipment on the south bank. Subsequently, a house was built over the equipment on the north bank, but neither are extant, although the winding equipment is. (HYDR & PARROTT)

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

LOCALS & CANAL CO RECORDS, COURIE & BAKER LIBRARY

See GREAT GATE.

12. DANGER OF DEMOLITION OR DAMAGE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. PRIORITY
--------------------------------------------------------------------------------------------------------	--------------

14. EXISTING SURVEYS AND DATES: NHL NR HAER HABS STATE COUNTY LOCAL OTHER

15. INVENTORIED BY: YOUR NAME **Charles Hyde & Charles Parrott** ADDRESS **HAER Lowell Survey** AFFILIATION DATE **August 24, 1974**

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MFG)	UTILITIES (UTIL)	POWER SOURCES & PRIME MOVERS (PS & PM)	TRANSPORTATION (TRANS)	COMM	BRIDGES
MACH	WATER	MUSI	RR	T&T	BEAM
FABR	SANI	WATER	ROAD	R&TY	ARCH
TEQUIP	GAS	WHEEL	CANAL		TRUSS
INST	ELEC	TURB	MARINE		SUSP
GNFG		TURB	AIR		AQUE
		WIND	PIPE		TRES
		STEAM			CANT
		RECIP			MOVE
		STEAM			
		TURB			
		INT			
		COMB			
		DIESEL			
		ELEC			

SUB-CLASSIFICATION
MUSEUM
ADAP
HOUS
P & ET
MATS
MATH
HEAT
CONST
HYDR
TUNLS
DAM
ANGIL
MECH
FENES
ROOF
FLOOR
FRAME
FOUND

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS	Park	Structure Name	Number
40603	LOWE	HAMILTON CANAL GUARD GATES	HAMGGATE
Management Information			
NPS Legal Interest: NONE - PRIVATELY OWNED		Federal Owner:	
Life:	Exp. Date: / /	Local Owner: BH	
Management Category: MUST BE PRES. & MAINT		Management Date: 10/16/87	
Management Agreement: MEMORANDUM OF UNDERSTANDING		Nat. Exp. Date: 04/03/96	
Proposed Ultimate Treat:		Doc:	Date: / /
Approved Ultimate Treat: PRESERVATION		Doc: GMP	Date: 08/00/81
Treatment Responsibilities		Treatment Costs	
Interim Treatment: OTH		Interim:	\$0 Date: /
Ultimate Treatment: OTH		Ultimate:	\$0 Date: /
Routine Maintenance: OTH Level of Estimate:			
Cyclic Maintenance: OTH		Estimator:	
Approved Ultimate Treatment Completed: NO			
Management Text			
LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS CANAL WALLS & FLOOR; NPS & STATE SHARE GROUNDS MAINT. RESPONSIBILITIES. SNOW PLOWED OVER REMAINS OF GUARD GATE @ N SIDE IS DESTRUCTIVE. TOP TIMBERS MISSING @ S SIDE; IRON TIES EXTANT.			
Major Bibliographical References			
Nat. Reg.: 78003149		CSI:	Nat. Cat: NO
HABS:		BRIDGES:	
HAER: MA-4-A		DAMS:	
		QTRS:	
CLI	CRBIB	Other	
1. HRS	1. 010385	1. 400101 MALONE, CANALS & IND.	
2. HS ASSESS	2. 400107	2. 010390 GMP	
3. HSR	3.	3.	
4. CLR	4.	4.	
5.	5. 400108		
Documentation Level: FAIR			
Date Entered/Updated: 07/20/94		Logger: JIG	

Date of Report: 04/04/95



Structure No. **HAMGGATE**
IDLCS: **40603**
HAMILTON CANAL GUARD GATES

PHOTO ★ GUARD # 3224
ACHT IMPRESSIONS™
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.992
Historic Name:	Hamilton Canal Wasteway Gate House
Common Name:	
Address:	Hamilton Canal in Hamilton Yard, off Jackson St
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	
Year Constructed:	c 1872
Architect(s):	
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related
Significance:	Archaeology, Historic; Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Users of this digital material acknowledge that they have read and understood the MACRIS Information and Disclaimer (<http://mhc-macris.net/macrisdisclaimer.htm>)

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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Friday, October 29, 2021 at 12:33 PM

LOWELL CULTURAL RESOURCES INVENTORY

LOW. 992
 [BC] NADIS 6/15/78
 [BF] LUD - 12/13/83
 [C] NAL - 12/22/77
 NADIS 8/13/76

- IDENTIFICATION HAMILTON CANAL, in HAMILTON YARD off JACKSON STREET MAP SHEET # 12
- 1) CURRENT OWNER Proprietors of Locks and Canals on Merrimack River OWNER OCCUPIED yes
- 2) HISTORIC NAME Hamilton Wasteway Gate House
- 3) CURRENT NAME same
- 4) PROPERTY TYPE canal structure 5) ZONING CLASSIFICATION A1
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP -- Locks and Canals HD -- LHPD

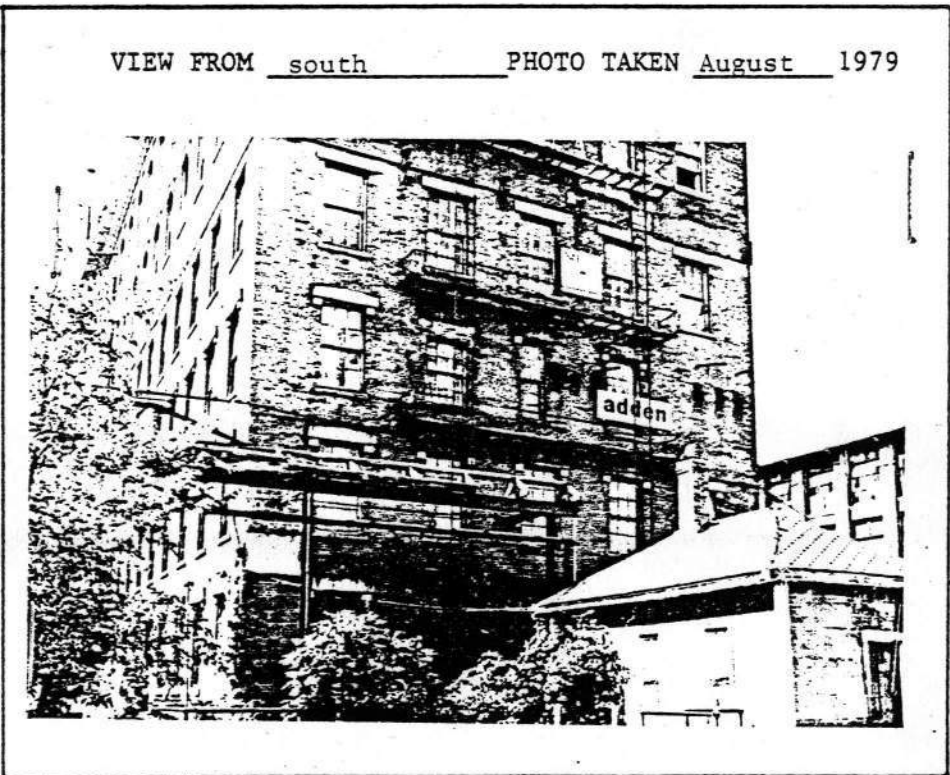
HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE 1872
 SOURCE documented: Lower Merrimack...Inventory, p. 74
- 2) ARCHITECT OR BUILDER unknown
- 3) HISTORIC OWNER Proprietors of Locks and Canals on Merrimack River
- 4) ORIGINAL USE: GF canal regulation UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY yes DATE 1850-1872
 SOURCE documented: Lower Merrimack...Inventory

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE utilitarian
- 2) PRESENT USE:
 GF canal regulation
 UF n/a
- 3) NO OF STORIES 1
- 4) PROP SQ FT n/a
- 5) PLAN rectangular
- 6) ROOF hip
- 7) STRUCTURAL SYSTEM wood frame
- 8) OUTBUILDINGS none
- 9) MATERIALS:
 FOUNDATION not visible

VIEW FROM south PHOTO TAKEN August 1979



FACADE all sides: sheet metal pressed to resemble brick

TRIM wood

- 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS none

ADDRESS HAMILTON CANAL, in HAMILTON YARD off
JACKSON STREET

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC needs major repair
- 2) IF DETERIORATED, CAUSES lack of maintenance
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact original fabric
UF n/a
- 4) SURROUNDING LAND USES industrial, canal frontage
- 5) INTEGRITY OF PROP'S HIST SETTING moderately disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING integral to character

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

This simple, one-story utilitarian structure, along with its gate-operating equipment, dates from 1872. The original gates and gate house were built in 1850 to remove ice from the Hamilton Canal into the lower Pawtucket Canal, via a covered, brick vaulted wasteway. In the early twentieth century, electric motor drive supplanted the manually controlled counter-weighted, rack and pinion machinery which formerly operated the gates.

Sources

The Lower Merrimack River Valley: An Inventory, HAER and MVTM, pp. 74, 75.

ARCHEOLOGICAL COMMENT

Not applicable.

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40591 LOWE HAMILTON WASTEWAY GATE HOUSE HAMIL.GH

Management Information

NPS Legal Interest: NONE - LOCAL GOVERNMENT OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: MA/DEM

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: RESTORATION Doc: NONE Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities

Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: NO

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. ADJ. PARKING AREA PRIVATELY OWNED. FIRE/INTRUSION ALARM
INSTALLED 1993. SCHEDULED FOR RESTORATION BY LHPC. WOOD ELEMENTS ARE DETERIORATING; STRUCTURE IS
NEGLECTED. NPS DAM #143.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-4-B DAMS: MA
QTRS:

CLI	CRBIB	Other
1.	HRS 1. 010385	1. 400101 MALONE, CANALS & IND.
2.	HS ASSESS 2. 400107	2. 010390 GMP
3.	HSR 3.	3.
4.	CLR 4.	4.
5.	5. 400108	

Documentation Level: GOOD

Date Entered/Updated: 07/20/94

Logger: JIG

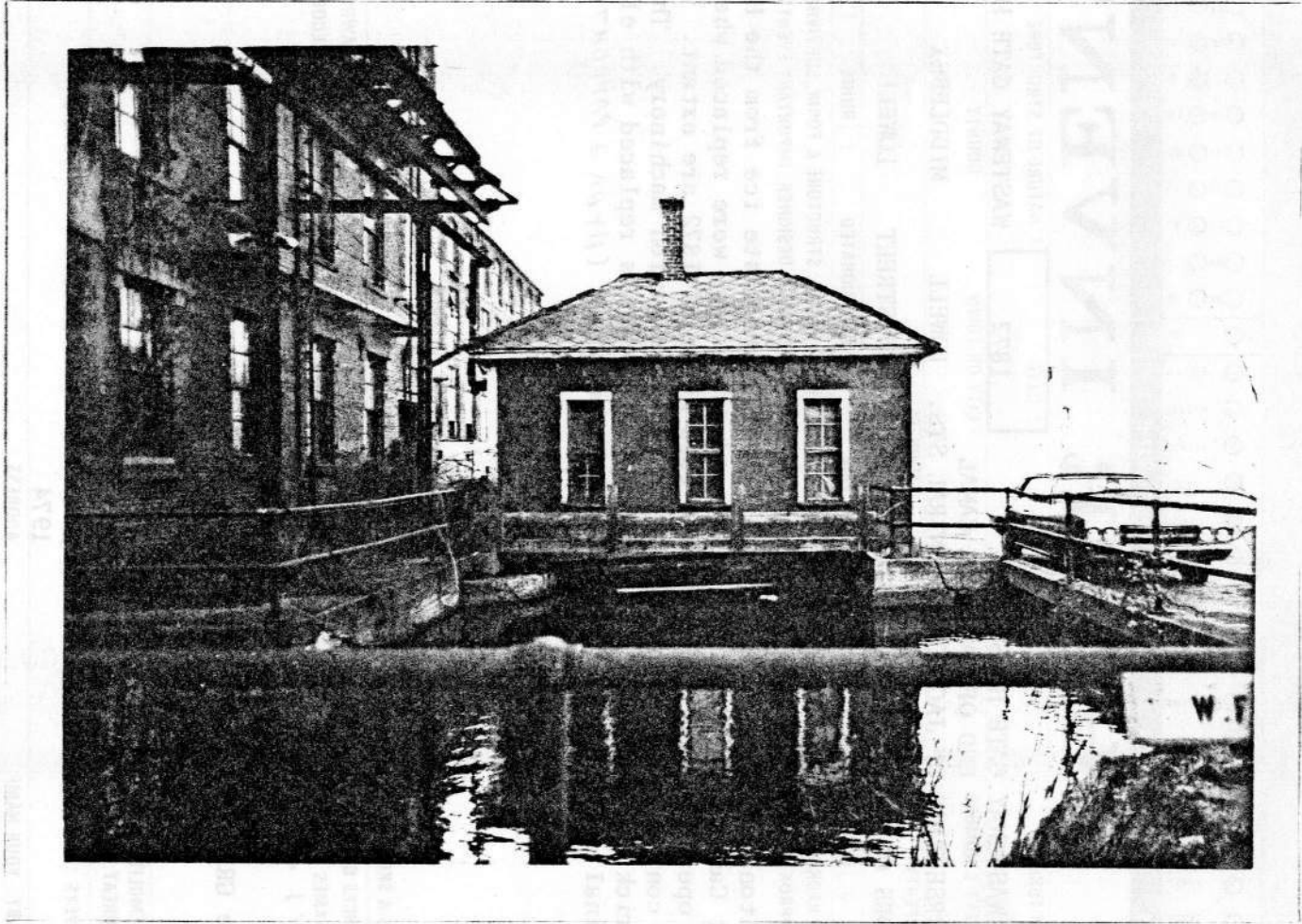
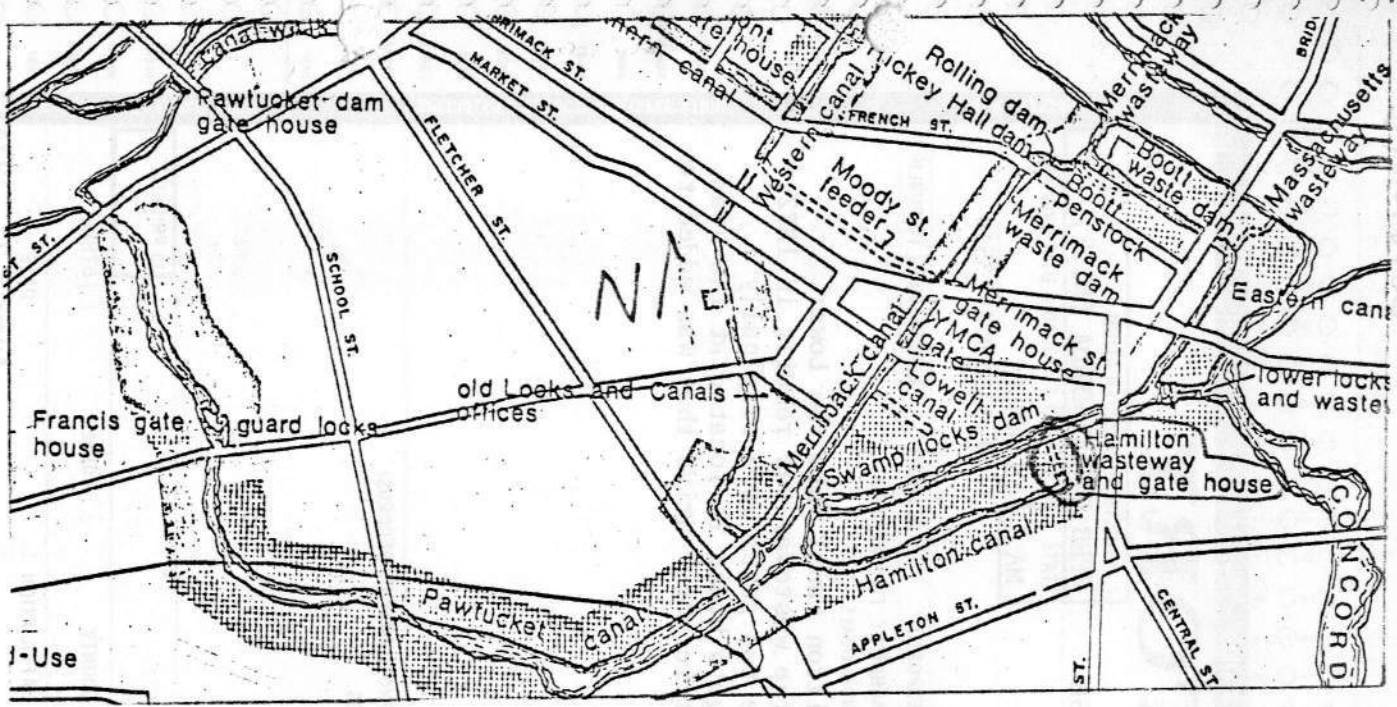
Date of Report: 04/04/95

992
LOW.992



Structure No. **HAMIL.GH**
IDLCS: **40591**
HAMILTON WASTEWAY GATE HOUSE

PHOTO * GUARD # 32264
LIGHT IMPRESSIONS
Rochester, NY



1033

LOW. 992

NHL PRE 1914 C 1800 1809 1810 1819 1820 1829 1830 1839 1840 1849 1850 1859 1860 1869 1870 1879 1880 1889 1890 1899 1900 1909 1910 1919 1920 1929 1930 1935 PRESENT

NR HAER HABS STATE COUNTY LOCAL OTHER DDD FN HIST TECH ARCH TAPES HAER OTHER FIELD SLIDES HIST SURVEY STEREO MOVIES LC AL AK AZ CA CO CT DE FL GA HI IL IN IA KS KY LA ME MD MI MN MS MT NE NH NJ NY NC ND OH OK OR PA RI SC SD TN TX UT VA WA WY

EXISTING SURVEYS DATA DWGS PHOTOGRAPHS STATES

HAER INVENTORY

1. NAME OF STRUCTURE: HAMILTON WASTEWAY GATE HOUSE

2. DATE: 1872

3. NATURE OF STRUCTURE: WASTEWAY GATE HOUSE

4. INDUSTRIAL CLASSIFICATION: SPEC STRUC:HYRDA (81.2)

5. LOCATION: STREET & NUMBER: END OF HAMILTON CANAL; CITY OR TOWN: LOWELL; COUNTY: MIDDLESEX; STATE: MA.; 6. USGS 7 1/2 QUAD & UTM GRID REF.: 19. 3106 10. 4723510

7. OWNER OF PROPERTY: PROPRIETORS OF THE LOCKS & CANALS, FOOT OF JOHN STREET; ADDRESS: LOWELL

8. CONDITION: EXCELLENT GOOD FAIR DETERIORATED RUINS UNEXPOSED ALTERED ACCESSIBLE TO PUBLIC

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/ DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.

The Hamilton Wasteway was first built in 1850 to waste ice from the Hamilton Canal into the Lower Pawtucket Canal. The original gates and gate house were replaced when the wasteway was rebuilt in 1872. The gate operating equipment and the gate house of 1872 are extant. The two gates were originally manually controlled by counterweighted rack and pinion machinery. The gate house is located at the head of the brick vaulted wasteway. Manual operation was replaced with electric motor drive that was added to the original equipment early in the 20th century. (HYRA & PARROTT)

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

LOCUS & CANALS CO RECORDS, LOWELL & BALCAN LIBRARY

See GREAT GATE.

12. DANGER OF DEMOLITION OR DAMAGE YES NO

NATURE OF THREAT: 13. PRIORITY

14. EXISTING SURVEYS AND DATES: NHL NR HAER HABS STATE COUNTY LOCAL OTHER

1974

15. INVENTORIED BY: YOUR NAME: Charles Hyde & Charles Parrott; ADDRESS: HAER Lowell Survey; AFFILIATION: HAER Lowell Survey; DATE: August 24, 1974

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MFG) UTILITIES (UTIL) POWER SOURCES & PRIME MOVERS (PS & PM) TRANSPORTATION (TRANS) COMM BRIDGES

MACH FABR TEQUIP INST GWFG WATER SANI GAS ELEC MISL WATER WHEEL WATER TURB WIND STEAM RECIP STEAM TURB INT COMB DIESEL ELEC RP ROAD CANAL MARINE AIR PIPE TAX RLYV BEAM ARCH TRUSS SUSP AQUE TRES CANT MOVE

DATES OF CONSTRUCTION

EXTRACTIVE INDUSTRIES (EXTRAC)

BULK PRODUCT INDUSTRIES (BULK)

SUB-CLASSIFICATION

SPECIALIZED STRUCTURES (SPEC STRUC)

BUILDING TECHNOLOGY (BLD TECH)

0
1
2
3
4
5
6
7
8
9
93
92
91
90
89 MUSEUM
88 ADAPT
87 HOUS
86 P & ET
85 MATS
84 MATH
83 HEAT
82 CONST
81 HYRDA
80 TUN
79 DAM
78
77
76
75 ANCIL
74 MECH
73 FENES
72 ROOF
71 FLOOR
70 FRAME
69 FOUND

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No: LOW.9016
Historic Name: Lower Western Canal - Lawrence Wasteway
Common Name:
Address: Western Canal
Btn Lawrence Dam and Merrimac River
City/Town: Lowell
Village/Neighborhood: Downtown
Local No: C
Year Constructed: c 1830
Architect(s):
Architectural Style(s):
Use(s): Other Industrial; Other Water Related; Utilities Other
Significance: Archaeology, Historic; Engineering; Industry
Area(s): LOW.C: Locks and Canals District
LOW.BC: Lowell National Historical Park
LOW.BE: Downtown Lowell Historic District
Designation(s): Nat'l Register District (08/13/1976); Nat'l Historic
Landmark (12/22/1977); Nat'l Register District
(06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):



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Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Friday, October 29, 2021 at 12:28 PM

WION. WENRDIS 6/5/78
LMD. 12/13/83

WENRDIS 8/13/76
NHL- 12/22/77

LOW. 9016
C AC BE

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40616 Structure Number: LAWE.WW
Structure Name 1: LAWRENCE WASTEWAY
Structure Name 2: LOWER WESTERN CANAL - LAWRENCE WASTEWAY
Structure Name 3:
Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
ORGCODE: 1780 County: MIDDLESEX State: MA
Regional Office: NORTH ATLANTIC
Subunit ORGCODE: Name:
Alpha Code: County: MIDDLESEX State: MA
Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED Date: 10/18/85
Significance: NATIONAL
NHL: YES Date: 12/22/77
Significance
ACTUALLY A PORTION OF THE WESTERN CANAL BELOW THE LAWRENCE DAM; FEEDS DIRECTLY INTO THE MERRIMACK RIVER.

Historical Information

Period of Construction: HISTORIC
Date: 1828-1832 (BU) Designer: ()
Date: - () Designer: ()
Date: - () Designer: ()
Date: - () Designer: ()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions Current Uses
CANAL CANAL
UTILITY SERVICE STRUCTURE UTILITY SERVICE STRUCTURE

Buildings Materials Structures
Foundation: Sub-structure: STONE
Framing: GRANITE
Walls: Super-structure: STONE
Roof: GRANITE
Other:
Volume:
Description

PORTION OF LOWER WESTERN CANAL FROM LAWRENCE DAM TO MERRIMACK RIVER; WIDE ROCKY CANAL BED SLOPES MARKEDLY TOWARDS RIVER. CANAL WALLS COMPRISED OF MANY DIFFERENT MATERIALS; MAY HAVE SERVED AS FOUNDATIONS FOR FORMER MILL BLDGS. CROSSED BY 24" PIPE.

Impact Level: MODERATE Impact Types: STRUCTURAL DETERIORATION
VEGETATION
Condition: FAIR NEGLECT

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40616 LOWE LAWRENCE WASTEWAY LAWE.WW

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: BH
Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96
Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS CANAL WALLS/FLOOR. CANAL WALKWAY PROPOSED.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-5 DAMS:
QTRS:

CLI CRBIB Other

- | | | | | |
|----|--------------|-----------|----|------------------------------|
| 1. | HRS 1. | 010385 | 1. | 400101 MALONE, CANALS & IND. |
| 2. | HS ASSESS 2. | 400107 | 2. | 010390 GMP |
| 3. | HSR 3. | | 3. | |
| 4. | CLR 4. | | 4. | |
| 5. | | 5. 400108 | | |

Documentation Level: FAIR

Date Entered/Updated: 07/20/94

Logger: JIG

Date of Report: 04/04/95

LOW.9016



Structure No. LAWE.WW
IDLCS: 40616
LAWRENCE WASTEWAY

PHOTO ★ GUARD # 3224
LIGHT IMPRESSIONS®
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.931
Historic Name:	Pawtucket Canal Lower Locks and Dam
Common Name:	
Address:	Lower Pawtucket Canal East of Central St
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	
Year Constructed:	1822
Architect(s):	Boott, Kirk
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related; Utilities Other
Significance:	Engineering; Industry; Transportation
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Thursday, November 7, 2019 at 9:37: AM

LOW.931

LOWELL CULTURAL RESOURCES INVENTORY

BC - NRD 13. 61578
C - NRD 13. 8113/76
NHL-12122/77

- IDENTIFICATION PAWTUCKET CANAL East of CENTRAL STREET MAP SHEET # 12
- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
- 2) HISTORIC NAME Lower Locks
- 3) CURRENT NAME same
- 4) PROPERTY TYPE canal structure 5) ZONING CLASSIFICATION B3
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP -- Locks and Canals HD -- LHPD

BE - NRD. 1213183

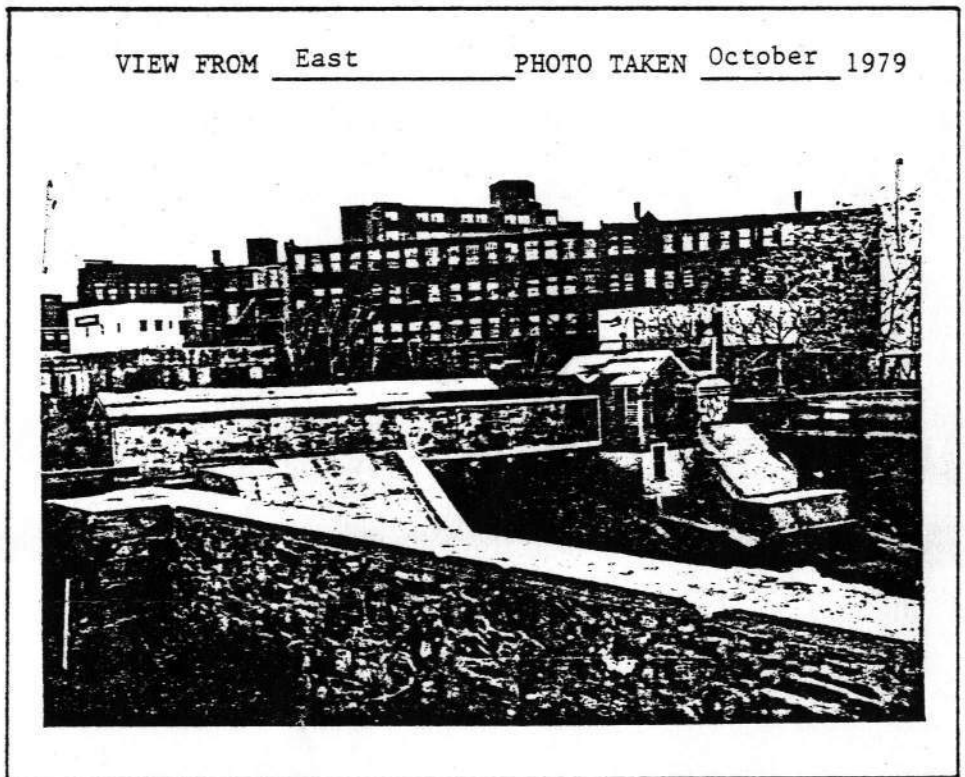
HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE 1822-23; 1841-43, etc.
SOURCE documented: Lower Merrimack...Inventory, p. 72
- 2) ARCHITECT OR BUILDER unknown
- 3) HISTORIC OWNER Proprietors of Locks and Canals
- 4) ORIGINAL USE: GF navigational locks UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY yes DATE ca. 1792-1822
SOURCE documented: See Research Report

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE utilitarian
- 2) PRESENT USE:
GF canal navigation
UF n/a
- 3) NO OF STORIES 1
- 4) PROP SQ FT n/a
- 5) PLAN rectangular
- 6) ROOF endwall & facade gable
- 7) STRUCTURAL SYSTEM
wood frame
load-bearing masonry
- 8) OUTBUILDINGS
concrete siphons
- 9) MATERIALS:
FOUNDATION
rubble stone
FACADE wood clapboard, metal sheathing
TRIM none
- 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS none

VIEW FROM East PHOTO TAKEN October 1979



ADDRESS PAWTUCKET CANAL East of CENTRAL STREET

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC needs minor repair
- 2) IF DETERIORATED, CAUSES lack of maintenance
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact with evolutionary alterations
UF n/a
- 4) SURROUNDING LAND USES commercial, recreational
- 5) INTEGRITY OF PROP'S HIST SETTING severely disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING integral to character

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

The Lower Locks and Dam are located at the end of the Pawtucket Canal, above a wasteway that empties into the Concord River. Like the Swamp Locks, Lower Locks assumed its basic configuration of two locks to the south of the dam in 1822-23, but much of its present fabric dates to an 1841-43 rebuilding.

Just as in the case of Swamp Locks, that reconstruction narrowed the twenty-five foot wide rubble stone locks to twelve feet, by building new stone walls at the locks' gates, and wooden walls along the lock chambers' sides. The wooden walls are now gone.

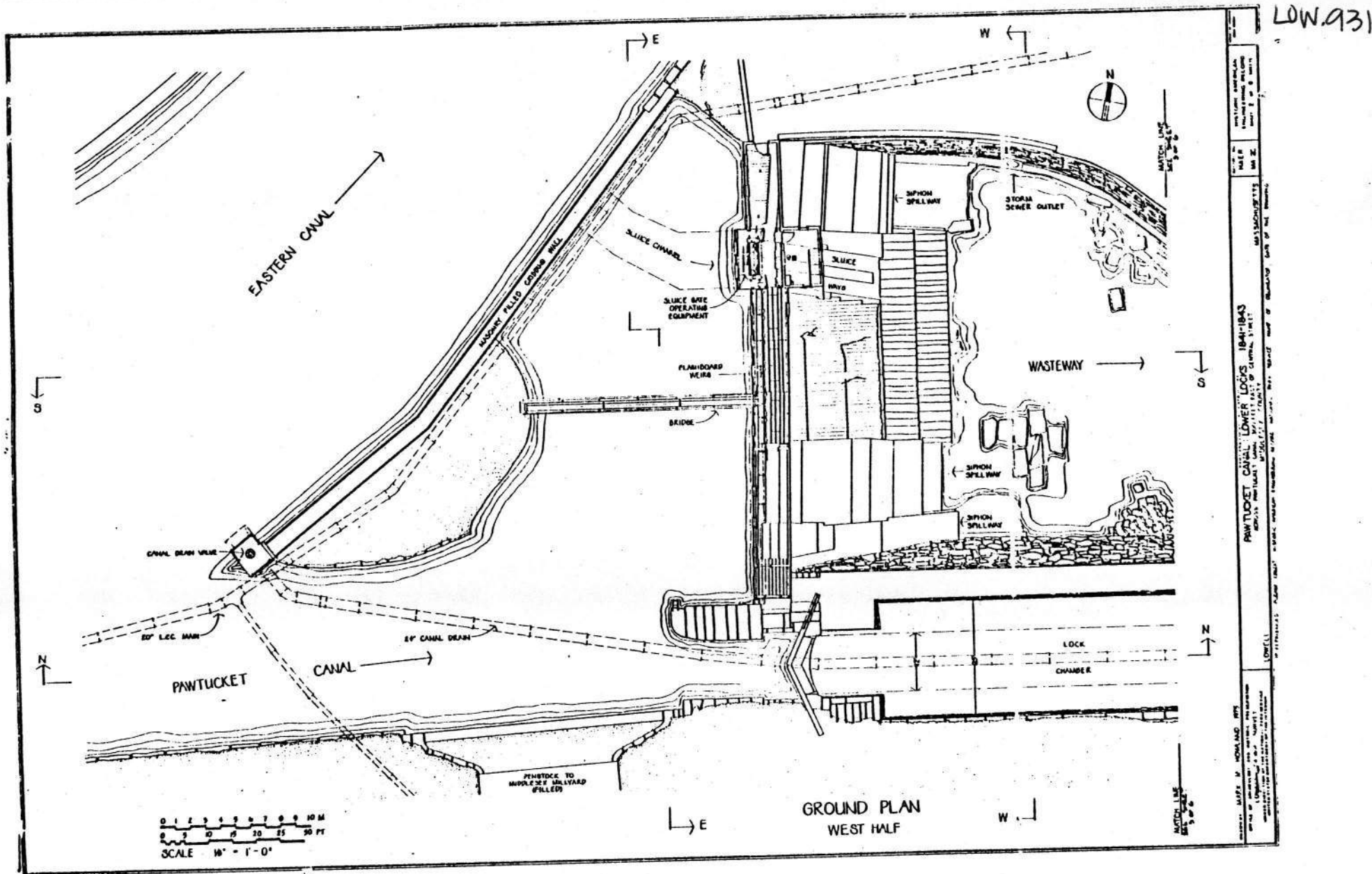
Other changes to the complex include a 1905 deepening of the eastern end of the lowest lock by two-and-a-half feet, a rebuilding of the sluiceway at the north side of the dam in 1887, and construction of concrete siphon spillways between 1946 and 1958. The house atop the dam has been in place since the late nineteenth century.

Source

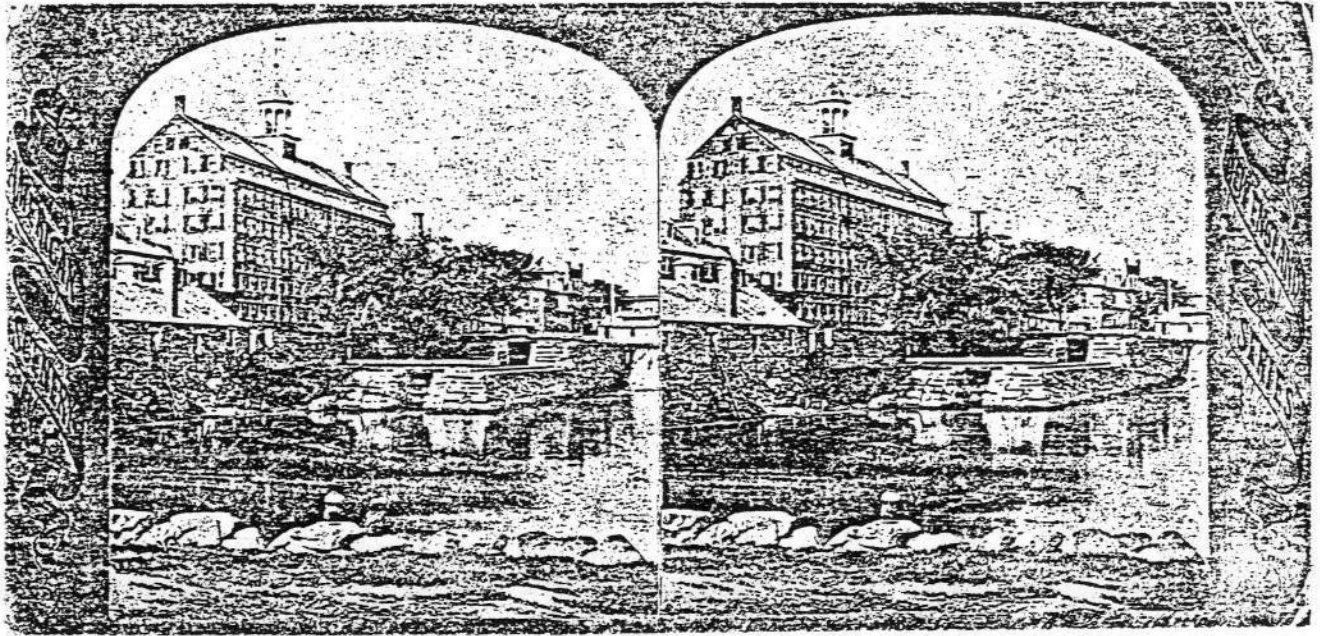
Lower Merrimack Valley...Inventory, p. 72.

ARCHEOLOGICAL COMMENT

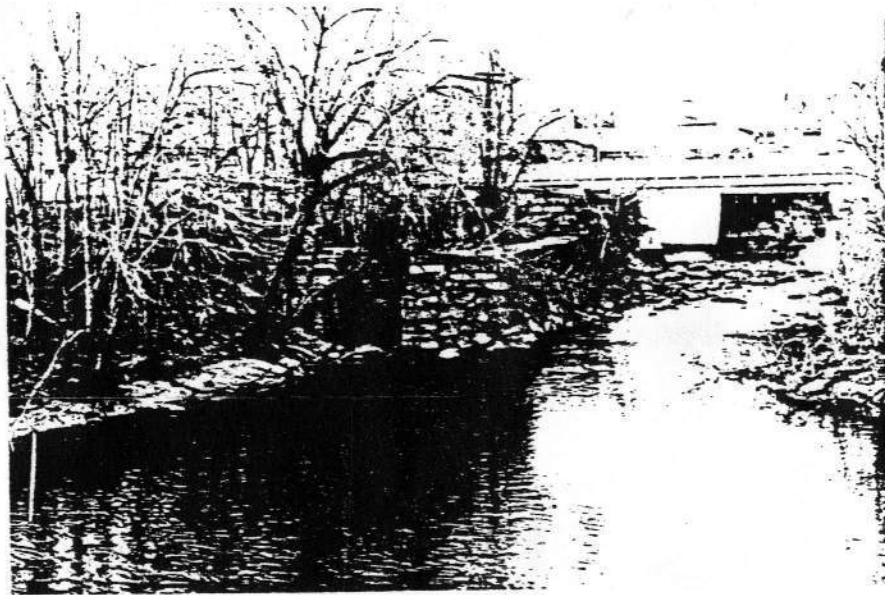
See comment on preceding Swamp Locks form.



Ground plan of the west half of the Lower Locks complex, drawn for HAER, in 1975. The dam is right center, the upper lock at lower right. From Malone's The Lowell Canal System, 1976.



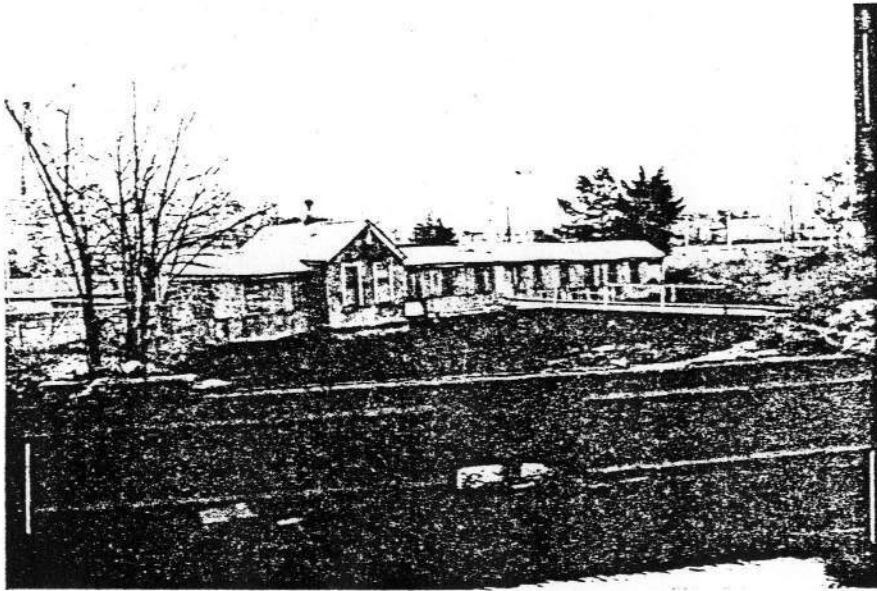
Stereographic view of the Lower Locks and the adjacent Middlesex Company Mill No. 1 (built 1832), photographed before 1880. U. of Lowell Library, Special Collections, photo file.



View of the Lower Locks from the east.

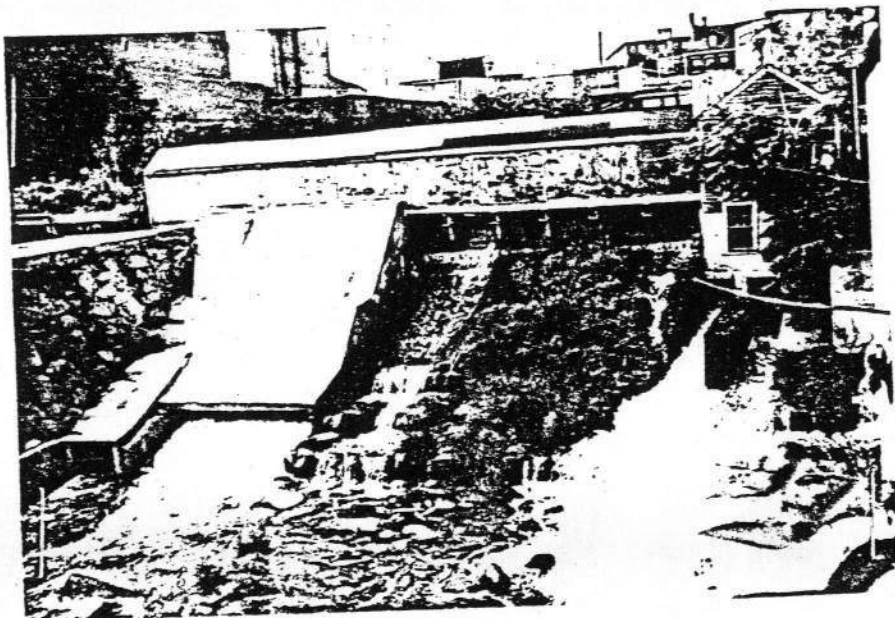
Photo taken in December 1979

LOW.931

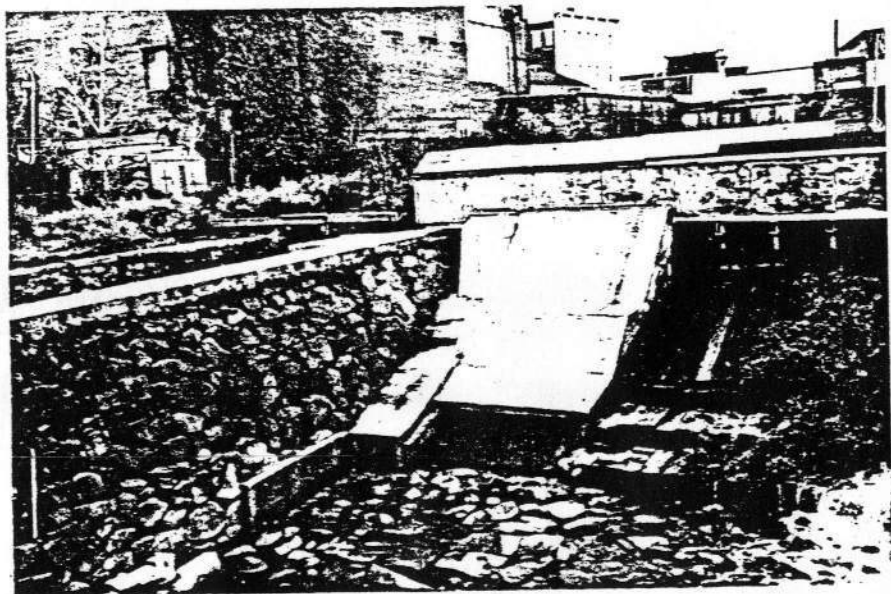


View of Lower Locks from the northwest. Photo taken in October 1979.

LOW.931



View of the Lower Locks from the northeast. Note the sluiceway at right, the stepped configuration of the dam at center, and the concrete siphon spillways at the left, beside the lock wall. Photo taken in August 1979.



View of the Lower Locks from the northeast, during a period when the water has been drained from the canal. At left is the rubble stone wall of the upper one of the pair of Lower Locks. Photo taken in October 1979.

LOW 931

HAER INVENTORY

EXISTING SURVEYS DATA DWGS PHOTOGRAPHS STATES

1. NAME OF STRUCTURE: LOWER LOCKS & DAM
 2. DATE: 1841-1843
 3. NATURE OF STRUCTURE: DAM & NAVIGATION LOCKS
 4. INDUSTRIAL CLASSIFICATION: SPEC STRUC:HYDRA (81.2)

5. LOCATION: STREET & NUMBER: LOWER PAWTUCKET CANAL JUST EAST OF CENTRAL ST.
 CITY OR TOWN: LOWELL COUNTY: MIDDLESEX
 STATE: MA 6. USGS 7 1/2 QUAD & UTM GRID REF.: LOWELL

7. OWNER OF PROPERTY: PROPRIETORS OF THE LOCKS & CANAL
 ADDRESS: FOOT OF JOHN STREET LOWELL MA 01852

8. CONDITION: EXCELLENT GOOD FAIR DETERIORATED RUINS UNEXPOSED ALTERED ACCESSIBLE TO PUBLIC

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.
 The basic configuration of this complex (two navigation locks and dam at the west end of the upper lock) was achieved in 1822-1823 when the Pawtucket Canal was reconstructed. However, the extant physical works are based on the rebuilding of 1841-1843, when the dam was rebuilt in its stepped configuration and the locks narrowed from 25' to 12'. The lock walls around the three gate pockets and the lower portion of the lower chamber were done in ashlar, and the remaining chamber walls were constructed of wood, all within the existing 25' rubble locks. The wood sides no longer remain although they were previously renewed. Due to frequent low water conditions in the Concord River at the low end of the locks, in 1905, the easterly half of the lower lock was deepened about 2-1/2 feet. In 1910, a 24" pipe was laid from a valve in the canal above the dam, beneath the upper lock, emptying into the lower lock, to drain the lower Pawtucket Canal. The sluice way on the north side of the dam, which was probably built in 1841, was reconstructed in 1887. A protective light frame house has been atop the crest of the dam and over the sluiceway since the late 19th century. Three concrete siphon spillway were built over the dam between 1946 and 1958.

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.
 11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

See GREAT GATE.

12. DANGER OF DEMOLITION OR DAMAGE YES NO
 NATURE OF THREAT: 13. PRIORITY

14. EXISTING SURVEYS AND DATES: NHL NR HAER 1974 HABS STATE COUNTY LOCAL OTHER

15. INVENTORIED BY: YOUR NAME: Charles Hyde & Charles Parrott ADDRESS: HAER Lowell Survey AFFILIATION: DATE: August 23, 1974

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MFG) UTILITIES (UTIL) POWER SOURCES & PRIME MOVERS (PS & PM) TRANSPORTATION (TRANS) COMM BRIDGES

MACH FABR TCOUIP INST GWFG WATER SARI GAS ELEC MUSL WATER WHEEL WATER TURB WIND RECIP STEAM TUBB INT COMB DIESEL ELEC RR ROAD CANAL MARINE AIR PIPE T&T R&TY BEAM ARCH TRUSS SUSP AQUE TRES CANT MOVE

DATES OF CONSTRUCTION

EXTRACTIVE INDUSTRIES (EXTRACT)

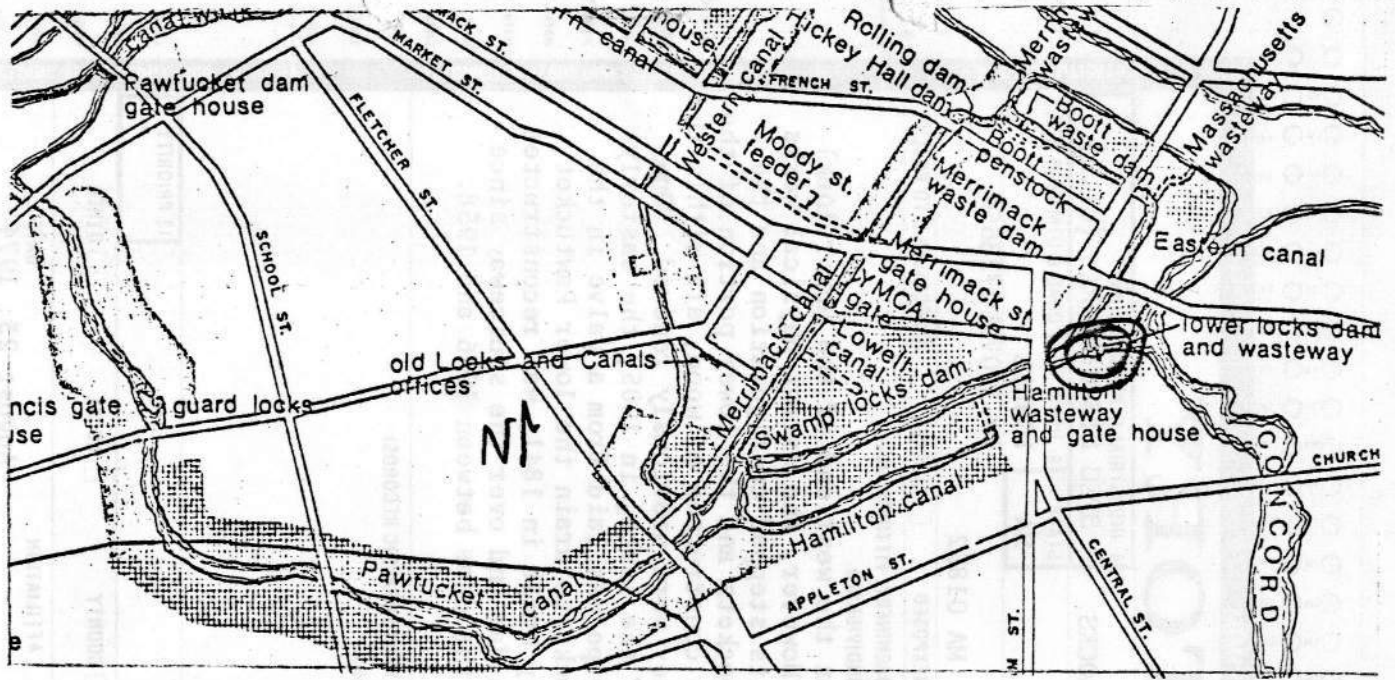
BULK PRODUCT INDUSTRIES (BULK)

SUB-CLASSIFICATION

SPECIALIZED STRUCTURES (SPEC STRUC)

BUILDING TECHNOLOGY (BLD TECH)

P30518X



LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40574 Structure Number: L.LOCK

Structure Name 1: LOWER LOCKS
 Structure Name 2: PAWTUCKET CANAL - LOWER LOCKS
 Structure Name 3: "LOWER LOCK"

Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
 ORGCODE: 1780 County: MIDDLESEX State: MA
 Regional Office: NORTH ATLANTIC

Subunit ORGCODE: Name:
 Alpha Code: County: MIDDLESEX State: MA

Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED Date: 10/18/85
 Significance: NATIONAL
 NHL: YES Date: 12/22/77

Significance
 SITE OF OLD SAW/GRIST/TEXTILE MILLS. DAM AND LOCKS HERE WERE REBUILT OR RENEWED SEVERAL TIMES - MOST NOTABLY IN 1822-23 BY KIRK BOOTT, IN ORDER TO MAINTAIN LOWER CANAL LEVEL 17' ABOVE CONCORD RIVER. TWO LOCK CHAMBERS REQ'D.

Historical Information

Period of Construction: HISTORIC

Date: 1792-1802 (BU) Designer: ()
 Date: 1822-1823 (AL) Designer: BOOTT, KIRK (E)
 Date: 1841-1910 (AL) Designer: ()
 Date: 1985-1993 (RR) Designer: NPS & DEM (O)

Functions, Uses, Materials, Impacts, and Condition

Historic Functions	Current Uses
CANAL LOCK	CANAL
CANAL	UTILITY SERVICE STRUCTURE
UTILITY SERVICE STRUCTURE	INTERPRETATION FACILITY

Buildings—Materials—Structures

Foundation:	Sub-structure: GRANITE
Framing:	
Walls:	
Roof:	Super-structure: GRANITE
Other:	WOOD
Volume:	IRON

Description
 RESTORED STONE DOUBLE LOCK CHAMBERS w/ TIMBER BALANCE LEVERS AT LOWER PAWTUCKET CANAL, JUST BELOW EASTERN CANAL MOUTH. LUKE "DEACON" RAND STONEMWORK STILL EVIDENT @ UPPER LOCK CHAMBER & WASTEWAY WALLS. ADJ. DAM TOPPED w/ GAUGE AND GATE HOUSES.

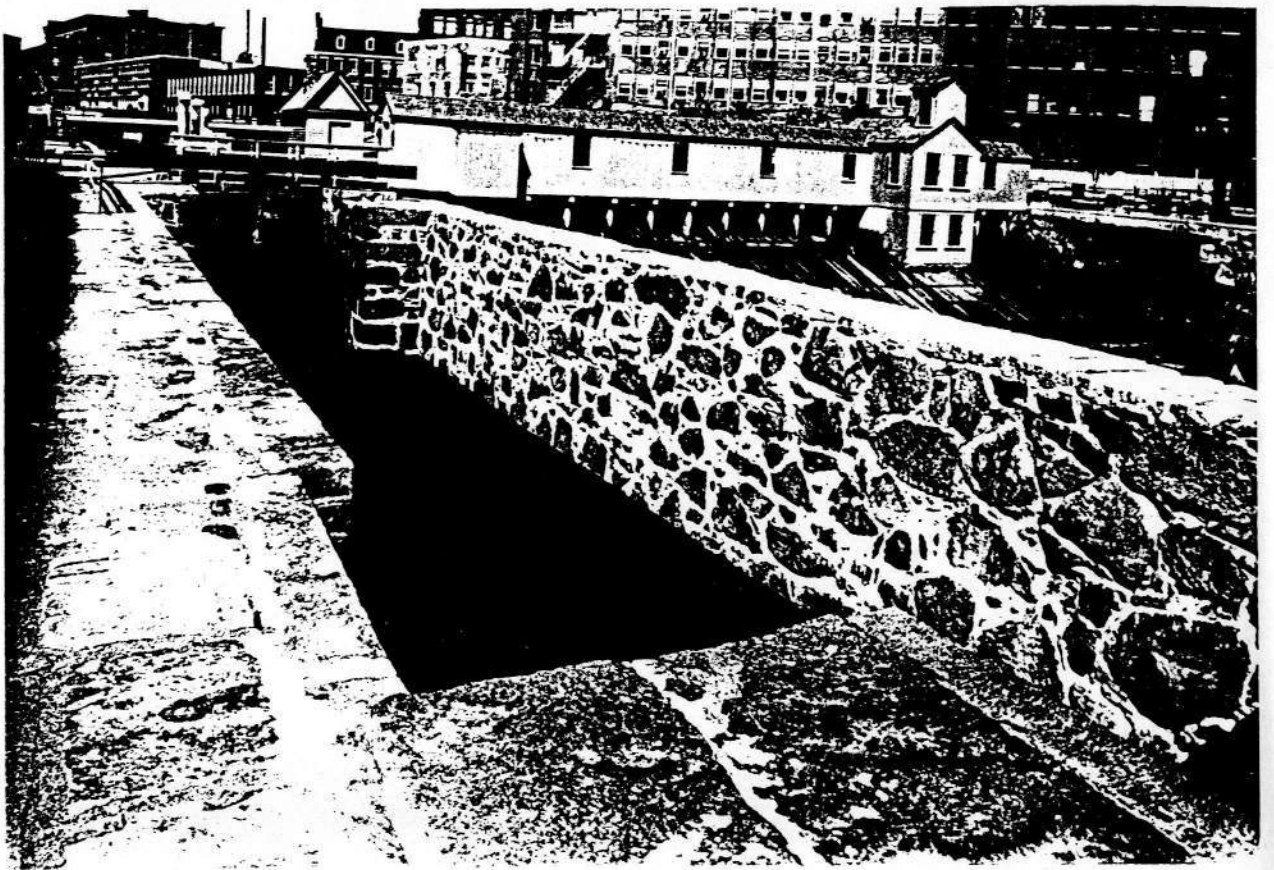
Impact Level: MODERATE Impact Types: STRUCTURAL DETERIORATION
 INUNDATION (FLOODING)

Condition: GOOD

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

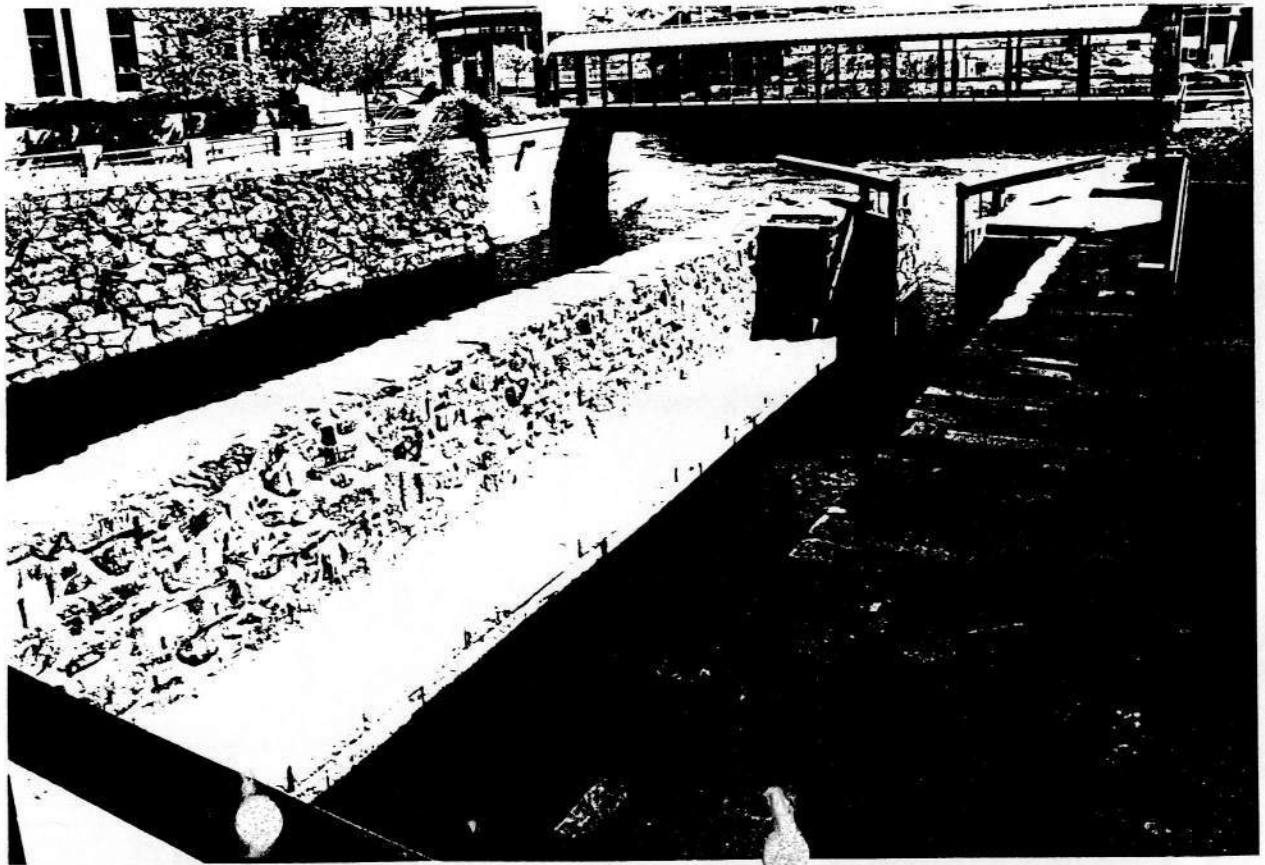
IDLCS	Park	Structure Name	Number
40574	LOWE	LOWER LOCKS	L.LOCK
Management Information			
NPS Legal Interest: NONE - PRIVATELY OWNED		Federal Owner:	
Life: Exp. Date: / /		Local Owner: BH	
Management Category: MUST BE PRES. & MAINT		Management Date: 10/16/87	
Management Agreement: MEMORANDUM OF UNDERSTANDING		Nat. Exp. Date: 04/03/96	
Proposed Ultimate Treat:		Doc:	Date: / /
Approved Ultimate Treat: PRESERVATION		Doc: GMP	Date: 08/00/81
Treatment Responsibilities		Treatment Costs	
Interim Treatment: NPS		Interim:	\$0 Date: /
Ultimate Treatment: NPS		Ultimate:	\$0 Date: /
Routine Maintenance: NPS Level of Estimate:			
Cyclic Maintenance: NPS		Estimator:	
Approved Ultimate Treatment Completed: YES			
Management Text			
LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS CANAL WALLS & FLOOR; NPS SHARES GROUNDS MAINT. RESPONSIBILITIES W/ STATE.			
Major Bibliographical References			
Nat. Reg.: 78003149		CSI:	Nat. Cat: NO
HABS: HAER: MA-2-C		BRIDGES: DAMS: MA00835 QTRS:	
CLI	CRBIB	Other	
1. HRS 1. 010385		1. 400101 MALONE, CANALS & IND.	
2. HS ASSESS 2. 400107		2. 010390 GMP	
3. HSR 3. 010625		3. 010674 MAHLSTED, HSR ARCHEOL.	
4. CLR 4.		4.	
5. 5. 400108			
Documentation Level: GOOD			
Date Entered/Updated: 07/20/94		Logger: JIG	

Date of Report: 04/04/95



Structure No. L.LOCK
IDLCS: 40574
LOWER LOCKS

PHOTO * GUARD # 3224
LIGHT IMPRESSIONS®
Rochester, NY



Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.929
Historic Name:	Lower Pawtucket Canal
Common Name:	Old Canal
Address:	Lower Pawtucket Canal
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	
Year Constructed:	c 1792
Architect(s):	
Architectural Style(s):	
Use(s):	Other Industrial; Other Transportation; Other Water Related; Utilities Other
Significance:	Engineering; Industry; Transportation
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Monday, November 1, 2021 at 11:37 AM

LOWELL CULTURAL RESOURCES INVENTORY

LOW. 929
 [B] NRDS-61578
 [C] NRDS-8113/76
 NPL-12/22/77

IDENTIFICATION From the MERRIMACK RIVER above the PAWTUCKET DAM, to the CONCORD RIVER near EAST MERRIMACK STREET MAP SHEET # 5, 10-13

- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
- 2) HISTORIC NAME Patucket or Pawtucket Canal
- 3) CURRENT NAME Pawtucket Canal
- 4) PROPERTY TYPE canal 5) ZONING CLASSIFICATION various
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP, Locks and Canals HD, LHPD

HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE 1792-6, 1822-4
 SOURCE documented: See Research Report, and Lowell Canal System, Malone.
- 2) ARCHITECT OR BUILDER unknown
- 3) HISTORIC OWNER Proprietors of Locks and Canals on the Merrimack River
- 4) ORIGINAL USE: GF transportation canal UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY no DATE _____
 SOURCE _____

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE n/a
- 2) PRESENT USE:
 GF power canal
 UF n/a
- 3) NO OF STORIES n/a
- 4) PROP SQ FT n/a
- 5) PLAN n/a
- 6) ROOF n/a
- 7) STRUCTURAL SYSTEM masonry and reinforced concrete
- 8) OUTBUILDINGS see following forms
- 9) MATERIALS:
 FOUNDATION n/a
 FACADE ashlar granite, rubble stone, reinforced concrete
 TRIM n/a

VIEW FROM north PHOTO TAKEN October 1979



- 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS banks are developed as park at northern end

From the MERRIMACK RIVER above the PAWTUCKET DAM,
 to the CONCORD RIVER near EAST MERRIMACK STREET
 ADDRESS _____

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC. good
- 2) IF DETERIORATED, CAUSES n/a
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact with evolutionary alterations
 UF n/a
- 4) SURROUNDING LAND USES railroad, expressway, canal frontage, river frontage, commercial, industrial, residential, recreational, institutional
- 5) INTEGRITY OF PROP'S HIST SETTING moderately disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING focal point in area

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

See Research Report, pages 1-3.

The Pawtucket Canal is a 9188 foot-long transportation and power canal that flows from the Merrimack River above the Pawtucket Falls, to the Concord River a few hundred yards above the confluence with the Merrimack River. The canal has three sets of locks--The Guard Locks, Swamp Locks, and Lower Locks--which accommodate a thirty-two foot difference in water level between the head of the canal on the Merrimack and the wasteway on the Concord. See the inventory forms on the individual sets of locks.

The Pawtucket varies from 80 to 100 feet in width, and averages eight feet deep. Its section is basically rectangular. Portions of its stone walls have been replaced with poured concrete.

ARCHEOLOGICAL COMMENT

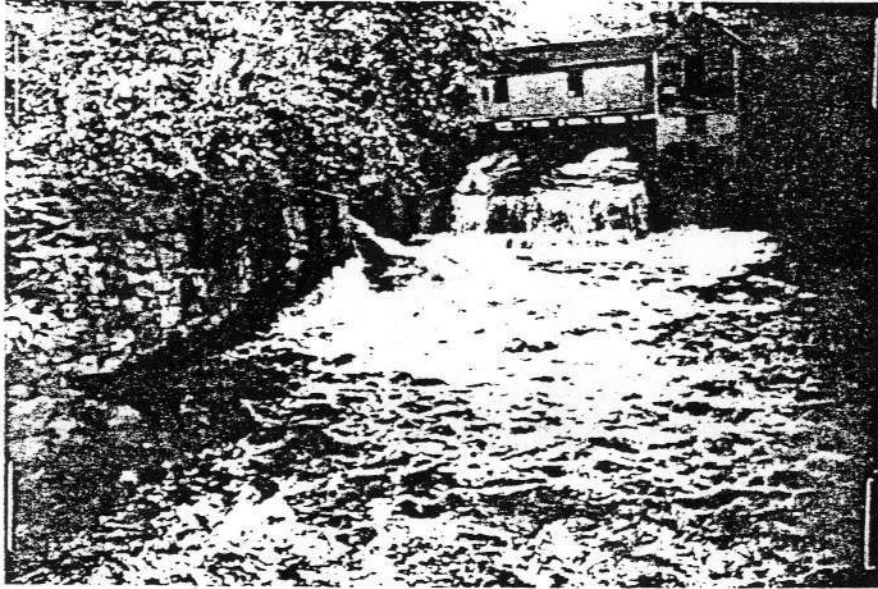
The 1820's widening of the Pawtucket Canal probably eradicated any remains of the canal's original fabric, including such features as the eliminated Minx Locks. The lengths of the canal between Broadway and School Streets, and above the Guard Locks have received less adjacent development than the lower portions, and possibly retain some traces of such early, canal-related features such as the towpath. The Middlesex Company near the Lower Locks was the only millyard to draw water for power directly from the Pawtucket, and filled-in penstocks and tailraces appear to survive beneath the surface of that razed yard.



View from Thorndike Street west along the Pawtucket, showing the canal with most of the water drawn off. Photo taken in October 1979.



View from the southwest of the Pawtucket Canal, at its junction with the Hamilton Canal (right). Photo taken in October 1979.



Pawtucket Canal passing through Swamp Locks. Photo taken in August 1979.

LOW.929

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40575 LOWE LOWER PAWTUCKET CANAL LOW.PAWT

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: L&C

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities

Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS (BUT DOES NOT OWN) PAWTUCKET CANAL WALLS/FLOORS; NPS SHARES MAINT. RESPONSIBILITIES W/ STATE ALONG CANALWAY.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-2 DAMS:
QTRS:

CLI

CRBIB

Other

- | | | | | | |
|----|-----------|----|--------|----|------------------------------|
| 1. | HRS | 1. | 010385 | 1. | 400101 MALONE, CANALS & IND. |
| 2. | HS ASSESS | 2. | 400107 | 2. | 010390 GMP |
| 3. | HSR | 3. | 010625 | 3. | |
| 4. | CLR | 4. | | 4. | |
| 5. | | 5. | 400108 | | |

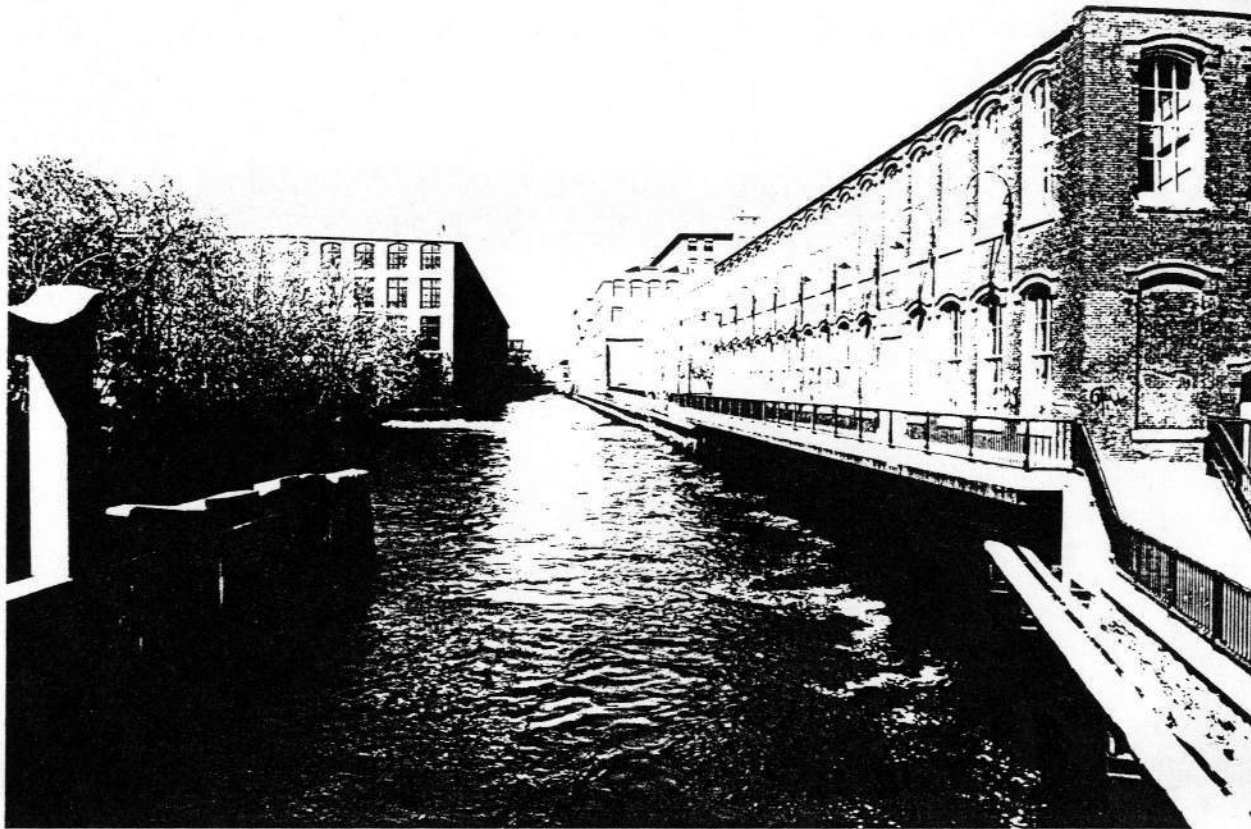
Documentation Level: GOOD

Date Entered/Updated: 07/20/94

Logger: JIG

Date of Report: 04/04/95

LOW.909



Structure No. **LOW.PAWT**
IDLCS: **40575**
LOWER PAWTUCKET CANAL

PHOTO ★ GUARD # 3224
LIGHT IMPRESSIONS[®]
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No: LOW.933
Historic Name: Merrimack Canal
Common Name:
Address: Merrimack Canal
Parallel to Dutton St
City/Town: Lowell
Village/Neighborhood: Downtown
Local No:
Year Constructed: 1822
Architect(s):
Architectural Style(s):
Use(s): Other Industrial; Other Water Related
Significance: Engineering; Industry; Transportation
Area(s): LOW.A: City Hall District
LOW.C: Locks and Canals District
LOW.BC: Lowell National Historical Park
LOW.BE: Downtown Lowell Historic District
Designation(s): Nat'l Register District (04/21/1975); Nat'l Register District
(08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l
Register District (06/05/1978); Local Historic District
(12/13/1983)
Building Materials(s):



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

LOWELL CULTURAL RESOURCES INVENTORY

[BC] NRD 13-615/78
[C] NRD 13-8113/76
NHL-12122/77

IDENTIFICATION Parallel to DUTTON STREET MAP SHEET # 7,11

1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes

2) HISTORIC NAME Merrimack Canal [A] NRD 13-4121/75 [BE] LTD-12113/83

3) CURRENT NAME same

4) PROPERTY TYPE canal 5) ZONING CLASSIFICATION A1, B3, B2A

6) TAXES: PAYMENTS current STATUS clear

7) WITHIN BOUNDARIES OF LNHP -- City Hall HD -- Locks and Canals HD -- LHPD

HISTORICAL ABSTRACT

1) CONSTRUCTION DATE 1822-23
SOURCE documented: See Research Report

2) ARCHITECT OR BUILDER unknown

3) HISTORIC OWNER Merrimack Manufacturing Company (1822-24)

4) ORIGINAL USE: GF transportation and water power UF n/a

5) PREVIOUS BLDGS ON PROPERTY no DATE _____
SOURCE _____

DESCRIPTIVE DATA

1) ARCHITECTURAL STYLE n/a

2) PRESENT USE:
GF canal
UF n/a

3) NO OF STORIES n/a

4) PROP SQ FT n/a

5) PLAN n/a

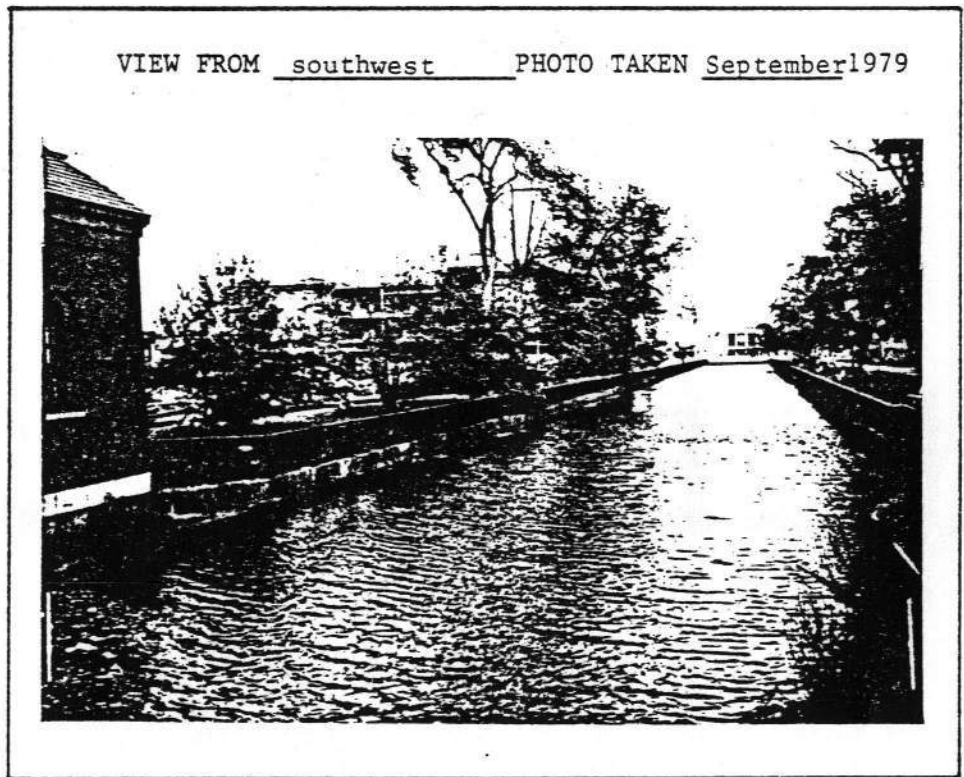
6) ROOF n/a

7) STRUCTURAL SYSTEM ashlar and concrete walls

8) OUTBUILDINGS various gates

9) MATERIALS:
FOUNDATION n/a
FACADE n/a
TRIM n/a

10) NOTABLE SURFACE & LANDSCAPE ELEMENTS tree and brush-lined course, iron fence north of Merrimack Street



ADDRESS Parallel to DUTTON STREETVISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC good
- 2) IF DETERIORATED, CAUSES n/a
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact with evolutionary alterations
UF n/a
- 4) SURROUNDING LAND USES railroad, canal frontage, commercial, industrial, recreational, institutional
- 5) INTEGRITY OF PROP'S HIST SETTING severely disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING focal point in area

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

The Merrimack Canal was built by the Merrimack Manufacturing Company between the spring of 1822 and November of 1823, as the first power canal off the Pawtucket Canal. The canal is ten feet deep, 3,500 feet long and forty to fifty feet wide. The early and rapid construction of the Merrimack Canal produced a canal of very irregular section, with ledges of bedrock projecting into the course of the canal at many points.

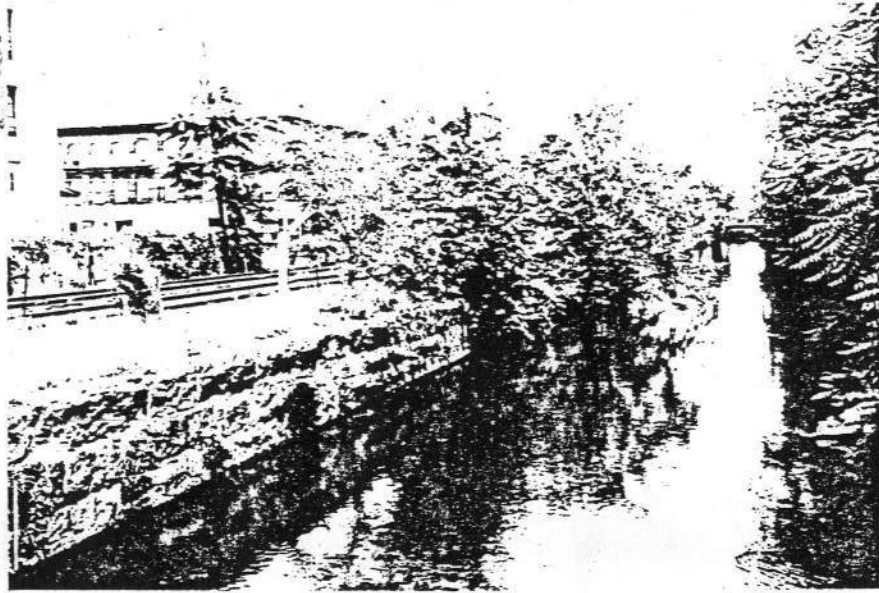
The Merrimack Canal was built to deliver water to the Merrimack Manufacturing Company at a level thirty feet above the water in the Merrimack River behind the mills. The canal later also supplied water to the Machine Shop, the Lowell Manufacturing Company via the Lowell Canal (after 1828), and Boott Mills on the Eastern Canal (via a penstock built in 1849).

Sources

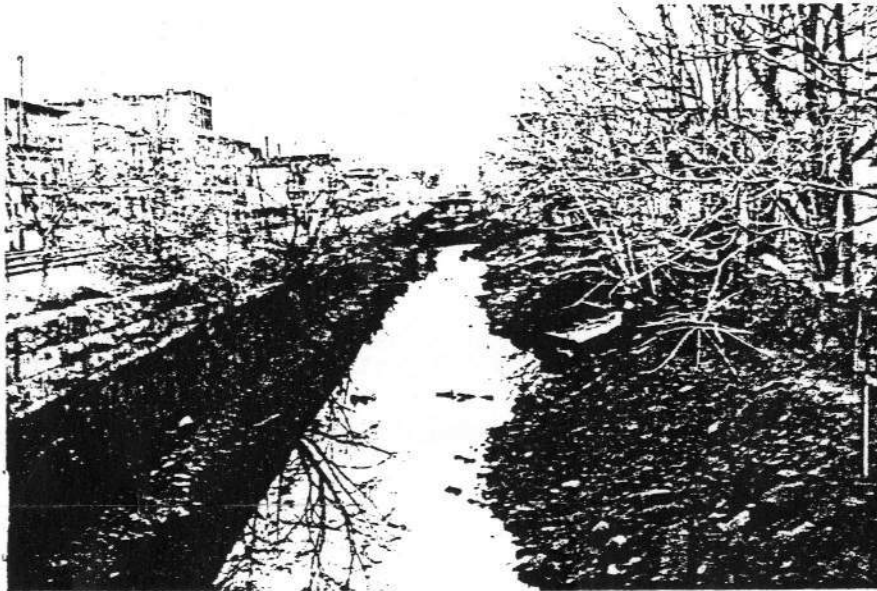
Lower Merrimack Valley...Inventory, HAER and MVTM, p. 72.

ARCHEOLOGICAL COMMENT

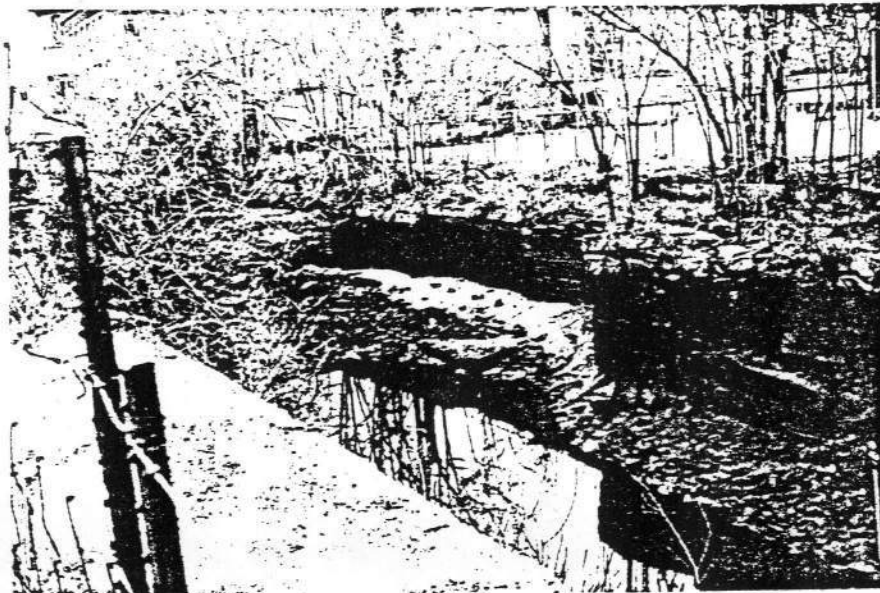
Filled-in head races off the Merrimack Canal are visible at points along the former Machine Shop yard. At the northern end of the canal, the portion that formerly extended into the Merrimack Manufacturing Company millyard has been filled, and perhaps destroyed.



View from the Dutton Street bridge to the Machine Shop site, looking north along the Merrimack Canal. Photo taken in June 1979.



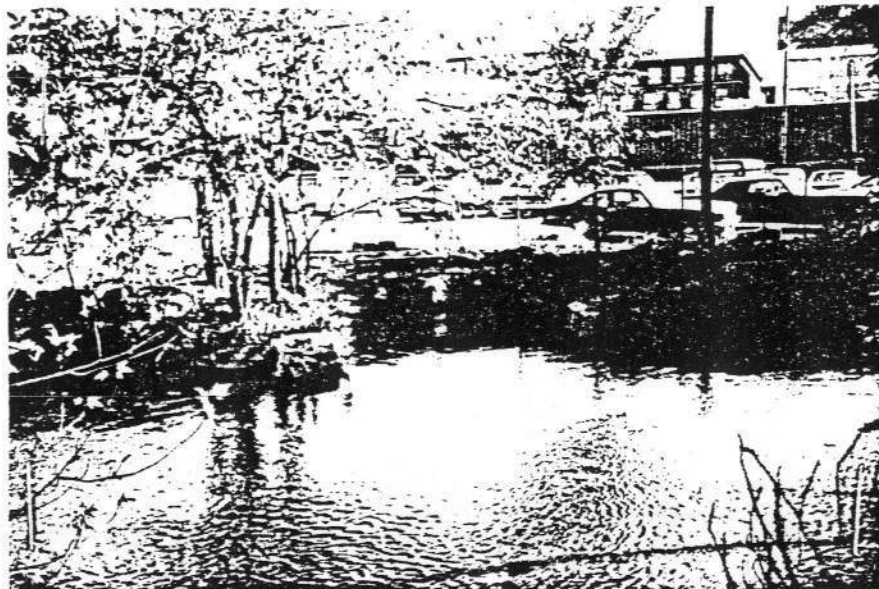
View from the south of the Merrimack Canal opposite the Machine Shop site, showing the drained canal. Photo taken in October 1979.



Detail of a second head race off the Merrimack Canal along the Machine Shop site, possibly for the sawmill raceway shown on 1832 and 1841 Lowell maps. Photo taken in October 1979.



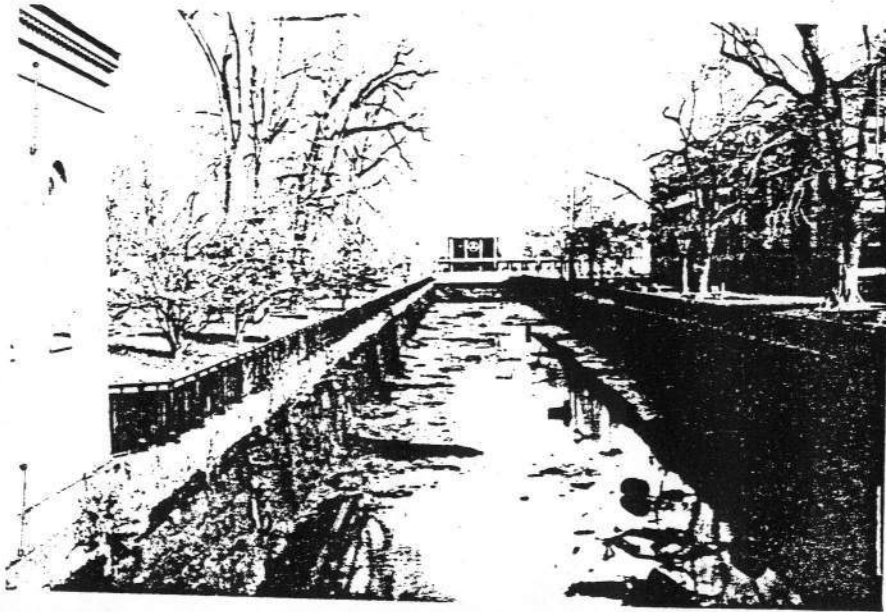
Merrimack Canal just north of Market Street, showing bedrock ledges that project into the course of the canal. Photo taken in October 1979.



View of a blocked-off head race in the Merrimack Canal at the Machine Shop site. Photo taken in June 1979.



Detail of the Machine Shop head race off the Merrimack Canal, shown when the canal was drained. Photo taken in October 1979.



View north from Merrimack Street of the Merrimack Canal. In the background is the Union National Bank office, on the site of Merrimack Manufacturing Company's bell tower. Photo taken in November 1979.



View from French Street Extension south, showing the Merrimack Canal drained. Photo taken in October 1979.

HAER INVENTORY

1. NAME OF STRUCTURE Merrimack Canal		2. DATE 1822-1823	3. NATURE OF STRUCTURE Power Canal	4. INDUSTRIAL CLASSIFICATION 812
5. LOCATION: STREET & NUMBER parallel to Dutton Street		CITY OR TOWN Lowell	COUNTY Middlesex	STATE MA
7. OWNER OF PROPERTY Proprietors of Locks and Canals, Boott Mills, Lowell, MA		6. USGS QUAD MAP & UTM GRID REF. Lowell 19.310130. 472350		
8. CONDITION: <input checked="" type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> DETERIORATED <input type="checkbox"/> RUINS <input type="checkbox"/> UNEXPOSED <input type="checkbox"/> ALTERED <input checked="" type="checkbox"/> ACCESSIBLE TO PUBLIC				

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.

The Merrimack Canal was the first of the power canals to be built by the Proprietors of Locks and Canals. It was intended to power the Merrimack Manufacturing Company with a thirty foot fall of water. Its design was crude; little attention was expended upon creating a uniform section. In some areas the section is rectangular, but in most of the Merrimack the canal has simply been gouged out of the native rock. The Canal is 8 feet deep, and ^{7,500} 7,500 feet in length, and 40 to 50 feet wide. In addition to the Merrimack Manufacturing Co., the canal supplied water to the Lowell Mfg. Co. and provided the Eastern Canal with water as well after the construction of a wasteway, rolling dam and penstock in the 1840s. Only the Merrimack Canal provides a full thirty feet fall; all of the canals provide either a 13 or 17 feet fall. In order to increase the amount of water flowing in the Merrimack Canal, the Moody Street feeder, connecting the Western Canal with the Merrimack Canal, was built in 1848. The extra water was available in 1848 because of the construction of the Northern Canal in 1847.

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

U. S. Census of 1880, Vol. XVI
 P. M. Malone, Water Power in Lowell, Mass. (GPO, 1974)
 Mr. Mel Lesberg, Manager, Proprietors of Locks and Canals, Lowell, MA

12. DANGER OF DEMOLITION OR DAMAGE YES NO

NATURE OF THREAT: 13. PRIORITY
1

14. EXISTING SURVEYS AND DATES: NHL NR HAER HABS STATE COUNTY LOCAL OTHER

15. INVENTORIED BY: YOUR NAME ADDRESS AFFILIATION DATE
Peter M. Molloy 800 Mass. Ave., N. Andover, MA 01845 Merrimack Valley Textile Museum 12/8/75

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MFG)	UTILITIES (UTIL)	POWER SOURCES & PRIME MOVERS (PS & PM)	TRANSPORTATION (TRANS)	COMM	BRIDGES
--------------------------------	------------------	----------------------------------------	------------------------	------	---------

MACH	FABR	TEDUP	INST	SMFG	WATER	SAHI	GAS	ELEC	MUSL	WATER WHEEL	WATER TURB	WIND	STEAM RECIP	STEAM TURB	INT	COIB	DIESEL	ELEC	RR	ROAD	CANAL	MARINE	AIR	PIPE	TEXT	RTY	BEAM	ARCH	TRUSS	SUSP	AQUE	TRES	CANT	MOVE
------	------	-------	------	------	-------	------	-----	------	------	-------------	------------	------	-------------	------------	-----	------	--------	------	----	------	-------	--------	-----	------	------	-----	------	------	-------	------	------	------	------	------

PRE 19th C 1800 1809 1810 1819 1820 1829 1830 1839 1840 1849 1850 1859 1860 1869 1870 1879 1880 1889 1890 1899 1900 1909 1910 1919 1920 1929 1930 1939 1940 1949 1950 1959 1960 1969 1970 1979 1980 1989 1990 1999 PRESENT

NR HAER HABS STATE COUNTY LOCAL OTHER DDD FN HIST TECH ARCH TAPES HAER OTHER FIELD SLIDES HIST SURVEY STEREO MOVIES LC AL AK AZ CA CT DE FL GA HI IL IN IA KS KY LA MI MO MS MT NE NY NH NJ NM NV NC ND OH OK OR PA RI SC SD TN TX UT VT VA WA WY WZ

EXISTING SURVEYS DATA DWGS PHOTOGRAPHS STATES

DATES OF CONSTRUCTION

EXTRACTIVE INDUSTRIES (EXTRACT)

BULK PRODUCT INDUSTRIES (BULK)

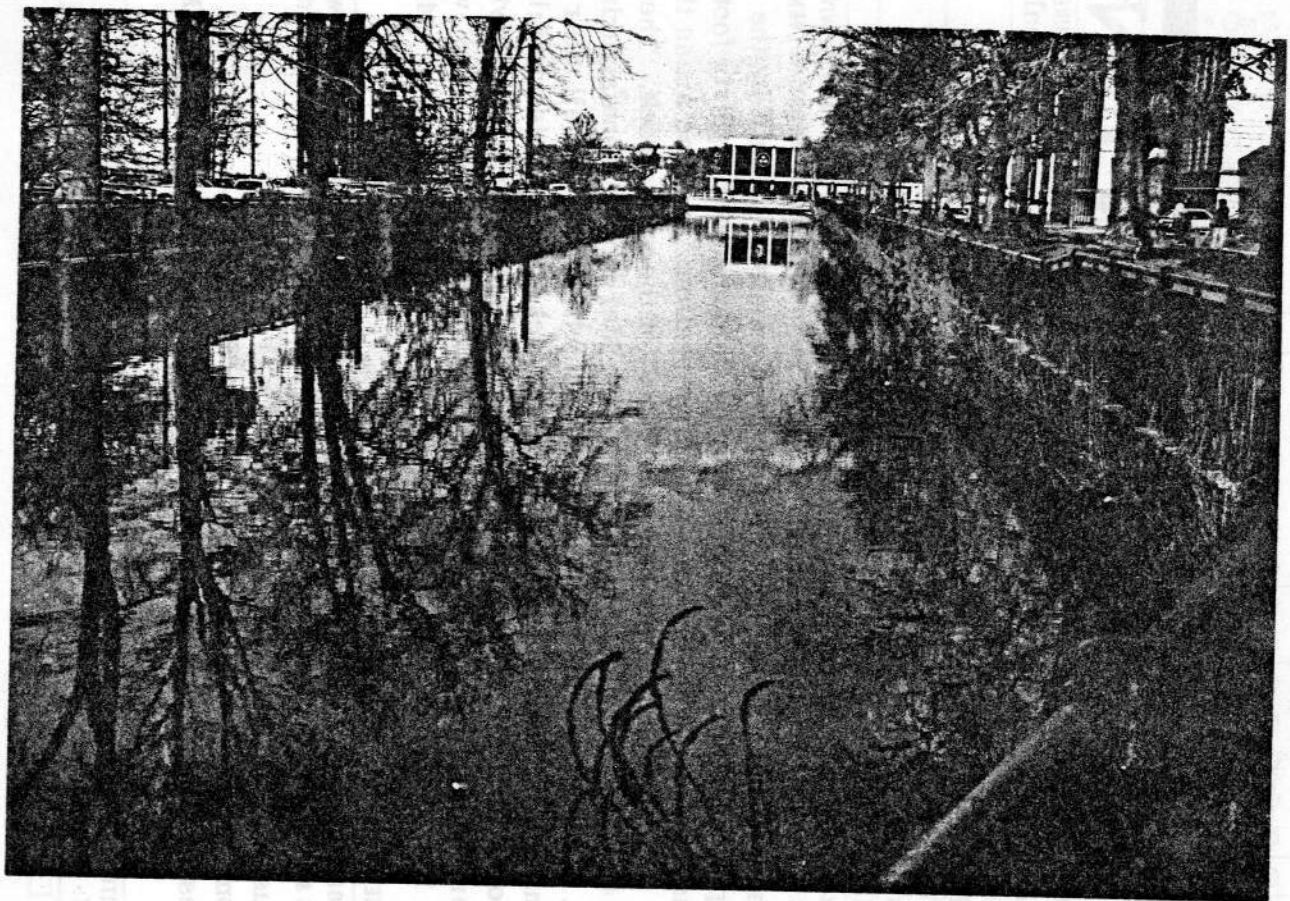
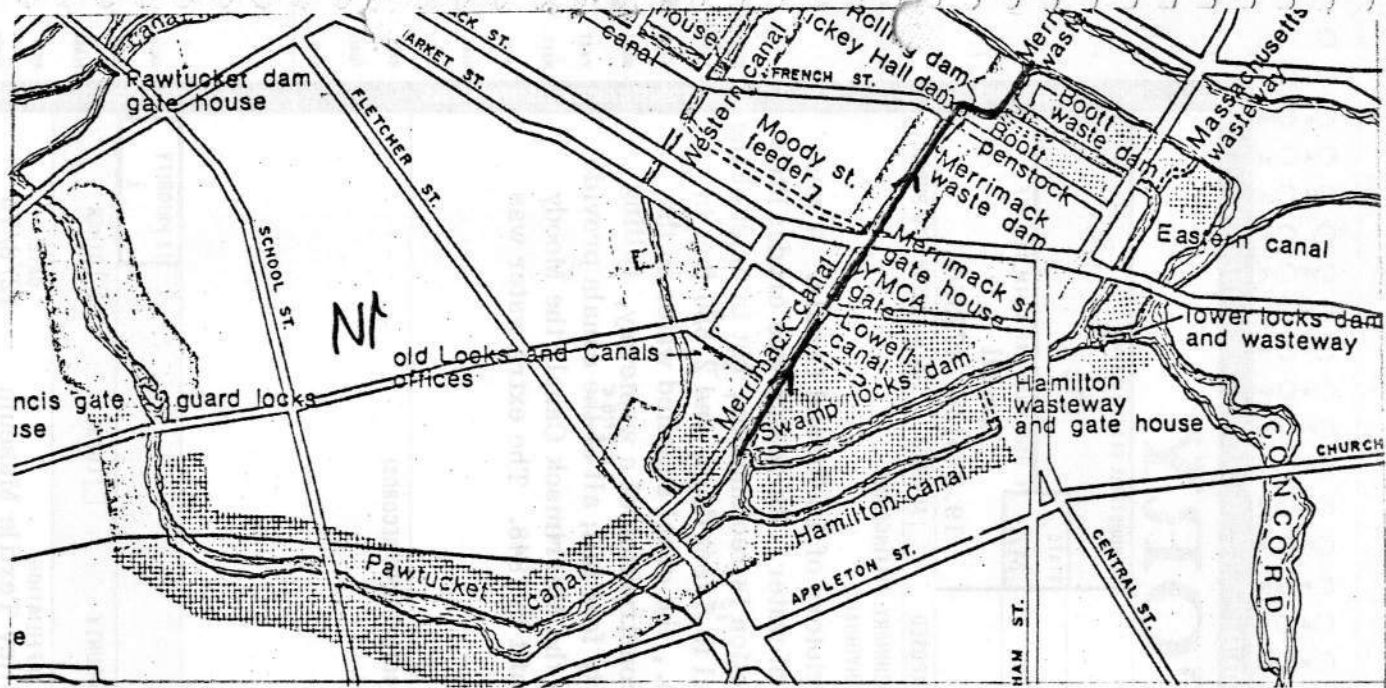
SUB-CLASSIFICATION

SPECIALIZED STRUCTURES (SPEC STRUC)

BUILDING TECHNOLOGY (BLD TECH)

P30618X

LOW 933



LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40576

Structure Number: MERMACK

Structure Name 1: MERRIMACK CANAL

Structure Name 2:

Structure Name 3:

Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
 ORGCODE: 1780 County: MIDDLESEX State: MA

Regional Office: NORTH ATLANTIC

Subunit ORGCODE: Name:
 Alpha Code: County: MIDDLESEX State: MA

Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED

Date: 10/18/85

Significance: NATIONAL

NHL: YES

Date: 12/22/77

Significance

BY 1823, PAWTUCKET CANAL REBUILT/ENLARGED, IN PART TO SERVE AS FEEDER FOR A NEW POWER CANAL - THE MERRIMACK: INTENDED TO USE ENTIRE 30' HEAD TO POWER WATERWHEELS OF NEWLY-CHARTERED MERRIMACK MFG. CO.; LATER, SUPPLIED LOWELL MFG. CO., BOOTT MILLS.

Historical Information

Period of Construction: HISTORIC

Date: 1822-1823	(BU)	Designer:	()
Date: -	()	Designer:	()
Date: -	()	Designer:	()
Date: -	()	Designer:	()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions
 CANAL
 UTILITY SERVICE STRUCTURE

Current Uses
 CANAL
 UTILITY SERVICE STRUCTURE

Buildings — Materials — Structures

Foundation:
 Framing:
 Walls:
 Roof:
 Other:
 Volume:
 Description

Sub-structure: GRANITE
 Super-structure: GRANITE
 CONCRETE

RUNS OFF SWAMP LOCKS BASIN IN DIRECT LINE TOWARD MERRIMACK RIVER; 3400' LONG (INCL. WASTEWAY), 8 1/2'-11 1/2' DEEP, 48' WIDE. PORTIONS OF STONE WALLS ALTERED, REPLACED w/ CONCRETE; HANDRAILS VARY FROM WD. PICKET FENCE TO STEEL BRIDGE RAIL.

Impact Level: MODERATE Impact Types: STRUCTURAL DETERIORATION
 INUNDATION (FLOODING)

Condition: FAIR

LOW.933-

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40576 LOWE MERRIMACK CANAL MERMACK

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: BH

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities

Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS CANAL WALLS/FLOOR; NPS SHARES MAINT.
RESPONSIBILITIES W/ STATE ALONG CANALWAY.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-3 DAMS:
QTRS:

CLI	CRBIB	Other
1.	HRS 1. 010385	1. 400101 MALONE, CANALS & IND.
2.	HS ASSESS 2. 400107	2. 010390 GMP
3.	HSR 3.	3.
4.	CLR 4.	4.
5.	5. 400108	

Documentation Level: GOOD

Date Entered/Updated: 07/20/94 Logger: JIG

Date of Report: 04/04/95



Structure No. MERMACK
IDLCS: 40576
MERRIMACK CANAL

PHOTO + GUARD # 3224
LIGHT IMPRESSIONS®
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.984
Historic Name:	Merrimack Canal Sluice Gate
Common Name:	Merrimack Dam
Address:	Merrimack Canal off French St, opposite Larcom, Lucy Park
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	
Year Constructed:	1962
Architect(s):	Gilbert, Perley F. Associates
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related; Utilities Other
Significance:	Archaeology, Historic; Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Thursday, November 7, 2019 at 3:44: PM

LOWELL CULTURAL RESOURCES INVENTORY

LOW. 984
 (BC) NRD 15-61578
 (BE) LMTD-12/13/83

- MERRIMACK CANAL, off FRENCH STREET
 opposite LUCY LARCOM PARK
- IDENTIFICATION MAP SHEET # 7
- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
- 2) HISTORIC NAME Site of Merrimack Dam
- 3) CURRENT NAME Sluice gate
- 4) PROPERTY TYPE canal structure 5) ZONING CLASSIFICATION A-B2
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP -- Locks and Canals HD -- LHPD

(C) NRD-12/22/77
 NRD 15-81376

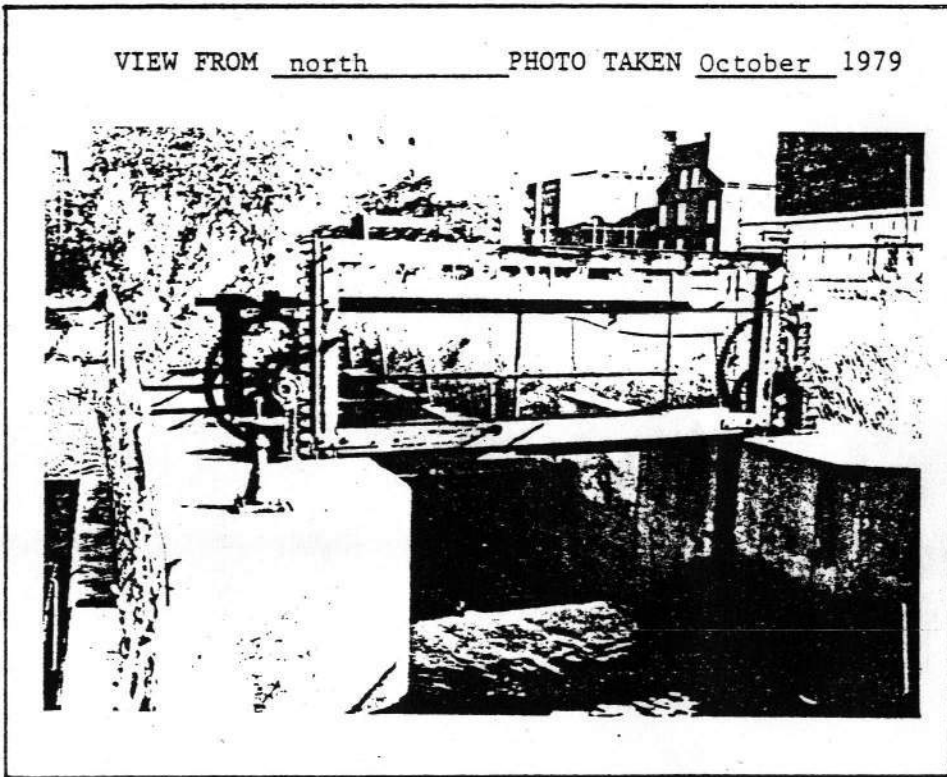
HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE 1962
 SOURCE documented: Lower Merrimack River Valley...Inventory, p. 73
- 2) ARCHITECT OR BUILDER unknown
- 3) HISTORIC OWNER Proprietors of Locks and Canals
- 4) ORIGINAL USE: GF canal regulation UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY yes DATE 1835-1962
 SOURCE documented: Lower Merrimack River...Inventory

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE n/a
- 2) PRESENT USE:
 GF inoperative
 UF n/a
- 3) NO OF STORIES n/a
- 4) PROP SQ FT n/a
- 5) PLAN n/a
- 6) ROOF n/a
- 7) STRUCTURAL SYSTEM wood frame
- 8) OUTBUILDINGS none
- 9) MATERIALS:
 FOUNDATION concrete
 FACADE wooden gate, metal controls
 TRIM n/a
- 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS none

VIEW FROM north PHOTO TAKEN October 1979



ADDRESS MERRIMACK CANAL, off FRENCH STREET opposite LUCY LARCOM PARK

VISUAL ASSESSMENT

- 1) CONDITION OF ~~BLDG FABRIC~~ ^{canal apparatus} needs major repair
- 2) IF DETERIORATED, CAUSES vandalism ?
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF n/a
UF n/a
- 4) SURROUNDING LAND USES canal frontage, commercial, industrial, institutional, railroad
- 5) INTEGRITY OF PROP'S HIST SETTING severely disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING compatible with character

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

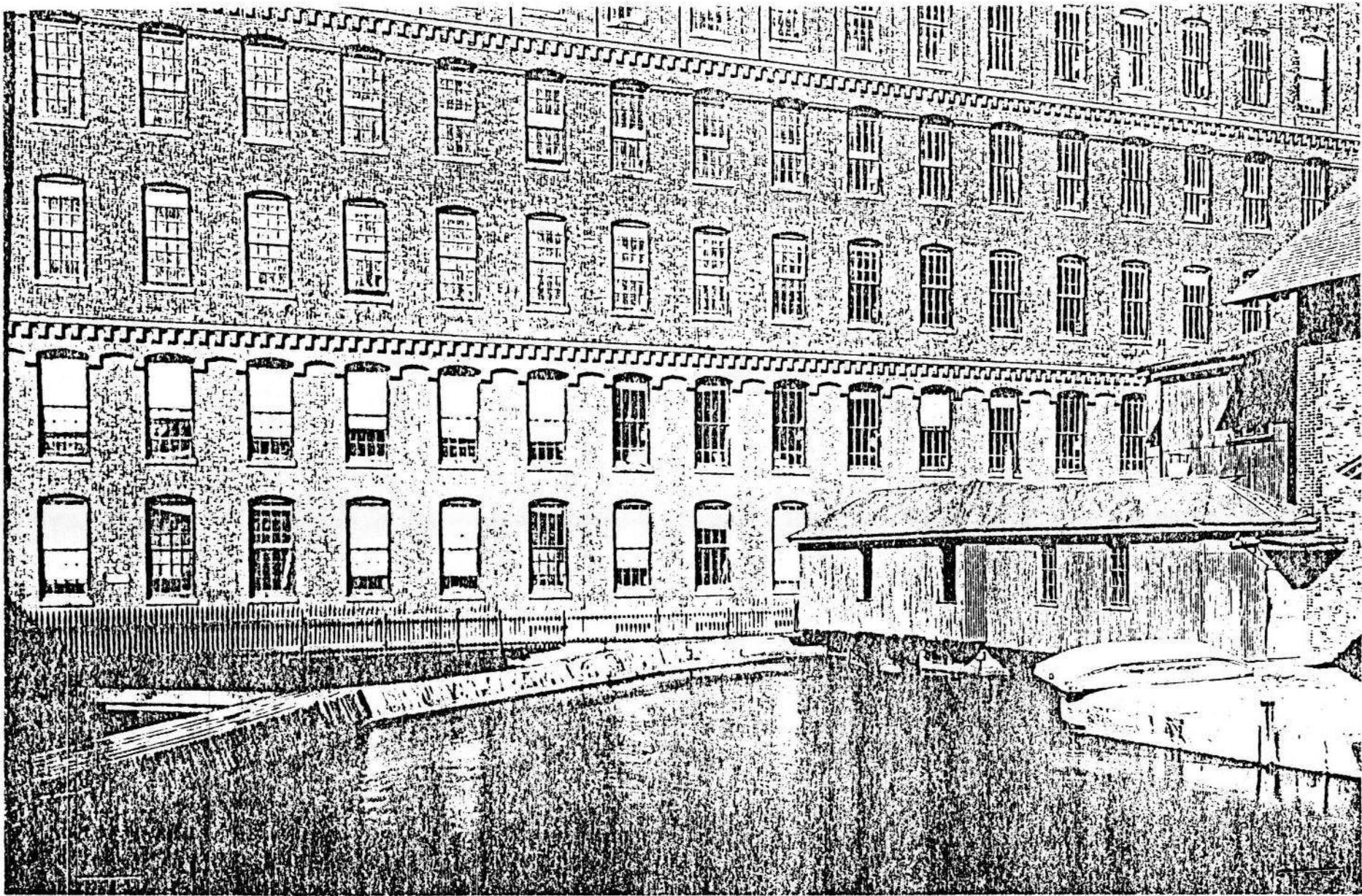
A dam was built near this site in 1835, as part of the coordination of the Merrimack Canal with the new Eastern Canal. The attached figure shows the building atop that dam (right), beside Merrimack Mill #2. The dam was destroyed in 1962, along with the rest of the Merrimack millyard. The present concrete sluiceway and sluice gate was constructed at that time. The control mechanisms appear to be intact, but the gate itself presently consists only of an open frame.

Source

Lower Merrimack...Inventory, HAER and MVTM, p. 73.

ARCHEOLOGICAL COMMENT

Elements of the 1835 Merrimack Dam may survive below ground near the present sluice gate, if the 1962 demolition was not complete.



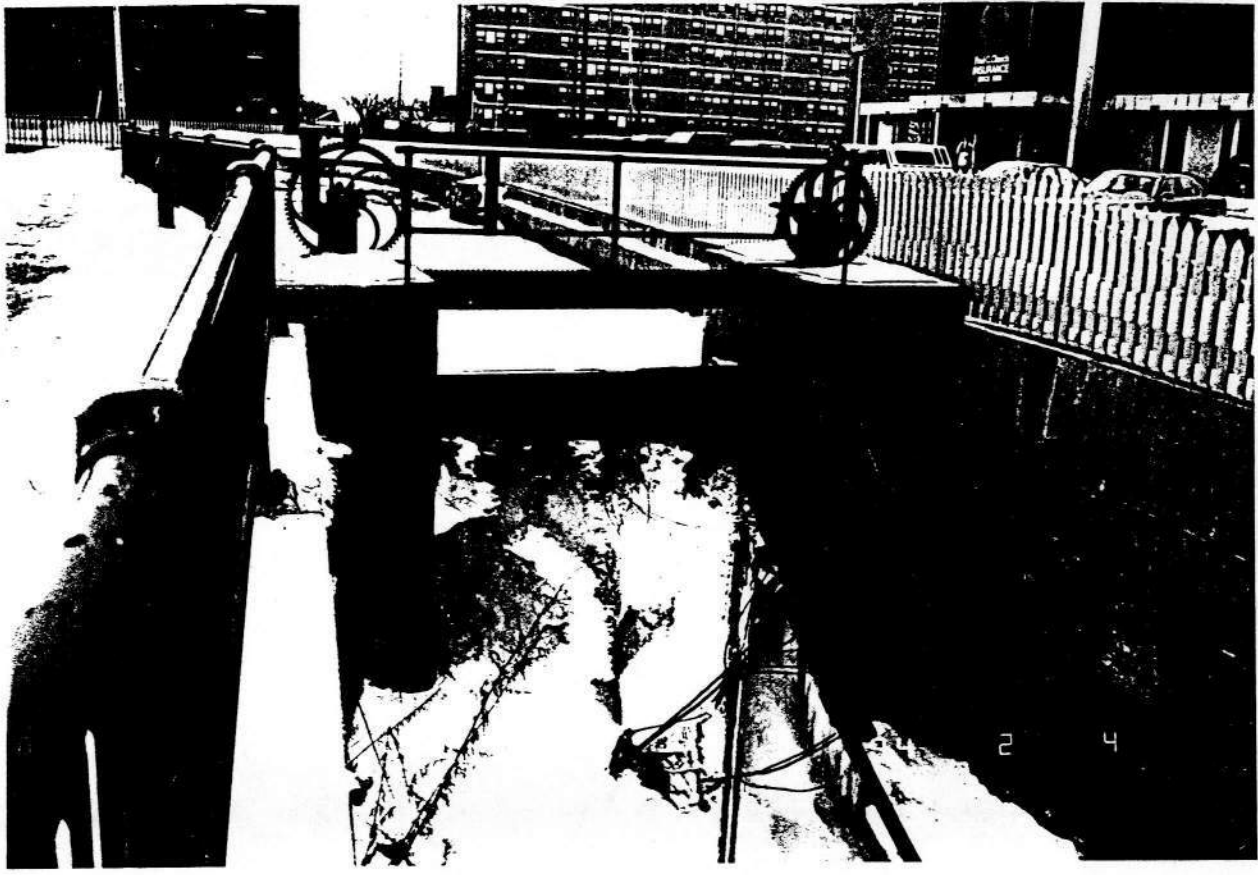
"Merrimack Canal at Merrimack Dam, Apr. 12, 1926." U. of Lowell Library, Special Collections, Locks and Canals photo #2179.

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS	Park	Structure Name	Number
40608	LOWE	MERRIMACK DAM	MER.DAM
Management Information			
NPS Legal Interest: NONE - PRIVATELY OWNED		Federal Owner:	
Life:	Exp. Date: / /	Local Owner: BH	
Management Category: MUST BE PRES. & MAINT		Management Date: 10/16/87	
Management Agreement: MEMORANDUM OF UNDERSTANDING		Nat. Exp. Date: 04/03/96	
Proposed Ultimate Treat:		Doc:	Date: / /
Approved Ultimate Treat: PRESERVATION		Doc: GMP	Date: 08/00/81
Treatment Responsibilities		Treatment Costs	
Interim Treatment: OTH		Interim:	\$0 Date: /
Ultimate Treatment: OTH		Ultimate:	\$0 Date: /
Routine Maintenance: OTH Level of Estimate:			
Cyclic Maintenance: OTH		Estimator:	
Approved Ultimate Treatment Completed: NO			
Management Text			
LOWELL LOCKS & CANALS HISTORIC DISTRICT. NPS DAM #141. BOOTT HYDRO MAINTAINS CANAL WALLS & FLOOR; NPS SHARES GROUNDS MAINT. RESPONSIBILITIES W/ STATE.			
Major Bibliographical References			
Nat. Reg.: 78003149		CSI:	Nat. Cat: NO
HABS:		BRIDGES:	
HAER: MA-3-A		DAMS: MA	
		QTRS:	
CLI	CRBIB	Other	
1.	HRS 1. 010385	1. 400101 MALONE, CANALS & IND.	
2.	HS ASSESS 2. 400107	2. 010390 GMP	
3.	HSR 3.	3.	
4.	CLR 4.	4.	
5.	5. 400108		
Documentation Level: FAIR			
Date Entered/Updated: 07/20/94		Logger: JIG	

Date of Report: 04/04/95

LDW.984



Structure No. MER.DAM
IDLCS: 40608
MERRIMACK DAM

PHOTO ★ GUARD # 3224
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Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No: LOW.934
Historic Name: Moody Street Feeder
Common Name:
Address: Moody St
Beneath Moody St from Western to Merrimack Canal
City/Town: Lowell
Village/Neighborhood: Downtown
Local No:
Year Constructed: 1848
Architect(s): Francis, James B.
Architectural Style(s):
Use(s): Other Industrial
Significance: Engineering; Industry
Area(s): LOW.C: Locks and Canals District
LOW.BC: Lowell National Historical Park
LOW.BE: Downtown Lowell Historic District
Designation(s): Nat'l Register District (08/13/1976); Nat'l Historic
Landmark (12/22/1977); Nat'l Register District
(06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
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This file was accessed on: Thursday, November 7, 2019 at 9:49: AM

LOWELL CULTURAL RESOURCES INVENTORY

LOW. 934

ABC
C

NRDIS-61578

NRDIS-811371

NHL-12/22/77

CANAL

- IDENTIFICATION Beneath MOODY STREET, from WESTERN to MERRIMACK MAP SHEET # 7
- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
- 2) HISTORIC NAME Moody Street Feeder
- 3) CURRENT NAME same
- 4) PROPERTY TYPE canal structure 5) ZONING CLASSIFICATION B1, B3, M3
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP, LHPD, Locks and Canals HD

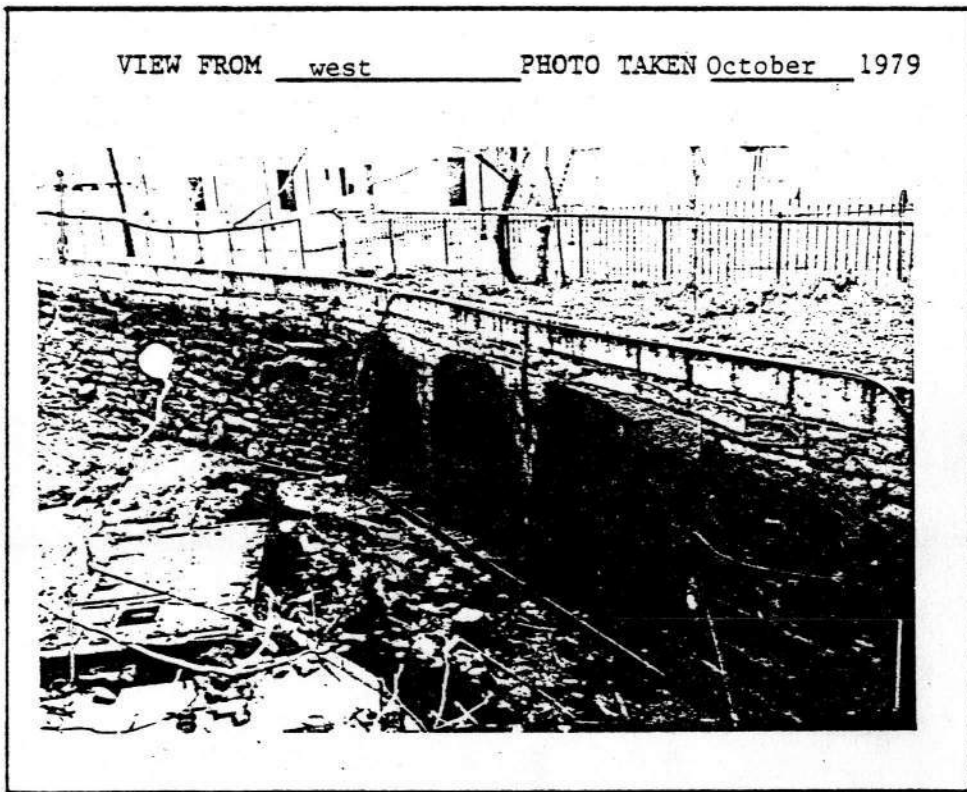
BE/UND, 2/13/83

HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE 1848
SOURCE documented: Research Report
- 2) ARCHITECT OR BUILDER James B. Francis
- 3) HISTORIC OWNER Proprietors of Locks and Canals
- 4) ORIGINAL USE: GF feeder UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY no DATE _____
SOURCE _____

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE n/a VIEW FROM west PHOTO TAKEN October 1979
- 2) PRESENT USE:
GF feeder
UF n/a
- 3) NO OF STORIES n/a
- 4) PROP SQ FT n/a
- 5) PLAN n/a
- 6) ROOF n/a
- 7) STRUCTURAL SYSTEM load-bearing masonry
- 8) OUTBUILDINGS Merrimack Gate House
- 9) MATERIALS:
FOUNDATION granite ashlar
FACADE rock-faced granite
TRIM n/a
- 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS none



ADDRESS Beneath MOODY STREET, from WESTERN to MERRIMACK CANAL

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC. good
- 2) IF DETERIORATED, CAUSES n/a
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact original fabric
UF n/a
- 4) SURROUNDING LAND USES commercial, residential, institutional, canal frontage
- 5) INTEGRITY OF PROP'S HIST SETTING severely disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING compatible with character

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

See Research Report, page 14.

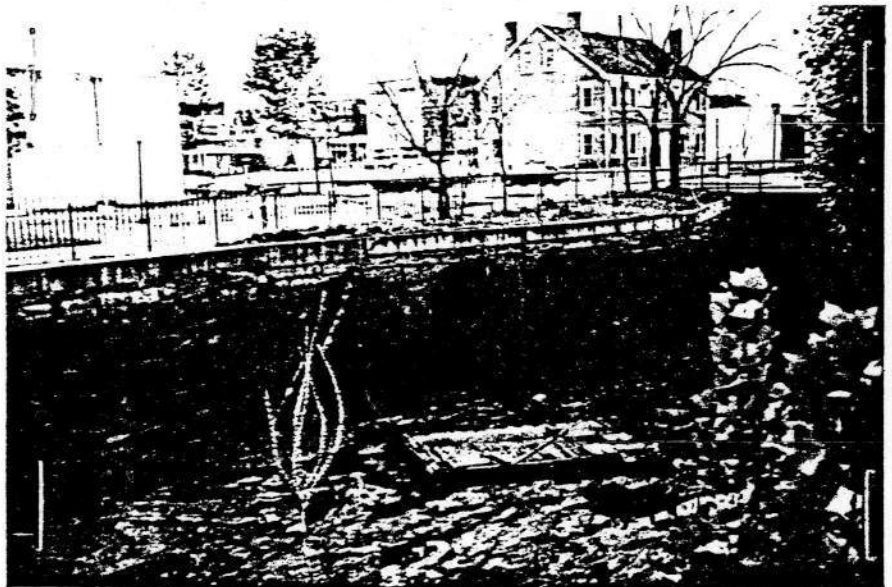
The Moody Street Feeder is a key part of the Northern Canal project. Completed by 1848 and opened in 1849, the Feeder delivered Northern Canal water (via the Western Canal) to the Merrimack Manufacturing Company on the Merrimack Canal. Indirectly, the Feeder also increased the Eastern Canal's supply, via the Boott penstock off the augmented Merrimack Canal.

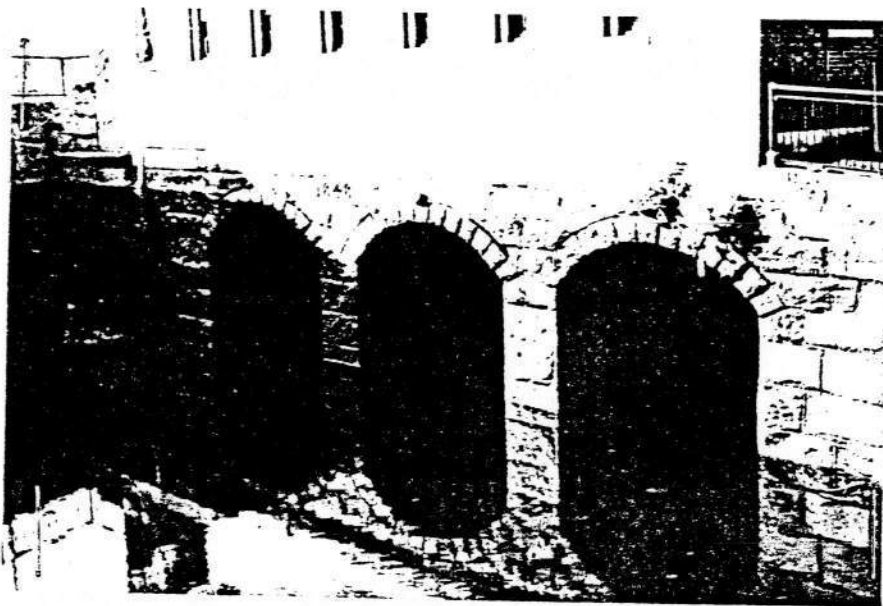
The Feeder is 1,418 feet long, ten feet high, and thirty feet wide. The width is divided into three archways that extend the length of the canal. The walls of those archways are granite ashlar, the segmental arches are of brick. The Merrimack Gatehouse at the eastern end of the Feeder regulates its flow.

ARCHEOLOGICAL COMMENT

Not applicable.

View from the north of the Western Canal head of the Moody Street Feeder.
Photo taken in October 1979.





View of the arches at the tail of the Moody Street Feeder, where it empties into the Merrimack Canal beneath the Merrimack Gate House. Photo taken in November 1979.



Detail of the arches beneath the Merrimack Gate House. The Feeder extends toward the Canal perpendicularly, but the final arches meet the Canal at an acute angle, to reduce the turbulence of the merging courses of water. Photograph taken in November 1979.

LOW 934

NR	HAER	HABS	STATE	COUNTY	LOCAL	OTHER	DDD	FN	HIST	TECH	ARCH	TAPES	HAER	OTHER	FIELD	SLIDES	HIST	SURVEY	STEREO	MOVIES	LC	AL	AK	AZ	CA	DC	DC	FL	GA	ID	IL	IA	KS	LA	MA	MD	MI	MS	MT	NE	NV	NH	NJ	NM	NY	ND	OK	OR	PA	RI	SC	SD	TN	TX	UT	VT	VA	WA	WV	WY	T
----	------	------	-------	--------	-------	-------	-----	----	------	------	------	-------	------	-------	-------	--------	------	--------	--------	--------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---

EXISTING SURVEYS	DATA	DWGS	PHOTOGRAPHS	STATES
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HAER INVENTORY

1. NAME OF STRUCTURE Moody Street Feeder	2. DATE 1848	3. NATURE OF STRUCTURE Feeder	4. INDUSTRIAL CLASSIFICATION 812
5. LOCATION: STREET & NUMBER parallel to Moody St. between Suffolk & Dutton Sts. - Lowell - Middlesex		CITY OR TOWN Lowell	COUNTY Middlesex
7. OWNER OF PROPERTY Proprietors of Locks and Canals, Boott Mills, Lowell, MA		STATE MA	6. USGS QUAD MAP & UTM GRID REF. LOWELL 19.310060 . 4724 10
8. CONDITION: <input checked="" type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> DETERIORATED <input type="checkbox"/> RUINS <input checked="" type="checkbox"/> UNEXPOSED <input type="checkbox"/> ALTERED <input type="checkbox"/> ACCESSIBLE TO PUBLIC			

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.

The Moody Street Feeder was built as part of the Northern Canal project, and, like the Northern, was designed by James B. Francis. The Feeder drew water from the upper Western Canal and delivered it to the Merrimack Canal, where it could be used to meet the needs of the Merrimack Mfg. Co. The Merrimack Canal, so provided with water by the Feeder, was also used to supply the Eastern Canal with water, by means of a penstock constructed in the years 1846-1848. The Feeder is ^{14.18}~~1.575~~ feet long, and 30 feet in width, and ⁷~~4~~ feet in height. The feeder is divided into three parts by two longitudinal walls, forming the piers for three arches, which close the conduit on top. The segmented arches are made of brick. The piers and sidewalls are granite.

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

U. S. Census of 1880, vol. XVI
P. M. Malone, The Power Canals of Lowell, MA (GPO, 1974)
Mr. Mel Lesberg, Manager, Proprietors of Locks and Canals, Boott Mills, Lowell, Mass.

12. DANGER OF DEMOLITION OR DAMAGE YES NO
NATURE OF THREAT: 13. PRIORITY
1

14. EXISTING SURVEYS NHL NR HAER HABS STATE COUNTY LOCAL OTHER

15. INVENTORIED BY: YOUR NAME ADDRESS AFFILIATION DATE
Peter M. Molloy 800 Mass. Ave., North Andover, MA Merrimack Valley Textile Museum 12/8/75

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MFG)	UTILITIES (UTIL)	POWER SOURCES & PRIME MOVERS (PS & PM)	TRANSPORTATION (TRANS)	COMM	BRIDGES
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MACH	FABR	TEQUIP	INST	GMFG	WATER	SANI	GAS	ELEC	MUSL	WATER	WHEEL	WATER	WIND	STEAM	STEAM	INT	COMB	DIESEL	ELEC	RR	ROAD	CANAL	MARINE	AIR	PIPE	TET	RETY	BEAM	ARCH	TRUSS	SUSP	AQDE	TRES	CANT	MOVE
------	------	--------	------	------	-------	------	-----	------	------	-------	-------	-------	------	-------	-------	-----	------	--------	------	----	------	-------	--------	-----	------	-----	------	------	------	-------	------	------	------	------	------

DATES OF CONSTRUCTION

EXTRACTIVE INDUSTRIES (EXTRACT)

BULK PRODUCT INDUSTRIES (BULK)

SUB-CLASSIFICATION

SPECIALIZED STRUCTURES (SPEC STRUC)

BUILDING TECHNOLOGY (BLD TECH)

0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
00	SURVEY
01	MUSEUM
02	ADAPT
03	HOUS
04	P & ET
05	MATS
06	MATH
07	HEAT
08	CONST
09	HYDR
10	TUNLS
11	DAM
12	
13	
14	
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20	

P30618X

LOW.934

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS	Park	Structure Name	Number
40578	LOWE	MOODY STREET FEEDER	MSTFC
Management Information			
NPS Legal Interest: NONE - PRIVATELY OWNED		Federal Owner:	
Life:	Exp. Date: / /	Local Owner: BH	
Management Category: MUST BE PRES. & MAINT		Management Date: 10/16/87	
Management Agreement: MEMORANDUM OF UNDERSTANDING		Nat. Exp. Date: 04/03/96	
Proposed Ultimate Treat:		Doc:	Date: / /
Approved Ultimate Treat: PRESERVATION		Doc: GMP	Date: 08/00/81
Treatment Responsibilities		Treatment Costs	
Interim Treatment: OTH		Interim:	\$0 Date: /
Ultimate Treatment: OTH		Ultimate:	\$0 Date: /
Routine Maintenance: OTH		Level of Estimate:	
Cyclic Maintenance: OTH		Estimator:	
Approved Ultimate Treatment Completed: YES			
Management Text			
LOWELL LOCKS & CANALS HISTORIC DISTRICT. NPS DAM #147. BOOTT HYDRO MAINTAINS CANAL WALLS/FLOOR.			
Major Bibliographical References			
Nat. Reg.: 78003149		CSI:	Nat. Cat: NO
HABS:		BRIDGES:	
HAER: MA-9		DAMS: MA82901	
		QTRS:	
CLI	CRBIB	Other	
1.	HRS 1. 010385	1. 400101 MALONE, CANALS & IND.	
2.	HS ASSESS 2. 400107	2. 010390 GMP	
3.	HSR 3. 400106	3.	
4.	CLR 4.	4.	
5.	5. 400108		
Documentation Level: FAIR			
Date Entered/Updated: 07/20/94		Logger: JIG	

Date of Report: 04/04/95

LOW. 934



Structure No. MSTFC
IDLCS: 40578
MOODY STREET FEEDER

PHOTO ★ GUARD # 3025
LIGHT IMPRESSIONS
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.9018
Historic Name:	Northern Canal - Little Canada Reach
Common Name:	
Address:	Northern Canal
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	C
Year Constructed:	c 1846
Architect(s):	Francis, James B.
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related; Utilities Other
Significance:	Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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NOA/NADIS - 6/5/78
LITD - 12/13/83

NADIS - 8/13/76
NHL - 12/22/77

LOW. 9018

C BC BE

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40579 Structure Number: NOR.LCR
Structure Name 1: NORTHERN CANAL - LITTLE CANADA REACH
Structure Name 2:
Structure Name 3:
Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
ORGCODE: 1780 County: MIDDLESEX State: MA
Regional Office: NORTH ATLANTIC
Subunit ORGCODE: Name:
Alpha Code: County: MIDDLESEX State: MA
Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED Date: 10/18/85
Significance: NATIONAL Date: 12/22/77
NHL: YES
Significance
CONSULTING ENGR'S. BALDWIN & FRANCIS DEMONSTRATED THAT NEW MILL POWERS COULD BE CREATED BY BUILDING
A NEW (NORTHERN) CANAL ALONG RIVER; PLANS LED TO A COMPL. REORG'N. OF LOCKS & CANALS. NORTHERN
CANAL PROJ. ACCLAIMED BY DAN'L. WEBSTER.

Historical Information

Period of Construction: HISTORIC
Date: 1846-1847 (BU) Designer: FRANCIS, JAMES B., et.al. (E)
Date: - () Designer: ()
Date: - () Designer: ()
Date: - () Designer: ()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions Current Uses
CANAL CANAL
UTILITY SERVICE STRUCTURE UTILITY SERVICE STRUCTURE

Buildings Materials Structures
Foundation: Sub-structure: GRANITE
Framing: STONE
Walls: OTHER
Roof: Super-structure: GRANITE
Other: STONE
Volume: OTHER
Description

RUNS FROM MERRIMACK RIVER SE TO WESTERN CANAL. TOTAL NORTHERN CANAL 4373' LONG, (AVG.) 18' DEEP,
90' WIDE. WALLS: GRANITE & HYDRAULIC CEMENT (AT WANNALANCIT AREA: ROUGH-COURSED ASHLAR; CONC.
COPING @ S SIDE). IRON RAILING REMNANTS.

Impact Level: MODERATE Impact Types: STRUCTURAL DETERIORATION
INUNDATION (FLOODING)
Condition: FAIR EROSION

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40579 LOWE NORTHERN CANAL - LITTLE CANADA REACH NOR.LCR

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: BH

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities

Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS CANAL WALLS/FLOOR; NPS SHARES
MAINTENANCE RESPONSIBILITIES W/ STATE ALONG CANALWAY.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-8 DAMS:
QTRS:

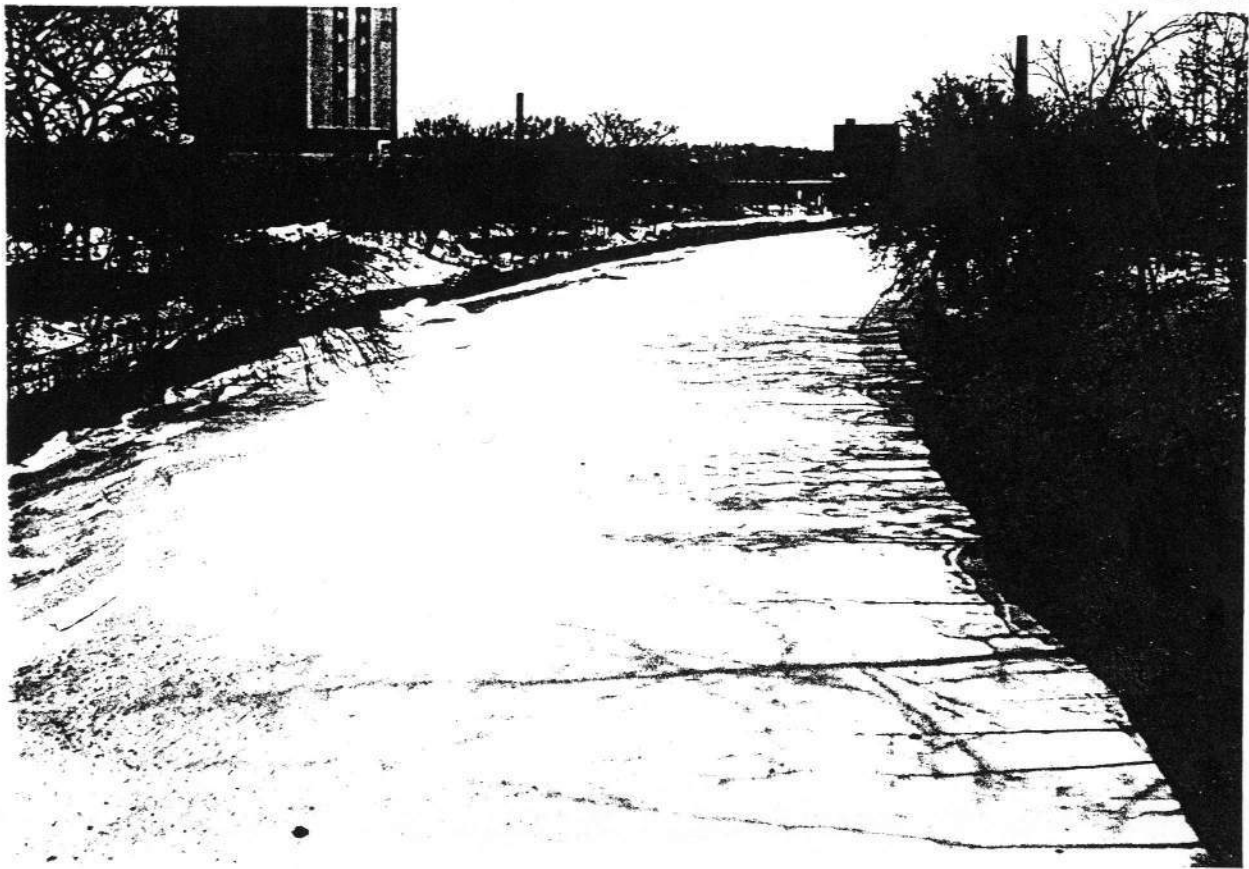
CLI	CRBIB	Other
1. HRS	1. 010385	1. 400101 MALONE, CANALS & IND.
2. HS ASSESS	2. 400107	2. 010390 GMP
3. HSR	3. 010625	3.
4. CLR	4.	4.
5.	5. 400108	

Documentation Level: GOOD

Date Entered/Updated: 07/20/94 Logger: JIG

Date of Report: 04/04/95

LOW. 9018



Structure No. NOR.LCR
IDLCS: 40579
NORTHERN CANAL - LITTLE CANADA REACH

PHOTO * GUARD # 3254
LIGHT IMPRESSIONS
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.9019
Historic Name:	Upper Pawtucket Canal - Mechanics Mills Reach
Common Name:	
Address:	Pawtucket Canal
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	C
Year Constructed:	c 1792
Architect(s):	Baldwin, Loammi; Tyng, D. A.
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related; Utilities Other
Significance:	Engineering; Industry; Transportation
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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NADIS - 6/5/78
LHD 12/1/83

NADIS - 8/31/76
NITL 12/22/77

LOW. 9019

[C] [BC] [BE]

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40583 Structure Number: U.PAWMMR
Structure Name 1: UPPER PAWTUCKET CANAL - MECHANICS MILLS REACH
Structure Name 2: "OLD CANAL"
Structure Name 3:
Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
ORGCODE: 1780 County: MIDDLESEX State: MA
Regional Office: NORTH ATLANTIC
Subunit ORGCODE: Name:
Alpha Code: County: MIDDLESEX State: MA
Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED Date: 10/18/85
Significance: NATIONAL
NHL: YES Date: 12/22/77
Significance
FIRST OF 6 MAJ. CANALS IN LOWELL. DESIGNED SOLELY FOR NAVIGATION, ESP. FOR TRANSPORTING LOGS & CUT
TIMBER AROUND PAWTUCKET FALLS, BUT FINANCIAL SUCCESS CUT SHORT BY COMPLETION OF MIDDLESEX CANAL,
1803. MODIFIED FOR SUBSEQ. POWER CANAL SYSTEM.

Historical Information

Period of Construction: HISTORIC
Date: 1792-1796 (BU) Designer: BALDWIN, LOAMMI OR D. A. TYNG (?) (0)
Date: 1806-1824 (AL) Designer: ()
Date: 1876-1902 (AL) Designer: ()
Date: 1902-1907 (AL) Designer: ()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions Current Uses
CANAL CANAL
NAVIGATIONAL UTILITY SERVICE STRUCTURE
UTILITY SERVICE STRUCTURE

Buildings Materials Structures
Foundation: Sub-structure: GRANITE
Framing: CONCRETE
Walls:
Roof: Super-structure: GRANITE
Other: STONE
Volume: CONCRETE
Description

RUNS FROM GUARD LOCKS, BELOW BROADWAY BRIDGE, TO SWAMP LOCKS; WESTERN, HAMILTON & MERRIMACK CANALS
BRANCH OFF @ LOWER END. 4950' LONG, AVG. 90' WIDE, 9 1/2'-11 1/2' DEEP. TALL WALLS ARE COURSED
ASHLAR @ N, POURED CONC. @ S.

Impact Level: MODERATE Impact Types: STRUCTURAL DETERIORATION
INUNDATION (FLOODING)
Condition: GOOD

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40583 LOWE UPPER PAWTUCKET CANAL - MECHANICS MILLS REACH U.PAWMMR

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: L&C

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities

Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS (BUT DOES NOT OWN) CANAL
WALLS/FLOOR; NPS SHARES GROUNDS MAINT. RESPONSIBILITIES w/ STATE.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-2 DAMS:
QTRS:

CLI

CRBIB

Other

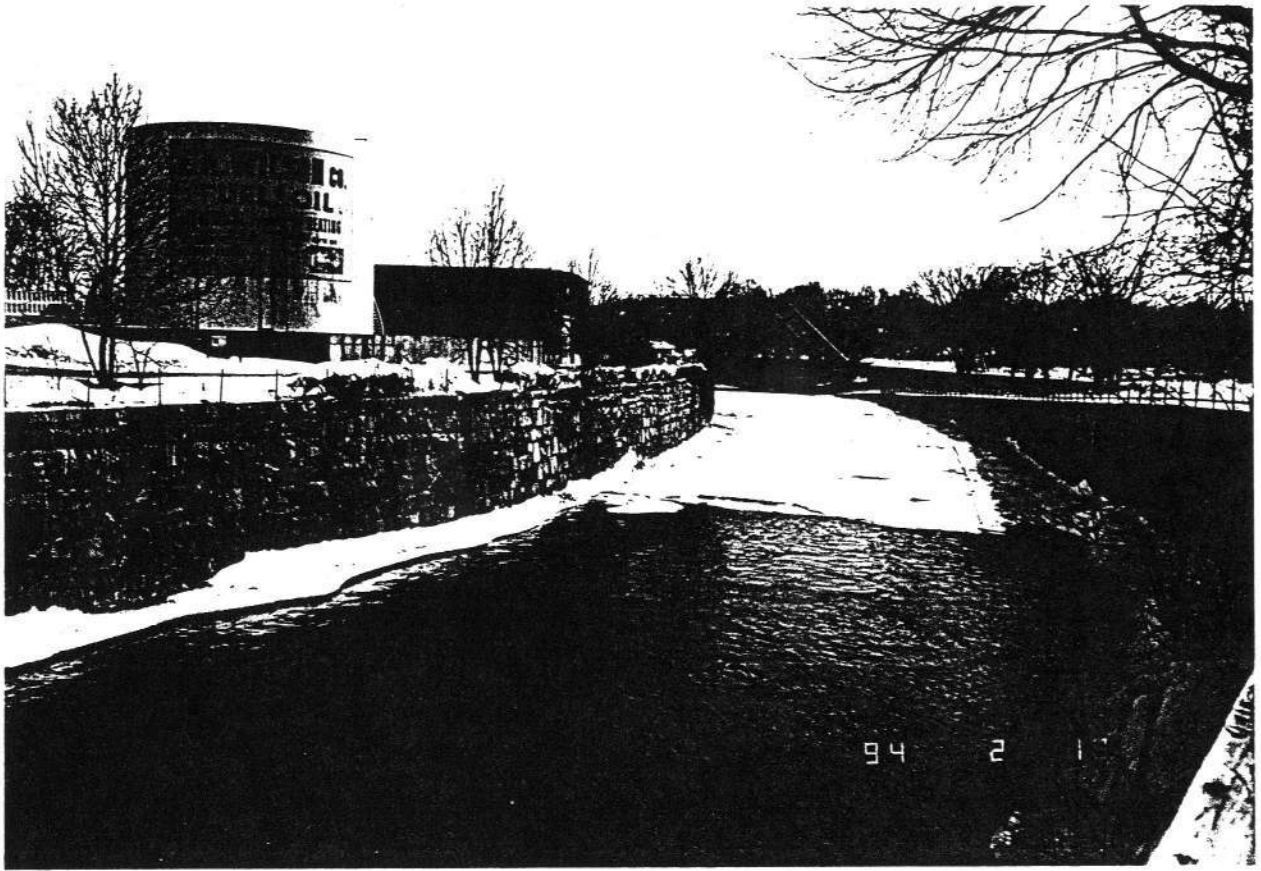
- | | | | | | |
|----|-----------|----|--------|----|------------------------------|
| 1. | HRS | 1. | 010385 | 1. | 400101 MALONE, CANALS & IND. |
| 2. | HS ASSESS | 2. | 400107 | 2. | 010390 GMP |
| 3. | HSR | 3. | 010625 | 3. | |
| 4. | CLR | 4. | | 4. | |
| 5. | | 5. | 400108 | | |

Documentation Level: GOOD

Date Entered/Updated: 07/20/94

Logger: JIG

Date of Report: 04/04/95



Structure No. U.PAWMMR
IDLCS: 40583
UPPER PAWTUCKET CANAL - MECHANICS MILLS REACH

PHOTO * GUARD * 1984
LIGHT IMPRESSIONS
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.938
Historic Name:	Upper Pawtucket Canal - Guard Locks Reach
Common Name:	
Address:	Upper Pawtucket Canal
City/Town:	Lowell
Village/Neighborhood:	Acre
Local No:	
Year Constructed:	c 1792
Architect(s):	
Architectural Style(s):	
Use(s):	Other Industrial; Other Transportation
Significance:	Engineering; Industry; Transportation
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Massachusetts Historical Commission
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NRD 6/5/78
LTD 12/13/83

NRD 8/13/76
MHL - 12/22/77

LOW. 938
C
CC
BE

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40582 Structure Number: U.PAWGLR
Structure Name 1: UPPER PAWTUCKET CANAL - GUARD LOCKS REACH
Structure Name 2: "OLD CANAL"
Structure Name 3:
Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
ORGCODE: 1780 County: MIDDLESEX State: MA
Regional Office: NORTH ATLANTIC
Subunit ORGCODE: Name:
Alpha Code: County: MIDDLESEX State: MA
Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED Date: 10/18/85
Significance: NATIONAL Date: 12/22/77
NHL: YES
Significance
FIRST OF 6 MAJ. CANALS IN LOWELL. DESIGNED SOLELY FOR NAVIGATION, ESP. FOR TRANSPORTING LOGS & CUT
TIMBER AROUND PAWTUCKET FALLS, BUT FINANCIAL SUCCESS CUT SHORT BY COMPLETION OF MIDDLESEX CANAL,
1803. IMPROVED 1893-95 TO INCREASE WORKING CAPACITY.

Historical Information

Period of Construction: HISTORIC
Date: 1792-1796 (BU) Designer: ()
Date: 1806-1824 (AL) Designer: ()
Date: 1893-1895 (AL) Designer: ()
Date: 1895-1902 (AL) Designer: ()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions Current Uses
CANAL CANAL
NAVIGATIONAL UTILITY SERVICE STRUCTURE
UTILITY SERVICE STRUCTURE

Buildings Materials Structures

Foundation: Sub-structure: EARTH
Framing: GRANITE
Walls: CONCRETE
Roof: Super-structure: GRANITE
Other: STONE
Volume: CONCRETE
Description

OF ALL THE LOWELL CANALS, THIS SECTION OF THE PAWTUCKET - FROM THE MERRIMACK RIVER ABOVE PAWTUCKET
FALLS TO GUARD LOCKS - REMAINS THE MOST "NATURAL" IN APPEARANCE. SLOPING WOODED BANKS, PRESENTLY
OVERGROWN. STONE WALL SEGMENTS UNMAINTAINED.

Impact Level: MODERATE Impact Types: EROSION
VEGETATION
Condition: FAIR INUNDATION (FLOODING)

LOW 938

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40582 LOWE UPPER PAWTUCKET CANAL - GUARD LOCKS REACH U.PAWGLR

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: L&C

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities

Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS (BUT DOES NOT OWN) CANAL
WALLS/FLOOR; NPS SHARES GROUNDS MAINT. RESPONSIBILITIES W/ STATE. DEFICIENCIES IN STONE WALL
SEGMENTS NOTED DURING INSPECTION.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-2 DAMS:
QTRS:

CLI

CRBIB

Other

- | | | | | | |
|----|-----------|----|--------|----|------------------------------|
| 1. | HRS | 1. | 010385 | 1. | 400101 MALONE, CANALS & IND. |
| 2. | HS ASSESS | 2. | 400107 | 2. | 010390 GMP |
| 3. | HSR | 3. | 010625 | 3. | |
| 4. | CLR | 4. | | 4. | |
| 5. | | 5. | 400108 | | |

Documentation Level: GOOD

Date Entered/Updated: 07/20/94

Logger: JIG

Date of Report: 04/04/95



Structure No. U.PAWGLR
IDLCS: 40582
UPPER PAWTUCKET CANAL - GUARD LOCKS REACH

PHOTO ★ GUARD # 3224
LIGHT IMPRESSIONS
Rochester, NY



Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.929
Historic Name:	Lower Pawtucket Canal
Common Name:	Old Canal
Address:	Lower Pawtucket Canal
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	
Year Constructed:	c 1792
Architect(s):	
Architectural Style(s):	
Use(s):	Other Industrial; Other Transportation; Other Water Related; Utilities Other
Significance:	Engineering; Industry; Transportation
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Thursday, November 7, 2019 at 9:33: AM

BC NRDS-61578
C NRDS-8113/76
NHL-12/22/77

LOWELL CULTURAL RESOURCES INVENTORY

IDENTIFICATION From the MERRIMACK RIVER above the PAWTUCKET DAM, to the CONCORD RIVER near EAST MERRIMACK STREET MAP SHEET # 5, 10-13

- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
- 2) HISTORIC NAME Patucket or Pawtucket Canal
- 3) CURRENT NAME Pawtucket Canal
- 4) PROPERTY TYPE canal 5) ZONING CLASSIFICATION various
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP, Locks and Canals HD, LHPD

HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE 1792-6, 1822-4
SOURCE documented: See Research Report, and Lowell Canal System, Malone.
- 2) ARCHITECT OR BUILDER unknown
- 3) HISTORIC OWNER Proprietors of Locks and Canals on the Merrimack River
- 4) ORIGINAL USE: GF transportation canal UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY no DATE _____
SOURCE _____

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE n/a
- 2) PRESENT USE:
GF power canal
UF n/a
- 3) NO OF STORIES n/a
- 4) PROP SQ FT n/a
- 5) PLAN n/a
- 6) ROOF n/a
- 7) STRUCTURAL SYSTEM masonry and reinforced concrete
- 8) OUTBUILDINGS see following forms
- 9) MATERIALS:
FOUNDATION n/a
FACADE ashlar granite, rubble stone, reinforced concrete
TRIM n/a

VIEW FROM north PHOTO TAKEN October 1979



- 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS banks are developed as park at northern end

From the MERRIMACK RIVER above the PAWTUCKET DAM,
 to the CONCORD RIVER near EAST MERRIMACK STREET

ADDRESS _____

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC good
- 2) IF DETERIORATED, CAUSES n/a
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact with evolutionary alterations
 UF n/a
- 4) SURROUNDING LAND USES railroad, expressway, canal frontage, river frontage, commercial, industrial, residential, recreational, institutional
- 5) INTEGRITY OF PROP'S HIST SETTING moderately disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING focal point in area

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

See Research Report, pages 1-3.

The Pawtucket Canal is a 9188 foot-long transportation and power canal that flows from the Merrimack River above the Pawtucket Falls, to the Concord River a few hundred yards above the confluence with the Merrimack River. The canal has three sets of locks--The Guard Locks, Swamp Locks, and Lower Locks--which accommodate a thirty-two foot difference in water level between the head of the canal on the Merrimack and the wasteway on the Concord. See the inventory forms on the individual sets of locks.

The Pawtucket varies from 80 to 100 feet in width, and averages eight feet deep. Its section is basically rectangular. Portions of its stone walls have been replaced with poured concrete.

ARCHEOLOGICAL COMMENT

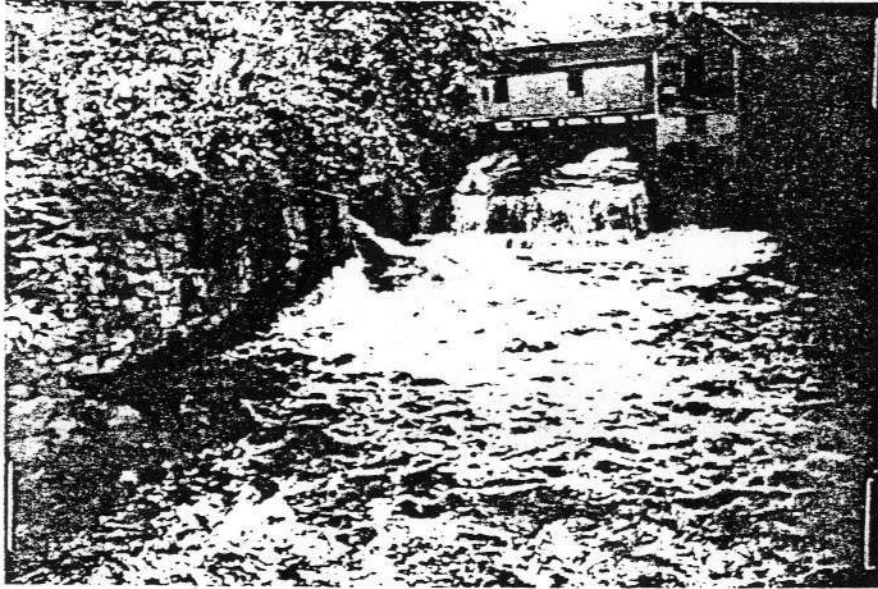
The 1820's widening of the Pawtucket Canal probably eradicated any remains of the canal's original fabric, including such features as the eliminated Minx Locks. The lengths of the canal between Broadway and School Streets, and above the Guard Locks have received less adjacent development than the lower portions, and possibly retain some traces of such early, canal-related features such as the towpath. The Middlesex Company near the Lower Locks was the only millyard to draw water for power directly from the Pawtucket, and filled-in penstocks and tailraces appear to survive beneath the surface of that razed yard.



View from Thorndike Street west along the Pawtucket, showing the canal with most of the water drawn off. Photo taken in October 1979.



View from the southwest of the Pawtucket Canal, at its junction with the Hamilton Canal (right). Photo taken in October 1979.



Pawtucket Canal passing through Swamp Locks. Photo taken in August 1979.

LOW.929

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40575 LOWE LOWER PAWTUCKET CANAL LOW.PAWT

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: L&C

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities Treatment Costs
Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS (BUT DOES NOT OWN) PAWTUCKET CANAL WALLS/FLOORS; NPS SHARES MAINT. RESPONSIBILITIES W/ STATE ALONG CANALWAY.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-2 DAMS:
QTRS:

CLI	CRBIB	Other
1.	HRS 1. 010385	1. 400101 MALONE, CANALS & IND.
2.	HS ASSESS 2. 400107	2. 010390 GMP
3.	HSR 3. 010625	3.
4.	CLR 4.	4.
5.	5. 400108	

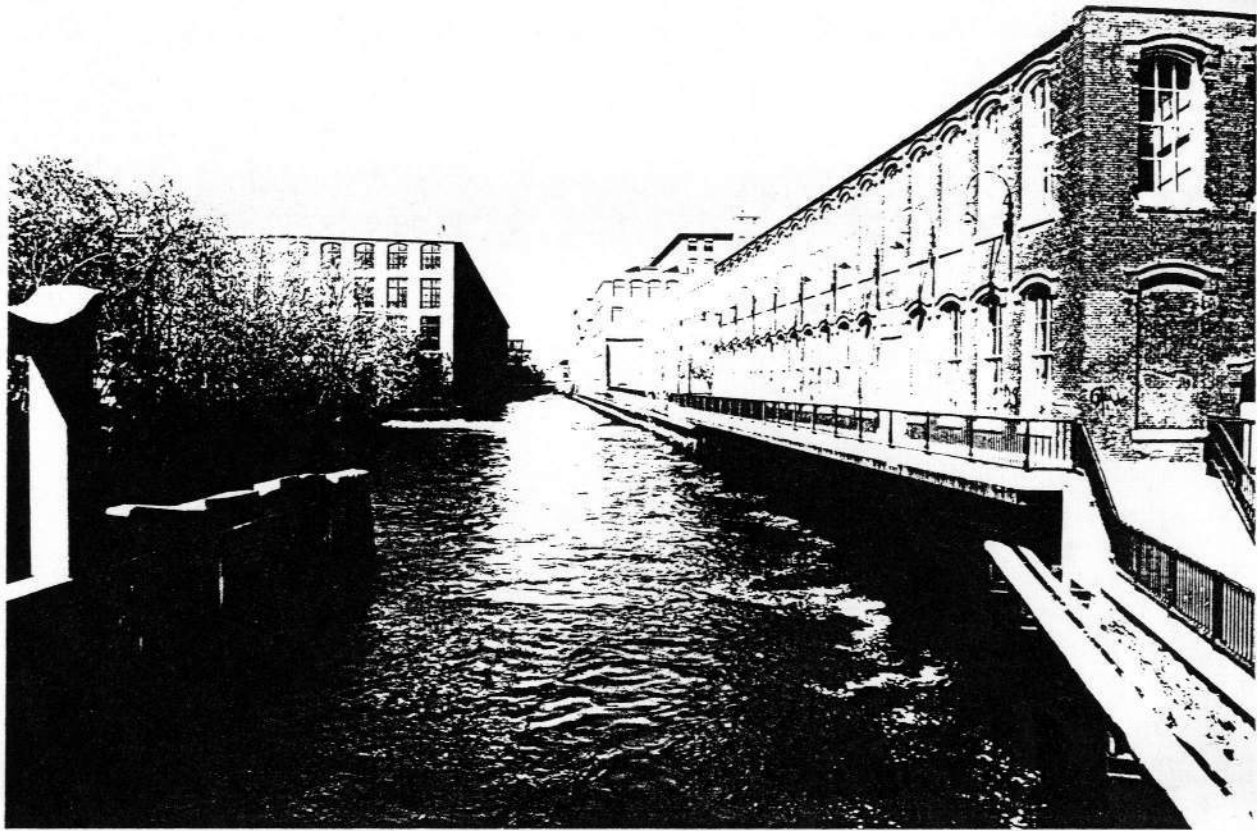
Documentation Level: GOOD

Date Entered/Updated: 07/20/94

Logger: JIG

Date of Report: 04/04/95

LOW.909



Structure No. **LOW.PAWT**
IDLCS: **40575**
LOWER PAWTUCKET CANAL

PHOTO ★ GUARD # 3224
LIGHT IMPRESSIONS[®]
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.937
Historic Name:	Pawtucket Dam
Common Name:	
Address:	Pawtucket Canal Above School St
City/Town:	Lowell
Village/Neighborhood:	Acre
Local No:	
Year Constructed:	c 1826
Architect(s):	
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related; Utilities Other
Significance:	Archaeology, Historic; Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983); Nat'l Register DOE (10/26/2011)
Building Materials(s):	



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LOWELL CULTURAL RESOURCES INVENTORY

BCI NRS 15-615178
C- NRS 15-8113170
MIL- 12/22/77

IDENTIFICATION MERRIMACK RIVER, above SCHOOL STREET MAP SHEET # 5

1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED no

2) HISTORIC NAME Pawtucket Dam BCI NRS 15-1212183

3) CURRENT NAME same

4) PROPERTY TYPE river dam 5) ZONING CLASSIFICATION M3, S2

6) TAXES: PAYMENTS current STATUS clear

7) WITHIN BOUNDARIES OF LNHP, LHPD, Locks and Canals HD

HISTORICAL ABSTRACT

1) CONSTRUCTION DATE 1846-7, 1875

SOURCE documented: Research Report

2) ARCHITECT OR BUILDER unknown

3) HISTORIC OWNER Proprietors of Locks and Canals

4) ORIGINAL USE: GF waterpower dam UF n/a

5) PREVIOUS BLDGS ON PROPERTY yes DATE 1826/1833-1846

SOURCE documented: Lower Merrimack River...Inventory, page:80

DESCRIPTIVE DATA

1) ARCHITECTURAL STYLE n/a

2) PRESENT USE:
GF dam
UF n/a

3) NO OF STORIES n/a

4) PROP SQ FT n/a

5) PLAN n/a

6) ROOF n/a

7) STRUCTURAL SYSTEM load-bearing masonry

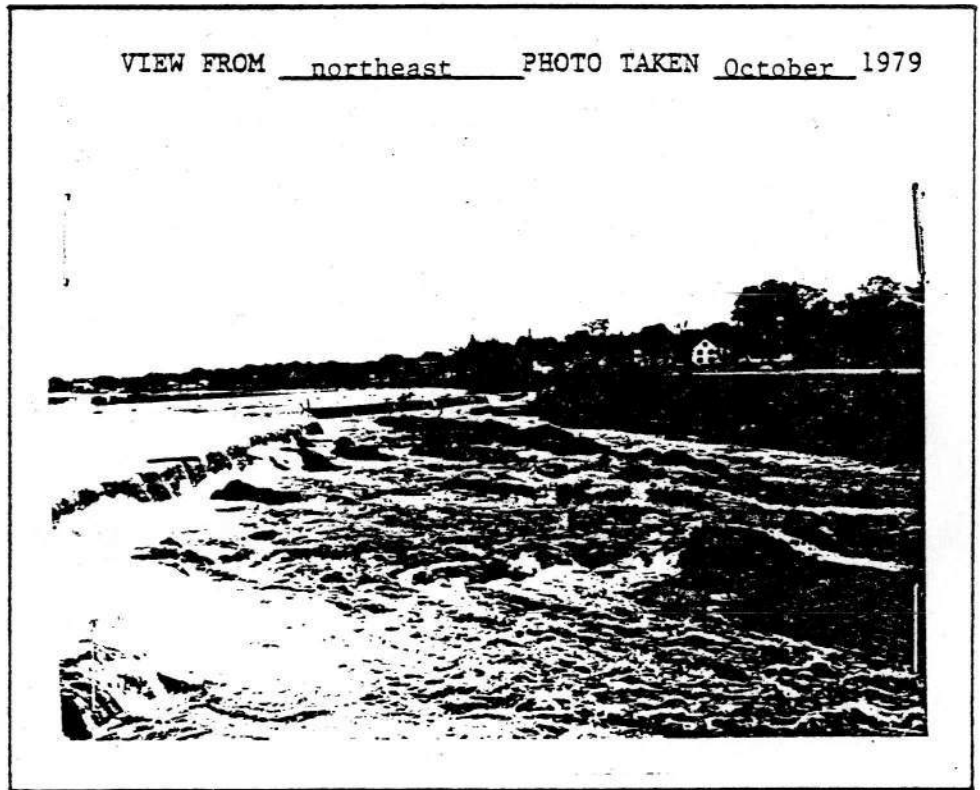
8) OUTBUILDINGS none

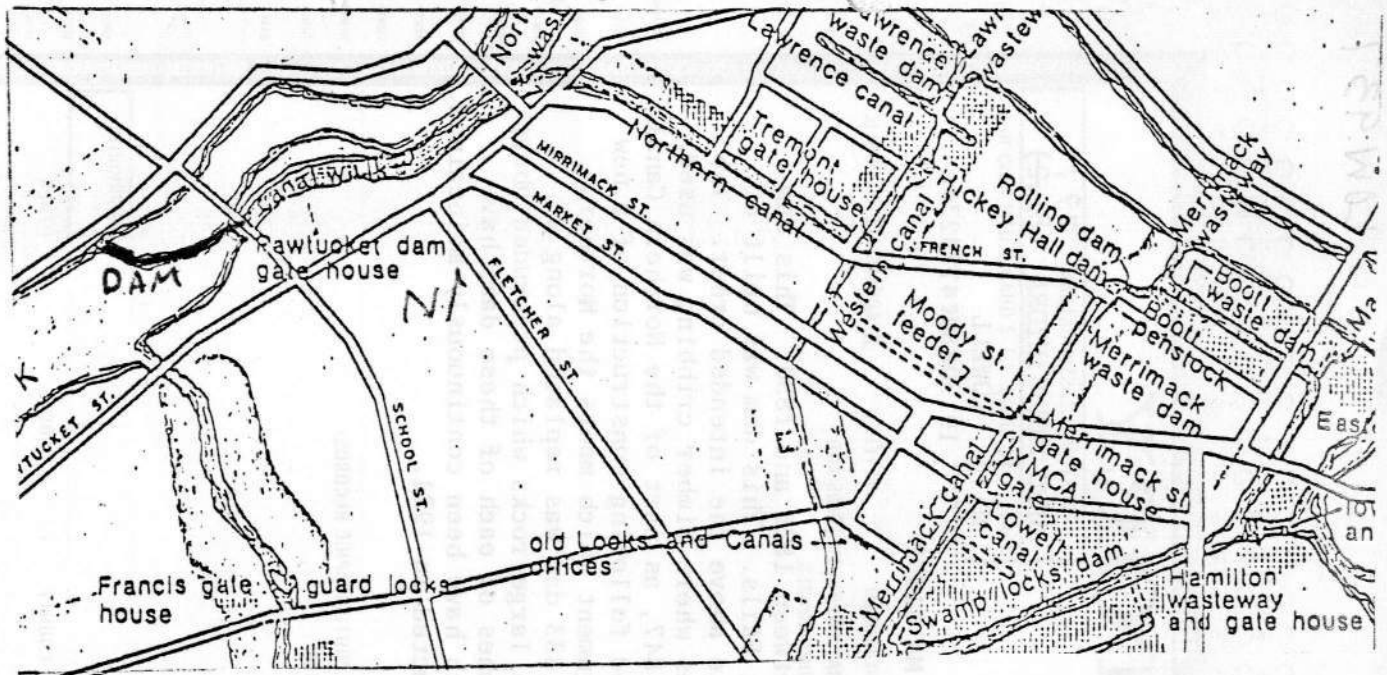
9) MATERIALS:
FOUNDATION granite ashlar

FACADE granite

TRIM n/a

10) NOTABLE SURFACE & LANDSCAPE ELEMENTS none





HAER INVENTORY

1. NAME OF STRUCTURE: PAWTUCKET DAM
 2. DATE: 1847; 1875
 3. NATURE OF STRUCTURE: DAM
 4. INDUSTRIAL CLASSIFICATION: SPEC STRUC:HYDRA (791-2)

5. LOCATION: STREET & NUMBER: MERRIMACK RIVER ABOVE SCHOOL STREET
 CITY OR TOWN: LOWELL
 COUNTY: MIDDLESEX
 STATE: MA
 6. USGS 7 1/2 QUAD & UTM GRID REF.: LOWELL
 19.3088024724230

7. OWNER OF PROPERTY: PROPRIETORS OF THE LOCKS & CANALS
 ADDRESS: FOOT OF JOHN STREET
 LOWELL, MA 01852

8. CONDITION: EXCELLENT GOOD FAIR DETERIORATED RUINS UNEXPOSED ALTERED ACCESSIBLE TO PUBLIC

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/ DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.
 The first masonry dam across the Merrimack River was built piecemeal between 1826 and 1830. This dam generally followed the natural ledge at the head of the Upper Pawtucket Falls. This dam was built of rough cut granite except in those places where the rock outcropping rose above the intended crest. The underpinning mostly consisted of natural ledge except in the declivities where timber cribbing was used. In 1833, this dam was raised 2' by adding two additional courses. In 1847, as part of the Northern Canal project, the easterly section, approximately 1/3 of the dam, was removed following construction of a new section, faced in bedrock founded granite ashlar along the present alignment which meets the Northern Canal head gate at a right angle. In 1875, the remaining part of the 1833 dam was replaced along a similar alignment also in granite ashlar founded on bedrock. The three large rocks which protruded above the crest of the dam were cut down and capped in 1875-1876. The capstones of each of these dams have contained colinear holes to hold wrought iron pins for flashboards which have been continuously maintained. The current fishway, located at the westerly end of the dam was constructed in 1921.

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

See GREAT GATE.

12. DANGER OF DEMOLITION OR DAMAGE: YES NO
 NATURE OF THREAT:

13. PRIORITY

14. EXISTING SURVEYS: NH NR X HAER HABS STATE COUNTY LOCAL OTHER
 DATE: 1974

15. RECORDED BY: YOUR NAME: Charles Hyde & Charles Parrott
 ADDRESS: HAER Lowell Survey
 AFFILIATION:
 DATE: August 23, 1974

Vertical labels on the left: HAER, HABS, STATE, COUNTY, LOCAL, OTHER, DDD, FN, HIST, TECH, ARCH, TAPES, MAER, OTHER, FIELD, SEDES, HIST, SURVEY, STEREO, MOVIES, LC, AL, AR, AZ, CA, CO, CT, DE, FL, GA, HI, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NE, NH, NJ, NY, NC, ND, OH, OK, PA, RI, SC, SD, TN, TX, UT, VT, VA, WA, WI, WY, OT.

Vertical labels on the right: SUP-CLASSIFICATION, SPECIALIZED STRUCTURES (SPEC-STRUC), MUSEUM, ADAPT, HOUS, P & ET, MATS, MATH, HEAT, CONST, HYDRA, TUNIS, DAM, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200.

Vertical labels at the bottom: METAL, WOOD, BRICK, CONCRETE, STONE, GLASS, CERAMIC, PLASTER, PAINT, OTHER.

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS	Park	Structure Name	Number
40610	LOWE	PAWTUCKET DAM	PAW.DAM
Management Information			
NPS Legal Interest: NONE - LOCAL GOVERNMENT OWNED Federal Owner:			
Life:		Exp. Date: / /	Local Owner: MA/DEM
Management Category: MUST BE PRES. & MAINT		Management Date: 10/16/87	
Management Agreement: MEMORANDUM OF UNDERSTANDING		Mat. Exp. Date: 04/03/96	
Proposed Ultimate Treat:		Doc:	Date: / /
Approved Ultimate Treat: PRESERVATION		Doc: GMP	Date: 08/00/81
Treatment Responsibilities		Treatment Costs	
Interim Treatment: OTH		Interim:	\$0 Date: /
Ultimate Treatment: OTH		Ultimate:	\$0 Date: /
Routine Maintenance: OTH		Level of Estimate:	
Cyclic Maintenance: OTH		Estimator:	
Approved Ultimate Treatment Completed: YES			
Management Text			
LOWELL LOCKS & CANALS HISTORIC DISTRICT. NPS DAM #130.			
Major Bibliographical References			
Nat. Reg.: 78003149		CSI:	Nat. Cat: NO
HABS:		BRIDGES:	
HAER: MA-1-A		DAMS: MA00837	
		QTRS:	
CLI		CRBIB	Other
1.	HRS	1. 010385	1. 400101 MALONE, CANALS & IND.
2.	HS ASSESS	2. 400107	2. 010390 GMP
3.	HSR	3.	3. 0102344 WEIBLE, HRS PART 1
4.	CLR	4.	4.
5.		5. 400108	
Documentation Level: GOOD			
Date Entered/Updated: 07/20/94		Logger: JIG	

Date of Report: 04/04/95

L0W.937



Structure No. PAW.DAM
IDLCS: 40610
PAWTUCKET DAM

PHOTO ★ GUARD # 3224
LIGHT IMPRESSIONS®
Rochester, NY

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.73
Historic Name:	Northern Canal Guard Gates Gatehouse
Common Name:	Pawtucket Gate House
Address:	23 School St
City/Town:	Lowell
Village/Neighborhood:	Acre
Local No:	163, 269
Year Constructed:	c 1847
Architect(s):	Forbes, Franklin; Francis, James B.
Architectural Style(s):	Italianate
Use(s):	Other Water Related; Utilities Other
Significance:	Architecture; Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	Roof: Slate Wall: Brick; Wood Foundation: Granite; Stone, Cut



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This file was accessed on: Thursday, November 7, 2019 at 3:35: PM

7. Original owner (if known) _____

Original use industrial

Subsequent uses (if any) and dates _____

8. Themes (check as many as applicable)

- | | | | | | |
|-----------------------|-------|----------------------------|-------|-------------------------|-------|
| Aboriginal | _____ | Conservation | _____ | Recreation | _____ |
| Agricultural | _____ | Education | _____ | Religion | _____ |
| Architectural | _____ | Exploration/
settlement | _____ | Science/
invention | _____ |
| The Arts | _____ | Industry | _____ | Social/
humanitarian | _____ |
| Commerce | _____ | Military | _____ | Transportation | _____ |
| Communication | _____ | Political | _____ | | |
| Community development | _____ | | | | |

9. Historical significance (include explanation of themes checked above)

Few industrial structures were built with the concern and attention to detail as evidenced in this structure.

10. Bibliography and/or references (such as local histories, deeds, assessor's records, early maps, etc.)



NR/NHL

NR

103

	HD	LOW.73
--	----	--------

Town Lowell

Street address Mammoth Road, O'Donnell Bridge

Name Northern Canal Gate House

Use: original & present Gate

Present owner Locks and Canal Company

Open to public No

Date 1847 Style _____

Source of date Locks & Canal Records

Architect _____

OR part of Area # _____

Literature _____
 Music _____
 Development of town/city _____
 Architectural reason for inventorying: _____

3. CONDITION Excellent Good Fair Deteriorated Moved Altered Added _____

4. DESCRIPTION

FOUNDATION/BASEMENT: High Regular Low Material Granite

WALL COVER: Wood _____ Brick Stone Other _____

ROOF: Ridge Gambrel Flat Hip Mansard _____
 Tower Cupola Dormer windows Balustrade Grillwork _____

CHIMNEYS: 1 2 3 4 Center End Interior Irregular Cluster Elaborate

STORIES: 1 2 3 4 ATTACHMENTS: Wings Ell Shed _____

PORCHES: 1 2 3 4 _____ PORTICO _____ Balcony _____

FACADE: Gable end: Front/side Ornament _____

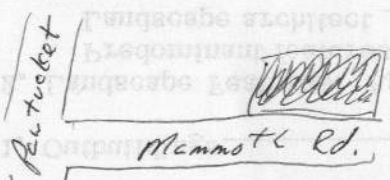
Entrance: Side Front: Center/Side Details: _____

Windows: Spacing: Regular Irregular Identical Varied _____

Corners: Plain Pilasters Quoins Cornerboards _____

5. Indicate location of building in relation to nearest cross streets and other buildings

6. Footage of structure from street 10'
 Property has 100' feet frontage on street



Recorder _____

For _____

Photo # _____ Date _____

SEE REVERSE SIDE

RELATION OF SURROUNDING STRUCTURE

- 1. Outbuildings _____
- 2. Landscape Features: Agriculture Open Wooded Garden: Formal/Informal
 Predominant features _____
 Landscape architect _____
- 3. Neighboring Structures
 Style: Colonial Federal Greek Revival Gothic Revival Italian Villa Lombard Rom.
 Venetian Gothic Mansard Richardsonian Modern
 Use: Residential Commercial Religious Conditions: Excellent Good Fair Deteriorated

GIVE A BRIEF DESCRIPTION OF HISTORIC IMPORTANCE OF SITE (Refer and elaborate on theme circled on front of form) " Presently owned by the Locks and Canal Company, and still in use as part of the canal system. The Northern Canal Gate House is near the site of the original canal built around the Pawtucket Falls. The Pawtucket Canal was constructed from 1793 to 1796 and was designed for floating logs down the Merrimack River to the Newburyport shipyards. In 1847 the Northern Canal was constructed to reduce the strong currents in the canal system and to provide more waterpower for the mills. The Gate House is an intricate part of the canal system and should be preserved." ①

BIBLIOGRAPHY AND/OR REFERENCE

① Urban Design Study Historical Survey, City Development Authority, Lowell, 1970.

RESTRICTIONS _____

Original Owner: _____
 Deed Information: Book Number _____ Page _____, _____ Registry of Deeds

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40593 LOWE NORTHERN CANAL GUARD GATES GATE HOUSE PAWT.GH

Management Information

NPS Legal Interest: NONE - LOCAL GOVERNMENT OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: MA/DEM

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities Treatment Costs

Interim Treatment: NPS Interim: \$0 Date: /
Ultimate Treatment: NPS Ultimate: \$0 Date: /
Routine Maintenance: NPS Level of Estimate:
Cyclic Maintenance: NPS Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. NPS DAM #128. FIRE/INTRUSION ALARM ADDED 1993. VERT.
CRACK @ NW ELEV. SHOULD BE SEALED, MONITORED. GRAN. CAP MISSING @ W CHIMNEY. WD. DOORS FACING
BRIDGE SUBJ. TO DETERIORATION, VANDALISM.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

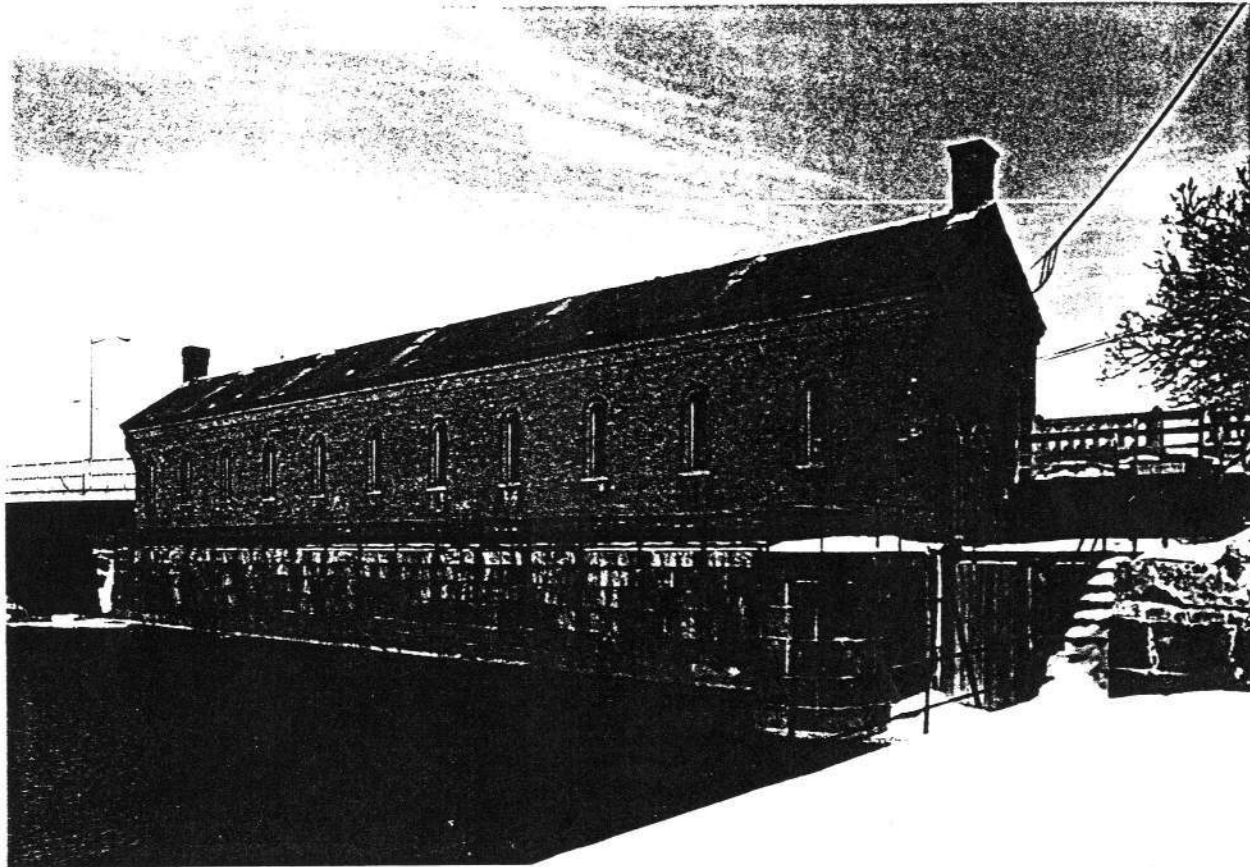
HABS: BRIDGES:
HAER: MA-8-A DAMS: MA00833
QTRS:

CLI	CRBIB	Other
1. HRS	1. 010385	1. 010674 MAHLSTED HSR ARCHEOL.
2. HS ASSESS	2. 400107	2. 400101 MALONE, CANALS & IND.
3. HSR	3. 010625	3. 010390 GMP
4. CLR	4.	4.
5.	5. 400108	

Documentation Level: GOOD

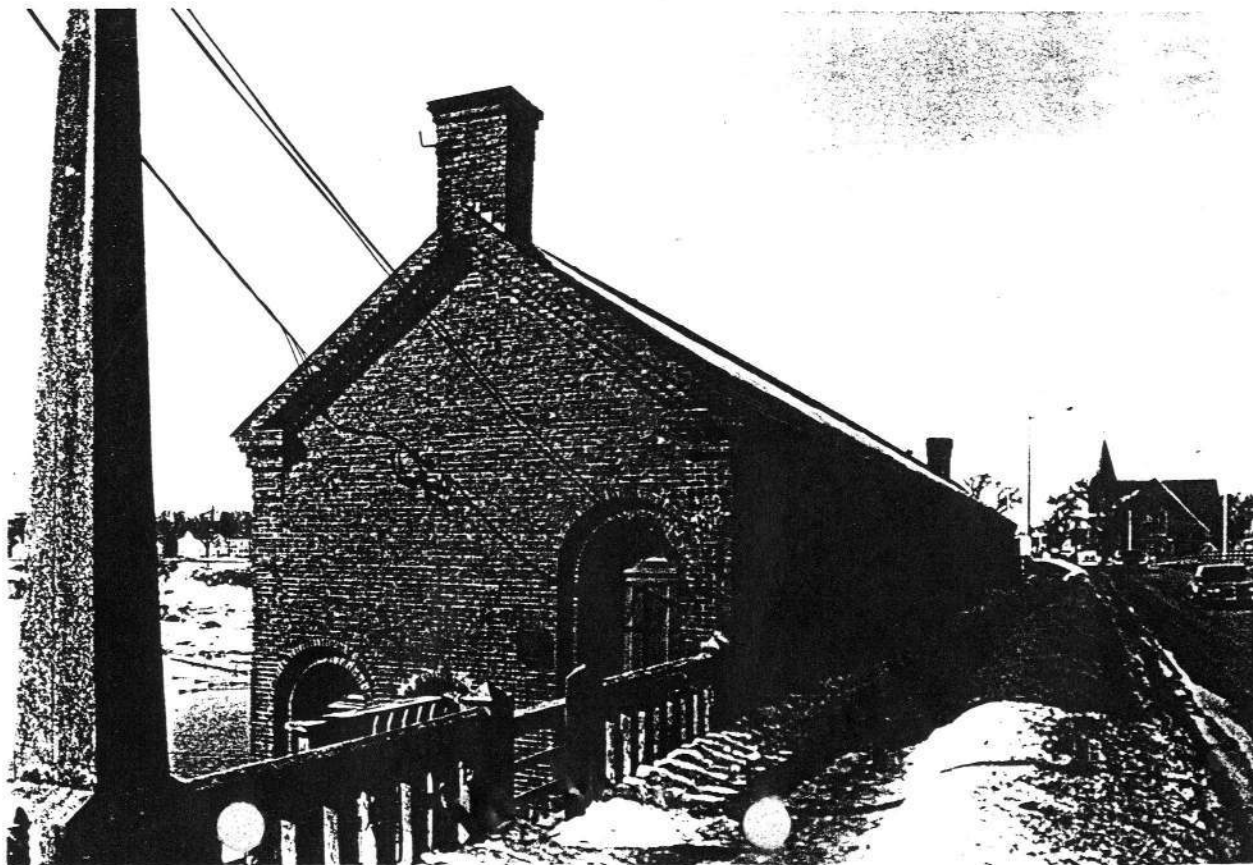
Date Entered/Updated: 07/19/94 Logger: JIG

Date of Report: 04/04/95



Structure No. PAWT.GH
 IDLCS: 40593
 NORTHERN CANAL GUARD GATES GATE HOUSE

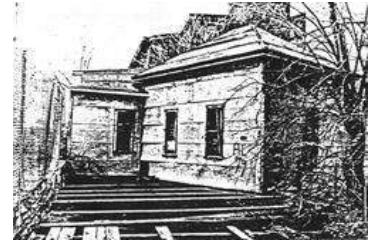
PHOTO * GUARD # 30274
 LIGHT IMPRESSIONS
 Rochester, NY



Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No: LOW.983
Historic Name: Merrimack Canal Rolling Dam and Wasteway
Common Name: Merrimack Canal Wasteway
Address: Merrimack Canal
off French St, opposite Kirk St
City/Town: Lowell
Village/Neighborhood: Downtown
Local No:
Year Constructed: c 1835
Architect(s):
Architectural Style(s):
Use(s): Abandoned or Vacant; Other Industrial; Other Water Related
Significance: Archaeology, Historic; Engineering; Industry
Area(s): LOW.C: Locks and Canals District
LOW.BC: Lowell National Historical Park
LOW.BE: Downtown Lowell Historic District
Designation(s): Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):



The Massachusetts Historical Commission (MHC) has converted this paper record to digital format as part of ongoing projects to scan records of the Inventory of Historic Assets of the Commonwealth and National Register of Historic Places nominations for Massachusetts. Efforts are ongoing and not all inventory or National Register records related to this resource may be available in digital format at this time.

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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Thursday, November 7, 2019 at 3:41: PM

LOWELL CULTURAL RESOURCES INVENTORY

MERRIMACK CANAL, off FRENCH STREET,
opposite KIRK STREET

LOW. 983
 NR 012 61572
 LHD 12113123
 NHL 12122177
 NR 012 81376

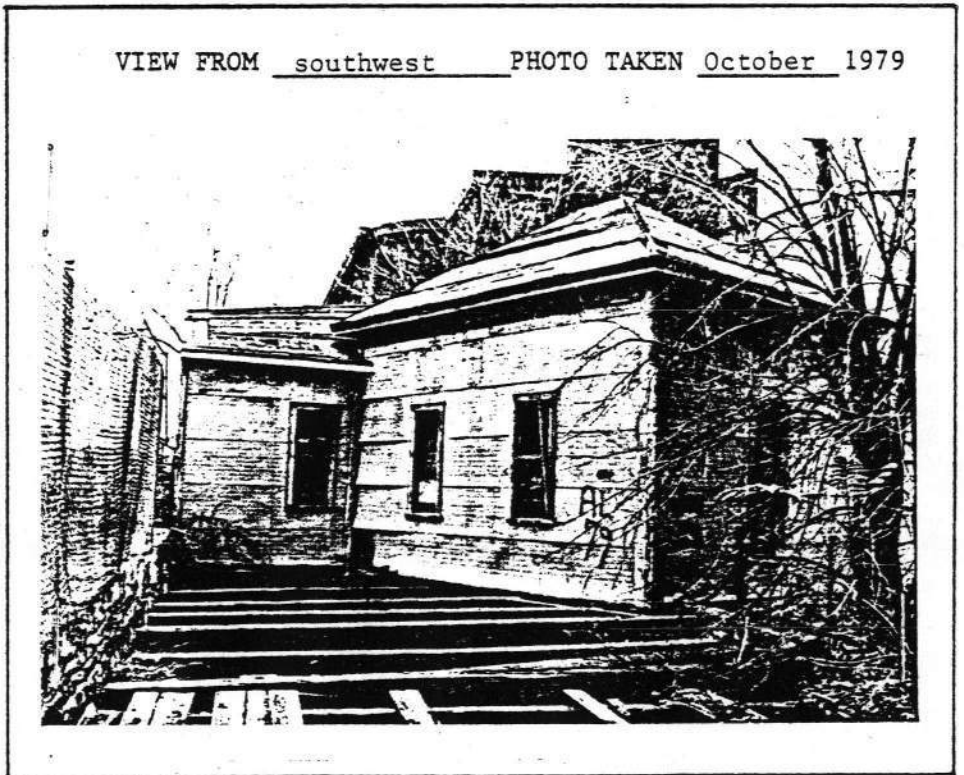
- IDENTIFICATION
- 1) CURRENT OWNER Proprietors of Locks and Canals MAP SHEET # 7 OWNER OCCUPIED no
- 2) HISTORIC NAME Rolling Dam and Merrimack Wasteway
- 3) CURRENT NAME same
- 4) PROPERTY TYPE canal/canal structure 5) ZONING CLASSIFICATION A - B2
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP -- Locks and Canals HD -- LHPD

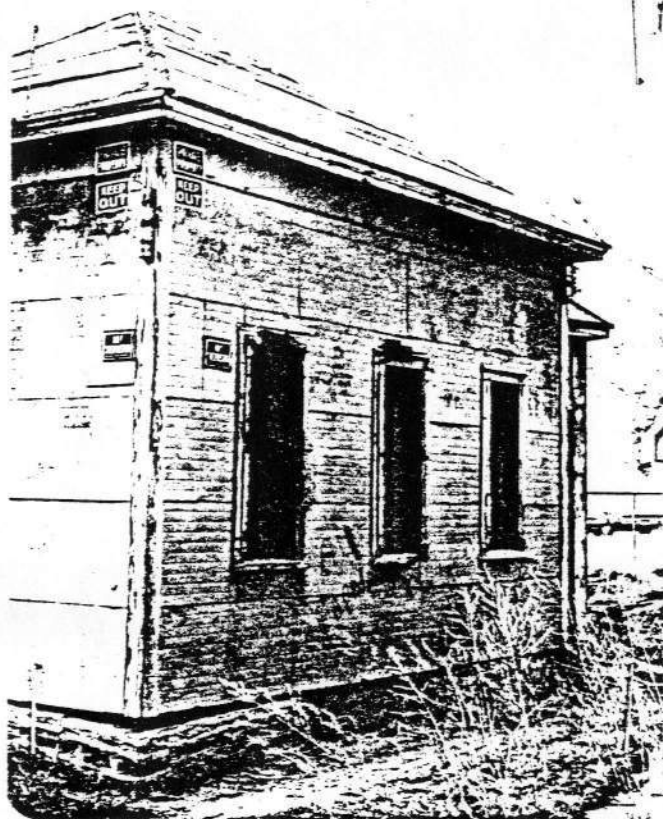
HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE ca. 1882/1835
 SOURCE documented: 1878 Boott insurance survey--updated/Lower Merrimack...Inventory
- 2) ARCHITECT OR BUILDER unknown
- 3) HISTORIC OWNER Proprietors of Locks and Canals
- 4) ORIGINAL USE: GF canal regulation UF n/a
- 5) PREVIOUS BLDGS ON PROPERTY no DATE _____
 SOURCE _____

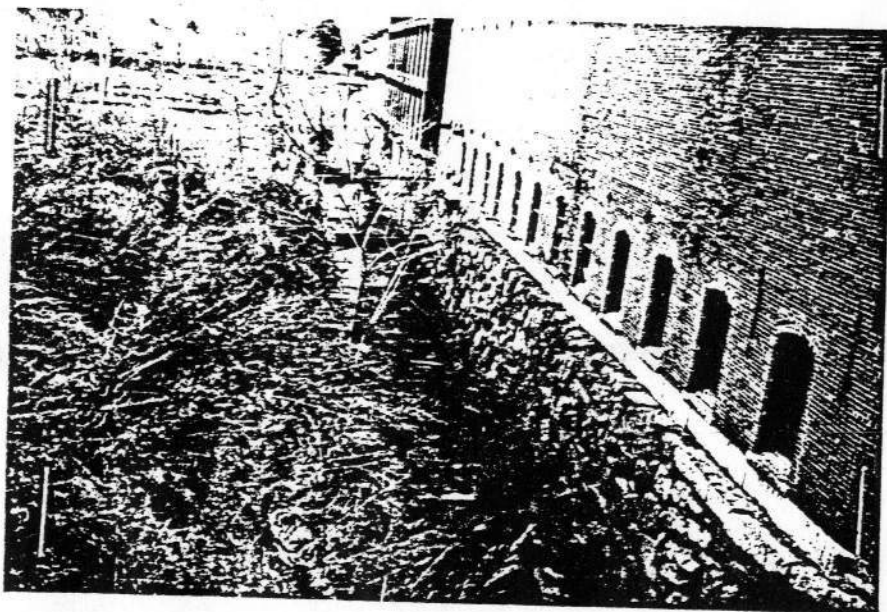
DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE utilitarian
- 2) PRESENT USE: inoperable
 GF (Rolling Dam)
 UF n/a
- 3) NO OF STORIES 1
- 4) PROP SQ FT n/a
- 5) PLAN I-shaped
- 6) ROOF hip
- 7) STRUCTURAL SYSTEM wood frame
- 8) OUTBUILDINGS none
- 9) MATERIALS:
 FOUNDATION ashlar stone
- FACADE all sides: brick-stamped metal siding
- TRIM wood
- 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS sits over wasteway

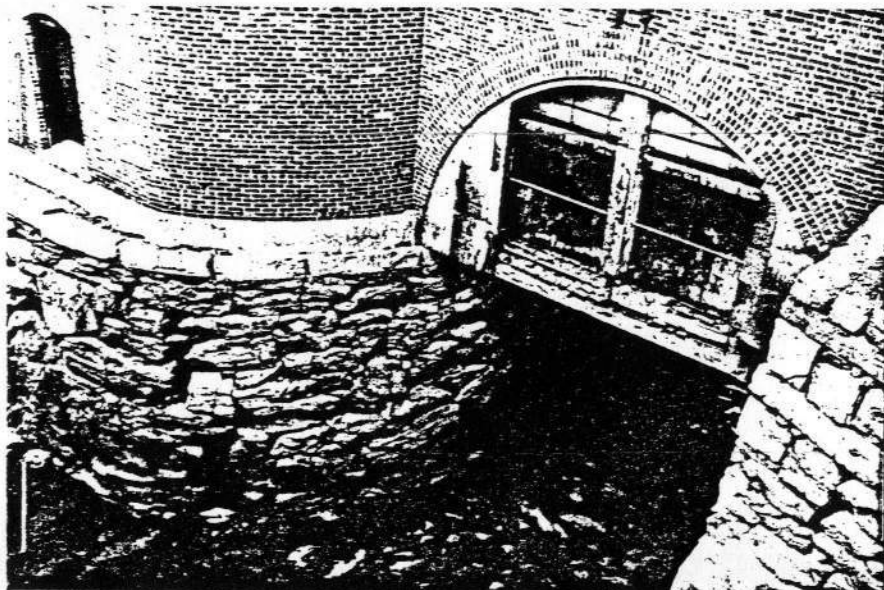




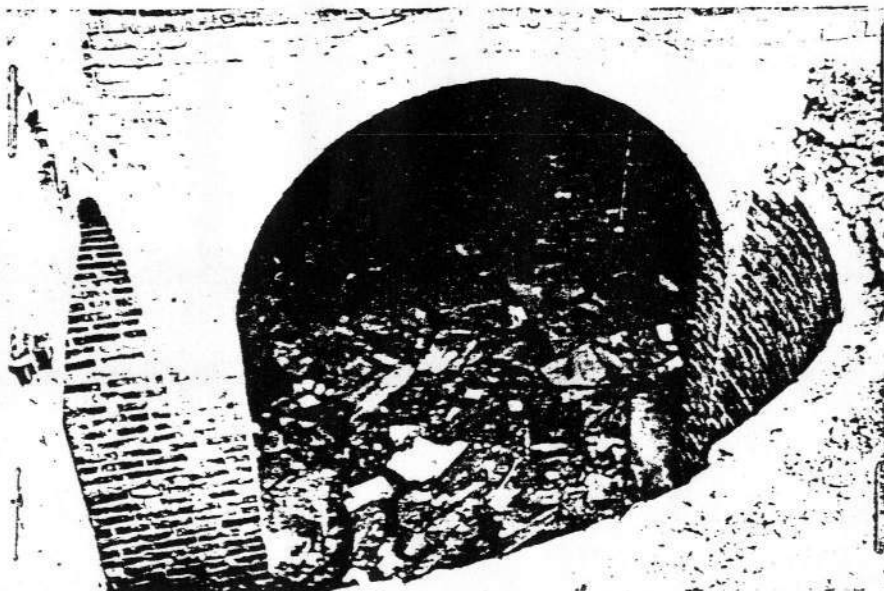
View from the south of the structure over the Rolling Dam.
Photo taken in June 1979.



View from the southwest of the Merrimack Wasteway. At right is
Bott Mill No. 9 Picker House. Photo taken in October 1979.



Detail of the west corner of Boott Mill No. 9, showing the wasteway passing beneath the corner of the building. Photo taken in October 1979.



Detail of the wasteway arches at the west corner of Boott Mill No. 9. Photo taken in October 1979.

HAER INVENTORY

EXISTING SURVEYS

DATA

DWGS

PHOTOGRAPHS

STATES

1. NAME OF STRUCTURE

ROLLING DAM

2. DATE

1835

3. NATURE OF STRUCTURE

DAM

4. INDUSTRIAL CLASSIFICATION

SPEC STRUC: HYDRA (81.2)

5. LOCATION: STREET & NUMBER MERRIMACK CANAL

CITY OR TOWN

COUNTY

STATE

6. USGS 7 1/2 QUAD & UTM GRID REF.

NEAR INTERSECTION OF KIRK & FRENCH STS.

LOWELL

MIDDLESEX

MA

LOWELL

7. OWNER OF PROPERTY

ADDRESS

19.310640.4724110

PROPRIETORS OF LOCKS & CANALS

FOOT OF JOHN STREET

LOWELL, MA 01852

8. CONDITION:

EXCELLENT

GOOD

FAIR

DETERIORATED

RUINS

UNEXPOSED

ALTERED

ACCESSIBLE TO PUBLIC

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.

The initial construction of this dam took place in 1835 when the Merrimack Wasteway was reconstructed to facilitate wasting from the then new Eastern (Boott) Canal. It provided the intermediate level necessary to vertically align the Merrimack Canal (on the upper level of the system) and the Eastern Canal (on the lower level) so they both could discharge water through the Merrimack Wasteway. This intermediate level was later used to supply water to the Eastern Canal from the Merrimack Canal through the Boott penstock. A house sheltering either a weir or a gate was erected over the dam sometime during the latter half of the 19th century to maintain a water level of sufficient height to adequately feed the Boott penstock. A house remains over the dam, but the device used to control the water level has been removed. There is no evidence that a roller gate of the type generally associated with a "rolling dam" was ever used at this site. It is possible that this name was given to this dam because it was the only one to survive with a curved configuration to its face, although there were, at one time, several of this type in the system. The profile of the dam was slightly altered in 1934 when a concrete facing with iron strap overlay was added

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE. which slightly increased its height. (HYDR & PARROT)

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS)

CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

LOCKS & CANALS RECORDS, LOWELL & BAKIN LIBRARY

See GREAT GATE.

12. DANGER OF DEMOLITION OR DAMAGE YES NO

NATURE OF THREAT: Possible site of new hydroelectric facility.

13. PRIORITY

14. EXISTING SURVEYS NHL NR HAER HABS STATE COUNTY LOCAL OTHER

1974

15. INVENTORIED BY: YOUR NAME

ADDRESS

AFFILIATION

DATE

Charles Hyde & Charles Parrott

HAER Lowell Survey

August 24, 1974

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MEG)

UTILITIES (UTIL)

POWER SOURCES & PRIME MOVERS (PS & PM)

TRANSPORTATION (TRANS)

COMM

BRIDGES

MACH FABR TCCUP INST GMEG

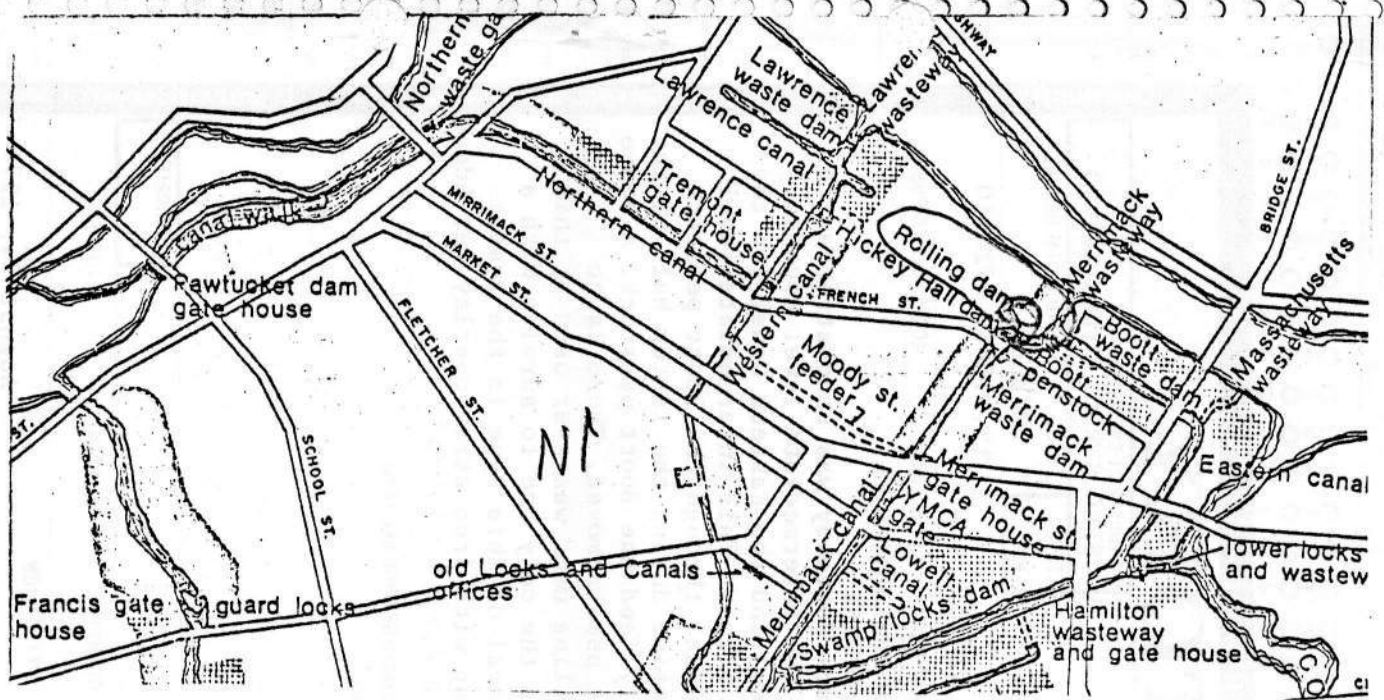
WATER SAHI GAS ELEC

MUSL WATER WHEEL WATER TURB WIND RECIP STEAM TURB INT COMB DIESEL ELEC

RR ROAD CANAL MARINE AIR PIPE

TXT R&TV

BEAM ARCH TRUSS SUSP AQUE TRES CANT MOVE



LOW 983

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40577 Structure Number: MER.WW

Structure Name 1: MERRIMACK WASTEWAY
 Structure Name 2:
 Structure Name 3:

Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
 ORGCODE: 1780 County: MIDDLESEX State: MA
 Regional Office: NORTH ATLANTIC

Subunit ORGCODE: Name:
 Alpha Code: County: MIDDLESEX State: MA

Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED Date: 10/18/85
 Significance: NATIONAL
 NHL: YES Date: 12/22/77

Significance
 CONSTRUCTED IN CONJUNCTION WITH EASTERN CANAL; APPARENTLY NOT PART OF ORIGINAL (1822-23) MERRIMACK CANAL LAYOUT. USED TO CONVEY EXCESS WATER BACK TO THE MERRIMACK RIVER.

Historical Information

Period of Construction: HISTORIC

Date: 1836-PRE	(BU)	Designer:	()
Date: 1882-	(AL)	Designer:	()
Date: -	()	Designer:	()
Date: -	()	Designer:	()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions	Current Uses
CANAL	CANAL
UTILITY SERVICE STRUCTURE	UTILITY SERVICE STRUCTURE

	Buildings	Materials	Structures
Foundation:			Sub-structure: GRANITE
Framing:			STONE
Walls:			
Roof:			Super-structure: STONE
Other:			
Volume:			
Description			

EXTENDS NE FROM ROLLING DAM TO MERRIMACK RIVER. BED LINED w/ ROUGH ASLAR BLOCKS; WALLS CONSIST OF LARGE ASHLAR STONE. APPROX. 16' WIDE. E WALL SURMOUNTED BY WALL OF BOOTT MILL BLDG.; CORNER ROUNDED TO FACILITATE FLOW FROM EASTERN CANAL.

Impact Level: MODERATE Impact Types: STRUCTURAL DETERIORATION
 INUNDATION (FLOODING)
 EROSION

Condition: GOOD

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40577 LOWE MERRIMACK WASTEWAY MER.WW

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: BH

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities

Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS CANAL WALLS/FLOOR; NPS SHARES MAINT.
RESPONSIBILITIES w/ STATE ALONG CANALWAY.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO
HABS: BRIDGES:
HAER: MA-3 DAMS:
QTRS:

CLI

CRBIB

Other

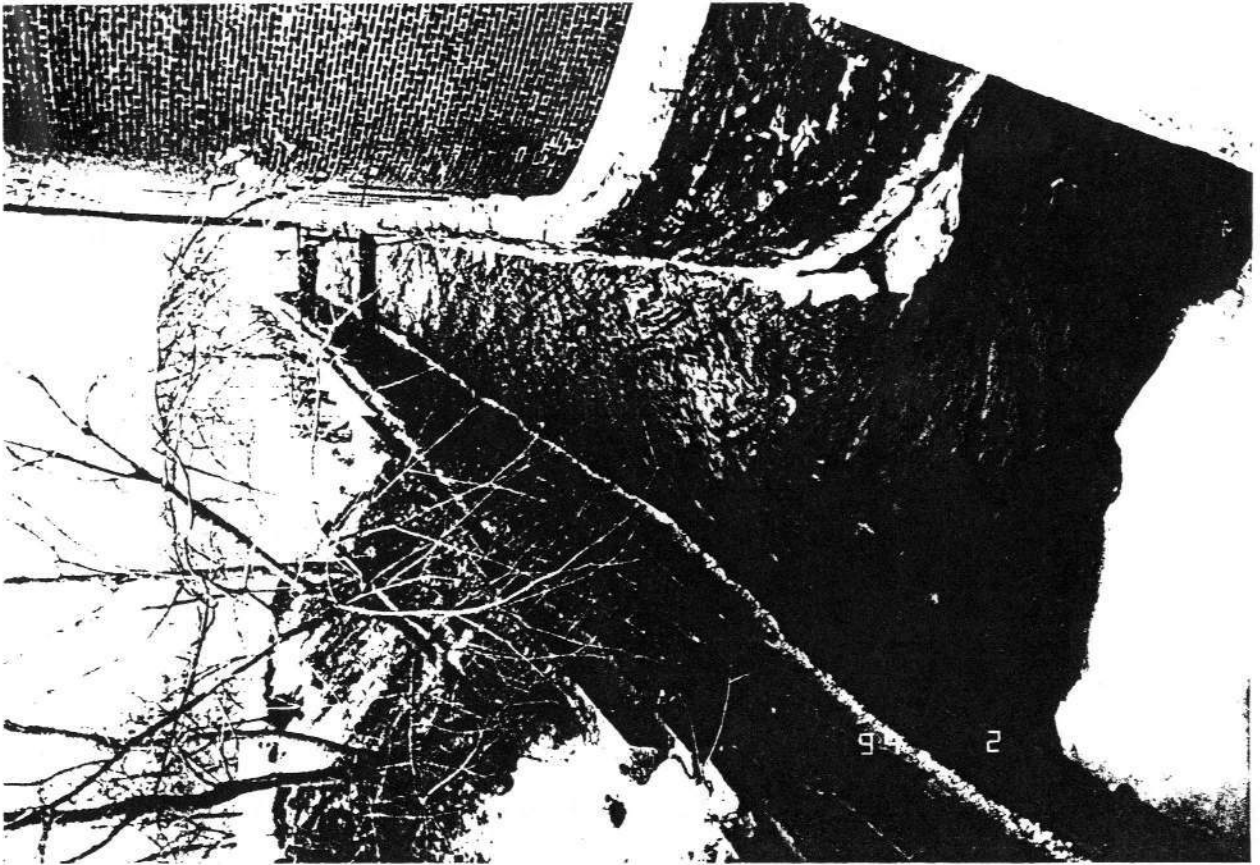
- | | | | | | |
|----|-----------|----|--------|----|------------------------------|
| 1. | HRS | 1. | 010385 | 1. | 400101 MALONE, CANALS & IND. |
| 2. | HS ASSESS | 2. | 400107 | 2. | 010390 GMP |
| 3. | HSR | 3. | | 3. | |
| 4. | CLR | 4. | | 4. | |
| 5. | | 5. | 400108 | | |

Documentation Level: FAIR

Date Entered/Updated: 07/20/94

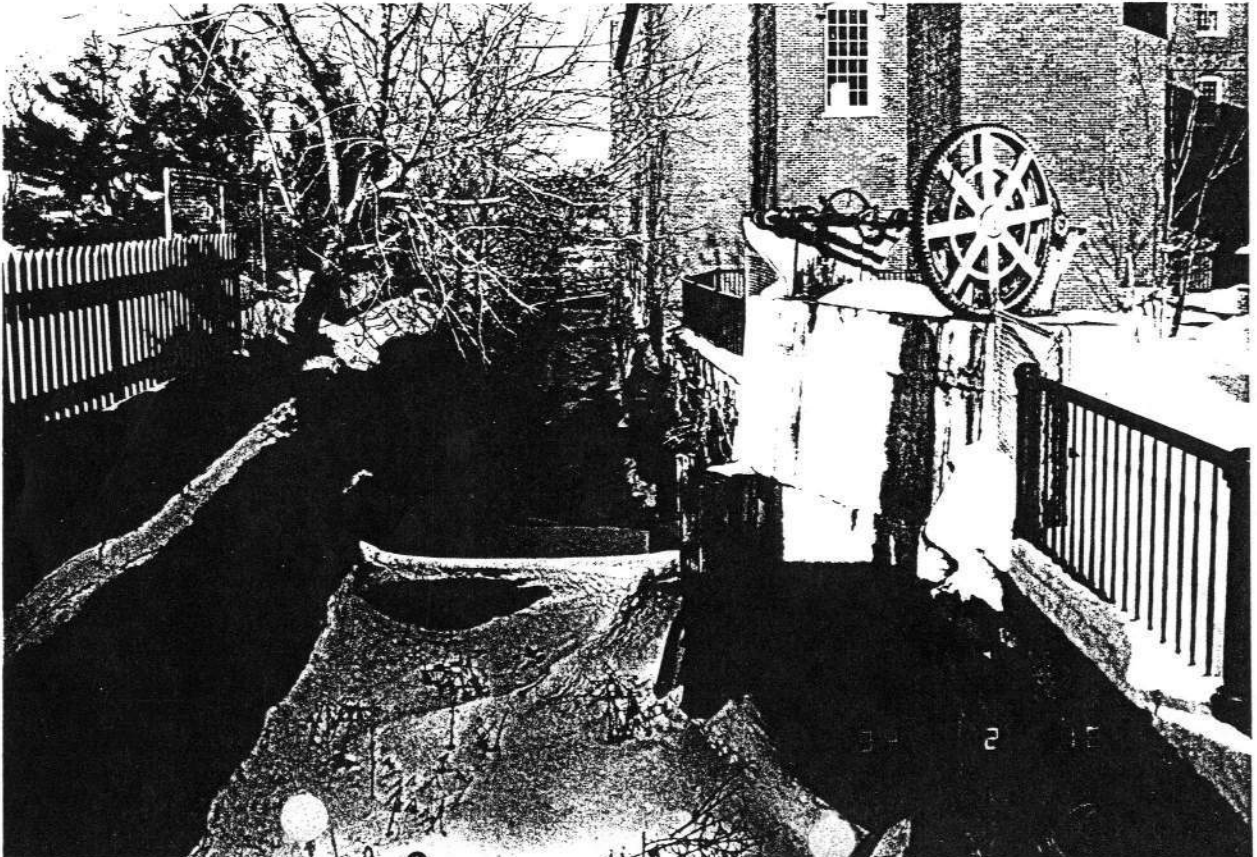
Logger: JIG

Date of Report: 04/04/95



Structure No. MER.WW
IDLCS: 40577
MERRIMACK WASTEWAY

PHOTO ★ GUARD # 3224
LIGHT IMPRESSIONS
Rochester, NY



LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT

Identification

IDLCS: 40611 Structure Number: ROL.DAM

Structure Name 1: ROLLING DAM
 Structure Name 2:
 Structure Name 3:

Park Alpha Code: LOWE Name: LOWELL NATIONAL HISTORICAL PARK
 ORGCODE: 1780 County: MIDDLESEX State: MA
 Regional Office: NORTH ATLANTIC

Subunit ORGCODE: Name:
 Alpha Code: County: MIDDLESEX State: MA

Number of UTM's: 0 Zone/Easting/Northing

Significance

NR Status: ENTERED - DOCUMENTED Date: 10/18/85
 Significance: NATIONAL Date: 12/22/77
 NHL: YES

Significance
 WATER CONTROL FEATURES HAVE STOOD AT THIS SITE SINCE 1835, WHEN CONSTR'N. OF EASTERN CANAL
 NECESSITATED REWORKING OF MERRIMACK WASTEWAY TO ACCOMMODATE BOTH EASTERN & MERRIMACK CANALS. USED
 IN CONJ. W/ BOOTT PENSTOCK AFTER 1849.

Historical Information

Period of Construction: HISTORIC

Date: 1835- (BU) Designer: ()
 Date: 1849- (AL) Designer: ()
 Date: 1934- (AL) Designer: ()
 Date: 1985-1988 (AL) Designer: ()

Functions, Uses, Materials, Impacts, and Condition

Historic Functions	Current Uses
DAM	DAM - CONCRETE (GRAVITY)
DAM - CONCRETE (GRAVITY)	UTILITY SERVICE STRUCTURE
UTILITY SERVICE STRUCTURE	

	Buildings	Materials	Structures
Foundation:			Sub-structure: GRANITE
Framing:			CONCRETE
Walls:			Super-structure: CONCRETE
Roof:			IRON
Other:			
Volume:			

Description
 CONC.-FACED DAM LOC'D. IN STONE-LINED MERRIMACK WASTEWAY JUST ABOVE EASTERN CANAL. 1-STORY
 HIP-ROOFED DAM HOUSE NO LONGER EXTANT. IRON WINDLASS ON CONC. PIER STRADDLES E WASTEWAY WALL AT
 ANGLE, ABOVE ENTRANCE TO BOOTT PENSTOCK.

Impact Level: MODERATE Impact Types: INUNDATION (FLOODING)
 STRUCTURAL DETERIORATION

Condition: FAIR

LOW. 983

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS	Park	Structure Name	Number
40611	LOWE	ROLLING DAM	ROL.DAM

Management Information

NPS Legal Interest: NONE - LOCAL GOVERNMENT OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: MA/DEM

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities Treatment Costs

Interim Treatment: OTH	Interim:	\$0	Date: /
Ultimate Treatment: OTH	Ultimate:	\$0	Date: /
Routine Maintenance: OTH	Level of Estimate:		
Cyclic Maintenance: OTH	Estimator:		

Approved Ultimate Treatment Completed: NO

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. 150 SF GATE HOUSE SLATED FOR RECONSTRUCTION BY LHPC.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO
HABS: BRIDGES:
HAER: MA-3-B DAMS:
QTRS:

CLI	CRBIB	Other
1. HRS 1. 010385	1. 400101 MALONE, CANALS & IND.	
2. HS ASSESS 2. 400107	2. 010390 GMP	
3. HSR 3.	3.	
4. CLR 4.	4.	
5. 5. 400108		

Documentation Level: GOOD

Date Entered/Updated: 07/19/94

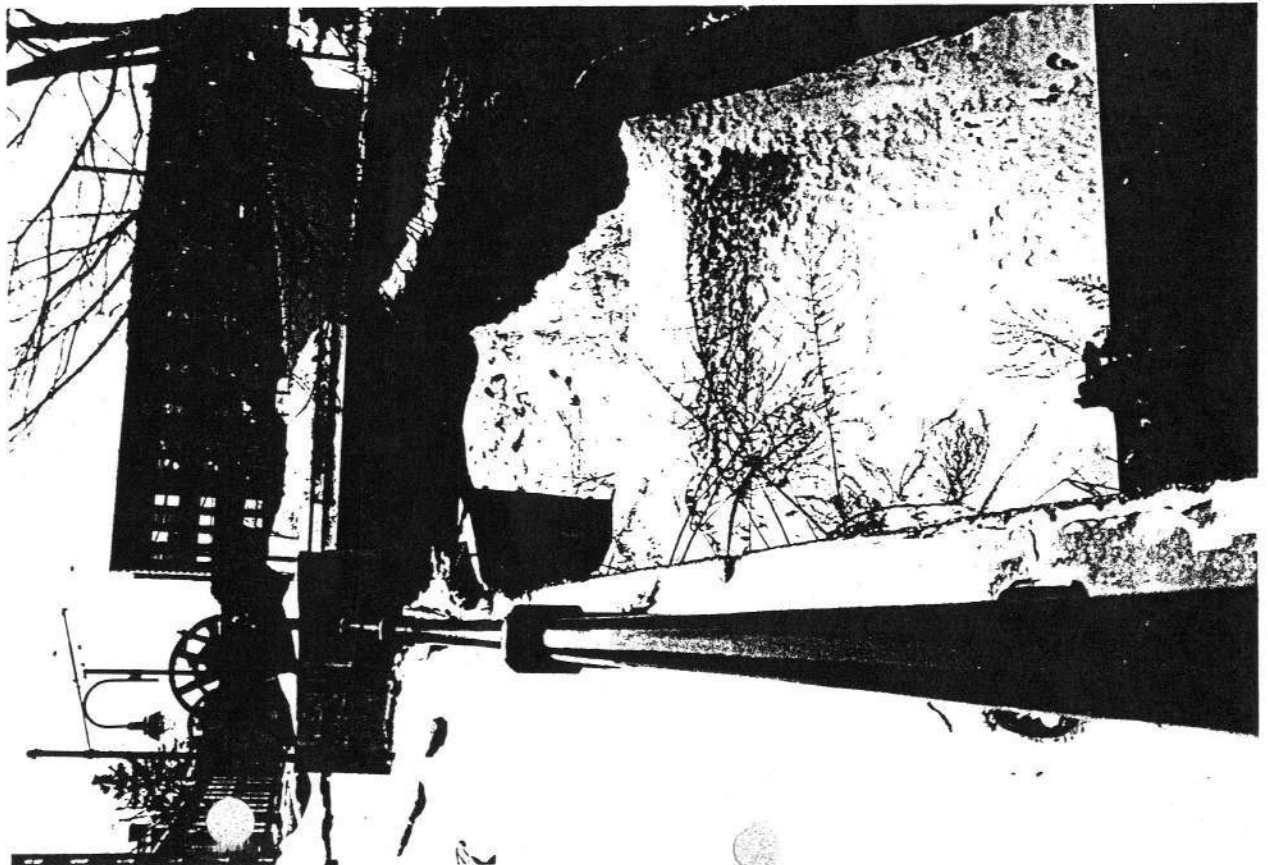
Logger: JIG

Date of Report: 04/04/95



Structure No. ROL.DAM
 IDLCS: 40611
 ROLLING DAM

PHOTO + GUARD # 3224
 LIGHT IMPRESSIONS®
 Rochester, NY



Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No: LOW.9029
Historic Name: Swamp Locks Ice Deflector and Trash Rack
Common Name: Swamp Locks Water Diverter
Address: Merrimack Canal

City/Town: Lowell
Village/Neighborhood: Downtown
Local No: C
Year Constructed: 1868
Architect(s):
Architectural Style(s):
Use(s): Other Industrial; Other Water Related; Utilities Other
Significance: Engineering; Industry

Area(s): LOW.C: Locks and Canals District
LOW.BC: Lowell National Historical Park
LOW.BE: Downtown Lowell Historic District

Designation(s): Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)

Building Materials(s):

Digital Photo
Not Yet
Available

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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Thursday, November 7, 2019 at 10:17 AM

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS	Park	Structure Name	Number
40613	LOWE	SWAMP LOCKS - ICE DEFLECTOR	SL.LNDG

Management Information

NPS Legal Interest: NONE - LOCAL GOVERNMENT OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: MA/DEM

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities Treatment Costs

Interim Treatment: NPS	Interim:	\$0	Date: /
Ultimate Treatment: NPS	Ultimate:	\$0	Date: /
Routine Maintenance: NPS	Level of Estimate:		
Cyclic Maintenance: NPS	Estimator:		

Approved Ultimate Treatment Completed: NO

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. NPS MAINTAINS FOR TOUR BOAT USE.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: DAMS:
QTRS:

CLI	CRBIB	Other
1. HRS	1. 010385	1. 400107 MALONE, CANALS & IND.
2. HS ASSESS	2. 400107	2. 010390 GMP
3. HSR	3.	3.
4. CLR	4.	4.
5.	5. 400108	

Documentation Level: POOR

Date Entered/Updated: 07/20/94

Logger: JIG

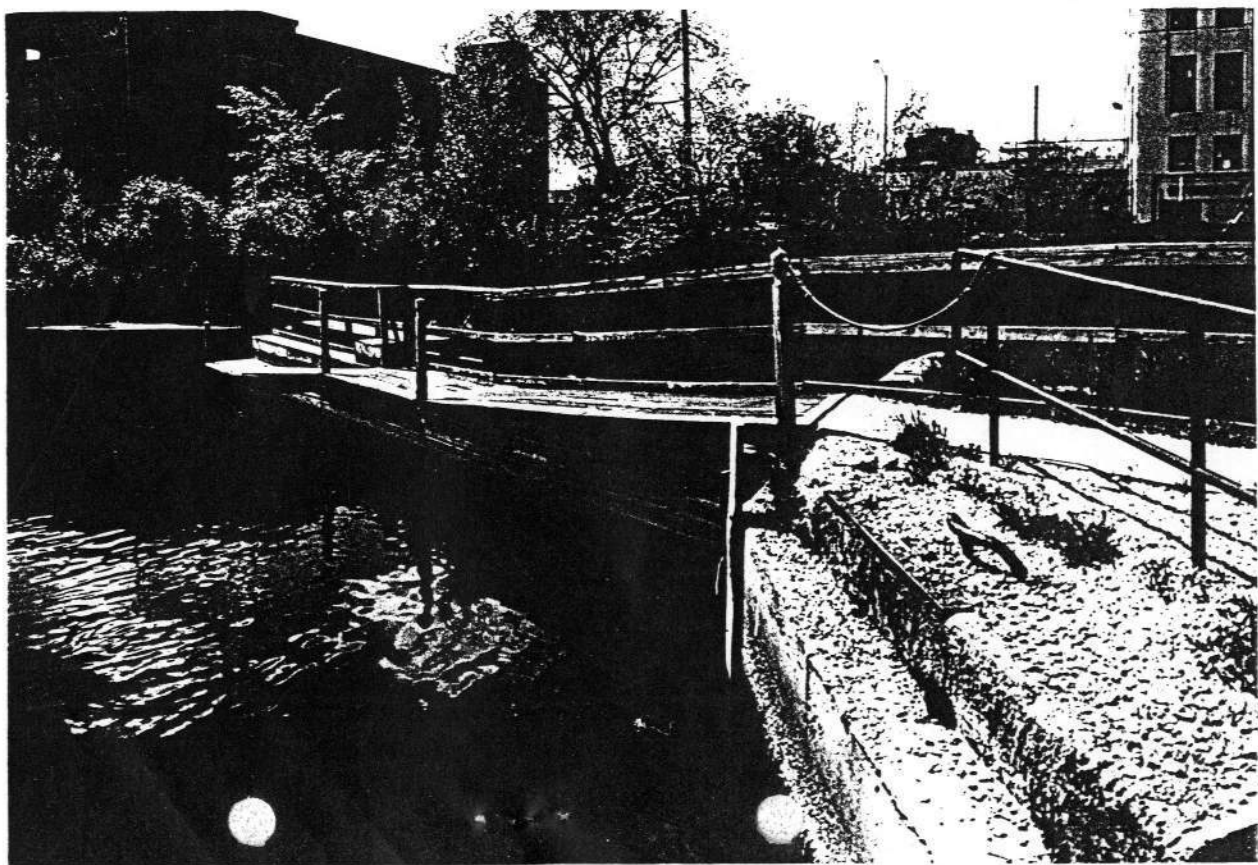
Date of Report: 04/04/95

LOW 9029



Structure No. SL.LNDG
IDLCS: 40613
SWAMP LOCKS - ICE DEFLECTOR

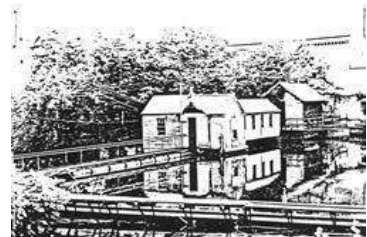
PHOTO ★ GUARD # 3224
LIGHT IMPRESSIONS
Rochester, NY



Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.932
Historic Name:	Pawtucket Canal Swamp Locks Gatehouse and Dam
Common Name:	
Address:	Lower Pawtucket Canal East of Thorndike St
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	
Year Constructed:	c 1859
Architect(s):	
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related; Utilities Other
Significance:	Engineering; Industry
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Thursday, November 7, 2019 at 9:35: AM

LOWELL CULTURAL RESOURCES INVENTORY

LOW. 932

[BC] NPD 19- 6/5/78
 [C] MED 19- 8/13/76
 NHL - 12/22/77

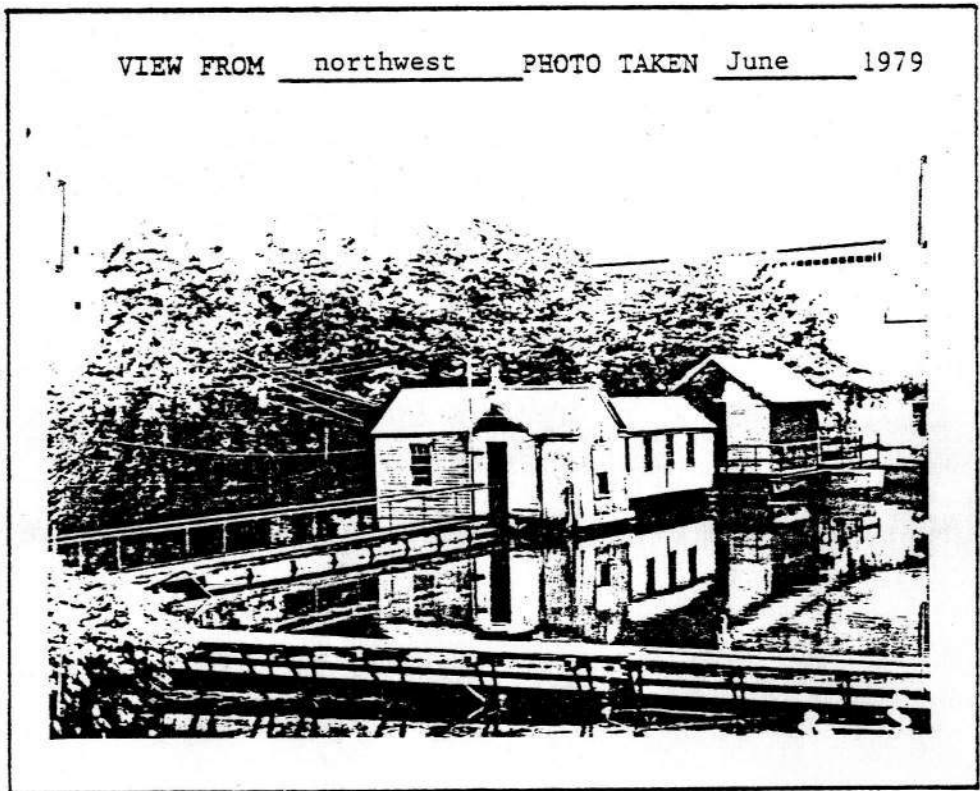
IDENTIFICATION PAWTUCKET CANAL, east of THORNDIKE STREET MAP SHEET # 11
 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
 2) HISTORIC NAME Swamp Locks
 3) CURRENT NAME same
 4) PROPERTY TYPE canal structure 5) ZONING CLASSIFICATION 1-A
 6) TAXES: PAYMENTS current STATUS clear
 7) WITHIN BOUNDARIES OF LNHP, LHPD, Locks and Canals HD

HISTORICAL ABSTRACT

1) CONSTRUCTION DATE 1839-41
SOURCE documented: Lower Merrimack...Inventory, p. 71
 2) ARCHITECT OR BUILDER unknown
 3) HISTORIC OWNER Proprietors of Locks and Canals on the Merrimack River
 4) ORIGINAL USE: GF canal regulation, navigation UF n/a
 5) PREVIOUS BLDGS ON PROPERTY yes DATE ca. 1792-1822, 1823-1839
SOURCE documented: Lower Merrimack...Inventory

DESCRIPTIVE DATA

1) ARCHITECTURAL STYLE utilitarian
 2) PRESENT USE:
GF canal navigation, regulation,
UF n/a
 3) NO OF STORIES 1
 4) PROP SQ FT n/a
 5) PLAN rectangular
 6) ROOF end-wall gable
 7) STRUCTURAL SYSTEM
wood frame
 8) OUTBUILDINGS
none
 9) MATERIALS:
FOUNDATION
granite ashlar, concrete
FACADE wood clapboard, vertical wood sheathing
TRIM wood
 10) NOTABLE SURFACE & LANDSCAPE ELEMENTS none



ADDRESS PAWTUCKET CANAL, east of THORNDIKE STREET

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC needs minor repair
- 2) IF DETERIORATED, CAUSES n/a
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact with evolutionary alterations
UF n/a
- 4) SURROUNDING LAND USES industrial, railroad, canal frontage
- 5) INTEGRITY OF PROP'S HIST SETTING severely disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING integral to character

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

See Research Report.

The Swamp Locks and Dam of the Pawtucket Canal occupy the position of the third of four sets of locks of the original 1792-6 canal. Since the 1822-3 rebuilding of the canal, this complex has been the central one of the reworked three-lock system, and has been the crucial division between the upper and lower levels of the two-tiered power canal network. Water flows at one level for about 5,700 feet from the Merrimack River to the Swamp Locks, then drops thirteen feet to the lower level, which is seventeen feet above the water in the Concord River below the Canal.

The oldest fabric of the complex dates from an 1839-41 rebuilding, but the basic configuration is the result of the 1822-23 reconstruction of the canal. In 1839-41, the present stepped dam was built, and the twenty-five foot locks were narrowed to twelve feet. Within the original rubble stone locks, the narrower locks were built. Only the new lock walls around the gates were built of stone--the remainder of the walls were wooden. These wooden walls were replaced with ashlar on the upper lock in 1892, but the lower lock's walls were simply renewed periodically in wood, and are now gone.

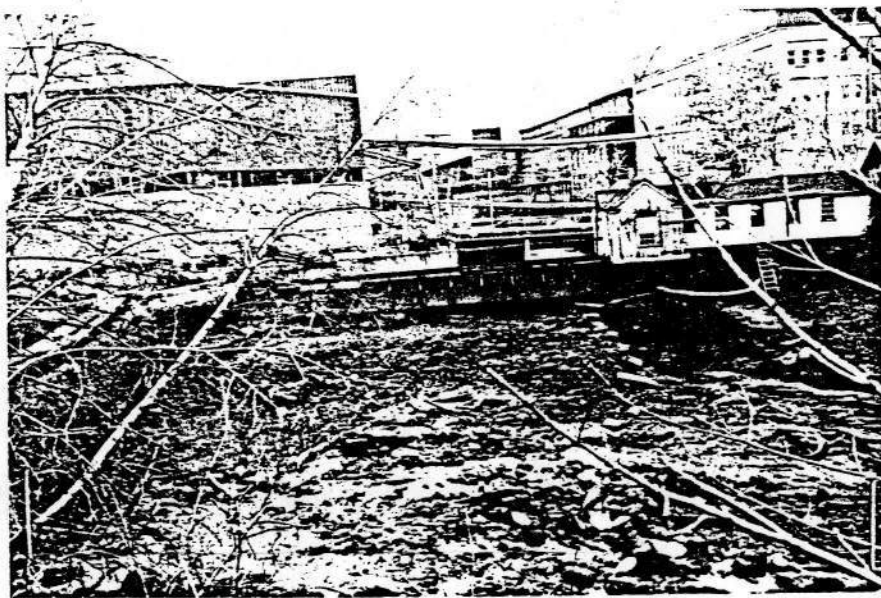
The dam has sluiceways to the north and south. The latter was built of ashlar, probably in 1841, while the former was completed in 1928. There have been protective houses over the south sluice gate and the crest of the dam since 1859, and the present gable-roofed structures may date at least in part from that time. In the 1940s, various portions of the complex were rebuilt in concrete.

ARCHEOLOGICAL COMMENT

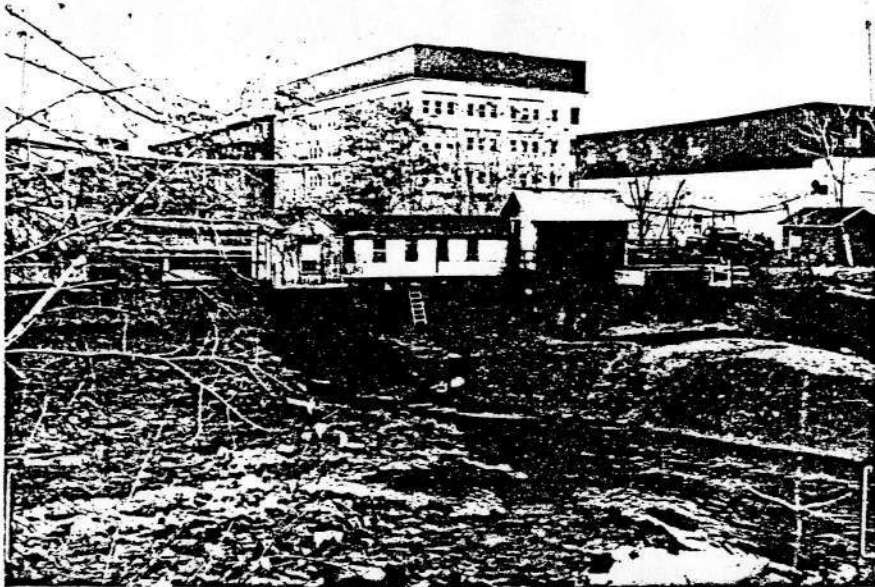
The Swamp Locks complex includes fabric of several construction efforts. An archeological investigation of the site might help elucidate the sequence of rebuildings.



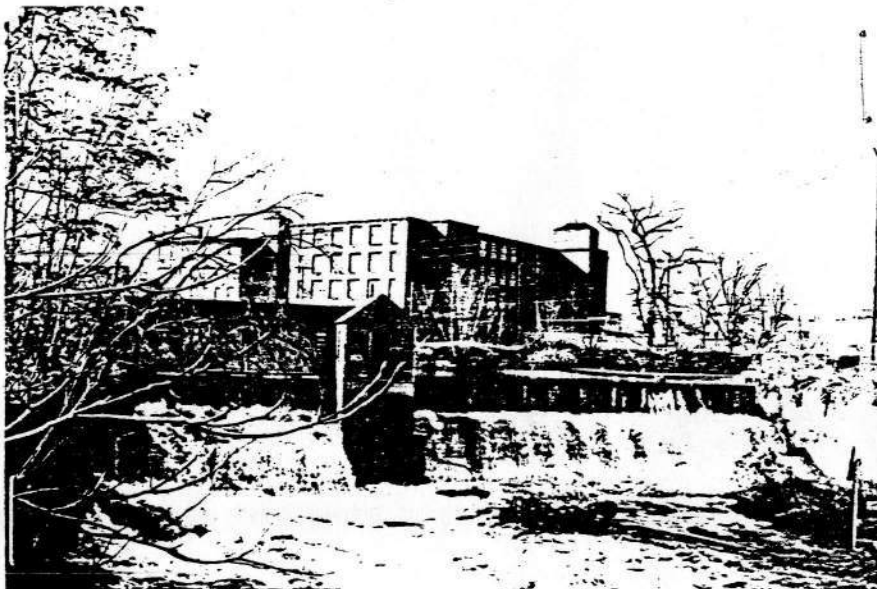
View of the Swamp Locks from the northwest, with the water drawn off from the canal. Photo taken in October 1979.



Detail of the Swamp Locks Dam and north sluiceway, viewed from the west, with the water drawn off. The north sluice is located beneath the small facade-
gale structure. Photo taken in October 1979.



View of the Swamp Locks from the west, showing men at work on the south sluice gate. Photo taken in October 1979.

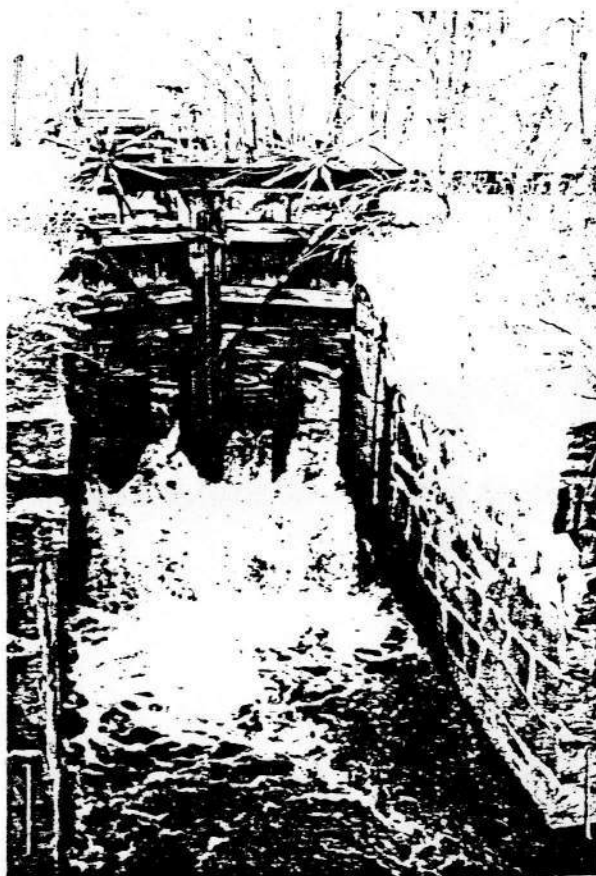


View of the Swamp Locks from the east. Photo taken in October 1979.



Detail of the Swamp Locks Dam (right) and lock (left), as seen from the east. Photo taken in August 1979.

Detail of a lock at the Swamp Locks. Photograph taken in October 1979.



LOW. 932

PRE 1910 C	NR	HAER	HABS	STATE	COUNTY	LOCAL	OTHER	DJD	FN	HIST	TECH	ARCH	TAPES	HAER	OTHER	FIELD	SLIDES	HIST	SURVEY	STEREO	MOVIES	LC	AL AK	AZ AR	CA CO	CT DE	DC FL	GA HI	ID IL	IN IA	KS KY	LA ME	MD MA	MI MN	MS MO	MT NE	NV NH	NJ NY	NC ND	OH OR	PA RI	SC SD	TN TX	UT VT	VA WA	WV WI	WY
1800	1809	1810	1819	1820	1829	1830	1839	1840	1849	1850	1859	1860	1869	1870	1879	1880	1889	1890	1899	1900	1909	1910	1919	1920	1929	1930	PRESENT	IRON	COAL	OIL	MNRL	AGRI	BPGC	CHEM	FOOD	METAL	TEXT	WOOD	MANUFACTURING INDUSTRIES (MFG)	UTILITIES (UTIL)	POWER SOURCES & PRIME MOVERS (PS & PM)	TRANSPORTATION (TRANS)	COMM	BRIDGES			

HAER INVENTORY

DATES OF CONSTRUCTION	1. NAME OF STRUCTURE		2. DATE		3. NATURE OF STRUCTURE		4. INDUSTRIAL CLASSIFICATION			
	SWAMP LOCKS & DAM		1839-1841		DAM & NAVIGATION LOCKS		SPEC STRUC:HYDRA (81.2)			
	5. LOCATION: STREET & NUMBER				CITY OR TOWN		COUNTY			
	PAWTUCKET CANAL AT CONFLUENCE WITH MERRIMACK CANAL				LOWELL		MIDDLESEX			
	7. OWNER OF PROPERTY				ADDRESS					
	PROPRIETORS OF THE LOCKS & CANALS				FOOT OF JOHN STREET				LOWELL, MA. 01852	
	8. CONDITION: <input type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input checked="" type="checkbox"/> FAIR <input type="checkbox"/> DETERIORATED <input type="checkbox"/> RUINS <input type="checkbox"/> UNEXPOSED <input type="checkbox"/> ALTERED <input checked="" type="checkbox"/> ACCESSIBLE TO PUBLIC									
	9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/ DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.									
	The basic configuration of this complex (two navigation locks and dam at the west end of the upper lock) was achieved in 1822-1823 when the Pawtucket Canal was reconstructed. However, the extant physical works are based on the rebuilding of 1839-1841, when the dam was rebuilt in its stepped configuration and the locks narrowed from 25' to 12'. The lock walls around the three gate pockets were done in ashlar, and the remaining chamber walls were constructed of wood, all within the existing 25' rubble locks. The wooden sides no longer remain although they were periodically renewed. The walls of the upper chamber, only were rebuilt in stone masonry to the 12' width in 1892. The sluice way on the south part of the dam was probably built in 1841 and the sluice way around the south end of the dam was completed in 1928. A protective light frame house over the length of the crest of the dam and the sluice gate in the dam was constructed first in 1859. Concrete was used to rebuild the north wall of the wasteway in 1942 and the apron on the face of the dam north of the 1841 sluice way in 1946. (HYDR & PARROT)									
	10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.									
11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.										
LOCKS & CANALS RECORDS, COWELL & BAKER LIBRARY See GREAT GATE										
12. DANGER OF DEMOLITION OR DAMAGE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO							13. PRIORITY			
NATURE OF THREAT:										
14. EXISTING SURVEYS <input type="checkbox"/> NHL <input type="checkbox"/> NR <input checked="" type="checkbox"/> HAER <input type="checkbox"/> HABS <input type="checkbox"/> STATE <input type="checkbox"/> COUNTY <input type="checkbox"/> LOCAL <input type="checkbox"/> OTHER										
AND DATES: 1974										
15. INVENTORIED BY: YOUR NAME ADDRESS AFFILIATION DATE										
Charles Hyde & Charles Parrott HAER Lowell Survey August 23, 1974										
PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240										

SUB-CLASSIFICATION

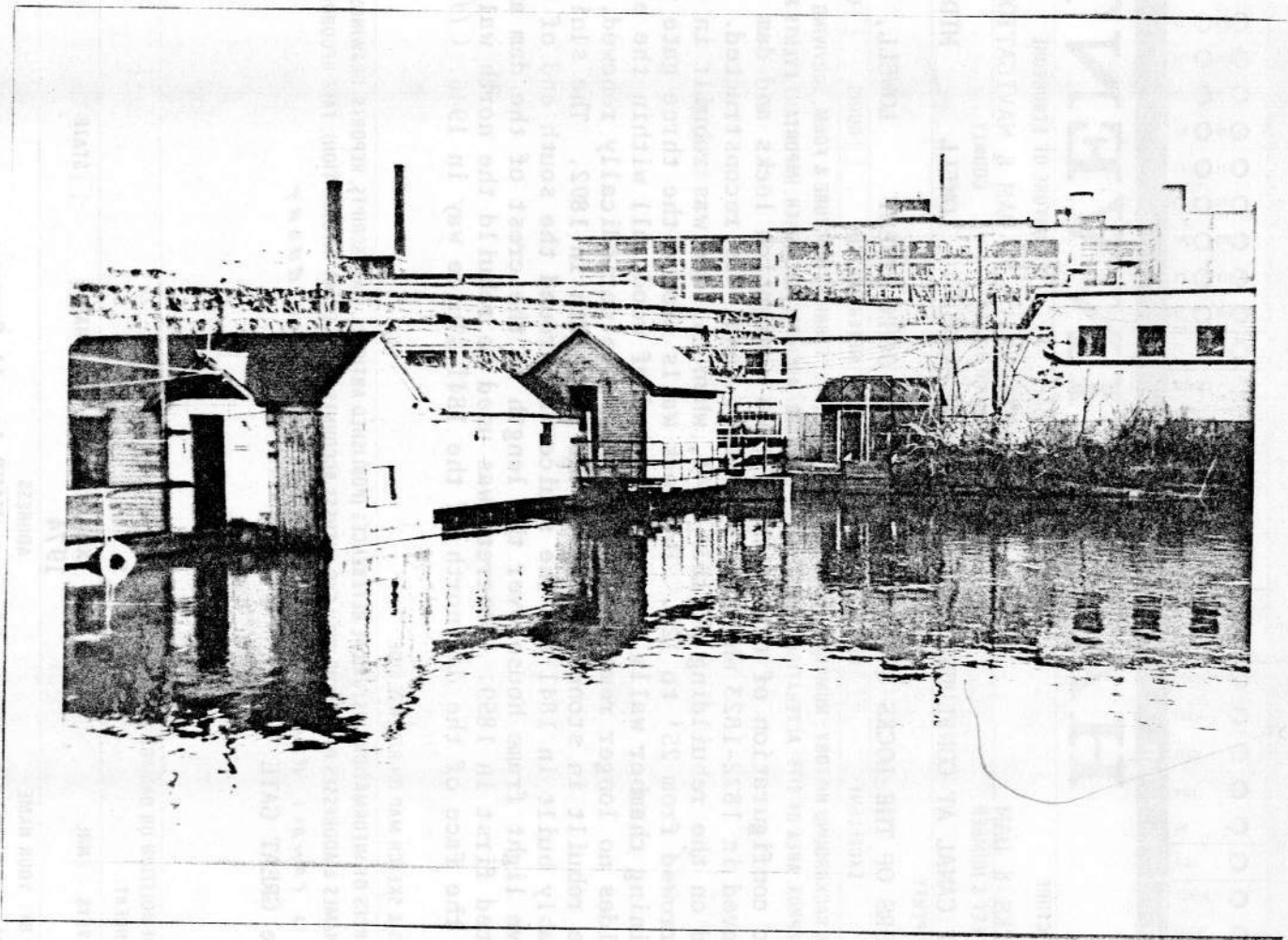
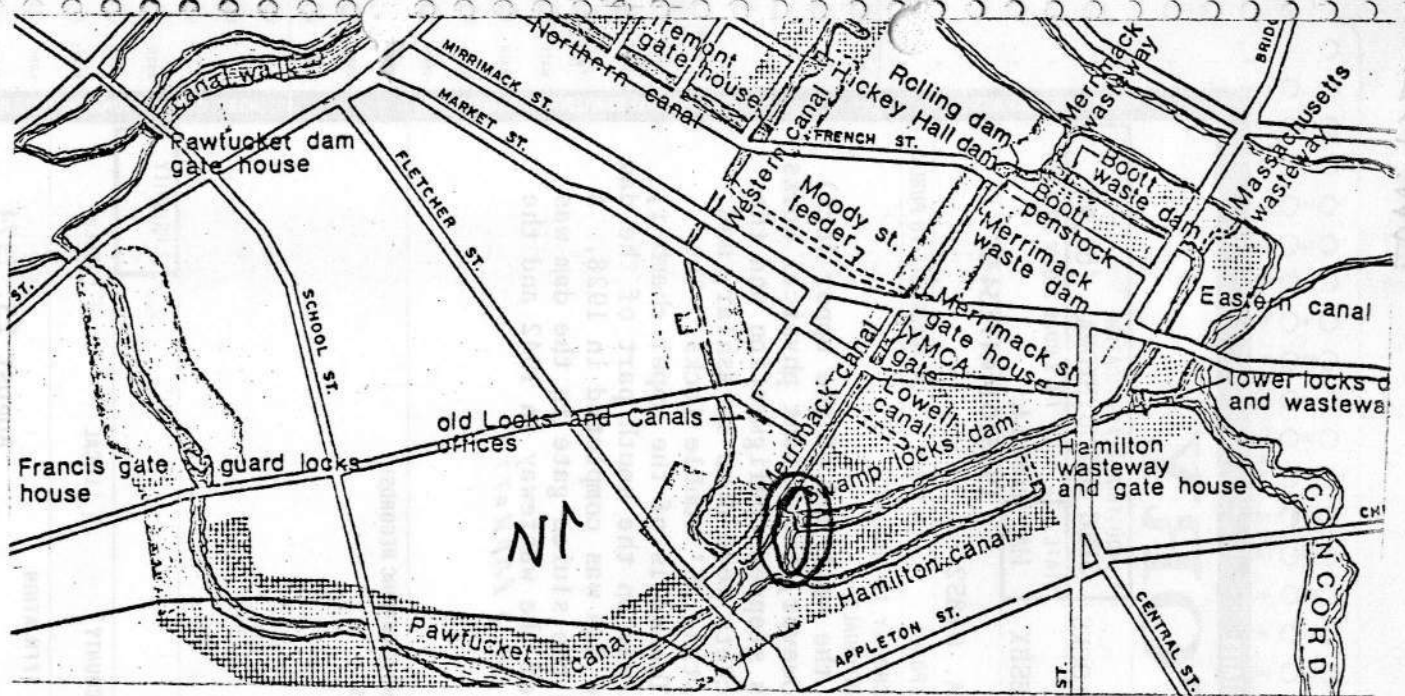
SPECIALIZED STRUCTURES (SPEC STRUC)

BUILDING TECHNOLOGY (BLD-TECH)

EXTRACTIVE INDUSTRIES (EXTRAC)

BULK PRODUCT INDUSTRIES (BULK)

MACH	FABR	TEQUIP	INST	DMFG	WATER	SANI	GAS	ELEC	MUSL	WATER	WHEEL	WATER	TUBE	WIND	STEAM	RECIP	STEAM	TURB	INT	COMB	DIESEL	ELEC	RR	ROAD	CANAL	MARINE	AIR	PIPE	T&T	R&TV	BEAM	ARCH	TRUSS	SUSP	ADQUE	TRES	CANT	MOVE
------	------	--------	------	------	-------	------	-----	------	------	-------	-------	-------	------	------	-------	-------	-------	------	-----	------	--------	------	----	------	-------	--------	-----	------	-----	------	------	------	-------	------	-------	------	------	------



LOW.932

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40627 LOWE SWAMP LOCKS GATE HOUSE S.LOCKGH

Management Information

NPS Legal Interest: NONE - LOCAL GOVERNMENT OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: MA/DEM

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: NO

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. NPS DAM #134. NPS SHARES GROUNDS MAINTENANCE
RESPONSIBILITIES W/ STATE. FIRE/INTRUSION ALARM INSTALLED 1993.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-2-B DAMS: MA00836
QTRS:

CLI	CRBIB	Other
1.	HRS 1. 010385	1. 400108 MALONE, CANAL SYSTEM
2.	HS ASSESS 2. 400107	2. 400101 MALONE, CANALS & IND.
3.	HSR 3. 010625	3. 010390 GMP
4.	CLR 4.	4.
5.	5. 010674	

Documentation Level: GOOD

Date Entered/Updated: 07/20/94 Logger: JIG

Date of Report: 04/04/95

LOW. 932



Structure No. S.LOCKGH
IDLCS: 40627
SWAMP LOCKS GATE HOUSE

PHOTO + GUARD # 122/1
LIGHT IMPRESSIONS
Rochester, NY

LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40612 LOWE SWAMP LOCKS DAM S.LOCDAM

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: BH

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities Treatment Costs

Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: NO

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. NPS DAMS #134 (GATE HOUSE, ETC.) & #597 (NAVIGATION LOCK).
BOOTT HYDRO MAINTAINS CANAL WALLS & FLOOR; NPS SHARES GROUNDS MAINT. RESPONSIBILITIES W/ STATE.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-2-B DAMS: MA00836
QTRS:

CLI CRBIB Other

- | | | | | |
|----|--------------|-----------|----|------------------------------|
| 1. | HRS 1. | 010385 | 1. | 400108 MALONE, CANAL SYSTEM |
| 2. | HS ASSESS 2. | 400107 | 2. | 400101 MALONE, CANALS & IND. |
| 3. | HSR 3. | 010625 | 3. | 010390 GMP |
| 4. | CLR 4. | | 4. | |
| 5. | | 5. 010674 | | |

Documentation Level: GOOD

Date Entered/Updated: 07/20/94 Logger: JIG

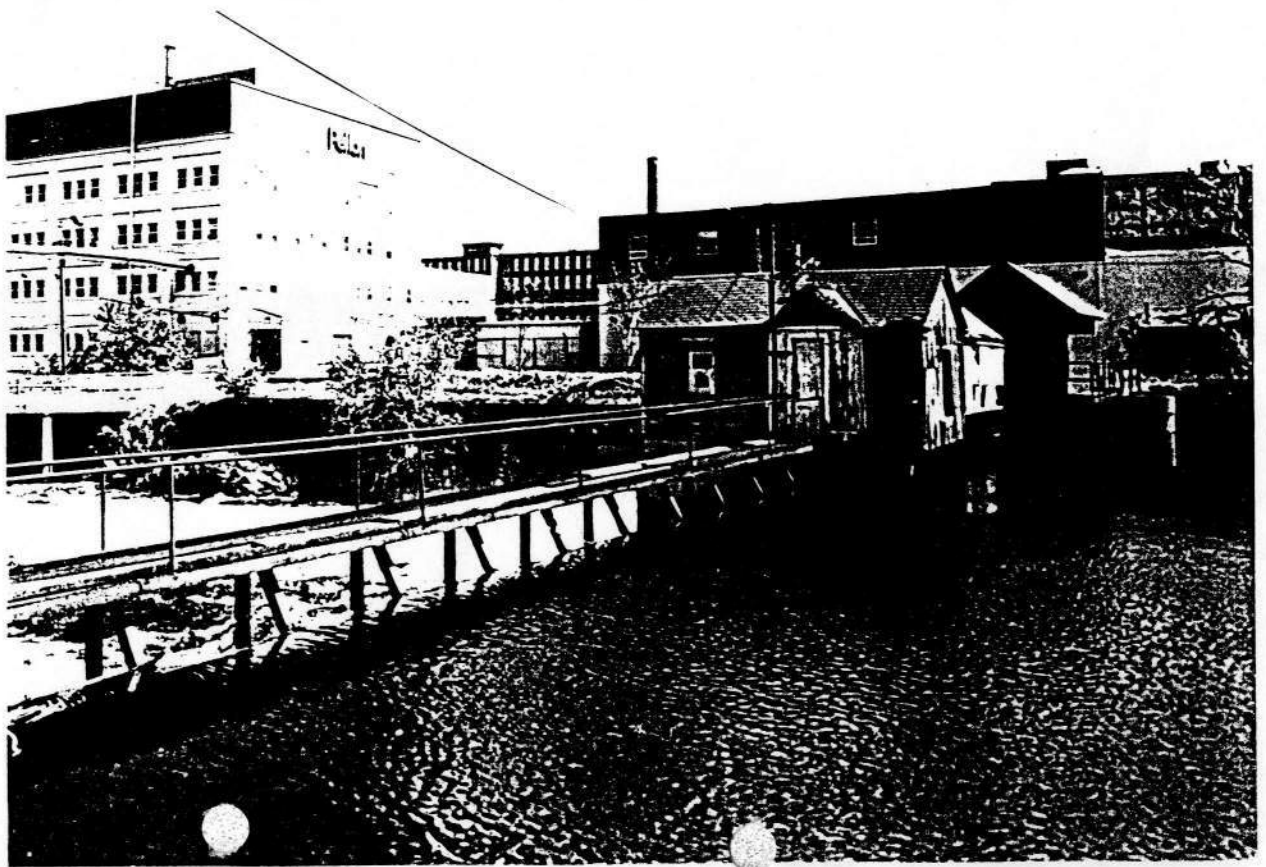
Date of Report: 04/04/95

LOW.932



Structure No. S.LOCDAM
IDLCS: 40612
SWAMP LOCKS DAM

PHOTO ★ GUARD # 3224
LIGHT IMPRESSIONS
Rochester, NY



LIST OF CLASSIFIED STRUCTURES (LCS)
SINGLE ENTRY REPORT
Continued

IDLCS Park Structure Name Number
40581 LOWE SWAMP LOCKS S.LOCKS

Management Information

NPS Legal Interest: NONE - PRIVATELY OWNED Federal Owner:
Life: Exp. Date: / / Local Owner: BH

Management Category: MUST BE PRES. & MAINT Management Date: 10/16/87
Management Agreement: MEMORANDUM OF UNDERSTANDING Nat. Exp. Date: 04/03/96

Proposed Ultimate Treat: Doc: Date: / /
Approved Ultimate Treat: PRESERVATION Doc: GMP Date: 08/00/81

Treatment Responsibilities Treatment Costs
Interim Treatment: OTH Interim: \$0 Date: /
Ultimate Treatment: OTH Ultimate: \$0 Date: /
Routine Maintenance: OTH Level of Estimate:
Cyclic Maintenance: OTH Estimator:

Approved Ultimate Treatment Completed: YES

Management Text

LOWELL LOCKS & CANALS HISTORIC DISTRICT. BOOTT HYDRO MAINTAINS CANAL WALLS & FLOOR; NPS SHARES
GROUNDS MAINTENANCE RESPONSIBILITIES W/ STATE.

Major Bibliographical References

Nat. Reg.: 78003149 CSI: Nat. Cat: NO

HABS: BRIDGES:
HAER: MA-2-B DAMS: MA00836
QTRS:

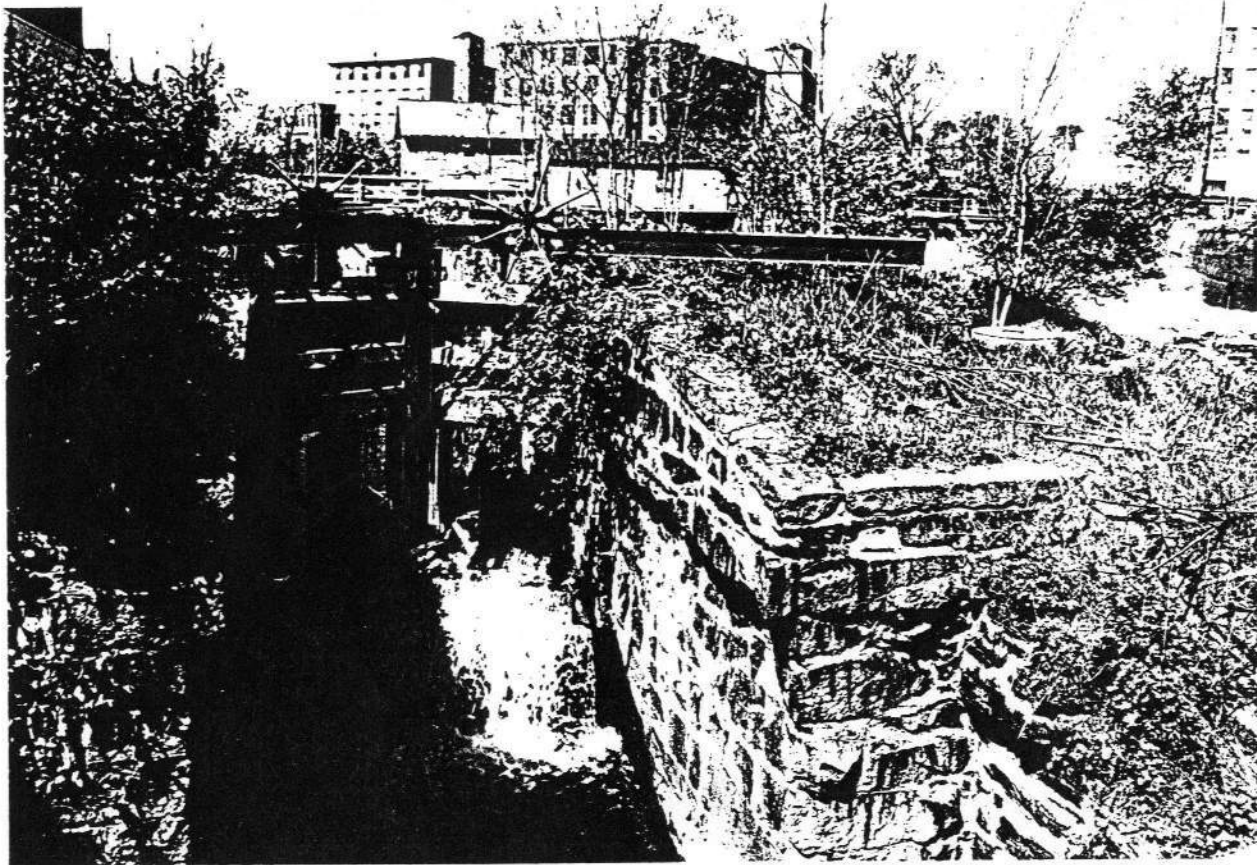
CLI	CRBIB	Other
1.	HRS 1. 010385	1. 400101 MALONE, CANALS & IND.
2.	HS ASSESS 2. 400107	2. 010390 GMP
3.	HSR 3. 010625	3.
4.	CLR 4.	4.
5.	5. 400108	

Documentation Level: GOOD

Date Entered/Updated: 07/20/94 Logger: JIG

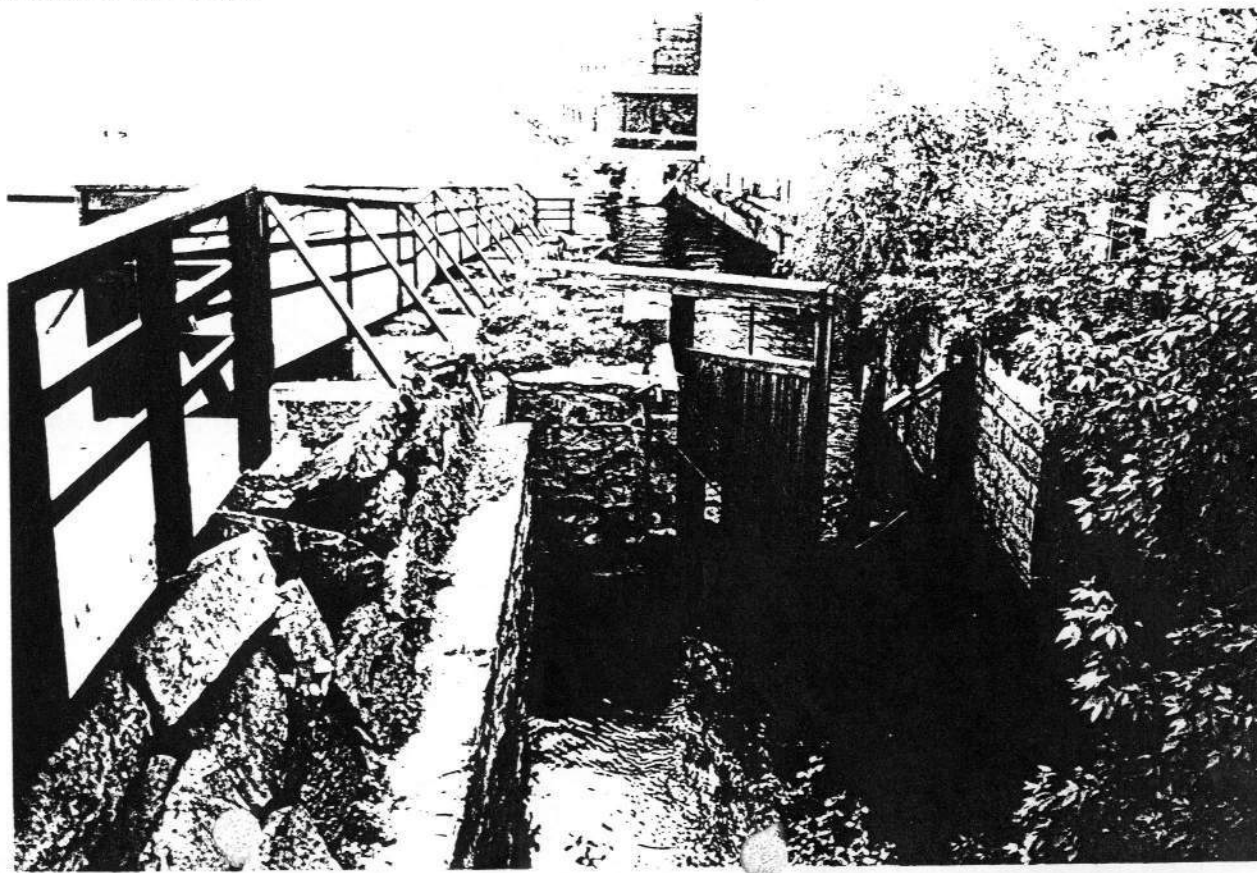
Date of Report: 04/04/95

LOW. 932



Structure No. S.LOCKS
IDLCS: 40581
SWAMP LOCKS

PHOTO ★ GUARD // 3224
LIGHT IMPRESSIONS®
Rochester, NY



Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	LOW.939
Historic Name:	Western Canal
Common Name:	Suffolk Canal
Address:	Western Canal Parallel to Suffolk St
City/Town:	Lowell
Village/Neighborhood:	Downtown
Local No:	
Year Constructed:	c 1830
Architect(s):	Beard, Ithamar A.
Architectural Style(s):	
Use(s):	Other Industrial; Other Water Related; Utilities Other
Significance:	Archaeology, Historic; Engineering; Industry; Transportation
Area(s):	LOW.C: Locks and Canals District LOW.BC: Lowell National Historical Park LOW.BE: Downtown Lowell Historic District
Designation(s):	Nat'l Register District (08/13/1976); Nat'l Historic Landmark (12/22/1977); Nat'l Register District (06/05/1978); Local Historic District (12/13/1983)
Building Materials(s):	



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Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Thursday, November 7, 2019 at 9:54: AM

LOWELL CULTURAL RESOURCES INVENTORY

LOW. 939
 [B] NADIS 61578
 [C] NADIS 8113176
 NM 12/22/77

IDENTIFICATION From SWAMP LOCKS BASIN, parallelling SUFFOLK ST. to MERRIMACK RIVER MAP SHEET #4.7.11

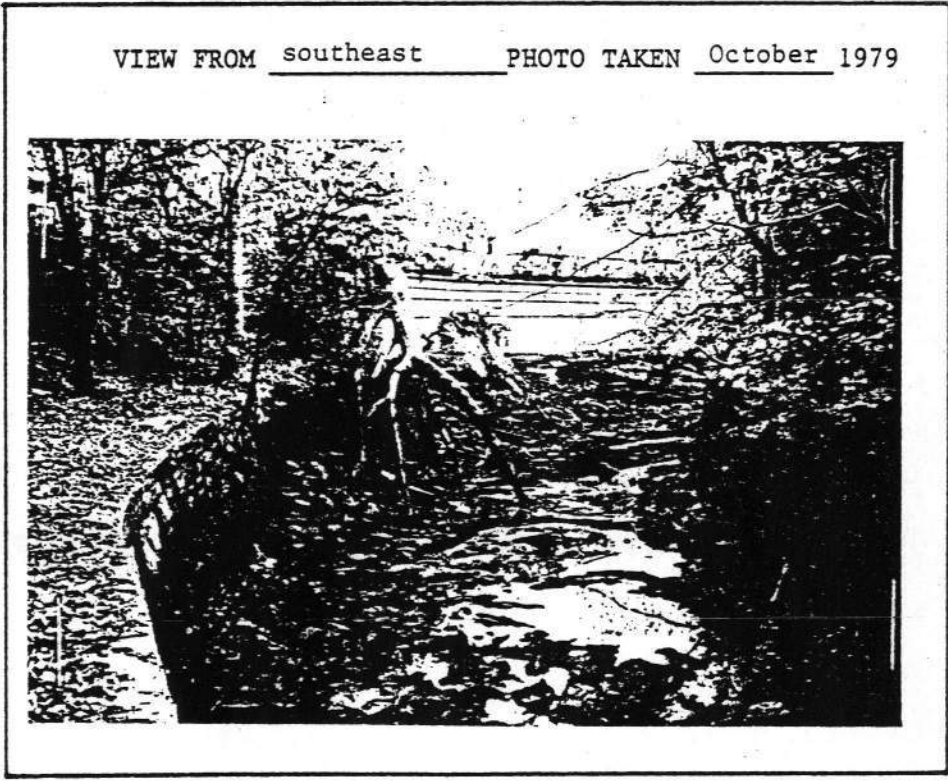
- 1) CURRENT OWNER Proprietors of Locks and Canals OWNER OCCUPIED yes
- 2) HISTORIC NAME Western (or Suffolk) Canal [BE] 12/13/83
- 3) CURRENT NAME Western Canal
- 4) PROPERTY TYPE canal 5) ZONING CLASSIFICATION A1, B1, M3
- 6) TAXES: PAYMENTS current STATUS clear
- 7) WITHIN BOUNDARIES OF LNHP -- Locks and Canals HD -- LHPD

HISTORICAL ABSTRACT

- 1) CONSTRUCTION DATE 1828-1832
 SOURCE documented: See Research Report, p. 7, 8
- 2) ARCHITECT OR BUILDER unknown
- 3) HISTORIC OWNER Proprietors of Locks and Canals
- 4) ORIGINAL USE: GF power and transportation UF n/a
canal
- 5) PREVIOUS BLDGS ON PROPERTY no DATE _____
 SOURCE _____

DESCRIPTIVE DATA

- 1) ARCHITECTURAL STYLE n/a
- 2) PRESENT USE:
 GF power canal
 UF n/a
- 3) NO OF STORIES n/a
- 4) PROP SQ FT n/a
- 5) PLAN n/a
- 6) ROOF n/a
- 7) STRUCTURAL SYSTEM masonry and re-inforced concrete
- 8) OUTBUILDINGS guardgates, Tremont Gate House, Hickey Hall Dam
- 9) MATERIALS:
 FOUNDATION n/a
 FACADE rubble and ashlar stone
 TRIM n/a



10) NOTABLE SURFACE & LANDSCAPE ELEMENTS park-like borders north of Broadway

ADDRESS From Swamp Locks Basin, parallelling SUFFOLK ST. to MERRIMACK RIVER

VISUAL ASSESSMENT

- 1) CONDITION OF BUILDING FABRIC needs minor repair
- 2) IF DETERIORATED, CAUSES lack of maintenance
- 3) INTEGRITY OF HISTORIC BLDG FABRIC: GF intact with evolutionary alterations
UF n/a
- 4) SURROUNDING LAND USES institutional, expressway, canal frontage, river frontage, commercial, industrial, residential, recreational,
- 5) INTEGRITY OF PROP'S HIST SETTING moderately disrupted historic setting
- 6) IMPORTANCE OF PROP TO HIST SETTING focal point in area

ADDITIONAL DESCRIPTIVE AND HISTORICAL INFORMATION

See Research Report, pp. 7-9, 14, 15.

The Western Canal is 4,964 feet long, from Swamp Locks to the Merrimack River. It averages nine feet deep, and varies in width from thirty five to fifty-five feet. Originally it flowed in two levels, from the Swamp Locks toward the Merrimack River, and provided power to the Suffolk, Tremont, and Lawrence mills. The Suffolk and the Tremont drew their water from the upper level Western, and dropped it thirteen feet into tailraces that carried the water to the Lawrence mills. Lawrence also used any surplus from the Western, via a lower level of the canal that fed into the Lawrence Canal. From the latter canal, the water dropped seventeen feet through Lawrence wheelpits and emptied into the Merrimack River.

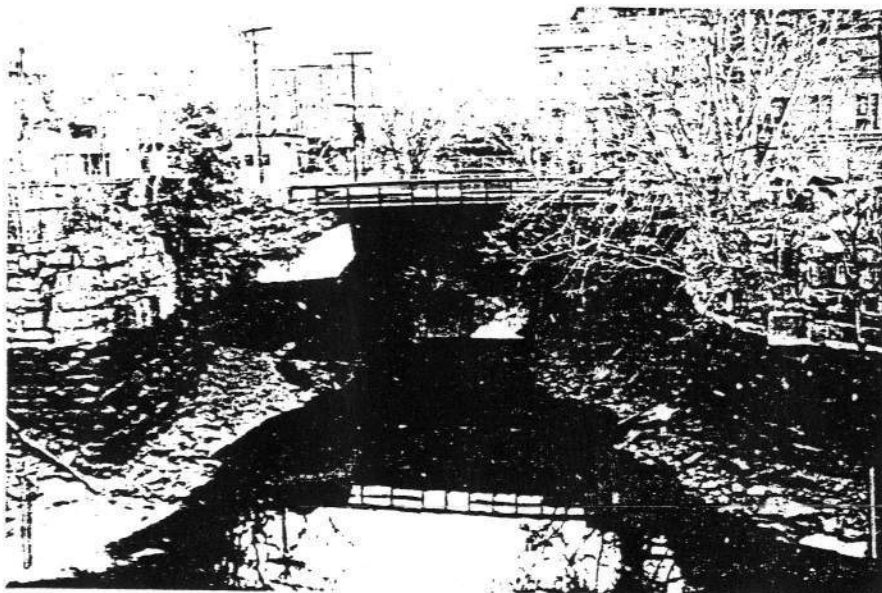
The 1846-7 construction of the Northern Canal radically altered the function of the Western Canal's upper level. The Northern directly supplied the Suffolk and Tremont mills, and reversed the flow of the Western's upper level, changing it into a feeder canal, carrying Northern Canal water to the Pawtucket Canal. Other features related to that change, such as the Moody Street Feeder off the Western Canal, and the Western Canal guard gates, are discussed on separate inventory forms.

Source

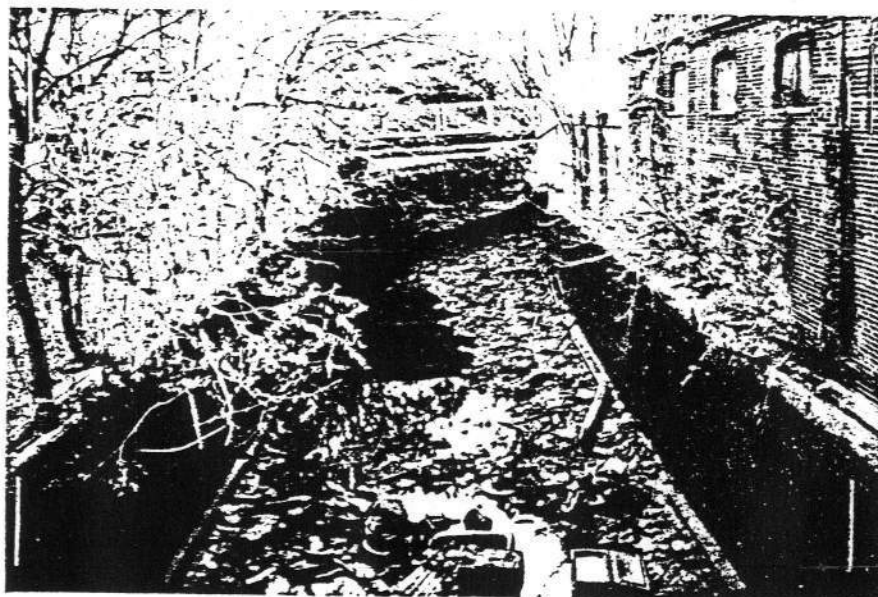
Lower Merrimack...Inventory, HAER and , pp. 75, 76.

ARCHEOLOGICAL COMMENT

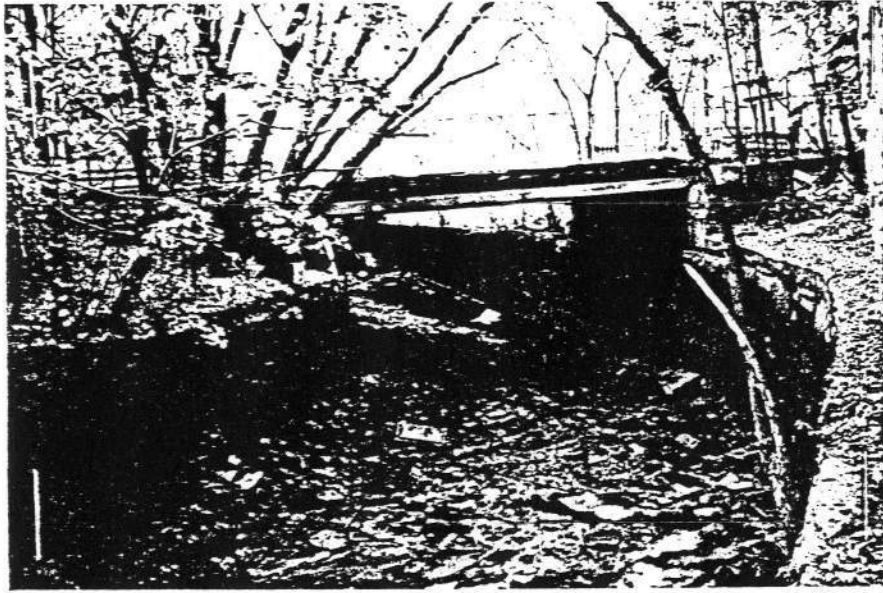
The major Western Canal-related feature to fall abandoned is the hydropower system of the former Tremont Mills. The condition of that razed yard suggests that Tremont's raceways have been filled in, but not destroyed, making that a site with considerable archeological potential.



View of the Swamp Locks end of the Western Canal, looking west. Photo taken in October 1979.



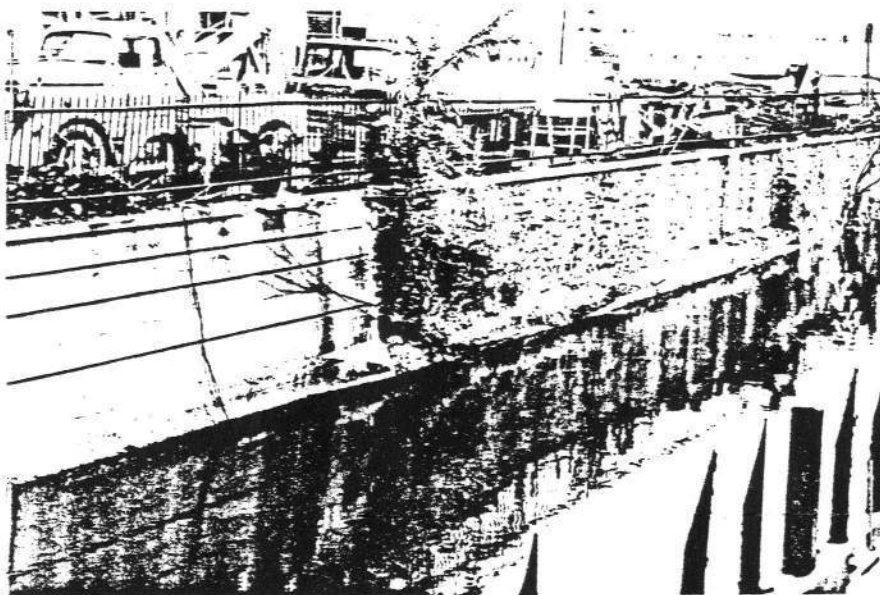
View along the drained Western Canal, looking northwest from Dutton Street. Photo taken in October 1979.



View from the north of the drained Western Canal, showing the narrowness of the canal at its southern end. The bridge crosses the canal along the former line of Worthen Street. Photo taken in October 1979.



The Western Canal along lower Suffolk Street, as seen from the southwest. Note the poured concrete wall on the left. Photo taken in October 1979.



Detail of the Western Canal wall behind 66 Broadway, showing the alteration between nineteenth century rubble stone construction, and its ca. 1920's poured concrete replacement. Photo taken in June 1979.



View from the southwest of the lower level of the Western Canal, shown drained of water. The former site of the Tremont Mills is at right. Photo taken in October 1979.

NHL	HAER	HABS	STATE	COUNTY	LOCAL	OTHER	DDO	FN	HIST	TECH	ARCH	TAPES	HAER	OTHER	FIELD	SLIDES	HIST	SURVEY	STEREO	MOVIES	LC	AL	AK	AZ	CA	CO	CT	DE	FL	GA	HI	ID	IL	IN	IA	KS	KY	LA	MA	MD	ME	MI	MN	MO	MS	MT	NC	NH	NJ	NY	NC	ND	OH	OK	OR	PA	RI	SC	SD	TN	TX	UT	VT	VA	WA	WV	WY	T
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Card One

HAER INVENTORY

1. NAME OF STRUCTURE Western Canal	2. DATE 1831-1832	3. NATURE OF STRUCTURE Power Canal	4. INDUSTRIAL CLASSIFICATION 812
5. LOCATION: STREET & NUMBER from Dutton St. northwest to Merrimack River	CITY OR TOWN Lowell	COUNTY Middlesex	STATE MA
7. OWNER OF PROPERTY Proprietors of Locks and Canals, Boott Mills, Lowell, MA	ADDRESS		
6. USGS QUAD MAP & UTM GRID REF. 19.310040. 472338			
8. CONDITION: <input checked="" type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> DETERIORATED <input type="checkbox"/> RUINS <input type="checkbox"/> UNEXPOSED <input type="checkbox"/> ALTERED <input checked="" type="checkbox"/> ACCESSIBLE TO PUBLIC			

9. DESCRIPTION & BACKGROUND HISTORY : NUMBER OF STRUCTURES ; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.

The Western Canal was built in 1831-32 as a two level water power system for the Tremont and Suffolk Mills, on the upper level, and the Lawrence Mills on the lower level. Locks were initially constructed in the Western to enable barges to reach the textile mills, but these locks were filled in during the 1840s; the remnants of the locks at the Hickey Hall Dam are still visible. The Western initially drew its water from the upper Pawtucket Canal, above the Swamp Locks, and flowed in a northerly direction to the Tremont-Suffolk Mill complex. These mills, on opposite sides of the Western's upper level, drew practically all of the water through their wheelpits, a fall of 13 feet, and discharged the water into the Lawrence Canal, a spur of the lower level of the Western. Any water which did not flow through the penstock of the Tremont & Suffolk Mills flowed through the wasteway of the Western Canal and fell in to the Western's lower level, where it joined the Lawrence Canal. Water from the lower level of the Western as well as the Lawrence Canal dropped 17 feet into the wheelpits of the Lawrence Mills, and discharged into the Merrimack River. A wasteway constructed just below the intersection of the Lawrence and lower level Western, carried

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE. (see Card Two)

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

U. S. Census of 1880, vol. XVI
 P. M. Malone, Water Power in Lowell, Mass. (GPO, 1974)
 Mr. Mel Lesberg, Manager, Proprietors of Locks and Canals, Boott Mills, Lowell, MA

12. DANGER OF DEMOLITION OR DAMAGE YES NO
 NATURE OF THREAT:

13. PRIORITY 1

14. EXISTING SURVEYS AND DATES: NHL NR HAER HABS STATE COUNTY LOCAL OTHER

15. INVENTORIED BY: YOUR NAME ADDRESS AFFILIATION DATE
Peter M. Molloy **800 Mass. Ave., N. Andover, MA 01845** **Merrimack Valley Textile Museum** **12/8/75**

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MACH	FABR	TEQUIP	INST	GMFG	WATER	SANT	GAS	ELEC	MUSL	WATER	WHEEL	WATER	TURB	WIND	WIND	STEAM	RECIP	STEAM	TURB	INT	COMB	DIESEL	ELEC	RR	ROAD	CANAL	MARINE	AIR	PIPE	T&T	R&TY	BEAM	ARCH	TRUSS	SUSP	AQUE	TRES	CANT	MOVE
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1930
PRESENT

IRON
COAL
OIL
MNRL
NUM-FERROUS

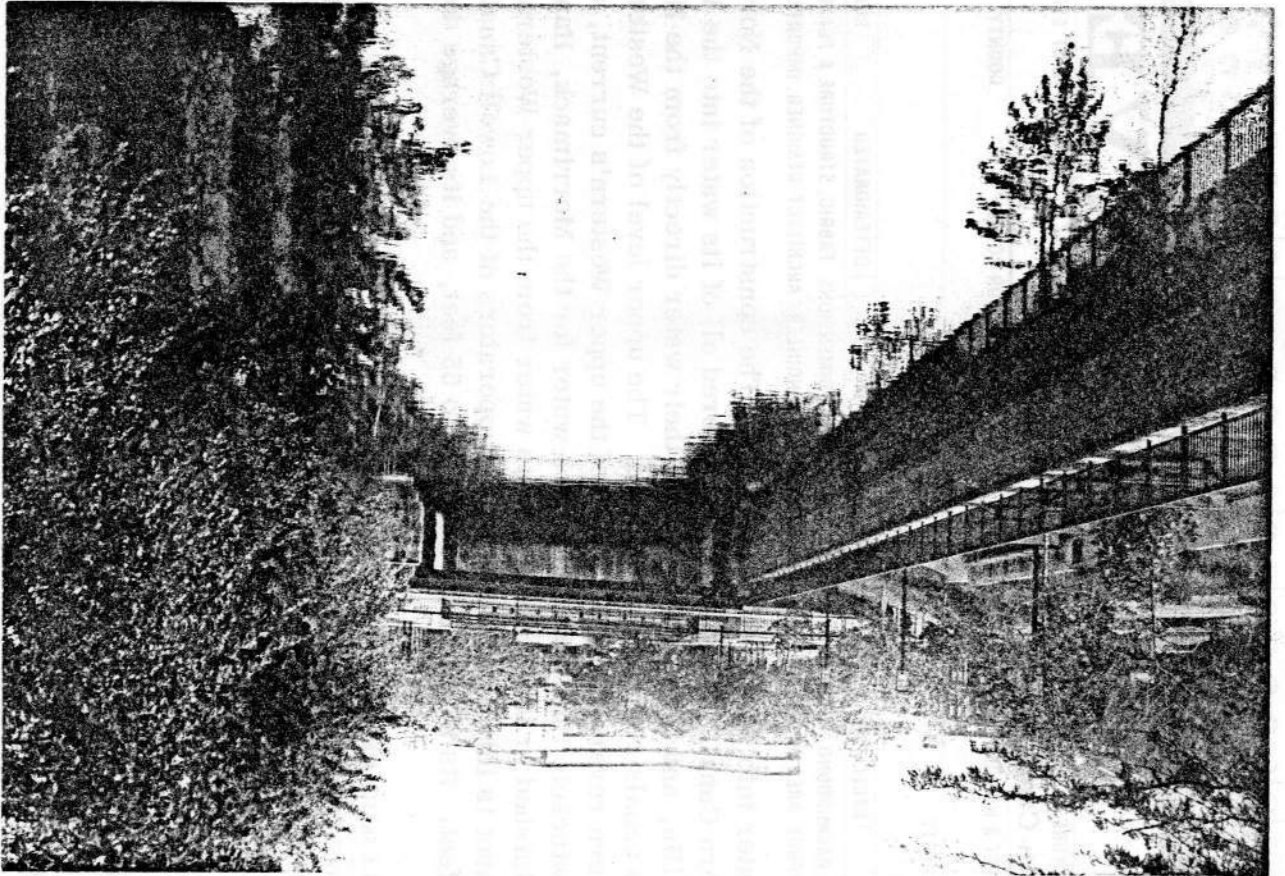
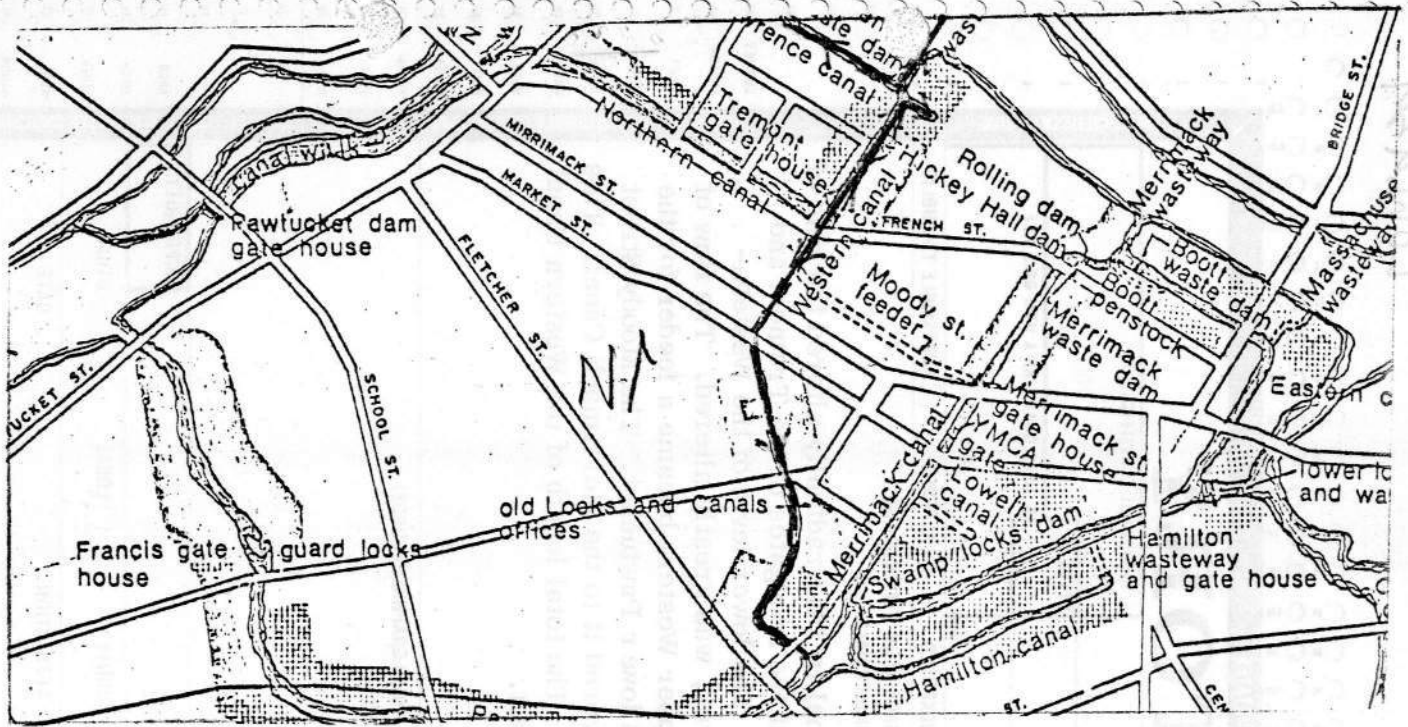
AGRI
BPGC
CHEM
FOOD
METAL
TEXT
WOOD

MANUFACTURING INDUSTRIES (MFG)

SUB-CLASSIFICATION

30 SURVEY
31 MUSEUM
32 ADAPT
33 HOUS
34 P & ET
35 MATS
36 MATH
37 HEAT
38 CONST
39 HYDRA
40 TUNLS
41 DAM
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45
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BUILDING TECHNOLOGY (BLD TECH)



PRE 19th C	NR	HAER	HABS	STATE	COUNTY	LOCAL	OTHER	DOD	FN	HIST	TECH	ARCH	TAPES	HAER	OTHER	FIELD	SLIDES	HIST	SURVEY	STEREO	MOVIES	LC	AL	AK	AZ	CA	CT	DC	GA	HI	ID	IL	IN	IA	KS	LA	MA	MD	MI	MO	MS	MT	NH	NJ	NY	NC	ND	OH	OK	PA	RI	SC	SD	TN	TX	UT	VA	WV	WY	T
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EXISTING SURVEYS

DATA

DWGS

PHOTOGRAPHS

STATES

Card Two

HAER INVENTORY

1. NAME OF STRUCTURE Western Canal	2. DATE	3. NATURE OF STRUCTURE	4. INDUSTRIAL CLASSIFICATION
5. LOCATION: STREET & NUMBER	CITY OR TOWN	COUNTY	STATE
7. OWNER OF PROPERTY	ADDRESS		
8. CONDITION:	<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> GOOD	<input type="checkbox"/> FAIR
	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> RUINS	<input type="checkbox"/> UNEXPOSED
	<input type="checkbox"/> ALTERED	<input type="checkbox"/> ACCESSIBLE TO PUBLIC	

9. DESCRIPTION & BACKGROUND HISTORY: NUMBER OF STRUCTURES; DIMENSIONS; FABRIC; STRUCTURE & FORM; SURVIVING MACHINERY, FITTINGS AND EQUIPMENT; APPROX. AREA OF SITE; ALTERATIONS; PRESENT USE; ENGINEER/ ARCHITECT/DESIGNER; IMPORTANT EVENTS & INDIVIDUALS.

excess water into the Merrimack River. The construction of the Northern Canal in 1847 radically altered the role of the Western Canal. The Northern delivered all of its water into the Western at the headgates of the Tremont and Suffolk Mills, and the mills now drew their water directly from the Northern. The lower level of the Western-Lawrence canals remained unchanged. The upper level of the Western, however, was greatly altered. The flow of the Northern reversed the direction of the upper Western's current, and the upper Western became a feeder for the upper Pawtucket, thus providing extra water for the Merrimack, Hamilton and lower Pawtucket. The Moody Street feeder, finished in 1848, also drew its water from the upper Western and delivered it to the Merrimack Canal. This arrangement is followed by the present operators of the Lowell Canal system. The total length of the Western Canal is ⁴⁹⁸⁴4,500 feet. Its width varies from 35 to 55 feet, and its average depth ¹⁵is 9 feet.

10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE.

11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION); TAPE RECORDINGS.

12. DANGER OF DEMOLITION OR DAMAGE YES NO
NATURE OF THREAT:

13. PRIORITY

14. EXISTING SURVEYS NHL NR HAER HABS STATE COUNTY LOCAL OTHER

15. INVENTORIED BY: YOUR NAME ADDRESS AFFILIATION DATE

PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240

MANUFACTURING INDUSTRIES (MFG)				UTILITIES (UTIL)				POWER SOURCES & PRIME MOVERS (PS & PM)				TRANSPORTATION (TRANS)				COMM		BRIDGES																			
MACH	FABR	TEQUIP		WATER	SANI	GAS	ELEC	MUSL	WATER	WHEEL	WATER	TURB	WIND	STEAM	RECIP	STEAM	TURB	INT	COMB	DIESEL	ELEC	RR	ROAD	CANAL	MARINE	AIR	PIPE	TEL	RTY	BEAM	ARCH	TRUSS	SUSP	AQUE	TRES	CANT	MOVE

DATES OF CONSTRUCTION

EXTRACTIVE INDUSTRIES (EXTRACT)

BULK PRODUCT INDUSTRIES (BUICK)

SUB-CLASSIFICATION

SPECIALIZED STRUCTURES (SPEC STRUC)

BUILDING TECHNOLOGY (BLD TECH)

LOW.939



94 2 18

Structure No. WESTERN
 IDLCS: 40584
 WESTERN CANAL

PHOTO * GUARD # 3024
 LIGHT IMPRESSIONS
 Rochester, NY



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