January 21, 2015

VIA ELECTRONIC FILING

Ms. Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: FirstLight Hydro Generating Company, FERC Project Nos. 2485 and 1889
Re-Submission of Study Report for Relicensing Study No. 3.7.2

Dear Secretary Bose:

On December 31, 2014, in accordance with the relicensing schedule for the Turners Falls Hydroelectric Project and Northfield Mountain Pumped Storage Project, FirstLight Hydro Generating Company (FirstLight) filed completed study reports for Study No. 3.7.1 *Phase IA, IB, and II Archaeological Surveys* and Study No. 3.7.2 *Survey and Evaluation of Historic Architectural Resources*. FirstLight requested that the reports be accorded privileged treatment and placed within the Commission's non-public files. After further evaluation of the information included in the study reports, FirstLight believes that the study report for the *Survey and Evaluation of Historic Architectural Resources* can be made available to the public. Accordingly, FirstLight has removed the privileged designation from the report and is re-submitting the document herein as public.

FirstLight requests continued privileged treatment of the study report for Study No. 3.7.1 *Phase IA, IB, and II Archaeological Surveys*, because it contains information regarding the specific location of archaeologically sensitive resources which is not to be disclosed to the public.

If you have any questions, or need additional information, please feel free to contact me.

Sincerely,

John Howard

John S. Howard
Director FERC Compliance, Hydro

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RELICENSING STUDY 3.7.2

HISTORIC ARCHITECTURAL RESOURCES SURVEY & NATIONAL REGISTER EVALUATION

Northfield Mountain Pumped Storage Project (No. 2485) and Turners Falls Hydroelectric Project (No. 1889)

FRANKLIN COUNTY, MASSACHUSETTS, CHESHIRE COUNTY, NEW HAMPSHIRE,
WINDHAM COUNTY, VERMONT

VOLUME I: REPORT

Prepared for:

FirstLight™
GDF SUEZ

Prepared by:

GOMEZ AND SULLIVAN ENGINEERS TRC

DECEMBER 2014

EXECUTIVE SUMMARY

FirstLight Hydro Generating Company (FirstLight), a subsidiary of GDF SUEZ North America, Inc., is the current licensee of the Northfield Mountain Pumped Storage Project (FERC No. 2485) and the Turners Falls Hydroelectric Project (FERC No. 1889). FirstLight has initiated with the Federal Energy Regulatory Commission (FERC, the Commission) the process of relicensing the two Projects using FERC's Integrated Licensing Process (ILP). The current licenses for the Northfield Mountain and Turners Falls Projects (Project or Projects) were issued on May 14, 1968 and May 5, 1980, respectively, and both licenses expire on April 30, 2018. On September 13, 2013, FERC issued a study plan determination for the Projects which, among other studies, requires FirstLight to conduct a survey and evaluation of historic architectural resources within the Project boundaries. This report provides information about previous National Register of Historic Places (NRHP) evaluations of historic architectural resources within the Project boundaries, as well as recommendations regarding the eligibility of surveyed resources for listing in the NRHP that have not been evaluated previously.

Between November 2013 and March 2014, TRC conducted a historic architectural survey and NRHP evaluation of all buildings, structures, objects, sites, and districts 50 years or older within the Projects' Area of Potential Effects (APE). In a letter dated November 27, 2013, FERC defined the APE for each of the two projects as:

> "*…all lands within the current project boundaries of the two projects in addition to any other lands outside the project boundaries where historic properties could be affected by project-related adverse effects. The Projects' APEs include lands within Franklin County, Massachusetts; Windham County, Vermont; and Cheshire County, New Hampshire. On lands adjacent to the Project boundary, the APEs would also include an additional 10 meters (33 feet) of lands inland from the top of banks of the Connecticut River and associated tributaries."*

Because the FERC Project boundaries encompass significant land ownership and/or easements beyond the immediate shoreline of the Project impoundments, in most places the APE is the FERC Project boundary for both Projects. Only in a few areas, mostly located at the upstream end of the Turners Falls Impoundment does the Project APE extend beyond the FERC Project boundary. There are no historic resources located within the Project APE, but outside the FERC Project boundary. However, there are surveyed historic resources within the Project APE not owned by FirstLight.

The 2013-2014 historic architectural survey consisted of background research on previously identified architectural resources in the APE; preparation of an historic context of the APE from the colonial period to the modern period; a survey of all architectural resources 50 years or older within the APE; and evaluation of their NRHP eligibility, either as an individual resource or as a contributing resource in an NRHP-listed or -eligible historic district. The Northfield Mountain Pumped Storage Facility, built between 1968 and 1972, was also surveyed as it will be 50 years old by the time the current license expires in 2018.

The initial phase of the survey included a background review of the 27 previously identified resources within the Project APE. The Turners Falls Historic District, consisting of historic industrial, residential, and commercial buildings in Turners Falls, was listed in the NRHP in 1983 and contains 13 contributing resources located within the Project APE. Six historic resources in the APE—Cabot Power Station and Dam; Eleventh Street Bridge; East Mineral Road Bridge; Gill-Montague Bridge; French King Bridge; and Schell Memorial Bridge—previously have been determined eligible for the NRHP. (The Cabot Station Gantry Crane was determined NRHP-eligible in 1987 but has since been demolished after being recorded

via the Historic American Engineering Record [HAER]). Three previously surveyed resources—Central Vermont Railroad Bridge over the Connecticut River (MA); Boston & Maine Railroad-Fort Hill Branch Bridge over Ashuelot River (NH); and Boston & Maine Railroad-Fort Hill Branch Bridge Piers over the Connecticut River (NH)—previously have been determined not eligible for NRHP listing. Six previously surveyed resources in the Project APE—"The Patch" district, Frederick Morgan House, Red Suspension Bridge, the Riverside district and two individual resources, the Frank Smith House and the Hunt-Sanderson House both located within the Riverside district—have not previously been evaluated for NRHP eligibility.

As a part of its field survey, TRC identified an additional 37 resources 50 years or older (in addition to the Northfield Mountain Pumped Storage facility which is less than 50 years old) not previously surveyed within the APE. TRC evaluated these 38 resources, plus the six previously surveyed resources not yet evaluated, for NRHP-eligibility according to the NRHP Criteria and standards for integrity. Of the six previously surveyed resources, "The Patch" Historic District in Turners Falls (with one contributing resource located within the Project APE) and the Riverside Historic District in Gill (with the two previously named contributing resources located within the Project APE) are eligible for the NRHP. Two previously surveyed resources—Red Suspension Bridge and Morgan House—are not eligible for NRHP listing.

Of the 38 newly surveyed resources, 15 resources are eligible for NRHP listing and 23 resources are not eligible for the NRHP due to lack of architectural/historical significance and/or loss of integrity. The results of the 2013-2014 architectural survey and evaluation of resources within the Project APE are summarized in Table 1. This table also identifies whether a surveyed resource is owned by FirstLight, and whether it is a FirstLight-owned Project facility.[1]

Newly surveyed resources that are eligible for the NRHP include the following:

- Cabot Camp in Montague MA possesses the historic/architectural significance and integrity for individual listing in the NRHP under Criteria A and C.
- The Central Vermont Railroad Bridge over Ferry Road in Northfield MA is a contributing resource in a Central Vermont Railroad Linear Historic District, NRHP-eligible under Criterion A.
- The section of the Mohawk Trail (State Route 2) in Massachusetts within the Project APE is NRHP-eligible under Criterion A.
- Three resources in New Hampshire: Route 63 (Northfield Street) Bridge over the Ashuelot River, a culvert on the Ashuelot River, and the Ashuelot River USGS Gauging Station are contributing resources in a Hinsdale Historic District, previously determined NRHP-eligible under Criteria A and C.
- The Northfield Mountain Pumped Storage Facility in Northfield MA meets Criteria A and C for its significance as the world's largest pumped storage facility when built and for its association with the more than century-long history of hydroelectric power in the Connecticut River Valley and is NRHP-eligible in 2018 when the present operating license expires.

[1] Section 3(11) of the Federal Power Act defines the term "project" as meaning a "complete unit of improvement or development, consisting of a power house, all water conduits, all dams and appurtenant works and structures including navigation structures) which are part of said unit, and all storage, diverting, or forebay reservoirs directly connected therewith, the primary line or lines transmitting power therefrom to the point of junction with the distribution system or with the interconnected primary transmission system, all miscellaneous structures used and useful in connection with said unit or any part thereof, and all water-rights, rights-of-way, ditches, dams, reservoirs, lands, or interest in lands the use of and occupancy of which are necessary or appropriate in the maintenance and operation of said unit." Section 3(12) defines "project works" as "the physical structures of a project."

- A Turners Falls Power & Electric Company (TFP&E) Historic District in Turners Falls and Gill, MA, with ten contributing resources and two non-contributing resources, is NRHP-eligible under Criteria A and C.

The remaining 21 surveyed resources in the Project APE are not eligible for NRHP listing due to lack of architectural/historical significance and/or loss of integrity.

Table 1:
Turners Falls and Northfield Mountain Project:
Surveyed Architectural Resources within the Project APE with NRHP Status

SITE NAME	SHPO # / FIELD #	ADDRESS	NRHP STATUS	PROJECT FACILITY; OWNED BY FIRSTLIGHT
NRHP-Listed Resources				
Turners Falls Historic District	MNT.H	Various streets, Turners Falls, MA	NRHP Listed 1983 (Criteria A, B, C, and D)	Power Canal is FirstLight-owned Project facility; Keith Mill footbridge and IP Bridge are FL-owned non-Project resources
Turners Falls Paper Co. Building	MNT.129	On power canal, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No; No
Esleeck Paper Mill	MNT.130	On power canal, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No; No
Keith Paper Mill	MNT.131	On power canal, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No; No
Montague Paper Co. Buildings (Great Falls Discovery Center)	MNT.132	2 Avenue A, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No; No
Montague Paper Co. Buildings (Great Falls Discovery Center)	MNT.133	2 Avenue A, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No; No
Sixth Street Bridge over Power Canal	MNT.909	Sixth Street, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No; No

SITE NAME	**SHPO # / FIELD #**	**ADDRESS**	**NRHP STATUS**	**PROJECT FACILITY; OWNED BY FIRSTLIGHT**
Fifth Street Bridge over Power Canal	MNT.910	Fifth Street, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No; No
Gill-Montague Bridge over Connecticut River	GIL.901/ MNT.920	Route 2A, Turners Falls/Riverside, MA	Contributing resource in Turners Falls Historic District. In 1987, determined NRHP-eligible by MHC for individual listing under Criterion C.	No; No
Fifth Street Footbridge over Power Canal	MNT.924	North of Fifth Street Bridge, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No; No
Keith's Mill Footbridge over Power Canal	MNT.925	North of Second Street, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No; Yes
Turners Falls Power Canal	MNT.933	Between Turners Falls Dam and Cabot Power Station, Turners Falls, MA	Contributing resource in Turners Falls Historic District (section north of Sixth Street Bridge only)	Yes; Yes
International Paper Co. Bridge over Power Canal	No MHC #, TRC-6	North of Great Falls Discovery Center, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No; Yes
Electrical Switch Building	No MHC #, TRC-39	Northeast of Great Falls Discovery Center at Power Canal, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No; No
Resources Previously Determined NRHP Eligible by Massachusetts Historical Commission (MHC)				
Cabot Power Station and Dam	MNT.449	South end of Power Canal, Turners Falls, MA	Determined NRHP Eligible 1987 (Criteria A and C)	Yes; Yes
Gantry Crane, Cabot Station (demolished)	MNT.945	Cabot Station, Turners Falls, MA	Determined NRHP Eligible 1987 DEMOLISHED in 1987	N/A

SITE NAME	**SHPO # / FIELD #**	**ADDRESS**	**NRHP STATUS**	**PROJECT FACILITY; OWNED BY FIRSTLIGHT**
Eleventh Street Bridge over Power Canal	MNT.904	Eleventh Street, Turners Falls, MA	Determined NRHP Eligible 1987 (Criterion C). Contributing resource in NRHP-eligible Turners Falls Power & Electric Company Historic District. Also a contributing resource in NRHP-eligible Patch Historic District	No; No
Schell Memorial Bridge over Connecticut River	NFL.924	Between East and West Northfield, MA	Determined NRHP Eligible 1987 (Criterion C)	No; No
French King Bridge over Connecticut River	GIL.900/ ERV.904	Mohawk Trail between Gill and Erving, MA	Determined NRHP Eligible 1987 (Criterion C)	No; No
East Mineral Road Bridge over Millers River	MNT.917	East Mineral Road at Cabot Camp, Montague and Erving, MA	Determined NRHP Eligible 1988 (Criterion C)	No; No
Resources Previously Determined Not NRHP-Eligible				
Boston & Maine Railroad Fort Hill Branch Bridge Piers over the Connecticut River	TRC-29	Connecticut River, between Hinsdale NH and Vernon VT	Determined Not Eligible by New Hampshire SHPO in 1994	No; No
Boston & Maine Railroad-Fort Hill Branch Bridge over Ashuelot River	TRC-30	East bank of Connecticut River, Hinsdale, NH	Determined Not Eligible by New Hampshire SHPO in 1994	No; No
Central Vermont Railroad Bridge over the Connecticut River	NFL.926	Northfield, MA	Determined Not Eligible by MHC in 1989	No; No
Previously Surveyed but Not Evaluated for NRHP				
Frederick Morgan House	NFL.178	153 Millers Falls Road (Route 63), Northfield Farms, MA	Not NRHP-Eligible	No; Yes

SITE NAME	**SHPO # / FIELD #**	**ADDRESS**	**NRHP STATUS**	**PROJECT FACILITY; OWNED BY FIRSTLIGHT**
"The Patch"	MNT.C	Residential area west of Power Canal and south of Eleventh Street, Turners Falls, MA	NRHP-Eligible as a historic district (Criteria A and C)	No; FirstLight owns unimproved lot (no standing structures)
Frank Smith House (Riverside)	GIL.043	39 Riverview Drive, Riverside, MA	Contributing resource in NRHP-eligible Riverside Historic District	No; No
Hunt-Sanderson-Jones House (Riverside)	GIL.037	9 Grove Street, Riverside, MA	Contributing resource in NRHP-eligible Riverside Historic District	No; No
Red Suspension Bridge (Remains of bridge operated between 1878 and 1942)	GIL.907	Gill and Montague Connecticut Riverbanks, MA	Not NRHP-Eligible	No; No
Riverside (Residential neighborhood in Gill)	GIL.D	Various streets, Riverside, Gill, MA	NRHP-Eligible historic district (Criteria A and C)	No; FirstLight owns property within Riverside boundaries
Newly Surveyed and Evaluated for the NRHP				
Central Vermont Railroad Bridge over Ferry Road	TRC-1	Ferry Road, Northfield, MA	NRHP-Eligible (Criteria A)	No; No
Boston & Maine Railroad Bridge over Turners Falls Power Canal	TRC-2	South of Sixth Street, Turners Falls, MA	Not NRHP-eligible. Non-contributing resource in Turners Falls Power & Electric Company Historic District	No; Yes
Boston & Maine Railroad Bridge over Branch Canal	TRC-3	Power Canal, Turners Falls, MA	Not NRHP-eligible. Non-contributing resource in Turners Falls Power & Electric Company Historic District	No; Yes
Cabot Camp	TRC-5	169 East Mineral Road, Montague	NRHP-Eligible (Criteria A and C)	No; Yes
Turners Falls Rod & Gun Club (Camp 1E)	TRC-7	End of Rod and Gun Club Road, Montague	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)

SITE NAME	**SHPO # / FIELD #**	**ADDRESS**	**NRHP STATUS**	**PROJECT FACILITY; OWNED BY FIRSTLIGHT**
Camp 2E	TRC-8	Off Industrial Boulevard, Montague	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 3E	TRC-9	Off Industrial Boulevard, Montague	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 11E	TRC-10	West Camp Road, Montague	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 10E	TRC-11	West Camp Road, Montague	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 9E	TRC-12	West Camp Road, Montague	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 8E	TRC-13	West Camp Road, Montague	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 7E	TRC-14	West Camp Road, Montague	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 16E	TRC-15	End of West Mineral Road, Montague	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 15E	TRC-16	End of West Mineral Road, Montague	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 17E	TRC-17	End of West Mineral Road, Montague	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 7W	TRC-18	Trenholm Way, Gill	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)

SITE NAME	SHPO # / FIELD #	ADDRESS	NRHP STATUS	PROJECT FACILITY; OWNED BY FIRSTLIGHT
Camp 2W	TRC-19	Off Peterson Way, Gill	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 16W	TRC-20	At end of Grist Mill Road, Gill	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp	TRC-21	40 Grist Mill Road, Gill	Not NRHP-Eligible	No; No
Camp	TRC-22	37 Vassar Way, Gill	Not NRHP-Eligible	No; No
Camp 11W	TRC-23	End of Taylor Place, Gill	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Camp 15W	TRC-24	Off of an unnamed road which is accessed from Route 2, Gill	Not NRHP-Eligible	No; No (Land is owned by FirstLight; structure is not)
Wanamaker Lake Dam	TRC-25	Route 63, Northfield, MA	Not NRHP-Eligible	No; No
Route 63 Bridge over Pauchaug Brook	TRC-26	Route 63, Northfield, MA	Not NRHP-Eligible	No; No
Whithed's/Shuttle's Mill, Dam and Millpond	TRC-27	Route 142, Vernon Village, Vernon, VT	Not NRHP-Eligible	No; No
Culvert	TRC-28	Route 142 and Governor Hunt Road, south of Vernon Dam, Vernon, VT	Not NRHP-Eligible	No; No
Route 63 (Northfield Street) Bridge over Ashuelot River	TRC-31	Northfield Street, Hinsdale, NH	Contributing resource in NRHP-eligible Hinsdale Historic District	No; No
Culvert	TRC-32	Just west of Northfield Street Bridge, north bank, Hinsdale, NH	Contributing resource in NRHP-eligible Hinsdale Historic District	No; No
Ashuelot River Gauging Station	TRC-33	Just east of Northfield Street Bridge, south bank, Hinsdale, NH	Contributing resource in NRHP-eligible Hinsdale Historic District	No; No

SITE NAME	**SHPO # / FIELD #**	**ADDRESS**	**NRHP STATUS**	**PROJECT FACILITY; OWNED BY FIRSTLIGHT**
Northfield Mountain Pumped Storage Facility and Visitor's Center	TRC-34	Route 63, Northfield and Erving, MA	Meets NRHP Criteria A and C and retains integrity; will be NRHP-eligible in 2018	Yes; Yes
Station No. 1	TRC-35	At end of Branch Canal, Turners Falls, MA	Contributing resource in NRHP-eligible Turners Falls Power & Electric Company Historic District	Yes; Yes
Turners Falls Gate House	TRC-36	Turners Falls next to Gill-Montague Bridge, Turners Falls MA	Contributing resource in NRHP-eligible Turners Falls Power & Electric Company Historic District	Yes; Yes
Turners Falls Dam (1 and 2)	TRC-37	Connecticut River between Gill and Montague, Turners Falls, MA	Contributing resource in NRHP-eligible Turners Falls Power & Electric Company Historic District	Yes; Yes
Turners Falls Road (White) Bridge over Connecticut River	TRC-38	Greenfield- Turners Falls, MA	Not Eligible	No; No
Turners Falls Power & Electric Company Historic District	TRC-40 (includes MNT.449, 904, 924, 925, and 933 and TRC-2, 3, 6, 35, 36, 37, and 39)	Between Turners Falls Dam and Cabot Station, Turners Falls, MA	NRHP-Eligible (Criteria A and C). Some resources are also contributing to NRHP-listed Turners Falls Historic District	Power Canal, Station No.1, Dam, Gate House, and Cabot Station are FL-owned Project facilities. IP Bridge, Fifth Street Footbridges, two railroad bridges FL-owned, non-Project facilities. Eleventh and Sixth Street Bridges, Keith and electrical switch building are non-FL-owned, non-Project facilities.

SITE NAME	**SHPO # / FIELD #**	**ADDRESS**	**NRHP STATUS**	**PROJECT FACILITY; OWNED BY FIRSTLIGHT**
Mohawk Trail	TRC-41	Route 2 Between Williamstown and Orange, MA	NRHP-Eligible (Criterion A)	No; No

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APPENDICES

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LIST OF ABBREVIATIONS

APE	Area of Potential Effects
Commission or FERC	Federal Energy Regulatory Commission
FirstLight	FirstLight Hydro Generating Company
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
HPMP	Historic Properties Management Plan
MA	Massachusetts
MACRIS	Massachusetts Cultural Resource Information System
MDC	Metropolitan District Commission
MHC	Massachusetts Historical Commission
MW	Megawatt
National Register	National Register of Historic Places
NHDHR	New Hampshire Division of Historical Resources
NHDOT	New Hampshire Department of Transportation
NHPA	National Historic Preservation Act of 1966, as amended
NOI	Notice of Intent
NH	New Hampshire
NRHP	National Register of Historic Places or National Register
NU	Northeast Utilities
PAD	Pre-Application Document
PSP	Proposed Study Plan
the Project or Projects	Northfield Mountain Pumped Storage and Turners Falls Hydroelectric Projects
RSP	Revised Study Plan
SD1	Scoping Document 1
SD2	Scoping Document 2
Section 106	Section 106 of the National Historic Preservation Act of 1966, as amended
SHPO	State Historic Preservation Office (or Officer)
TFP&E	Turners Falls Power & Electric Company
TRC	TRC Environmental Inc.
VDHP	Vermont Division for Historic Preservation
VT	Vermont
WMECO	Western Massachusetts Electric Company

I. INTRODUCTION

Project Background

FirstLight Hydro Generating Company (FirstLight), a subsidiary of GDF SUEZ North America, Inc., is the current licensee of the Northfield Mountain Pumped Storage Project (FERC No. 2485) and the Turners Falls Hydroelectric Project (FERC No. 1889). FirstLight has initiated with the Federal Energy Regulatory Commission (FERC, the Commission) the process of relicensing the two Projects using FERC's Integrated Licensing Process (ILP). The current licenses for the Northfield Mountain and Turners Falls Projects were issued on May 14, 1968 and May 5, 1980, respectively, and both licenses expire on April 30, 2018.

As part of the ILP, FERC conducted a public scoping process during which various resource issues were identified. On October 31, 2012, FirstLight filed its Pre-Application Document (PAD) and Notice of Intent (NOI) with FERC. The PAD included FirstLight's preliminary list of proposed studies. On December 21, 2012, FERC issued Scoping Document 1 (SD1) and preliminarily identified resource issues and concerns. On January 30 and 31, 2013, FERC held scoping meetings for the two Projects. FERC issued Scoping Document 2 (SD2) on April 15, 2013.

FirstLight filed its Proposed Study Plan (PSP) on April 15, 2013 and, per the Commission regulations, held a PSP meeting at the Northfield Visitors Center on May 14, 2013. Thereafter, FirstLight held ten resource-specific study plan meetings to allow for more detailed discussions on each PSP and on studies not being proposed.[2] On June 28, 2013, FirstLight filed with the Commission an Updated PSP to reflect further changes to the PSP based on comments received at the meetings. On or before July 15, 2013, stakeholders filed written comments on the Updated PSP. FirstLight filed a Revised Study Plan (RSP) on August 14, 2013 with FERC addressing stakeholder comments. Included in the RSP was Study No. 3.7.2 *Historic Resources Survey.*

On September 13, 2013, FERC issued a study plan determination with respect to the survey and evaluation of Historic Architectural Resources. FERC stated that the survey should assess existing condition of all resources, identify any other potentially significant resources within the APE, and evaluate the significance of resources that have not yet been formally determined eligible for listing in the NRHP. Accordingly, the objective of the study is to identify historic resources listed in or eligible for listing in the NRHP. If it is confirmed through consultation with the SHPOs that historic resources are present in the APE, FirstLight will then move forward to identify and assess any potential effects to historic resources from the continuing operation and maintenance of the Project.

[2] The ten meetings were held on May 14, 15, 21, and 22, and June 4, 5, 11, 12, and 14 and August 8, 2013.

Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act (Section 106) of 1966, as amended, (36 CFR Part 800.4 through 800.5) requires a systematic and complete inventory of the built environment, including evaluating all inventoried structures for NRHP eligibility and assessing Project-related effects to those structures that are listed in or eligible for the NRHP. Such an inventory needs to be done prior to FERC's review of the Draft License Application and before the FERC decision on issuing new licenses for these Projects.

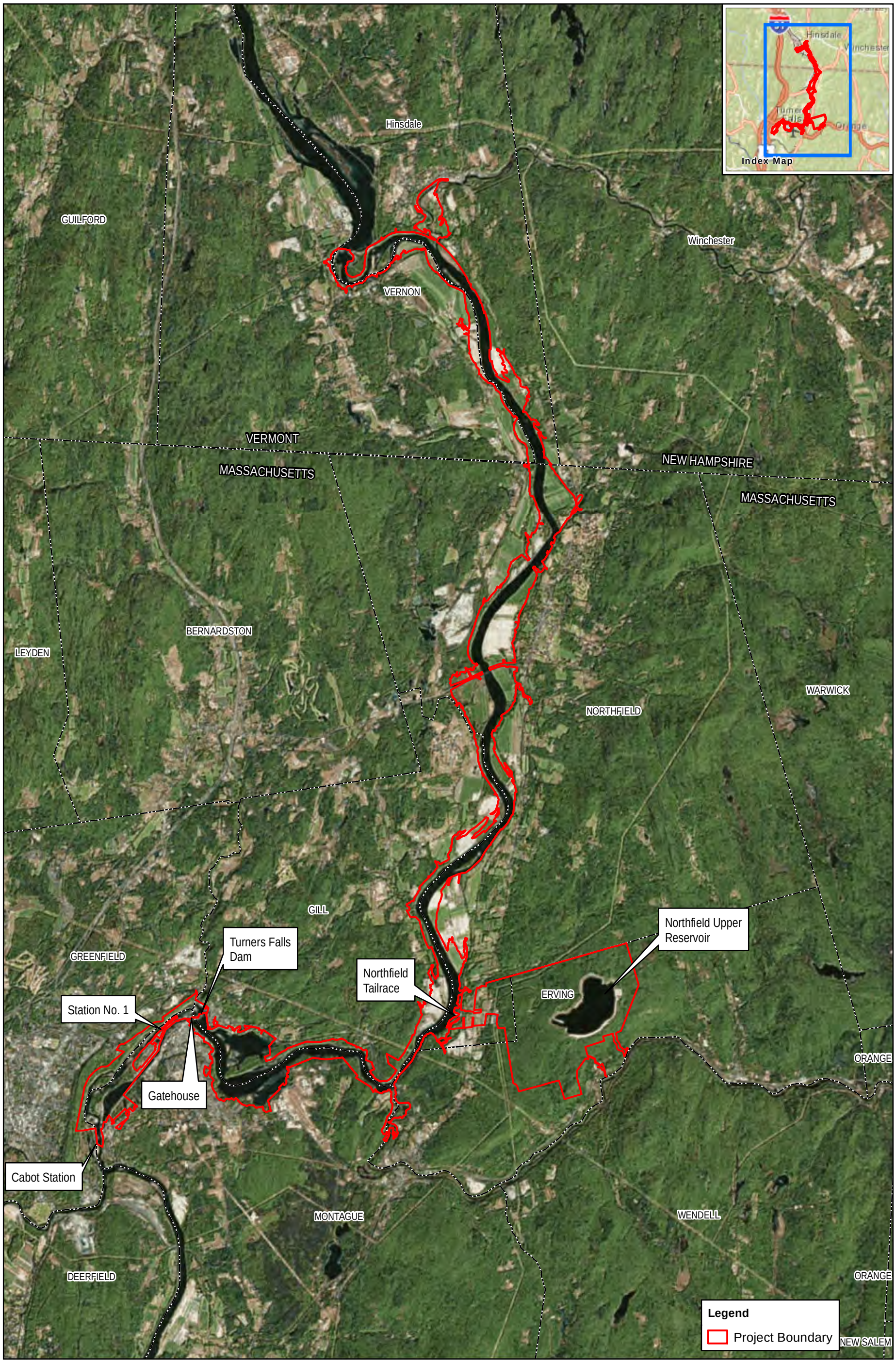
This report was prepared to assist FERC in making its federal licensing determination for the Project in compliance with Section 106, as well as inform the development of a Historic Properties Management Plan (HPMP) for the Project. As set forth in the Study Plan Determination letter, the HPMP will specify how FirstLight will consider and manage the historic properties within the Project's APE throughout the term of the next FERC license.

II. PROJECT DESCRIPTION

The Turners Falls Project and Northfield Mountain Project are located on the Connecticut River in the states of Massachusetts, New Hampshire, and Vermont (Figure 1). The greater portion of the Turners Falls Project and Northfield Mountain Project, including developed facilities and most of the lands within the Project boundary, are located in Franklin County, MA; specifically, in the towns of Erving, Gill, Greenfield, Montague, and Northfield. The northern reaches of the Turners Falls Project and Northfield Mountain Project boundary extend into the towns of Hinsdale, in Cheshire County, NH, and Vernon, in Windham County, VT.

The Turners Falls Project consists of: a) two concrete gravity dams separated by an island and appurtenant facilities located on the Connecticut River in the towns of Gill and Montague, MA; b) a gate house controlling flow to the main power canal; c) the main power canal and a short branch canal; d) two hydroelectric powerhouses, located on the power canal, known as Station No. 1 and Cabot Station; e) an impoundment known as the Turners Falls Impoundment (Connecticut River); and f) one 13.8 kV line to the Montague substation.

The Northfield Mountain Project consists of: a) an upper reservoir and dams and dikes; b) an underground powerhouse; c) a tailrace; and d) two 345 kV lines to the Northfield Switching Station. The Turners Falls Impoundment (Connecticut River) serves as a lower impoundment.



FIRSTLIGHT POWER RESOURCES

HISTORIC ARCHITECTURAL RESOURCES SURVEY & NATIONAL REGISTER EVALUATION

Figure 1
Turners Falls and Northfield Mountain Project Areas

N

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III. HISTORIC ARCHITECTURAL SURVEY METHDOLOGY

Survey Purpose

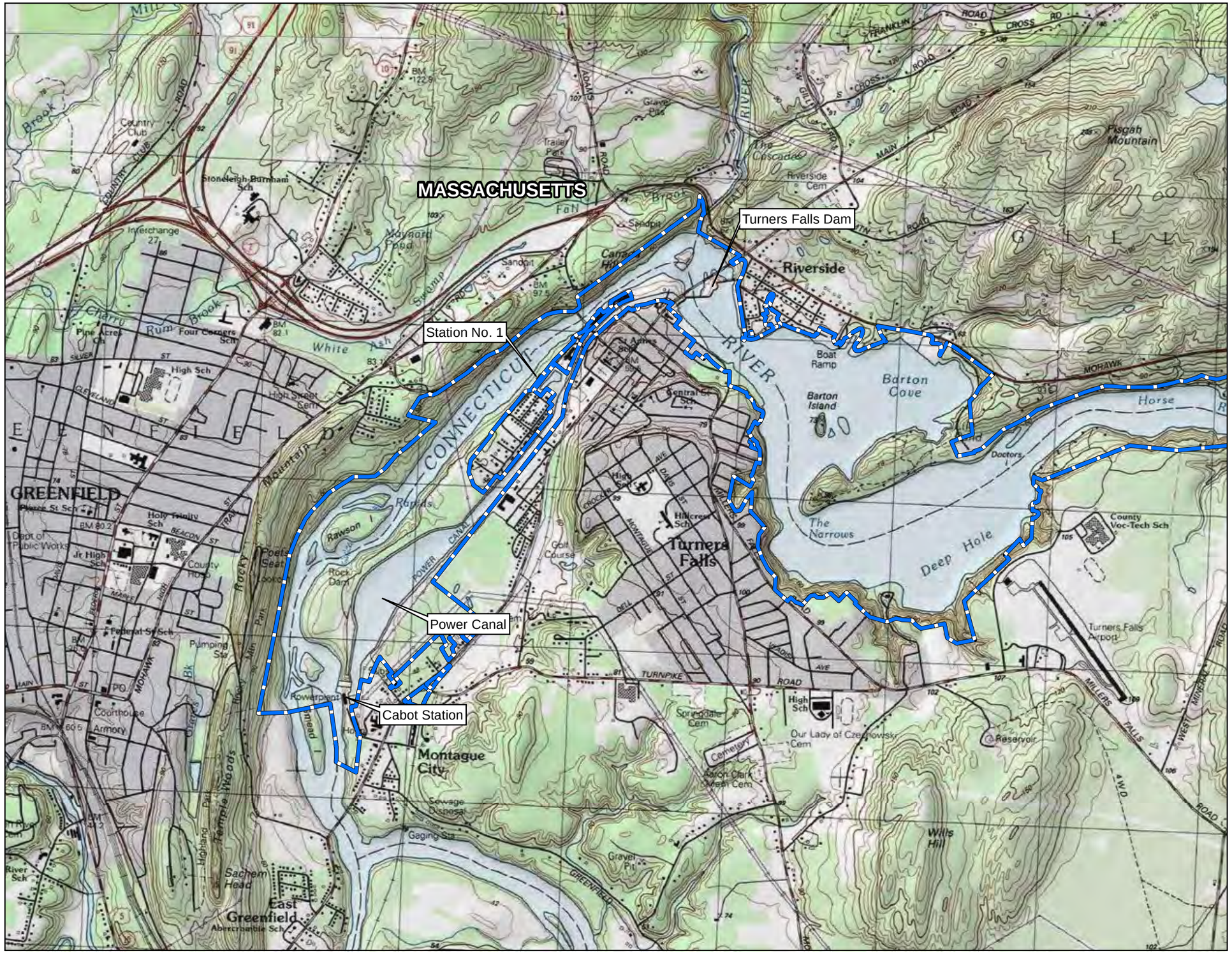
Between November 2013 and March 2014, TRC Environmental Inc. (TRC) conducted an historic architectural survey and NRHP evaluation of all buildings, structures, objects, sites, and districts 50 years or older within the Project APE[3]. Consistent with FERC's Study Plan Determination letter, the survey had the following purposes: identify historic resources within the Project's APE currently listed in or determined eligible for listing in the NRHP and conduct fieldwork and provide evaluations of NRHP eligibility for all previously and newly surveyed resources, based on their historic significance and integrity. The architectural assessment included a review of historic maps, a literature search, and a review of historical documents at local and state repositories in Massachusetts, New Hampshire, and Vermont, as well as on-site fieldwork and evaluation.

Agency Consultation and Definition of Area of Potential Effects

On November 27, 2013, FERC defined the APE for the Project in accordance with Section 106 and in consultation with the three State Historic Preservation Offices (SHPOs) for the states included within the Project boundaries: the Massachusetts Historical Commission (MHC), the New Hampshire Division of Historical Resources (NHDHR), and the Vermont Division for Historic Preservation (VDHP), along with the Narragansett Indian Tribe, and the Nolumbeka Project. The Project APE is defined as "*…all lands within the current FERC Project Boundary of the two projects in addition to any other lands outside the FERC Project Boundary where historic properties could be affected by project-related adverse effects. The Projects' APEs include lands within Franklin County, Massachusetts, Windham County, Vermont, and Cheshire County, New Hampshire. On lands adjacent to the project boundaries, the APEs would also include an additional 10 meters (33 feet) of lands inland from the top of banks of the Connecticut River and associated tributaries."*

Figure 2 (presented on five continuous sheets) demarcates the geographic and topographic coverage of the Project APE for the Turners Falls and Northfield Mountain Projects.

[3] Because the Northfield Mountain Pumped Storage Facility dates from 1968-1972 and the Project license expires in 2018, the Northfield Mountain facility was included in the historic architectural survey for purposes of NRHP evaluation because it will be 50 years old upon expiration of the current license.



FIRSTLIGHT POWER RESOURCES
AREA OF POTENTIAL EFFECTS

Figure 3.7.2-1
(Archaeology & Historic Structures)

N

Legend

Area of Potential Effects*

* Final Area of Potential Effect defined by Northfield Mountain/Turners Falls Project Boundary

Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

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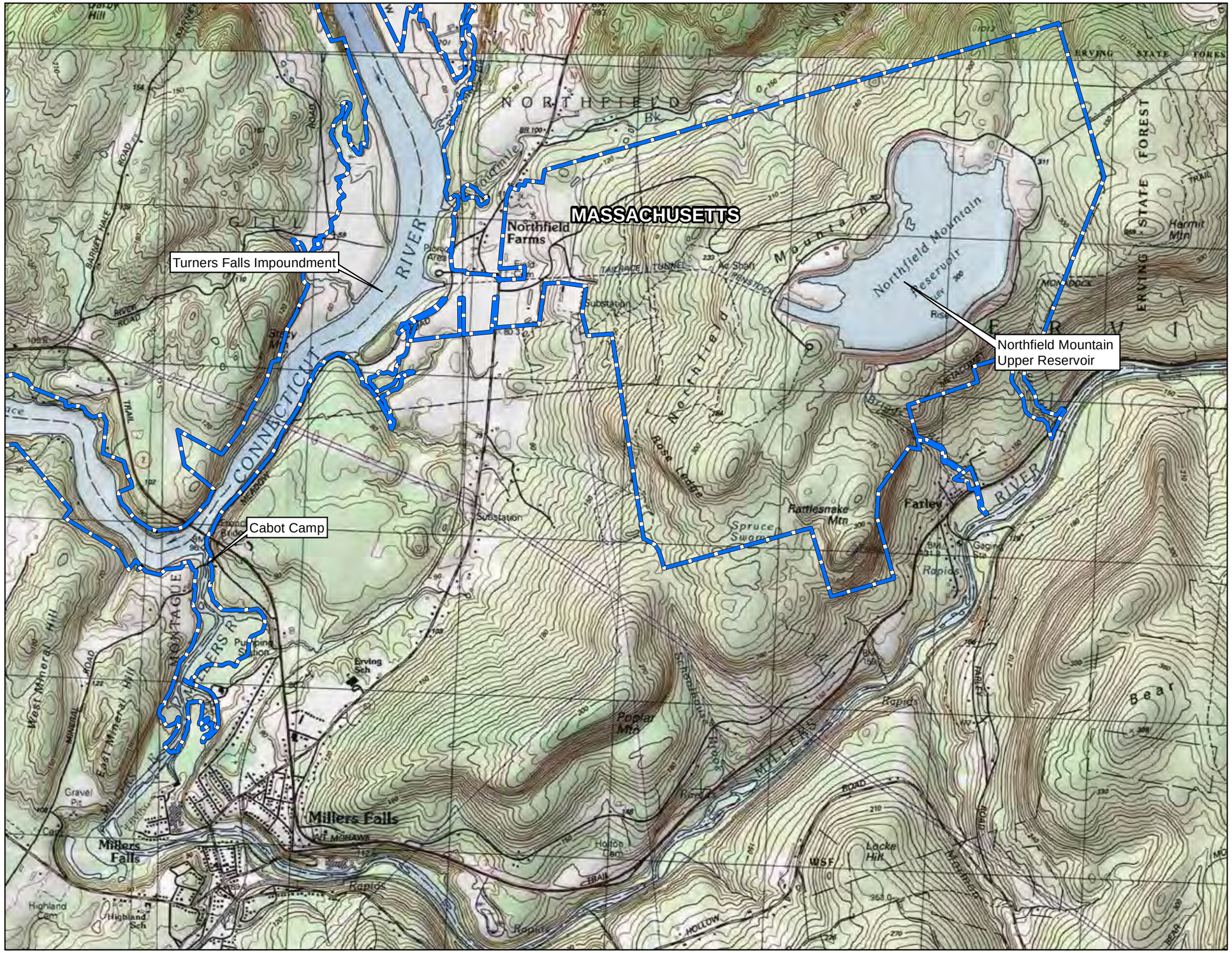

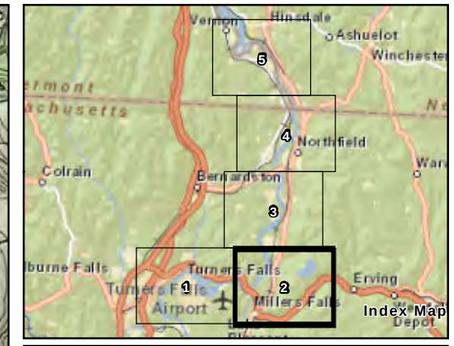

FIRSTLIGHT POWER RESOURCES
AREA OF POTENTIAL EFFECTS

Figure 3.7.2-2
(Archaeology & Historic Structures)

Legend

Area of Potential Effects*

* Final Area of Potential Effect defined by Northfield Mountain/Turners Falls Project Boundary

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Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

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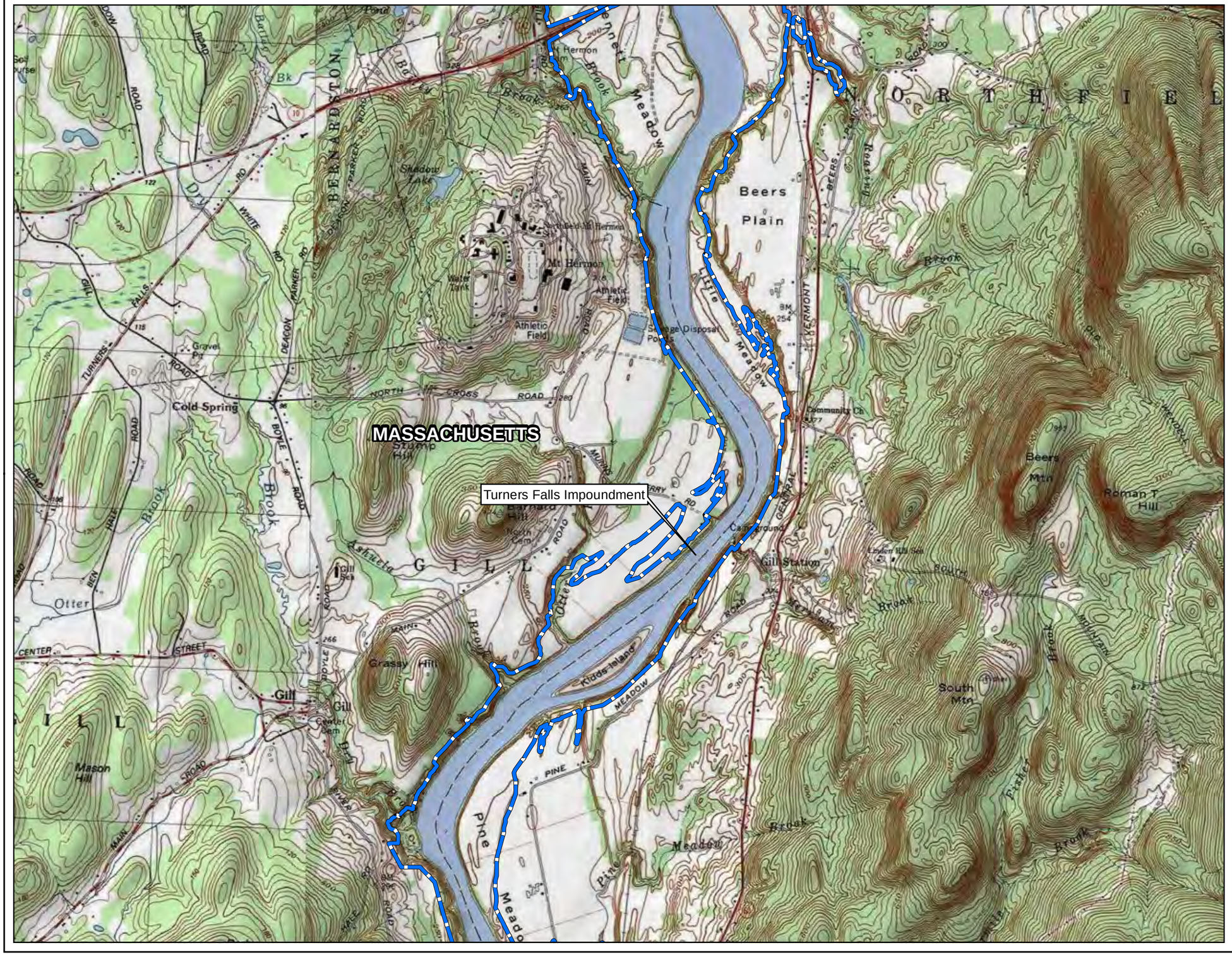

FIRSTLIGHT POWER RESOURCES
AREA OF POTENTIAL EFFECTS

Figure 3.7.2-3
(Archaeology & Historic Structures)

Legend

Area of Potential Effects*

* Final Area of Potential Effect defined by Northfield Mountain/Turners Falls Project Boundary

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Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

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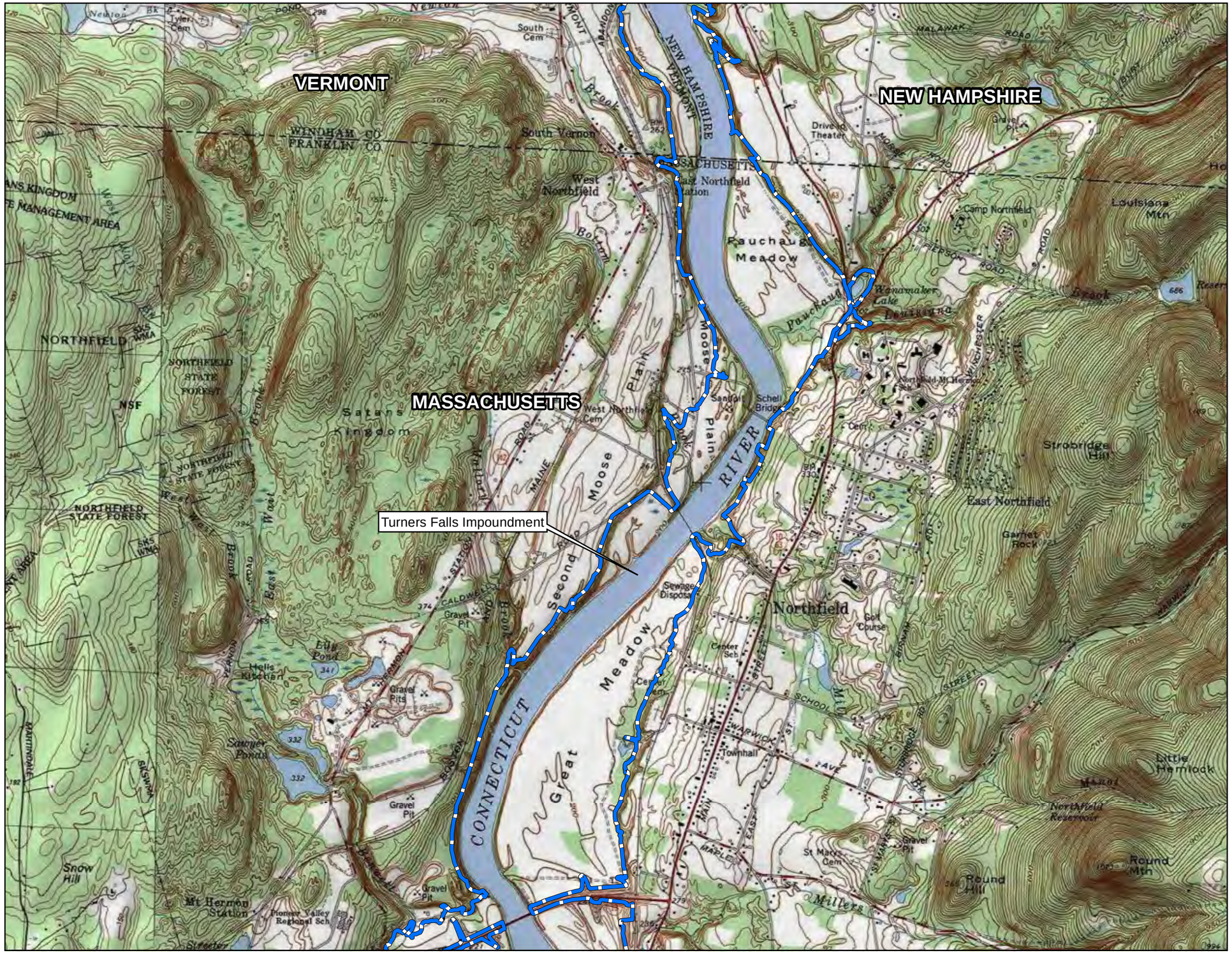

FIRSTLIGHT POWER RESOURCES
AREA OF POTENTIAL EFFECTS

Figure 3.7.2-4
(Archaeology & Historic Structures)

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Legend

Area of Potential Effects*

* Final Area of Potential Effect defined by Northfield Mountain/Turners Falls Project Boundary

Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

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FIRSTLIGHT POWER RESOURCES
AREA OF POTENTIAL EFFECTS

Figure 3.7.2-5
(Archaeology & Historic Structures)

Legend

Area of Potential Effects*

* Final Area of Potential Effect defined by Northfield Mountain/Turners Falls Project Boundary

N

Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

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Survey Methodology

The TRC survey conducted between November 2013 and March 2014 consisted of separate consultations (in-person and written) with each SHPO to define the survey methodology; a site file search at each SHPO's archives for previously identified architectural resources; general background and historical research conducted at various local and state repositories; an initial "windshield" survey to verify the background research followed by a more intensive-level survey of all resources 50 years and older, including digital photography; data synthesis, production of state (MA, VT, and NH) architectural survey forms; and an evaluation of NRHP eligibility of the surveyed resources. This report is the end result of the survey and includes as appendices the state survey forms with photographs, maps with surveyed sites located and keyed, and relevant agency correspondence.

The 2013-2014 survey assessed the existing condition of all previously recorded resources, identified any other potentially significant resources within the Project APE, and evaluated the significance of resources not previously evaluated for NRHP eligibility. The historic architectural survey and evaluation was carried out by qualified TRC architectural historians and industrial historians who meet the *Secretary of the Interior's Professional Qualification Standards* (36 C.F.R. § 61). In addition, the survey followed all applicable federal and state guidelines, including those contained in *National Register Bulletin 24, Guidelines for Local Surveys: A Basis for Preservation Planning* (National Park Service 1978, rev. 1985); the MHC *Historic Properties Survey Manual* (1995); and the New Hampshire Division of Historical Resources (NHDHR) *Project Area and Individual Form Manuals* (2013). The Vermont Division of Historic Preservation (VDHP) does not currently have state-specific survey guidelines.

Because the survey, reporting, and NRHP-evaluation process for historic resources in New Hampshire differs from that used in most other states, TRC prepared meeting minutes that summarized the survey methodology for review and approval by the NHDHR (Appendix E Agency Correspondence). Briefly, the NHDHR requests all information be submitted on the NHDHR "Project Area Form" found at http://www.nh.gov/nhdhr/programs/survey.htm. The Project Area Form is intended to minimize unnecessary survey work not consistent with the Project purpose and anticipated effects.

The Project Area Form includes a description of the project, geographic context, discussion of the 50+ year old resources in the APE, and an historic context relevant both to the survey area and the architectural resources identified. According to the accompanying NHDHR guidelines "The historic context should utilize existing historic contexts, as well as Project Area Forms already completed. The Project Area Form should conclude with recommendations on the need for further, more intensive survey to determine NRHP eligibility and is submitted to NHDHR for review and comment."

Background Research

TRC conducted background research on the history and development of the Project APE and its surroundings for the preparation of an historic context spanning the colonial period to the present (Chapter IV). Published histories and previous architectural and historical studies of individual towns and villages in Franklin County, MA, Windham County, VT, and Cheshire County, NH were consulted, as were historic maps and atlases of the three counties. Additional research was conducted at local libraries in Greenfield, Turners Falls, and Northfield, MA; Vernon and Brattleboro, VT; and Hinsdale NH. Research was also carried out at the Great Falls Discovery Center in Turners Falls, the Vernon Historical Society in Vernon, and town offices in Montague, Northfield, Erving, and Gill, MA and Vernon, VT. FirstLight archivists scanned historic photographs and building and engineering records of FirstLight-owned facilities including the Turners Falls Dam, Power Canal, Station No. 1, Gate House, and Cabot Station. FirstLight staff and other individuals knowledgeable about local history and the history of the area's hydroelectric facilities were interviewed. The historic context identified the themes of hydroelectric

power, as well as recreation and transportation (including canals and railroads) as important themes in the history and development of the Project APE.

Using the MHC website and cultural resources search engine known as Massachusetts Cultural Resource Information System or "MACRIS", TRC conducted a search for all NRHP-listed and -eligible resources and previously surveyed structures within the Massachusetts portion of the APE. At the MHC Archives in Boston, TRC reviewed the 1980 NRHP nomination form for the Turners Falls Historic District, MHC forms for all previously surveyed resources, HAER reports prepared for several historic bridges located within the Project boundaries, and cultural resource management reports for previous surveys conducted in the Project APE. Because VDHP and NHDHR do not have an online database, both repositories in Montpelier, VT and Concord, NH were also searched in person for previously surveyed resources and cultural resource management reports for previous surveys conducted in the Project APE.

Fieldwork

In November 2013, TRC conducted a windshield survey to confirm the results of the background research and determine the presence of additional historic architectural resources within the project area. In March 2014, TRC conducted a comprehensive field survey that consisted of a systematic walkover of the lands within the Project APE. The survey team of TRC architectural historians visited each of the previously identified resources and documented through field notes and descriptions any other resource that appeared to be 50 years or older. Information about the current appearance, including the setting, physical condition, and character-defining architectural features of the resources and any secondary buildings were recorded on the appropriate state architectural inventory forms.[4] For identification purposes, TRC used SHPO-assigned survey numbers for previously identified resources and temporary "field numbers" (TRC-1, TRC-2 etc.) for those resources not previously identified. Completed survey forms, including both current digital and historic photographs, are included as appendices to this report (Appendices B [MA], C [NH Area Form], and D [VT]). High-resolution digital photographs of multiple views were taken of each resource including general context views that show the resource in relation to one another and their surroundings. TRC mapped the locations of the previously and newly surveyed resources on the relevant USGS quadrangle maps.

NRHP Criteria for Evaluation

Upon completion of the field investigations, TRC analyzed all collected data and prepared an historic context that identifies the significant themes, events, and/or people that had an impact on the historical development of the area and its built resources. TRC determined the areas, period(s), and level(s) of significance for each surveyed resource and applied the NRHP criteria for evaluation. The integrity of the resources was also evaluated to determine if the properties retain a sufficient amount of their historic appearance to be considered for listing in the NRHP. The NRHP significance criteria in 36 CFR 60.4 define eligible cultural resources as buildings, structures, objects, sites, and districts that have integrity of *location, design, setting, materials, workmanship, feeling, and association* and that meet one or more of the following criteria. Note that Criterion D is most often, but not exclusively, used with archaeological resources.

[4] For each state, the inventory form is the primary means for documenting a historic resource. Massachusetts uses the MHC standard inventory forms (Forms A through H) developed for eight categories of historic resources. Vermont has a standard inventory form for historic structures. Both of these states use these forms as well as an accompanying survey report to evaluate projects. In New Hampshire, there are two forms used for Section 106 Projects, primarily the *Project Area Form*, and this is used to record and evaluate historical resources, rather than an accompanying report.

- Criterion A: Association with events that have significantly contributed to the broad patterns of history;
- Criterion B: Association with persons significant in the past;
- Criterion C: Possession of distinctive characteristics of a type, period, or method of construction; exemplification of the work of a master architect, engineer, or artist; embodiment of high artistic values; or evidence of a significant and discernible entity whose components may lack distinction on their own; and
- Criterion D: Ability to yield information significant to prehistory or history.

Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past fifty years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- Consideration A: A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- Consideration B: A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- Consideration C: A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his or her productive life; or
- Consideration D: A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, from association with historic events; or
- Consideration E: A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- Consideration F: A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or,
- Consideration G: A property achieving significance within the past 50 years if it is of exceptional importance.

IV. HISTORICAL OVERVIEW OF THE TURNERS FALLS/NORTHFIELD MOUNTAIN PROJECT AREA

Introduction

The following illustrated historic context covers the seven towns, three counties, and three states, portions of which lie within the Project APE. The historic context seeks to identify the major themes, individuals, and population groups that have had a significant impact on the history of the area. The context focuses on the general historical development of hydroelectric facilities on the Connecticut River during the early twentieth century and other themes such as transportation and recreation that may apply to architectural resources identified in the field. The historic context of the Project APE was developed using both primary and secondary sources accessed at local and state repositories, from online sources, and from informant interviews conducted as part of the architectural survey, and is illustrated with both current and historic photographs, as well as sections of historic maps and atlases.

This section begins with a brief, present-day geographic overview of the towns within the Project APE. Because the majority of the land area and historic resources are located in Massachusetts, the historic context that follows adheres to the historic time periods and guidelines of the MHC and is organized as follows:

1. *Contact (1500-1620); Plantation (1620-1675); and Colonial (1675-1775) Periods*
2. *Federal Period (1775-1830)*
3. *Early Industrial Period (1830-1870)*
4. *Late Industrial Period (1870-1915)*
5. *Modern Period (1915-1972)*

Geographic Overview

Gill, Massachusetts

Gill is located in Franklin County on the northern and western sides of the Connecticut River (See Figure 1). The town has a total area of 14.8 square miles, of which 13.7 square miles is land. The Connecticut River forms most of the town's boundary with Northfield to the east, and separates the town from Erving to the southeast, and Montague to the south. The Fall River, a small tributary, forms the boundary with Greenfield to the southwest. Gill shares land boundaries with Bernardston in the northwest, and a portion of Northfield to the north.

Much of the floodplain near Riverside in the southwestern part of Gill was flooded following construction of the Turners Falls Dam in the 1860s (Parsons 1999). The town's population center is in Riverside, across the Turners Falls Dam and bridge from the village of Turners Falls in Montague. Most commercial development has taken place in the southern part of town along Route 2 (French King Highway), near Riverside. This road is a major secondary highway and is the principal east-west thoroughfare for Franklin County; at the eastern end of the road in Gill is the 1932 French King Bridge (Holmes 1991: 17).

Montague, Massachusetts

Montague is located in central Franklin County. The town has a total area of 31.5 square miles, of which 30.2 square miles is land. The town is bounded on the north by the Connecticut River and the towns of Greenfield and Gill, on the east by the Millers River and the towns of Erving and Wendell, on the south by Leverett and Sunderland, and on the west by the Connecticut River and the towns of Deerfield and Greenfield (Holmes 1991: 24).

The town's most prominent geographic feature is the Connecticut River. The Turners Falls Dam was built at the impressive natural drop in the river at this location (Jenkins 1980: 7.1). Historically, rapids were located here as well as north of the present-day French King Bridge. Due to impoundments, rapids are located both downstream from Turners Falls, near the present Cabot Powerhouse, as well as upstream, in the vicinity of the confluence of the Millers and Connecticut Rivers, just south of the French King Bridge (Holmes 1991: 24).

The Millers River is a tributary of the Connecticut River bordering Montague on the northeast. "Shallower than the Connecticut, it is a rocky and turbulent stream and has historically not been used for commercial transportation." It has been used as a mill stream, however, and has been the source of power for mills in both Millers Falls and Erving (Holmes 1991: 24).

Erving, Massachusetts

Erving has a total area of 14.4 square miles, of which 13.9 square miles is land. The Millers River is the southern border of the town. The terrain of Erving is hilly and rugged; most of the developed area of the town is located along the Connecticut and Millers Rivers. Northfield Mountain occupies much of the northern two-thirds of the town. Most of the Northfield Mountain pumped storage hydroelectric facility is located in Erving.

Northfield, Massachusetts

Northfield, in northern Franklin County, has a total area of 35.4 square miles. Northfield is the only town in Franklin County to be divided by the Connecticut River, though only partially; the river forms the southwest border of town (Holmes 1991: 24).

Northfield is located at the junction of the Massachusetts, New Hampshire, and Vermont state lines along the Connecticut River. To the north are Vernon, VT, and Hinsdale and Winchester, NH. The town is bounded on the east by the Massachusetts town of Warwick, on the south by Erving, and on the west by Gill and Bernardston. Tributaries of the Connecticut River in Northfield include Mill Brook, Millers Brook, Pine Meadow Brook, and Four Mile Brook (Holmes 1991: 24).

Changes in the northern boundary with New Hampshire were made in 1740, along with several other boundary changes with neighboring Massachusetts towns made throughout the eighteenth century. A portion of Northfield on the western side of the Connecticut River, Mount Hermon, was given to Gill in 1795 and an area south of the Northfield Farms section of town was made part of Erving in 1860 (Fitt 1910: 4).

Vernon, Vermont

Vernon (until 1802 known as Hinsdale) is located in Windham County in the southeast corner of Vermont. The town has a total area of 20 square miles, of which nearly all is land. Vernon is bounded on the west by Guilford, on the south by the Massachusetts towns of Bernardston and Northfield, on the north by Brattleboro, and on the east by the Connecticut River which separates it from Hinsdale, NH. The Connecticut River makes a great bend at the south end of town, with the Vernon Dam being the principal man-made feature here. The former Central Vermont Railway line and Route 142 are the principal north-south transportation routes through the town (Holmes 1991: 52).

Hinsdale, New Hampshire

Hinsdale, in Cheshire County, is located in the southwestern corner of New Hampshire. The town has a total area of 22.7 square miles, of which nearly all is land. It is bounded on the north by the town of Chesterfield, on the east by Winchester, on the south by Northfield, MA, and on the west by the Connecticut River which separates it from Vernon and Brattleboro, VT.

Located beside the Connecticut River and connected to Brattleboro by a bridge, most of Hinsdale along the Connecticut River is flat or rolling land, much of it used as fields or pasture. The Ashuelot River enters the town from the east and flows into the Connecticut River south of the main settlement of Hinsdale.

Disputes over the boundary between the provinces of Massachusetts and New Hampshire created much confusion among the area's settlers in the mid-eighteenth century. The town of Hinsdale was incorporated in 1753 (NHDOT 2007). Originally the town included land on both sides of the Connecticut River. Soon after incorporation, the different sides of the river were separated into two towns, although both retained the Hinsdale name. In 1802, the west side of Hinsdale, by then in Vermont, voted to be renamed Vernon (Holmes 1991: 46).

Historic Context

Contact (1500-1620); Plantation (1620-1675); and Colonial (1675-1775) Periods

Colonial settlement of the Project area (present-day towns of Gill, Greenfield, Montague, Erving and Northfield, MA; Vernon, VT; and Hinsdale, NH) in the seventeenth century was scattered and short-term and is for the most part poorly documented. At least two dwellings reputedly were established a short time prior to the outbreak of King Philip's War in 1675 on two separate lowland locations along the present French King Highway (Route 2) in Riverside village in Gill, and near the southern terminus of River Road (Parsons 1999: 2). These sites were abandoned with the outbreak of English conflicts with Native Americans in 1675 (MHC 1982b: 5). The colonial settlements at Deerfield and Northfield were both attacked in September of that year, leading most English settlers living to the north to retreat to either Hadley or Northampton (Holmes 1991: 53).

Historically, Turners Falls is reputed to have been the site of the native village of "Peskeomskut" (Pressey 1910: 52). Turners Falls gains its name from the historic "Falls Battle" of 1676, when Captain William Turner attacked a group of Patumkets and members of other tribes camped at the falls of the Connecticut River. More than 300 Indians died in the battle before they counter-attacked, killing Turner and 40 of his men (Jenkins 1980: 8.1). The battle is commemorated by the Captain Turner monument, located on the French King Highway near the Gill end of the Montague-Gill Bridge.

Considered a northern outpost of colonial settlement, the Vernon and Northfield areas were largely abandoned during King Philip's War and only lightly re-settled after the conclusion of Queen Anne's War in 1714. At that time, the boundaries of the old Swampfield Plantation (Sunderland) were extended to include Leverett to the east and Montague to the north. The first land grant that included what is now Montague was made on March 23, 1716 and the first permanent white settler in Montague arrived around 1726 (Holmes 1991: 25).

In 1723, the Massachusetts General Court decided to build a defensive block-house manned by 40 colonial and Mohawk soldiers on the west bank of the Connecticut River above Northfield, within the southerly limits of the town of Brattleboro. Named Fort Dummer after Massachusetts Governor William Dummer, it counts as the first permanent English settlement in Vermont (Child 1884: 21). The fort site was flooded as the result of the building of the Vernon Dam in 1906 (Holmes 1991: 54). Other blockhouses were built at nearby Fort Bridgman and Sartwell's Fort in the 1730s and 1740s.

Confusion over the town boundaries of Northfield in relation to the New Hampshire colony to the north resulted in several inconclusive surveys that muddied settlement claims in the area for many years (NHDOT 2007: 4). A 1753 decree by New Hampshire's Royal Governor created two towns north of Northfield on either side of the Connecticut River, both named Hinsdale (Holmes 1991: 56).

A meetinghouse was established at Montague Center in 1753. In 1765, the colonial settlement of Montague consisted of 49 houses, 64 families, and 392 individuals. By 1776, the town population had increased to 575. Most of Montague's residents moved there from older settlements at Deerfield and Sunderland (MHC 1982c: 3). Residents grew crops and raised livestock and either shipped goods down the river to Hartford, CT in exchange for manufactured products or followed overland routes to Boston.

Federal Period (1775-1830)

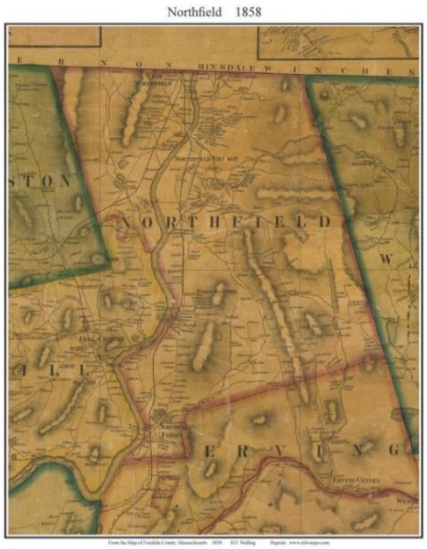
The Project area's economic base was mostly agricultural during this period, although there were at least eight sawmills in the Montague area by 1790, including Bissel's sawmill at the location of the modern Turners Falls Dam (Parsons 1999: 3). There was also substantial lumber traffic, both originating in Montague and Gill, as well as from areas further north and then transported around Turners Falls via the "Great Carrying Place" across Montague Plain (MHC 1982b: 4). A lucrative river trade in lumber and transporting merchandise rapidly developed, and in the late eighteenth century, a small village optimistically christened Montague City grew up on the western edge of the town on the banks of the Connecticut River (Holland 1855 II: 397).

Vermont, contested among New York, New Hampshire, and Massachusetts in the years before the Revolution, enjoyed a population boom in the late 1700s. In 1783, the province had a population of 10,000; by 1790, it had increased to 55,425. On March 4, 1791 Vermont gained statehood. In October 1802, the town on the Vermont side of the Connecticut River changed its name from Hinsdale to Vernon, in honor of the British Admiral William Vernon (Child 1884: 304; Holmes 1991: 56).

Turners Falls itself was not settled until 1792, when a canal and dam were proposed by the Proprietors of the Upper Locks and Canals of the Connecticut River to aid navigation around both Turners Falls and South Hadley to the south. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, VT to Hartford, CT (Jenkins 1980: 8.1). The canal, designed by Benjamin Prescott of Northampton, was 2.5 miles long and 14 feet wide, with ten locks. A second dam and lock downstream from the confluence of the Connecticut and Millers Rivers raised the water in order that boats could navigate the French King rapids (MHC 1982c: 6). A building at Cabot Camp (TRC-5), located on East Mineral Road in Montague, and currently owned and operated by FirstLight as a meeting center, reputedly incorporates a building that may have served as a toll house for tow boats and barges passing through the French King gorge during the early nineteenth century period (Abercrombie 1973: 3).

In 1794, a consortium of German-Dutch businessmen initiated development of port activities along the Connecticut River, with planned settlements at Montague City and around the Upper Locks and Canal to Turners Falls (MHC 1982c: 6). The Dutch apparently envisioned a great commercial city at the outlet of the canal and head of deep-water navigation, "another Tyre or Baghdad" in the words of one historian (Pressey 1910: 78). Nothing came of the plan, however, and the businessmen had abandoned the area by the end of the decade.

The area began to lose some of its frontier character as a result of transportation improvements in the early 1800s that encouraged both economic development and resultant in-migration from other parts of Massachusetts. In 1799, the Fifth Massachusetts Turnpike Company was established to either construct new roads or take over and improve existing ones in western Massachusetts. As part of one of these routes, a bridge was built between Montague City and Greenfield in 1802. A portion of the highway route went from Montague City to Millers Falls. Steam boat service to Springfield, MA was initiated in the 1830s but was hampered by the inability to widen the Upper Locks and Canal (MHC 1982c: 6). In 1828, a power canal and dam were constructed on the Ashuelot River in Hinsdale; these were joined to neighboring Keene by a turnpike, ushering in Hinsdale's industrial era (NHDOT 2007: 7).



Early Industrial Period (1830-1870)

Railroads opened up the entire Connecticut River Valley area to sustained economic development beginning in the 1840s and remained the area's transportation backbone for nearly a century. The first railroad line to reach the Turners Falls area of Montague was the Connecticut River Railroad, a north-south line between New Haven and Greenfield which began service in 1846 (Holmes 1991: 24). This line was extended to Brattleboro, Vermont in 1851. The Vermont & Massachusetts Railroad reached South Vernon at the Massachusetts state line in 1849. In 1848, the first east-west line, the Vermont & Massachusetts Railroad, reached Millers Falls from Fitchburg. The Ashuelot Railroad opened in 1850 between Keene, New Hampshire and South Vernon, VT (Hostutler et al 1994: 2). These railroads provided the final blow for the Canal and Locks in both Montague and South Hadley, and the canal closed for boat transit in 1856 (Abercrombie 1983: 7).

Figure 3. Northfield, Massachusetts as shown on the 1858 Walling Map of Franklin County
(Source: Walling 1858)

Until the mid-1800s, the only crossings over the Connecticut River at Northfield were by means of ferries. The best-known of these were Stebbins Ferry, also known as Bennett's Meadow Ferry, just below the village center; Munn's Ferry, about a mile downstream; and Stacy's Ferry, at Northfield Farms, in the southern section of Northfield (Walling 1858).

In 1849, construction was completed on the Vermont & Massachusetts Railroad's double-deck covered wooden bridge across the Connecticut River in Northfield. The upper deck was used by the railroad, while the lower deck was a highway toll bridge. For half a century, this wooden structure was the only bridge over the Connecticut River in Northfield until 1899 when the Bennett's Meadow highway bridge was constructed (Bennett 1990c: 4).

The present-day village of Turners Falls in Montague dates only from 1866, when Colonel Alvah Crocker decided to create a planned industrial community on the model of Lowell or Holyoke (Jenkins 1980: 8.1). Crocker and his associate Wendell T. Davis bought up the stock and water rights of the defunct Proprietors of the Upper Locks and Canals and eventually acquired 700 acres of land in the Turners Falls area (Abercrombie 1983: 8).

Crocker and Davis founded the Turners Falls Company which embarked on building a dam and a new power canal, that roughly paralleled the route of the old navigational canal, from which water was thereafter leased or sold to factories for power purposes. The canal was designed by engineer Bernard Farren, who previously had designed the 1848 Hoosac Tunnel, between Florida and North Adams, MA. A wood-and-stone crib dam with a 30-foot fall at the Turners Falls rapids was completed in early 1867 and that same year the first water rights were purchased by the Turners Falls Lumber Company, located on the Gill side of the river in what is now Riverside (Jenkins 1980: 8.2).

Figure 4. Turners Falls Village as shown in F.W. Beers' *1871 Map of Franklin County*.

With the canal and dam built, Crocker turned his attention to developing mill sites and attracting industry to Turners Falls. The new village received a huge boost in 1868, when the John Russell Manufacturing Company moved to Turners Falls from its former location in Greenfield. Its complex of two- and four-story buildings (no longer standing), running for nearly 2,000 feet along the power canal, housed one of the largest cutlery factories in the world at the time. The company also was the town's largest employer; at one time nearly 600 people worked at the company's Turners Falls plant (Jenkins 1980: 8.2; Montague Bicentennial Committee 1954: 12; Great Falls Discovery Center 1996: 3).

The plan for the new Turners Falls village was laid out by Crocker's civil engineer brother William Crocker, assisted by Charles Hazelton. The strategic sites along the river and canal were reserved for the planned industrial enterprises, with residential lots located inland along a rectangular street grid, with main avenues labelled alphabetically and the cross streets labeled numerically. Avenue A was intended for commercial development and during the 1870s and 1880s numerous businesses built handsome three- and four-story brick commercial Victorian-era buildings that still line the street (Jenkins 1980: 8.2). Turners Falls was connected to the Connecticut River (Fitchburg) Railway by a branch line constructed in 1869.

Late Industrial Period (1870-1915)

In 1871, the Montague Paper Company (partially owned by Alvah Crocker) built its complex (only two buildings MNT.132 and MNT.133 still stand) on a site on either side of the power canal just below the dam gatehouse. The architecturally impressive Keith Paper Company (later Hammermill Paper) Mill complex (MNT.131) was completed in 1873. In 1874, the Turners Falls Cotton Mill (MNT.128) was built at the southern end of the power canal. In 1881, the New Haven & Northampton Railroad was extended to Turners Falls (Holmes 1991: 28). In 1895 Frank W. Marshall, inventor of the Marshall Refining Engine, built his enterprise on the Connecticut River bank and west of the power canal, between the Turners Falls and Keith Paper Companies' manufacturing plants (Great Falls Discovery Center 1996: 4). Marshall's company was in business only until 1899, when bookkeeper Augustine W. Esleeck and Alfred T. Judd of the Valley Paper Company of Holyoke founded the Monadnock Paper Company in the old Marshall Company Building (Montague Bicentennial Committee 1954: 125). The firm's name was changed to Esleeck Paper Company in 1901. From the beginning, the company specialized in the manufacture of high-grade onionskin and manifold papers. By 1912, the company was recognized as the leading manufacturer of this paper type (Great Falls Discovery Center 1996: 4).

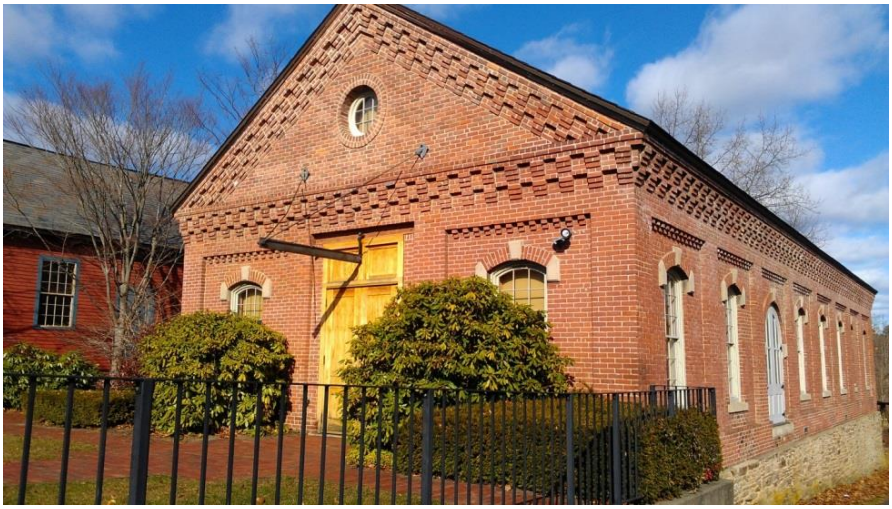


Figure 5. MNT.132 AND MNT.133, Montague Paper Company Buildings, now the Great Falls Discovery Center in the Turners Falls Historic District

(Source: TRC 2013)

The Riverside area of Gill remained sparsely populated until late 1867 when Amos Perry, David Wood, and Nathaniel Holmes bought water rights on the Connecticut River from the Turners Falls Company along with a small parcel of land in Riverside at the edge of the river for a grist- and saw-mill (Parsons 1999: 2). In 1872, Holmes, Wood and Perry incorporated as the Turners Falls Lumber Company to bring logs downriver to their saw-mill from Vermont, New Hampshire, and Canada. The company ran log drives every year between 1869 and ca. 1908 bringing millions of board feet into Riverside each year, where it was then processed and sold (Turners Falls Lumber Company Archives 1908). The company's saw-mill provided vast amounts of lumber for the development of Turners Falls across the river and lumber production soon surpassed the gristmill (Parsons 1999: 3).

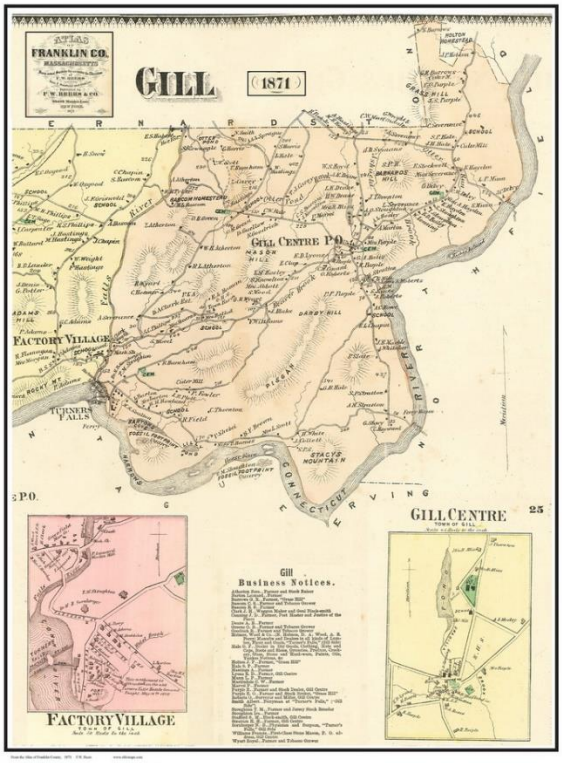


Figure 6. Gill in 1871, showing Riverside

(Source: Beers' Map of Franklin County).

In 1872, Riverside gained its own post office and, underscoring the lumber company's role in village growth, David Wood became Riverside's first postmaster. Riverside quickly developed as a suburb of Turners Falls, with numerous Italianate, Stick-style, and Queen Anne-style houses built along its streets in the 1870s and 1880s. The need for lumber workers also prompted much housing construction in Riverside for the rest of the century (Parsons 1999: 2).

The Upper Suspension Bridge, or "Red Suspension Bridge," connected Turners Falls with Riverside across the Connecticut River. The bridge was built in 1878 on the upstream edge of Turners Falls, at the site of a ferry landing that had run for almost a century, and was complemented by the Lower or "White" Suspension Bridge, constructed in 1872 on the downstream side of Turners Falls. Built at a cost of $48,000, the Red Suspension Bridge was 563 feet

long and stood 20 feet above the water level (Montague Bicentennial Committee 1954: 110). The Red Suspension Bridge was designed with the Roebling system of inclined stays which was also used for the Lower Suspension Bridge. John A. Roebling was the preeminent suspension bridge designer in late-19th-century America, building suspension bridges for aqueducts, road, and rail use. Over the course of his career, John Roebling designed and constructed a series of suspension bridges of increasing length and his final design for the Brooklyn Bridge (main span of 1595 ft.) was completed in 1883 under the direction of his son Washington A. Roebling. The stayed suspension bridge system developed by John A. Roebling and continued by Washington was highly successful and had a widespread influence on suspension bridge design in the late nineteenth century (Buonopane 2006: 12).

The Red Suspension Bridge survived the great flood of 1936, which wiped out many other bridges on the Connecticut River in Franklin County, but after the completion of the Turners Falls-Gill Bridge in 1938 it was closed to all but bicycle and foot traffic. As a part of the World War II salvage movement, the bridge was dismantled in September 1942. Bridge abutments from the Red Suspension Bridge (GIL.907) still stand along Riverview Drive in Riverside and on the Montague side.

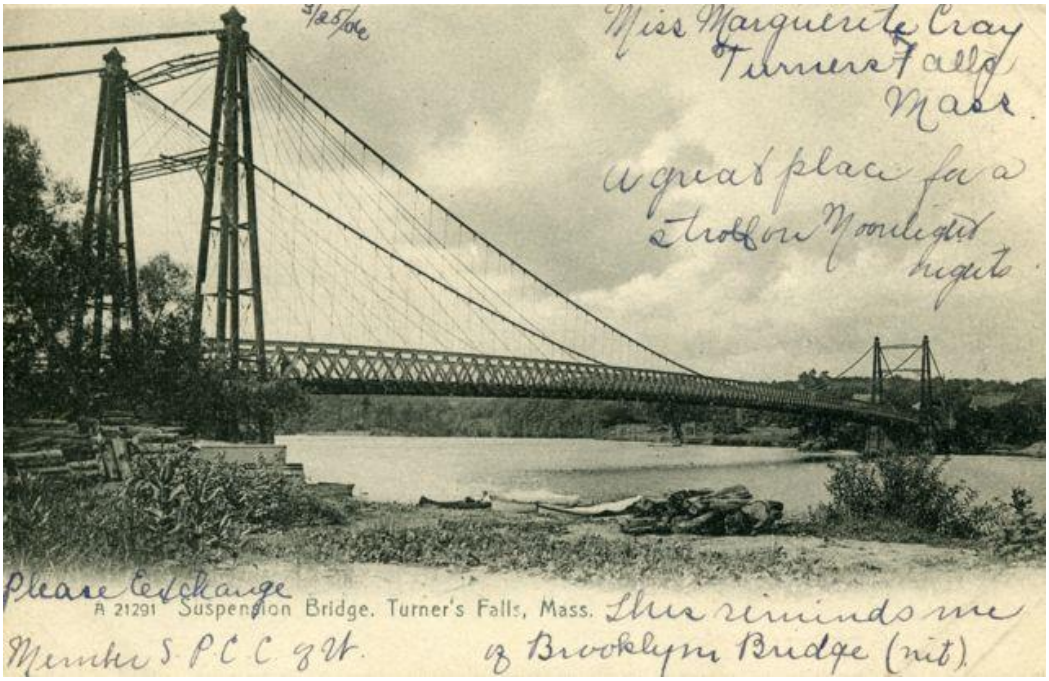


Figure 7. 1906 Postcard View of Red Suspension Bridge from Turners Falls

(Source: cardcow.com)

The new suspension bridge represented a prosperous future for Riverside. In 1879 Louis Everts wrote in his *History of the Connecticut Valley in Massachusetts* that Riverside was "rapidly growing in popularity among businessmen at Turners Falls Village as a place of suburban residences" and that when Turners Falls succeeded "Riverside will be an architectural garden place" (Parsons 1999: 4).

A short distance down the river from Riverside, a new metal suspension bridge, known as the "Lower Suspension Bridge" was built in 1872 to connect the towns of Greenfield and Montague. Completed at a cost of $36,000 paid for jointly by the two town governments, the bridge was constructed primarily to allow laborers in Greenfield to more easily commute to the newly developing Turners Falls village and its factories. A road connecting the bridge to Greenfield center was laid out by the following year. The Greenfield-Turners Falls Bridge was severely damaged in the disastrous 1936 flood and the present concrete-and-metal-stringer highway bridge (still officially known as the White Bridge) (TRC-38) over the Connecticut River was constructed as its replacement soon after (Whittlesey 1938: 25).

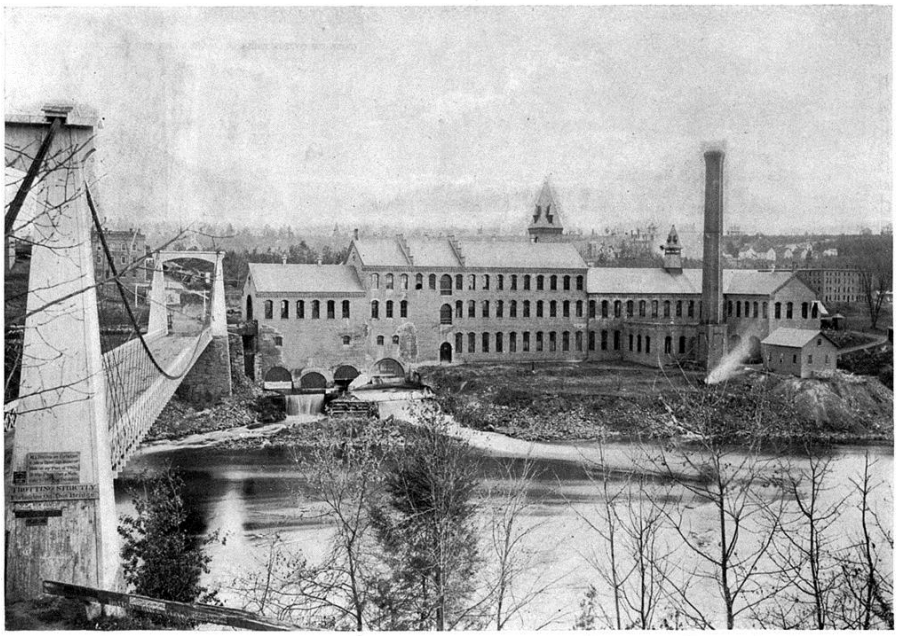


Figure 8. An 1891 photograph showing the White Suspension Bridge on left and the Turners Falls Paper Company on right.

(Source: Wade, Warner & Company)

Figure 9. Bird's eye view of Turners Falls Village in 1877

(Source O.H. Bailey & Co. 1877).

In 1879, the evangelist Dwight Moody established a school at Northfield Village for "girls of limited means" known as the Northfield Seminary for Young Ladies. Three years later, Moody established a similar school for boys, the Mount Hermon School, just across the Connecticut River, in the neighboring town of Gill (Parsons et al 2010: 10-12). Beginning in the summer of 1880, Moody held a national conference of Christian workers at the Northfield Seminary. "These summer conferences eventually brought world-wide renown to the otherwise peaceful and unassuming village of Northfield" (Bennett 1990c: 3).

By the early 1880s, Hinsdale possessed a well-developed industrial infrastructure, centered on several paper and cotton mills built along the Ashuelot River. High, Hancock, and Prospect Streets were laid out on the north side of town, reflecting the steep hillside on which the village is built. High Street, located above the heat and noise of the valley below, was soon lined with spacious architect-designed residences (NHDOT 2007: 8).

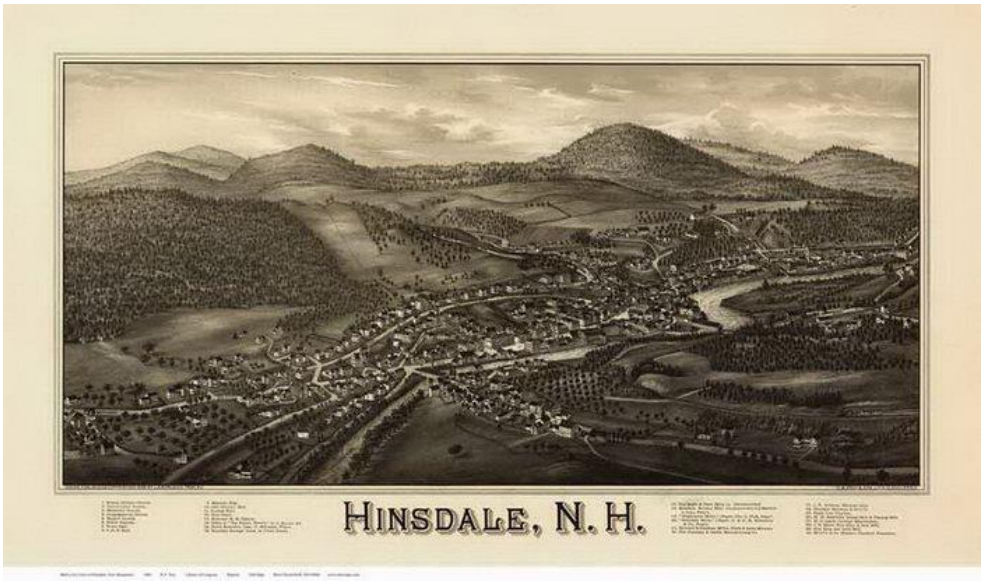


Figure 10. Bird's eye view of Hinsdale, NH in 1886
(Source: L.H. Burleigh 1886)

The Turners Falls Company, headquartered at what is now the Montague Town Hall on Avenue A, was the major landholder in Turners Falls during the late nineteenth century. The village rapidly became the population and commercial center of Montague. It was a planned urban environment, unlike the older Montague Center which grew up around a village common, and by the late 1800s, Turners Falls had developed a distinctly industrial-urban appearance.

On June 9, 1886, A.S. Clarke of the Clarke & Chapman Machine Company, made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, "a small company of public-spirited citizens" leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls gatehouse and in 1892, the gatehouse was expanded for greater water flow (Sanborn map Company 1895). The present Turners Falls Gatehouse (TRC-36) was built in 1903-1904 following demolition of the original 1866 gate house, was substantially enlarged in 1913-1914, and was modified again in 1968-72 to support the Northfield Mountain Project (Turners Falls Power & Electric Company 1914a and b, Gregory 2006 12).

Figure 11. September 14, 1910 photo of 1904 Turners Falls Gate House (left) and the original 2-story 1866 gatehouse (demolished in 1913 for new gatehouse extension) and the 1866 Turners Falls crib dam

(Source: FirstLight Photo Archives)

The Turners Falls Power Canal (MNT.933) also was improved by widening it and increasing its depth (Sanborn Map Company 1895). By 1917, the canal was extended to its present length of approximately 2.5 miles (Turners Falls Power & Electric Company 1917). Final work on the canal's excavation was completed that year when it reached its present depth of between 25-40 feet and between 100-920 feet in width (the latter at the Cabot forebay); canal walls were raised in 1919 and again in 1922-1929 (Jenkins 1980: 8.4)(Gregory 2006: 13)(Holmes 1991: 28).

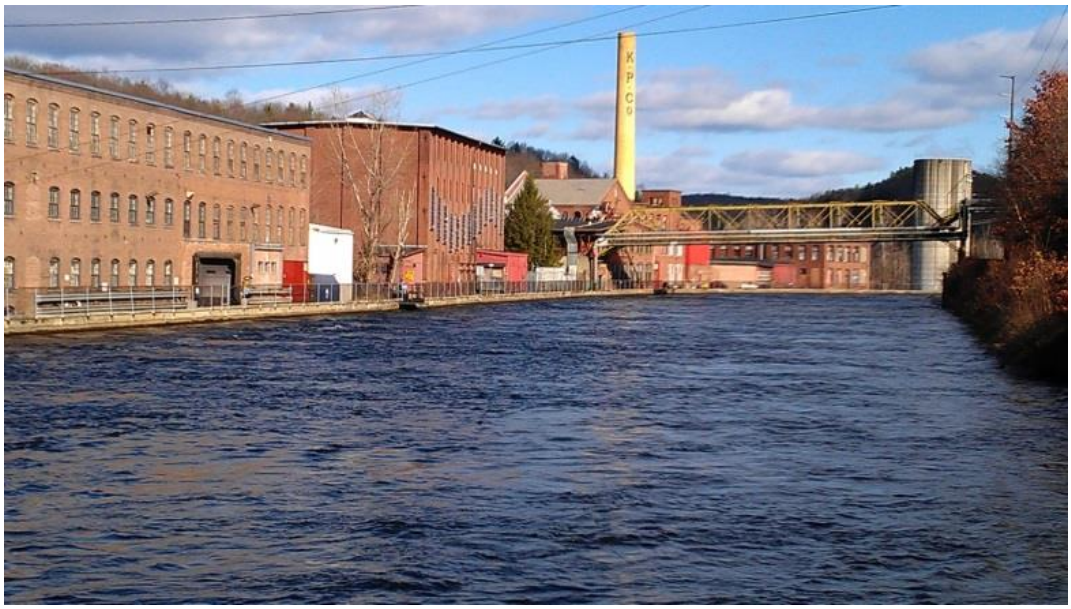


Figure 12. View of the widened Turners Falls Power Canal (MNT.933) and historic paper mills, looking north from the Fifth Street Bridge, Turners Falls

(Source: TRC 2014)

Figure 13. Boston & Maine Railroad-Fort Hill Branch Trestle, near Hinsdale, NH

(Source: TRC: 2013)

In 1892, the Boston & Maine Railroad acquired the entire Connecticut River Railroad, comprised of the former 21-mile Ashuelot Railroad and the Cheshire Railroad, among others (Wallace et al 2001: 36). In 1911, the railroad extended its line from Dole Junction, NH to Brattleboro, VT on the other side of the river. Known as the Fort Hill Branch of the Boston & Maine Railroad, the rail line at one time included eight bridges, a 2,800-foot causeway and numerous stone culverts and drains. The line was abandoned in the 1980s and several of the bridges have been removed. At its south end, the line crossed the Connecticut River via a six-span metal truss bridge on concrete-encased piers; the bridge was closed in the 1970s and the superstructure has been removed, leaving only the deteriorated bridge piers (Hostutler et al 1994: 3-4).

In 1897, a bill was proposed in the Massachusetts Legislature for the authorization of the construction of a highway bridge across the Connecticut River at Northfield. The Northfield Bridge, also known as the Bennett's Meadow Bridge, was completed in 1899 and was a 613-foot arched cantilever bridge designed by Boston civil engineer Edward S. Shaw (Bennett 1990c: 5). In 1969, the bridge was demolished and replaced by the present Route 10 bridge.

Shortly after the Bennett's Meadow Bridge was completed, the Massachusetts Railroad Commission condemned the 50-year-old, two-tier wooden railroad/vehicular toll bridge just upstream. The railroad—by that time known as the Central Vermont Railway—then petitioned the legislature for authority to build a new bridge in cooperation with the town of Northfield (Bennett 1990c: 6).

At first, the town favored the construction of another joint railroad and highway bridge, and an agreement was reached by which the town was to pay $10,000 toward the cost of a steel bridge (Fitt 1910: 28). Public sentiment shifted towards building a separate highway bridge, which would not only relieve them of paying rent for their portion of the railroad bridge, but would also do away with the nuisance of passing overhead trains. One of the strongest proponents of a separate bridge was the Northfield Seminary, which advocated building the bridge farther up the river, and asked for a delay in the plans (Bennett 1990c: 6).

An advocate for their cause was Francis R. Schell, a successful New York City banker, who first started attending Dwight Moody’s evangelistic summer conferences in Northfield beginning in 1890. At Moody's invitation, Schell and his wife often stayed at the Northfield Hotel, which was owned and operated by the Northfield Seminary. In 1900, Schell inherited his father's considerable banking fortune, and decided to build a country estate at Northfield. "Chateau Schell," as it came to be known, was designed by architect Bruce Price, and modeled after a French chateau that the Schells had admired on one of their trips to Europe. The Schells spent the rest of their summers at their new Northfield estate until 1928, when Francis Schell died (MHC 1982d: 12).

Schell determined to take the matter of the new bridge and its location into his own hands. "Francis Schell had a great fondness for the town of Northfield, and perhaps an even greater fondness for Dwight L. Moody and the Northfield Schools. This was demonstrated in 1901, when, in an act of extreme generosity, Schell offered to pay for a bridge that was badly needed by both the town and the two schools" (Bennett 1990c:4).

In 1901, Schell composed a proposal for a new bridge that he submitted to the town of Northfield:

> *Desiring to leave an enduring memorial to my honored father, Robert Schell, in Northfield, and also desiring that a bridge be built across the Connecticut River at a point within 500 feet north of the boundary line between lands of the Northfield Seminary and one William D. Alexander, I hereby for myself, my executors and administrators, do offer, covenant and agree that if the Town of Northfield shall cause a bridge to be constructed at such location, I will, and my executors and administrators shall pay to the said Town, the cost of such bridge to an amount not exceeding Thirty Two Thousand Dollars.* (Bennett 1990c: 5)

Edward S. Shaw, the engineer of the Bennett's Meadow Bridge, had already been asked to design this new highway bridge. As first projected, the bridge was designed for utilitarian purposes only, with three simple and independent spans, but after Schell decided to have the bridge erected in memory of his father, the plans were changed substantially. The revised plans for the bridge showed a structure with considerably more ornamental details than the earlier bridge (Spaulding et al 2007).

The March 1, 1902 edition of the *Greenfield Gazette & Courier* detailed Shaw's design process for the Schell Memorial Bridge:

> *Upon careful consideration, it was found that the original plan would result in a structure that was not pleasing architecturally. In order to remedy this lack, especially as it was to be a memorial and it was desired that no detail should be wanting to its perfection, an additional cost of $6000 was authorized by Mr. Schell, and now a bridge will be erected with a single ground arch leaping from one bank of the river to its opposite 400 feet away. Bridge builders who have seen the plans of the proposed structure characterize it as highly artistic in effect and beautiful in all its details. In fact, it is stated that the New England Structural Company, to whom the contract is awarded, submitted a bid for the contract only after the plans had been modified as described above and the superstructure designed in such a manner as to make it a great credit to the company that was fortunate enough to erect it* (Bennett 1990c: 7).

Figure 14. Schell Memorial Bridge (NFL.924), Northfield, MA

(Source: TRC 2014)

"The Schell Memorial Bridge (NFL.924) is a unique variation—at least in Massachusetts—of a Pennsylvania truss, in that it was designed to function as a three-span continuous truss under live load, and as a simple truss span with cantilevered ends under dead load." The bridge also has some unusual Gothic Revival decorative elements (Bennett 1990c: 5).

In 1904, the Central Railroad of Vermont,

rebuffed in its offer to construct a combination rail/vehicular bridge, proceeded with plans to construct its own bridge across the Connecticut River in Northfield. The six-span, pin-connected, metal Pratt truss bridge (NFL-926) was completed later that year. The bridge's current appearance with five spans now consisting of a series of Warren deck trusses is the result of a major reconstruction carried out by the American Bridge Company for the railroad after the bridge was severely damaged in the 1936 flood (Roper 1989).

Figure 15. Central Railroad of Vermont Bridge over the Connecticut River (NFL.926), Northfield, MA

(Source: TRC 2013)

By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market, driven by both its existing industrial customers, as well as potential demand from commercial and residential users (Jenkins 1980: 8.3). In 1904, Charles Hazelton, treasurer of the Turners Falls Company, proposed to his board of directors that that they make better use of the water power currently being wasted by widening and extending the power canal, and establishing a hydroelectric generating plant of 5,000 kilowatt capacity. "His proposal met with unanimous agreement, and was carried out during the next three years" (Bennett 1990a: 5).

In 1905, the Turners Falls Company completed construction of Turners Falls Power Station No. 1 (Station No. 1) (TRC-35), a 1,000-kilowatt unit built approximately 3,000 feet downstream of the Turners Falls Gatehouse at the upstream end of the power canal (Turners Falls Company 1904 and 1907). As designed, the construction of Station No. 1 involved the installation of six small horizontal Francis-type units (WMECO 1987: 2). The first generation of electricity from water power by the Turners Falls Company took place in 1906. By 1913, the station had grown to five units with a total capacity of 5,000 kW. Today, Station No. 1 operates under a gross head of approximately 43.7 feet, and has an approximate total electrical capacity of 5,693 kilowatts (Northfieldrelicensing.com 2013).

In 1908, Boston financier Phillip Cabot assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new focus on hydroelectric power and its transmission. Cabot's ambitious plans called for the construction of a second powerhouse, named Cabot Station (MNT.449) in his honor, replacing and raising the original Crocker-built dam, and extending and widening the power canal and Gatehouse. Work began on dam construction in 1912 and was completed in 1915 along with the Cabot Station in 1917 and the newly improved power canal by the 1920s.

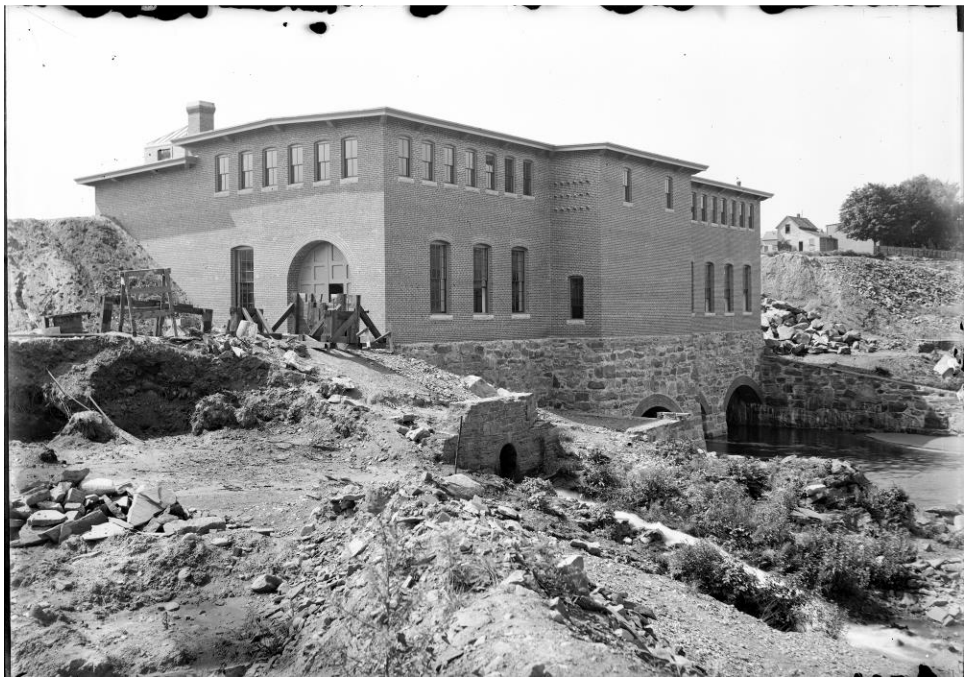


Figure 16. Ca. 1905 Photo of Station No. 1 Powerhouse in Turners Falls during its construction (Source: FirstLight Photo Archives).

Among other enterprises, the Turners Falls Power & Electric Company built and maintained the Turners Falls power canal and dam, as well as financing and building several vehicular and pedestrian bridges crossing the canal between the village and the mills. The construction of bridges over the canal at Sixth Street and Eleventh Street were crucial to the development of the village, as any proposed extension of the power canal would, in effect, create an "island" in the center of Turners Falls.

The southern section of town historically settled by Polish immigrants and known as "The Patch" would consequently be bordered on all sides with water—the Connecticut River on the north and west, and the power canal on the east and south—and connected to the rest of the village by only a small strip of land to the north. While a substantial steel suspension bridge already spanned the Connecticut River at Fifth Street, and there were several small bridges crossing the upper part of the canal, the lower section of the canal would need to be bridged between the center of the village and "The Patch" (Bennett 1990a: 6).

The Sixth Street Bridge (MNT-909) was constructed across the power canal in 1912. It is a riveted, double-intersection Warren thru-truss, designed by the Eastern Bridge & Structural Company of Worcester MA, and erected by a crew of workers from the Turners Falls Company (Bennett 1990a: 4).

Figure 17. Sixth Street Bridge (MNT.909) over Power Canal, Turners Falls
(Source: TRC 2013)

The Eastern Bridge & Structural Company also built footbridges at Fifth Street (MNT.924) and to the Keith's Mill (MNT.925) (Franklin Arts Council 1978a, b, and c). A replacement Warren pony truss bridge (MNT.910) was constructed in 1954 to carry Fifth Street over the power canal in Turners Falls (Roper 1987). In addition, two small railroad bridges (TRC-2 and TRC-3) were built to carry the Boston & Maine spur line over the power canal and the smaller branch canal that led to Power Station No. 1.

Modern Period (1915-1972)

Figure 18. Eleventh Street Bridge (MNT.904) over Power Canal, Turners Falls
(Source: TRC 2013)

In 1915, the Eleventh Street Bridge (MNT-904) was completed over the power canal. The bridge is a unique triple-barreled configuration of a double-intersection Warren thru-truss, with a pair of trusses on either side of the roadway, and lateral bracing between each pair, but none over the roadway. The Eleventh Street Bridge was also engineered by the Eastern Bridge & Structural Co. and is the only known example of this bridge type in Massachusetts (Roper 1986) (Bennett 1990a: 1).

In 1915, the Turners Falls Company completed construction of a new Turners Falls Dam to replace the original Crocker-built dam. That same year, construction began on the Cabot Station powerhouse (MNT.449) located at the south end of the power canal. Cabot Station was named for Philip Cabot who was largely responsible for its construction, first as President of the Turners Falls Company after 1908,

and then as founder and president of the Turners Falls Power & Electric Company (Northeast Utilities Service Co. 1985). Located two miles below the dam on the Connecticut River, the station required a 1.5-mile extension of the existing power canal. It utilized 54 feet of head, high by New England standards. Raising the canal embankment in 1917 and again in the 1920s allowed an increase to 48,000 kW (Clouette 1987: 2).

Figure 19. Cabot Station and Dam, aerial view
(Source: FirstLight 2014)

Cabot Station was originally conceived to accommodate six 6,000 kW units, for a total of 36,000 kW. The Turners Falls Power & Electric Company first put the station into service in 1915 equipped with four 7,000 kW units, the original plan having been changed to raise the total capacity to 48,000 kW (Northeast Utilities Service Co. 1985). As completed, the Cabot Station is a substantial steel-frame, brick curtain-wall structure with Beaux Arts-style architectural detailing and was built on both concrete and bedrock. The powerhouse enclosed six vertical Francis-type units manufactured by I. P. Morris and was upgraded in 2001-04 and now encloses six vertical Francis-type units manufactured by VA Tech (WMECO 1987: 3).

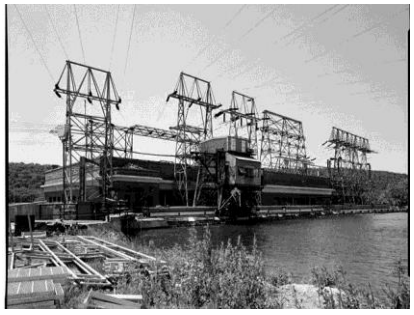


Figure 20. Historic American Engineering Record (HAER) photo of Cabot Station with gantry crane before the crane's removal in 1987.

Later, in 1917, three similar additional units were added within the powerhouse. By the time Cabot Station was completed in 1918, each unit had a capacity of 8000 kW, for a total output of 48,000 kW. The station, now rated at 62,000 kW, has a gross head of 60 feet (Northeast Utilities Service Co. 1985). Today, Cabot Station remains "the largest installed capacity of the conventional hydro-electric plants on the Connecticut River in Massachusetts" (WMECO 1987: 4).

The Cabot powerhouse also contained a 60-ton overhead bridge gantry crane (MNT.45) which was used to maintain the turbine/generators (Massachusetts Historical Commission 1987). Located outside the powerhouse, the gantry crane was mounted on steel tracks just over the intake gate and was used to clean the trash racks and control the lift gates at the powerhouse (WMECO 1987). According to the HAER documentation prepared before the historic gantry crane was replaced in 1987: "The Cabot Station gantry crane was a special feature of the original design and illustrates the close functional integration of the plant's components" (Clouette 1987: 1).

The development of electrical power in the Connecticut Valley in Massachusetts began with the almost simultaneous creation of small, independent lighting and local distribution systems powered by steam- or water-powered dynamos, such as the Franklin Electric Light Company established in 1886 in Turners Falls. In the ensuing years, these various small lighting and distribution systems grew and were interconnected, such that by the time Cabot Station reached full operation in 1918, it served as a power source, in combination with other plants, for a region encompassing Turners Falls, Greenfield, Amherst, Chicopee, Springfield, Ludlow, Agawam, Westfield, Easthampton and Northampton (Northeast Utilities Service Co. 1985).

Historically, Cabot Station represents the last major industrial development of the water resources at Turners Falls. When it was completed, Cabot Station was the largest hydroelectric facility in Massachusetts, and the principal source of power for the Turners Falls Power & Electric Company. "It represents a stage in the development of major hydro-electric stations along the Connecticut River Valley in the first half of the twentieth century, a sequence which includes Vernon Station, constructed in 1909; Deerfield Units 3-5, constructed in 1912-13; and culminating in the 140,000 kW project at Comerford, built in 1930" (Northeast Utilities Service Co. 1985).

In 1917, the Turners Falls Company consolidated with the Amherst Power Company, becoming the Turners Falls Power & Electric Company (TFP&EC). World War I and the post-war period created ever increasing demands for electricity for both industrial and residential use, so the TFP&EC expanded its transmission system southward and by 1923 had reached the Springfield, MA area. During the 1920s, the company continued to acquire other smaller electric companies in western Massachusetts (WMECO 1987: 2). Another line went westward across the Berkshire foothills to Pittsfield. The 1920s and 1930s saw the expansion of hydroelectricity throughout western Massachusetts.

Turners Falls had already reached its peak of industrial production by that point. Modernization of factories in the late nineteenth century staved off economic decline, but increased competition from other parts of the country was felt in the factories of Turners Falls, Greenfield, and Montague. By 1900, only 11 percent of the knives produced in the United States were still made in Massachusetts. Production would decline further throughout the 1910s and 1920s (Holmes 1991: 30).

The decades of the 1920s and 1930s were disastrous for the industrial base of Turners Falls. Economic depression, and the 1927 and 1936 floods which deposited mud on much of the mill factory machinery, cut into the region's industrial productivity (Jenkins 1982: 8.5). During the 1920s, log drives on the Connecticut also stopped (Holmes 1991: 30). In 1938, the Russell cutlery factory closed and its operations were moved by its new owner to Southbridge, Massachusetts. Papermaking continued in Turners Falls in this period, although several mills closed. Production of cotton textiles ended by the early 1940s.

With the advent of the automobile in the early 1900s, the inadequacies of the old wagon roads in western Massachusetts for motorized vehicles became evident, and the Massachusetts Highway Commission made plans to improve all the state's roads, including the section of highway from Greenfield to North Adams. Work was begun in September of 1912 and completed in November of 1914, at a cost of

$350,000. At the opening ceremonies, October 24, 1914, the highway was officially dedicated as "The Mohawk Trail" (TRC-41) after the Mohawk Indians of that region (Bennett 1990b: 1).

Vermont's roads were also deemed inadequate for the growth of automobile traffic in the 1920s. Progress in building hard-surface roads in the state was slow until 1927 when many bridges and roadways, including those in the Vernon area, were destroyed during floods (Holmes 1991: 58). Automobiles and trucks brought about a corresponding steep decline in rail traffic after 1930.

The French King Bridge (GIL.900/ERV.904) was conceived as part of a state-financed project to relocate a particularly hazardous seven-mile stretch of the old Mohawk Trail Highway (State Route 2) between Erving and Greenfield. The old route had wound through the villages of Millers Falls and Turners Falls on a course marked by steep grades, sharp curves, and narrow bridges. The relocated State Route 2 ran north of both villages on an alignment whose principal challenge was the crossing of the precipitous Connecticut River gorge near the French King Rock (Bennett 1990b: 11).

After looking at several plans, the engineers decided to cross the Connecticut River with a bridge at the height of the hills on either side, about 135 feet above the water. When completed, the entire project would include the construction of about six miles of new state highway, a highway grade separation, a bridge over the Central Vermont Railroad, and the construction of a large high-level steel arch bridge over the Connecticut River (Bennett 1990b: 6).

The selection of a specific structural type for this high-level bridge was based on the highway department's desire to fit the bridge into this dramatic setting, while responding to such factors as the height and steepness of the gorge's bank and the swiftness of the river current. "The graceful 3-span arch design which resulted takes advantage of the favorable foundation conditions (critical for an arch) while it avoided the construction of either permanent piers or temporary falsework in the river itself" (Bennett 1990b: 6).

Albert E. Kleinert, Assistant Structural Engineer at the Massachusetts Department of Public Works in 1931, stated that in selecting the type of bridge to be erected on the chosen site, "the endeavor was made to develop a bridge which not only fitted the site, but which could be erected by cantilever construction, since the deep water, rocky river bed, and the swift current discouraged the use of falsework in the river. The result of our studies is a steel deck structure, continuous over four supports, two of which are abutments placed at the ends of the bridge, high on the banks, and the other two are piers placed at the edges of the river" (Bennett 1990b: 6).

Figure 21. French King Bridge (GIL.900/ERV.904), which carries the Mohawk Trail over the Connecticut River between Gill and Montague, as seen from the Montague side
(Source: TRC 2014)

During the summer of 1931, the contracts for the Erving-Greenfield cutoff of the Mohawk Trail were awarded to Kelleher Corporation of Montague, Massachusetts (for the western section, from Greenfield to the Connecticut River) and to Lawton Construction Company of Providence, Rhode Island (for the eastern section, from the Connecticut River to the road to Millers Falls, just east of the road to Northfield, now Highway 63) (Bennett 1990b: 5).

French King Bridge construction began in September of 1931 and was completed at a cost of $385,000, when the bridge opened to travel on September 10, 1932. One of four known steel deck-arch vehicular bridges in Massachusetts, the bridge has the sixth-longest span of any vehicular bridge in the state. "It is of engineering interest as an unusual development of the uncommon three-span, cantilever arch bridge type, in that definite reactions were jacked into its steelwork at the conclusion of construction, resulting in a bridge which is structurally continuous across four supports. The American Institute of Steel Construction named the French King Bridge the most beautiful steel bridge of its class erected in America in 1932" (Bennett 1990b: 3).

Local historian John A. Taggart wrote movingly of the beauty of the French King Bridge for the 1932 opening souvenir program:

> *"Today we dedicate a magnificent addition to the justly famous Mohawk Trail system. The imposing structure of steel and concrete which here spans the Connecticut River is a noble monument to man's skill and ingenuity. The miles of newly constructed highway which approach the bridge from west and east open up a territory rich in history and replete with views which delight the eyes"* (Tercentary Committee 1973: 32).

Good roads and an improving transportation network in the 1920s and 1930s brought increased tourism to the area, as vacationers from Boston and elsewhere discovered the natural beauty of the Connecticut River Valley. Many tourists stayed in roadside motor hotels built during this period along the Mohawk Trail. Others decided to build summer or seasonal "camps" along the river. The most elaborate of these is Phillip Cabot's "Cabot Camp" (TRC-5) built at a picturesque location at the confluence of the Connecticut and Millers Rivers by an unknown Boston architect around 1913. The New England

Colonial-style complex consists of a large rambling stone-and-frame house, a stone carriage house, and several smaller outbuildings.

Figure 22. Cabot Camp (TRC-5), summer camp of Turners Falls Company President Phillip Cabot
(Source: TRC 2013)

Several early- to mid-twentieth-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight, the current owner of this land, permits the land on which these camp dwellings are located to individuals, several of whom are descendants of the original owners. The camps along the Connecticut River represent the area's summer residents in the early twentieth century and are among the first summer recreational dwellings in the area.

Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (2014 Interview with Leena Newcomb).

Increasing demand for electric power in the post-World War I years led to construction of a steam turbine generating plant at the confluence of the Chicopee and Connecticut Rivers. The plant was projected to function principally when the waters of the Connecticut were low and when hydroelectric power from Turners Falls was not sufficient (Samartino 1991: 25). After extensive studies, the Turners Falls Power & Electric Company and the Connecticut River Power Company of New Hampshire combined to form the Connecticut River Conservation Company. Its purpose was to "develop a system of reservoirs on the headwaters and tributaries of the Connecticut whereby the tremendous spring run-off might be stored for use during the period of low flow in the River." It was projected that five-billion cubic feet of storage water could be made available for power purposes, saving ten thousand tons of coal annually (Samartino 1991: 26).

In 1942, the biggest merger was made when three pre-existing companies were merged into Western Massachusetts Electric Company (WMECO): Turners Falls Power & Electric Company, Pittsfield Electric Company, and United Electric Light Company. That year WMECO was issued a license to

operate the water power development at Turners Falls and several power companies continued to expand and to cooperate in transmission exchanges. By 1965, the Connecticut Valley Electrical Exchange (CONVEX) covered six thousand square miles, generated up to three million kilowatts, and served about three million people within southern New England (Stephenson 1982: 650). Combined, nearly two dozen major hydroelectric stations along the Connecticut River were capable of producing collectively 700 thousand kilowatts of power.

On July 1, 1966, three Connecticut Valley power companies—Western Massachusetts Electric Company, Connecticut Light & Power Company, and the Hartford Light Company—joined forces to form Northeast Utilities Service Company (NU), creating the first new multi-state public utility holding company since the mid-1930s (WMECO 1987: 4). In 1967, Holyoke Water Power Company (HWP) joined the NU System, followed by the Public Service Company of New Hampshire (PSNH) in 1992. Despite its great generating capacity, reports estimated that by 1971 CONVEX would have a deficit of 314 thousand kilowatts, and by 1973 that deficit would increase to 666 thousand kilowatts. Studies to increase the generating capacity at the Turners Falls plants were well underway in 1961.

The economic boom of the 1950s and 1960s and consequent demand for energy caused investor-owned utility companies like NU to respond to market needs by diversifying their energy portfolio. They did so by constructing large-scale steam (coal-fired) stations, nuclear plants, and later, natural gas facilities. While construction of hydroelectric facilities by investor-owned utilities declined in the late twentieth century, hydropower continued to play a critical role in the electric power supply because it provided peaking power, was quicker and more cost-efficient to put online (or take offline) to meet electrical demands, and proved a viable method of balancing thermal base loads. For its part, in order to plan for future power demands, NU started an expansion plan in the 1960s, which involved three multi-million dollar projects, including the Northfield Mountain Pumped Storage Facility in Massachusetts.

1. Connecticut Yankee Nuclear Power Plant at Haddam Neck CT (not owned by FirstLight), began commercial operation in 1968 and produced more than 110 billion kilowatt-hours of electricity during its 28-year operating history. In 1996, the CY Board of Directors voted to permanently close and decommission the power plant. After two years of planning and preparation, actual decommissioning began in 1998 and was completed successfully in 2007 with all plant structures removed.

2. Millstone Nuclear Power Station, (not owned by FirstLight) is the only nuclear power generation site in Connecticut. It is located at a former quarry (from which it takes its name) in Waterford. Of the three reactors built here, units two and three are still operating at a combined output rating of 2020 MW. In terms of generating capacity, Millstone is the largest electrical generating facility in New England, and the plant contains the second (unit 3) and third (unit 2) largest individual generating units on the New England electrical grid.

3. Northfield Mountain Pumped Storage Facility at Northfield MA, currently owned by FirstLight, was planned at the time to be the largest such facility of its kind in the world, surpassing both the Niagara (Robert Moses) Power Project and Blenheim-Gilboa Project, both in New York State, and both built in the 1960s (Samartino 1991: 26). The pumped storage facility would store water in reservoirs to be released during periods of peak electrical use, usually during the day or during periods of extreme weather. Northfield Mountain was chosen for the location of the pumped storage facility because of its 1,000-foot summit crowned by a 300-acre natural basin, as well as for its proximity to the Connecticut River. The shape and geologic make-up of the land also enabled the powerhouse portion of the plant to be built underground and not rely on the natural flow of the river for its operation, another major design innovation (WMECO 1987: 13).

Figure 23. Aerial view of Northfield Mountain Pumped Storage Facility Reservoir, Northfield, MA

(Source: Northfield Relicensing: http://www.northfieldrelicensing.com/NorthfieldRelicensing/SitePages/Project-Locations-and-Features.aspx)

Construction of the Northfield Project began in late 1968, with the major job being the drilling and dynamiting of a 2500-foot tunnel, 565-foot ventilation shaft, 1130-foot pressure shaft, and the mile-long tailrace between the powerhouse and the river, as well as the 10-story-high underground power house. Over 4.9 billion tons of rock were blasted to create the tunnels, shafts, and powerhouse (Samartino 1991: 26). Four 250,000-kilowatt capacity turbine generators were placed in the powerhouse cavern 700 feet below the surface. Also built were the 300-acre reservoir, the rock-fill dam 144 feet high and 5600 feet long, and other dikes totaling 5600 feet.

At the same time, the Turners Falls dam downriver was raised (Stone & Webster 1968). This enabled more water to be impounded behind the dam, creating a 2,500 acre impoundment on the Connecticut River. The Northfield Mountain Pumped Storage Facility began operation in early 1972. As part of the development, WMECO created the Northfield Recreation and Environmental Center, with exhibits on the area's geology, history, and ecology, along with facilities and trails for hiking, skiing, and snowshoeing (Samartino 1991: 139).

V. RESULTS AND ANALYSIS

Setting of the Turners Falls and Northfield Mountain Projects

The Turners Falls Project and Northfield Mountain Project are located in western Massachusetts (with a small portion in southern Vermont and New Hampshire) in an area known as the Connecticut River Valley. The valley is generally narrow in the vicinity of the two Projects, with some areas of floodplain. Other areas are characterized by steep rocky banks, especially the French King Gorge area, immediately downstream of the Northfield Mountain Project's tailrace. The topography of the Connecticut River Valley is mostly level to rolling, with some higher areas, such as Northfield Mountain, where the Northfield Mountain Project is located.

The Connecticut River Valley's landscape has distinct natural beauty and classic New England farm village patterns. In the Turners Falls Project and Northfield Mountain Project vicinity, historic villages and working landscapes combine with natural riverine beauty to create a scenic corridor. The region is comprised of riverside farmlands, woodlands, historic village centers founded in the late 1600s, working landscapes laid out during Colonial times, and vistas of the Connecticut River and mountain ranges.

The area surrounding the Turners Falls and Northfield Mountain Projects, from the Northfield Mountain Project north to the Vernon Project, is largely rural with a mix of agricultural lands and some forested areas. The lands south of the Northfield Mountain Project, near the Turners Falls Dam, are largely developed with a mix of residential and industrial uses. Between the two projects are forested shorelines dotted with small recreational camps.

Property Types in the Turners Falls and Northfield Mountain Project APE

In the Connecticut River Valley, building forms of two broad types, one industrial and the other residential, dominate the regional architecture. The north end of the project area is predominantly rural with a scattering of small villages dating from the early nineteenth century along roads outside of the Project APE, such as Hinsdale, NH and Northfield, MA. Resources within the Project APE in the northern section are primarily transportation-related, although these resources also are found throughout the Project area: vehicular bridges, railroad bridges, and culverts. A reconstruction of a nineteenth-century gristmill is located in Vernon, VT. In the area south of the small village of Northfield Farms is an agricultural area including the Frederick Morgan Sr. Property; just east of the Morgan property is the 1968-1972 Northfield Mountain Pumped Storage Facility, including a Visitor's Center and recreational areas.

Moving south along the Connecticut River, there are numerous recreational camps from the 1910s to the 1950s, including the FirstLight-owned Cabot Camp, built ca. 1913. Approaching the Turners Falls Dam, the northern shore bank is the location of Riverside in Gill. A former manufacturing village, Riverside's buildings date from the late nineteenth and early twentieth centuries and are generally in fair to good condition. Single- and multi-family dwellings are mostly vernacular variants of nationally popular styles such as the Italianate, Gothic Revival, Queen Anne and Colonial Revival Styles.

The Village of Turners Falls is located on the southern and eastern river bank. Laid out beginning in 1866, Turners Falls consists of a cohesive grouping of historic industrial, residential, commercial, institutional, and religious structures. The industrial and commercial buildings are generally of brick construction and residential structures represent a variety of single- and multi- family configurations. In each building type, there are many fine examples of late-nineteenth century vernacular design. Turners Falls' historic and architectural significance was recognized by its listing in the NRHP in 1983.

In addition to the Village proper, there are numerous resources related to the history of hydroelectric power in Turners Falls. The hydroelectric power facilities and related structures built by the Turners Falls Power & Electric Company between 1904 and 1929 are located within an area bounded on the south by the Cabot Power Station and on the north by the Turners Falls Gatehouse and the Turners Falls Dam. These resources are all physically connected by the Power Canal, which is also spanned by two railroad bridges, two pedestrian bridges, and four vehicular bridges, all over 50 years old.

National Register-Listed and -Eligible Historic Resources within the Project APE

Several local and statewide architectural surveys conducted in the 1970s and 1980s resulted in the listing of one historic district in the National Register and determinations of National Register eligibility for seven resources, all located in Massachusetts. These resources are described below, along with the applicable NRHP Criteria, their period and levels of significance, and their level of integrity. Updated MHC survey forms with both current and historic photographs, along with maps locating these resources are located in Appendix B.

Resources Listed in the National Register:

- Turners Falls Historic District, Turners Falls, MA

Resources Previously Determined Eligible for the National Register:

- Cabot Station and Dam, Turners Falls, MA
- Cabot Station Gantry Crane (Demolished in 1987), Turners Falls, MA
- Turners Falls-Gill Bridge (also part of the National Register-listed Turners Falls Historic District), Turners Falls, MA
- Eleventh Street Bridge over Power Canal, Turners Falls, MA
- Schell Memorial Bridge, Northfield, MA
- French King Bridge, Gill and Erving, MA
- East Mineral Road Bridge, Montague and Erving, MA
- Hinsdale Historic District, Hinsdale, NH

Turners Falls Historic District (MNT.H)

Description: The Turners Falls Historic District is located on a knoll along the eastern bank of the Connecticut River near the falls from which it gains its name. The historic district consists of approximately 130 acres and according to the 1980 National Register nomination form contained 285 properties: 266 contributing resources and 19 non-contributing resources. The Turners Falls Historic District, which was observed to be still largely intact during the 2014 survey by TRC, consists of a cohesive grouping of industrial, residential, commercial, institutional, and religious structures built mostly between 1866 and the early 1900s in accordance with Col. Alvah Crocker's original concept of a planned industrial community. The industrial and commercial buildings are mostly of brick construction. Residential structures represent a wide variety of single- and multi- family configurations. While some of the mill buildings have been altered or abandoned, the Turners Falls Historic District retains all seven aspects of integrity.

Historic Significance: The Turners Falls Historic District was listed in the National Register in 1983 under Criteria A, B, C, and D with a period of significance from ca. 1866 to 1932. A portion of the Turners Falls Historic District lies within the Project APE and includes 13 contributing resources located

within or partially within the Project APE. The district's contributing resources located within the Turners Falls Project APE are listed in Table 2 below.

Table 2:
Contributing Resources in the NRHP-Listed Turners Falls Historic District Located within the Project APE

SITE NAME	SHPO SITE NUMBER	ADDRESS	PROJECT FACILITY	OWNED BY FIRSTLIGHT
Turners Falls Paper Co. Building	MNT.129	On power canal, Turners Falls, MA	No	No
Esleeck Paper Mill	MNT.130	On power canal, Turners Falls, MA	No	No
Keith Paper Mill	MNT.131	On power canal, Turners Falls, MA	No	No
Montague Paper Co. Buildings (Great Falls Discovery Center)	MNT.132	2 Avenue A, Turners Falls, MA	No	No
Montague Paper Co. Buildings (Great Falls Discovery Center)	MNT.133	2 Avenue A, Turners Falls, MA	No	No
Sixth Street Bridge over Power Canal	MNT.909	Sixth Street, Turners Falls, MA	No	No
Fifth Street Bridge over Power Canal	MNT.910	Fifth Street, Turners Falls, MA	No	No
Gill-Montague Bridge over Connecticut River	GIL.901/ MNT.920	Route 2A, Turners Falls/Riverside, MA	No	No
Fifth Street Footbridge over Power Canal	MNT.924	North of Fifth Street Bridge, Turners Falls, MA	No	No
Keith's Mill Footbridge over Power Canal	MNT.925	North of Second Street, Turners Falls, MA	No	Yes
Turners Falls Power Canal	MNT.933	Between Turners Falls Dam and Cabot Power Station, Turners Falls, MA	Yes	Yes
International Paper Co. Bridge over Power Canal	No MHC #, TRC-6	North of Great Falls Discovery Center, Turners Falls, MA	No	Yes
Electrical Switch Building	No MHC #, TRC-39	Northeast of Great Falls Discovery Center at Power Canal, Turners Falls, MA	No	No

Cabot Power Station and Dam (MNT.449), South end of Power Canal, Turners Falls, MA

Description: The Cabot Station and Dam (MNT.449), located at the south end of the Power Canal in Turners Falls, is set on partially exposed concrete and bedrock. The 1914-1917 powerhouse is a 1-story-with-clerestory, 3-bay, steel-frame, brick curtain-wall structure utilizing a 5:1 common bond of Roman brick with an attached concrete gravity dam. While industrial in nature, decorative details can be traced to elements of then-popular Beaux Arts Style. The gantry crane installed during the station's construction was replaced in 1987, after being recorded by HAER. The Cabot Station and Dam are a Project facility, owned and operated by FirstLight.

Historic Significance: Cabot Station was determined NRHP-eligible by MHC in 1987 under Criteria A and C. Cabot Station is historically significant as the largest hydroelectric facility in Massachusetts at the time it was completed in 1917. It represents the last major industrial development utilizing the water as a resource at Turners Falls and was for many years the primary power source for the region. Architecturally, it is significant as an intact example of a well-articulated early-twentieth-century industrial architecture and is noteworthy for the retention of the original power generation components. The resource retains all aspects of integrity, except for the loss of the original gantry crane in 1987.

Turners Falls (Gill-Montague) Bridge over Connecticut River (GIL.901/MNT.920, Route 2A, Turners Falls/Riverside, MA)

Description: The Turners Falls-Gill Bridge (also known as Gill-Montague Bridge) carries Route 2A over the Connecticut River in Turners Falls and Riverside, MA. Designed by the Massachusetts Department of Public Works and built by Daniel O'Donnell's Sons of Holyoke, MA, Turners Falls-Gill Bridge was constructed over the Connecticut River in 1937-38. It is a 1733-foot-long, triple-span, single-intersection riveted-steel, Warren deck truss with verticals and haunched lower chords over the two intermediate piers with Art Deco elements. Built at a cost of more than one million dollars, the Turners Falls-Gill Bridge was dedicated on September 10, 1938 and is one of the largest three-span bridges on the Connecticut River and was at the time the longest bridge in the state (Montague Bicentennial Committee 1954: 111). The Turners Falls-Gill Bridge is a Non-Project facility that is not owned or maintained by FirstLight.

Historic Significance: The Turners Falls-Gill Bridge is a contributing resource in the NRHP-listed Turners Falls Historic District. In 1987, the bridge was determined NRHP-eligible for individual listing under Criteria A and C. The bridge is architecturally significant for its fine Art Deco-style detailing, particularly the concrete pylons with carved eagles. The bridge retains all aspects of integrity.

Eleventh Street Bridge over Power Canal (MNT.904, Eleventh Street, Turners Falls, MA)

Description: The Eleventh Street Bridge is a triple-barrel, 167-foot, riveted-steel double-intersection Warren through truss bridge. The main configuration is a central roadway barrel with no overhead lateral bracing, with a through truss sidewalk barrel on either side. The Eleventh Street Bridge was recorded by HAER in 1990. The Eleventh Street Bridge is a Non-Project facility that is not owned or maintained by FirstLight.

Historic Significance: The Eleventh Street Bridge over the Power Canal in Turners Falls was determined NRHP-eligible by the MHC in 1987 under Criterion C as a rare double-intersection Warren through-truss bridge with no lateral bracing over the roadway; it may be one of a kind in Massachusetts. MHC also has identified the Eleventh Street Bridge as a contributing resource in the "Patch" district, an NRHP-eligible neighborhood in Turners Falls adjacent to and west of the power canal. The Eleventh Street Bridge retains all aspects of integrity.

Schell Memorial Bridge over Connecticut River (NFL.924, Between East and West Northfield, MA)

Description: The Schell Memorial Bridge is a 515-foot, riveted-steel cantilever Pennsylvania-type through-truss bridge. It is a unique variation—at least in Massachusetts—of a Pennsylvania truss, in that it was designed to function as a three-span continuous truss under live load, and as a simple truss span with cantilevered ends under dead load. The bridge also has some unusual Gothic Revival-style decorative elements. In 1990, the Schell Memorial Bridge was recorded by HAER. In May of 2014, the Massachusetts Department of Transportation announced its plans to demolish the bridge and replace it with a bicycle bridge modeled after the 1903 structure (Rainville 2014). The Schell Memorial Bridge is a Non-Project facility that is not owned or maintained by FirstLight.

Historic Significance: The Schell Memorial Bridge over the Connecticut River between East and West Northfield, MA was determined NRHP-eligible by the MHC in 1987 under Criteria A and C. The bridge is a significant structure in Northfield's social history, in that it was built for the Town by one of its most prominent citizens and benefactors, Francis R. Schell. Although no longer in use and barricaded, the resource retains all aspects of integrity.

French King Bridge over Connecticut River (GIL.900/ERV.904, Mohawk Trail between Gill and Erving, MA)

Description: The French King Bridge carries State Route 2 over the Connecticut River between Gill and Erving, MA. The bridge rises 135 feet above the level of the Connecticut River, and spans the narrow French King Gorge just above the Connecticut's confluence with the Millers River. The bridge itself is a 782-foot, riveted steel, three-span continuous spandrel-braced deck arch, resting on two concrete river piers and two concrete abutments. In 1990, the French King Bridge was recorded by HAER. The French King Bridge is a Non-Project facility that is not owned or maintained by FirstLight.

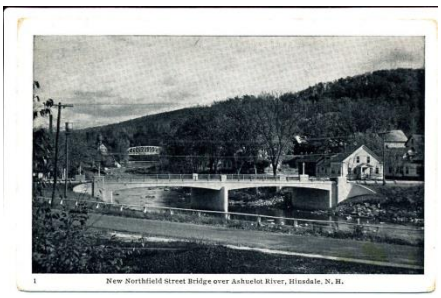
Historic Significance: The French King Bridge was determined NRHP-eligible by the MHC in 1987 under Criterion C. The French King Bridge is significant as one of four known steel deck-arch bridges in Massachusetts, and is one of the longest spans in the state. It is of engineering interest as an unusual development of the uncommon three-span, "cantilever arch" bridge type, in that definite reactions were jacked into the steelwork at the conclusion of its construction, making the bridge structurally continuous across four supports. The French King Bridge retains all aspects of integrity.

East Mineral Road Bridge over Millers River (MNT.917, East Mineral Road at Cabot Camp, Montague and Erving, MA)

Description: The East Mineral Road Bridge spans the Millers River at Cabot Camp, between Montague and Erving, MA. Composed of two spans, the approach span, which was reconstructed in 1939 and replaced with a Pratt half-hip pony truss, is 52 feet long and has steel stringers with a reinforced concrete deck. The 105-foot main span is a pin-connected, Pratt truss with wrought-iron floor beams. Unusual structurally, the western end of the through truss span is carried on a 2-column braced bent, rather than directly on a masonry pier. The bridge also has a number of unusual structural details, such as the upper lateral struts and the double eyes of the lower ends of the hip verticals. Converted to a bicycle and pedestrian bridge in 2005, railings have been added. However, this does not impact the overall design and the resource retains all aspects of integrity. The East Mineral Road Bridge is a Non-Project facility that is not owned or maintained by FirstLight.

Historic Significance: The East Mineral Road Bridge was determined NRHP-eligible by the MHC in 1988 under Criterion C.

Hinsdale Historic District, Hinsdale, NH



Description: There are three newly surveyed resources within the Project APE located along the Ashuelot River (a tributary of the Connecticut River) within Hinsdale Village, the population center of the Town of Hinsdale:

1. *Northfield Street (Route 63) Bridge over the Ashuelot River, Hinsdale Village (TRC-31):* Bridge # 132/133, known locally as the Northfield Street Bridge, is a two-span concrete rigid-frame bridge that carries two-lane Northfield Street (NH Route 63) over the Ashuelot River in Hinsdale Village. Built ca. 1940, this bridge replaced an earlier metal bridge with stone abutments and pier, possibly as a result of flood damage in 1936. The Northfield Street Bridge is a Non-Project facility that is not owned or maintained by FirstLight.

2. *Culvert, Hinsdale Village (TRC-32):* A culvert, consisting of a rectangular concrete slab facing with a circular opening, is located on the north bank of the Ashuelot River, adjacent to the northwest corner of the Northfield Street Bridge. According to Hinsdale Town records, the culvert dates from ca. 1942. The culvert is a Non-Project facility that is not owned or maintained by FirstLight.

3. *USGS Gauging Station #01161000 (TRC-33):* This rectangular concrete USGS gauging station with pyramidal concrete cap is built into the south bank of the Ashuelot River, near the southeast corner of the Northfield Street Bridge in Hinsdale Village. According to USGS records, the gauging station dates from 1907. The gauging station is a Non-Project facility that is not owned, operated or maintained by FirstLight.

Historic Significance: In 2005, NH DOT conducted a partial survey of Hinsdale Village in connection with repairs undertaken along Route 63, following flood damage that same year. Based on historic map research and fieldwork, NH DOT defined an NRHP-eligible Hinsdale Village Historic District, eligible under Criteria A and C. According to the Project Area Form: "The village continues to function as the

commercial, civic, religious, and residential center of Hinsdale" (NH DOT 2006). Based on TRC's 2014 field observations, the Hinsdale Village Historic District remains eligible for the NRHP. The three resources surveyed by TRC in 2014 all relate to the Ashuelot River, historically the driving force behind Hinsdale's economic growth in the 19th and early 20th centuries and contribute to the district's NRHP eligibility under Criterion A.

Boundaries for the Hinsdale Historic District were drawn as part of the 2005 NH DOT Project Area Form and are coterminous with the 19th century maps of the village drawn in 1858 and 1892. The boundaries include the 19th and 20th century development patterns and the variety of resources that make up Hinsdale today. A portion of the Hinsdale Historic District lies with the Project APE. The Northfield Street Bridge, culvert, and USGS gauging station surveyed in 2014 are all within the Project APE and fall within the Hinsdale Historic District boundary.

NRHP-Eligible Historic Districts in the Project APE

Previous architectural surveys, as well as the 2013-2014 TRC survey, have identified three additional potential historic districts eligible for NRHP listing under one or more NRHP Criteria based on their architectural and/or historic significance, each of which has at least one contributing resource located within the Project APE, although they have not been evaluated by the MHC. The districts are described below, along with the applicable NRHP Criteria, their period and levels of significance, and their level of integrity. Updated MHC survey forms, along with maps locating these districts are located in Appendix B.

- "The Patch" Historic District, Turners Falls, MA with one contributing resource within the Project APE
- Riverside Historic District, Gill, MA with two contributing resources within the Project APE
- Turners Falls Power & Electric Company Historic District, Turners Falls and Gill, with ten contributing resources and two non-contributing resources within the Project APE

"The Patch" Historic District (MNT.C, Residential area west of Power Canal and south of Eleventh Street, Turners Falls, MA)

Description: The area of southwest Turners Falls known locally as "The Patch" is a rectangular three-block-by-five-block area bounded on the west by the Connecticut River, north by Tenth Street, east by the Turners Falls Power Canal, and south by Fifteenth Street. Access to "The Patch" from the rest of Turners Falls is at only two points: from the east via the Eleventh Street Bridge and from the north by Power Street over the Station No. 1 dam. Streets are laid out on a grid pattern, with north-south lettered streets and east-west numbered streets, as is true for the rest of Turners Falls village. A portion of The Patch Historic District lies within the Project APE.

"The Patch" is a primarily residential area consisting of approximately 85 houses and auxiliary buildings, although a few commercial buildings are located near Eleventh Street. Buildings date from the late nineteenth to early twentieth centuries, coinciding with Turners Falls' prominence as an industrial and manufacturing center on the Connecticut River. Single- and multi-family dwellings are either of frame or brick construction, one or two stories in height, with side- or front-gable roofs. They are mostly vernacular variants of nationally popular styles such as the Italianate, Queen Anne and Colonial Revival Styles. Some residences have retained their original detached garages. There are no major modern intrusions or demolitions in the district, with most alterations confined to the use of replacement siding and replacement windows and doors. Buildings range from fair to good in condition.

Historic Significance: "The Patch" was developed in the 1880s and 1890s primarily by Polish immigrants and housed workers at the nearby industrial plants in Turners Falls. Turners Falls itself was a planned industrial community laid out in 1866 along the lines of Lowell or Holyoke under the aegis of the Turners Falls Company and its founder Col. Alvah Crocker. Crocker and his business associates purchased the rights of the old Proprietors of the Upper Locks and Canals at Turners Falls and embarked on converting the old navigational canal into a power canal for the use of mills and factories that would locate to Turners Falls. By the late 1870s, several significant industries, chief among them the John Russell Cutlery Company, had built plants along the power canal at its northern end. Soon joined by the Montague, Turners Falls, and Keith paper mills, Turners Falls' factories provided employment for hundreds of local residents, many of whom lived in company-built housing in the village (Jenkins 1980: 8.1). "The Patch" neighborhood, consisting mostly of Polish immigrants, developed a decade or two later than the original heart of Turners Falls, as is shown by Sanborn insurance maps beginning in 1884 and continuing into 1914.

By the early 1900s, the Turners Falls Company had expanded its operations to include development of hydroelectric power for industrial and residential use. As part of this, the Turners Falls Power & Electric Company (as it became known) widened and extended the power canal south of Seventh Street and constructed two new power stations. The first one, known as Station No. 1, was completed in 1906 just north of Eleventh Street within sight of the north end of "The Patch," with the new branch canal and dam cutting the area off from the rest of Turners Falls to the north. When the canal was extended south to the new Cabot Station south of "The Patch" in 1915, the area became a virtual island, relieved only by the building of the Eleventh Street Bridge that same year.

Like the rest of Turners Falls, "The Patch" experienced an economic decline beginning in the 1930s, as several major mills and factories closed or relocated elsewhere. Although a few of the historic factories are still partially operated, they no longer provide much employment for Turners Falls' residents, most of whom work elsewhere. As a result, there has been little new construction in the village since the 1940s and "The Patch" has preserved most of its historic appearance intact.

NRHP Eligibility Evaluation: The Patch Historic District was previously surveyed by the Franklin County Arts Council during its survey of Turners Falls in 1978 but was not assessed for NRHP eligibility by the MHC. Since "The Patch" is a previously defined historic district with a separate history and period of significance, as well as geographical separation from the NRHP-listed Turners Falls Historic District, it is appropriate to consider it as a separate district rather than attempt to modify the boundaries and historic context for the Turners Falls Historic District. The Patch Historic District is NRHP-eligible under Criteria A and C on the local level with a period of significance between the early 1880s and 1932 (within the period of significance of the NRHP-listed Turners Falls Historic District, located five blocks to the north). The Eleventh Street Bridge (MNT.904), previously determined NRHP-eligible by MHC, is also a contributing resource in the Patch Historic District.

Criterion A

The Patch Historic District is NRHP-eligible under Criterion A for its association with the development of Turners Falls as a major industrial center in western Massachusetts following its founding as a planned industrial community in 1866. The village grew throughout the late nineteenth and early twentieth centuries as a center of paper-making mills and a cutlery factory whose workers lived within walking distance along the grid-pattern streets designed by the Turners Falls Company. Originally settled in the 1880s and 1890s by Polish immigrants to Turners Falls, after 1906 "The Patch" developed somewhat of a separate identity due to the fact that it was physically cut off by expansion of the Turners Falls power canal, and became accessible only by the Eleventh Street Bridge.

Criterion C

"The Patch" Historic District is NRHP-eligible under Criterion C for its largely intact collection of late-nineteenth and early-twentieth-century architecture in vernacular variants of the Italianate, Colonial Revival, and Queen Anne Styles, along with some Italianate-style commercial buildings and a Classical Revival-style school. The district has had few intrusions or demolitions and retains all aspects of integrity.

Contributing Resource(s): There is one contributing resource within "The Patch" Historic District located within the Project APE: the Eleventh Street Bridge (MNT.904) which spans the power canal and connects The Patch with the rest of Turners Falls. The Eleventh Street Bridge is a Non-Project facility and is not owned or maintained by FirstLight.

Riverside (GIL.D, Various streets, Riverside, Gill, MA)

In 1999, the village of Riverside was surveyed by Bonnie Parsons of the Gill Historical Commission and an MHC Area Form (GIL.D) was completed that recommended a Riverside Historic District eligible for NRHP listing under Criteria A and C. As a portion of the Riverside Historic District lies within the Project APE, the area was re-surveyed as part of the 2014 survey by TRC, the potential historic district boundaries verified, and the overall condition of resources noted and recorded with digital photographs.

Description: Riverside in Gill is located on the north side of the Connecticut River where the river makes a short turn to the west. The village is just east of the Turners Falls Dam and east of the confluence from the north of the Fall River into the Connecticut. State Route 2, known in this area as French King Highway, runs through the village in an east-west direction and Main Road running to the northeast connects Riverside with Gill Center. The village lies along a flood plain of the river made narrow by a series of hills on its north side.

Historically, Riverside was considered all of the section of Gill south of Gill Center including a small area of industry on Fall River, as well as farmland and alluvial flood plain that extended to the Connecticut River on the east. The most densely settled section of the village, a former manufacturing village, occupies a shallow peninsula extending into the river between Barton's Cove on the east and the falls on the west and the south side of the French King Highway (Route 2). Buildings date from the late nineteenth to early twentieth centuries, coinciding with Turners Falls' prominence as an industrial and manufacturing center on the Connecticut River. Single- and multi-family dwellings are either of frame construction, one or two stories in height, with hipped or gable roofs. They are mostly vernacular variants of nationally popular styles such as the Italianate, Gothic Revival, Queen Anne and Colonial Revival Styles. There are no major modern intrusions or demolitions in the district, with most alterations confined to the use of replacement siding and replacement windows and doors. Buildings range from fair to good in condition.

As a result of King Phillips War in 1676, the area remained unsettled until just before the middle of the eighteenth century. One of its earliest residents, George Howland, arrived in 1743 and built the Howland Tavern ca. 1760 (GIL. 10) close to the Connecticut River where he served the river boat traffic that was carting goods above and below the falls. A few farms were established prior to the Revolutionary War in Riverside including that of Timothy Stoughton who bought a 300-acre piece of property from Native Americans. This section of Gill was suited to farming and particularly sheep farming and by 1838 Stoughton was among the more successful sheep farmers with a house, two barns, numerous outbuildings, a cider mill, a few dairy cows and 210 acres. In addition to the farms, a ferry operated across the Connecticut River from Riverside at the foot of Riverview Drive and a saw-mill was operated nearby at the falls (Parsons 1999).

A small settlement grew up around a textile mill in the 1830s in a part of Riverside known as Factory Hollow, but most of this settlement was on the Greenfield side of Falls River. On the Gill side were a blacksmith shop, a machine shop and several dwellings, all since demolished. The area remained sparsely populated until 1867 when Amos Perry, David Wood, and Nathaniel Holmes bought water rights on the Connecticut River from the Turners Falls Company along with a small parcel of land in Riverside at the edge of the river for a grist- and saw-mill. A farmer, Cornelius Allen, owned most of the land in Riverside at that point but in 1870 Perry, Wood and Holmes together with Timothy Stoughton, descendent of one of the earliest farmers of Riverside, bought Allen's farmland as the mills began operation. Stoughton invested in land with the three men and perhaps in the company as well. The Holmes, Wood and Company saw-mill provided vast amounts of lumber for the development of Turners Falls across the river and lumber production soon outstripped the gristmill. The need for lumber workers prompted housing construction. It was from 1869-70 that the concentration of buildings comprising the manufacturing village of Riverside was constructed. Many were built by the company for their mill hands, some of these by Timothy Stoughton; others were speculatively built by associates or speculators from nearby towns (Parsons 1999).

In 1872, Holmes, Wood and Perry incorporated as the Turners Falls Lumber Company bringing logs downriver to their saw-mill from Vermont and Canada. This was also the year in which Riverside got its own post office and with it, the official village name. Underscoring the lumber company's role in village growth, David Wood became its first postmaster. The three partners lost control of their business the following year and were bought out by Timothy Stoughton. The Turners Falls Lumber Company ran log drives every year between 1869 and about 1900, bringing millions of board feet into Riverside each year, where it was processed and sold (Parsons 1999).

Stoughton was an early proponent of connecting Gill to Turners Falls with a bridge that would put Riverside within easy reach of the larger industrial Turners Falls. Without a bridge the lumber company had to ship materials on the ferry run by Albert Smith or overland in a circuitous route across Falls River. Accordingly, he began publicly to advocate for the structure and in 1878 the Red Suspension Bridge was constructed connecting the two towns. The bridge represented a prosperous future for Riverside. In 1879, Louis Everts wrote in his *History of the Connecticut Valley in Massachusetts* that Riverside was "rapidly growing in popularity among businessmen at Turners Falls Village as a place of suburban residences" and that when Turners Falls succeeded "Riverside will be an architectural garden place (Parsons 1999)."

The village did continue to grow, although more modestly than predicted. A second industry was added at the foot of Riverview Drive in 1885, known as the Kindling Wood Factory. A spin-off industry from the lumber mill, the kindling wood factory bought waste wood from the Turners Falls Lumber Company, cut, dried, bundled, and sent it to city markets. When the company organization faltered, it was bought by the Turners Falls Lumber Company and continued until 1891 when it burned down and was not reconstructed. Housing continued to be built in Riverside both in high style and as workers housing. Several stores and a community building went up in the area and residents not employed by the lumber company followed various cottage industries from dressmaking to knife handle manufacturing. Improvements to the village included a water system that Timothy Stoughton had constructed in 1870 from a spring on his property and connected to village homes. The system was expanded in 1884 becoming the Riverside Water Company that ran water lines to all the buildings in the village (Parsons 1999).

In 1903, the Turners Falls Lumber Company complex burned down. It was not rebuilt and though there were subsequent development plans that aimed to build the area up into a suburban neighborhood, it never recovered from the loss of its industrial base. Rather, Riverside grew gradually partly for its proximity to the French King Highway as automobiles made their way across the state, and partly for its proximity to the industry of Turners Falls. Two plans for residential subdivision date from 1908. One was proposed as a “Plan of Riverside Park” and covered the southern portion of Riverview Drive, Elm and Walnut Streets. The second plan, proposed the same year, divided land that had formerly belonged to

Timothy Stoughton into small house lots on the northern section of Riverview Drive (Bridge Street), French King Highway, Oak, Myrtle, Maple and Pine Streets. Street layouts proposed by the two plans were completed, but the dense lot divisions were never completely developed (Parsons 1999).

While residences continued gradually to be added to Riverside and other buildings were lost, the focus of the area shifted away from the river and towards the main road through Riverside that later became Route 2 or the French King Highway. The ca. 1920 Crawford Socony-Mobil Gas Station was a roadside development brought about by the automobile. One new business that merged Riverside's agriculture with roadside culture of the automobile era is the Yukl vegetable stand where the Yukls established their market and nursery for over fifty years. Also indicative of the age of the automobile, in 1931 the French King Highway and a new bridge across the Fall River were constructed as part of a Route 2 cutoff. The Red Suspension Bridge, which had shown signs of deterioration in 1918, was severely compromised in the floods of 1936 and was demolished in 1942 for scrap metal. A more substantial bridge was needed and was built in 1937-38, the Turners Falls-Gill Bridge (Parsons 1999).

NRHP Eligibility Evaluation: Riverside's Native American resources already are recognized as the Riverside Archeological District, listed in the National Register in 1975. The proposed Riverside Historic District is a roughly triangular-shaped area bounded on the northwest by Bridge Street, at the north by French King Highway (Route 2), and on the east and southeast by the east sides of Meadow Street and Riverview Avenue. The district contains approximately 60 contributing resources and only a few non-contributing (the historic district boundaries are drawn to exclude mostly non-historic commercial buildings). The Riverside Historic District is NRHP-eligible under Criteria A and C on the local level with a period of significance between ca. 1866 and ca. 1940.

Criterion A

Riverside Historic District is NRHP-eligible under Criterion A for its association with a Connecticut River Valley colonial-era settlement, then former manufacturing village, then suburb. Several different facets and periods of Riverside's history and architectural heritage are represented within the historic district boundaries. Late eighteenth- and early-nineteenth century residences reflect the rural and agricultural character of the community, which also relied on timbering and yearly log drives. Riverside's greatest period of expansion occurred after the damming of the river at Turners Falls and the founding of the Turners Falls Lumber Company in the 1860s and 1870s. The community was both economically and physically linked to Turners Falls after the building of the Red Suspension Bridge in 1878, enabling workers to commute to jobs and business on both sides of the river.

Criterion C

Riverside Historic District is NRHP-eligible under Criterion C for its largely intact collection of late-nineteenth and early-twentieth-century architecture in vernacular variants of the Italianate, Gothic Revival, Queen Anne and Colonial Revival Styles. The late-nineteenth and twentieth- century architecture reflects Riverside's role as a suburb of Turners Falls, and a desirable place for wealthier residents escaping the more industrial village across the river. The district has had few intrusions or demolitions and retains all aspects of integrity.

Contributing Resources: There are two contributing resources within the NRHP-eligible Riverside Historic District that are located within or partially within the Project APE:

Hunt-Sanderson-Jones House (GIL.037, 9 Grove Street, Riverside, MA)

Description: Based on historic photographs and deed records, this house was originally constructed ca. 1869-70 as a 1-story, 3-bay vernacular Greek Revival-style frame house with clapboard siding, a front-gable roof with cornice returns and corner boards, and a side-hall plan with entrance on the southeast. Sometime between 1902 and 1909, the side ell was raised an additional half story, two gabled wall dormers added, and an additional bay added on the east end, turning the porch into an incised porch with turned posts. This porch has since been enclosed with 1/1 metal windows and a concrete-block foundation added. This house is a privately owned, Non-Project facility.

Historic Significance: This house is reported to have been the first building erected on Grove Street (Stoughton 1978: 245). The date of the erection of this home can be closely fixed to 1869-1870 since a March 23, 1870 deed between Edwin Hunt and T.M. Stoughton mentions, apart from the "40 rods of ground" in Gill,...and also the new dwelling house recently erected upon the land and now occupied by me" (Franklin County Deed [FCD] Book 282, Page 67).

The property passed into the possession of Frank D. Jones, who purchased it at an auction for $1,050.60 (FCD Book 370, Page 350). Frank Jones and his family would live in this home into the 1930s-1940s. During that time he operated a local general store. He also performed other civic duties, at times acting as a town juror (1891-92), town auditor (1894), and as the Riverside librarian from 1890 to 1922 (Stoughton 1978: 200, 247). During 1902-09, Jones enlarged the house although it is not known if these changes reflect stylistic or economic adaptations.

NRHP Eligibility Evaluation: The Hunt-Sanderson-Jones House is a contributing resource to the NRHP-eligible Riverside Historic District (Criteria A and C). Due to the enclosure of the porch, replacement windows and vinyl siding, the resource does not retain the integrity of design, materials, or workmanship.

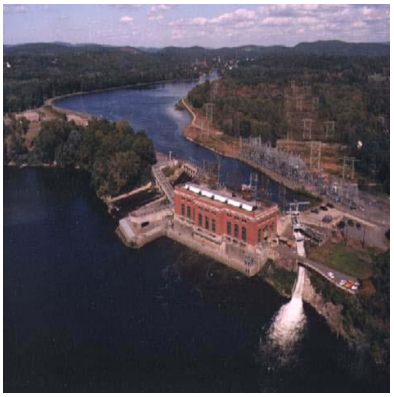
Frank Smith House (GIL.043, 39 Riverview Drive, Riverside, MA)

Description: Based on historic photographs and deed records, this residence was built ca. 1882 as a 2-story, gable-roofed frame house with a T plan on a brick foundation, consisting of a front-gabled, 1-bay section perpendicular to the street on the east and a 3-bay, side-gabled ell with on-peak brick on the west. The primary porch has been enclosed with removable storm windows and enclosed weatherboard balustrade. Based on an 1895 photograph, the 1½-story east wing with side-gable roof and enclosed shed-roofed front porch is a later addition, although the similarity of architectural details suggests it was built not long after the original house. This house is a privately owned, Non-Project facility.

Historic Significance: This home is believed to have been built by Frank W. Smith ca. 1882. Smith was the son of an important local personage, the ferryman Albert Smith whose house is located next door at 39 Riverside Drive (GIL.059). An 1894 photo shows the details of the home, along with Smith family members. Smith had most likely engaged in farming activities in Gill and seems to have been relatively well-off since a record of his estate describes four houses, a shop, two barns, a poultry house, and some small acreage (Gill Town Report 1901: 2).

NRHP Eligibility Evaluation: The Frank Smith House is a contributing resource in the NRHP-eligible Riverside Historic District (Criteria A and C). Although the porch has been enclosed, the building retains all aspects of integrity.

Turners Falls Power & Electric Company Historic District (TRC-40, Between Turners Falls Dam and Cabot Station, Turners Falls, MA)



Description: The Turners Falls Power & Electric Company (TFP&EC) Historic District in Montague and Gill extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. The district consists of hydroelectric power facilities and related structures built by the Turners Falls Power & Electric Company between 1904 and ca. 1929 and is bounded on the south by the Cabot Power Station, on the west and northwest by the Connecticut River and/or the west bank of the Power Canal, on the northeast by the Turners Falls Dam (the only portion of the district in Gill), and on the east and southeast by the east bank of the Power Canal. The resources are all physically connected by the Power Canal, which is also spanned by two railroad bridges, two pedestrian bridges, and four vehicular bridges. All of the hydroelectric structures and buildings and the power canal within the historic district boundaries are owned by FirstLight as part of the FERC-licensed Turners Falls Project. FirstLight also owns the Keith Mill Footbridge and so-called International Paper Company Footbridge (the footbridges and vehicular bridges across the power canal were built by the Turners Falls Power Company, with the exception of the Fifth Street Highway Bridge) and two abandoned railroad bridges. The Fifth Street, Sixth Street, and Eleventh Street vehicular bridges are not owned nor maintained by FirstLight

The TFP&EC Historic District contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983, as well as previously surveyed resources that are outside the TFHD boundaries, in addition to resources that were newly surveyed by TRC in 2014. The TFP&EC Historic District's contributing resources include (running from north to south):

- Turners Falls Dams 1 and 2 (Montague and Gill dams) (TRC Survey # 37)
- Turners Falls Gate House (TRC Survey # 36)
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district) (MNT.933)
- International Paper Company Bridge (THFD-listed) (TRC Survey # 6)
- Keith's Mill Footbridge (THFD-listed) (MNT.925)
- Fifth Street Pedestrian Bridge (THFD-listed)(MNT.924)
- Sixth Street Bridge (THFD-listed) (MNT.909)
- Eleventh Street Bridge (determined NRHP-eligible for individual listing by MHC) (MNT.904)
- Power Station No. 1 (TRC Survey # 35)
- Cabot Station (determined NRHP-eligible for individual listing by MHC in 1987) (MNT.449)

The following two structures are non-contributing resources:

- Boston & Maine Railroad Bridge over the Power Canal (TRC Survey # 2)
- Boston & Maine Railroad Bridge over the Branch Canal (TRC Survey # 3)

Historical Significance: In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the

locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1980: 8.1). The canal, designed by Benjamin Prescott of Northampton, was 2.5 miles long and 14 feet wide, with ten locks. A second dam and lock downstream from the confluence of the Connecticut and Millers Rivers to the north of Turners Falls raised the water in order that boats could navigate the French King rapids (MHC 1982c: 6). By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, the state legislature granted the Proprietors the right to lease the canal waters for power purposes. A group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the rights from the Proprietors and formed the Turners Falls Company. The company replaced the older dam with a new wood-and-stone crib dam and rebuilt the canal. Soon, the canal was powering new manufacturers attracted by Crocker to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, "a small company of public-spirited citizens" leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls gatehouse and in 1892 the gatehouse was expanded for greater water flow. The Power Canal also was improved by widening it and increasing its depth.

By 1900, many of the mills and factories in Turners Falls and western Massachusetts began to lose business to Southern mills with their cheaper labor supply and as a consequence a few area mills and small start-up power companies turned their attention to harnessing hydroelectric power. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1904, Charles Hazelton, treasurer of the Turners Falls Company, proposed to his board of directors that that they make better use of the water power being wasted by widening and extending the canal, and establishing a hydro-electric generating plant of 5,000 kilowatt capacity. "His proposal met with unanimous agreement, and was carried out during the next three years" (Bennett 1990a: 5). Changing its name to the Turners Falls Power & Electric Company, the company constructed a Power Station (Power Station No. 1) at Turners Falls, and widened and lengthened the existing power canal (Montague Bicentennial Committee 1954: 5).

Construction of Station No. 1 in 1904-1906 increased the importance of the power canal to the success of hydroelectric operations at Turners Falls. As built, the canal bypasses approximately 2.7 miles of the Connecticut River. Fall River, located near the head of the bypass channel, discharges into the bypass reach. In 1906, the Turners Falls Company had completed the widening of the power canal to 125 feet, increasing its depth to 15 feet, and extended it south by 1,000 feet.

The company had by then attracted the attention of financier Phillip Cabot of Boston. Born in Brookline in 1872, Cabot graduated from Harvard and soon became a partner in the investment form of White, Weld & Company.

> *"About this time, Turners Falls stockholders had begun to dispose of their shares to a group of Boston investors represented by Philip Cabot, who had also purchased substantial holdings in the stocks of the Amherst Gas Company, the Greenfield Electric Light and Power Company and the East Hampton Gas Company. Cabot was invited to become a director of all these companies and for the first time in its history the Turners Falls Company became associated with others in the electric utility field.*

> *Philip Cabot and the men working with him were largely responsible for the rapid and successful development of the Turners Falls project and for the starting of the associations which eventually led to the formation of the Western Massachusetts Companies and the Western Mass. Electric Company. In 1908, Cabot succeeded Char1es T. Crocker as president of the Company, a position he held for the next 11 years."* (Abercrombie 1973: 4)

The hydroelectric development at Turners Falls that Cabot planned, financed, and pushed through included far-reaching decisions to build a new concrete dam at Turners Falls; widen, deepen, and extend the power canal by two miles; and at its lower end build a 42,000-kilowatt hydroelectric station utilizing a 60-foot head. Work was begun in 1912 and in 1916, No. 2 Station (later renamed Cabot Station in honor of Phillip Cabot) started commercial operation. When completed in 1918, Cabot Station was the largest hydroelectric plant in Massachusetts and was in fact the largest hydroelectric generating station east of Niagara Falls. By 1914, separate generating and transmission companies seemed unnecessary and Amherst Power was absorbed by the Turners Falls Power & Electric Company (Montague Bicentennial Committee 1954: 12) (WMECO 1987: 2).

Among other enterprises, the Turners Falls Power & Electric Company built and maintained the Turners Falls Canal and Dam, as well as financing and building several vehicular and pedestrian bridges crossing the canal between the village and the mills. The construction of bridges over the canal at Fifth Street, Sixth Street, and Eleventh Street were crucial to the development of the village, as any proposed extension of the power canal would, in effect, create an "island" in the center of Turners Falls.

Raising the canal embankment in 1917 allowed an increase to 48,000 kW (Clouette 1987: 2). By 1917, the canal was extended to its present length of approximately 2.5 miles. Final work on the canal's excavation was completed that year when it reached its present depth of between 25-40 feet and between 100-920 feet (the latter at the Cabot Station forebay) in width; canal walls were raised in 1919 and again in 1922 and the late 1920s (Holmes 1991: 28).

NRHP Eligibility Evaluation:

Criterion A

The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the late 1920s). This defines the period of significance between 1904 and 1929.

This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its principal investor and later president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine Railroad across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street Bridge and the Eleventh Street Bridgs were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts. The district has had few intrusions or demolitions and retains all aspects of integrity.

Contributing/Non-Contributing Resources: There are ten contributing resources and two non-contributing resources within the proposed TFP&EC Historic District located within the Project APE. Seven of these resources also are contributing resources to the NRHP-listed Turners Falls Historic District. The contributing/non-contributing resources to the TFP&EC Historic District are identified:

<u>Boston & Maine Railroad Bridge over Turners Falls Power Canal (TRC-2, South of Sixth Street, Turners Falls, MA)</u>

Description: This three-span, riveted-plate girder, half-thru railroad bridge carries the single-line "Mill Track" of the former Boston & Maine Railroad over the Turners Falls Power Canal. The railroad's main line ran on the east side of the canal and had a three-part curve on the east that followed the curve of the canal before crossing the canal at an oblique angle, continuing north via an additional curve on the west before crossing over the Power Station 1 forebay and continuing north to the former paper mills at Turners Falls. The bridge rests on a concrete retaining wall on the east and the canal wall on the west and has two tapered concrete piers. The railroad ties are either deteriorated or have been removed and the bridge is not accessible by foot. The bridge is a Non-Project facility that is owned and maintained by FirstLight.

Passenger service to Turners Falls on the Boston & Maine ceased in 1957, and freight service ended sometime in the early 1990s. The tracks were removed on both sides of the power canal and converted to bicycle and pedestrian use. The two railroad bridges spanning the branch canal and the power canal were sealed off, most of the ties removed, and both are now in deteriorated condition.

Historical Significance: Beginning in 1915, the Turners Falls Power Company widened and lengthened the Turners Falls Power Canal that formerly ran only as far south as Sixth Street. The power company replaced the many existing railroad, vehicular, and pedestrian bridges that spanned the canal with new bridges to accommodate the widened canal. This Boston & Maine Railroad Bridge was built ca. 1915 at an oblique angle and with a decided curve to carry the line over the canal and north to the paper mills that lined the western bank of the canal in Turners Falls.

NRHP Eligibility Evaluation: The Boston & Maine Railroad Bridge over the Turners Falls Power Canal is a non-contributing resource in the NRHP-eligible Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. Due to its deteriorated condition, the resource does not retain the integrity of materials, workmanship, association, and setting.

Boston & Maine Railroad Bridge over Branch Canal (TRC-3, Power Canal, Turners Falls, MA)

Description: This single-span, riveted-plate girder, half-thru railroad bridge formerly carried the single-track spur line of the Boston & Maine Railroad over the Branch Canal, a narrow channel that connects the Turners Falls Power Canal with the forebay of Turners Falls Power Station 1. The bridge rests on a concrete retaining wall on the south and on the north rests on a stone-and-concrete abutment with wing walls. The railroad spur formerly ran along the west side of the Power Canal, and some old ties are still visible north and south of the bridge. The ties have partially been removed from the bridge and the others are in deteriorated condition. There is a wooden walkway on the east, although the bridge is only partially accessible for pedestrian use. The bridge is a Non-Project facility that is owned and maintained by FirstLight.

The bridge that crosses the Branch Canal to Power Station No. 1 is a portion of the "Mill Owners Track." The 1874 indentures for the mills reserved a 10 foot wide parcel of land for the Turners Falls Power Company on which the mill owners were to build a railroad. There are agreements from 1884 between three of the mill owners for the construction of the track (Franklin County Deed Book 972, Page 444). This Boston & Maine Railroad Bridge was built ca. 1905 to cross the short channel that connects the power canal with the forebay of the Power Station No. 1. Historic photos show that it had stone abutments; these were encased with concrete at a later date. Also, the bridge may have been moved or repositioned ca. 1915 during the widening of the power canal. The bridge carried the line north to the mills and factories that lined the western bank of the canal in Turners Falls.

NRHP Eligibility Evaluation: The Boston & Maine Railroad Bridge over the Turners Falls Branch Canal is a non-contributing resource in the NRHP-eligible TFP&EC Historic District in Turners Falls. Due to its deteriorated condition, the resource does not retain the integrity of materials, workmanship, association, or setting.

Turners Falls Station No. 1 (TRC-35, At end of Branch Canal, Turners Falls, MA)

Description: The Turners Falls Station No. 1 is located on the east bank of the Connecticut River at the western terminus of the Turners Falls Branch Canal. The complex consists of the Power Station and the Branch Canal/Forebay with gates at the west end leading to the concrete-and-stone spillway (not in use). Turners Falls Station No. 1 is a Project facility, owned and operated by FirstLight.

Station No. 1 was built between 1904 and 1906 in a vernacular variant of the Italianate Style as adapted for an industrial building. The building is built into an embankment consisting of the natural rock ledge and earth fill, so that the rear of the building appears as only a half-story building. The foundation consists of coursed granite with 40-foot-wide, stone-and-brick arches on the west face for water to empty into the short tailrace and the Connecticut River. The one-story-with-clerestory brick building is basically cruciform in plan with 3-bay arms on the north and south, a short west ell (the "wire tower") and the longer ell that contains the penstocks between the forebay and the main section of the power station (The northwest corner of the building was filled in with an additional two bays at an unknown date).

The building has a shallow-pitched roof with gravel top and paired wood brackets beneath the wide eaves. Originally, windows on the ground level had tall 12/12 double-hung sash with segmental-arched heads, with 2/2 sash windows on the clerestory, also with segmental-arched heads and concrete sills. Most of the windows have been either filled in or had their sash replaced with modern 1/1 sash. The main entrance is

on the north with a double-leaf paneled wood door set within an arched opening. An identical entrance is on the south end. A secondary entrance with glass-and wood door set within a segmental-arched opening is on the northwest.

The interior is open to the ceiling with painted brick walls and exposed roof timbers. The enclosed control room and stair are on the north. The five turbine generators are at ground level and all are connected to the four 12”-diameter penstocks carrying water from the Branch Canal above. The generator’s manufacturer nameplates visible include Bullocks Mfg., Allis-Chalmers, and General Electric Co.

NRHP Eligibility Evaluation: Turners Falls Power Station No. 1 is a contributing resource in the NRHP-eligible TFP&EC Historic District in Turners Falls. The resource retains all aspects of integrity.

Turners Falls Gate House (TRC-36, Turners Falls next to Gill-Montague Bridge, Turners Falls MA)

Description: The Turners Falls Gate House consists of two clearly identifiable sections that span the head of the Turners Fall Power Canal at the Turners Falls Dam. The east section, built in 1903-1904 is a 1-story, 10-bay-long, 2-bay-wide brick building adjoining the Montague shoreline and has a gable roof with crow-step gable topped by rough-cut granite caps. The foundation consists of 16 courses of cut granite and arches over 8 gate openings. Decorative features include the brick dentil and corbelled cornice and brick pilasters marking each bay. The 1903 drawings showed a single-leaf wood-paneled door and entrance on the east gable end, however the entrance is now on the northeast corner with a glass-and-wood-paneled single-leaf door within a segmental arched opening. The 6/6 sash windows on the north elevation have segmental heads. On the south, some windows are single 6-pane fixed windows, others are double hung sash with the lower half filled in. A modern metal roll-up door is on the west gable end. Turners Falls Gate House is a Project facility, owned and operated by FirstLight.

In 1913-1914, the gatehouse was extended on the west and on the other side of the natural rock ledge at this point by demolishing the existing 1866 2-story brick gate house. Of nearly identical design to the 1904 gatehouse, the extension is 13 bays long with a concrete foundation, a crow-step gable end and nine gate openings.

NRHP Eligibility Evaluation: The Turners Falls Gate House is a contributing resource in the NRHP-eligible TFP&EC Historic District in Turners Falls. The resource retains all aspects of integrity.

Turners Falls Dam 1 and 2 (TRC-37, Connecticut River between Gill and Montague, Turners Falls, MA)

Description: The Turners Falls Dam is located at approximately river mile 122 (above Long Island Sound) on the Connecticut River in the towns of Gill and Montague, MA. The dam creates an impoundment extending upstream approximately 20 miles to the base of TransCanada's Vernon Hydroelectric Project Dam in VT/NH. At the Turners Falls Dam is a gate house with headgates extending from the Montague shoreline controlling flow into the Turners Falls Power Canal. A fishway was added on the Montague side in 1973. As a part of the raising of the water level of the Connecticut River above the Turners Falls Dams to create the lower impoundment for the Northfield Mountain Project, the original Gill Dam was breached following construction of a new Gill Dam, which includes three taintor gates and a non-overflow section. The Montague Dam was raised by the addition of four 120 foot long thirteen foot high bascule gates placed atop the dam crest and a non-overflow section. Turners Falls Dam is a Project facility, owned and operated by FirstLight.

The Turners Falls Dam consists of two individual concrete gravity dams, referred to as the Gill Dam and the Montague Dam, which are connected by a natural rock island known as Great Island. The 630-foot-long Montague Dam, completed in 1913 and raised in height in 1968-1969, is founded on bedrock and connects Great Island to the east bank of the Connecticut River. It includes four bascule type gates and a fixed crest section which is normally not overflowed. When fully upright, the top of the bascule gates are at elevation 185.5 feet mean sea level (msl). A new 493-foot-long Gill Dam was also completed in 1968-1969 and connects Great Island to the west bank of the Connecticut River, and includes three tainter spillway gates and a fixed crest section which is normally not overflowed. When closed, the elevation atop the tainter gates is at elevation 185.5 feet.

NRHP Eligibility Evaluation: The Turners Falls Dam (Montague and Gill Dams) are counted as a single contributing resource in the NRHP-eligible TFP&EC Historic District in Turners Falls.

NRHP-Eligible Individual Resources in the Project APE

Previous surveys, as well as the 2013-2014 TRC survey, have identified four historic resources in the APE eligible for NRHP listing (or in the case of Northfield Mountain Pumped Storage Facility, NRHP-eligible in 2018) under one or more NRHP Criterion based on their architectural and/or historic significance, although they have not been evaluated by the SHPO(s). The resources are described below, along with the applicable NRHP Criteria, their period and levels of significance, and their integrity. Updated MHC survey forms, along with maps locating these resources are located in Appendix B.

Central Vermont Railroad Bridge over Ferry Road (TRC-1, Ferry Road, Northfield, MA)

Description: This single-span, riveted-plate, deck-girder bridge carries the single-track former Central Vermont Railroad (now New England Central Railroad) line over Ferry Road, west of Route 63 in Northfield. The bridge is supported on either end by tapered piers of coursed and cut granite topped by a concrete cap. The railroad ties extend over the sides of the bridge about a foot on either side. There is a metal date plaque on the southeast corner stamped "Built in 1912 by the Detroit Bridge & Ironworks, Detroit, MI." The bridge is typical of several other small deck-girder railroad bridges from that date built by the Central Vermont Railroad in this area of Franklin County and southern Vermont. The Central Vermont Railroad Bridge is a Non-Project facility that is not owned or maintained by FirstLight.

Historical Significance: The Central Vermont Railroad connected Montreal, Quebec with New London, Connecticut using a route along the shores of Lake Champlain, through the Green Mountains and along the Connecticut River valley, as well as Montreal to Boston, Massachusetts, through a connection with the Boston & Maine Railroad at White River Junction, Vermont. Chartered in 1843, the railroad reached Northfield from the north on October 10, 1848. It has operated under several companies since the 1890s, including the Grand Trunk Railway, Canadian National, and New England Central Railroad. The route along the Connecticut River also handles the twice-daily Amtrak Vermonter.

NRHP Eligibility Evaluation: This resource is NRHP-eligible as a contributing resource in a potential Central Vermont Railroad Linear Historic District in Massachusetts and Vermont (with boundaries and resource count as yet undefined). This linear historic district is NRHP-eligible under Criterion A for its association with the history of railroads in northwestern Massachusetts and southern Vermont during the nineteenth and early twentieth centuries. The resource is not associated with a significant individual and is not NRHP-eligible under Criterion B. The resource is not a significant engineering structure and is not NRHP-eligible under Criterion C.

Criterion A:

In the 1840s, railroads took over the major transportation role in western Massachusetts and southern Vermont once briefly enjoyed by canals in the early 1800s. Among the earliest railroads in the region was the Vermont & Massachusetts Railroad, chartered in 1844 and immediately merged with the Brattleboro & Fitchburg Railroad of Vermont. Further extensions opened to Athol and Miller's Falls in Massachusetts in 1848, and to Brattleboro, Vermont in 1850. Later in 1850, a branch from Grout's Corner west to Greenfield, Massachusetts opened. A short branch to Turner's Falls opened in 1870-1871, spurring economic growth in this industrial center founded only a few years earlier in 1866.

The original main line north from Millers Falls was leased to the Vermont Central Railroad in 1871, which became the Central Vermont Railroad in 1872. Chartered in 1843, the railroad reached Northfield from the north on October 10, 1848. It has operated under several companies since the 1890s, including the Grand Trunk Railway, Canadian National, and New England Central Railroad.

Cabot Camp (TRC-5, 169 East Mineral Road, Montague, MA)

Description: The Cabot Camp complex is located on the northwest side of East Mineral Road, at the confluence of the Millers and Connecticut Rivers, just south of the East Mineral Road Bridge over the Millers River and within sight of the French King Bridge over the Connecticut River. The property is bordered by a low, dry-laid fieldstone wall that runs at the east property line along East Mineral Road. A second wall also links the house to the carriage house creating a small courtyard. The land slopes steeply on the north and west towards the two rivers. Cabot Camp is a Non-Project facility that is owned and maintained by FirstLight.

The main house and outbuildings date from 1913 and are built in a rustic variant of the New England Colonial Revival Style. The house consists of three identifiable sections: the easternmost section is a 1-story, 3-bay frame house on a fieldstone foundation with a side-gable roof covered with slate shingles. This section is clad with clapboard siding and is trimmed with corner boards and a box cornice. There is a central off-peak, brick chimney north of the roofline. The windows are presently covered with original board shutters with metal strap hinges, so the number of window lights was not visible. A louvered attic window is on the east gable end. There is a single-leaf wood door on the south façade; the north elevation was not accessible for inspection.

A 1-story, 3-bay, frame hyphen on a stone foundation and slate-shingled, side-gable roof is on the west. It has a central entrance on the south with a single-leaf batten door with strap hinges. The flanking windows are sealed with batten shutters with metal hinges.

The westernmost section extends from the southwest corner of the hyphen. It has a solid fieldstone gable end and an interior-end stone chimney. The rest of the building is frame, covered with dark-stained board-and-batten siding. The side-gable roof is covered with slate shingles and has exposed rafter ends. The windows on the south and west gable ends are sealed with single-leaf wood shutters.

Outbuildings on the property include a fieldstone carriage house and two frame storage buildings of undetermined use. The 1-story, 6-bay carriage house is built of fieldstone and has a side-gable roof with slate shingles. It is open on the north and each bay is marked by a single wood Tuscan column. There is a 1-story, 3-bay, frame outbuilding with board-and-batten siding, slate-shingled side-gable roof, and an exterior-end brick chimney. There is also a small frame building with board-and-batten siding and a ventilator atop its gable roof; the structure may have been built to house tamed birds.

Historical Significance: The property is the site of a former toll house associated with the canal and lock system in operation by 1798 built by the Proprietors of the Upper Locks and Canals to bypass the French King Gorge and the Great Falls at Turners Falls. One source also claims that the property contains the site of the Dark Tavern, built to accommodate travelers along the canal route (Abercrombie 1973: 1). The canal proved commercially successful for its first 30 years, but suffered from competition from the emerging railroads beginning in the 1840s, and by 1856 the canal was closed to boat traffic.

In 1866, Colonel Alvah Crocker and his associates bought the land and water rights of the canal company. Beginning in 1868, Crocker and his newly formed Turners Falls Company developed the village of Turners Falls as an industrial hub deriving water power from the Turners Falls and turning the former navigational canal into a power canal (Jenkins 1980: 8.2).

By 1886, the Clarke and Chapman Machine Company in Turners Falls began converting water from the dam at Turners Falls for electrical power and by the early 1900s the Turners Falls Company made the

crucial decision to go into the hydroelectric power business. Changing its name to the Turners Falls Power & Electric Company, the company constructed a Power Station (Power Station No. 1) at Turners Falls, and widened and lengthened the existing power canal (Montague Bicentennial Committee 1954: 5).

The company had by then attracted the attention of financier Phillip Cabot of Boston. Born in Brookline in 1872, Cabot graduated from Harvard and soon became a partner in the investment form of White, Weld & Company. The hydroelectric development at Turners Falls that Cabot planned, financed, and pushed through included far-reaching decisions to build a new concrete dam at Turners Falls; widen, deepen and extend the power canal two miles; and at its lower end build a 42,000-kilowatt hydroelectric station utilizing a 60-foot head. Work was begun in 1912 and in 1916, No. 2 Station (later renamed Cabot Station in honor of Phillip Cabot) started commercial operation. When completed, Cabot Station was the largest hydroelectric plant in Massachusetts and was in fact the largest hydroelectric generating station east of Niagara Falls. By 1914, separate generating and transmission companies seemed unnecessary and Amherst Power was absorbed by the Turners Falls Power & Electric Company (Montague Bicentennial Committee 1954: 12)

Cabot resigned as president of the Company in 1919 because of ill health. General Manager George W. Lawrence succeeded him. When Lawrence died in 1939, Fred C. Abercrombie was elected president and served until consolidation with the Western Mass. Electric Company in 1942. After his retirement, Cabot moved to a career in teaching at Harvard University, leading courses in business and public utility management. Phillip Cabot died in 1941.

The site of Cabot Camp was sold in two separate transactions to the Turners Falls Company. In 1883, the northwestern section was sold by Alfred Cobb (Franklin County Deed Book 369-95); an undated land map shows both an "old mill foundation" and an "old dam abutment" (Western Mass. Electric Company n.d.). In 1903, Sarah Briggs sold the part adjoining East Mineral Road that may have contained a section of an earlier toll house (Deed Book 503-51).

Around 1913, Cabot decided to redesign the former Briggs and Cobb properties as his rural retreat, the property having been purchased by the power company for flowage rights. "With the help of a Boston architect, Cabot closely supervised the construction of a large stone meeting room or dining hall. The heavy beams, rafters, heavy roof and side wall boards were procured from an old barn in Ashfield. The old "ship-knees" holding up the cross beams came from Salem or the eastern Massachusetts area to be re-erected on the site at the mouth of the Millers River" (Abercrombie 1973: 7).

> *"Especially noteworthy are the thick stone masonry walls, the slanted keystone arch, huge fireplace and chimney easily capable of burning logs cut into four foot lengths, and the extremely heavy roof construction topped off by a quarry stone roof rarely seen today. He added an ell and kitchen area connecting the old toll house to the new meeting room, and a carriage or garden house with thick stone walls, heavy beams, rafters, roof boards and tremendous slabs of slate.*
>
> *A stone-lined circular well was constructed with an underground pipe running into the cellar area of the old toll house where a hand pump provided water for general household use. Cabot, under a long-term lease, spent a good deal of his free time at this camp, whiling away some of it working with plaster of Paris forms designing various ceiling molds and wall pillars which today still remain in the ell part of the house. He himself attached them to these specific locations with fish line he provided back in the 1900s.*

Following Cabot's retirement in 1919, Fred Abercrombie, then treasurer and later president of the Turners Falls Power & Electric Company, took over the long-term lease from the power company when Cabot began teaching at Harvard. Under this lease, the Abercrombie family maintained and enjoyed Cabot

Camp for over 40 years. When construction for the Northfield Mountain Pumped Storage Station began in 1968, Fred's son Allen Abercrombie voluntarily cancelled the long-term lease on Cabot Camp (Abercrombie 1973: 7). From 1968 to the present, Cabot Camp has been owned and maintained by the successor companies to Western Massachusetts Electric, including FirstLight. Cabot Camp is a Non-Project facility.

NRHP Eligibility Evaluation: Cabot Camp is NRHP-eligible under Criterion A (period of significance ca. 1913-1968) as the summer residence of two officers of the Turners Falls Power & Electric Company and its successor companies, and under Criterion C (period of significance is ca. 1913) for embodying the characteristics of the New England Colonial Revival Style.

Criterion A

This resource is NRHP-eligible under Criterion A with a period of significance from ca. 1913 to 1968. Cabot Camp is significant for its association with the Turners Falls Power & Electric Company (TFP&E) and its successor companies up to and including its current owner, FirstLight. The property consists of two parcels on the Connecticut and Millers Rivers purchased in 1883 and 1903 respectively and upon which TFP&E president Phillip Cabot erected these buildings as a summer residence. Cabot was instrumental in the early growth and development of TFP&E, including construction of the company's two power stations, dam, and power canal at Turners Falls, as well as merging the company with other regional electric utility companies. Cabot leased the property from the power company for his own use, and when he retired in 1919, his successor Fred Abercrombie took up the lease and resided there.

Criterion B

Although the Cabot Camp is associated with the life of financier and Turners Falls Power Company executive Phillip Cabot, it is not known whether there are other extant buildings elsewhere outside of the Projects' APE more closely associated with Cabot's productive life, as required by Criterion B. The NRHP-eligibility of Cabot Camp under Criterion B is undetermined.

Criterion C

Cabot Camp is NRHP-eligible under Criterion C as it embodies characteristics of rustic New England Colonial Revival-style architecture that were popular in the design of rural retreats and summer residences of the early 20th century. The Colonial Revival Style harkened back to simple and unornamented architecture that was felt to be more in keeping with rural and rustic settings such as this. According to an unpublished history of Cabot Camp, Boston native Phillip Cabot engaged an unnamed Boston architect and was instrumental in several of the house's design features. Prominent features include the use of uncut fieldstone, slate roofs, working wood shutters, over-sized chimneys, and a mix of wood and stone for the exterior. Although there was no interior access, Cabot Camp appears to be in good and unaltered condition and retains all seven aspects of integrity.

Northfield Mountain Pumped Storage Facility and Visitor's Center (TRC-34, Route 63, Northfield and Erving, MA)

Description: The Northfield Mountain Pumped Storage Facility is a Project facility owned, operated, and maintained by FirstLight, located in the towns of Erving and Northfield, Franklin County, MA on the east side of the Connecticut River and approximately 5.5 miles upstream from the Turners Falls Dam in Montague. The principal structures comprising the project are the impervious-core, rock-fill dam and dikes forming the upper reservoir; intake channel and intake structure; pressure conduit system; underground powerhouse cavern

with four Francis-type reversible pump-turbines and generator-motors; tailrace tunnel; surge suppression chambers and shafts; tailrace exit structure and tailrace canal; vertical ventilation and emergency exit shaft; and the main access tunnel leading to the underground structures. The individual features of the Northfield Mountain Pumped Storage Facility are described in the *Pre-Application Document* and in more detail below:

Turners Falls Impoundment

The 20-mile reach of the Connecticut River between the dams at Vernon, VT and at Turners Falls, MA serves as the Lower Reservoir of the Northfield Project and has a drainage area of 7,138 square miles. There are two project gage houses on the Turners Falls Impoundment: Gage House L2 is located on the Connecticut River on the north side of the tailrace canal. Gage House L3 is downstream on the Turners Falls Impoundment, on the south side of the river 0.3 miles upstream of the Turners Falls Dam.

Upper Reservoir

The upper reservoir is located on top of Northfield Mountain in the Briggs Brook drainage area. The reservoir is formed by the main compacted earth-core rock-fill dam; a concrete gravity spillway structure; a concrete gravity dam, three compacted earth core rock fill dikes; and four natural ridges. A low-level reservoir outlet is located in the main dam. The water supply intake is also located under the main dam. The gated structure at the inboard toe of the dam is equipped with fish screens.

Main Dam and Dikes

The main dam and dikes are constructed of compacted rock-fill embankments utilizing a central impervious rock-filter design. The crests of the rock fill embankments are at El 1010 and are approximately 30 feet wide. Founded on sound groutable rock, the core is 12-feet wide. There are sand and gravel filter zones upstream and downstream of the impervious core with oversize rock zones forming the upstream and downstream faces. The impervious core was raised in 1979 on the downstream portion of the crest in the Main Dam to elevation 1,006.25 feet in response to settlement shortly after construction. This dam contains an intake structure and sub-foundation pipe for possible future water-supply diversion to the Quabbin Reservoir, a principal water supply for the City of Boston and parts of the Greater Boston metropolitan area.

The three dikes, known as the North, Northwest and West Dikes, are constructed in a similar manner and to the same crest elevation as the main rock fill dam, with a central impervious core-filter and compacted rock-filled embankments. They help form the upper reservoir.

Concrete Gravity Dam

At the west end of the intake channel, the reservoir is enclosed by a low concrete gravity dam. The main section is situated at the channel's end, is 327-feet long and varies from 10 to 20 feet in height. The concrete walls at both ends of the gravity section are constructed to a higher level, allowing a parapet wall to be constructed against the retaining wall on the right side of the intake. A series of 19 control monuments are located on the crests of the dam and dikes. A low-level outlet located in the main dam is used for releasing storm runoff from the reservoir.

Concrete Gravity Spillway Structure

The two-stage, un-gated spillway is designed to discharge natural rainfall runoff of the upper reservoir drainage area when the reservoir is full, and to protect the embankments from accidental overtopping. This spillway discharges into the Packard Brook valley which flows into the Millers River, and consists

of a concrete gravity-type weir section, approximately 550 feet long located in a shallow channel excavated in bedrock and a 20 foot long notch near the center of the structure.

Intake Channel

The intake channel, approximately 1890 feet long, directs the flow of water from the upper reservoir to the pressure conduit intake. The intake channel stop log and gate structure forms a low dam between the upper reservoir and the intake channel and prevents stormwater from entering the pressure conduit when the intake channel is dewatered. The submerged dam is 63 feet long with two manually operated sluice gates and two 18 foot wide stoplog slots which usually hold eight concrete stoplogs. The intake structure consists of a reinforced concrete intake portal that is 55 feet wide and 80 feet high to the crown of the arched roof. A vertical concrete pier 3.5 feet thick supports the portal roof and provides support for the intake trashracks. A welded steel trash rack system of 28 individual panels covers the intake portal and limits the entrance of debris into the pressure conduit.

Pressure Shaft

The pressure shaft and two elbows connect the pressure conduit intake to the pressure manifold. The manifold is formed by the branching of the pressure shaft into two 22 foot diameter concrete-lined conduits which in turn branch into four 14-foot diameter tunnels leading to the four welded steel-lined penstocks. The four welded steel penstocks connect the manifold with the powerhouse cavern. Each is 340 feet long with wall thickness varying from one to two inches. During pumping operation, water is pumped from the Turners Falls Impoundment via the powerhouse through the pressure shaft to the upper reservoir. During generation, water flows from the intake channel through the pressure shaft to the powerhouse.

Surge Chambers

The surge chambers consist of four vertical surge shafts interconnected by three horizontal surge galleries. Each of the four surge shafts is connected to one of the draft tube tunnels which controls the rate of flow between the draft tube tunnel and the surge chamber. Three surge galleries running parallel to the powerhouse interconnect the four vertical surge chambers.

Powerhouse

The powerhouse consists of an underground chamber excavated in the bedrock of Northfield Mountain. The powerhouse contains the four reversible pump-turbine motor-generator units and their spherical valves and governors, and the two main transformers. Two overhead bridge cranes service the entire length of the powerhouse. The powerhouse cavern is unlined and is laid out with the long axis running north and south measuring 328 feet long and 70 feet wide. There are four unit bays starting with Unit 1 at the north end. South of Unit 4 is the service and erection bay which also contains the control room. Access and ventilation air into the powerhouse are provided by the access tunnel which connects the south end of the powerhouse.

Tailrace Tunnel

Water flows between the powerhouse and the Turners Falls Impoundment via the tailrace tunnel. There are four draft tubes connected by a manifold to a common tailrace tunnel. The tailrace tunnel is concrete-lined, horseshoe shaped and 5,136 feet long, with a maximum width of 33 feet and a height of 31 feet. The exit structure into the Turners Falls Impoundment includes a transition from the horseshoe shape into a trapezoidal shape. Steel stop logs are used in the exit structure when needed to dewater the tailrace tunnel. A floating boom is provided across the exit channel to provide a barrier to large debris and boaters.

Culverts and Weirs

There is a series of 28 culverts and weirs as part of the Northfield Project. Culverts are constructed of corrugated metal pipe. Weirs are constructed of precast concrete.

Metropolitan District Commission (MDC) Facilities

The intake works for the MDC water supply line leading to the Quabbin Reservoir (Diversion Intake Works) is located at the east side of the upper reservoir along the main earth fill dam. It consists of an octagonal-footprint concrete structure, 94 feet high and 30 feet wide. Access to the tower is by means of a steel beam-reinforced concrete slab bridge leading from the roadway to main dam.

Historical Significance:

By 1965, the Connecticut Valley Electrical Exchange (CONVEX) covered six thousand square miles, generated up to three million kilowatts, and served about three million people within southern New England (Stephenson 1982: 650). Combined, nearly two dozen major hydroelectric stations along the Connecticut River were capable of producing collectively 700 thousand kilowatts of power.

On July 1, 1966, three Connecticut Valley power companies—Western Massachusetts Electric Company, Connecticut Light & Power Company, and the Hartford Light Company—joined forces to form Northeast Utilities Service Company (NU), creating the first new multi-state public utility holding company since the mid-1930s (WMECO 1987: 4). In 1967, Holyoke Water Power Company (HWP) joined the NU System, followed by the Public Service Company of New Hampshire (PSNH) in 1992. Reports estimated that by 1971 CONVEX would have a deficit of 314 thousand kilowatts, and by 1973 that deficit would increase to 666 thousand kilowatts. Studies to increase the generating capacity at the Turners Falls plants were well underway in 1961.

The economic boom of the 1950s and 1960s and consequent demand for energy caused investor-owned utility companies like NU to respond to market needs by diversifying their energy portfolio. They did so by constructing large-scale steam (coal-fired) stations, nuclear plants, and later, natural gas facilities. In addition, because of the limited number of suitable sites combined with the large environmental footprint required for hydropower, construction of hydroelectric facilities by investor-owned utilities declined in the late twentieth century. Hydropower continued to play a critical role in the electric power supply, however, in that it provided peaking power, was quicker and more cost-efficient to put online (or take offline) as required by electrical demands, and proved a viable method of balancing thermal base loads. For its part, in order to plan for future power demands, NU started an expansion plan in the 1960s which involved three multi-million dollar projects, including the Northfield Mountain Pumped Storage Facility in Massachusetts.

1. Connecticut Yankee Nuclear Power Plant at Haddam Neck CT (not owned by FirstLight) began commercial operation in 1968 and produced more than 110 billion kilowatt-hours of electricity during its 28-year operating history. In 1996, the CY Board of Directors voted to permanently close and decommission the power plant. After two years of planning and preparation, actual decommissioning began in 1998 and was completed successfully in 2007 with all plant structures removed.

2. Millstone Nuclear Power Station (not owned by FirstLight) is the only nuclear power generation site in Connecticut. It is located at a former quarry (from which it takes its name) in Waterford. Of the three reactors built here, units two and three are still operating at a combined output rating of 2020 MW. In terms of generating capacity, Millstone is the largest electrical generating facility

in New England, and the plant contains the second (unit 3) and third (unit 2) largest individual generating units on the New England electrical grid.

3. Northfield Mountain Pumped Storage Facility (owned by FirstLight) at Northfield MA was planned as the largest such facility of its kind in the world, surpassing both the Niagara (Robert Moses) Power Project and Blenheim-Gilboa Project, both in New York State, and both built in the 1960s. The pumped storage facility was designed to store water in reservoirs to be released during periods of peak electrical use, usually during the day or during periods of extreme weather. Northfield Mountain was chosen for the project location because of its 1000-foot summit crowned by a 300-acre natural basin, as well as for its proximity to the Connecticut River. The shape and geologic make-up of the land also enabled the powerhouse portion of the plant to be built underground and not rely on the natural flow of the river for its operation, another major design innovation (WMECO 1987: 13).

Construction of the Northfield Project began in late 1968, with the major job being the drilling and dynamiting of a 2500-foot tunnel, 565-foot ventilation shaft, 1130-foot pressure shaft, and the mile-long tail race between the powerhouse and the river, as well as the 10-story-high underground power house. Over 4.9 billion tons of rock were blasted to create the tunnels, shafts, and powerhouse (Samartino 1991: 26). Four 250,000-kilowatt capacity turbine generators were placed in the powerhouse cavern 700 feet below the surface. Also built were the 300-acre reservoir, the rock-fill dam 144 feet high and 5600 feet long, and other dikes totaling 5600 feet.

At the same time, the Turners Falls dam downriver was raised (Stone & Webster 1968). This enabled more water to be backed up behind the dam, creating a 2,500 acre impoundment on the Connecticut River. The Northfield Mountain Pumped Storage Facility began operation in early 1972. As part of the development, WMECO created the Northfield Recreation and Environmental Center, with exhibits on the area's geology, history, and ecology, along with facilities and trails for hiking, skiing, and snowshoeing (Samartino 1991: 139).

National Register Evaluation: The Northfield Mountain Pumped Storage Facility meets the standards for eligibility for the NRHP under Criteria A and C. It is significant as being the world's largest pumped storage facility at the time of its completion and for its association with the more than century-long history of hydroelectric power in the Connecticut River Valley. The Northfield Mountain facility, built between 1968 and 1972, will be eligible for the NRHP in 2018 when the present operating license expires.

Criterion A

The Northfield Mountain Pumped Storage facility meets Criterion A for its association with the more than 200-year history of harnessing the Connecticut River in western Massachusetts for manufacturing and hydroelectric power purposes. As the demand for electricity grew in the twentieth century throughout western Massachusetts, many smaller regional utility companies merged to form larger entities capable of financing and building ever bigger hydroelectric facilities, culminating in the formation of Northeast Utilities in 1966 and construction of the Northfield Mountain Project in 1968-1972. The resource is significant on the state and local levels with a period of significance from 1968 to 1972.

Development of the Connecticut River for transportation and power purposes dates to 1794, when the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. In 1864, a group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the water rights from the Proprietors and formed the Turners Falls Company. Soon, the improved canal was powering new manufacturers moving to Turners Falls (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1908, Boston financier Phillip Cabot assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new direction. In 1942, the biggest merger was made when three pre-existing companies were merged into Western Massachusetts Electric Company (WMECO): Turners Falls Power & Electric Company, Pittsfield Electric Company, and United Electric Light Company.

On July 1, 1966, three Connecticut Valley power companies—Western Massachusetts Electric Company, Connecticut Light & Power Company, and the Hartford Light Company—joined forces to form Northeast Utilities Service Company (NU). Despite such a great generating capacity, reports estimated that by 1971 CONVEX would have a deficit of 314 thousand kilowatts, and by 1973 that deficit would increase to 666 thousand kilowatts. Studies to increase the generating capacity at the Turners Falls plants were well underway in 1961. For its part, in order to plan for future power demands, NU started an expansion plan in the 1960s which involved three multi-million dollar projects, including two nuclear power plants in Connecticut and the Northfield Mountain Pumped Storage Facility in Massachusetts.

The Northfield Mountain pumped storage facility at Northfield MA was planned as the largest such facility in the world. In September 1964, an application for a preliminary permit had been filed with the Federal Power Commission and by May 1968, an operating license had been issued for the Northfield Project. Construction of the Northfield Project began in late 1968 (Samartino 1991: 26). The Northfield Mountain Pumped Storage Facility began operation in November 1972, greatly increasing overall capacity and bringing NU firmly to the forefront of American utilities.

Criterion C

The Northfield Mountain Pumped Storage facility meets the standards of Criterion C for embodying the distinctive design and engineering characteristics of a pumped storage hydroelectric facility. It is significant on the national and state levels with a period of significance from 1968 to 1972.

Some of the first uses of pumped storage technology occurred in the 1890s in the Alpine regions of Switzerland and northern Italy. In the 1930s reversible hydroelectric turbines became available. These turbines could operate as both turbine-generators and in reverse as electric motor driven pumps. The first use of pumped-storage in the United States was in 1930 by the Connecticut Electric & Power Company, using a large reservoir located near New Milford, CT pumping water from the Houstatonic River to the storage reservoir 230 feet above.

During the early twentieth century, utilities relied heavily on electricity generated by conventional hydroelectric power plants as well as conventional steam units. By the mid-twentieth century, as average electric loads doubled each decade, utilities began developing a more diverse energy portfolio to account for base and peak load variability. Technological advancements in steam-power generation and the introduction of nuclear power helped stabilize the increasing demands for base load capacity. However, using those types of generation for peak power production could potentially lead to mechanical stresses in the units. Utilities, therefore, began looking to pumped-storage facilities for addressing peak demands and typically designed the projects to operate in conjunction with other generation facilities. The 1960s and 1970s witnessed a sharp increase in the number of proposed pumped storage developments across the country

Pumped storage hydroelectric plants continued to be built in the US throughout the 1950s and early 1960s, as innovations in engineering and pumping technology made their construction ever more appealing to power companies looking to harness water power.

Mohawk Trail (TRC-41, Route 2 Between Williamstown and Orange, MA)

Description: The Mohawk Trail opened in 1914 as one of the first auto-touring roads in the country. The highway known today as the Mohawk Trail is a section of State Highway 2 and Route 2A (the original Route 2 before re-routing took place). There are various formal and informal designations of the Mohawk Trail's endpoints, but the most common reference is between Williamstown, on the New York State border and Athol, along the Millers River. This road traverses a part of the state that is famous for its scenery and its association with Native Americans. In 1914, the most mountainous miles of the Mohawk Trail were graded and specifically dedicated to auto touring. This stretch begins in the small city of North Adams and zig-zags its way up the Hairpin Turn to the western summit of Hoosac Mountain. It runs eastward along heavily wooded ridges, then drops into the long-settled Deerfield Valley, and finally descends into the broad Connecticut River Valley (Tree and Davis 2011). There are numerous points of interest along the way, including many scenic viewpoints, roadside attractions and gift shops. A 523-foot section of Route 2 along the French King Bridge as well as small portions in Gill (573 feet) and Erving (588 feet) lie within the Project APE, but the road and right-of-way are owned and maintained by the State of Massachusetts.

Historic Significance: One of the oldest designated tourist and scenic routes in the country, the Mohawk Trail traces its roots to Native American trails. Because Indian trails, as a general rule, followed the natural grades of the landscape, they often later became roads for traders and settlers. The early European settlers used the Indian Path, as it was then called, to travel between the English settlements of Boston and Deerfield, and the Dutch settlements in New York. The settlers and traders brought with them the horse and wagon, which required the widening and slight relocation of the original path. After the close of the Revolutionary War the establishment of privately owned "turnpikes" became common place (Bennett 1990: 3).

Chartered in March 8, 1797, the Second Massachusetts Turnpike was authorized from Charlemont to just east of North Adams on the western side of Hoosac Mountain. This route over Hoosac Mountain followed approximately the line of the old Indian trail. Three years later, the General Court of Massachusetts granted a charter to the proprietors of The Fifth Massachusetts Turnpike, authorizing them to lay out a toll road from Greenfield and Northfield to Leominster. This road was the first road to open a direct line from east to west across Massachusetts. A few years later, in 1802, a group of men from Greenfield chartered The Fourteenth Massachusetts Turnpike, to complete the section of turnpikes from Boston to the Hudson River, essentially by connecting the Fifth Massachusetts Turnpike with the Second Massachusetts Turnpike. Eventually, the turnpike corporations dissolved, and the roads were turned over to the counties as free roads (Bennett 1990: 3).

With the advent of the automobile in the early 1900s, the inadequacies of the old wagon roads in western Massachusetts for motorized vehicles became evident, and the Massachusetts Highway Commission made plans to improve all the state's roads, including the section of highway from Greenfield to North Adams. Work was begun in September of 1912 and completed in November of 1914, at a cost of $350,000. At the opening ceremonies, October 24, 1914, the highway was officially dedicated as "The Mohawk Trail," after the Mohawk Indians of that region (Bennett 1990: 1).

In the early 1920s, the Massachusetts Department of Public Works began a project to relocate a particularly hazardous seven-mile stretch of the Mohawk Trail Highway between Erving and Greenfield.

The old route had wound through the villages of Millers Falls and Turners Falls on a course marked by steep grades, sharp curves, and narrow bridges. The relocated route ran north of both villages on an alignment whose principal challenge was the crossing of the precipitous Connecticut River gorge near the French King Rock (Bennett 1990: 11). After looking at several plans, the engineers decided to cross the Connecticut River with a bridge at the height of the hills on either side, about 135 feet above the water. When completed, the entire project would include the construction of about six miles of new state highway, a highway grade separation, a bridge over the Central Vermont Railroad, and the construction of a large high-level steel arch bridge over the Connecticut River (Bennett 1990: 5). During the summer of 1931, the contracts for the Erving-Greenfield cutoff were awarded to Kelleher Corporation of Montague, Massachusetts (for the western section, from Greenfield to the Connecticut River) and to Lawton Construction Company of Providence, Rhode Island (for the eastern section, from the Connecticut River to the road to Millers Falls, just east of the road to Northfield, now Highway 63). Work on these two contracts commenced immediately, and the highway was completed in July of 1932 (Bennett 1990: 5).

The challenge of driving over rather than riding through Hoosac Mountain drew families from throughout the Northeast. Recognized as a destination in its own right from the 1920s through the 1950s, this initial stretch of the Mohawk Trail sprouted tea shops and motor courts, trading posts and campgrounds, both private and state. In the 1960s vacation patterns including the new method of air travel and highway routes changed. The 1965 opening of the Massachusetts Turnpike (Route 90) provided a quicker route to cross the state resulted in the decline in the use of Route 2, and also the deterioration and demolition of the lookout towers, motor courts, tearooms, and trading posts (Tree and Davis: 2011).

NRHP Eligibility Evaluation: The Mohawk Trail, including the523-foot section of Route 2 along the French King Bridge as well as small portions in Gill (573 feet) and Erving (588 feet) that falls within the Project APE is NRHP-eligible under Criterion A with a period of significance from ca. 1912 to 1960. The resource surveyed is the automobile Mohawk Trail route. The "Mohawk Trail" that is currently listed in the National Register (1973) is a segment of the ancient footpath that the Native Americans traveled between the Hudson River and Connecticut River. The NRHP-listed corridor follows the Cold River valley between Florida, MA and Charlemont, MA.

Criterion A:

This resource is NRHP-eligible under Criterion A. The Mohawk Trail is significant for its association with the transportation history of Massachusetts and the expanding movement for conservation, public outdoor recreation, and regional planning that gained momentum in the 1920s and became the hallmark of Federal policy in the 1930s. The trail demonstrated a new form of outdoor recreation based on recreational motoring. This road possesses statewide significance in New England as one of the best preserved scenic byways that continues to evoke a sense of time and place as an early twentieth-century automobile route. The original alignment of this road remains largely intact allowing the resource to retain integrity of location, design, and workmanship. The rural characteristics of the landscape and environs have been retained, contributing to the significance of the road and its integrity of setting, feeling, and association as an early twentieth-century roadway.

Resources in the Project APE Not Eligible for National Register Listing

Resources Previously Determined Not Eligible for National Register Listing:

Three previously surveyed resources (TRC-29 and TRC-30 and NFL.926) within the Project APE have been determined not eligible for NRHP listing by the respective SHPOs in Massachusetts and New Hampshire.

Fort Hill Division of Boston & Maine Railroad (TRC-29 and TRC-30):

The abandoned Boston & Maine Railroad (Fort Hill Branch) in Hinsdale, NH was determined not eligible for the NRHP by the New Hampshire SHPO in 1994. Constructed in 1911, the 8.5-mile-long Fort Hill Division of the Boston & Maine Railroad runs from the NH-VT state line on the Connecticut River at Brattleboro VT south along the east riverbank in Hinsdale NH to Dole Junction, where it connected with the 21.75-mile-long Ashuelot Branch and crossed the Connecticut River again into Vernon VT. At one time, the line consisted of eight bridges, a 2800-foot causeway, eight mile marker posts, and a number of culverts and drains. Two resources associated with this line, the bridge piers which carried the removed bridge over the Connecticut River (Field No. TRC-29) and the extant bridge over Ashuelot River (Field No. TRC-30) are within the Project APE.

Description: TRC-30, a riveted-plate deck-girder bridge (Bridge #53.51) with cut-stone abutments carried the single-track line over the Ashuelot River, west of the village of Hinsdale. The rail line was abandoned in 1974, and tracks and ties have been removed. The rail bed and structures were purchased by NH DOT in 1995. This bridge, along with the other railroad bridges and structures still standing, was incorporated into a hiking/bike/snowmobile trail and was re-decked with boards and metal safety railings added.

TRC-29, the six-span metal bridge (Bridge #50.52) over the Connecticut River at the line's southern terminus was closed in 1970 and based on historic aerial images the superstructure was removed between 1981 and 1997. The structure's six concrete-sheathed piers in the river have been left in place and are in deteriorated condition. Bridge #50.52 is a Non-Project facility that is not owned or maintained by FirstLight.

NRHP Eligibility Evaluation:

Due to the abandonment of the line and removal of the bridge over the Connecticut River, the resource no longer retains the integrity of design, materials, feeling, or association. Due to the lack of integrity, the resource no longer conveys its significance and the resource was determine not eligible for listing in the NRHP by the New Hampshire SHPO in 1994.

Central Vermont Railroad Bridge over the Connecticut River (NFL.926)

Description: The Central Vermont Railroad Bridge over the Connecticut River in Northfield, MA is an approximately 800-foot, six-span bridge. Originally constructed in 1904, the end spans are steel deck-plate girders and the main four spans were steel Pratt deck trusses. Only one of these is extant, that on the northern end. After the 1936 flood, the remaining three trusses were replaced with steel Warren deck trusses. As part of the reconstruction, the original stone piers were repurposed and were topped with concrete due to the new truss design. It is noted in the annual reports of the railroad that the 1904 bridge was constructed as part of a complete rebuilding of an 1840s two-tier wooden railroad/vehicular toll bridge, thus the stone piers and abutments may predate the 1904 bridge (Central Vermont Railway Company 1905: 11). The Central Vermont Railroad Bridge is a Non-Project facility that is not owned or maintained by FirstLight.

Historic Significance: The Central Vermont Railroad connected Montreal, Quebec, with New London, Connecticut, using a route along the shores of Lake Champlain, through the Green Mountains and along the Connecticut River valley, as well as Montreal to Boston, Massachusetts, through a connection with the Boston & Maine Railroad at White River Junction, Vermont. Chartered in 1843, the railroad reached Northfield from the north on October 10, 1848. It has operated under several companies since the 1890s, including the Grand Trunk Railway, Canadian National, and New England Central Railroad. The route along the Connecticut River also handles the twice-daily Amtrak Vermonter.

Shortly after the Bennett's Meadow Bridge in Northfield was completed in 1899, the Massachusetts railroad commission condemned the 50-year-old, two-tier wooden railroad/vehicular toll bridge located just upstream on the Connecticut River. The Central Vermont Railway then petitioned the legislature for authority to build a new bridge in cooperation with the town of Northfield. At first, the town favored the construction of another joint railroad and highway bridge, and an agreement was reached by which the town was to pay $10,000 toward the cost of a steel bridge. Public sentiment shifted towards building a separate highway bridge, which would not only relieve them of paying rent for their portion of the railroad bridge, but would also do away with the nuisance of passing overhead trains (Bennett 1990: 6). At this time, it is presumed that the railroad began to erect the 4-span, Pratt-truss deck bridge with deck plate girder approach spans. As mentioned in the annual reports of the railroad, the existing stone piers and abutments may date to the two-tier wooden railroad/vehicular toll bridge (Central Vermont Railway Company 1905: 11). Severely damaged in the 1936 flood, the three southern spans were replaced with new spans of a Warren truss deck design. This new design called for taller piers in order to keep the original rail bed at grade and concrete was added to the top of the stone piers (Roper 1989).

NRHP Eligibility Evaluation:

Due to the 1936 alterations, the resource no longer retains the integrity of design, materials, or workmanship. Due to the lack of integrity, the resource no longer conveys its significance. In 1989, MHC determined the bridge not eligible for listing in the NRHP.

Surveyed Resources Not Eligible for National Register Listing:

Previous surveys, as well as the 2013-2014 TRC survey, have identified twenty-seven (27) resources in Massachusetts and two in Vermont that are not eligible for NRHP listing due to lack of significance and/or integrity. These resources are described below, along with the rationale for their NRHP status and their integrity. Updated and/or new MHC and VDHP survey forms, along with maps locating these resources, are found in Appendices B and D.

Resources in Massachusetts Not Eligible for the NRHP:

- Frederick Morgan House, 153 Millers Falls Road (Route 63), Northfield Farms (NFL.178)
- Red Suspension Bridge Remains on Gill and Montague Connecticut Riverbanks (GIL.907)
- Turners Falls Rod & Gun Club (Camp 1E) at End of Rod and Gun Club Road, Montague (TRC-7)
- Camp 2E off Industrial Boulevard, Montague (TRC-8)
- Camp 3E off Industrial Boulevard, Montague (TRC-9)
- Camp 11E on West Camp Road, Montague (TRC-10)
- Camp 10E on West Camp Road, Montague (TRC-11)
- Camp 9E on West Camp Road, Montague (TRC-12)
- Camp 8E on West Camp Road, Montague (TRC-13)
- Camp 7E on West Camp Road, Montague (TRC-14)
- Camp 16E at end of West Mineral Road, Montague (TRC-15)
- Camp 15E at end of West Mineral Road, Montague (TRC-16)
- Camp 17E at end of West Mineral Road, Montague (TRC-17)
- Camp 7W on Trenholm Way, Gill (TRC-18)
- Camp 2W off Peterson Way, Gill (TRC-19)
- Camp at End of Grist Mill Road, Gill (TRC-20)
- Camp at 40 Grist Mill Road, Gill (TRC-21)
- Camp at 37 Vassar Way, Gill (TRC-22)
- Camp 11W at end of Taylor Place, Gill (TRC-23)
- Camp 15W off of Chase Road, Gill (TRC-24)
- Wanamaker Lake Dam off Route 63, Northfield (TRC-25)
- Route 63 Bridge over Pauchaug Creek, Northfield (TRC-26)
- Turners Falls Road (White) Bridge over Connecticut River Greenfield- Turners Falls (TRC-38)
- Boston & Maine Railroad Bridge over Power Canal (TRC-2)
- Boston & Maine Railroad Bridge over Branch Canal (TRC-3)

Resources in Vermont Not Eligible for the NRHP:

- Whithed's/Shuttle's Mill, Dam and Millpond in Vernon Village, Vernon (TRC-27)
- Culvert under Route 142 and Governor Hunt Road, south of Vernon Dam, Vernon (TRC-28)

Surveyed Resources Not Eligible for National Register Listing in Massachusetts:

Frederick Morgan House, 153 Millers Falls Road (Route 63) (NFL.178)

Description: The Frederick Morgan House is located on the east side of Millers Falls Road (Route 63) in a rural area just north of the entrance to the Northfield Mountain facility and Visitors Center. Set on a stone foundation, the 2-story, 5-bay dwelling is of wood-frame construction with a central-hall, double-pile plan. Originally surveyed in 1978, significant alterations have occurred to the dwelling since then, including replacing the clapboard with vinyl siding, the 2/2 sash windows with 1/1 vinyl sash, and recessing the single-leaf door with sidelights and replacing with modern replacements. The asphalt-shingled, side-gable roof has off-peak interior brick chimneys and cornice returns. A 1-story addition with standing-seam, gable roof is attached to the rear elevation. An open hyphen off the rear elevation connects the dwelling to a 3-bay garage. The western-bay of the garage sits on a fieldstone foundation and most likely the modern garage expanded upon an older building. The remainder of the garage has a concrete foundation, vinyl siding, and corrugated metal gable roof.

There are four agricultural buildings located east of the dwelling. A pasture and pond are located further east of these buildings. The largest of the agricultural buildings is a mixed-use barn. Set on a concrete foundation, the bank bark has a central aisle accessed by double-leaf sliding doors. The side-gable roof is corrugated metal and the walls are board-and-batten. The windows are 6-light hopper windows. One-story additions are located on the façade and side elevations. Concrete block in construction and clad with board-and-batten, weatherboard, and brick-tex siding, these additions provide access into the larger barn. A one-story addition on the banked (rear) elevation spans the full elevation and connects the mixed use barn to a 1-story dairy barn. The dairy barn is of concrete-block construction with weatherboard siding on the upper-half of the walls, a corrugated metal roof with vents, and evenly spaced 6-light hopper windows at the stalls. Two wood-frame outbuildings are located north and south of the connected barns. The Frederick Morgan property is a Non-Project facility that is owned by FirstLight.

History: The 1740 Dwight survey added land to the south boundary of Northfield known as Northfield Farms. This area became important agriculturally and still has a number of large dairy farms plus some small agricultural enterprises. This homestead traces its land origins back to the original "Pembroke Grant" of 1736. Sold by the five grantees in 1802 to Noah and Reuben Morgan as part of a 500 acre tract of land, the parcel came to Frederick Morgan, Sr. in 1811 after the death of Reuben Morgan. There is no mention of the house until the 1831 deed when Frederick Morgan Sr. conveys to his sons Gerizim and Calvin "the home where he now lives." Although heavily altered, the house most likely dates from the Reuben Morgan era (1802-1811) or early in the ownership of Frederic Morgan Sr. beginning in 1811. Calvin relinquished his rights to the property in 1834 and the property was passed onto Nancy Morgan in the 1850 will of Gerizim Morgan when the property was divided into seven parcels. A Mrs. Morgan is noted as residing on the property on both the 1858 Franklin County Map and the 1871 F.W. Beers & Co. Franklin Co. Atlas. The Morgan family holdings in the Farms area of Northfield represented a significant element in the growth of the agricultural economy of the town, particularly to the Farms section.

In 1884 the property was sold to Edward Nash (1838-1902) who also bought three additional surrounding parcels. According to the 1900 U.S. Census, Edward and his son Ernest lived on the property operating a farm. According to the 1910 census Ernest, who was willed the property in 1902, lived on the property with his wife, Mary, and a 57-year-old Polish farmhand, Joe Smith and operated a dairy farm. By 1920 he was a widower, operating a general farm and his mother-in-law, Irene Osgood, resided on the property. The 1930 census shows the same information, although Irene Osgood is listed as a housekeeper. In 1940 the property was valued at $7,000 and Ernest was the only resident. Ernest Nash sold the property to

Frank Fuller in 1950. The property was deeded by Frank and his wife Irene to the Western Massachusetts Electric Company on September 23, 1965 (Franklin County Deed Book 1187, Page 151).

NRHP Eligibility Evaluation: Based on historic research and field observations, the Frederick Morgan House is not eligible for the NRHP under Criteria A, B, or C due to lack of historic/architectural significance and lack of integrity. Due to the replacement siding, windows, and replaced entrance, the resource no longer retains the integrity of design, materials, and workmanship.

Red Suspension Bridge (GIL.907)

Description: The Red Suspension Bridge was built by James W. Shipman in 1878 at the site of a ferry landing that had run for almost a century. Built at a cost of $48,000, it was a 563-foot-long suspension bridge, designed with the Roebling system of inclined stays (Montague Bicentennial Committee 1954: 110). Although damaged by the 1936 Flood, it remained standing until 1942, when it was dismantled and sold for scrap metal during World War II. Today the only remnants of the bridge are the stone abutments in Gill and Montague. Copies of the original bridge specifications and contract survive in the H. Hobart Holly Collection, Boston Society of Civil Engineers Section, Boston, Massachusetts. The construction contract states:

> *The parties of the first part [Hutchinson & Shipman] agree to furnish a certificate from John A. Roebling's Sons that the materials used in the cables and stays in the above bridge is of ample strength to sustain a rolling load of forty pounds per square foot in addition to its own weight with a factor of 4. Also that the elastic limit of each 2 1/4" steel wire rope is not less than 6-9 tons and the breaking strength is no less than 15-6 tons* (Buonopane 2006: 13).

This statement implies that the Roebling Company is certifying the actual design of the bridge—the relationship between applied loads and strength of the bridge elements. Thus, the Red Bridge stands as evidence that the Roebling Company was closely involved with the structural design of bridges for which they supplied wire and cable. Although it was demolished in 1942, the bridge was designated a Massachusetts Historic Civil Engineering Landmark by the Boston Society of Civil Engineers in 1990. The Red Suspension Bridge remains are a Non-Project facility that are not owned or maintained by FirstLight.

History: The Upper Suspension Bridge, or "Red Suspension Bridge," connected Turners Falls with Riverside, located across the Connecticut River. The bridge was built in 1878 on the upstream edge of Turners Falls, at the site of a ferry landing that had run for almost a century, and was complemented by the Lower or "White" Suspension Bridge, constructed in 1872 on the downstream side of Turners Falls. Built at a cost of $48,000, the bridge was 563 feet long and stood 20 feet above the water level (Montague Bicentennial Committee 1954: 110). It survived the great flood of 1936, which wiped out many other bridges on the Connecticut River in Franklin County, but after the completion of the Turners Falls-Gill Bridge in 1938 it was closed to all but bicycle and foot traffic. As a part of the World War II salvage movement, the bridge was dismantled in September 1942.

The suspension bridge was designed with the Roebling system of inclined stays which was also used for the Lower Suspension Bridge. John A. Roebling was the preeminent suspension bridge designer in late-19th-century America, building suspension bridges for aqueducts, road, and rail use. Over the course of his career, John Roebling designed and constructed a series of suspension bridges of increasing length and his final design for the Brooklyn Bridge (main span of 1595 ft.) was completed in 1883 under the

direction of his son Washington A. Roebling. The stayed suspension bridge system developed by John A. Roebling and continued by Washington was highly successful and had a widespread influence on suspension bridge design in the late 19th century (Buonopane 2006: 12).

For construction of the 1868 Harrison Bridge over the Whitewater River between Ohio and Indiana, the county commissioners hired John A. Roebling & Sons to write the specifications for a 425-ft.-span suspension bridge. Washington Roebling actually submitted a bid in partnership with a local engineer, but the contract was awarded to James W. Shipman & Co. of Cincinnati. By 1877, Shipman was practicing under the name of the New York Bridge Co. and the Roebling-style suspension bridge figured prominently in their advertising and letterhead (Buonopane 2006: 13). In 1878, Shipman's New York Bridge Co. (also known as Hutchinson & Shipman) won the contract for a suspension bridge of 563 ft. over the Connecticut River at Turners Falls in Massachusetts, later to become known as the "Red Bridge."

NRHP Eligibility Evaluation: Based on background research and field observations, the resource is not eligible for the NRHP under Criteria A, B or C due to its lack of integrity. Retaining only its stone abutments, the resource lacks the integrity of materials, workmanship, design, association, and feeling.

Summer Camps along the Connecticut River (TRC-7 to TRC-24)

Description: Several early- to mid-20th-century summer camp dwellings are located along both sides of the Connecticut River in Massachusetts on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently owns the land and licenses the existing building lots to private individuals, a few of whom are descendants of the original owners, who own and maintain the buildings. Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are rustic, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb). While the camp buildings are located on land owned by FirstLight and permitted to private individuals, the camp buildings themselves are privately owned Non-Project facilities and are not maintained by FirstLight.

NRHP Eligibility Evaluation: Based on background research and field observations, the collection of summer camps along the Connecticut River is not eligible for NRHP listing (either individually or as a thematic group) under Criteria A, B, or C due to lack of integrity and/or architectural significance. As only 18 of the 150 original camp residences are extant, the collection of camps no longer embodies the

distinctive designs, materials, setting, and methods of construction characteristic of recreational camps as originally built along the Connecticut River. The majority of the individual camp residences have non-historic additions and replacement materials impacting their integrity of design, workmanship, and materials.

Turners Falls Rod & Gun Club (Camp 1E), End of Rod and Gun Club Road (TRC-7)

Constructed ca. 1930, this 1½-story, 3-bay frame building on a concrete block foundation has a side-gable roof and a 4-bay shed-roofed front dormer. The wrap-around porch is enclosed. Formerly a residence, the building was converted to a clubhouse at an unknown date and a large addition for meeting space was added to the west elevation. The west entrance is original; the north porch entrance with wooden hood is later. The board-and-batten siding, windows, doors and rear hip-roofed ell and the large side-gable-roofed ell are not original. The interior features knotty pine paneling and an original stone fireplace and hearth. Due to the large addition, porch enclosure, and replacement siding and windows, the resource does not retain the integrity of materials, workmanship, and design.

Camp 2E, Off Industrial Boulevard (TRC-8)

Constructed ca. 1950, this 2-story, 3-bay frame house on concrete-block piers has a side-gable roof with exposed rafter ends, wood corner boards, and brick-tex siding. The central entrance with double-leaf door on the north is flanked by 6/6 windows with wood frames. There are paired 6-pane wood pivot windows in the attic story. On the south is a 2-story, 2-bay shed-roofed wing with a glassed-in porch on the second story. A modern wood deck is on the south. Due to the replacement siding and door replacement, the resource does not retain the integrity of materials.

Camp 3E, Off Industrial Boulevard (TRC-9)

Constructed ca. 1930, this 1-story, 3-bay frame building on a concrete-block foundation has a front-gable roof with exposed rafter ends, wood corner boards, and a partially enclosed porch with plain posts. Most of the metal and vinyl sliding windows and sash windows are not original; the 3-part attic windows appear original. The house has asphalt shingle siding. There is a below-grade entrance on the north below the enclosed porch in the concrete block foundation possibly for storage. There are two outbuildings: a wood storage shed and a storage shed. Due to the addition, porch enclosure, and replacement siding and windows, the resource does not retain the integrity of materials, workmanship, and design.

Camp 11E, West Camp Road (TRC-10)

Constructed ca. 1930, this 1-story, 3-bay frame house on concrete-block foundation has a side-gable roof with exposed rafter ends, wood corner boards, and German siding. Entrances are on the south, west and east. The west entrance appears original and has a door with four panels and 3-pane light above. On the east is an exterior-end shouldered brick chimney. There is a shed-roofed porch, presently screened, on the north. The shed-roofed addition on the south is not original and has a deck. The house has 1/1 windows with wood frames.

Due to the addition, porch enclosure, and replacement siding and windows, the resource does not retain the integrity of materials, workmanship, and design.

Camp 10E, West Camp Road (TRC-11)

This building was constructed by a Mr. Stone in 1942 who resided here throughout the year (Interview with Leena Newcomb). This 2-story, 1-bay frame house on concrete-block foundation has a front-gable roof with exposed rafter ends and vinyl siding. The house has been greatly enlarged on the east and west with shed-roofed and gable roofed-additions. Windows and doors are not original. The wrap-around porch is enclosed and is further extended by a deck. Due to the additions, porch enclosure, and replacement siding and windows, the resource does not retain the integrity of materials, workmanship, and design.

Camp 9E, West Camp Road (TRC-12)

Constructed ca. 1930, this 1-story, 3-bay frame house on a rubble-stone foundation has a side-gable roof with exposed rafter ends, German siding, and wood corner boards. There is an exterior-end brick chimney on the east gable end. The door on the north is flanked by 15-pane casement windows. Additionally, there are paired 1/1 sash windows. The north porch has been enlarged and now wraps around the west gable end where it is enclosed. The porch vertical-board siding is not original. The house was added on to on the south with a shed-roofed ell. Due to the additions and porch enclosure, the resource does not retain the integrity of design.

Camp 8E, West Camp Road (TRC-13)

Constructed ca. 1942, this 1-story, 3-bay frame house on a concrete-block foundation has a side-gable roof, German siding, and wood corner boards. There is an exterior-end brick chimney on the west gable end. The west door has four panels and a 2-pane window above the panels. There are original 2/2 sash windows with wood frames on the west and east. Most of the other windows are modern replacements. The shed-roofed porch on the north is enclosed and there is a modern deck on the west. Due to the porch enclosure, the resource does not retain the integrity of design.

Camp 7E, West Camp Road (TRC-14)

Constructed ca. 1950, this 2-story, 3-bay frame house on a concrete-block foundation has a front-gable roof, German siding, and wood corner boards. There is an interior brick chimney. There are original 2/2 sash windows with wood frames. The 2-story, shed-roofed porch on the north is enclosed. Due to the slope of the land, there is a full-basement level with porch and 3-light windows. Due to the porch enclosure, the resource does not retain the integrity of design.

Camp 16E, End of West Mineral Road (TRC-15)

This 1-story, 3-bay frame house has concrete-block piers, a side-gable roof, German siding, and wood corner boards. The windows have wood frames and wood shutters which were closed, obscuring the window sash. A single 4-light window is on the attic level of each gable end. The central entrance on the west is set within a 3-bay, shed-roofed porch with brick piers, plain posts and balustrade. There is a secondary entrance on the east with a small shed-roofed ell. The resource retains all aspects of integrity.

Camp 15E, End of West Mineral Road (TRC-16)

This 2-story, 3-bay frame house has a concrete-block foundation, a side-gable roof, clapboard siding, and wood corner boards. The 12/2 windows have wood frames and some have wood shutters. There are louvered attic ventilators in the gable ends. The 2-story front porch is supported on unfinished cedar posts and is screened on the second story, with a wood-shingled kneewall. The 1-story, 2-bay gable-roofed rear ell has 2-pane pivot windows with wood shutters. The exterior brick chimney has a replaced metal flue. The house is in generally unaltered but deteriorated condition and retains all aspects of integrity.

Camp 17E, End of West Mineral Road (TRC-17)

According to the current owner, his great uncle, Frank Bertrang purchased the camp in 1916. The building was reportedly built by a group of wealthy men from Turners Falls around 1910. This 1-story, 3-bay frame house has concrete-block piers, a side-gable roof, German siding, and wood corner boards. The windows have wood frames and wood shutters which were closed, obscuring the window sash. A single 2-light window is on the attic level of each gable end. There is a concrete exterior-end chimney on the south elevation. A 1-story porch with shed roof is on the east elevation. It has been screened in and has a wood-shingled kneewall. A shed roofed addition is on the west elevation and is partially open. The resource retains all aspects of integrity.

Camp 7W, Trenholm Way (TRC-18)

Constructed ca. 1946, this 1-story, 3-bay frame house has a concrete-block foundation, a front-gable roof with exposed rafter tails, German siding, and wood corner boards. The 1/1 sash windows have wood frames and some are paired. A 1-story, 2-bay rear section has a full-width side-gable roof and a shed-roofed section with separate entrance and both sash and casement windows is to its rear. There is a modern deck on the east. Interior brick chimneys are on the north and south. The resource retains all aspects of integrity.

Camp 2W, Off Peterson Way (TRC-19)

Constructed ca. 1930, this 1-story, 3-bay frame house has a concrete-block foundation, a front-gable roof with exposed rafter tails, German siding, and wood cornerboards. The 1/1 sash windows have wood frames and some are paired. A 1-story, 2-bay rear section has a full-width side-gable roof and a shed-roofed section with separate entrance and both sash and casement windows is to its rear. There is a modern deck on the east. Interior brick chimneys are on the north and south. The resource retains all aspects of integrity.

Camp 16Wat End of Grist Mill Road (TRC-20)

Constructed ca. 1930, this 2-story-with basement, 3-bay frame house has a concrete-block foundation, a side-gable roof, clapboard siding, and wood corner boards. The 6-pane pivot windows have wood frames. Built on a steep slope, the house has a basement entrance on the west. A full-width shed-roofed porch is cantilevered over the basement on the east. An entrance on the north end of the porch serves as the principal entrance to the house. The porch wraps around on the south and has been enclosed. An exterior-end brick chimney has had its upper portion removed. Due to the porch enclosure, and chimney alteration, the resource does not retain the integrity of design.

Camp at 40 Grist Mill Road (TRC-21)

Constructed ca. 1934, this 1-story, 3-bay frame house has a partial concrete-block foundation, a front-gable roof, German siding, and wood corner boards. Built on a steep slope, the house has a shed-roofed rear section on wood posts with lattice infill. A shed-roofed porch, partially screened, is on the east and has an entrance on the north. The windows have wood shutters which were closed at time of survey, so window panes were not visible. The resource retains all aspects of integrity.

Camp at 37 Vassar Way (TRC-22)

Constructed in 1958, this 1-story, 3-bay frame house has a concrete-block foundation, a side-gable roof with exposed rafter tails, and vinyl siding. Built on a steep slope, the house has a full basement on the rear. There are a variety of sash, sliding, fixed, and picture windows, most with vinyl-coated frames. The resource retains all aspects of integrity.

Camp 11W, End of Taylor Place (TRC-23)

Constructed ca. 1930, this house consists of two sections: a 1-story, 3-bay frame section with a concrete-block foundation, a side-gable roof with exposed rafter tails, replaced sash windows, and German siding. Two cinder-block chimneys are at either gable end. Built on a steep slope, the house has another 2-story-with-basement section on the south with a shed roof and porch on the second story. An entrance is on the west. Due to the added porch and replacement windows, the resource does not retain the integrity of design.

Camp 15W, Off of an unnamed road south of Route 2 (TRC-24)

Constructed ca. 1920, this house is built on an L plan, with the main section being a tall 1-story, 3-bay frame section with a concrete-block foundation, a side-gable roof with exposed rafter tails, steeply pitched roof, and wood shingle siding. Set at right angles is a shorter, 2-bay gable-roofed frame section with shingle siding. The entrance is set within the intersection of the two, in its own canted bay, and beneath the incised porch. The house has both 2-pane and single-pane windows, most of which appear to be modern replacements. The resource retains all aspects of integrity.

Wanamaker Lake Dam at Route 63 and Route 10 in Northfield (TRC-25)

Description: This dam is located on a parcel at the northwest corner of the intersection of Route 63 (Northfield-Hinsdale Road) and Route 10 (Wanamaker Road) in East Northfield. The dam spans Pauchaug Brook, a tributary of the Connecticut River which is located a short distance to the west. The structure formerly functioned as the dam for the man-made Lake Wanamaker, part of the designed landscape of the late-nineteenth-century Northfield Seminary for Girls located on the east side of Wanamaker Road. In its present condition, the dam consists of a bottom layer of rough fieldstone capped by a top row of squared granite. Lake Wanamaker was drained at some unknown date and the dam is presently in ruins. The dam is a Non-Project facility that is not owned or maintained by FirstLight.

History: In 1879, the evangelist Dwight Moody established a school at Northfield Village for "girls of limited means" known as the Northfield Seminary for Young Ladies. Three years later, Moody established a similar school for boys, the Mount Hermon School, just across the Connecticut River, in the neighboring town of Gill. Beginning in the summer of 1880, Moody held a national conference of Christian workers at the Northfield Seminary. "These summer conferences eventually brought world-wide reknown to the otherwise peaceful and unassuming village of Northfield" (Parson et al 2010: 14).

Drawing on his many patrons and admirers in the upper reaches of Boston, New York, and Philadelphia society, Moody was able to engage the services of several prominent architects and landscape architects of the day, including Peabody & Stearns, Delano & Aldrich, Charles Nassau Lowrie (one of the 11 founding members of the American Society of Landscape Architects), and Hugh Findlay, Professor of Landscape Architecture at Cornell University.

According to the MHC area form for Northfield Seminary written in 2006: "The designed (Northfield Seminary) campus landscape is significant as the embodiment of the vision of Dwight Moody and the founder of Wellesley College, Henry Durant, who applied the romantic landscape aesthetic to the campus as a means of creating a successful educational environment-both academic and religious. The layout created distant viewsheds of the Connecticut River, of the hills of New Hampshire and Vermont. It created in the middle ground views of undulating lawns, meadows, and, as it grew, views of trees, and shrubbery, which defined walks, shaded buildings, and provided color and texture in all seasons. It is significant for the work of landscape designers Charles Lowrie and Hugh Findlay" (Parson 2006).

Lake Wanamaker was conceived as a part of the overall landscape plan, although it is not known whether the two landscape architects Lowrie and Findlay had any direct hand in its design. An 1892 description of the school campus stated: "A very pretty little lake, called Wanamaker is included in the 'Seminary grounds and is much used for boating and skating. Many of the girls play tennis and various courts adorn the grounds."

According to Peter Weir, Northfield school archivist: "Our information on the dam and associated lake is limited. The June 9, 1888 issue of "The Hermonite," the newspaper which served both schools in the 19th and early 20th centuries, notes the existence of the lake, the gift of John Wanamaker, the Philadelphia department store magnate. It was a swimming destination for many years, and until the advent of gas refrigeration, was a source of ice. It was abandoned in the late 1960s or perhaps early 1970s. We have many photographic images, but very little printed material gathered on the subject." (Personal communication via e-mail May 20, 2014)

NRHP Eligibility Evaluation: Based on background research and field observations, this resource is not eligible for NRHP listing under Criteria A, B, and C due to lack of architectural/historical significance and lack of integrity. Due to the drainage of the lake and the ruinous condition of the resource, the resource lacks the integrity of materials, workmanship, design, association, setting, and feeling.

Route 63 Bridge over Pauchaug Brook (TRC-26)

Description: This single-span reinforced-concrete T-beam bridge with metal railings and concrete abutments with wing-walls is located near the intersection of Route 63 (Northfield-Hinsdale Road) and Route 10 (Wanamaker Road) in East Northfield. The two-lane bridge spans Pauchaug Creek, a tributary of the Connecticut River which is located a short distance to the west. The approaches have metal W-railings terminating in square blocks with formstone veneer and a date plaque inscribed with the 1954 date and Massachusetts state seal. The metal bridge railings have some decorative scrollwork but are in rusted and deteriorated condition. The Route 63 Bridge is a Non-Project facility that is not owned or maintained by FirstLight.

History: The bridge was designed by Massachusetts Department of Public Works and constructed in 1938. The bridge originally carried a 30' roadway, which was widened to 44' in 1954. This extension was also designed by Massachusetts Department of Public Works. The original open concrete parapets were removed and replaced with the existing steel "Type B" railings with stone-faced concrete end posts. It adjoins the dam of Lake Wanamaker, a man-made lake created as part of the Northfield Seminary landscape plan but drained at an unknown date.

NRHP Eligibility Evaluation: Based on background research and field observations, this resource is not eligible for NRHP listing under Criteria A, B, and C due to lack of architectural/historical significance. The bridge is an undistinguished example of this common bridge type from the mid-20th century.

Turners Falls Road (White) Bridge over Connecticut River (TRC-38)

Description: This six-span, metal stringer, multi-beam highway bridge carries two-lane Turners Falls Road (formerly Route 2A) over the Connecticut River between Greenfield and the village of Turners Falls in Montague. At its eastern end, the road continues over the Turners Falls Power Canal via the Warren thru-truss Fifth Street Bridge. The bridge has a reinforced concrete deck supported on reinforced concrete piers, with reinforced concrete bridge seats added on top of earlier mortared rubble stone abutments. The bridge has a maximum span of 75 feet, a total length of 446 feet, and the deck measures 27 feet in width, from edge to edge. The Turners Falls Road Bridge is a Non-Project facility that is not owned or maintained by FirstLight.The present bridge was designed in 1936 as a temporary replacement bridge for the White Bridge, destroyed earlier that year in a flood. Plans indicate that the replacement bridge was designed by Mass. Department of Public Works, but do not indicate the name of the particular engineer involved. The temporary bridge was originally constructed with a timber deck, and was built by T. Stuart & Son. When the bridge was made permanent in 1946, the timber deck was replaced with the present reinforced concrete deck by W.W. Wyman Inc. (Jergensen 2014).

History: After the John Russell Cutlery and Montague Mill factories were built along the Turners Falls power canal in the late 1860s, demand grew for erecting a bridge for the convenience of workers traveling between the factories and Greenfield (Jenkins 1980: 8.4). On November 16, 1871 work started on the White Bridge (also known as the Lower Suspension Bridge) across the Connecticut River, and it was completed by the contractor Charles MacDonald the following spring. Costing $36,000 the White Bridge was a 445-foot-long, stone-and-brick suspension bridge with steel cables (Montague Bicentennial Committee 1954: 110; Vogt 1877).

The original White bridge was destroyed by the Flood of 1936. Its replacement was made a priority of the Massachusetts DOT, as several other bridges across the Connecticut River had also been destroyed. The new bridge, built by T. Stuart & Son of Boston, cost $150,000. The Stuart Bridge Company was responsible for several Boston area bridges during this period, the best-known being the 1936-1937 Chelsea Street Bridge in Boston, "More than 3,500 tons of concrete were used on the bridge and its five abutments, piers were 50 feet high, and the structure is 450 feet long and 20 feet wide" (Montague Bicentennial Committee 1954: 110).

NRHP Eligibility Evaluation: Based on background research and field observations, this resource is not eligible for NRHP listing under Criteria A, B, and C due to lack of architectural/historical significance. The bridge is a typical example of its type, constructed well after the period of first adoption and engineering innovations for steel stringers, in the years preceding 1900. Although the east abutment and approach is located within the NRHP-Listed Turners Falls Historic District, it was constructed outside of the district's Period of Significance (1800 to 1932) and does not contribute to the historic district.

Surveyed Resources in Vermont Not Eligible for National Register Listing:

Whithed's/Shuttle's Mill, Dam and Millpond (TRC-27)

Description: The former Whithed's (also Whithed & Ball and Bushnell's) Mill is located on the east side of Route 142 where the road makes a sharp bend in Vernon Village, Windham County. The complex consists of the original (1839-1845) granite gristmill foundation, reconstructed brick wheel pit with metal overshot wheel in poor condition; stone dam with metal sluice gate; and mill pond encircled with cut-stone border. Above the mill's stone foundation, but still below-grade, is a brick-and-stone basement level with entrances on the east. The present 2-story, 5-bay-by-6-bay, gable-roofed building with decorative center cupola is a 1978 reconstruction of the original mill that burned in 1962. Historic photographs indicate that the mill building had clapboard siding on all three levels except at the northeast corner where the basement level was stone; a gable roof without cupola and 6/6 double-hung sash windows with wood frames. The building is currently vacant. Also on the property, but unrelated to the gristmill complex, is a one-story, gable-roofed non-historic building that houses the Vernon Post Office. The Whithed's Mill is a Non-Project facility that is not owned or maintained by FirstLight.

History: Born in Lincoln, Massachusetts in 1797, Marshall Whithed settled in Vernon in 1810 and soon became an enterprising businessman and landowner. In partnership with David Ball of Winchester, New Hampshire, he built a large 3-story, timber-framed mill on Town Brook, sometime between 1839 and 1845. The stone dam and wheel pit were reportedly constructed at a cost of $6,500, while the slate-roofed mill building cost $1,500. A blacksmith shop stood slightly away from the building.

Power was furnished by a 25-foot overshot water wheel. The building's basement held the gristmill, a sawmill was at ground level, and there was a bone mill on the upper floor for grinding bones of dead animals to produce bone meal for fertilizer and chicken feed. By 1859, Marshall Whithed sold the mill and adjoining road to David Ball, who thereupon sold it to John Hunt for $600. Lafayette Whithed, Marshall's son, regained the property in 1867. The Whithed & Hunt Mill is shown in the Vernon Village inset on the Beers' Atlas of Windham County of 1869.

By the early 1900s, business had slowed at the mill, and the Whithed family, by then somewhat geographically dispersed, sold the mill property to the Town of Vernon in 1908. The town stored its snow roller and other equipment in the mill building. In 1927, Jason Bushnell, a Brattleboro grocer, bought the mill from the town for $700, and turned it into a private museum of his vast and varied collection of rural items. The mill burned in 1962, leaving only the dam, mill foundation, and wheel pit. A reconstruction of the old mill was built on site in 1978 and in the 1980s housed an acrylic housewares manufacturer, Clear Solutions, Inc. The building is currently vacant.

NRHP Eligibility Evaluation: The Whithed Mill structure above the basement level is a 1978 reconstruction of the original mill following a fire that destroyed the mill in 1962. As such, it falls within NRHP Criteria Consideration E, which states that a reconstructed property is NRHP-eligible "when it is accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan and when no other building or structure with the same associations has survived. All three of these requirements must be met." There is no evidence that the Whithed Mill was reconstructed as part of a preservation master plan or according to historical accuracy, and thus does not satisfy this consideration.

Based on background information and field observations, the resource is not eligible for the NRHP under Criteria A, B, and C due to lack of historic/architectural significance and lack of integrity. As only the

dam, mill foundation, and wheel pit are historic and the mill building itself is not over 50 years old, the building does not retain the integrity of design, materials, workmanship, feeling, and association.

Culvert at Route 142 and Governor Hunt Road south of Vernon Dam (TRC-28)

Description: This concrete culvert is located on the west side of Gov. Hunt Road, a short distance north of its intersection with Route 142, just south of the Vernon Hydroelectric Power Plant and Dam and north of Vernon Village. The approximately 5-feet-high and 4-feet-wide rectangular culvert opening on the east is built into an embankment. Concrete wing walls extend on either side of the culvert opening. The culvert carries an unnamed stream under Route 142 before it empties out on its east face, and from there flows through private property, then under Gov. Hunt Road, before emerging via a non-historic corrugated metal culvert on the east side of the road, then flowing east and finally emptying into the Connecticut River just south of the Vernon Dam. This concrete culvert is located on the west side of Gov. Hunt Road, a short distance north of its intersection with Route 142, just south of the Vernon Hydroelectric Power Plant and Dam and north of Vernon Village. The approximately 5-feet-high and 4-feet-wide rectangular culvert opening on the east is built into an embankment. Concrete wing walls extend on either side of the culvert opening. The culvert carries an unnamed stream under Route 142 before it empties out on its east face, and from there flows through private property, then under Gov. Hunt Road, before emerging via a non-historic corrugated metal culvert on the east side of the road, then flowing east and finally emptying into the Connecticut River just south of the Vernon Dam. The culvert is a Non-Project facility that is not owned or maintained by FirstLight.

NRHP Eligibility Evaluation: Based on background research and field observation, the resource is not associated with a significant event (or pattern of events) or an individual and is not eligible for the NRHP under Criteria A or B. The culvert is an undistinguished example of this common type from the mid-20th century and is not NRHP-eligible under Criterion C.

VI. CONCLUSIONS AND RECOMMENDATIONS

FirstLight is the current licensee of the Northfield Mountain Pumped Storage Project (FERC No. 2485) and the Turners Falls Hydroelectric Project (FERC No. 1889) and has initiated with FERC the process of relicensing the two Projects. The current licenses for the Northfield Mountain and Turners Falls Projects were issued on May 14, 1968 and May 5, 1980, respectively, and both licenses expire on April 30, 2018. On September 13, 2013, FERC issued a study plan determination for the Project which among other studies requires FirstLight to conduct a survey and evaluation of historic architectural resources within the Project boundaries.

As set forth in FERC's September 13, 2013 Study Plan Determination, a Historic Property Management Plan (HPMP) will be developed in consultation with and input from FERC, the SHPOs, and others prior to the issuance of a new FERC license for the Projects. Among other things, the HPMP will identify the nature and significance of historic structures within the Projects' boundaries that may be affected by project-related maintenance and operation, proposed improvements, if any, and public access. Accordingly, the objective of this report has been to identify historic structures within the Project APE listed in or eligible for listing in the NRHP. Development of the HPMP (and consultation connected therewith) will occur prior to issuance of a new FERC license.

Between November 2013 and March 2014, TRC conducted a historic architectural survey and NRHP evaluation of all buildings, structures, objects, sites, and districts 50 years or older within the Projects' APE. The 2013-2014 historic architectural survey consisted of background research on previously identified architectural resources in the APE; preparation of a historic context; a survey of all architectural resources 50 years or older; and evaluation of their NRHP eligibility, either as an individual resource or as a contributing resource in an NRHP-listed or -eligible historic district. The Northfield Mountain Pumped Storage Facility, built between 1968 and 1972, was also surveyed as it will have reached the 50-year mark by the time the license expires in 2018.

Background review identified 27 previously surveyed resources within the APE:

- The Turners Falls Historic District, consisting of historic industrial, residential, and commercial buildings in Turners Falls, was listed in the NRHP in 1983 and contains 13 contributing resources located within the Project APE.

- Six historic resources in the APE—Cabot Power Station and Dam; Eleventh Street Bridge; East Mineral Road Bridge; Gill-Montague Bridge; French King Bridge; and Schell Memorial Bridge—previously have been determined eligible for the NRHP.

- Three previously surveyed resources—Central Vermont Railroad Bridge over the Connecticut River (MA); Boston & Maine Railroad-Fort Hill Branch Bridge over Ashuelot River (NH); and Boston & Maine Railroad-Fort Hill Branch Bridge Piers over the Connecticut River (NH)—previously have been determined not eligible for NRHP listing by the MA and NH SHPOs.

- Six previously surveyed resources in the APE—"The Patch" district in Turners Falls, Frederick Morgan House, Red Suspension Bridge, Frank Smith House, Hunt-Sanderson House, and the Riverside district—have not previously been evaluated for NRHP eligibility. Of the six previously surveyed resources, "The Patch" Historic District in Turners Falls (with one contributing resource located within the Project APE) and the Riverside Historic District in Gill (with two contributing resources located within the Project APE) are eligible for the NRHP. The Red Suspension Bridge and Morgan House are not eligible for NRHP listing.

As a part of the March 2014 field survey, TRC identified an additional 37 resources 50 years or older (in addition to the Northfield Mountain Pumped Storage facility which is less than 50 years old) not previously surveyed within the APE. TRC evaluated these 38 resources, plus the six previously surveyed resources not yet evaluated, for NRHP-eligibility according to the NRHP Criteria and standards for integrity:

- Cabot Camp in Montague MA possesses the historic/architectural significance and integrity for individual listing in the NRHP under Criteria A and C.

- The Central Vermont Railroad Bridge over Ferry Road in Northfield MA is a contributing resource in an NRHP-eligible Central Vermont Railroad Linear Historic District under Criterion A.

- The small portion of the Mohawk Trail (State Route 2) in Massachusetts within the Project APE is NRHP-eligible under Criterion A.

- Three resources in New Hampshire: Route 63 (Northfield Street) Bridge over the Ashuelot River, a culvert on the Ashuelot River, and the Ashuelot River Gauging Station are contributing resources in the Hinsdale Historic District, previously determined eligible by the NH SHPO under Criteria A and C.

- The Northfield Mountain Pumped Storage Facility in Northfield meets Criteria A and C for its significance as the world's largest pumped storage facility when built and for its association with the more than century-long history of hydroelectric power in the Connecticut River Valley and will be eligible for the NRHP in 2018 when the present operating license expires.

- Turners Falls Power & Electric Company Historic District in Turners Falls and Gill with ten contributing resources and two non-contributing resources is NRHP-eligible under Criteria A and C.

- The remaining 23 surveyed resources are not eligible for NRHP listing due to lack of architectural/historical significance and/or loss of integrity.

The NRHP-listed and –eligible resources surveyed within the FirstLight Project APE are listed in Table 3 below:

Table 3:
Turners Falls and Northfield Mountain Project:
NRHP-Listed and NRHP-Eligible Resources within the Project APE

SITE NAME	SHPO # / FIELD #	ADDRESS	NRHP STATUS	PROJECT FACILITY	OWNED BY FIRSTLIGHT
NRHP-Listed Resources					
Turners Falls Historic District	MNT.H	Various streets, Turners Falls, MA	NRHP Listed 1983 (Criteria A, B, C, and D)	Power Canal	Power Canal, Keith Mill and IP Footbridges
Turners Falls Paper Co. Building	MNT.129	On power canal, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No	No
Esleeck Paper Mill	MNT.130	On power canal, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No	No
Keith Paper Mill	MNT.131	On power canal, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No	No
Montague Paper Co. Buildings (Great Falls Discovery Center)	MNT.132	2 Avenue A, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No	No
Montague Paper Co. Buildings (Great Falls Discovery Center)	MNT.133	2 Avenue A, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No	No
Sixth Street Bridge over Power Canal	MNT.909	Sixth Street, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No	No
Fifth Street Bridge over Power Canal	MNT.910	Fifth Street, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No	No

SITE NAME	SHPO # / FIELD #	ADDRESS	NRHP STATUS	PROJECT FACILITY	OWNED BY FIRSTLIGHT
Gill-Montague Bridge over Connecticut River	GIL.901/ MNT.920	Route 2A, Turners Falls/Riverside, MA	Contributing resource in Turners Falls Historic District. In 1987, determined NRHP-eligible by MHC for individual listing under Criterion C.	No	No
Fifth Street Footbridge over Power Canal	MNT.924	North of Fifth Street Bridge, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No	No
Keith's Mill Footbridge over Power Canal	MNT.925	North of Second Street, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No	Yes
Turners Falls Power Canal	MNT.933	Between Turners Falls Dam and Cabot Power Station, Turners Falls, MA	Contributing resource in Turners Falls Historic District (section north of Sixth Street Bridge only)	Yes	Yes
International Paper Co. Bridge over Power Canal	No MHC #, TRC-6	North of Great Falls Discovery Center, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No	Yes
Electrical Switch Building	No MHC #, TRC-39	Northeast of Great Falls Discovery Center at Power Canal, Turners Falls, MA	Contributing resource in Turners Falls Historic District	No	No
Resources Previously Determined NRHP Eligible by Massachusetts Historical Commission (MHC)					
Cabot Power Station and Dam	MNT.449	South end of Power Canal, Turners Falls, MA	Determined NRHP Eligible 1987 (Criteria A and C)	Yes	Yes
Gantry Crane, Cabot Station (demolished)	MNT.945	Cabot Station, Turners Falls, MA	Determined NRHP Eligible 1987 DEMOLISHED in 1987	N/A	N/A

SITE NAME	SHPO # / FIELD #	ADDRESS	NRHP STATUS	PROJECT FACILITY	OWNED BY FIRSTLIGHT
Eleventh Street Bridge over Power Canal	MNT.904	Eleventh Street, Turners Falls, MA	Determined NRHP Eligible 1987 (Criterion C). Contributing resource in NRHP-eligible Turners Falls Power & Electric Company Historic District. Also a contributing resource in NRHP-eligible Patch Historic District	No	No
Schell Memorial Bridge over Connecticut River	NFL.924	Between East and West Northfield, MA	Determined NRHP Eligible 1987 (Criterion C)	No	No
French King Bridge over Connecticut River	GIL.900/ ERV.904	Mohawk Trail between Gill and Erving, MA	Determined NRHP Eligible 1987 (Criterion C)	No	No
East Mineral Road Bridge over Millers River	MNT.917	East Mineral Road at Cabot Camp, Montague and Erving, MA	Determined NRHP Eligible 1988 (Criterion C)	No	No
NRHP-Eligible (Previously and Newly Surveyed) Resources in the APE					
"The Patch"	MNT.C	Residential area west of Power Canal and south of Eleventh Street, Turners Falls, MA	NRHP-Eligible historic district (Criteria A and C)	No	Unimproved lots but no standing structures
Frank Smith House (Riverside)	GIL.043	39 Riverview Drive, Riverside, MA	Contributing resource in NRHP-eligible Riverside Historic District	No	No
Hunt-Sanderson-Jones House (Riverside)	GIL.037	9 Grove Street, Riverside, MA	Contributing resource in NRHP-eligible Riverside Historic District	No	No

SITE NAME	SHPO # / FIELD #	ADDRESS	NRHP STATUS	PROJECT FACILITY	OWNED BY FIRSTLIGHT
Riverside (Residential neighborhood in Gill)	GIL.D	Various streets, Riverside, Gill, MA	NRHP-Eligible historic district (Criteria A and C)	No	FirstLight owns property within Riverside boundaries
Central Vermont Railroad Bridge over Ferry Road	TRC-1	Ferry Road, Northfield, MA	NRHP-Eligible (Criteria A)	No	No
Cabot Camp	TRC-5	169 East Mineral Road, Montague	NRHP-Eligible (Criteria A and C)	No	Yes
Route 63 (Northfield Street) Bridge over Ashuelot River	TRC-31	Northfield Street, Hinsdale, NH	Contributing resource in NRHP-eligible Hinsdale Historic District	No	No
Culvert	TRC-32	Just west of Northfield Street Bridge, north bank, Hinsdale, NH	Contributing resource in NRHP-eligible Hinsdale Historic District	No	No
Ashuelot River Gauging Station	TRC-33	Just east of Northfield Street Bridge, south bank, Hinsdale, NH	Contributing resource in NRHP-eligible Hinsdale Historic District	No	No
Northfield Mountain Pumped Storage Facility and Visitor's Center	TRC-34	Route 63, Northfield and Erving, MA	Meets NRHP Criteria A and C and retains integrity; will be NRHP-eligible in 2018	Yes	Yes
Station No. 1	TRC-35	At end of Branch Canal, Turners Falls, MA	Contributing resource in NRHP-eligible Turners Falls Power & Electric Company Historic District	Yes	Yes
Turners Falls Gate House	TRC-36	Turners Falls next to Gill-Montague Bridge, Turners Falls MA	Contributing resource in NRHP-eligible Turners Falls Power & Electric Company Historic District	Yes	Yes

SITE NAME	SHPO # / FIELD #	ADDRESS	NRHP STATUS	PROJECT FACILITY	OWNED BY FIRSTLIGHT
Turners Falls Dam (1 and 2)	TRC-37	Connecticut River between Gill and Montague, Turners Falls, MA	Contributing resource in NRHP-eligible Turners Falls Power & Electric Company Historic District	Yes	Yes
Turners Falls Power & Electric Company Historic District	TRC-40 (includes MNT.449, 904, 924, 925, and 933 and TRC-2, 3, 6, 35, 36, 37, and 39)	Between Turners Falls Dam and Cabot Station, Turners Falls, MA	NRHP-Eligible district (Criteria A and C). Some resources are also contributing to NRHP-listed Turners Falls Historic District	Power Canal, Station No.1, Dam, Gate House, and Cabot Station are FL-owned Project facilities.	IP Bridge, Fifth Street Footbridges, two railroad bridges FL-owned, non-Project facilities. Eleventh and Sixth Street Bridges, Keith and electrical switch building are non-FL-owned, non-Project facilities.
Mohawk Trail	TRC-41	Route 2 Between Williamstown and Orange, MA	NRHP-Eligible (Criterion A)	No	No

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First Light Photo Archives (1900-1918)

Gill Historical Society Photograph Collection

Howes Brothers Photograph Collection (On File Ashfield Historical Society)

Mass DOT Historic Bridge Survey Files

RELICENSING STUDY 3.7.2

HISTORIC ARCHITECTURAL RESOURCES SURVEY & NATIONAL REGISTER EVALUATION

Northfield Mountain Pumped Storage Project (No. 2485) and Turners Falls Hydroelectric Project (No. 1889)

FRANKLIN COUNTY, MASSACHUSETTS, CHESHIRE COUNTY, NEW HAMPSHIRE, WINDHAM COUNTY, VERMONT

VOLUME II: APPENDICES

Prepared for:

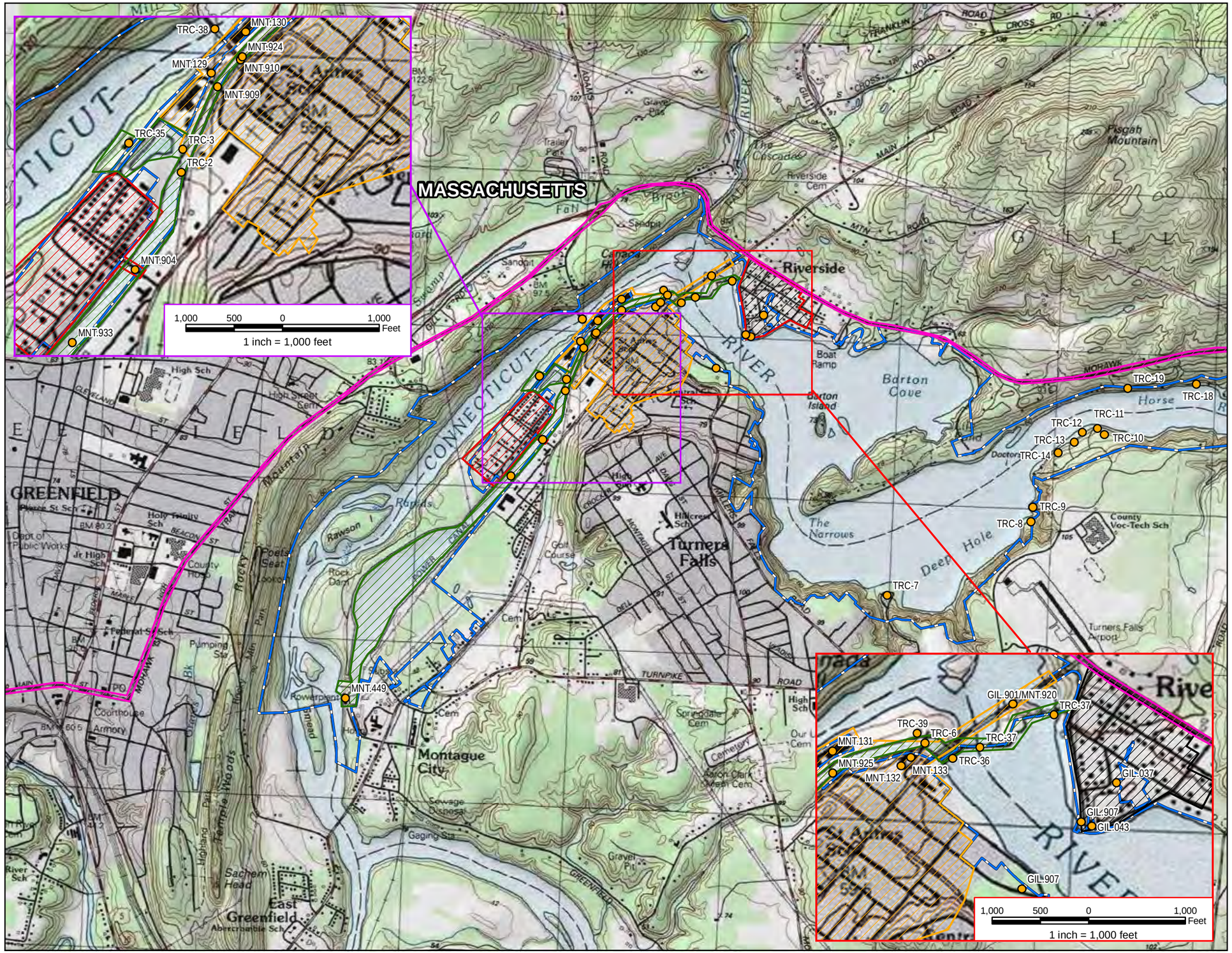
FirstLight™
GDF SUEZ

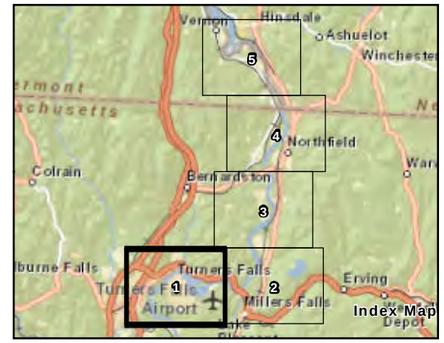
Prepared by:

GOMEZ AND SULLIVAN ENGINEERS
TRC

DECEMBER 2014

Appendix A: Project Maps





FIRSTLIGHT POWER RESOURCES

Area of Potential Effects with Surveyed Architectural Resources
Sheet 1 of 5

Legend

- Surveyed Architectural Resources
- Area of Potential Effects

Historic District

- Mohawk Trail (TRC-41)
- The Patch (TRC-4)
- Riverside (GIL.D)
- Turners Falls Historic District (MNT.H)
- Turners Falls Power District (TRC-40)
- Northfield Mountain Pumped Storage Facility (TRC-34)

N

Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

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1 inch = 2,000 feet

FirstLight
GDF SUEZ

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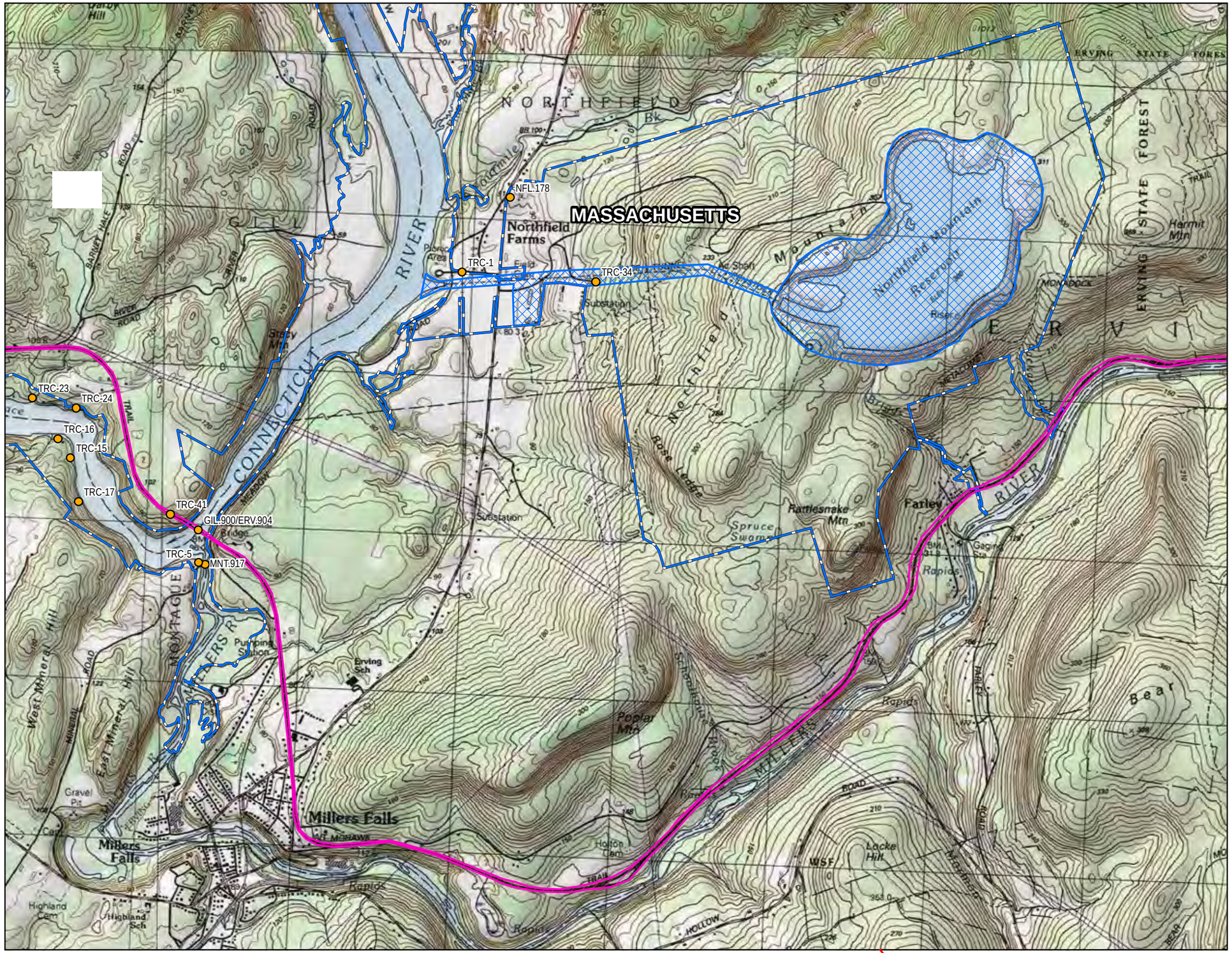

FIRSTLIGHT POWER RESOURCES

Area of Potential Effects with Surveyed Architectural Resources Sheet 2 of 5

Legend

- Surveyed Architectural Resources
- Area of Potential Effects

Historic District

- Mohawk Trail (TRC-41)
- The Patch (TRC-4)
- Riverside (GIL.D)
- Turners Falls Historic District (MNT.H)
- Turners Falls Power District (TRC-40)
- Northfield Mountain Pumped Storage Facility (TRC-34)

N

Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

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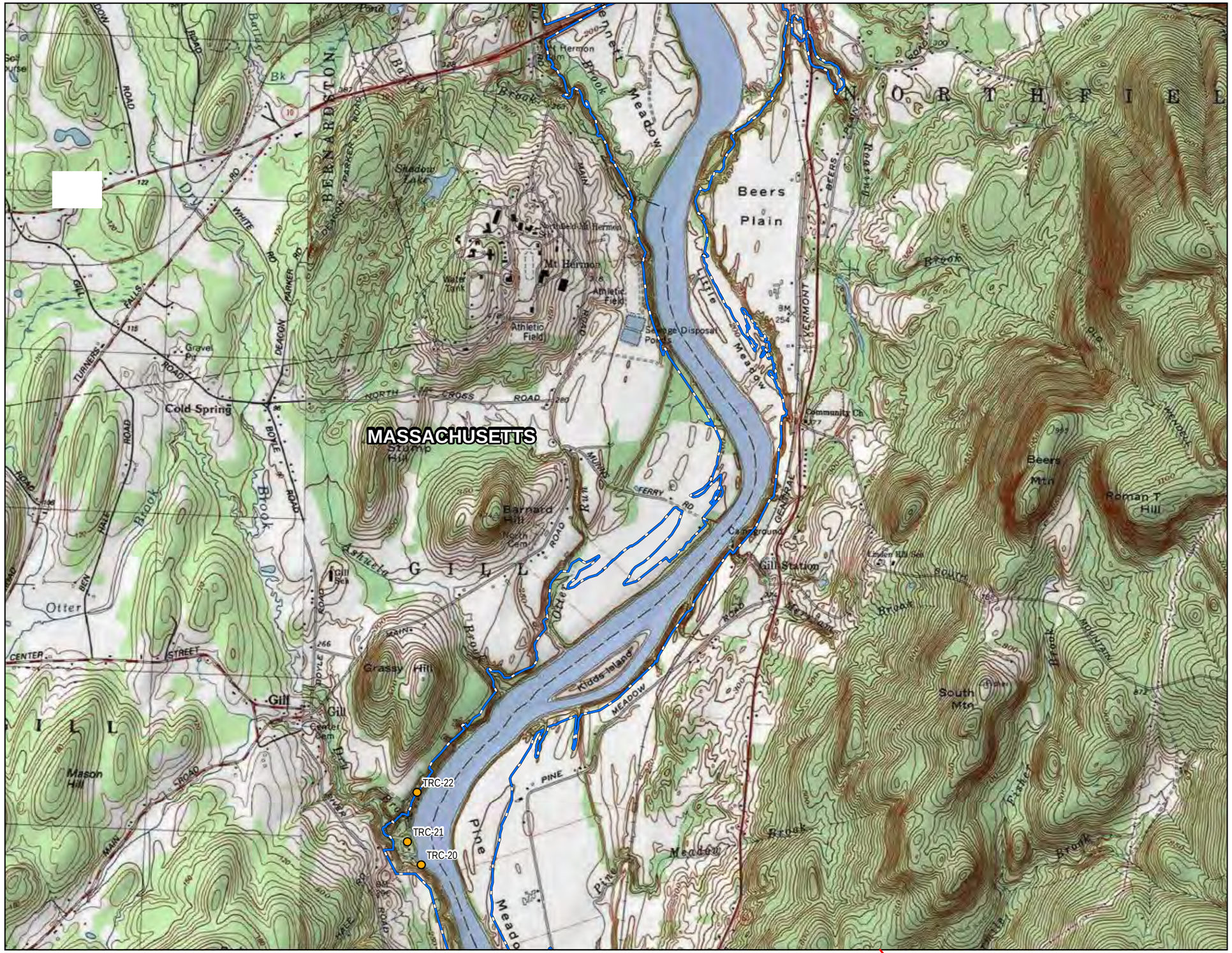

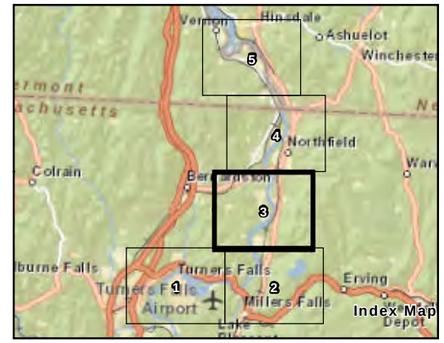

FIRSTLIGHT POWER RESOURCES

Area of Potential Effects with Surveyed Architectural Resources Sheet 3 of 5

Legend

- Surveyed Architectural Resources
- Area of Potential Effects

Historic District

- Mohawk Trail (TRC-41)
- The Patch (TRC-4)
- Riverside (GIL.D)
- Turners Falls Historic District (MNT.H)
- Turners Falls Power District (TRC-40)
- Northfield Mountain Pumped Storage Facility (TRC-34)

N

Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

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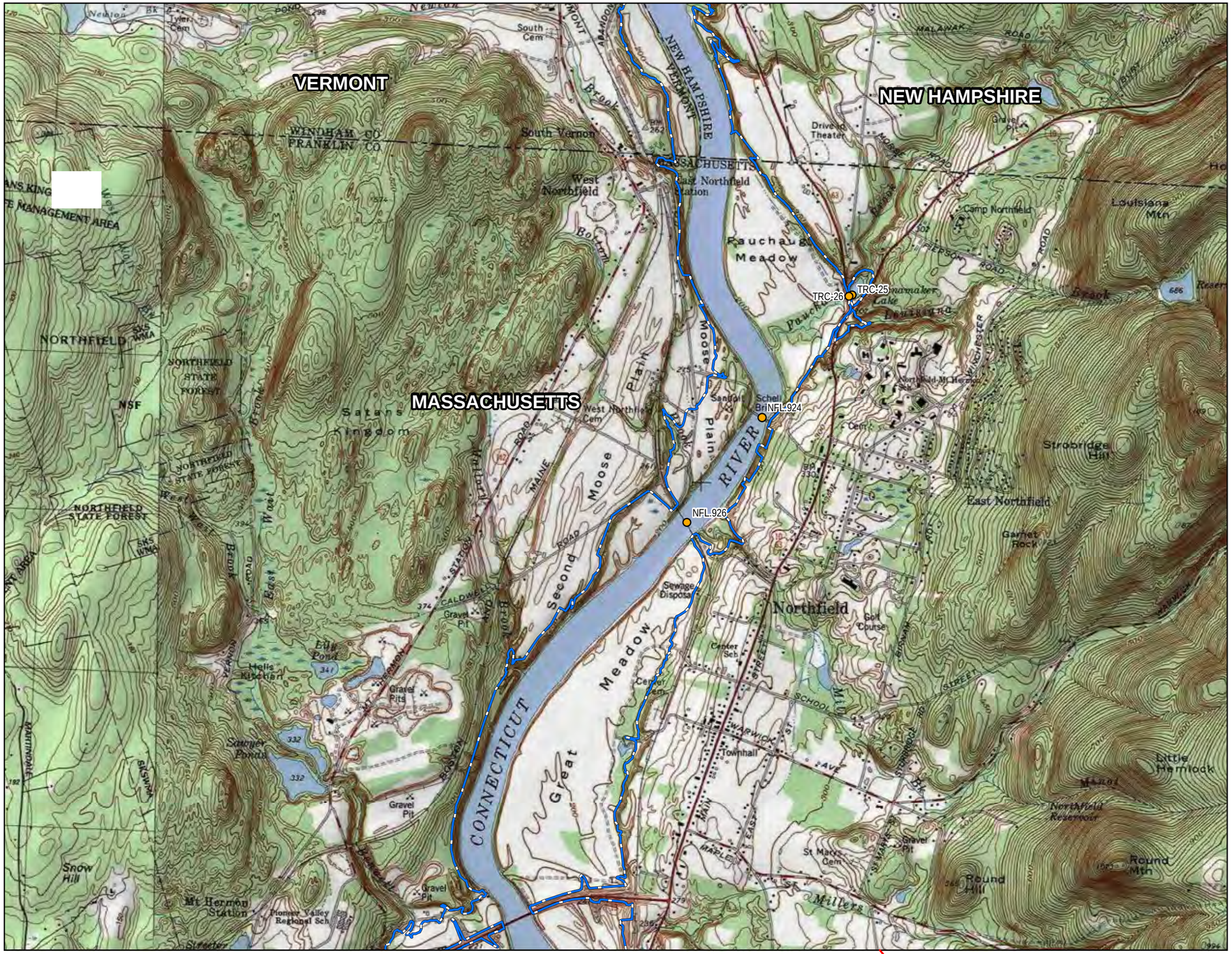

FIRSTLIGHT POWER RESOURCES

Area of Potential Effects with Surveyed Architectural Resources Sheet 4 of 5

Legend

- Surveyed Architectural Resources
- Area of Potential Effects

Historic District

- Mohawk Trail (TRC-41)
- The Patch (TRC-4)
- Riverside (GIL.D)
- Turners Falls Historic District (MNT.H)
- Turners Falls Power District (TRC-40)
- Northfield Mountain Pumped Storage Facility (TRC-34)

N

Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

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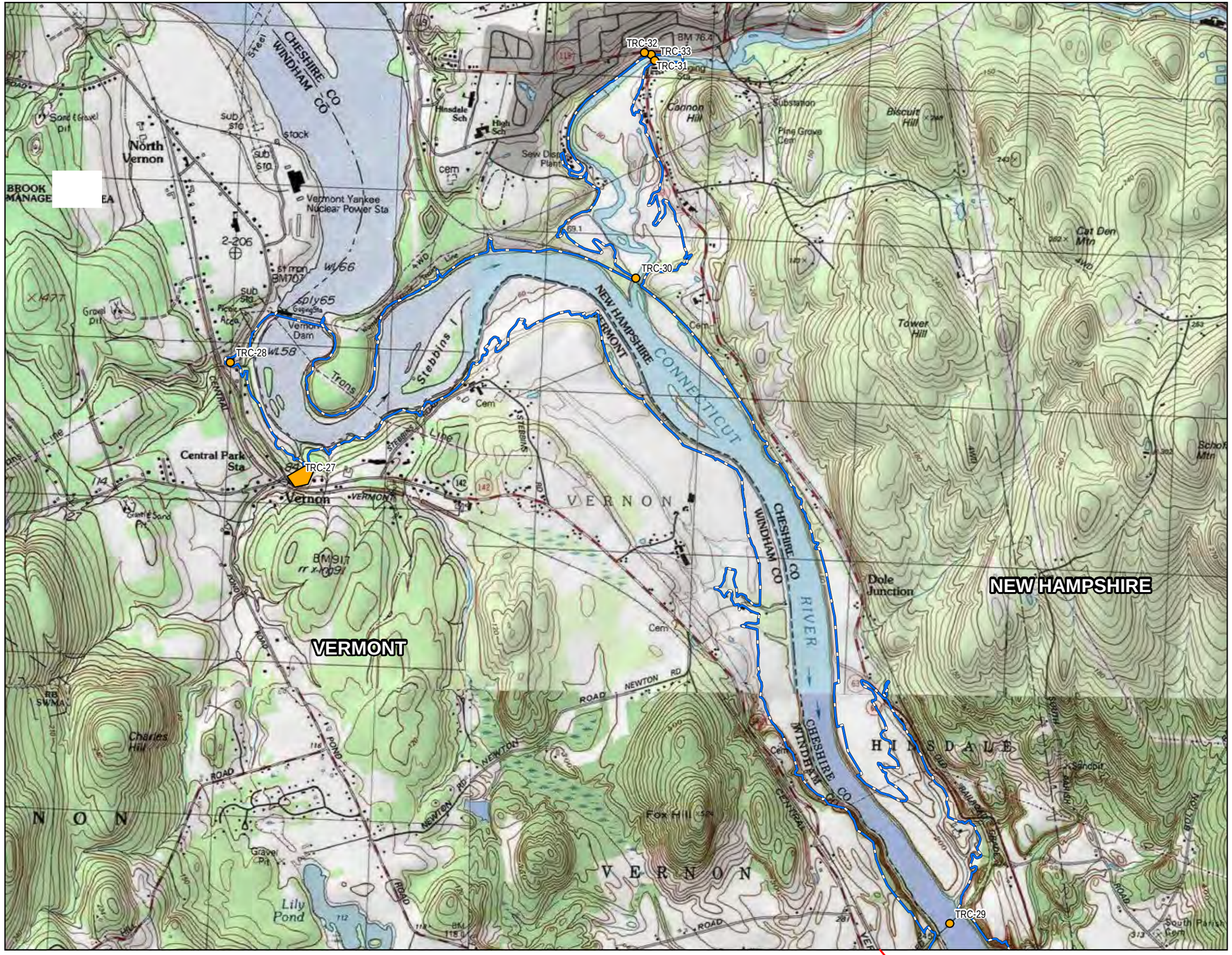

FIRSTLIGHT POWER RESOURCES

Area of Potential Effects with Surveyed Architectural Resources
Sheet 5 of 5

Legend

- Surveyed Architectural Resources
- Area of Potential Effects

Historic District

- Mohawk Trail (TRC-41)
- The Patch (TRC-4)
- Riverside (GIL.D)
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- Turners Falls Power District (TRC-40)
- Northfield Mountain Pumped Storage Facility (TRC-34)

Service Layer Credits: Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

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Appendix B: Massachusetts Historical Commission Forms

FORM A - AREA

Assessor's Sheets	USGS Quad	Area Letter	Form Numbers in Area
02 though 04	Greenfield	MNT.H	Numerous

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Photograph

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Name of Area: Turners Falls Historic District

Present Use: Industrial, Commercial, Religious, Residential

Construction Dates or Period: Late 19th to Early 20th Century

Overall Condition: Fair to Excellent

Major Intrusions and Alterations: No major intrusions. Commercial buildings have altered storefronts. Many of the industrial complexes have been partially or completely demolished.

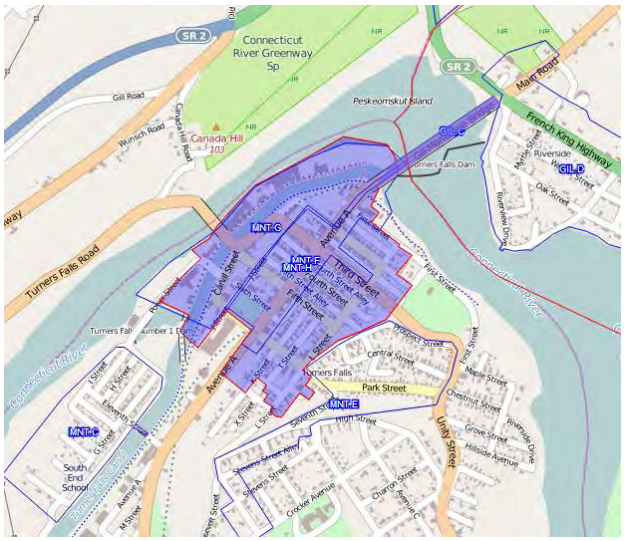
Acreage: Approx. 130 acres

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date *(month/year):* March 2014

Locus Map



2014 MACRIS

☒ *see continuation sheet*

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION

Describe architectural, structural and landscape features and evaluate in terms of other areas within the community.

The Turners Falls Historic District is located on a knoll along the eastern bank of Connecticut River near the falls from which it gains its name. The historic district is approximately 130 acres and according to the 1980 National Register nomination form contained 285 properties: 266 contributing resources and 19 non-contributing resources. The boundaries are roughly defined as follows: On the north and west by the Connecticut River (although the Turners Fall-Gill Bridge (MNT.920/GIL.901) which spans the Connecticut River is a contributing resource); on the east along L Street, and on the south by Ninth Street. Boundaries were selected to include as much of the intact planned community as possible. The western and northern boundaries reflect the course of the river and were drawn to include mill buildings, bridges and the power canal while excluding vacant lots and new construction. The eastern boundary reflects an abrupt change in elevation and the original extent of the plan. The southern boundary marks the end of dense construction.

The Turners Falls Historic District, which was still largely intact during the 2014 survey by TRC, consists of a cohesive grouping of industrial, residential, commercial, institutional & religious structures built mostly between 1866 and the early 1900s in accordance with Col. Alvah Crocker's original concept of a planned industrial community. The industrial and commercial buildings are usually of brick construction. Residential structures represent a wide variety of single and multi-family configurations. In each building type, there are many examples of late nineteenth century vernacular design.

The district was developed according to a plan laid out in 1867 by Crocker. Turners Falls is shown in an 1877 birds eye view as a planned community superimposed on the natural landscape and bisected by the power canal. A basic component of the plan was to develop mill sites along the river which would obtain water to power their machinery from the new power canal and dam system. The rest of the village was laid out in a horizontal grid pattern with the main avenues labelled alphabetically and the cross streets numerically. Avenue A was designed as a 100-foot wide tree-lined street for commercial and governmental buildings while other streets are 60-feet wide for the building of single- and multi-family residences.

For individual building descriptions, see the 1980 Turners Falls Historic District Nomination.

HISTORICAL NARRATIVE

Explain historical development of the area. Discuss how this relates to the historical development of the community.

The Turners Falls Historic District gains its significance as a rare surviving example of a planned industrial community of the 1860s-1870s. It was laid out and developed with the distinct purpose of capitalizing on the abundant water supply and the technological developments which made it possible to harness the Connecticut River's energy to power the mills. The town reached the peak of its economic prosperity in the first quarter of the 20th century and gained the nickname "Home of the White Coal (Jenkins 1980: 8.1)."

Turners Falls was developed in the 1870s as a planned industrial community along the lines of Lowell or Holyoke under the aegis of the Turners Falls Company and its founder Col. Alvah Crocker. Crocker and his business associates purchased the rights of the old Proprietors of the Upper Locks and Canals at Turners Falls and embarked on converting the old navigational canal into a power canal for the use of mills and factories that would locate to Turners Falls. By the late 1870s several significant industries, chief among them the John Russell Cutlery Company had built plants along the

power canal at its northern end. Soon joined by the Montague, Turners Falls, and Keith paper mills, Turners Falls' factories provided employment for hundreds of local residents, many of whom lived in company-built housing in the village (Great Falls Discovery Center 1996: 6).

By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydro-electric market (Jenkins 1980: 8.3). Beginning in 1903, the company widened the power canal and erected the east half of the present gate house appended to the east gable end of the 1866 gate house. In 1906, the company completed Power Station No. 1, located some distance south of the existing dam. In 1908, Phillip Cabot of Boston assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new direction. Cabot's ambitious plans called for the construction of a second powerhouse, named Cabot Station in his honor, replacing and raising the original Crocker-built dam, and extending and widening the power canal. Work began on dam construction in 1912 and was completed in 1915 along with the Cabot Station in 1917-1918 and the newly improved power canal.

The late 19th century and early 20th century also saw growth and change in the downtown area, as commercial enterprises, as well as entertainment and social institutions developed. Commercial buildings were erected by individual businessmen during the 1870's and 1880's, and consisted largely of three- and four-story brick buildings with storefront entrances at grade and professional offices and tradesmen housed on the upper floors. From 1895 to 1934 an Electric Trolley ran up Avenue A on its route from Greenfield to Montague and Millers Falls. During the construction of the expanded dam and power canal the village supported four hotels and direct rail service from New York City (Great Falls Discovery Center 1996: 6).

Turners Falls experienced a decline beginning in the 1930s, as several major mills and factories closed or relocated elsewhere. Although a few of the historic factories are still partially operated, they no longer provide much employment for Turners Falls residents, most of who work elsewhere. As a result, there has been little new construction in the village since the 1940s and the area has preserved most of its appearance intact.

For a more detailed developmental history, see the 1980 Turners Falls Historic District Nomination.

BIBLIOGRAPHY and/or REFERENCES

Arts Council OF Franklin County
1978 "Cabot Station" MHC Survey Form MNT.449. Boston MA.

Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

C.H. Vogt & Co.
1877 "Turners Falls, Mass." (Bird's eye view). C.H. Vogt & Co., Milwaukee, WI.

F.W. Beers & Co.
1871 *Franklin County, Massachusetts.*

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

ADDITIONAL PHOTOGRAPHS

1877 Bird's Eye View (Source: C.H. Vogt & Co.)

Ca. 1900 View of Turners Falls (Source: Montague Bicentennial Committee)

2014 View of Power Canal and Industrial Buildings (Source: TRC)

2008 Low-level oblique image of Turners Falls Historic District (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☐ Listed Historic District ☐ Potential historic district

Criteria: ☒ **A** ☒ **B** ☒ **C** ☒ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

The Turners Falls Historic District was listed in the NRHP in 1982 under Criteria A (Engineering, Commerce, Community Planning and Development, Industry, and Social History); B (Colonel Alvah Crocker); C (Architecture); and D (Historic - Non-Aboriginal). The Period of Significance is 1800-1932.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
03-0-086	Greenfield	G, H	MNT.129

Photograph

Locus Map

Town/City: Montague

Place: *(neighborhood or village)*:
Turners Falls

Address: West Side of Turners Falls Power Canal

Historic Name: Turners Falls Paper Co. Building

Uses: Present: Commercial

Original: Industrial

Date of Construction: ca.1880

Source: Sanborn Maps, Written sources

Style/Form: Vernacular Italianate/Industrial

Architect/Builder: Turners Falls Paper Company

Exterior Material:
Foundation: Stone

Wall/Trim: Brick (8:1 Common Bond)

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Windows and doors, addition, removal of most of the mill complex and mill machinery

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/industrial

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE
ADDRESS W. Side of Power Canal at 6th Street.

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) G,H
Form No. MNT.129

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Once part of a larger complex, the extant remains of the ca. 1884 Turners Falls Paper Company complex consist of a 1-story 8:1 common bond brick structure that once housed the office, shipping room, and machine room. Set on a stone foundation, the main block of the building which faces the power canal has an asphalt-shingled, side-gable roof with a corbelled brick cornice, corbelled dentils, and returns. A 1-story wing of like construction is attached to the west elevation and originally served as the office. The original doors have arched lintels and the 4/4 sash windows have stone stills and segmental arched lintels with corbelled vousoirs. Alterations to the building include a modern roll-up door on the east elevation, an original window opening bricked-in and modern windows added on the east elevation, and a 1-story addition added to the north elevation.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

The Turners Falls Paper Company was incorporated in 1879 with a capital of $120,000. According to an 1892 description, "The main building is divided into a machine room, engine room, and pulp mill. There is an addition for the beating engines, and another building, just completed to be used for finishing and repairs. The mill equipment is very complete and includes two 1200-lb washers, two 500-pound beating engines, and one 84-inch Foudronier paper machine. These require the use of 1000-horse water power. Employment is given to upwards of seventy hands and the output is some 16,000 pounds of newspaper per day" (Greenfield Gazette 1892: 3). The plant is shown on the 1884, 1889, and 1895 Sanborn maps of Turners Falls, after 1902 it is shown on these insurance maps as being owned by the International Paper Company.

BIBLIOGRAPHY and/or REFERENCES

Greenfield Gazette
1892 "Centennial Edition." *Greenfield Gazette*, publishers, Greenfield, MA.

Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

Sanborn Map Company

June 1884 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
February 1889 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
March 1895 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Sept 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Wade, Warner & Company
1891 "Picturesque Franklin." Northampton, MA.

ADDITIONAL PHOTOGRAPHS

MILLS OF THE TURNERS FALLS PAPER COMPANY.

1891 Image (Source: Wade, Warner & Company)

2014 View of East and South Elevations (Source: TRC)

2014 View of East Elevation Looking Across Turners Falls Power Canal (Source: TRC)

2012 Low-level oblique image of former Turners Falls Paper Company Buildings (Source: Bing.com)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by_____
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District
The Turners Falls Paper Company Building is a contributing resource in the NRHP-listed Turners Falls Historic District, listed under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

Integrity: As the most of the complex has been demolished and most of the windows have been boarded over, the building no longer retains the integrity of design.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
03-0-002	Greenfield	MNT.G, MNT.H	MNT.130

Photograph

Locus Map

Town/City: Montague

Place: *(neighborhood or village)*:
Turners Falls

Address: West Side of Turners Falls Power Canal, north of 5th Street

Historic Name: Marshall Paper Co. , Esleeck Paper Co.

Uses: Present: Industrial

Original: Industrial

Date of Construction: 1896

Source: Sanborn Maps, Written sources

Style/Form: Industrial

Architect/Builder: Marshall Paper Company

Exterior Material:
Foundation: Stone

Wall/Trim: Brick

Roof: Asphalt

Outbuildings/Secondary Structures:
Boiler Stack

Major Alterations *(with dates):*
Windows and doors, addition on south end

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/industrial

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE

ADDRESS W. Side of Power Canal at 5th Street.

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s)	Form No.
MNT.G,MNT.H	MNT.130

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Originally used as the finishing and stock dry rooms, the dominant mass of the 1896 brick industrial complex is a 4-story, flat-roofed building with a dentilled brick cornice. The windows are rhythmically spaced, 6/6 and 9/9 sash with segmental arch lintels and stone sills. There are groupings of 2- and 3-story brick buildings attached to the finishing and stock dry room block and serves as the bleach house, engine rooms, and machine room. A brick boiler stack which reads "E.M.P.C." is located within the complex. Added between 1914 and 1940, there is a 3-story brick building that features identical 6/6 and 9/9 sash windows with segmental arch lintels and stone sills. Added in ca. 2006, a 3-story brick and concrete building is set within this later addition and the finishing and stock dry rooms block.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

The predecessor of the Esleeck Paper Company was the Marshall Paper Company, founded in 1895 by Frank W. Marshall, inventor of the Marshall Refining Engine. Marshall built his enterprise on the Connecticut River bank and west of the power canal, between the Turners Falls and Keith Paper Companies' manufacturing plants (Great Falls Discovery Center 1996: 4).

Marshall's company was in business only until 1899, when bookkeeper Augustine W. Esleeck and Alfred T. Judd of the Valley Paper Company of Holyoke founded the Monadnock Paper Company in the old Marshall Company Building (Montague Bicentennial Committee 1954: 125). The firm's name was changed to Esleeck Paper Company in 1901. The factory complex is shown on the 1902 Sanborn Map of Turners Falls, identified still as the Marshall Paper Company (Sanborn Map Co. 1902: Sheet 3). A finishing building was added on the south end by 1909 (Sanborn Map Co. 1909: Sheet 3).

From the beginning, the company specialized in the manufacture of high-grade onionskin and manifold papers. By 1912, the company was recognized as the leading manufacturer of this paper type (Great Falls Discovery Center 1996: 4). After more than 100 years of continuous operation, the Esleeck Company was purchased by Southworth Company in 2006. Southworth sold the plant in 2012 and closed its operations soon afterwards, although the plant is still in use for paper production.

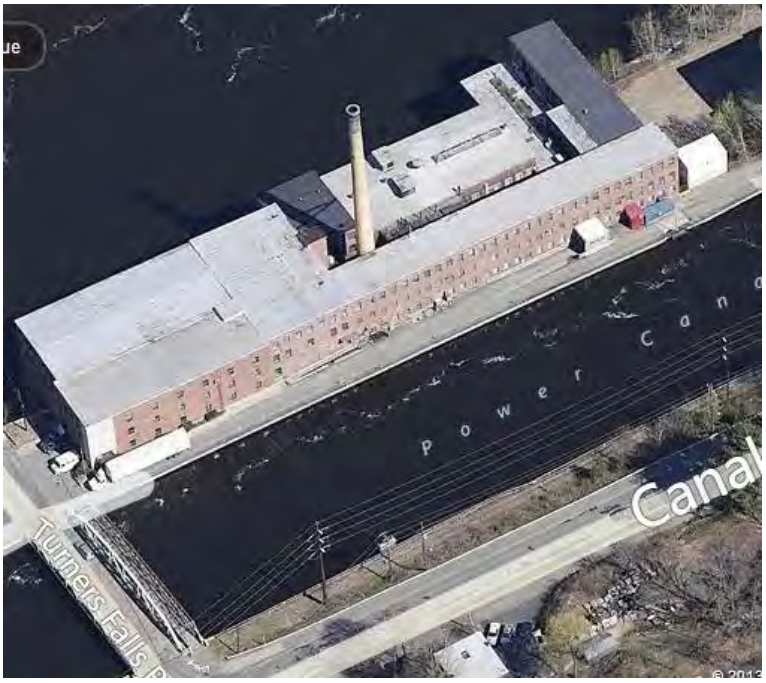
BIBLIOGRAPHY and/or REFERENCES

Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

Sanborn Map Company
September 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
December 1909" "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

2014 View of East and South Elevations (Source: TRC)



2012 Low-level oblique image of Esleeck Paper Company (Bing Maps)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District
The Esleeck Paper Company Building is a contributing resource in the NRHP-listed Turners Falls Historic District, listed in 1983 under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-01	Greenfield	MNT.G, MNT.H	MNT.131

Photograph

Locus Map

Town/City: Montague

Place: *(neighborhood or village)*:
Turners Falls

Address: West Side of Turners Falls Power Canal

Historic Name: Keith Paper Company

Uses: Present: Vacant

Original: Industrial

Date of Construction: 1877; 1893-1896

Source: Sanborn Maps, Written sources

Style/Form: Industrial

Architect/Builder: George F. Hardy

Exterior Material:
Foundation: Stone

Wall/Trim: Brick

Roof: Asphalt, Metal

Outbuildings/Secondary Structures:
Boiler Stack, Connected Paper Mill Complex

Major Alterations *(with dates):*
Windows and doors, additions and demolitions

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/Industrial

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE

ADDRESS W. Side of Power Canal

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s)	Form No.
MNT.G, MNT.H	MNT.131

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

The Keith Paper Mill complex is a grouping of connected brick industrial buildings dating from 1877 and designed by George F. Hardy. The main buildings, sited directly along the Connecticut River, are 4 stories in height and have asphalt-shingled gable roofs with dentilled brick cornices. The windows are 9/9 sash with segmental arch lintels and stone sills. Two square towers with flat roofs are located toward the east and west ends of these three buildings. Originally housing the bleachery, a 3-story brick building with front-gable roof projects from the center of the buildings along the river. The buildings have similar architectural features including a dentilled cornice. The gable dormers have been removed. Several 1- and 2-story brick buildings as well as a brick boiler stack reading “K. P. Co.” are also located on the southern portion of the parcel. The southern-most building on the site was constructed to store finished products and rag storage. The 4-story building has brick pilasters with movable glass panels running in between and can cover the segmental arched windows.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

John Keith, founder of the company and mill that bore his name, was a paper salesman from Worcester, MA who later was affiliated with the Valley Paper Company of Holyoke. Lacking capital of his own, he obtained $250,000 in backing for a paper mill to be built in Turners Falls from by Turners Falls founder and chief driving force, Colonel Alvah Crocker. Keith became first president and treasurer of the firm on August 29, 1871 (Montague Bicentennial Committee 1954: 125).

After the John Russell Cutlery Company (1868) and Montague Paper Mill (1870), the Keith Mill was the third major industrial complex built along the power canal, where it purchased power from Crocker’s Turners Falls Company. The original mill building was destroyed by fire on November 7, 1877, but was reconstructed soon after. “Spring water so essential to the manufacture of fine paper is brought to the mill through a 12-inch pipe from a spring at Deep Hole, two miles up the river” (Greenfield Gazette 1892: 4). In 1893-1896 the plant was expanded to house two additional machines, nearly doubling output (Montague Bicentennial Committee 1954: 125). The Keith Block, a block-long row of brick apartments on Canal Street and joined to the paper mill by a metal pedestrian bridge over the power canal, was built by the Keith Paper Company to house its workers. Rent was deducted from workers’ pay and the Keith Block housed both families and single workers (Jenkins 1980: 8.4).

In 1916, the original power plant, seven flumes, and water wheels were removed and replaced with a more efficient hydroelectric plant. Further modernization was accomplished in 1935 and again in 1953, when several new machines were installed. The Keith Paper Company was known for its high-grade ledger, index, and bond papers and in the 1940s provided employment for about 200 people. On November 4, 1953 the company was sold by the last Keith Paper Company president to the Strathmore Paper Company of West Springfield, MA (Montague Bicentennial Committee 1954: 125). The plant closed in 1994 and the building is currently vacant.

BIBLIOGRAPHY and/or REFERENCES

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

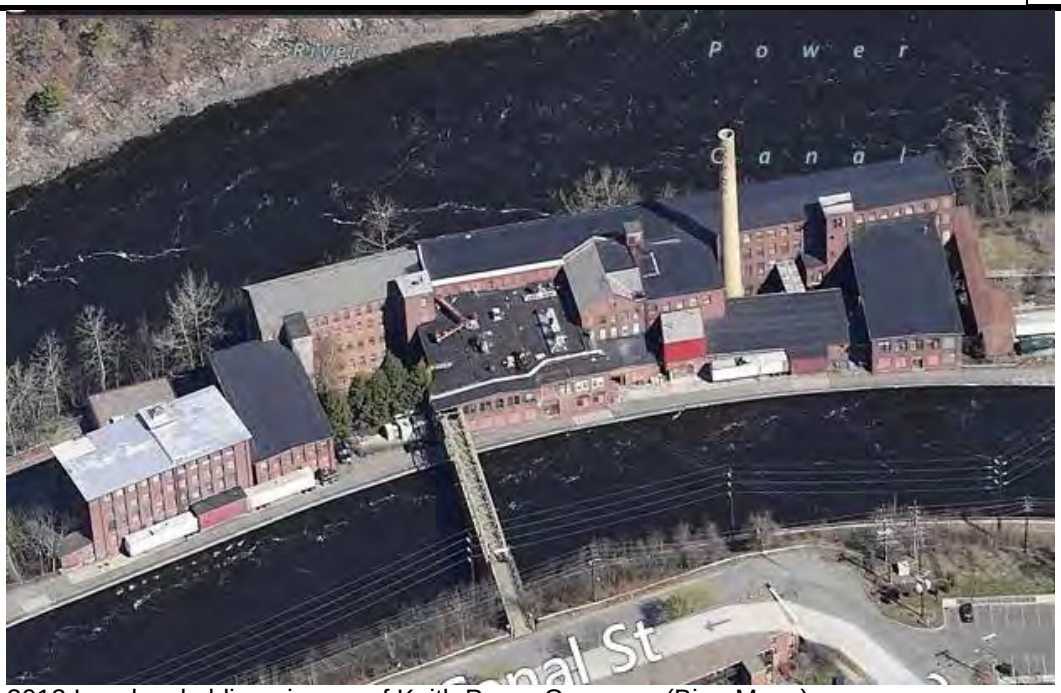
Sanborn Map Company
September 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
December 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Wade, Warner & Company
1891 "Picturesque Franklin." Northampton, MA.

Ca. 1891 View of Keith Paper Mill (Source: Wade, Warner & Company).

2014 View of South Elevations (Source: TRC)


2014 View of Southern Storage Building (Source: TRC)



2012 Low-level oblique image of Keith Paper Company (Bing Maps)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Keith Paper Company Complex is a contributing resource in the NRHP-listed Turners Falls Historic District listed in the National Register in 1983 under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
04-0-0001	Greenfield	MNT.G, MNT.H	MNT.132

Town/City: Montague

Place: *(neighborhood or village)*:
Turners Falls

Address: 2 Avenue A

Historic Name: Montague Paper Company: Carpentry shop and administrative offices

Uses: Present: Great Falls Discovery Museum

Original: Industrial

Date of Construction: 1902-1909

Source: Sanborn Maps

Style/Form: Industrial

Architect/Builder: Montague Paper Company

Exterior Material:
Foundation: Stone

Wall/Trim: Weatherboard

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Sporting goods store; converted to Great Falls Discovery Museum in 1995

Condition: Excellent

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/industrial

Photograph

Locus Map

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE
ADDRESS 2 Avenue A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): MNT.G, MNT.H
Form No.: MNT.132

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Set on a stone foundation, the former Montague Paper Company carpentry shop and administrative offices buildings are of wood-frame construction clad with weatherboard. Originally two separate buildings, by 1940, the buildings were combined to form a 1-story building with an L-shaped plan. The smaller of the two buildings served as the offices and is 5 bays in width and 3 bays deep. The windows are paired 2/2 double-hung sash on the façade and single 2/2 double-hung sash on the side elevations all with lipped lintels. The windows in the gables are large 9/6 sash with segmental-arched lintels. Off-center, double-leaf paneled doors are present on the façade and west elevation. The long ell moving eastward from the small block features 12/12 sash windows and both single- and double-leaf doors. A modern addition connects this building to the former machine shop (MNT.133). The two buildings now comprise the Great Falls Discovery Museum.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

These buildings located on Avenue A in Turners Falls are the only two still standing of the vast 15-building Montague Paper (later International Paper) Company complex built at the head of the Turners Falls Power Canal. Water from the canal at one time supplied 3,000 horsepower for heating, steaming, and drying the company's primary product, newsprint. The company was started in 1868 by Colonel Alvah Crocker, founder of Turners Falls and its driving force for many years (Great Falls Discovery Center 1996: 12).

According to an 1879 description: "In 1871, a three-story brick mill, 128 by 55 feet, with a ground area of 15,000 square feet and floor space of 43,700 feet, was erected just west of the Russell Company's works, and the work of manufacturing news-printing paper begun. In 1872 the manufacture of book-paper was inaugurated, and to the production of these two kinds of paper the mill is still devoted. In 1874 the works were enlarged by the addition of a wing three stories in height, and measuring 100 by 55 feet, and in 1875 the company purchased the works of the Turner's Falls Pulp Company, directly east, and consisting of a two-story brick edifice, measuring 200 by 55 feet. The latter was soon afterward enlarged, so that now, in 1879, the company has a front on the river of 560 feet" (Everts 1879).

An 1892 description provided an update on buildings at the mill site: "The buildings which have been erected from time to time since then have been constructed of brick in the most substantial manner and have a frontage along the river of nearly 900 feet" (Greenfield Gazette 1892: 2).

The brick gable-roofed building served as the company machine shop and first appears on the 1884 Sanborn map, while the attached wooden buildings were built sometime between 1902 and 1909 to serve as the company carpentry shop and administrative offices (Sanborn Map Company, 1889, 1902, 1909)(Great Falls Discovery Center 1996: 12). In 1994-1995, the two buildings were converted for use as the Great Falls Discovery Museum.

BIBLIOGRAPHY and/or REFERENCES

Everts, Louis H.
1879 *History of the Connecticut Valley in Massachusetts*, Volume II." Louis H. Everts, publisher, Philadelphia PA.

Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

Greenfield Gazette
1892 "Centennial Edition." Greenfield Gazette, publishers, Greenfield, MA.

Sanborn Map Company
September 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
December 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

MILLS OF THE MONTAGUE PAPER COMPANY, TURNERS FALLS.

Pre 1912 historic view of Montague Paper Company (Source: Great Falls Discover Center)

2014 View of South and West Elevations (Source: TRC)

2014 View of East Elevation (Source: TRC)

2012 Low-level oblique image of former Montague Paper Company Buildings (Source: Bing.com)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Montague Paper Company building (now the Great Falls Discovery Center Museum) is a contributing resource in the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
04-0-0001	Greenfield	MNT.G, MNT.H	MNT.133

Photograph

Locus Map

Town/City: Montague

Place: *(neighborhood or village)*:
Turners Falls

Address: 2 Avenue A

Historic Name: Montague Paper Company: Machine Shop

Uses: Present: Great Falls Discovery Museum

Original: Industrial

Date of Construction: ca. 1880

Source: Sanborn Maps

Style/Form: Vernacular Italianate/Industrial

Architect/Builder: Montague Paper Company

Exterior Material:
Foundation: Stone

Wall/Trim: Brick (Stretcher Bond)

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Sporting goods store; Converted to Great Falls Discovery Museum in 1994-1995

Condition: Excellent

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/industrial

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year*): March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE
ADDRESS 2 Avenue A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): MNT.G, MNT.H
Form No.: MNT.133

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Set on a stone foundation, the 1-story, 3-bay former Montague Paper Company machine shop and blacksmith building has stretcher-bond brick exterior walls. The asphalt-shingled, front-gable roof features a corbelled brick, dentilled cornice with pedimented gable ends and a round window in the gable end. The façade has a central double-leaf door with paneled transom. The side elevation has an arched, double-leaf door with strap hinges. The rear elevation has a replacement, single-leaf door with a segmental arched lintel. Both doors on the side and rear elevations are no longer used. The windows consist of 9/9 sash windows with stone lintels and segmental arched transoms with stone keystones and voussoirs. The windows are set within slightly recessed bays topped by brick dentils. A 1-story ell, added 1889-1895, is attached to the rear of the side elevation and is of consistent materials and windows as the main block. Originally serving as an engine room and later as a blacksmith shop, a modern addition off the ell connects this building to the former carpentry shop and administrative offices (MNT.132). Used as a sporting goods store in the 1970s and 1980s, the two buildings were converted for use as the Great falls Discovery center Museum in 1994-1995.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

These buildings located on Avenue A in Turners Falls are the only two still standing of the vast 15-building Montague Paper (later International Paper) Company complex built at the head of the Turners Falls Power Canal. Water from the canal at one time supplied 3,000 horsepower for heating, steaming, and drying the company's primary product, newsprint. The company was started in 1868 by Colonel Alvah Crocker, founder of Turners Falls and its driving force for many years (Great Falls Discovery Center 1996: 12).

According to an 1879 description: "In 1871, a three-story brick mill, 128 by 55 feet, with a ground area of 15,000 square feet and floor space of 43,700 feet, was erected just west of the Russell Company's works, and the work of manufacturing news-printing paper begun. In 1872 the manufacture of book-paper was inaugurated, and to the production of these two kinds of paper the mill is still devoted. In 1874 the works were enlarged by the addition of a wing three stories in height, and measuring 100 by 55 feet, and in 1875 the company purchased the works of the Turner's Falls Pulp Company, directly east, and consisting of a two-story brick edifice, measuring 200 by 55 feet. The latter was soon afterward enlarged, so that now, in 1879, the company has a front on the river of 560 feet" (Everts 1879).

An 1892 description provided an update on buildings at the mill site: "The buildings which have been erected from time to time since then have been constructed of brick in the most substantial manner and have a frontage along the river of nearly 900 feet" (Greenfield Gazette 1892: 2).

The brick gable-roofed building served as the company machine shop and first appears on the 1884 Sanborn map, while the attached wooden buildings were built sometime between 1902 and 1909 to serve as the company carpentry shop and administrative offices (Sanborn Map Company, 1889, 1902, 1909) (Great Falls Discovery Center 1996: 12).

BIBLIOGRAPHY and/or REFERENCES

Everts, Louis H.
1879 *History of the Connecticut Valley in Massachusetts*, Volume II." Louis H. Everts, publisher, Philadelphia PA.

Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

Greenfield Gazette
1892 "Centennial Edition." Greenfield Gazette, publishers, Greenfield, MA.

Sanborn Map Company
September 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
December 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

MILLS OF THE MONTAGUE PAPER COMPANY, TURNERS FALLS.

Pre 1912 historic view of Montague Paper Company (Source: Great Falls Discovery Center)

2014 View of South and East Elevations (Source: TRC)

2014 View of East Elevation (Source: TRC)

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE
ADDRESS 2 Avenue A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): MNT.G, MNT.H
Form No.: MNT.133

2012 Low-level oblique image of former Montague Paper Company Buildings (Source: Bing.com)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Montague Paper Company Building (converted for use as the Great Falls Discovery Center Museum) is a contributing resource in the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

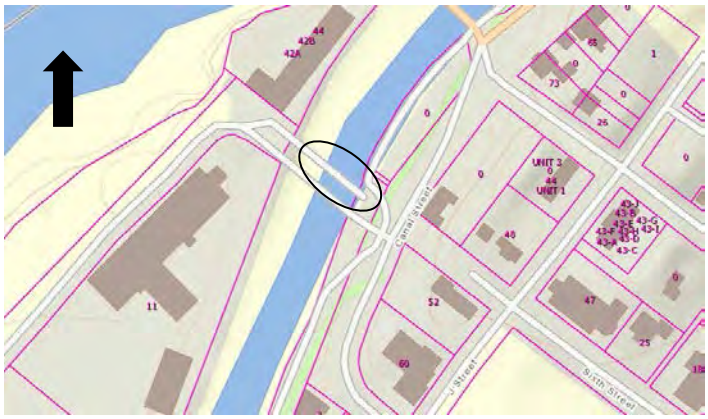
FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.G	MNT.909

Photograph

Locus Map



MA GIS 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Sixth Street

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Sixth Street Bridge over Power Canal

Ownership: Town of Montague
(Name of state agency or municipality)

Mass. Highway bridge no.: M-28-16

Bridge type: Warren thru-truss

Bridge typology code 310

Date of Construction: 1912

Source: Date Plaque; Engineering Plans

Engineer/Designer: Eastern Bridge & Structural Company

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Steel, Concrete

Alterations *(with dates):* Closed for traffic

Posted load limit *(if any):* None-closed for traffic

Condition: Poor

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban (Industrial area of Turners Falls)

UTM Reference: 18 0700050E 4720117N

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* March 2014

Superstructure:

Overall length: 139 ft. Deck width: 20.5 ft. Skew: 16 degrees
Main unit: No. of spans: 1 Span length: 136 ft.
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 4 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Sixth Street Bridge was constructed across the Turners Falls Power Canal in 1912. It is a 136'-long, single-span, riveted, double-intersection Warren thru-truss bridge, designed by the Eastern Bridge & Structural Company of Worcester MA, and erected by a crew of workers from the Turners Falls Power Company. It is the sixth oldest of the seven double-intersection Warren thru-trusses in the Massachusetts bridge inventory. It is technologically notable for the use of inclined end posts of different angles of inclination to absorb the 16 degree skew. The bridge is in poor condition, is closed to traffic, and a temporary "Bailey" type bridge has been built immediately to its south.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Sixth Street Bridge was one of several built at the expense of the Turners Falls Power Company to provide vehicular and pedestrian access to the paper mills located across the company's power canal from the rest of town. The Eastern Bridge & Structural Company also built footbridges at Fifth Street (MNT.924) and to the Keith's Mill (MNT.925).

Among other enterprises, the Turners Falls Power & Electric Company built and maintained the Turners Falls Power Canal and dam, as well as financing and building several vehicular and pedestrian bridges crossing the canal between the village and the mills. The construction of bridges over the canal at Sixth Street and Eleventh Street was crucial to the development of the village, as any proposed southern extension of the power canal would, in effect, create an "island" in the south-center of Turners Falls (Bennett 1990: 4).

The section of town known as the "South End" or "the Patch" would consequently be bordered on all sides with water--the Connecticut River on the north and west, and the power canal on the east and south--and connected to the rest of the village by only a small strip of land to the north. While a substantial steel suspension bridge already spanned the river at Fifth Street, and there were several small bridges crossing the upper part of the canal, the lower section of the canal would need to be bridged between the center of the village and the south end at Sixth Street and Eleventh Street (Bennett 1990: 4).

BIBLIOGRAPHY and/or REFERENCES

Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Turners Falls Power Company
1916 Plan and Profile, 5th and 6th Bridges, Raising of Upper Canal, Turners Falls Power Company, Engineering Department-Turners Falls Office, January 2, 1919.
1918 General Layout Plan—Raising Canal Walls. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. December 20, 1918.

ADDITIONAL PHOTOGRAPHS

June 27, 1915 Photo of 6th Street Bridge (Source: FirstLight Photo Archives)

2014 View of East Approach and Downstream Face (Source: TRC)

2012 Low-level oblique image of 6th Street Bridge over Power Canal (Bridge is the abandoned on the left) (Source: Bing.com)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☒ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Sixth Street Bridge over the Turners falls Power Canal is a contributing resource in the NRHP-listed Turners Falls Historic District, listed under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)

The Sixth Street Bridge is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A

The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during

Continuation sheet 4

the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Greenfield	MNT.H	MNT.910

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0700118E 4720204N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Fifth Street

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Fifth Street Bridge over Power Canal

Ownership: Town of Montague
(Name of state agency or municipality)

Mass. Highway bridge no.: M-28-15

Bridge type: Warren Pony Truss

Bridge typology code 310

Date of Construction: 1954

Source: MASS DOT Bridge Files

Engineer/Designer: C.J. Cray (Boston)

Bridge company/Contractor: Warner Brothers Co.

Material (s): Steel, Concrete

Alterations *(with dates):* Rehabilitated (1992)

Posted load limit *(if any):* Not Known

Condition: Fair

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban (Industrial area of Turners Falls)

Superstructure:

Overall length: 136 ft. Deck width: 28.4 ft. Skew: None

Main unit: No. of spans: 1 Span length: 134 ft.

Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 4 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Fifth Street Bridge was constructed across the Turners Falls power canal in 1954 and replaced an earlier bridge on the site. Immediately adjacent to the Fifth Street pedestrian bridge, it is a 136'-long, single-span riveted, single-intersection Warren pony truss with a 5-slope upper chord. It was designed by C.J. Cray of Boston MA, and erected by the Warner Brothers Company. The polygonal upper chord was the common bridge design for all Warren pony trusses erected in Massachusetts after 1925, however this bridge is the longest span of the type.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Fifth Street Bridge was constructed across the power canal in 1954 when Route 2A was routed over this route, possibly in order to accommodate heavier traffic patterns. It is a riveted Warren pony truss, designed by C.J. Cray of Boston MA, and erected by the Warner Brothers Company. The bridge crosses the canal at a point where it directly lines up with the white bridge to Greenfield. Both of these bridges replaced earlier bridges located at the same site. The bridge was one of several built to provide vehicular and pedestrian access to the paper mills located across the Turners Falls power canal from the rest of town.

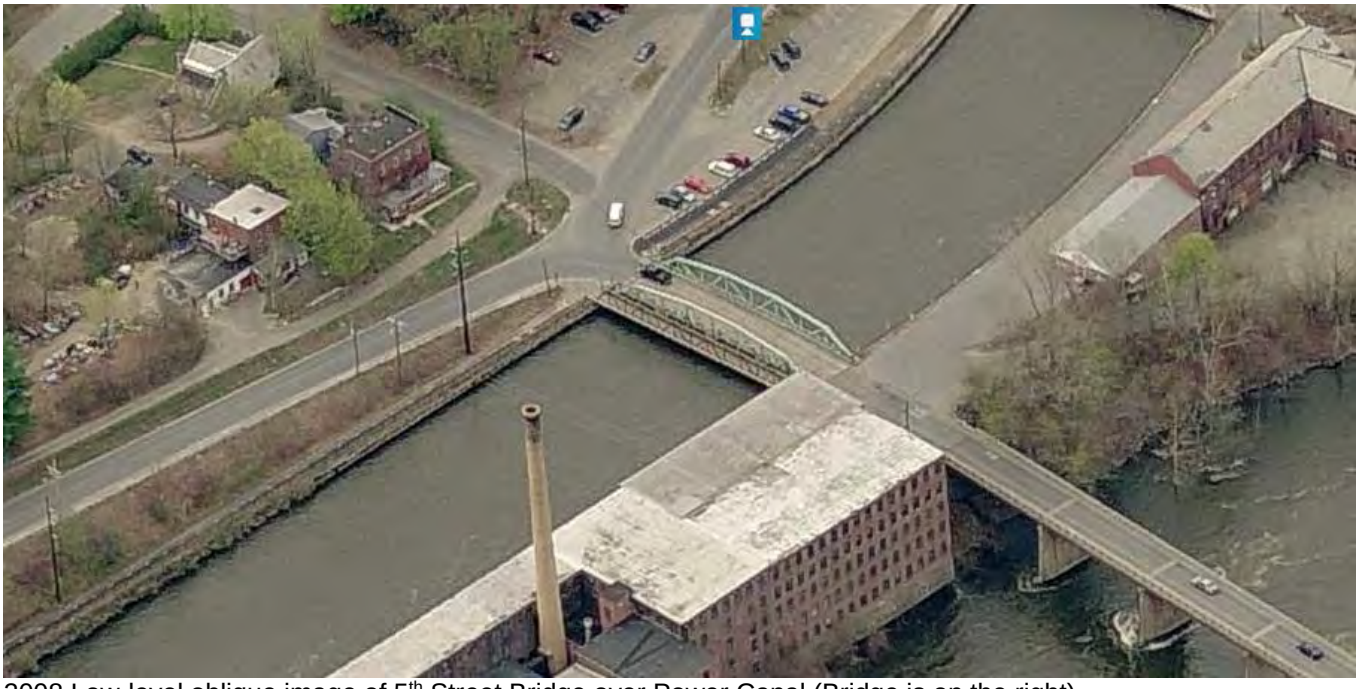
BIBLIOGRAPHY and/or REFERENCES

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Roper, S.J.
1987 "5th Street Bridge," Massachusetts Historic Bridge Inventory. Massachusetts Historical Commission, Boston, MA.

ADDITIONAL PHOTOGRAPHS

2014 View of Downstream Face (Source: TRC)



2008 Low-level oblique image of 5th Street Bridge over Power Canal (Bridge is on the right)
(Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District
The Fifth Street Bridge over the Turners Falls Power Canal is a contributing resource to the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late nineteenth century industrial communities of Massachusetts, and particularly of the Connecticut River Valley. This bridge built in 1954 to replace an earlier bridge at this location is a common type and previously was determined not eligible for individual listing in the NRHP.

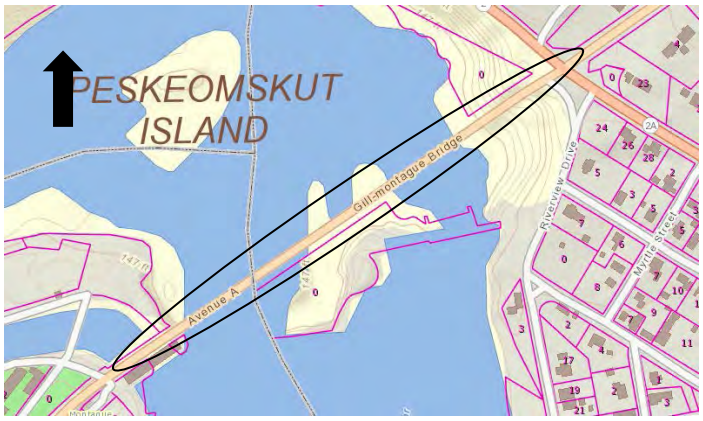
FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Greenfield	MNT.H, GIL.C	GIL.901/MNT.920

Photograph

Locus Map



MA GIS 2014

UTM Reference: 18 0700837E 4720605N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* 03/2014

Town/City: Montague, Gill

Place *(neighborhood or village):* Turners Falls and Riverside

Street/Route: Route 2A (Avenue A)

Carried over: Connecticut River, B&M Railroad Bed
(Railroad, river, brook, canal or road)

Historic/Common name: Turners Falls-Gill Bridge (Historic), Gill-Montague Bridge (Current)

Ownership: MassDOT
(Name of state agency or municipality)

Mass. Highway bridge no.: G-4-10/M-28-31

Bridge type: Warren Deck Truss

Bridge typology code 409 309 302

Date of Construction: 1937-38

Source: Date Plaque; written sources

Engineer/Designer: Massachusetts Department of Public Works (Plans-no engineer/designer indicated)

Bridge company/Contractor: Daniel O'Donnell's Sons

Material (s): Steel, Concrete, Stone

Alterations *(with dates):* Concrete Deck replaced (ca. 1985), Rehabilitation of existing steel truss (2010-2014)

Posted load limit *(if any):* 20 tons

Condition: Excellent

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban (Industrial area of Turners Falls, residential area of Riverside)

Superstructure:

Overall length: 1733 ft.	Deck width: 39.1 ft.	Skew: 23 degrees	
Main unit: No. of spans:	3	Span length:	1 at 449 ft. 2 at 400 ft.
Approaches: No. of spans:	3	Span length:	SW to NE: 1 at 62 ft. (approx.), 1 at 211 ft. (approx.), 1 at (177 ft. (approx.)

Substructure *(structure below deck)*

Height above feature spanned: 300 ft. (approx.) Material of abutments or piers: Concrete, Stone veneer

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

Designed by the Massachusetts Department of Public Works and built by Daniel O'Donnell's Sons of Holyoke, MA, the Turners Falls-Gill Bridge was constructed over the Connecticut River in 1937-38. It is a 1733'-long, 3-span, single-intersection riveted-steel, Warren deck truss with verticals and haunched lower chords over the two intermediate piers. There are also two approach spans on each side of the river; both are Warren deck trusses with alternate verticals. Immediately southwest of the Turners Falls Gatehouse is a steel stringer approach span to carry the roadway over the non-extant Boston & Maine Railroad line. All of the piers and abutments are concrete. The two central piers are stone faced. The piers flanking these rise above the truss and roadway to terminate in Art Deco-style stepped pylons ornamented with eagles, shields, and fluted panels. The Art Deco motif is continued onto the steel balustrade designs as well as the open-panel reinforced guardrails on the approaches.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The current Turners Falls-Gill Bridge was a major Depression-era public works project in western Massachusetts and began construction on May 17, 1937 (Jenkins 1980: 8.7). The bridge was completed in September 1938 by the contractor Daniel O'Donnell's Sons of Holyoke (Montague Bicentennial Committee 1954: 111). The firm was founded in 1879 by Daniel O'Donnell, then Superintendent of Streets in Holyoke and went on to become a prominent bridge building firm in Massachusetts. Since 1979, the firm has been known as the O'Donnell Companies and is still in business.

Spanning over the two Turners Falls Dams, and built at a cost of more than a million dollars, the Turners Falls-Gill Bridge was dedicated on September 10, 1938 and is one of the largest three-span bridges on the Connecticut River and at the time the longest bridge in the state (Montague Bicentennial Committee 1954: 111). It is significant as well for its fine Art Deco-style detailing, particularly the concrete pylons with carved eagles. By 2010, the road deck of the bridge had become riddled with potholes and uneven pavement. A major renovation project began in summer 2010 and was completed in 2014 at an estimated cost of $40.7 million. At this time the bridge is now known as the Gill-Montague Bridge.

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Jessen, Klark
2010 Gill-Monatgue Bridge Reconstruction. June 25, 2010. Accessed Online 2014: http://blog.mass.gov/transportation/massdot-highway/gillmontague-bridge-reconstruction/

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

ADDITIONAL PHOTOGRAPHS

2014 View of Upstream Face (Source: TRC)

2014 View of Southwest Approach (Source: TRC).

2014 View of Art Deco-Style Pylon (Source: TRC).

2008 Low-level oblique image of Turners Falls-Gill Bridge over the Connecticut River (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Individually NRHP-eligible under Criteria A and C

The Turners Falls-Gill Bridge previously has been determined individually eligible for listing in the NRHP by the MHC. Built at a cost of more than a million dollars, the Turners Falls-Gill Bridge was dedicated on September 10, 1938 and is one of the largest three-span bridges on the Connecticut River and was at the time the longest bridge in the state (Montague Bicentennial Committee 1954: 111). The Turners Falls-Gill Bridge was part of major overhaul and rebuilding of the highway system in this area during the 1930s that included building the Mohawk Trail highway (Route 2) and the French King Bridge farther upriver. The bridge is architecturally significant as well for its fine Art Deco-style detailing, particularly the concrete pylons with carved eagles.

Contributing Resource in Turners Falls Historic District

The Turners Falls-Gill Bridge is a contributing resource in the NRHP-listed Turners Falls Historic District, listed in 1983 under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

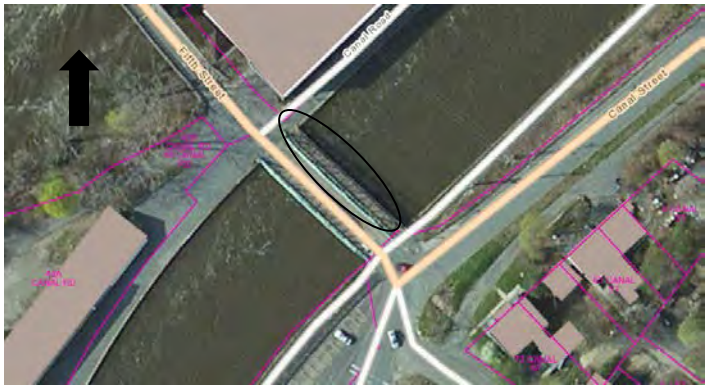
FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.H	MNT.924

Photograph

Locus Map



MA GIS 2014

UTM Reference: 18 0700124E 4720215N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Pedestrian Walkway Adjacent to 5th Street Bridge over Turners Falls Power Canal

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: 5th Street Pedestrian Bridge

Ownership: FirstLight Power Resources-GDF Suez Energy
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Warren Thru-truss

Bridge typology code 310

Date of Construction: 1912

Source: Turners Falls HD Nomination; date plaque

Engineer/Designer: Eastern Bridge & Structural Company

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Steel, Concrete

Alterations *(with dates):* None Known; closed to traffic

Posted load limit *(if any):* N/A

Condition: Fair

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/Industrial

Superstructure:

Overall length: 139 ft. (approx.) Deck width: 12 ft. (Approx.) Skew: None

Main unit: No. of spans: 1 Span length: 134 ft. (approx..)

Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 4 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Fifth Street Pedestrian Bridge was constructed across the Turners Falls Power Canal in 1912 in order to provide workers at the Esleeck and Keith Paper Mills access across the canal. Immediately adjacent to the Fifth Street vehicular bridge, it is a136'-long, single-span riveted, Warren thru-truss, designed by the Eastern Bridge & Structural Company of Worcester MA, and erected by a crew of workers from the Turners Falls Power Company. The bridge currently is closed to pedestrian traffic.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Fifth Street Pedestrian Bridge was constructed across the power canal in 1912. It is a riveted Warren thru-truss, designed by the Eastern Bridge & Structural Company of Worcester MA, and erected by a crew of workers from the Turners Falls Company. The bridge was one of several built at the expense of the Turners Falls Power Company to provide vehicular and pedestrian access to the paper mills located across the company's power canal from the rest of town. The Eastern Bridge & Structural Company also built the adjacent vehicular bridge at Fifth Street (MNT.910) and the Keith's Mill pedestrian bridge (MNT.925).

BIBLIOGRAPHY and/or REFERENCES

Arts Council OF Franklin County
1978 "Fifth Street Bridge" MHC Survey Form A. Boston MA.

Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

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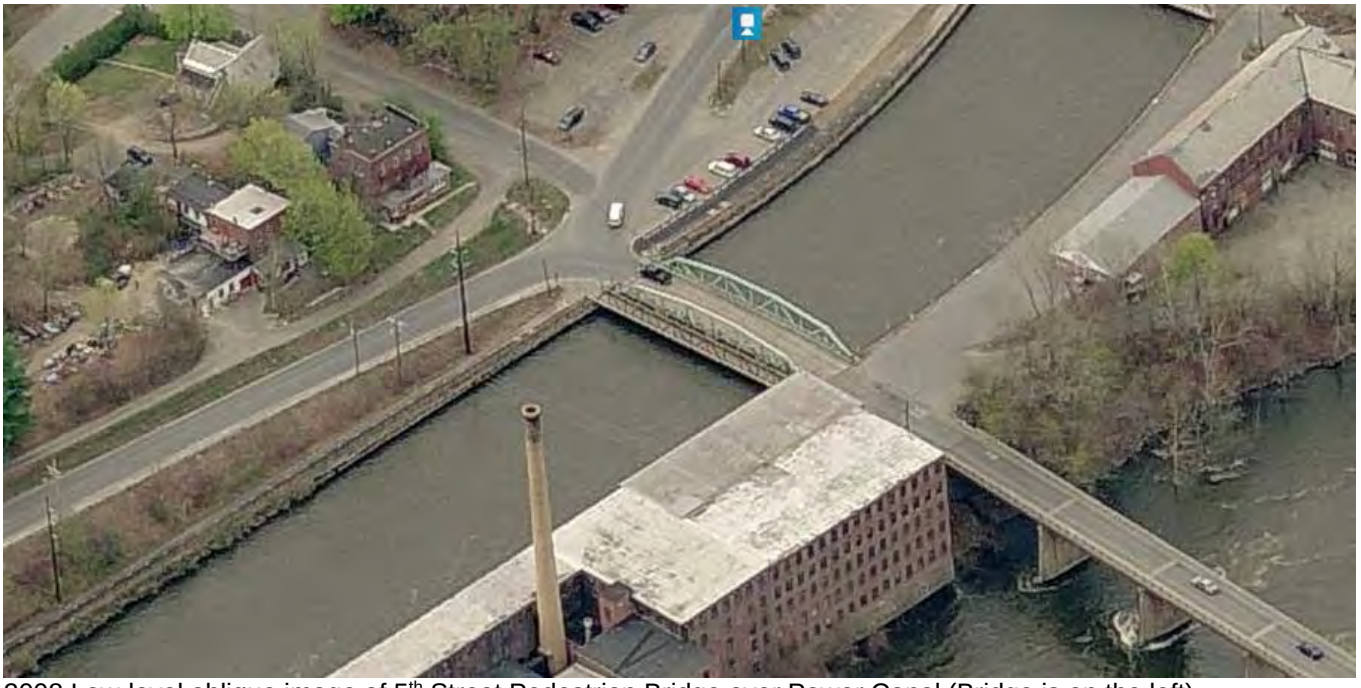
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Turners Falls Power Company
1916 Plan and Profile, 5th and 6th Bridges, Raising of Upper Canal, Turners Falls Power Company, Engineering Department-Turners Falls Office, January 2, 1919.

ADDITIONAL PHOTOGRAPHS

2014 View of East Approach (Source: TRC)



2008 Low-level oblique image of 5th Street Pedestrian Bridge over Power Canal (Bridge is on the left) (Source: MASSDOT GIS)

Continuation sheet 2

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☒ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Fifth Street Pedestrian Bridge over the Turners Falls Power Canal is a contributing resource in the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Fifth Street Pedestrian Bridge over the Turners Falls Power Canal is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A

The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.H	MNT.925

Photograph

Locus Map

MA GIS 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Canal Street Between 2nd and 3rd Streets

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Keith Mill Pedestrian Bridge over Power Canal

Ownership: FirstLight Power Resources-GDF Suez Energy
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Pratt Thru-truss

Bridge typology code 310

Date of Construction: ca. 1913-14

Source: Turners Falls HD Nomination, 1914 Sanborn map

Engineer/Designer: Eastern Bridge & Structural Company

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Steel, Concrete

Alterations *(with dates):* None Known

Posted load limit *(if any):* None-closed to pedestrian traffic

Condition: Poor

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/industrial

UTM Reference: 18 0700279E 4720365N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Superstructure:

Overall length: 230 ft. Deck width: 12 ft. (Approx.) Skew: None

Main unit: No. of spans: 1 Span length: 135 ft.

Approaches: No. of spans: 1 Span length: 95 ft.

Substructure *(structure below deck)*

Height above feature spanned: 47 ft. (approx.) Material of abutments or piers: Concrete, metal

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

Totaling 230 feet in length, the 135-foot span over the Turners Falls Power Canal is accessed by a 95-foot deck plate girder span with concrete deck. Built ca. 1913-1914 by the Eastern Bridge & Structural Company the single-span bridge is an eleven-panel rivet-connected Pratt thru-truss design. This unique riveted truss bridge provides direct pedestrian access to the historic Keith paper mill. The bridge actually rests on part of the building, and the bridge deposits pedestrians right on the second floor of the mill. The original lattice railing that is on the bridge continues on this "porch" of the building, emphasizing the connection and relationship of bridge to building. This unique connection makes this historic bridge a critical part of the mill building.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

Built ca. 1913-1914 by the Eastern Bridge & Structural Company for the Turners Falls Company, the bridge is one of several built to provide pedestrian access for workers to the mills on the opposite side of the canal. In this case, the footbridge led from the Keith Block apartments on Canal Street directly into the mill building and is shown on the 1914 Sanborn map. The Eastern Bridge & Structural Company also built the vehicular bridge at Sixth Street and a footbridge at Fifth Street (Arts Council of Franklin County 1978g, h, j, n).

BIBLIOGRAPHY and/or REFERENCES

Arts Council OF Franklin County
1978g “Eleventh Street Bridge” MHC Survey Form A. Boston MA.
1978h “Fifth Street Bridge” MHC Survey Form A. Boston MA.
1978j “Keith Paper Mill” MHC Survey Form A. Boston MA.
1978n “Sixth Street Bridge” MHC Survey Form A. Boston MA.

Sanborn Map Company
September 1902 “Turners Falls, Mass.” Sanborn Map Company, Broadway, NY.
December 1909 “Turners Falls, Mass.” Sanborn Map Company, Broadway, NY.
August 1914 “Turners Falls, Mass.” Sanborn Map Company, Broadway, NY.

ADDITIONAL PHOTOGRAPHS

2014 View of Southeast Approach from Canal Street and Downstream Face (Source: TRC)

2014 View of Underside and Upstream Face (Source: TRC)

2008 Low-level oblique image of Keith's Mills Pedestrian Bridge over Power Canal (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☒ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Keith Mill Pedestrian Bridge over the Turners Falls Power Canal is a contributing resource in the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Keith Mill Pedestrian Bridge over the Turners Falls Power Canal is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A

The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.H	MNT.933

Town/City: Montague

Place *(neighborhood or village):* Turners Falls/Montague City

Address or Location: Connects Turners Falls Dam with Cabot Power Station east of Connecticut River

Name: Turners Falls Power Canal

Ownership: ☐ *Public* ☒ *Private*

Type of Structure ***(check one):***

___ boat or ship
_X_ canal
___ carousel
___ dam
___ fort
___ gate
___ kiln
___ lighthouse
___ other *(specify)*
___ pound
___ powder house
___ street
___ tower
___ tunnel
___ wall
___ windmill

Date of Construction: 1798; 1866; 1906; and 1915-17

Source: Written records, engineering drawings

Architect, Engineer or Designer: Benjamin Prescott (1798); Turners Falls Company (1866); Turners Falls Power & Electric Company (1915-1917)

Materials: Concrete and stone

Alterations *(with dates)*: Original 1798 navigational canal lengthened, widened, and re-routed in 1866 as a power canal for factories, and in 1906 and again in 1915-17 as a hydroelectric canal serving two power stations. Canal walls raised in 1920s and 1930s.

Condition: Good

Moved: _☒_ **no** ☐ **yes** **Date**:

Acreage: Approximately 85 acres

Setting: Urban/industrial

Photograph

Locus Map

2014 MA GIS

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp. for FirstLight

Date (*month / year):* March 2014

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other structures within the community.

The Turners Falls Power Canal is a concrete-lined canal that runs between the Turners Falls Dam and the Cabot Power Station east of the Connecticut River in Montague. The canal incorporates a small part of the 1798 navigational canal built to bypass Turners Falls, while including improvements and a realignment completed in 1866 when it was converted to an industrial power canal, and again in 1915-1917 when it was widened, deepened, and lengthened for hydroelectric purposes. As a result of the canal widening in 1915-1917, numerous rail, vehicular, and pedestrian bridges were built spanning the canal by the power company to replace the earlier bridges now rendered obsolete. Today, the power canal is approximately 2.1 miles long and ranges in width from approximately 920 feet in the Cabot forebay (downstream end of canal) to 120 feet in the canal proper. The power canal has a design capacity of approximately 18,000 cubic feet per second. A short extension of the canal on its west serves as the forebay for Power Station No. 1

HISTORICAL NARRATIVE

Explain the history of the structure and how it relates to the development of the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1908: 8.1). The canal, designed by Benjamin Prescott of Northampton, was 2.5 miles long and 14 feet wide, with ten locks. A second dam and lock downstream from the confluence of the Connecticut and Millers Rivers to the north of Turners Falls raised the water in order that boats could navigate the French King rapids (MHC 1982c: 6). By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, the legislature granted the Proprietors the right to lease the canal waters for power purposes. A group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the rights from the Proprietors and formed the Turners Falls Company. The company replaced the older dam with a new wood-and-stone dam and rebuilt the canal. Soon, the canal was powering new manufacturers moving to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, “a small company of public-spirited citizens” leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls gatehouse and in 1892, the gatehouse was expanded for greater water flow. The Power Canal also was improved by widening it and increasing its depth.

By 1900, many of the mills and factories in Turners Falls and western Massachusetts began to lose business to Southern mills with their cheaper labor supply and as a consequence a few mills and small start-up power companies turned their attention to harnessing hydroelectric power. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1904, Charles Hazelton, treasurer of the Turners Falls Company, proposed to his board of directors that that they make better use of the water power being wasted by widening and extending the

canal, and establishing a hydro-electric generating plant of 5,000 kilowatt capacity. “His proposal met with unanimous agreement, and was carried out during the next three years” (Bennett 1990a: 5).

Construction of Power Station No. 1 in 1905 increased the importance of the power canal to the success of hydroelectric operations at Turners Falls. As built, the canal bypasses approximately 2.7 miles of the Connecticut River. Fall River, located near the head of the bypass channel, discharges into the bypass reach. In 1906, the Turners Falls Company had completed the widening of the power canal to 125 feet, increasing its depth to 15 feet, and extended it south by 1,000 feet.

In 1914, the Turners Falls Company consolidated with the Amherst Power Company, becoming the Turners Falls Power & Electric Company. During the 1920s, the company continued to acquire other smaller electric companies in western Massachusetts (WMECO 1987: 2).

Among other enterprises, the Turners Falls Power & Electric Company built and maintained the Turners Falls Canal and Dam, as well as financing and building several vehicular and pedestrian bridges crossing the canal between the village and the mills. The construction of bridges over the canal at Sixth Street and Eleventh Street were crucial to the development of the village, as any proposed extension of the power canal would, in effect, create an "island" in the center of Turners Falls.

In 1915, the Turners Falls Power & Electric Company completed its second power station at Cabot Station. Located two miles below the dam on the Connecticut River, the station required a 1.5-mile extension of the existing power canal. It utilized 54 feet of head, high by New England standards. Raising the canal embankment in 1917 allowed an increase to 48,000 kw (Clouette 1987: 2). By 1917, the canal was extended to its present length of approximately 2.5 miles. Final work on the canal's excavation was completed that year when it reached its present depth of between 25-40 feet and between 100-920 feet (the latter at the Cabot forebay) in width; canal walls were raised in 1919 and again in 1922 and the early 1930s (Holmes 1991: 28).

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1990 *Eleventh Street Bridge Spanning the Turners Falls Power Canal (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

C.H. Vogt & Co.
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Clouette, Bruce
1987 *Cabot Station Electric Generating Plant, Gantry Crane, HAER No. MA-79.* Historic Resource Consultants Inc., Hartford, CT.

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1996 “Walking Tour of Downtown Turners Falls, Massachusetts.” Great Falls Discovery Center, Turners Falls, MA.

Holmes, Richard D., Michelle T. Mulholland, and Carolyn D. Hertz
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1982b *MHC Reconnaissance Town Report: Gill*. MHC: Boston, MA.
1982c *MHC Reconnaissance Town Report: Montague*. MHC: Boston, MA.

Continuation sheet 2

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Sanborn Map Company

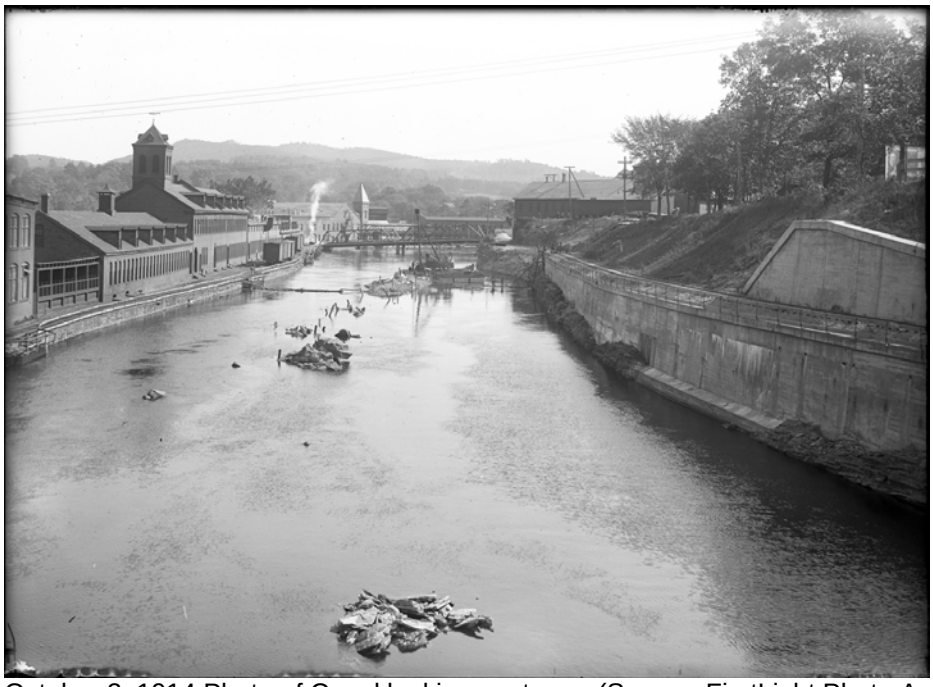
June 1884 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
February 1889 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
March 1895 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Sept 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Turners Falls Power & Electric Company
1917 Plan and Profiles I.P. Mill, Raising Upper Canal Walls. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. February 23, 1917.
1918 General Layout Plan—Raising Canal Walls. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. December 20, 1918.

Western Massachusetts Electric Company (WMECO)
1987 *Before the Federal Energy Regulatory Commission: Turners Falls Project FERC Project No. 1889, Application for Amendment of License, Proposed Cabot Unit 7.* WMECO, Springfield, MA

ADDITIONAL PHOTOGRAPHS

August 12, 1912 Photo looking upstream from S.E. corner on top of Keith's Mills stock house (Source: FirstLight Photo Archives).



October 2, 1914 Photo of Canal looking upstream (Source: FirstLight Photo Archives).

March 2, 1915 Photo of Upper end of upper canal looking upstream (Source: FirstLight Photo Archives).

August 31, 1915 Photo of Canal from 11th Street Bridge looking downstream (Source: FirstLight Photo Archives).

2014 View of Power Canal from Eleventh Street Bridge (Source TRC)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☒ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Turners Falls Power Canal between the Turners Falls Dam and Sixth Street Bridge is a contributing resource in the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The entire length of the Turners Falls Power Canal between the Turners Falls dam and the Cabot Power Station is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging

hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.H	TRC-6

Photograph

Locus Map

MA GIS 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Canalside Trail

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Montague Paper (International Paper) Company Bridge over Turners Falls Power Canal

Ownership: FirstLight Power Resources-GDF Suez Energy
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Warren pony truss

Bridge typology code 310

Date of Construction: ca. 1914

Source: 1914 Engineering Drawings, 1914 Sanborn map

Engineer/Designer: Unknown

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Metal, with concrete piers

Alterations *(with dates):* Deck replaced (unknown date)

Posted load limit *(if any):* N/A

Condition: Good

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/industrial

UTM Reference: 18 0700565E 4720471N

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp. for FirstLight

Date (*month / year):* March 2014

Superstructure:

Overall length: 134 ft Deck width: 10 ft Skew: None
Main unit: No. of spans: 2 Span length: 67 ft. (total)
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: Varies with water level of canal Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This two-span, six-panel, rivet-connected Warren pony truss bridge spans the Turners Falls power canal between the site of the Montague Paper (later International Paper) Company plant and the parking area for the Great Falls Discovery center in Turners Falls. The Gill-Montague Bridge and Turners Falls Dam/Gatehouse are located a short distance to the east. Like the two other remaining pedestrian bridges that span the power canal, this bridge was built to provide access for workers coming from downtown Turners Falls to one of the former paper mills located on the opposite side. According to one source, there was at this site an earlier bridge built in 1870 (Gregory 2006: 6).The present bridge was built ca. 1914 by the Turners Falls Company and is shown on the 1914 Sanborn map.

The bridge is 134 feet long and 10.5 feet wide and has two unusual design features. Most unusual is that the central pier sits lower than one of the abutments, but equal to the height of the other abutment, so only one of the two spans angle down toward the center slightly, rather than having a constant slope throughout the bridge. This is due to the fact that the canal wall on the east was raised. In addition, one of the end posts was constructed to have two angles to it, so that it bows out slightly. Additional bracing is present between the hip vertical and this second end post connection that allows this shape. The purpose of these two features is unclear. According to the 1914 plans, the bridge was intended to be extended at its southern end. The bridge's built-up beams are riveted but all connections are bolted. It is unclear if this is a later truss bridge that was built with bolted connections, or if it was altered by having all connection rivets replaced with bolts.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

Beginning in 1914, the Turners Falls Power Company widened and lengthened the Turners Falls Power Canal that formerly ran only as far south as Sixth Street. The power company replaced the many existing railroad, vehicular, and pedestrian bridges that spanned the canal with new bridges to accommodate the widened canal. The other footbridges across the power canal were built by the Eastern Bridge and Structural Company of Worcester MA and it is assumed that this one was as well.

BIBLIOGRAPHY and/or REFERENCES

Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

Sanborn Map Company
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Turners Falls Power Company

1914 Dimension Sheet, Bridge, Canal Enlargement, Turners Falls Company, Engineering Department-Turners Falls Office, July 25, 1914.

ADDITIONAL PHOTOGRAPHS

2014 View of Southern Approach (Source: TRC)

2014 View of Northern Approach (Source: TRC)

2008 Low-level oblique image of Keith's Mills Pedestrian Bridge over Power Canal (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Montague Paper (International Paper) Company Bridge over Turners Falls Power Canal is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during

Continuation sheet 4

the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-06	Greenfield		TRC-39

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: Power Canal at International Paper Co. Bridge

Historic Name: Electrical Switch Building

Uses: Present: Vacant

Original: Electrical Switch Building

Date of Construction: Late 19th century

Source: Historic Photographs

Style/Form: Vernacular Italianate/Industrial

Architect/Builder: Turners Falls Company

Exterior Material:

Foundation: Concrete

Wall/Trim: Brick

Roof: Asphalt

Outbuildings/Secondary Structures: None

Major Alterations *(with dates):* Building is vacant

Condition: Deteriorated

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Urban/Industrial

Photograph

Locus Map

MA GIS 2014

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp. for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

TOWN
MONTAGUE

ADDRESS
POWER CANAL AT I.P. BRIDGE

Area(s) Form No.

TRC-39

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

This building is located on the northeast side of the Turners Falls Power Canal at the site of both the John Russell Cutlery Company and the Montague (International Falls) Paper Company complexes. The 1-story, 3-bay-by-2-bay brick building has a shed roof, corbelled brick cornice, entrance on the northeast with a segmental-arched head, and window openings with segmental arched brick lintels. The building is vacant and abandoned and no longer has its door or window sash.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

This section of Turners Falls' industrial area was once occupied by the John Russell Cutlery Company and Montague Paper Company complexes, massive brick mills and factories built in the late 1860s and 1870s along the newly converted power canal. Although this building does not appear on historic Sanborn Maps of the area, according to one source it served as an electrical switch building for both complexes (Gregory 2014). The cutlery factory was damaged by the 1936 flood, and the company moved out of their buildings soon afterwards and the complex was demolished in 1958. Most of the Montague Paper Company was also demolished in the mid-20th century, leaving two small buildings on the south side of the canal and leaving only this small electrical switch building as the sole industrial-related building on the north side of the canal.

BIBLIOGRAPHY and/or REFERENCES

Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

Gregory, Ed (Turners Falls historian). Personal communication, May 3, 2014.

Greenfield Gazette
1892 "Centennial Edition." Greenfield Gazette, publishers, Greenfield, MA.

Sanborn Map Company
September 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
December 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

ADDITIONAL PHOTOGRAPHS

2014 View of West and South Elevations (Source: TRC)

2008 Low-level oblique image of Electrical Switch Building (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

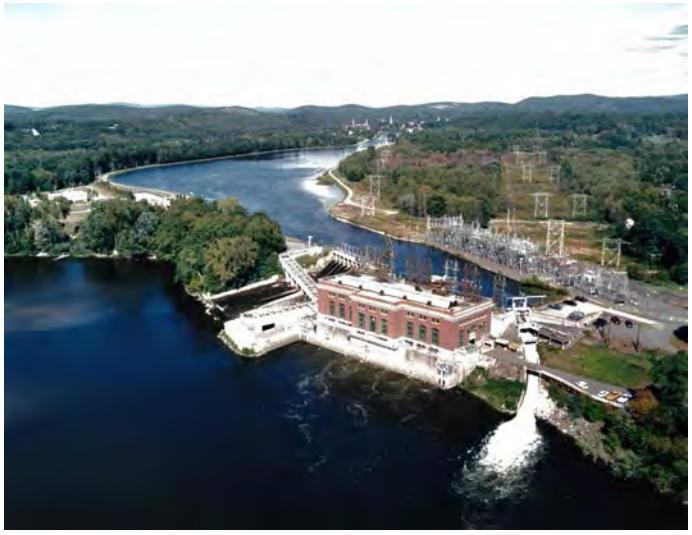
Contributing Resource in Turners Falls Historic District
This building is a contributing resource in the NRHP-listed Turners Falls Historic District, listed on the National Register in 1983 under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

FORM F – STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
12-0-001	Greenfield		MNT.449

Photograph



Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* April 2014

Town/City: Montague

Place *(neighborhood or village):* Montague City

Address or Location: South End of Turners Falls Power Canal

Name: Cabot Hydroelectric Power Generating Station

Ownership: ☐ *Public* ☒ *Private*
FirstLight Power Resources-GDF Suez Energy

Type of Structure ***(check one):***

___ boat or ship	___ pound
___ canal	___ powderhouse
___ carousel	___ street
___ dam	___ tower
___ fort	___ tunnel
___ gate	___ wall
___ kiln	___ windmill
___ lighthouse	
_X_ other *(specify)*	Hydroelectric Generating Station

Date of Construction: 1914-15 (Units 1-4); 1916-17 (Units 5-6)

Source: Original Records

Architect, Engineer or Designer: Turners Falls Power & Electric Co.; Contractor: Fred F. Ley, Inc., Springfield, MA

Materials: Substructure: Concrete; Superstructure: Steel-frame with brick exterior and concrete details
Alterations *(with dates)*:
1930s: Small addition on river side of building
1980: Fish Ladder
1987: Replacement of the Gantry Crane

Condition: Good

Moved: _☒_ **no** ☐ **yes** **Date**:

Acreage: 5 acres (approx.)

Setting: Urban/Industrial

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other structures within the community.

Cabot Station is located on the east bank of the Connecticut River, south of the Village of Turners Falls, in the Town of Montague, Massachusetts. It receives water from an extension of the Turners Falls Canal, which was completed in 1915. Cabot Station is located at the downstream terminus of the power canal and one mile upstream of the confluence of the Connecticut and Deerfield Rivers.

Set on concrete (which is partially exposed) and bedrock, the powerhouse is a 1-story with clerestory, 3-bay steel-frame, brick curtain wall structure with a 5:1 common bond of Roman brick. While industrial in nature, decorative details can be traced to elements of the Beaux Arts style. The flat roof with parapet has concrete cast-stone coping and brick dentils. A long skylight is placed on top of the main roof to light and air the generator room below. Below the dentils is a signage panel and on the south elevation it originally read “Turners Falls P.&E. Co.” and later “Western Massachusetts Electric Company,” the latter still has ghost marks. The current signage reads “Cabot Station.” Below the signage panel on all elevations is a concrete cast stone cornice with a cavetto molding.

One the south elevation, a ribbon window with the original metal 12-light awning windows and concrete cast stone sill course is below the cornice. The ribbon window terminates directly above the symmetrical three-bay opening below. There are three 2-story arched openings, the central one serving as a door is slightly larger. The original opening, with full-height double doors, was large enough for the delivery of the machinery by train. The lower 2/3 of the door has been removed and a security panel with single-leaf door installed. Above the doors is a segmental-arched, multi-light transom, Flanking the entry are segmental-arched, multi-light windows with 10-light hopper windows placed in the center. All three openings have a raised brick surround. Between the windows and the door are two, original metal lights with cavetto-shaped curved undersides and an integrated “TF” logo on the exterior sides. The north elevation is a reflection of the south elevation, however, the central bay is also a window, not a door, and there are no lights.

This symmetrical pattern of 12-light hopper windows over three 2-story arched openings is also present on the 9-bay west elevation facing the Connecticut River. This elevation features a central, slightly projecting bay with triangular cap on the parapet. Additionally, paired 12-light hopper windows are above each 2-story window rather than a continuous ribbon window as is on the south elevation. Below the opening are the concrete draft tubes to allow for water discharge into the river.

Only the upper story of the east elevation is exposed, as the lover levels are below the forebay. The ribbon windows continue on this elevation as well. A central bay also projects from this elevation and features a stepped parapet which once was used as a signage panel. A secondary entrance for access to the office space is located at the southeast corner. Set within a projecting bay, the single-leaf door is flanked by 4/4 sash windows with soldier-course lintels and concrete cast stone sills. Above the windows are original metal lights with cavetto-shaped curved undersides and an integrated “TF” logo on the exterior sides as are found on the south elevation. The coping and dentils are consistent with the main block, however the cornice features an ovolo molding. Running in front of this elevation is the trash rack opening (217’-wide by 31’-high) A gantry crane (installed in 1987 to replace the original crane) runs on top of the trash racks. This crane is used to clean the trash racks and control the lift gates at the powerhouse. After passing through the trash racks, water flow is conveyed through one of six penstocks to turbines housed in the powerhouse.

The interior of the powerhouse is comprised of exposed brick and steel as well as the truss systems: a truss with integrated skylight n the generator room to the west and a truss above the operations and office areas to the east. The generator room encloses six vertical Francis units manufactured by I. P. Morris. The room also contains a 60-ton overhead bridge crane which is

used to maintain the turbine/generators. In this room there is a repetition of the lamps on the exterior which feature a cavetto curve underside and an integrated "TF" logo. A square bay housing the original operations center projects slightly out over the generator room, features paired 10-light windows, and is supported by curved brackets.

At the downstream terminus of the power canal and adjacent to the northern end of the Cabot Powerhouse are eight wooden 16'-8" high by 13'-7" wide spillway gates. These gates are used to rapidly draw down the power canal in the event of a Cabot Station load rejection or canal dike breach or to sluice ice and debris. In addition, there is a 16'-2" wide by 13'-1" high log sluice located near the bottom of the forebay, at the southern end of the powerhouse that can be used for de-watering the power canal. A concrete wall with recessed panels runs on top of the sluice.

Except for the presence of the nearby modern fish ladder and a small addition to the river-side wall of the building, the overall outward appearance of Cabot Station is virtually the same as when it was constructed in 1914-1917. Although its basic generating equipment components are original, modifications, repairs, and in some instances replacement of these has occurred over the years as parts wear out and/or break down. Generation components consist of:

- o Wheels: (6) single runner, vertical, Francis-type (I.P. Morris Co.) were replaced in 2001-04 with (6) vertical Francis-type units manufactured by VA Tech
- o Generators: (6) direct connected, vertical (General Electric Co.) basically original
- o Transformers: some originals may remain, but most are replacements
- o Bus Structures: basically original (one band removed)
- o High Tension Rooms (2): basically original (some oil switches removed)
- o Oiling System: basically original (Peterson Engineering Co., Milwaukee)
- o Governors: (6) all replaced about 1970 with Woodward governors
- o Penstock Gates: replaced 1950-60
- o Gantry Crane: Replaced in 1987
- o Penstocks: 3 for each unit, all concrete, 13'6" high 9'4" wide (Some gunnite repairs).

There is a former garage which also has similar architectural details of the powerhouse. The 1-story, 7-bay former garage is steel-framed with a brick curtain wall of 5:1 bond. The flat roof with parapet has concrete cast stone coping and brick dentils. The original design had centrally located triangular parapets on each elevation which have been removed. The concrete cast stone cornice has an ovolo-shaped molding and plain frieze. The west elevation has five vehicular door openings; the right two are original brick panels and the left two have been adapted to windows with T-III and 1/1 vinyl sash so that only the central bay still operates as a roll-up door. Original metal lights with cavetto-shaped curved undersides and an integrated "TF" logo on the exterior sides as are found on the powerhouse flank the right three bays. Flanking the vehicular doors are single-leaf doors with half-hipped hood supported by triangular braces. The 3-bay south elevation has a central vehicular door flanked above with the same metal lights and on the side by 6/6 sash windows with soldier-course lintels and concrete cast-stone sills. The 5-bay east elevation features four 6/6 sash windows with soldier-course lintels and concrete cast-stone sills and a single-leaf door in the north bay with half-hipped hood supported by triangular braces. The north elevation is not visible due to machinery within the adjacent substation.

HISTORICAL NARRATIVE

Explain the history of the structure and how it relates to the development of the community.

Historically, Cabot Station represents the last major industrial development of the water resource at Turners Falls on the Connecticut River. Constructed during World War I, it was preceded first by navigation improvements (1797-1864), hydro-mechanical power generation (1864-1900s) and finally by small hydroelectric generation (1880s-1904). The station is named for financier Philip Cabot of Boston, who was largely responsible for its construction, first as President of The Turners Falls Company, and then as Founder and President of the Turners Falls Power & Electric Company. The latter company was formed in May 1914 as the consolidation of The Turners Falls Company with the Amherst Gas Company, of which Mr. Cabot was also the President (WMECO 1987: E-54).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the

Continuation sheet 2

purpose of generating electricity at night. Soon afterward, “a small company of public-spirited citizens” leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990: 5). In late 1886, an electric generating station opened at the Turners Falls gatehouse and in 1892, the gatehouse was expanded for greater water flow.

By 1900, many of the mills and factories in Turners Falls and western Massachusetts began to lose business to Southern mills with their cheaper labor supply and as a consequence a few mills and small start-up power companies turned their attention to harnessing hydroelectric power. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1904, Charles Hazelton, treasurer of the Turners Falls Company, proposed to his board of directors that that they make better use of the water power being wasted by widening and extending the canal, and establishing a hydro-electric generating plant of 5,000 kilowatt capacity. “His proposal met with unanimous agreement, and was carried out during the next three years” (Bennett 1990: 5).

Construction of Power Station No. 1 in 1906 increased the importance of the power canal to the success of hydroelectric operations at Turners Falls. In 1914, the Turners Falls Company consolidated with the Amherst Power Company, becoming the Turners Falls Power & Electric Company. During the 1920s, the company continued to acquire other smaller electric companies in western Massachusetts. In 1915, the Turners Falls Power & Electric Company completed its second power station at Cabot Station. It utilized 54 feet of head, high by New England standards (WMECO 1987: 2).

Cabot Station was originally conceived to accommodate six 6,000 kW units, for a total of 36,000 kW. The Turners Falls Power & Electric Company first put the station into service in 1915 equipped with four 7000 kW units (Units 1-4), after the original plan was changed to raise the total capacity to 42,000 kW. By the time all six units were put in service in 1918, each unit had a capacity of 8000 kW, for a total output of 48,000 kW. The station, now rated at 51,000 kW, has a gross head of 60 feet (WMECO 1987: E-55).

When it was completed, Cabot Station was the largest hydroelectric facility in Massachusetts, and the principal source of power for the Turners Falls Power & Electric Company. It represents a stage in the development of major hydroelectric stations along the Connecticut River Valley in the first half of this century, a sequence which includes Vernon Station (VT /NH: 1909 with 8 units, 2000 kW each, for a total of 16,000 kW, increased and upgraded in the 1920's to 10 units and 28,000 kW), Deerfield Units 3-5 (MA: 1912-13, 6,000-15,000 kW each), and culminating in the 140,000 kW project at Comerford (NH/VT, 1930, 179 ft. head). In Massachusetts, Cabot is still the largest conventional hydroelectric station along the Connecticut River. As an engineering work, it incorporates certain novel achievements (e.g. large-scale, double-curvature concrete formwork). Vertical turbines of comparable size and dating back to the same period exist elsewhere in New England (WMECO 1987: E-54).

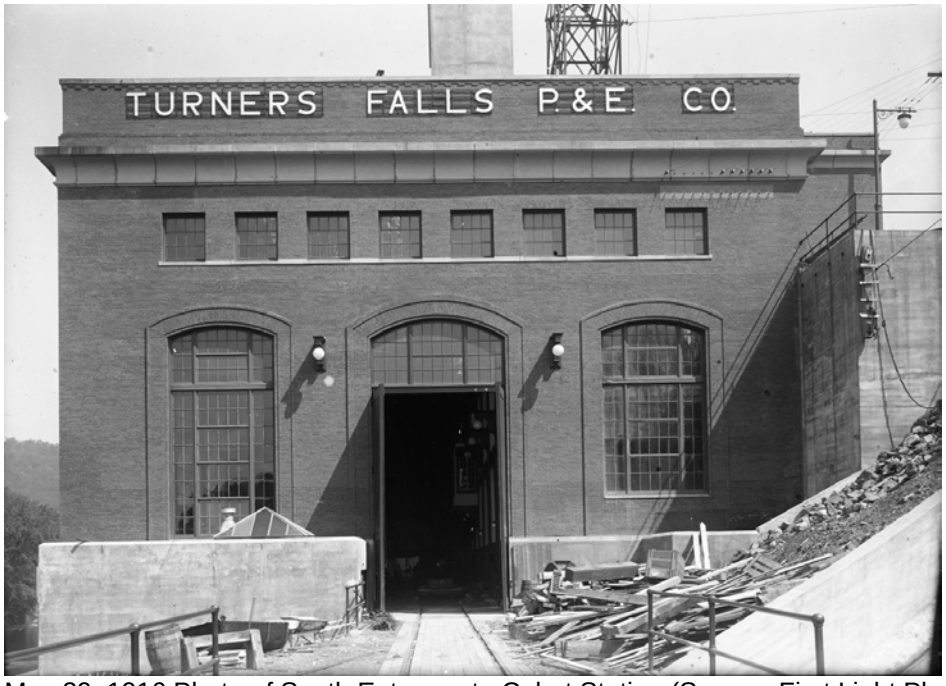
BIBLIOGRAPHY and/or REFERENCES

Bennett, Lola (Historic American Buildings Survey [HAER] Historian)
1990 *Eleventh Street Bridge Spanning the Turners Falls Power Canal (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

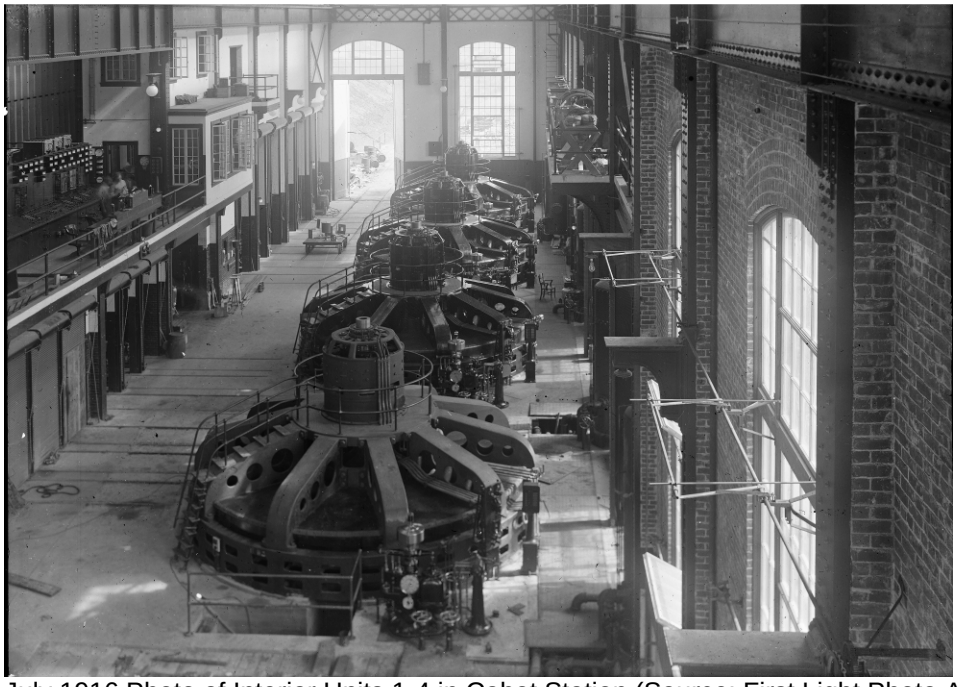
Western Massachusetts Electric Company (WMECO)
1987 *Before the Federal Energy Regulatory Commission: Turners Falls Project FERC Project No. 1889, Application for Amendment of License, Proposed Cabot Unit 7.* WMECO, Springfield, MA

ADDITIONAL PHOTOGRAPHS



May 29, 1916 Photo of South Entrance to Cabot Station (Source: First Light Photo Archives)

July 1, 1916 Photo of East Elevation with Forebay in Foreground, Original Gantry Crane is on the Right (Source: First Light Photo Archives)



July 1916 Photo of Interior Units 1-4 in Cabot Station (Source: First Light Photo Archives)

June 9, 1917 Photo of Garage at Cabot Station (Source: First Light Photo Archives)

2014 View of South Elevation, Sluiceway and Concrete Wall to the Right (Source: TRC)

2014 View of Second Story Entrance and Metal Lights (Source: TRC)

2014 View of Interior of Generator Room Including Truss System and Skylight (Source: TRC)

2014 View of Interior of Generator Room Including Projecting Bay and Metal Light (Source: TRC)

2014 View of 1987 Gantry Crane (Left), Spillway Gates (Right), and Forebay (Foreground) (Source: TRC)

2014 View of Former Garage (Source: TRC)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

NRHP-Eligible, Criteria A and C
In 1987, the MHC determined Cabot Station NRHP-eligible under Criteria A and C. Cabot Station is historically significant as the largest hydroelectric facility in Massachusetts at the time it was completed in 1917. It represents the last major industrial development utilizing the water as a resource at Turners Falls and was for many years the primary power source for the region. Architecturally, it is significant as an intact example of a well-articulated early-twentieth-century industrial architecture and is noteworthy for the retention of the original power generation components. The resource retains all aspects of integrity, except for the loss of the original gantry crane in 1987.

Contributing Resource in Turners Falls Power & Electric Company Historic District, Criteria A and C
This resource is also a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gatehouse
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street eligible for the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A

The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the late 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts's hydroelectric grid, as it extended in Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1916 by the Boston & Maine across the newly widened canal.

Criterion C

The Turners Falls Power & Electric Company Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.C	MNT.904

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0700279E 4720365N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Eleventh Street

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Eleventh Street Bridge over Power Canal

Ownership: Town of Montague
(Name of state agency or municipality)

Mass. Highway bridge no.: MA-28-17

Bridge type: Warren Thru-truss

Bridge typology code 310

Date of Construction: 1915

Source: Historic American Engineering Record; Plaque

Engineer/Designer: Eastern Bridge & Structural Company

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Steel, Concrete

Alterations *(with dates):* None Known

Posted load limit *(if any):* Unknown

Condition: Good

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/Industrial and Residential Areas of Turners Falls

Superstructure:

Overall length: 198 ft. Deck width: 27 ft. (road), 7.5 ft. (sidewalk) Skew: None

Main unit: No. of spans: 1 Span length: 167 ft.

Approaches: No. of spans: 2 Span length: 15.5 ft. each

Substructure *(structure below deck)*

Height above feature spanned: 4 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Eleventh Street Bridge is a triple-barrel, 167-foot, riveted-steel double-intersection Warren through truss bridge that carries 2-lane Eleventh Street over the Turners Falls Power Canal. The main configuration is a central roadway barrel with no overhead lateral bracing, with a through truss sidewalk barrel on either side. Each of the four trusses is identical. The upper chord of each truss is comprised of two channels, connected with a plate on the upper side and lacing and tie plates on the lower side. The floor system is comprised of I-section steel beams and steel stringers, and corrugated steel decking, which support a poured concrete deck, and an asphalt-paved roadway, 27'-0" wide. On either side of the roadway is a raised sidewalk, 7'-6" wide, with latticed railings on the outer sides. Above each sidewalk is overhead lateral bracing and portal bracing, consisting of two angles riveted together and connecting the outer and inner trusses. Both ends of the bridge rest on concrete piers, with a short stringer approach span extending from pier to abutment at either end.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

Between 1914 and 1918, the Turners Falls Power Canal was extended south about a mile and a half, and a second electric generating plant, later named Cabot Station, was built. The construction of the bridges over the canal at Sixth Street and Eleventh Street were a significant part of this project, because the extension of the power canal would, in effect, create an "island" in the center of Turners Falls. The section of town known as the "South End" would be bordered on all sides with water and connected to the rest of the village by only a small strip of land to the north. While a suspension bridge spanned the Connecticut River at Fifth Street, and there were several smaller bridges crossing the upper part of the canal, the lower section of the canal would need to be bridged between the center of town and the South End (Bennett 1990: 4).

Documentary evidence for the Eleventh Street Bridge seems to indicate that it was originally designed to be very similar to the bridge at Sixth Street. The original plans for the bridge, drawn up by the Eastern Bridge & Structural Company in May of 1914, show a double- intersection Warren through truss, with a 21-foot wide roadway, upper lateral bracing, and no sidewalks. A second set of plans for the same bridge, dated May 1915, shows a pair of double-intersection Warren trusses on either side of a roadway 27 feet wide, with a 6-foot-wide sidewalk running between each pair of trusses. Rather than the standard upper lateral bracing over the center barrel, the second set of plans shows lateral bracing only over the sidewalk barrels. This change in design is attributed to a discrepancy between the Turners Falls Company, which was paying for the bridge, and the residents of the town, who were the beneficiaries of whatever infrastructure changes the company were required to make (Bennett 1990: 4).

Increasing the size of the bridge and adding sidewalks meant that the already fabricated trusses would have had greater dead and live loads to carry, probably more than they could withstand. Instead of designing and fabricating a new bridge and scrapping the old, which could have been quite costly, the engineers increased the load-carrying capacity of the old trusses by adding two identical trusses to the design. As finally constructed, the Eleventh Street Bridge represented a unique engineering solution to a project influenced by both public and private interests (Bennett 1990: 4).

BIBLIOGRAPHY and/or REFERENCES

Bennett, Lola
1990 *Eleventh Street Bridge over the Turners Falls Power Canal, Turners Falls, MA (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

Sanborn Map Company
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

ADDITIONAL PHOTOGRAPHS

August 2, 1915 Photo of 11th Street Bridge, looking upstream (Source: First Light Photo Archives)

2014 View of Western Approach and Upstream Face (Source: TRC)

2014 View of Eastern Approach at Sidewalks (Source: TRC)

2008 Low-level oblique image of 11th Street Bridge over Power Canal (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Eligible Patch Historic District (Criteria A and C)
MHC has included the Eleventh Street Bridge as a contributing resource in the Patch Historic District (MNT.C), surveyed by the Arts Council of Franklin County in 1978, but not evaluated for the NRHP.

Individually NRHP-eligible Criterion C
The Eleventh Street Bridge previously has been determined NRHP-eligible by the MHC under Criterion C as a rare double-intersection Warren thru-truss bridge; with no lateral bracing over the roadway, it may be one of a kind in Massachusetts. The bridge is still in use today as the only vehicular and pedestrian bridge in Turners Falls' South End. It is significant as a unique configuration of a double-intersection Warren through truss, and is the unique result of a project in which political factors played a major role in the final appearance of the structure. The bridge was paid for and erected by the Turners Falls Company for the town of Montague, during a very significant period (1912-1915) of the hydroelectric development of western Massachusetts. The bridge fabricator, Eastern Bridge & Structural Company, was an important regional bridge-manufacturing company in the early- to mid-twentieth century.

Contributing Resource in Eligible Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Eleventh Street Bridge is a contributing resource in the NRHP-eligible Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A

The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Northfield	H	NFL.924

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0708563E 4731990N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Northfield

Place *(neighborhood or village):* West Northfield/East Northfield

Street/Route: East Northfield Road

Carried over: Connecticut River
(Railroad, river, brook, canal or road)
Historic/Common name: Schell Memorial Bridge

Ownership: Town of Northfield
(Name of state agency or municipality)
Mass. Highway bridge no.: N-22-2

Bridge type: Cantilever Pennsylvania-type through truss

Bridge typology code 310 410

Date of Construction: 1901-1903

Source: Historic American Engineering Record

Engineer/Designer: Edward S. Shaw (Boston)

Bridge company/Contractor: New England Structural Company, East Everett, Massachusetts (superstructure); Ellis & Buswell, Woburn, Massachusetts (substructure)

Material (s): Steel, Concrete, Stone

Alterations *(with dates):* Stringers replaced and wood block decking (1932); Repairs after 1936 flood (1936); Repairs (1958). Closed to traffic.

Posted load limit *(if any):* Unknown, closed to traffic due to deterioration

Condition: Poor, slated for demolition

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural

Superstructure:

Overall length: 515 ft. Deck width: 18 ft. Skew: None

Main unit: No. of spans: 1 Span length: 352 ft.

Approaches: No. of spans: 2 Span length: 80 ft. each

Substructure *(structure below deck)*

Height above feature spanned: 90 ft. (approx.) Material of abutments or piers: Ashlar Cut Granite

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Schell Memorial Bridge is a 515-foot, riveted-steel cantilever Pennsylvania-type through truss. The bridge was designed to function as a three-span continuous truss under live load, and as a simple truss span with cantilevered ends under dead load. This was accomplished by means of freight car springs, placed under the abutment ends of the bridge, to counter upward movement of the ends when the bridge had a live load in the center. The original wooden stringers have been replaced with steel stringers, which support a wood block deck paved with asphalt. The portals are defined by the inclined end posts of each truss, with cast iron finials at the top, and an ornamental Gothic portal strut crossing overhead. The portal strut is pierced with small Gothic arches and trefoils. Other unique details include Gothic-arch sway bracing between the panel points directly above the piers, stone pylons with pyramidal caps, and connecting low stone parapets at each end of the bridge. The bridge rests on quarry-faced granite ashlar piers and granite-faced concrete abutments.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

Shortly after the Bennett's Meadow Bridge in Northfield was completed in 1899, the Massachusetts railroad commission condemned the 50-year-old, two-tier wooden railroad/vehicular toll bridge located just upstream on the Connecticut River. The Central Vermont Railway then petitioned the legislature for authority to build a new bridge in cooperation with the town of Northfield (Bennett 1990: 6).

At first, the town favored the construction of another joint railroad and highway bridge, and an agreement was reached by which the town was to pay $10,000 toward the cost of a steel bridge. Public sentiment shifted towards building a separate highway bridge, which would not only relieve them of paying rent for their portion of the railroad bridge, but would also do away with the nuisance of passing overhead trains. One of the strongest proponents of a separate bridge was the Northfield Seminary, which advocated building the bridge farther up the river, and asked for a delay in the plans (Bennett 1990; 6).

Enter Francis R. Schell, a successful New York City banker, who first started attending Rev. Dwight Moody's evangelistic summer conferences in Northfield beginning in 1890. In 1900, Schell inherited his father's considerable banking fortune, and decided to build a country estate at Northfield (Bennett 1990: 4).

Schell determined to take the matter of the new bridge and its location into his own hands. "Francis Schell had a great fondness for the town of Northfield, and perhaps an even greater fondness for Dwight L. Moody and the Northfield Schools. This was demonstrated in 1901, when, in an act of extreme generosity, Schell offered to pay for a bridge that was badly needed by both the town and the two schools" (Bennett 1990: 4).

In 1901, Schell composed a proposal for a new bridge that he submitted to the town of Northfield:

> *Desiring to leave an enduring memorial to my honored father, Robert Schell, in Northfield, and also desiring that a bridge be built across the Connecticut River at a point within 500 feet north of the boundary line between lands of the Northfield Seminary and one William D. Alexander, I hereby for myself, my executors and administrators, do offer, covenant and agree that if the Town of Northfield shall cause a bridge to be constructed at such location ,I will, and my executors and administrators shall, pay to the said Town the cost of such bridge to an amount not exceeding Thirty Two Thousand Dollars.* (Bennett 1990: 5)

Edward S. Shaw, the engineer of the Bennett's Meadow Bridge, had already been asked to design this new highway bridge. As first projected, the bridge was designed for utilitarian purposes only, with three simple and independent spans, but after Schell decided to have the bridge erected in memory of his father, the plans were changed substantially. The revised plans for the bridge showed a structure with considerably more ornamental details than the earlier bridge.

The March 1, 1902 edition of the *Greenfield Gazette & Courier* detailed Shaw's design process for the Schell Memorial Bridge:

> *Upon careful consideration, it was found that the original plan would result in a structure that was not pleasing architecturally. In order to remedy this lack, especially as it was to be a memorial and it was desired that no detail should be wanting to its perfection, an additional cost of $6000 was authorized by Mr. Schell, and now a bridge will be erected with a single ground arch leaping from one bank of the river to its opposite 400 feet away. Bridge builders who have seen the plans of the proposed structure characterize it as highly artistic in effect and beautiful in all its details. In fact, it is stated that the New England Structural Company, to whom the contract is awarded, submitted a bid for the contract only after the plans had been modified as described above and the superstructure designed in such a manner as to make it a great credit to the company that was fortunate enough to erect it* (Bennett 1990: 7).

After Francis Schell died in 1928, his widow sold their estate to the Northfield Schools, but The Chateau eventually fell into disrepair and was torn down in the 1960s, leaving only the bridge as a reminder of the Schell's days at Northfield. The Schell Memorial Bridge has remained virtually unaltered over time, with the exception of the floor system which was replaced in 1932 with new stringers and a wood block deck. The bridge was maintained by the state until the 1970s, when Highway 142 was rerouted over a new highway bridge at Bennett's Meadow, at which time the Schell Bridge became the sole responsibility of the town. In response to a 1977 engineering study, the town studied proposals for the bridge's rehabilitation or replacement, but concluded that they just did not have the money to fund such an undertaking. The bridge has been closed since 1985, and the bridge is barricaded with metal plates across the portal ends (Bennett 1990: 8). In May of 2014, the Massachusetts Department of Transportation announced its plans to demolish the bridge and replace it with a bicycle bridge modeled after the 1903 structure (Rainville 2014).

BIBLIOGRAPHY and/or REFERENCES

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1990 *Schell Memorial Bridge Spanning the Connecticut River, Northfield, MA (HAER No. MA-111).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

n.a.
1901 "Northfield's Good Fortune: Francis Schell Gives the Town a Bridge over the Connecticut River." *Northfield Gazette & Courier*, August 31, 1901.

Rainville, David
2014 "Schell Bridge 'summit' set for Thursday." The Recorder, Greenfield, MA.

Spaulding, Maureen and Sue Ross
2007 "Schell Memorial Bridge Threatened," *Society for Industrial Archeology Newsletter*, Volume 36, No. 2.

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1973 *Northfield's 300th Anniversary: Official Souvenir Tercentary Program*. Northfield, MA.

ADDITIONAL PHOTOGRAPHS

Ca. 1902 Photo of Schell Bridge Under Construction (Source: Northfield School)

Historic Photograph of Schell Bridge (Source: www.cardcow.com)

2013 View of Western Approach and Downstream Face (Source: TRC)

2008 Low-level oblique image of Schell Bridge over Connecticut River (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

NRHP-eligible, Criteria A and C
The Schell Memorial Bridge has been determined eligible for listing in the National Register by the MHC. It is the third oldest of five known Pennsylvania truss bridges identified in the Massachusetts Department of Public Works database. It is a unique variation—at least in Massachusetts-of a Pennsylvania truss, in that it was designed to function as a three-span continuous truss under live load, and as a simple truss span with cantilevered ends under dead load. The bridge also has some unusual Gothic Revival-style decorative elements. The bridge is a significant structure in Northfield's social history, in that it was built for the Town by one of its most prominent citizens and benefactors, Francis R. Schell. Although no longer in use and barricaded, the resource retains all aspects of integrity.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Orange		GIL.900/ERV.904

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0705372E 4719186N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Gill, Erving

Place *(neighborhood or village):* West Northfield/East Northfield

Street/Route: Route 2 (Mohawk Trail)

Carried over: Connecticut River
(Railroad, river, brook, canal or road)
Historic/Common name: French King Bridge

Ownership: Massachusetts Department of Transportation
(Name of state agency or municipality)
Mass. Highway bridge no.: E-10-14/G-4-9

Bridge type: Riveted steel deck arch bridge

Bridge typology code 411

Date of Construction: 1931-32

Source: Historic American Engineering Record, Plaque

Engineer/Designer: George E. Harkness, Bridge Engineer, Albert E. Kleinert, Jr., Asst. Structural Engineer

Bridge company/Contractor: McClintic-Marshall Construction Co., Pittsburgh (steelwork); Simpson Brothers Construction Co., Boston (substructure)

Material (s): Steel, Concrete

Alterations *(with dates):* Deck replaced (1955)

Posted load limit *(if any):* Unknown

Condition: Excellent

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Superstructure:

Overall length: 890 ft. Deck width: 47.9 ft. Skew: None
Main unit: No. of spans: 3 Span length: 460 ft. (center), 161 ft. (ends)
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 135 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The French King Bridge rises 135-feet above the level of the Connecticut River, and spans the narrow French King Gorge just above the Connecticut's confluence with the Millers River. The bridge itself is a 782-foot, riveted steel, three-span continuous spandrel-braced deck arch, resting on two concrete river piers and two concrete abutments. It has a parabolic lower chord, and a very slightly arched upper chord, which are connected by a series of verticals and diagonals patterned after the Pratt system. The trusses, spaced 41-feet apart and divided into thirty-four panels each, are identical. The vertical truss members support plate girder floor beams, on top of which are rolled I-beam stringers and a reinforced concrete deck. The deck carries a 40-foot roadway and a 6-foot sidewalk on the north side of the bridge. Concrete pylons extend upward from the abutments, above the level of the roadway, to form the portals of the bridge. These pylons have decorative Art Deco-style paneling on their outer surfaces, and are stepped at the top. On top of each pylon is an ornamental, Neoclassical, wrought iron electrolier with decorative lanterns on either side, and an eagle on top. A decorative iron balustrade runs along both sides of the deck, and is bolted to steel castings set in the concrete of the sidewalks.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The French King Bridge was conceived as part of a state-financed project to relocate a particularly hazardous seven-mile stretch of the old Mohawk Trail Highway (State Route 2) between Erving and Greenfield. The old route had wound through the villages of Millers Falls and Turners Falls on a course marked by steep grades, sharp curves, and narrow bridges. The relocated State Route 2 ran north of both villages on an alignment whose principal challenge was the crossing of the precipitous Connecticut River gorge near the French King Rock (Bennett 1990: 11).

After looking at several plans, the engineers decided to cross the Connecticut River with a bridge at the height of the hills on either side, about 135 feet above the water. When completed, the entire project would include the construction of about six miles of new state highway, a highway grade separation, a bridge over the Central Vermont Railroad, and the construction of a large high-level steel arch bridge over the Connecticut River (Bennett 1990: 6).

The selection of a specific structural type for this high-level bridge was based on the highway department's desire to fit the bridge into this dramatic setting, while responding to such factors as the height and steepness of the gorge's bank and the swiftness of the river current. “The graceful 3-span arch design which resulted takes advantage of the favorable foundation conditions (critical for an arch) while it avoided the construction of either permanent piers or temporary falsework in the river itself” (Bennett 1990: 6).

Albert E. Kleinert, Assistant Structural Engineer at the Massachusetts Department of Public Works in 1931, stated that in selecting the type of bridge to be erected on the chosen site, "the endeavor was made to develop a bridge which not only fitted the site, but which could be erected by cantilever construction, since the deep water, rocky river bed, and the swift current discouraged the use of falsework in the river. The result of our studies is a steel deck structure, continuous over four supports, two of which are abutments placed at the ends of the bridge, high on the banks, and the other two are piers placed at the edges of the river" (Bennett 1990: 6).

In naming the type of this structure Kleinert used the term "steel continuous spandrel braced arch," because it is a steel spandrel-braced arch between the piers, and is continuous to each abutment where it receives vertical support (Bennett 1990: 9).

During the summer of 1931, the contracts for the Erving-Greenfield cutoff were awarded to Kelleher Corporation of Montague, Massachusetts (for the western section, from Greenfield to the Connecticut River) and to Lawton Construction Company of Providence, Rhode Island (for the eastern section, from the Connecticut River to the road to Millers Falls, just east of the road to Northfield, now Highway 63)(Bennett 1990: 5).

Construction of the French King Bridge began in September of 1931, was completed at a cost of $385,000 and opened to travel on September 10, 1932. The French King Bridge is one of four known steel deck-arch vehicular bridges in Massachusetts, and has the sixth-longest span of any vehicular bridge in the state. "It is of engineering interest as an unusual development of the uncommon three-span, cantilever arch bridge type, in that definite reactions were jacked into its steelwork at the conclusion of construction, resulting in a bridge which is structurally continuous across four supports. The American Institute of Steel Construction named the French King Bridge the most beautiful steel bridge of its class erected in America in 1932" (Bennett 1990: 3).

Local historian John A. Taggart wrote movingly of the beauty of the French King Bridge for the 1932 opening souvenir program:

> *Today we dedicate a magnificent addition to the justly famous Mohawk Trail system. The imposing structure of steel and concrete which here spans the Connecticut River is a noble monument to man's skill and ingenuity. The miles of newly constructed highway which approach the bridge from west and east open up a territory rich in history and replete with views which delight the eyes* (Daily Recorder-Gazette, September 10, 1932).

BIBLIOGRAPHY and/or REFERENCES

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1990 *French King Bridge Spanning the Connecticut River Between Gill and Erving (HAER No. MA-100).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

Daily Recorder-Gazette
1932 "Souvenir Program on the Occasion of the Dedication of the French King Bridge" Greenfield Daily Recorder-Gazette, Greenfield, MA.

ADDITIONAL PHOTOGRAPHS

Historic Postcard Photograph of French King Bridge (Source: www.cardcow.com)

2014 View of Eastern Approach (Source: TRC)

2014 View of Framing System (Source: TRC)

2008 Low-level oblique image of French King Bridge over Connecticut River (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☐ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

NRHP-Eligible under Criterion C

The French King Bridge previously has been determined eligible for NRHP listing by the MHC. The French King Bridge is significant as one of four known steel deck arch bridges in Massachusetts, and one of the longest spans in the state. It is of engineering interest as an unusual development of the uncommon three span, "cantilever arch" bridge type, in that definite reactions were jacked into the steelwork at the conclusion of its construction, making the bridge structurally continuous across four supports. The bridge fabricator, McClintic-Marshall Company of Pittsburgh, was a very significant bridge building firm in the early to mid-twentieth century. The French King Bridge was the crucial link in the establishment of a safe and efficient highway across northwestern Massachusetts in the 1930s, and is a reminder of the great strides made in transportation technology during that period.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Orange		MNT.917

Photograph

Locus Map

MA GIS 2014

Town/City: Montague, Erving

Place *(neighborhood or village):* Miller's Falls

Street/Route: East Mineral Road

Carried over: Millers River
(Railroad, river, brook, canal or road)

Historic/Common name: East Mineral Road Bridge

Ownership: Towns of Erving, Northfield, and Montague
(Name of state agency or municipality)

Mass. Highway bridge no.: E-10-1/M-28-14

Bridge type: Pratt through truss

Bridge typology code 910 302

Date of Construction: 1888, 1939

Source: Erving/Montague Annual Reports

Engineer/Designer: George P. Carver Engineering Co. (1939)

Bridge company/Contractor: Wrought Iron Bridge Company (Canton, OH)

Material (s): Wrought Iron, Stone, Concrete

Alterations *(with dates):* Replacement of span and western abutment, pier encased in concrete (1939)

Posted load limit *(if any):* Unknown, closed to vehicular traffic due to deterioration

Condition: Fair

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural

UTM Reference: 18 0705425E 4718969N

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* 04/2014

Superstructure:

Overall length: 157 ft. Deck width: 13.6 ft. Skew: None

Main unit: No. of spans: 1 Span length: 105 ft.

Approaches: No. of spans: 1 Span length: 52 ft.

Substructure *(structure below deck)*

Height above feature spanned: 135 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The East Mineral Road Bridge was constructed in 1888 to replace a covered bridge for the cost of $5,500. Composed of two spans, the approach span, which was reconstructed in 1939 and replaced a Pratt half-hip pony truss, is 52 feet long and has steel stringers with a reinforced concrete deck. The 105 foot main span is a pin connected Pratt truss with wrought iron floor beams. Unusual structurally, the western end of the through truss span is carried on a 2-column braced bent, rather than directly on a masonry pier. The bridge also has a number of unusual structural details, such as the upper lateral struts and the double eyes of the lower ends of the hip verticals. It was closed to vehicular traffic in 1987 and in 2005 it was rehabilitated for pedestrian, bicycle and equestrian use.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

A covered bridge was erected on the site in 1774. In 1888 it was replaced with the current bridge for a cost of $5,500 The cost was paid by the towns of Montague (50%), Erving (25%), and Northfield (25%). According to the 1927 Erving Town report, this bridge “was not as important these days as it was in the past.” It was built by the Wrought Iron Bridge Company of Canton, Ohio, which specialized, as the name would suggest, in the fabrication of iron truss bridges and was a prolific bridge builder in the late 19th century. It was one of the 28 firms consolidated by J. P. Morgan into the American Bridge Company in 1900. In 1939, the approach span which was a Pratt half-hip pony truss, was replaced as was the western abutment (with concrete) and the stone pier was encased with concrete.

BIBLIOGRAPHY and/or REFERENCES

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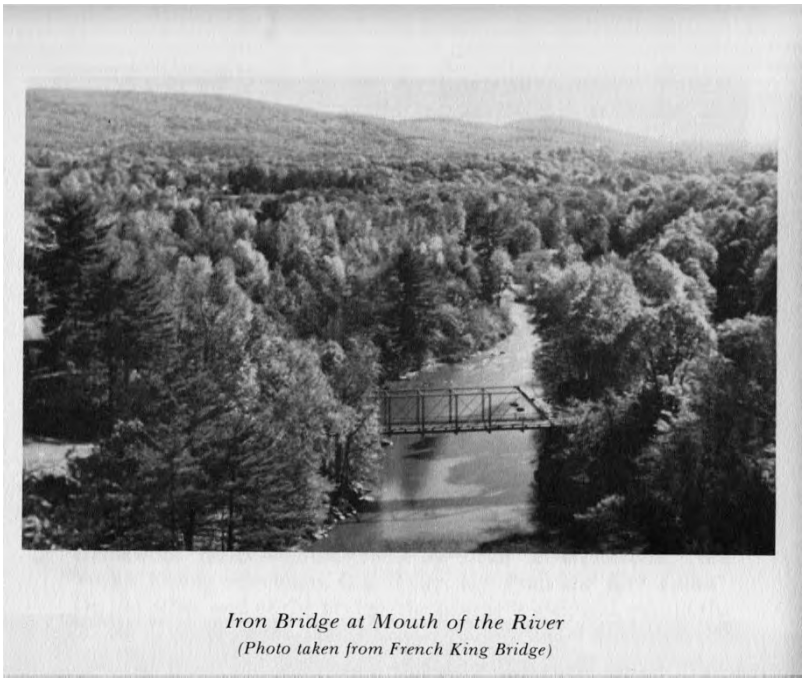
1987 *Town Forced to Close Erving-Montague Span. The Greenfield Recorder.* May 9, 1987.

ADDITIONAL PHOTOGRAPHS



Undated Photograph of East Mineral Springs Bridge (Source: http://historycruise.blogspot.com/)

2013 View of Eastern Approach (Source: TRC)

2014 View of Plaque (Source: TRC)

2008 Low-level oblique image of French King Bridge over Connecticut River (Source: MASSDOT GIS)

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☐ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)

The criteria that are checked in the above sections must be justified here.

National Register Eligible, Criterion C

The MHC has determined the East Mineral Springs Bridge eligible the NRHP under Criterion C. The bridge is the third oldest of nine known Pratt through trusses in Massachusetts. Somewhat altered, the original pony truss approach span on the west was replaced in 1939. It was built by one of the largest and most innovative late-19th-century bridge building firms, the Wrought Iron Bridge Company of Canton, Ohio. Unusual structurally, the western end of the through truss span is carried on a 2-column braced bent, rather than directly on a masonry pier. The bridge also has a number of unusual structural details, such as the upper lateral struts and the double eyes of the lower ends of the hip verticals.

FORM A - AREA

Assessor's Sheets	USGS Quad	Area Letter	Form Numbers in Area
05-0-11 to 05-0-144	Greenfield	MNT. C	MNT.907

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Photograph

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Name of Area: "The Patch"

Present Use: Residential, some commercial

Construction Dates or Period: Late 19th to Early 20th Century

Overall Condition: Fair to Good

Major Intrusions and Alterations: No major intrusions. Most buildings have some replacement siding.

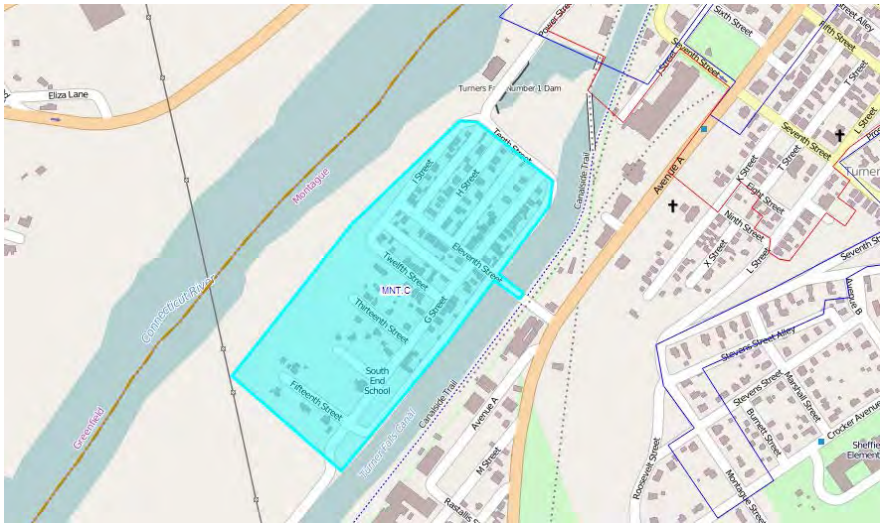
Acreage: > 10 acres

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date *(month/year):* March 2014

Locus Map



MACRIS 2014

☒ *see continuation sheet*

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION

Describe architectural, structural and landscape features and evaluate in terms of other areas within the community.

The area of southwest Turners Falls known locally as "The Patch" is a rectangular three-block-by-five-block area bounded on the west by the Connecticut River, north by Tenth Street, east by the Turners Falls Power Canal, and south by Fifteenth Street. Access to The Patch from the rest of Turners Falls is at only two points: from the east via the Eleventh Street Bridge (which is included as part of this district) and from the north by Power Street over the Station No. 1 dam. Streets are laid out on a grid pattern, with north-south lettered streets and east-west numbered streets, as is true for the rest of Turners Falls.

The Patch is a primarily residential area consisting of approximately 85 houses and auxiliary buildings, although a few commercial buildings are located near Eleventh Street. Buildings date from the late nineteenth to early twentieth centuries, coinciding with Turners Falls' prominence as an industrial and manufacturing center on the Connecticut River. Single- and multi-family dwellings are either of frame or brick construction, one or two stories in height, with side- or front-gable roofs. They are mostly vernacular variants of nationally popular styles such as the Italianate, Queen Anne and Colonial Revival Styles. Some residences have retained their original detached garages. There are no major modern intrusions or demolitions in the district, with most alterations confined to the use of replacement siding and replacement windows and doors. Buildings range from fair to good in condition.

Typical buildings in The Patch include:

- MNT-124 South End School, early 1900s Classical Revival, 3-story brick school house
- MNT-125 House #83 G Street, a 2-story brick house with front-gable roof and replaced front porch
- MNT-126 Eleventh Street, 2-story frame apartment building with 2-story front porch
- MNT-127 #25 Eleventh Street, a 3-story Italianate-style brick commercial/apartment building

HISTORICAL NARRATIVE

Explain historical development of the area. Discuss how this relates to the historical development of the community.

Along with the rest of Turners Falls, "The Patch" was developed in the 1870s primarily by Polish immigrants as a planned industrial community along the lines of Lowell or Holyoke under the aegis of the Turners Falls Company and its founder Col. Alvah Crocker. Crocker and his business associates purchased the rights of the old Proprietors of the Upper Locks and Canals at Turners Falls and embarked on converting the old navigational canal into a power canal for the use of mills and factories that would locate to Turners Falls. By the late 1870s several significant industries, chief among them the John Russell Cutlery Company had built plants along the power canal at its northern end. Soon joined by the Montague, Turners Falls, and Keith paper mills, Turners Falls' factories provided employment for hundreds of local residents, many of whom lived in company-built housing in the village (Jenkins 1980: 8.1).

Turners Falls is shown in an 1877 birds eye view as a planned community superimposed on the natural landscape and bisected by the power canal. The Turners Falls Company laid out a town with the prime sites along the river reserved for the factories, with a broad tree-lined street (Avenue A) for commercial and governmental buildings, and the remaining area laid out in a grid pattern for the building of single- and multi-family residences. Nearly all of these housed workers at

one of the local mills and factories, as well as some who worked for the logging operations along the Connecticut River. "The Patch" neighborhood, consisting mostly of Polish immigrants, developed a decade or two later than the original heart of Turners Falls, as is shown by Sanborn insurance maps beginning in 1884 and continuing into 1914.

By the early 1900s, the Turners Falls Company had expanded its operations to include development of hydroelectric power for industrial and residential use. As part of this, the Turners Falls Power & Electric Company (as it became known) widened and extended the power canal south of Seventh Street and constructed two new power stations. The first one, known as Station No. 1, was completed in 1906 just north of Eleventh Street within sight of the north end of The Patch, with the new Branch Canal and dam cutting the area off from the rest of Turners Falls to the north. When the canal was extended south to the new Cabot Station south of the Patch in 1915, the area became a virtual island, relieved only by the building of the Eleventh Street Bridge that same year.

Like the rest of Turners Falls, The Patch experienced a decline beginning in the 1930s, as several major mills and factories closed or relocated elsewhere. Although a few of the historic factories are still partially operated, they no longer provide much employment for Turners Falls' residents, most of whom work elsewhere. As a result, there has been little new construction in the village since the 1940s and The Patch has preserved most of its appearance intact.

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1978a "Avenue A" MHC Survey Form A. Boston MA.
1978b "Eleventh Street Bridge" MHC Survey Form F. Boston MA.
1978c "Fifth Street Bridge" MHC Survey Form F. Boston MA.
1978d "Sixth Street Bridge" MHC Survey Form F. Boston MA.
1978e "Turners Falls Power Canal" MHC Survey Form C. Boston MA.
1978f "The Patch" MHC Form A. Boston MA.

Bennett, Lola (Historic American Buildings Survey [HAER] Historian)
1990a *Eleventh Street Bridge Spanning the Turners Falls Power Canal (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

C.H. Vogt & Co.
1877 "Turners Falls, Mass." (Bird's eye view). C.H. Vogt & Co., Milwaukee, WI.

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1871 *Franklin County, Massachusetts.*

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Montague Bicentennial Committee
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Sanborn Map Company
June 1884 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
February 1889 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
March 1895 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Sept 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Whittlesey, Charles W.
1938 *Crossing and Re-Crossing the Connecticut River*. New Haven, Connecticut: The Tuttle, Morehouse & Taylor Company.

ADDITIONAL PHOTOGRAPHS

2013 View of street typical of The Patch along G Street (Source: TRC)

2013 View of commercial area of The Patch at 11th Street (Source: TRC)


2008 Low-level oblique image of The Patch (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☒ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)

The criteria that are checked in the above sections must be justified here.

The Patch Historic District was previously surveyed by the Franklin County Arts Council during its survey of Turners Falls in 1978 but was not assessed for NRHP eligibility by the MHC. Since "The Patch" is a previously defined historic district with a separate history and period of significance, as well as geographical separation from the NRHP-listed Turners Falls Historic District, it is appropriate to consider it as a separate district rather than attempt to modify the boundaries and historic context for the Turners Falls Historic District. The Patch Historic District is NRHP-eligible under Criteria A and C on the local level with a period of significance between the early 1880s and 1932 (within the period of significance of the NRHP-listed Turners Falls Historic District, located five blocks to the north). The Eleventh Street Bridge (MNT.904), previously determined NRHP-eligible by MHC, is also a contributing resource in the Patch Historic District.

NRHP-eligible "The Patch" Historic District, Turners Falls (Criteria A and C)

This district in southwest Turners Falls is a rectangular three-block-by-five block area bounded on the west by the Connecticut River, north by Tenth Street, east by the Turners Falls Power Canal, and south by Fifteenth Street. The historic district is a primarily residential area consisting of approximately 85 houses and auxiliary buildings, although a few commercial buildings are located along and near Eleventh Street. Buildings date from the late nineteenth to early twentieth centuries, coinciding with Turners Falls' prominence as an industrial and manufacturing center on the Connecticut River.

Criterion A

The Patch Historic District is NRHP-eligible under Criterion A for its association with the development of Turners Falls as a major industrial center in western Massachusetts following its founding as a planned industrial community in 1866. The village grew throughout the late nineteenth and early twentieth centuries as a center of paper-making mills and a cutlery factory whose workers lived within walking distance along the grid-pattern streets designed by the Turners Falls Company. Originally settled in the 1880s and 1890s by Polish immigrants to Turners Falls, after 1906 "The Patch" developed somewhat of a separate identity due to the fact that it was physically cut off by expansion of the Turners Falls power canal, and became accessible only by the Eleventh Street Bridge.

Criterion C

The Patch Historic District is NRHP-eligible under Criterion C for its largely intact collection of late-nineteenth and early-twentieth-century architecture in vernacular variants of the Italianate, Colonial Revival, and Queen Anne styles, along with some Italianate-style commercial buildings and a Classical Revival-style school. The district has had few intrusions or demolitions and retains all seven aspects of integrity.

FORM A - AREA

Assessor's Sheets	USGS Quad	Area Letter	Form Numbers in Area
101, 102	Greenfield	D	GIL. 9, 10, 23-59, 118-172

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Photograph

Town/City: Gill

Place *(neighborhood or village):* Riverside

Name of Area: Riverside

Present Use: Residential, commercial

Construction Dates or Period: ca. 1760-1945

Overall Condition: Good

Major Intrusions and Alterations: Contemporary commercial buildings on French King Highway, inappropriate alterations to historic houses

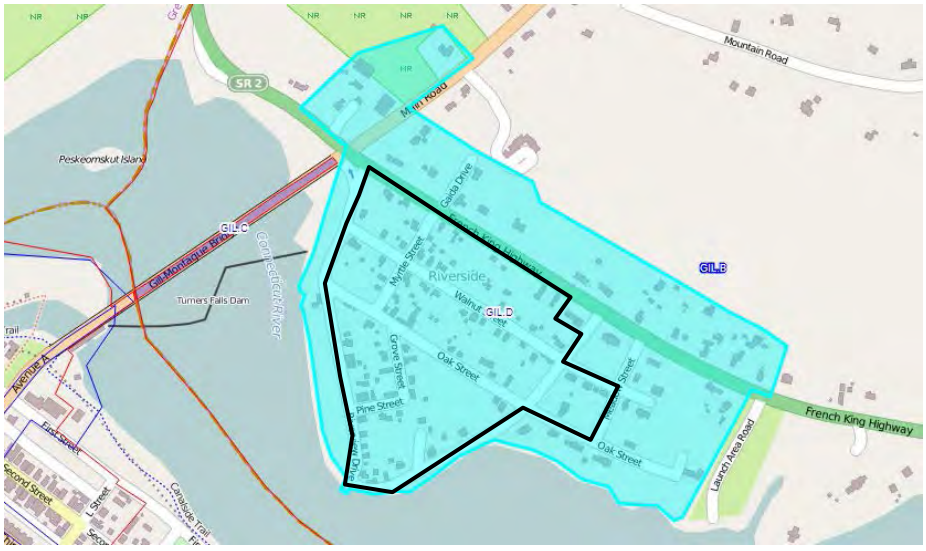
Acreage: over 50 acres

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date *(month/year):* April 2014

Locus Map



Proposed Riverside Historic District

MACRIS 2014

☒ *see continuation sheet*

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION

Describe architectural, structural and landscape features and evaluate in terms of other areas within the community.

Location

Riverside in the Town of Gill is located on the north side of the Connecticut River where the river makes a short turn to the west. The village is just east of a major dammed falls in the river and east of the entry from the north of the Fall River into the Connecticut. Route 2 known in this area as "French King Highway" runs through the village in an east-west direction and Main Road running to the northeast connects Riverside with Gill Center. The village lies along a flood plain of the river made narrow by a series of hill on its north side. Fall River marks the boundary with Greenfield on the west and the Connecticut River marks the boundary with Erving on the west and Montague (Turners Falls) to the south.

Historically, Riverside was considered all of the section of Gill south of Gill Center including a small area of industry on Fall River, as well as farmland and alluvial flood plain that extended to the Connecticut River on the east. The most densely settled section of the village, a former manufacturing village, occupies a shallow peninsula extending into the river between Barton's Cove on the east and the falls on the west and the south side of the French King Highway (Route 2). The following descriptions are a representative selection of the best-preserved buildings, a structure, and a monument found in the area as written by Bonnie Parsons of the Gill Historical Commission in 1999.

Architectural Description

The George and Clara Harris House, 4 Grove Street, ca. 1869 (GIL.35) is an Italianate cottage that is 1½ stories in height beneath a front-gabled, slate roof. Three bays wide and two bays deep, the clapboard house has a one-story rear ell that incorporates a garage. Stone foundations mark it as one of the earliest houses in the manufacturing village of Riverside, the majority being brick. A trabeated door surround remains, although its sidelights and original opening have been filled in and reduced.

Another early house, the Field-Foster House, 8 Grove Street, 1870 (GIL.37) is late Gothic Revival in style. It is a front-gabled, one-and-a-half story, side-hall plan house. Like many of the buildings in Gill it has a slate roof. The main block of the vinyl-sided house is two bays deep and three bays wide and there is a rear one-and-a-half story ell with a glassed-in porch room added to each side. Two gabled dormers, Gothic Revival-style, rise on the south side of the ell and one on the north. Sash is 2/2. A column-supported, shed-roof porch, Colonial Revival in style, was added to the house as well as an exterior chimney.

The Turners Falls Lumber Company Office and Riverside Library, 17 Riverview Drive, ca. 1872 (GIL. 187) has been altered by the addition of the double-width door in its street facade, but it retains much of its early appearance as a one-and-a-half story, front-gabled building two bays wide and one bay in depth. It is clapboard sided and has an asphalt shingle roof. The attenuated proportions of the corner pilasters, a broad frieze and eaves returns mark the building as post-1850.

Larger in scale and Italianate in style is the house at 21 Riverview Drive, ca. 1870 (GIL.58). This is a 2½-story house on brick foundations with a side-gabled roof that was set sideways on its lot to be south facing. A transverse gable wing on the south creates an L-shaped plan in whose angle is the building entry through a shed-roof porch that is enclosed. Three bays wide and one bay deep, the house has a paneled, three-sided bay on its street facade. The wide overhang of the

roof, an arched, louvered gable vent and capped window surrounds remain from its Italianate origins. Sash is mainly replacement 1/1, but the house retains its clapboard exterior.

At 7 Walnut Street, a Charles Stoughton House, 1883 (GIL.55) is a large-scale, but modestly ornamented Italianate style house. The main block of the two-story clapboard building is L-shaped in plan with an entry in its inner corner beneath a chamfered-pier-supported porch. A two-story rear ell has a side porch on Italianate piers as well. Three-sided bays on the south and west facades add visual appeal to the elevations. The thinly boxed eaves with no returns have a wide overhang and there is a single roundel window in the gable ends. The house retains its clapboard exterior.

Three Queen Anne style cottages retain the ornamental bargeboards popularized during the Gothic Revival period. At 9 Walnut Street, a Charles Stoughton House, 1883 (GIL.23) is the largest of the three. The 2 ½-story, front-gabled house, now shingle-sided, is three bays wide and five bays deep. There is a transverse gable bay on the west. Unusual are the exaggerated shed-roof lintels supported by scrolled braces over both first and second story windows. Also unique in Riverside are the arched king-post trusses in the gables that are further ornamented with bargeboards with wave-like jigsaw work at their ends. A shed roof porch has been enclosed but retains its pedimented roof with a modified version of the king-post truss.

Next door at 11 Walnut Street, a Charles Stoughton-Peleg Adams House, 1883 (GIL. 166) is a small Queen Anne cottage one-and-a-half stories in height beneath a front-gabled roof. It is three bays by three bays and has a one-and-a-half story, followed by a one-story, ell at the rear for a long rectangular plan. Principal ornaments are the scroll-cut bargeboards in the front gable and a shed roof porch on posts with elaborate scroll-cut brackets. 2/2 sash and simple flat stock window surrounds complete its modest appearance.

The third house, the Katherine and John Pfersich House, 27 Oak Street ca. 1890 (GIL.31) is vinyl-sided and has 1/1 vinyl replacement windows, but retains some of its trim including barge boards in the front gable of its rather steeply pitched slate roof. The house is three bays wide and two bays deep and has a flat-roofed porch across its east facade supported by posts, linked by solid brackets that are connected by spindle work.

Typical of the small, side-hall-plan Queen Anne-style houses found in the area is the house at 35 Riverview Drive, ca. 1890 (GIL. 162) This is a one-and-a-half story, front-gabled and asbestos shingle-sided house whose front corners at the first floor have been canted beneath a pendent-ornamented overhang for a three-bay elevation. An entry with half-length, angled sidelights is placed in a shallow projecting bay just beyond the overhang.

A pair of Queen Anne-style multi-family houses is found at the David A. Wood House, 7 Riverview Drive, ca. 1869 (GIL.27) and the Curtis Johnson House, 25 Riverview Drive, ca. 1869 (GIL.40). Originally nearly identical, the two are 2 ½-stories in height with slate roofs that present their gable ends to the street and have porch-covered entries on both sides. The two houses are four bays wide with a pair of three-sided bays at the first floor on the street or west facades. At the Wood House a flat-roofed, two-story bay on the north creates two corner porch-covered entries. The porches have turned supports and lattice scrollwork in the Johnson House the same double porches exist although they have been altered with replacement posts and removal of the brackets. A one-and-a-half story rear ell has two gabled dormers while at the Wood House there is a two-and-a-half story ell. Sash in both houses is 2/2.

A more simply designed multifamily house is the Ernest and Mary Yukl House, 45-47 Riverview Drive, ca. 1910 (GIL.41). The large scale, 2½-story house is five, irregularly spaced bays wide and two bays deep under a side-gable, asphalt shingle roof whose eaves make returns. Clapboard-sided, the house sits on a high brick foundation and has a single center chimney. It is entered beneath a double stacked Colonial Revival style porch on half-length columns that sit on solid clapboard porch walls. The porch has a shed roof. A glass, metal and concrete greenhouse was added to the east facade of the house.

More architecturally elaborate is the multifamily Turners Falls Lumber Company Workers' Housing at 32 Walnut Street, ca. 1900 (GIL.51). Here the units are side-by-side rather than stacked as at 45-47 Riverview Drive. The 2 ½-story house has a side-gable, asphalt shingle roof, with two interior chimneys, from which projects a centered, transverse gable. The building is only four bays wide with a pair of entries in the center flanked by paired sash. A shed-roof porch with paired pediments shelters the entries. The porch rests on posts with simple braces that echo a king-post truss motif in the transverse roof gable. Windows have replacement 6/6 and 1/1 sash. The eaves have a relatively wide overhang and do not make returns in the gable ends, features that support its early 20th century date.

Close in date is the Angelina and Obed Murley House, 41 Riverview Drive, ca. 1909 (GIL.42). This is a two-by-two-bay, front-gabled cottage. There is a one-story kitchen ell on the north. The house shares with its Italianate neighbors in Riverside its tall proportions, medium-width frieze and cornerboards. Here, however, its full-width, hipped-roof porch rests on Queen Anne-style turned posts with scroll-cut supporting brackets. Originally three bays in width; the house has a large window replacing two on the south facade, which overlooks the Connecticut River.

Across the street on Riverview Drive from the Albert Smith House is a remaining bridge abutment, 1878 (GIL.907) from the Red Suspension Bridge, an iron bridge that crossed into Montague between 1878 and 1942 when it was demolished as scrap for World War II. The abutment has been designated as a Massachusetts Historic Civil Engineering landmark and is of interest to geologists as it was constructed from local stone that contains armored mudballs, or petrified, encased fossils.

At the south west corner of Riverview Drive and the French King Highway is the Turner Monument, erected in 1900 (GIL .906) to commemorate the English settlers' ambush of Native Americans led by Captain William Turner at the natural falls in the Connecticut River. It is a granite monument five feet high by approximately three and a half feet by three and a half feet. It is rusticated and has a pyramidal top and is inscribed with a description of the event as follows: "Captain William Turner with one hundred and forty five men surprised and destroyed over three hundred Indians encamped at this place, May 19, 1676".

HISTORICAL NARRATIVE

Explain historical development of the area. Discuss how this relates to the historical development of the community.

The following narrative has been adapted from the 1999 Area Form written by Bonnie Parsons of the Gill Historical Commission:

As a result of King Phillips War in 1676, the area remained unsettled until just before the middle of the 18th century. One of its earliest residents, arriving in 1743 was George Howland who built the Howland Tavern, ca. 1760 (GIL. 10) close to the Connecticut River where he served the river boat traffic that was carting goods above and below the falls. A few farms were established prior to the Revolutionary War in Riverside including Timothy Stoughton whom bought a 300 acre piece of property from Native Americans. This section of Gill was suited to farming and particularly sheep farming and by 1838 Stoughton was among the more successful sheep farmers with a house, two barns, numerous outbuildings, a cider mill, a few dairy cows and 210 acres. In addition to the farms, a ferry operated across the Connecticut River from Riverside at the foot of Riverview Drive and a sawmill was operated nearby at the falls.

A small settlement grew up around a textile mill in the 1830s in a part of Riverside known as Factory Hollow, but most of this settlement was on the Greenfield side of Falls River. On the Gill side were a blacksmith shop, a machine shop and several dwellings, all since demolished. The area remained sparsely populated until 1867 when Amos Perry, David Wood, and Nathaniel Holmes bought water rights on the Connecticut River from the Turners Falls Company along with a small parcel of land in Riverside at the edge of the river for a grist and sawmill. A farmer, Cornelius Allen, owned most of the land in Riverside at that point but in 1870 Perry, Wood and Holmes together with Timothy Stoughton, descendent of one of the earliest farmers of Riverside, bought Allen's farmland as the mills began operation. Stoughton invested in land with the three men and perhaps in the company as well. The Holmes, Wood and Company sawmill provided vast amounts of

lumber for the development of Turners Falls across the river and lumber production soon outstripped the gristmill. The need for lumber workers prompted housing construction. It was from 1869-70 that the concentration of buildings comprising the manufacturing village of Riverside was constructed. Many were built by the company for their mill hands, some of these by Timothy Stoughton; others were speculatively built by associates or speculators from nearby towns.

In 1872, Holmes, Wood and Perry incorporated as the Turners Falls Lumber Company bringing logs downriver to their sawmill from Vermont and Canada. This was also the year in which Riverside got its own post office and with it, the official village name. Underscoring the lumber company's role in village growth, David Wood became the first postmaster. The three partners lost control of their business the following year and they were bought out by Timothy Stoughton. The Turners Falls Lumber Company ran log drives every year between 1869 and about 1900 bringing millions of board feet into Riverside each year, where it was processed and sold.

Stoughton was an astute entrepreneur and a person of extensive interests. When it was ascertained that prints found in sandstone in the Gill area were prints of prehistoric animals it was Stoughton who turned their collection into a commercial enterprise, quarrying the prints, selling and distributing them to colleges and museums throughout the country. The Tax Valuation List of 1885 suggests some of his interests and investments, for that list shows he owned six houses including a tenement or workers' housing, and a blacksmith shop, a "bird track house" (storage building for the dinosaur prints), that he continued to run a farm that included several tobacco barns and had a substantial amount of cash, $17,400. Prior to his involvement with the lumber company, he had torn down the family homestead and built the house at 13 Main Road ca. 1860 where he proceeded to develop a model farm with the most up-to-date technology.

Stoughton was an early proponent of connecting Gill to Turners Falls with a bridge that would put Riverside within easy reach of the larger industrial Turners Falls. Without a bridge the lumber company had to ship materials on the ferry run by Albert Smith or overland in a circuitous route across Falls River. Accordingly, he began publicly to advocate for the structure and in 1878 the Red Suspension Bridge (demolished in World War II for scrap metal) was constructed connecting the two towns. The bridge represented a prosperous future for Riverside. In 1879 Louis Everts wrote in his *History of the Connecticut Valley in Massachusetts* that Riverside was "rapidly growing in popularity among businessmen at Turners Falls Village as a place of suburban residences" and that when Turners Falls succeeded "Riverside will be an architectural garden place."

The village did continue to grow, although more modestly than predicted. A second industry was added at the foot of Riverview Drive in 1885, known as the Kindling Wood Factory. A spin-off industry from the lumber mill, the kindling wood factory bought waste wood from the Turners Falls Lumber Company, cut, dried, bundled and sent it to city markets. When the company organization faltered, it was bought by the Turners Falls Lumber Company and continued until 1891 when it burned down and was not reconstructed. Housing continued to be built in Riverside both in high style and as workers housing. Several stores and a community building (all now gone) went up in the area and residents not employed by the lumber company followed various cottage industries from dressmaking to knife handle manufacturing. Improvements to the village included a water system that Timothy Stoughton had constructed in 1870 from a spring on his property and connected to village homes. The system was expanded in 1884 becoming the Riverside Water Company that ran water lines to all the buildings in the village.

In 1903, the Turners Falls Lumber Company burned down. It was not rebuilt and though there were subsequent development plans that aimed to build the area up into a suburban neighborhood, it never recovered from the loss of its industrial base. Rather, Riverside grew gradually partly for its proximity to the French King Highway, Route 2, as automobiles made their way across the state, and partly for its proximity to the industry of Turners Falls. Two plans for residential subdivision date from 1908. One was proposed as a Plan of Riverside Park and covered the southern portion of Riverview Drive, Elm and Walnut Streets. The second plan, proposed the same year, divided land that had formerly belonged to Timothy Stoughton into small house lots on the northern section of Riverview Drive (Bridge Street), French King Highway, Oak, Myrtle, Maple and Pine Streets. Street layouts proposed by the two plans were completed, but the dense lot divisions were never completely developed.

While residences continued gradually to be added to Riverside and other buildings were lost, the focus of the area shifted away from the River and towards the main road through Riverside that later became Route 2 or the French King Highway. The ca. 1920 Crawford Socony-Mobil Gas Station was a roadside development brought about by the automobile. One new business that merged Riverside's agriculture with roadside culture of the automobile is the Yukl vegetable stand where the Yukls established their market and nursery for over fifty years. Also indicative of the age of the automobile, in 1931 the French King Highway and new bridge across the Fall River were constructed as part of a Route 2 cutoff. The Red Suspension Bridge, that had shown signs of deterioration in 1918, was severely compromised in the floods of 1936. A more substantial bridge was needed and built in 1937-38, the Turners Falls-Gill Bridge.

BIBLIOGRAPHY and/or REFERENCES

Parsons, Bonnie
1999 "Riverside" Massachusetts Historic Building Inventory-Area Form. Massachusetts Historical Commission, Boston, MA.

Stoughton, Ralph
1978 History of the Town of Gill.

[Delete this page if no Criteria Statement is prepared]

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☒ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Potential Riverside Historic District, Criteria A and C

In 1999, the village of Riverside was surveyed by Bonnie Parson of the Gill Historical Commission and an MHC Area Form (GIL.D) was completed that recommended a Riverside Historic District eligible for National Register listing under Criteria A and C. The area was re-surveyed as part of the 2014 survey by TRC, the potential boundaries verified, and the overall condition of resources noted and recorded with photographs.

Riverside's Native American resources already are recognized as the Riverside Archeological District, listed in the National Register in 1975.

The proposed Riverside Historic District is a roughly triangular-shaped area bounded on the northwest by Bridge Street, at the north by French King Highway (Route 2), and on the east and southeast by the east sides of Meadow Street and Riverview Avenue. The district contains approximately 60 contributing resource and only a few non-contributing (thee boundaries are drawn to exclude mostly non-historic commercial buildings.

The Riverside Historic District is eligible for National Register listing on the local level as a representative Connecticut River Valley colonial era settlement, then former manufacturing village, then suburb. Several different facets and periods of Riverside's history and architectural heritage are represented within the district boundaries. Late eighteenth- and early-nineteenth century residences reflect the rural and agricultural character of the community, which also relied on timbering and yearly log drives. Riverside's greatest period of expansion occurred after the damming of the river at Turners Falls and the founding of the Turners Falls Lumber Company in

the 1860s and 1870s. The community was both economically and physically linked to Turners Falls after the building of the Red Suspension Bridge in 1878, enabling workers to commute to jobs and business on both sides of the river. Late-nineteenth and twentieth- century architecture reflects Riverside's role as a suburb of Turners Falls, and a desirable place for wealthier residents escaping the more industrial village across the river.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
101.0-0000-0103.0	Greenfield	D	GIL.037

Town/City: Gill

Place: *(neighborhood or village)*:
Riverside

Address: 9 Grove Street, Riverside

Historic Name: "Home Nook": Hunt-Sanderson-Jones House

Uses: Present: Residential

Original: Residential

Date of Construction: ca. 1869-70

Source: *History of Town of Gill* (p. 245)

Style/Form: Vernacular Greek Revival/Side-hall with ell

Architect/Builder: Unknown

Exterior Material:

Foundation: Brick; concrete block

Wall/Trim: Vinyl Siding

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
Carriage House

Major Alterations *(with dates):*
Side ell enlarged (1902-09), porch enclosed, windows and doors altered, siding added (post 1992)

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Residential

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year*): April 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: GILL

ADDRESS: 9 Grove Street

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): D

Form No.: GIL.037

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Based on historic photographs and deed records, this house was originally constructed ca. 1869-70 as a 1-story, 3-bay vernacular Greek Revival-style frame house with clapboard siding, a front-gable roof with cornice returns and corner boards, and a side-hall plan with entrance on the southeast. The single-leaf entrance door was flanked by rectangular sidelights and topped by a ramped lintel. The 2/2 double-hung sash windows had working louvered shutters and ramped lintels. The 1-story, 3-bay side ell on the east (probably a kitchen wing) had a full-width shed-roofed front porch and on-peak brick chimney.

Sometime between 1902 and 1909, the side ell was raised an additional half story, two gabled wall dormers added, and an additional bay added on the east end, turning the porch into an incised porch with turned posts. This porch has since been enclosed with 1/1 metal windows and a concrete-block foundation added. After 1992, the present 1/1 vinyl sash windows with square surrounds were added, the ramped lintels removed, and the door replaced with the present one.

Set on a brick foundation with basement, the 1-story, 3-bay dwelling with front-gable roof and 1 1/2-story, 3-bay side ell with side-gable roof is of wood-frame construction with replacement vinyl siding. The house has asphalt-shingled cross-gable roof has two on-peak interior brick chimneys and two gable wall dormers on the ell. Both the main roof and the dormers have cornice returns. The original 2/2 sash windows with working shutters and a triangular lintels were replaced after 1992 with 1/1 vinyl sash windows and square surrounds. The off-central, single-leaf door with shutters and triangular lintel has also been replaced and the surround removed. Original constructed as a 1-story ell with porch, likely as a kitchen and informal entrance, the side ell was raised ca. 1902-09 to 1 ½ stories, the gable wall dormers added, and the porch became incised into the massing with turned posts. The porch was later enclosed with 1/1 metal windows and concrete block placed under for a foundation. To the rear of the property is a 1-story garage. Square in plan, it has a pyramidal roof, weatherboard siding, and 2/2 sash windows.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

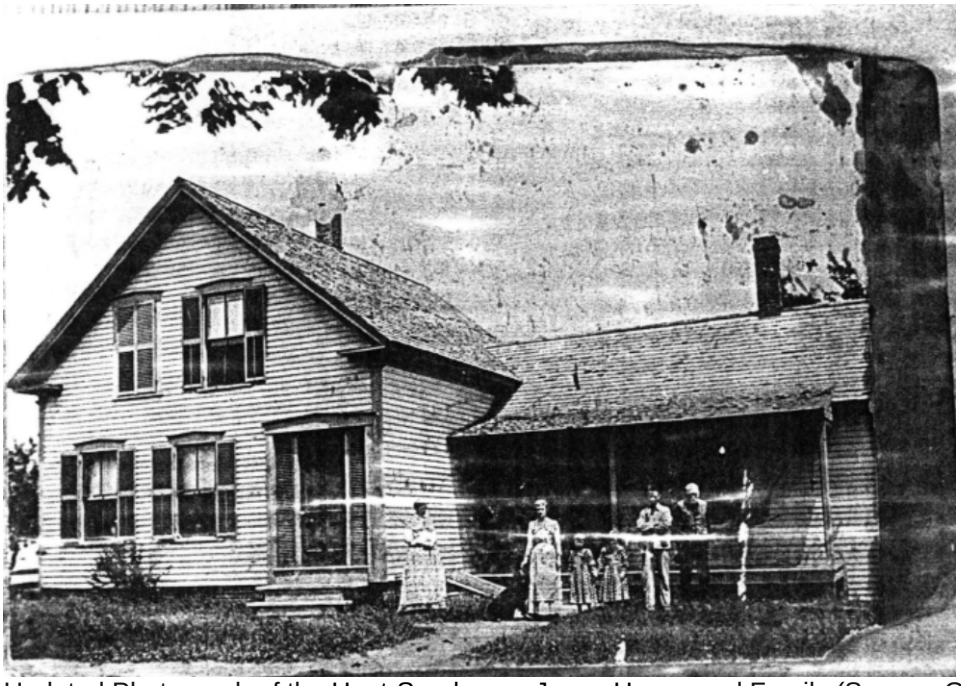
This house is reported to have been the first building erected on Grove Street (Stoughton 1978: 245). The date of the erection of this home can be closely fixed to 1869-1870 since a March 23, 1870 deed between Edwin Hunt and T.M. Stoughton mentions, apart from the "40 rods of ground" in Gill,...and also the new dwelling house recently erected upon the land and now occupied by me" (Franklin County Deed [FCD] Book 282, Page 67). Since the building was occupied by Hunt at the time of his recorded purchase, it is quite possible that he was the actual builder. On the same March day, Hunt deeded the property to his sister Elizabeth ("Lizzie") Sanderson, a widow from Sunderland (Stoughton 1978: 245). Lizzie Sanderson soon married Horatio Marsh and apparently lived at the house until her death sometime in 1883.

The property then passed into the possession of its most notable occupant, Frank D. Jones, who purchased it from Lizzie's heirs at an auction in 1884 for the price of $1,050.60 (FCD Book 370, Page 350). Frank Jones and his family would live in this home into the 1930s-1940s. During that time he operated a local general store, which was a necessary institution for the growing community of Riverside. He also performed other civic duties, at times acting as a town juror (1891-92), town auditor (1894), and as the Riverside librarian from 1890 to 1922 (Stoughton 1978: 200, 247). During 1902-09, Jones enlarged the house although it is not known if these changes reflect stylistic or economic adaptations.

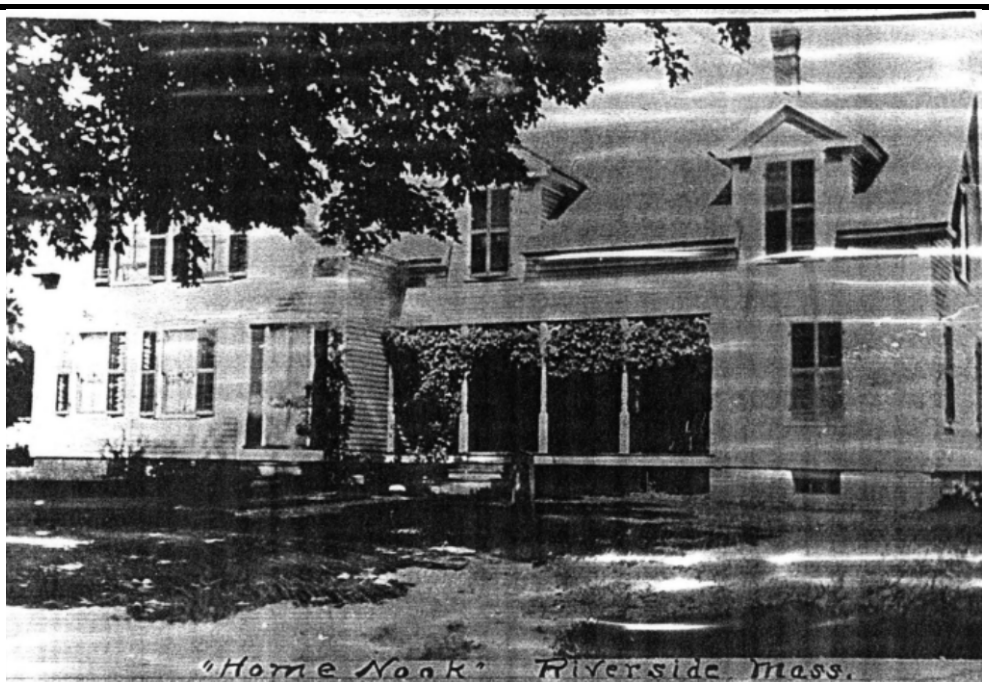
BIBLIOGRAPHY and/or REFERENCES

Gill Historical Society Photograph Collection

Stoughton, Ralph.
1978 *History of the Town of Gill*, Greenfield, MA.



Undated Photograph of the Hunt-Sanderson-Jones House and Family (Source: Gill Historical Society)



Undated Photograph of the Hunt-Sanderson-Jones House (Source: Gill Historical Society)

2014 View of Hunt-Sanderson-Jones Garage (Source: TRC)

2008 Low-level oblique image of Hunt-Sanderson-Jones House (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Riverside Historic District

The Hunt-Sanderson-Jones House is a contributing resource to the NRHP-eligible Riverside Historic District.

Potential Riverside Historic District, Criteria A and C

In 1999, the village of Riverside was surveyed by Bonnie Parson of the Gill Historical Commission and an MHC Area Form (GIL.D) was completed that recommended a Riverside Historic District eligible for National Register listing under Criteria A and C. The area was re-surveyed as part of the 2014 survey by TRC, the potential boundaries verified, and the overall condition of resources noted and recorded with photographs.

Riverside's Native American resources already are recognized as the Riverside Archeological District, listed in the National Register in 1975.

The proposed Riverside Historic District is a roughly triangular-shaped area bounded on the northwest by Bridge Street, at the north by French King Highway (Route 2), and on the east and southeast by the east sides of Meadow Street and Riverview Avenue. The district contains approximately 60 contributing resource and only a few non-contributing (thee boundaries are drawn to exclude mostly non-historic commercial buildings.

The Riverside Historic District is eligible for National Register listing on the local level as a representative Connecticut River Valley colonial era settlement, then former manufacturing village, then suburb. Several different facets and periods of Riverside's history and architectural heritage are represented within the district boundaries. Late eighteenth- and early-nineteenth century residences reflect the rural and agricultural character of the community, which also relied on timbering and yearly log drives. Riverside's greatest period of expansion occurred after the damming of the river at Turners Falls and the founding of the Turners Falls Lumber Company in the 1860s and 1870s. The community was both economically and physically linked to Turners Falls after the building of the Red Suspension Bridge in 1878, enabling workers to commute to jobs and business on both sides of the river. Late-nineteenth and twentieth- century architecture reflects Riverside's role as a suburb of Turners Falls, and a desirable place for wealthier residents escaping the more industrial village across the river.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
101.0-0000-0112.0	Greenfield	D	GIL.043

Town/City: Gill

Place: *(neighborhood or village)*: Riverside

Address: 39 Riverview Drive, Riverside

Historic Name: Frank Smith House

Uses: Present: Residential

Original: Residential

Date of Construction: ca. 1882

Source: *History of Town of Gill* (pps. 245, 249)

Style/Form: Vernacular with T-shaped plan

Architect/Builder: Unknown

Exterior Material:

Foundation: Brick

Wall/Trim: Clapboard

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
Carriage House

Major Alterations *(with dates):*
1 ½-story wing added on east (1884-1907), porch partially enclosed (unknown date).

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Residential

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: April 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: GILL

ADDRESS 39 Riverview Drive.

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s)	Form No.
D	GIL.043

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Based on historic photographs and deed records, this residence was built ca. 1882 as a 2-story, gable-roofed frame house with a T plan on a brick foundation, consisting of a front-gabled, 1-bay section perpendicular to the street on the east and a 3-bay, side-gabled ell with on-peak brick on the west. The west gable end is canted, with scrolled brackets at the eaves of the cut-away corners. A 1-story, shed-roofed front porch (now partially enclosed) is set within the two sections. A smaller secondary shed-roofed porch (since enclosed) is on the east. There are original single and paired 2/2 wood sash windows. The primary porch has been enclosed with removable storm windows and enclosed weatherboard balustrade. Based on an 1895 photograph, the 1 ½-story east wing with side-gable roof and enclosed shed-roofed front porch is a later addition, although the similarity of architectural details suggests it was built not long after the original house.

To the rear of the property is a 1-story carriage house. It is of wood-frame construction with wood shingles. The building has an asymmetrical front-gable roof with a salt-box profile. The south elevation has a double-leaf vehicular door and a single-leaf entrance door. The windows are 6-light on the east elevation and are boarded over on the west elevation.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

This home is believed to have been built by Frank W. Smith ca. 1882. Smith was the son of an important local personage, the ferryman Albert Smith whose house is located next door at 39 Riverside Drive (GIL.059). Frank Smith purchased the adjacent property from T. M. Stoughton and had the dwelling erected (Stoughton 1978: 245). An 1894 photo shows the details of the home, along with Smith family members. Frank's first wife Rose would pass away some time after this date and he remarried a woman named Margaret. Upon Frank's death in 1897, his wife and family of four children inherited the property. Smith had most likely engaged in farming activities in Gill and seems to have been relatively well-off since a record of his estate describes four houses, a shop, two barns, a poultry house, and some small acreage (Gill Town Report 1901: 2) In 1930, Mrs. Mary Smith Warren (Franks' second wife) is recorded as owning a house, barn, two poultry houses and several small plots in Riverside.

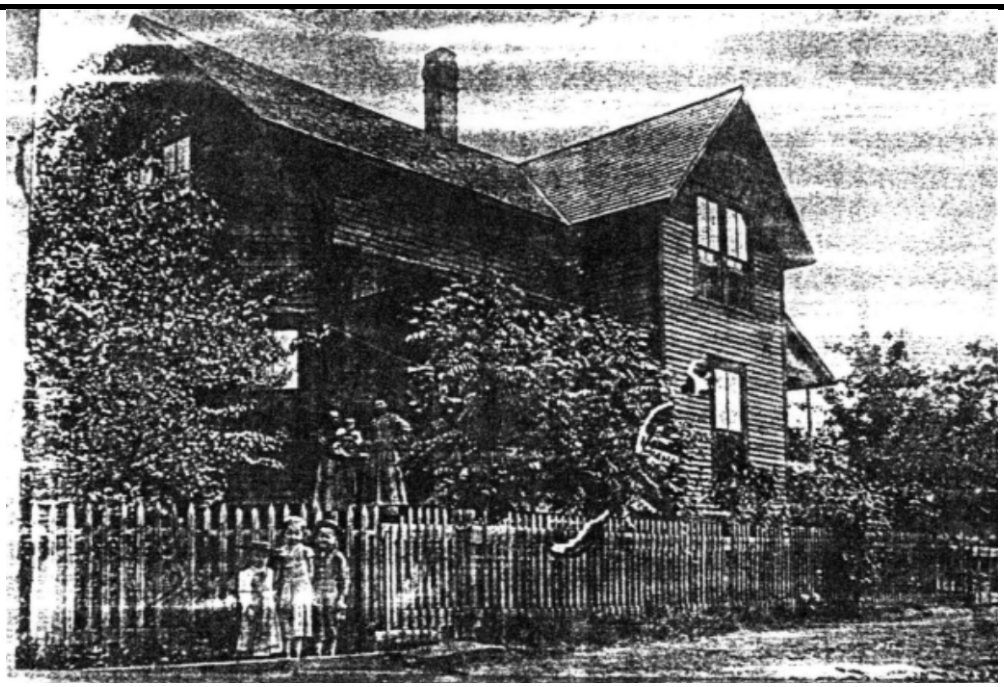
BIBLIOGRAPHY and/or REFERENCES

Gill Historical Society Photograph Collection

Howes Brothers Photograph Collection (On File Ashfield Historical Society)

Stoughton, Ralph.
1978 *History of the Town of Gill*, Greenfield, MA.

Town of Gill
1901 *Gill Town Reports*, Gill, MA.



1895 Photograph of Frank Smith House and Family (Source: Gill Historical Society)

Ca.1905 Howes Brothers Photograph (No. 4953A) (Source: Ashfield Historical Society)

2014 View of Facade and East Elevation (Source: TRC)

2014 View of Carriage House (Source: TRC)

2008 Low-level oblique image of Frank Smith House (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Riverside Historic District

The Frank Smith House is a contributing resource to the NRHP-eligible Riverside Historic District.

Potential Riverside Historic District, Criteria A and C

In 1999, the village of Riverside was surveyed by Bonnie Parson of the Gill Historical Commission and an MHC Area Form (GIL.D) was completed that recommended a Riverside Historic District eligible for National Register listing under Criteria A and C. The area was re-surveyed as part of the 2014 survey by TRC, the potential boundaries verified, and the overall condition of resources noted and recorded with photographs.

Riverside's Native American resources already are recognized as the Riverside Archeological District, listed in the National Register in 1975.

The proposed Riverside Historic District is a roughly triangular-shaped area bounded on the northwest by Bridge Street, at the north by French King Highway (Route 2), and on the east and southeast by the east sides of Meadow Street and Riverview Avenue. The district contains approximately 60 contributing resource and only a few non-contributing (thee boundaries are drawn to exclude mostly non-historic commercial buildings.

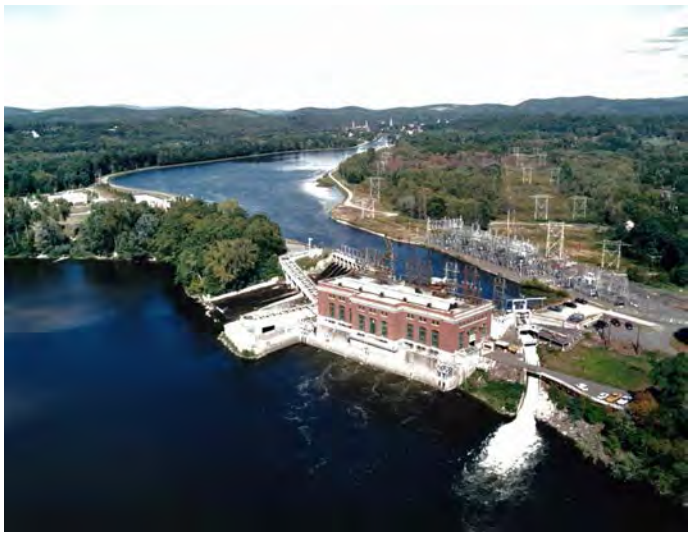
The Riverside Historic District is eligible for National Register listing on the local level as a representative Connecticut River Valley colonial era settlement, then former manufacturing village, then suburb. Several different facets and periods of Riverside's history and architectural heritage are represented within the district boundaries. Late eighteenth- and early-nineteenth century residences reflect the rural and agricultural character of the community, which also relied on timbering and yearly log drives. Riverside's greatest period of expansion occurred after the damming of the river at Turners Falls and the founding of the Turners Falls Lumber Company in the 1860s and 1870s. The community was both economically and physically linked to Turners Falls after the building of the Red Suspension Bridge in 1878, enabling workers to commute to jobs and business on both sides of the river. Late-nineteenth and twentieth- century architecture reflects Riverside's role as a suburb of Turners Falls, and a desirable place for wealthier residents escaping the more industrial village across the river.

FORM A - AREA

Assessor's Sheets	USGS Quad	Area Letter	Form Numbers in Area
	Greenfield		TRC-40

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Photograph



Town/City: Montague/Gill

Place *(neighborhood or village):* Turners Falls

Name of Area: Turners Falls Power & Electric Company Historic District

Present Use: Hydroelectric power facility; vehicular, railroad, and pedestrian bridges; power canal; dam.

Construction Dates or Period: 1904-late 1920s

Overall Condition: Good

Major Intrusions and Alterations: None observed. Fifth Street Bridge built in 1954. Cabot Station gantry crane removed in 1987.

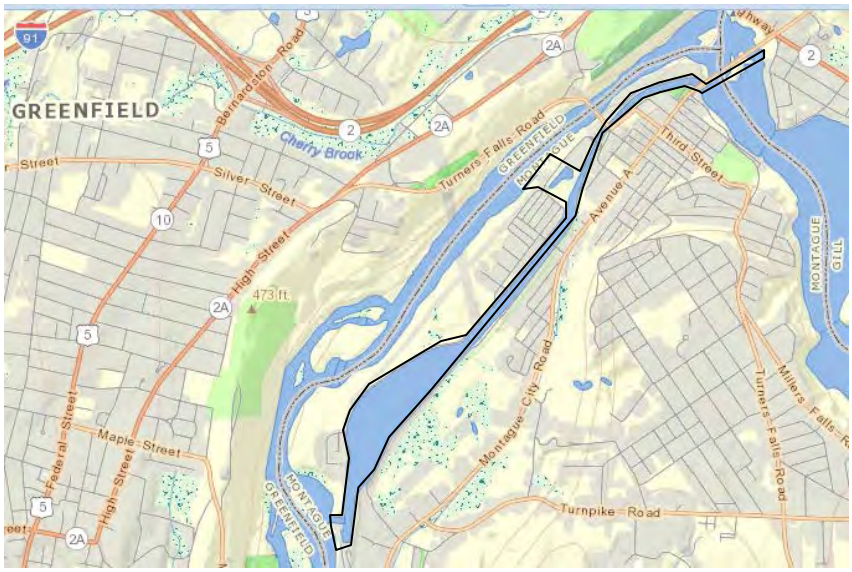
Acreage:

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date *(month/year):* March 2014

Locus Map



☒ *see continuation sheet*

INVENTORY FORM A CONTINUATION SHEET

TOWN
MONTAGUE

NAME OF AREA
Turners Falls Power & Electric Company Historic District

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area Letter | Form Nos.
TRC-40

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION

Describe architectural, structural and landscape features and evaluate in terms of other areas within the community.

The Turners Falls Power & Electric Company (TFP&EC) Historic District in Montague and Gill extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. The district consists of hydroelectric power facilities and related structures built by the Turners Falls Power & Electric Company between 1904 and 1929 and is bounded on the south by the Cabot Power Station, on the west and northwest by the Connecticut River and/or the west bank of the Power Canal, on the northeast by the Turners Falls Dam (the only portion of the district in Gill), and on the east and southeast by the east bank of the Power Canal. The resources are all physically connected by the Power Canal, which is also spanned by two railroad bridges, two pedestrian bridges and four vehicular bridges. All of the hydroelectric structures and buildings and the power canal within the historic district boundaries are owned by FirstLight Power Resources-GDF Suez Energy who also owns the Fifth Street Footbridge, Keith Mill Footbridge, and International Paper Company Footbridge (the footbridges and vehicular bridges were built by the Turners Falls power company, with the exception of the Fifth Street Bridge). The Fifth Street, Sixth Street, and Eleventh Street vehicular bridges are owned and maintained by the Town of Montague.

The TFP&EC Historic District contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983, as well as previously surveyed resources that are outside the TFHD boundaries, in addition to resources that were newly surveyed by TRC in 2014. The TFP&EC Historic District's contributing resources include (running from north to south):

- Turners Falls Dams 1 and 2 (Montague and Gill dams) (TRC Survey # 37)
- Turners Falls Gate House (TRC Survey # 36)
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district) (MNT.933)
- International Paper Company Bridge (THFD-listed) (TRC Survey # 6)
- Keith's Mill Footbridge (THFD-listed) (MNT.925)
- Fifth Street Pedestrian Bridge (THFD-listed)(MNT.924)
- Sixth Street Bridge (THFD-listed) (MNT.909)
- Eleventh Street Bridge (determined NRHP-eligible for individual listing by MHC) (MNT.904)
- Power Station No. 1 (TRC Survey # 35)
- Cabot Station (determined NRHP-eligible for individual listing by MHC in 1987) (MNT.449)

The following two structures are non-contributing resources:

- Boston & Maine Railroad Bridge over the Power Canal (TRC Survey # 2)
- Boston & Maine Railroad Bridge over the Branch Canal (TRC Survey # 3)

The Fifth Street Bridge over the Power Canal (vehicular bridge) (MNT.910) was built in 1954 and has no known historical association with the Turners Falls Power & Electric Company or its successor utility companies and is not a contributing resource although it is a contributing resource in the National Register-listed Turners Falls Historic District.

HISTORICAL NARRATIVE

Explain historical development of the area. Discuss how this relates to the historical development of the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1980: 8.1). The canal, designed by Benjamin Prescott of Northampton, was 2.5 miles long and 14 feet wide, with ten locks. A second dam and lock downstream from the confluence of the Connecticut and Millers Rivers to the north of Turners Falls raised the water in order that boats could navigate the French King rapids (MHC 1982c: 6). By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, the state legislature granted the Proprietors the right to lease the canal waters for power purposes. A group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the rights from the Proprietors and formed the Turners Falls Company. The company replaced the older dam with a new wood-and-stone crib dam and rebuilt the canal. Soon, the canal was powering new manufacturers attracted by Crocker to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, “a small company of public-spirited citizens” leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls gatehouse and in 1892 the gatehouse was expanded for greater water flow. The Power Canal also was improved by widening it and increasing its depth.

By 1900, many of the mills and factories in Turners Falls and western Massachusetts began to lose business to Southern mills with their cheaper labor supply and as a consequence a few area mills and small start-up power companies turned their attention to harnessing hydroelectric power. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1904, Charles Hazelton, treasurer of the Turners Falls Company, proposed to his board of directors that that they make better use of the water power being wasted by widening and extending the canal, and establishing a hydro-electric generating plant of 5,000 kilowatt capacity. “His proposal met with unanimous agreement, and was carried out during the next three years” (Bennett 1990a: 5). Changing its name to the Turners Falls Power & Electric Company, the company constructed a Power Station (Power Station No. 1) at Turners Falls, and widened and lengthened the existing power canal (Montague Bicentennial Committee 1954: 5).

Construction of Station No. 1 in 1904-1906 increased the importance of the power canal to the success of hydroelectric operations at Turners Falls. As built, the canal bypasses approximately 2.7 miles of the Connecticut River. Fall River, located near the head of the bypass channel, discharges into the bypass reach. In 1906, the Turners Falls Company had completed the widening of the power canal to 125 feet, increasing its depth to 15 feet, and extended it south by 1,000 feet.

The company had by then attracted the attention of financier Phillip Cabot of Boston. Born in Brookline in 1872, Cabot graduated from Harvard and soon became a partner in the investment form of White, Weld & Company.

> *"About this time, Turners Falls stockholders had begun to dispose of their shares to a group of Boston investors represented by Philip Cabot, who had also purchased substantial holdings in the stocks of the Amherst Gas Company, the Greenfield Electric Light and Power Company and the East Hampton Gas Company. Cabot was invited to become a director of all these companies and for the first time in its history the Turners Falls Company became associated with others in the electric utility field.*
>
> *Philip Cabot and the men working with him were largely responsible for the rapid and successful development of the Turners Falls project and for the starting of the associations which eventually led to the formation of the Western Massachusetts Companies and the Western Mass. Electric Company. In 1908, Cabot succeeded Char1es T. Crocker as president of the Company, a position he held for the next 11 years."* (Abercrombie 1973: 4)

The hydroelectric development at Turners Falls that Cabot planned, financed, and pushed through included far-reaching decisions to build a new concrete dam at Turners Falls; widen, deepen, and extend the power canal by two miles; and at its lower end build a 42,000-kilowatt hydroelectric station utilizing a 60-foot head. Work was begun in 1912 and in 1916, No. 2 Station (later renamed Cabot Station in honor of Phillip Cabot) started commercial operation. When completed in 1918, Cabot Station was the largest hydroelectric plant in Massachusetts and was in fact the largest hydroelectric generating station east of Niagara Falls. By 1914, separate generating and transmission companies seemed unnecessary and Amherst Power was absorbed by the Turners Falls Power & Electric Company (Montague Bicentennial Committee 1954: 12) (WMECO 1987: 2).

Among other enterprises, the Turners Falls Power & Electric Company built and maintained the Turners Falls Canal and Dam, as well as financing and building several vehicular and pedestrian bridges crossing the canal between the village and the mills. The construction of bridges over the canal at Fifth Street, Sixth Street and Eleventh Street were crucial to the development of the village, as any proposed extension of the power canal would, in effect, create an "island" in the center of Turners Falls.

Raising the canal embankment in 1917 allowed an increase to 48,000 kw (Clouette 1987: 2). By 1917, the canal was extended to its present length of approximately 2.5 miles. Final work on the canal's excavation was completed that year when it reached its present depth of between 25-40 feet and between 100-920 feet (the latter at the Cabot forebay) in width; canal walls were raised in 1919 and again in 1922 and the late 1920s (Holmes 1991: 28).

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1990 *Eleventh Street Bridge Spanning the Turners Falls Power Canal (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

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Clouette, Bruce
1987 *Cabot Station Electric Generating Plant, Gantry Crane, HAER No. MA-79.* Historic Resource Consultants Inc., Hartford, CT.

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1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

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1982b *MHC Reconnaissance Town Report: Gill*. MHC: Boston, MA.
1982c *MHC Reconnaissance Town Report: Montague*. MHC: Boston, MA.

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March 1895 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Sept 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Turners Falls Company
1903a Plan of Bulkhead (section and elevation). Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. February 1903.
1903b Turners Falls Gatehouse, Rear Elevation and Floorplan. Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. September, 1903.
1913 Dam and Headgates—Plan of New Bulkhead and Headgates. September 1913.

Turners Falls Power & Electric Company
1914a General Plan of Dam and Dam Construction. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. October 24, 1914.
1914b Dam and Headgates Cross Section. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. October 24, 1914.
1917 Plan and Profiles I.P. Mill, Raising Upper Canal Walls. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. February 23, 1917.
1918 General Layout Plan—Raising Canal Walls. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. December 20, 1918.

Western Massachusetts Electric Company (WMECO)
1987 *Before the Federal Energy Regulatory Commission: Turners Falls Project FERC Project No. 1889, Application for Amendment of License, Proposed Cabot Unit 7.* WMECO, Springfield, MA

ADDITIONAL PHOTOGRAPHS

2014 View of Power Canal and Boston & Maine Bridge over Power Canal (Source: TRC)

2014 View of Station No. 1 (Source: TRC)

2014 View of Power Canal and Keith's Mill Footbridge

2014 View of Gate House and Montague Dam (Source: TRC)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☒ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the late 1920s). This defines the period of significance between 1904 and 1929.

This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its principal investor and later president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal. However, due to their deteriorated condition and lack of integrity, these two railroad bridges are non-contributing resources.

Criterion C
The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

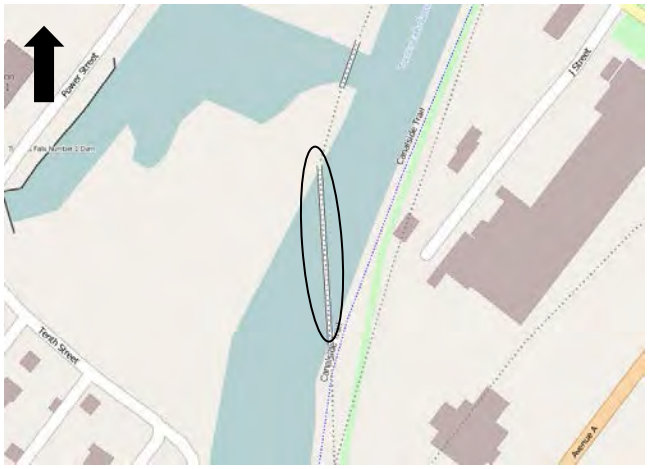
FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield		TRC-2

Photograph

Locus Map



MA GIS 2014

UTM Reference: 18 0699946E 4719842N
Recorded by: Geoffrey Henry/Ellen Rankin
Organization: TRC Environmental Corp. for FirstLight
Date (*month / year):* March 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Boston & Maine Railroad (former)

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Boston & Maine Railroad Bridge over Turners Falls Power Canal

Ownership: FirstLight Power Resources-GDF Suez Energy
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Half-Pony

Bridge typology code 306

Date of Construction: ca. 1915

Source: 1915 Photographs; Engineering drawings

Engineer/Designer: Unknown

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Metal, with concrete piers

Alterations *(with dates):* Tracks removed in 1990s

Posted load limit *(if any):* N/A

Condition: Deteriorated

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/industrial

INVENTORY FORM F CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

TOWN: MONTAGUE
ADDRESS: B&M RR OVER POWER CANAL
Area(s): | Form No.: TRC-2

Superstructure:

Overall length: 200 | Deck width: 7 ft | Skew:
Main unit: No. of spans: 3 | Span length: 66 ft
Approaches: No. of spans: 0 | Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: Varies with water level of canal | Material of abutments or piers: Concrete

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This three-span, riveted-plate girder, half-pony railroad bridge carries the single-line "Mill Track" of the former Boston & Maine Railroad over the Turners Falls Power Canal. The railroad's main line ran on the east side of the canal and had a three-part curve on the east that followed the curve of the canal before crossing the canal at an oblique angle, continuing north via an additional curve on the west before crossing over the Power Station 1 forebay and continuing north to the former paper mills at Turners Falls. The bridge rests on a concrete retaining wall on the east and the canal wall on the west and has two tapered concrete piers. The railroad ties are either deteriorated or have been removed and the bridge is not accessible by foot.

Passenger service to Turners Falls on the Boston & Maine ceased in 1957, and freight service ended sometime in the early 1990s. The tracks were removed on both sides of the power canal and converted to bicycle and pedestrian use. The two railroad bridges spanning the branch canal and the power canal were sealed off, most of the ties removed, and both are now in deteriorated condition.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

Beginning in 1915, the Turners Falls Power Company widened and lengthened the Turners Falls Power Canal that formerly ran only as far south as Sixth Street. The power company replaced the many existing railroad, vehicular, and pedestrian bridges that spanned the canal with new bridges to accommodate the widened canal. This Boston & Maine Railroad Bridge was built ca. 1915 at an oblique angle and with a decided curve to carry the line over the canal and north to the paper mills that lined the western bank of the canal in Turners Falls.

Non-Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Boston & Maine Railroad Bridge over the Turners Falls Power Canal is a non-contributing resource in the NRHP-eligible Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. Due to its deteriorated condition, the resource does not retain the integrity of materials, workmanship, association, and setting.The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station.

BIBLIOGRAPHY and/or REFERENCES

Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

Turners Falls Power & Electric Company
1916 Railroads 5th Street to 11th Street, Raising Canal Walls, Turners Falls Power & Electric Company, Engineering Department, Turners Falls office, June 22, 1916.

ADDITIONAL PHOTOGRAPHS

April 1, 1915 Photo of B&M Railroad Bridge During Construction on the Power Canal (Source: First Light Photo Archives)

2014 Photo of Interior of Bridge (Source: TRC)

2008 Low-level oblique image of B&M Railroad Bridge over Power Canal (Source: MASSDOT GIS)

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield		TRC-3

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0699948E 4719915N
Recorded by: Geoffrey Henry/Ellen Rankin
Organization: TRC Environmental Corp. for FirstLight
Date (*month / year):* March 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Boston & Maine Railroad (former)

Carried over: Branch Canal for Station No. 1
(Railroad, river, brook, canal or road)

Historic/Common name: Boston & Maine Railroad Bridge over Branch Canal

Ownership: FirstLight Power Resources-GDF Suez Energy
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Half-Pony

Bridge typology code 306

Date of Construction: ca. 1905

Source: Photographs, Written records; engineer's drawings

Engineer/Designer: Unknown

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Metal, with stone and concrete piers

Alterations *(with dates):* Tracks removed 1990s

Posted load limit *(if any):* N/A

Condition: Deteriorated

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/industrial

Superstructure:

Overall length: 40 ft Deck width: 7 ft Skew: None
Main unit: No. of spans: 1 Span length: 40 ft. (total)
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: Varies with water level of canal
Material of abutments or piers: Stone, Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This single-span, riveted-plate girder, half-pony railroad bridge formerly carried the single-track spur line of the Boston & Maine Railroad over the Branch Canal, a narrow channel that connects the Turners Falls Power Canal with the forebay of Turners Falls Power Station 1. The bridge rests on a concrete retaining wall on the south and on the north rests on a stone-and-concrete abutment with wing walls. The railroad spur formerly ran along the west side of the Power Canal, and some old ties are still visible north and south of the bridge. The ties have partially been removed from the bridge and the others are in deteriorated condition. There is a wooden walkway on the east, although the bridge is only partially accessible for pedestrian use. The bridge was built ca. 1905 as a result of the construction of Station No. 1. Historic photos show that it had stone abutments; these were encased with concrete at a later date. Also, the bridge may have been moved or repositioned ca. 1915 during the widening of the power canal.

Passenger service to Turners Falls on the Boston & Maine ceased in 1957, and freight service ended sometime in the early 1990s. The tracks were removed on both sides of the power canal and converted to bicycle and pedestrian use. The two railroad bridges spanning the branch canal and the power canal were sealed off, most of the ties removed, and are now in deteriorated condition.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

This Boston & Maine Railroad Bridge was built ca. 1905 to cross the short channel that connects the power canal with the forebay of the Power Station No. 1. The bridge carried the line north to the mills and factories that lined the western bank of the canal in Turners Falls. Beginning in 1915, the Turners Falls Power Company widened and lengthened the Turners Falls Power Canal that formerly ran only as far south as Sixth Street. The power company replaced the many existing railroad, vehicular, and pedestrian bridges that spanned the canal with new bridges to accommodate the widened canal.

Non-Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Boston & Maine Railroad Bridge over the Branch Canal is a non-contributing resource in the NRHP-eligible Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. Due to its deteriorated condition, the resource does not retain the integrity of materials, workmanship, association, and setting. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station.

BIBLIOGRAPHY and/or REFERENCES

Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

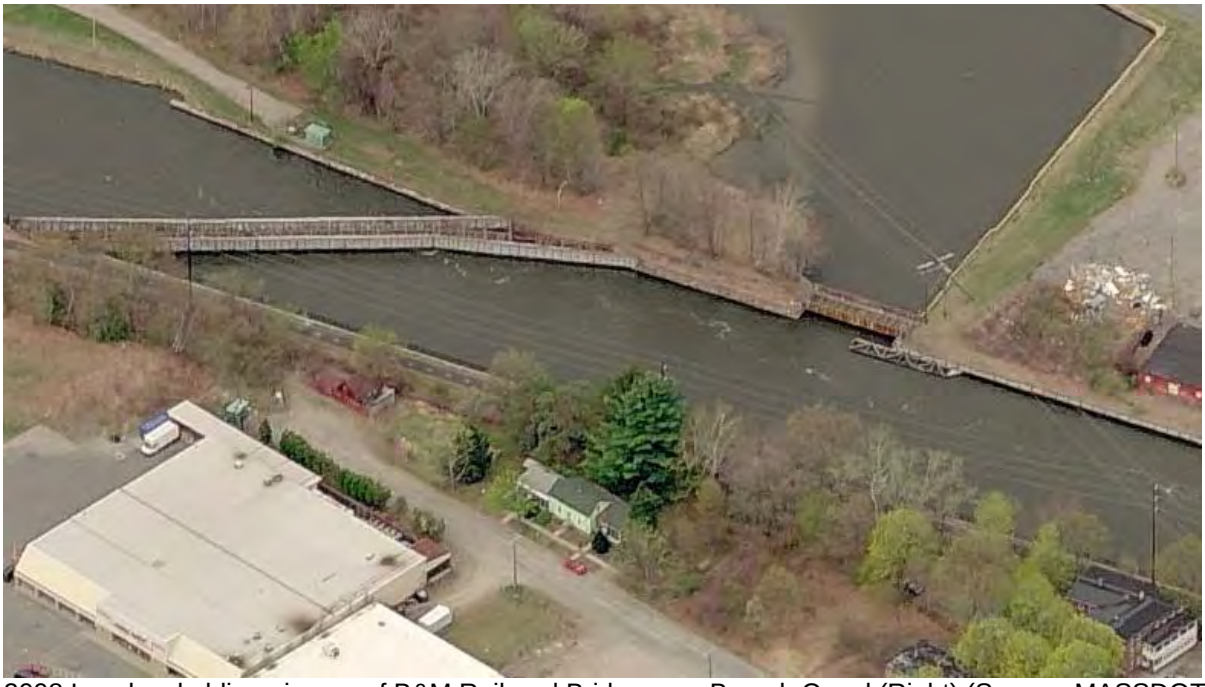
Turners Falls Power & Electric Company
1916 "Railroads 5th Street to 11th Street, Raising Canal Walls, Turners Falls Power & Electric Company, Engineering Department, Turners Falls office, June 22, 1916.

ADDITIONAL PHOTOGRAPHS

May 29, 1905 View of B&M Railroad Bridge over Branch Canal (Source: FirstLight Photo Archives)

June 1, 1905 View of B&M Railroad Bridge over Branch Canal (Source: FirstLight Photo Archives)

2014 View of Interior of B&M Railroad Bridge over Branch Canal (Source: TRC)



2008 Low-level oblique image of B&M Railroad Bridge over Branch Canal (Right) (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
05-0-151	Greenfield		TRC-35

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: 26 Power Street

Historic Name: Turners Falls Power Station No. 1

Uses: Present: Hydroelectric Powerhouse

Original: Hydroelectric Powerhouse

Date of Construction: 1904-1906

Source: Engineering drawings; written sources

Style/Form: Industrial

Architect/Builder: Turners Falls Power Company

Exterior Material:

Foundation: Stone

Wall/Trim: Brick

Roof: Gravel

Outbuildings/Secondary Structures: Forebay and spillway

Major Alterations *(with dates):* River façade enlarged

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/industrial location on the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: Geoffrey Henry/Ellen Rankin for FirstLight

Organization: TRC Environmental Corp.

Date (*month / year)*: March 2014

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

The Turners Falls Power Station No. 1 is located on the east bank of the Connecticut River at the western terminus of the Turners Falls Branch Canal. The complex consists of the Power Station and the Branch Canal/Forebay with gates at the west end leading to the concrete-and-stone spillway (not in use).

The Power Station was built in 1904-1906 in a vernacular Italianate Style adapted for an industrial building. The building is built into an embankment consisting of the natural rock ledge and earth fill, so that the rear of the building appears as only a half-story building. The foundation consists of coursed granite with 40-foot-wide, stone-and-brick arches on the west face for water to empty into the short tailrace and the Connecticut River. The one-story-with-clerestory brick building is basically cruciform in plan with 3-bay arms on the north and south, a short west ell (the "wire tower") and the longer ell that contains the penstocks between the forebay and the main section of the power station (The northwest corner of the building was filled in with an additional two bays at an unknown date).

The building has a shallow-pitched roof with gravel top and paired wood brackets beneath the wide eaves. Originally, windows on the ground level had tall 12/12 double-hung sash with segmental-arched heads, with 2/2 sash windows on the clerestory, also with segmental-arched heads and concrete sills. Most of the windows have been either filled in or had their sash replaced with modern 1/1 sash. The main entrance is on the north with a double-leaf paneled wood door set within an arched opening. An identical entrance (not in use) is on the south end. A secondary entrance with glass-and wood door set within a segmental-arched opening is on the northwest.

The interior is open to the ceiling with painted brick walls and exposed roof timbers. The enclosed control room and stair are on the north. The turbine generators are at ground level: four 1,000 kW, two 300kW and one 80kW exciter; all are connected to the four 12"-diameter penstocks carrying water from the Branch Canal above. The generator's manufacturer nameplates visible include Bullocks Mfg., Allis-Chalmers, and General Electric Co.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1908: 8.1). The dam provided a power source for several adjoining small lumber mills and remained profitable. By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, a group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the rights from the Proprietors and formed the Turners Falls Company. In 1866, the company replaced the old wood-crib dam with a new 1,200-foot-long and 300-foot-high, wood-and-stone dam and built a fishway, log sluice gate and granite headgate house on the Montague shore to control water flow to the proposed power canal (Gregory 2006: 14). Soon, the canal was powering new manufacturers moving to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, "a small company of public-spirited citizens" leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls and in 1892, the gatehouse was expanded for greater water flow. The Power Canal also was improved by widening it and increasing its depth. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydro-electric market (Jenkins 1980: 8.3). In 1906, the company completed Power Station No. 1, located some distance south of the existing dam. The power station was fitted with four 1000kW and two 300 kW generators and operated between 1906 and 1973, and again since 1982.

In 1908, Phillip Cabot of Boston assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new focus on hydroelectric power and its transmission. Cabot's ambitious plans called for the construction of a second powerhouse, named Cabot Station in his honor, replacing and raising the original Crocker-built dam with the present Gill and Montague dams, and extending and widening the power canal and headgate house. Work began on dam construction in 1912 and was completed in 1915 along with the Cabot Station in 1917 and the newly improved power canal by the early 1920s.

World War I and the post-war period created ever increasing demands for electricity for both industrial and residential use, so the Turners Falls Company expanded its transmission system southward and by 1923 had reached the Springfield MA area. Another line went westward across the Berkshire foothills to Pittsfield. The 1920s and 1930s saw the expansion of hydroelectricity throughout western Massachusetts. In 1942, the biggest merger was made when three pre-existing companies were merged into Western Massachusetts Electric Company (WMECO): Turners Falls Power & Electric Company, Pittsfield Electric Company, and United Electric Light Company. That year WMECO was issued a license to operate the water power development at Turners Falls.

BIBLIOGRAPHY and/or REFERENCES

Bennett, Lola (Historic American Buildings Survey [HAER] Historian)
1990a *Eleventh Street Bridge Spanning the Turners Falls Power Canal (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

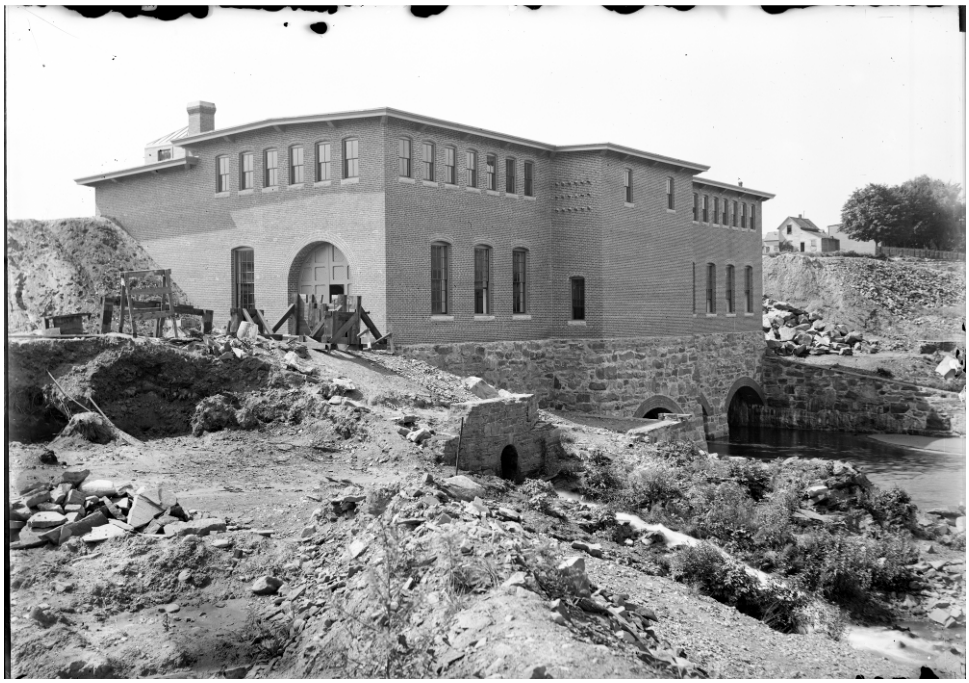
Sanborn Map Company
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Turners Falls Company
1904 Floor Plan of Powerhouse. Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. September, 1904.
1907 Plan of 44" Wheels for Power House. Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. March, 1907.

Turners Falls Power & Electric Company
1912 Power Station No. 1. Sketch of Proposed Unit Nos. 1 and 2. April 25, 1912.

ADDITIONAL PHOTOGRAPHS

October 3, 1904 Photo of Excavations at Canal Entrance to Station (Source: FirstLight Photo Archives).



April 1, 1905 Photo of Station During Construction (Source: FirstLight Photo Archives).

June 1, 1905 Photo of Erection of Plant Machinery (Source: FirstLight Photo Archives).

2014 View of West and South Elevations of Station No. 1 (Source: TRC).

2014 Interior View of Station No. 1 (Source: TRC).

2014 View of Forebay of Station No. 1 (Source: TRC).

2014 View of Concrete and Stone Spillway (Source: TRC)

2008 Low-level oblique image of Station No. 1 (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
Turners Falls Power Station No. 1 is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

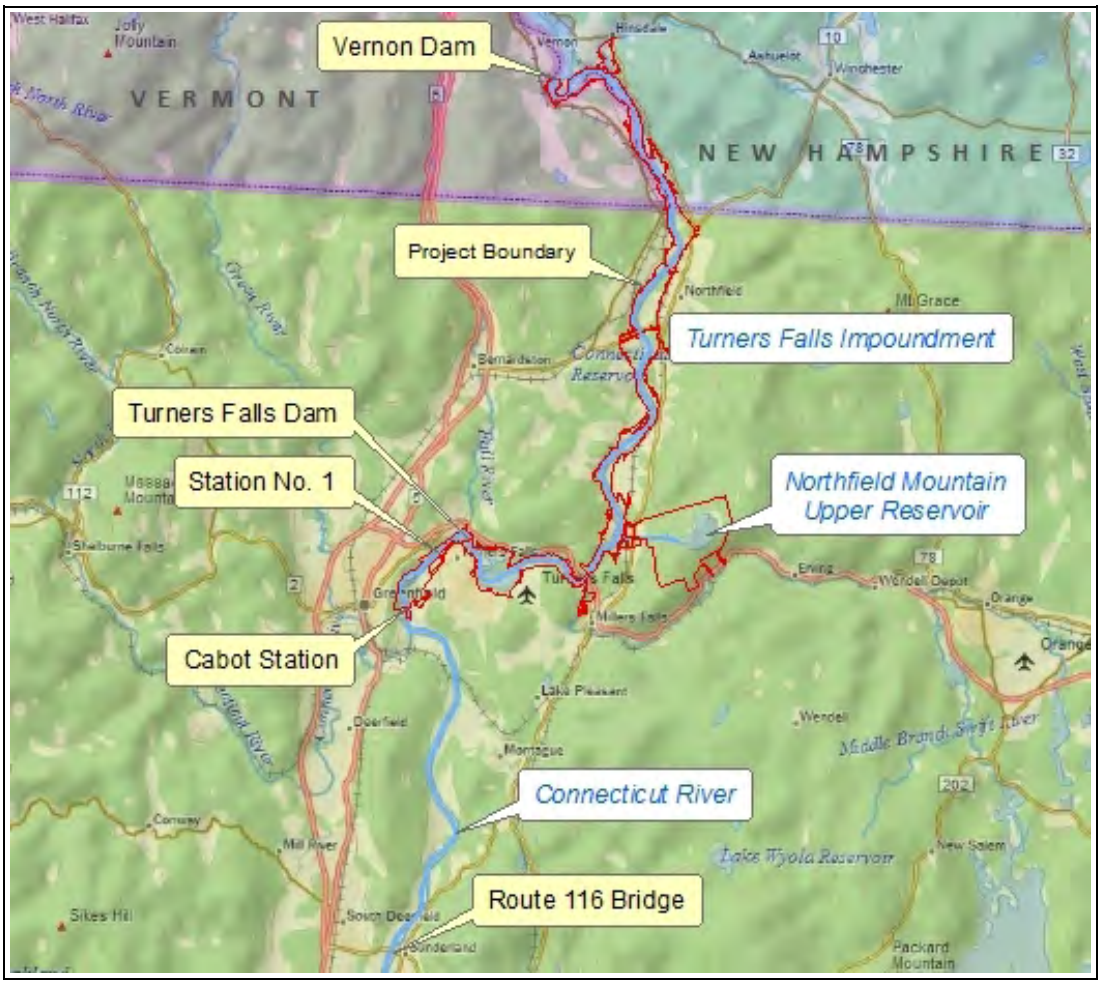
Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian

bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

Locational Map for Turners Falls Power Station No. 1



FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-04	Greenfield		TRC-36

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: At Turners Falls Dam, Montague side

Historic Name: Turners Falls Gate House

Uses: Present: Hydroelectric Facility

Original: Hydroelectric Facility

Date of Construction: 1903-04; 1913-1914

Source: Engineering Drawings; historic photographs

Style/Form: Industrial

Architect/Builder: Edwin Ball (engineer, 1903 drawings)

Exterior Material:

Foundation: Stone; concrete

Wall/Trim: Brick

Roof: Asphalt single

Outbuildings/Secondary Structures: Attached to Turners Falls Dam on Montague side

Major Alterations *(with dates):* 1866 gatehouse removed for 1913-1914 addition

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < I acre

Setting: Industrial location at Turners Falls on the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp.for FirstLight

Date (*month / year)*: April 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
AT TURNERS FALLS DAM

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.
TRC-36

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

The Turners Falls Gatehouse consists of two clearly identifiable sections that span the head of the Turners Fall Power Canal at the Turners Falls Dam. The east section, built in 1903-1904 is a 1-story, 10-bay-long, 2-bay-wide brick building adjoining the Montague shoreline and has a gable roof with crow-step gable topped by rough-cut granite caps. The foundation consists of 16 courses of cut granite and arches over 8 gate openings. Decorative features include the brick dentil and corbelled cornice and brick pilasters marking each bay. The 1903 drawings showed a single-leaf wood-paneled door and entrance on the east gable end, however the entrance is now on the northeast corner with a glass-and-wood-paneled single-leaf door within a segmental arched opening. The 6/6 sash windows on the north elevation have segmental heads. On the south, some windows are single 6-pane fixed windows, others are double hung sash with the lower half filled in. A modern metal roll-up door is on the west gable end.

In 1913-1914, the gatehouse was extended on the west and on the other side of the natural rock ledge at this point by demolishing the existing 1866 2-story brick gate house. Of nearly identical design to the 1904 gatehouse, the extension is 13 bays long with a concrete foundation, a crow-step gable end and nine gate openings.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1908: 8.1). The dam provided a power source for several adjoining small lumber mills and remained profitable. By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, a group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the rights from the Proprietors and formed the Turners Falls Company. In 1866, the company replaced the old wood-crib dam with a new 1,200-foot-long and 300-foot-high, wood-and-stone dam and built a fishway, log sluice gate and 2-story granite gate house on the Montague shore to control water flow to the proposed power canal (Gregory 2006: 14). Soon, the canal was powering new manufacturers moving to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of waterpower at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, “a small company of public-spirited citizens” leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls and in 1892, the headgate house was expanded for greater water flow. The Power Canal also was improved by widening it and increasing its depth. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydro-electric market (Jenkins 1980: 8.3). Beginning in 1903, the company widened the power canal and erected the east half of the present headgate house appended to the east gable end of the 1866 headgate house. In 1906, the company completed Power Station No. 1, located some distance south of the existing dam.

In 1908, Phillip Cabot of Boston assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new direction. Cabot's ambitious plans called for the construction of a second powerhouse, named Cabot Station in his honor, replacing and raising the original Crocker-built dam, and extending and widening the power canal. Work began on dam construction in 1912 and was completed in 1915 along with the Cabot Station and the newly improved power canal. As part of this building program, the headgate house at Turners Falls was more than doubled in length in 1914 by demolishing the old 1866 headgate house and adding a 13-bay extension on the west, adding 9 additional gates.

BIBLIOGRAPHY and/or REFERENCES

Bennett, Lola (Historic American Buildings Survey [HAER] Historian)

1990a *Eleventh Street Bridge Spanning the Turners Falls Power Canal (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

C.H. Vogt & Co.

1877 "Turners Falls, Mass." (Bird's eye view). C.H. Vogt & Co., Milwaukee, WI.

Gregory, Ed

2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

Jenkins, Candace

1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Sanborn Map Company

June 1884 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
February 1889 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
March 1895 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Sept 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Stone & Webster Engineering Company

1969 Excavation—Existing Montague Dam. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1969.

1973 Gatehouse Sluices Additions to Piers. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, October 31, 1973

1975 Gatehouse Fishway, Plan and Details. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, May 31, 1975.

Turners Falls Company

1903a Plan of Bulkhead (section and elevation). Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. February 1903.

1903b Turners Falls Gatehouse, Rear Elevation and Floorplan. Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. September, 1903.

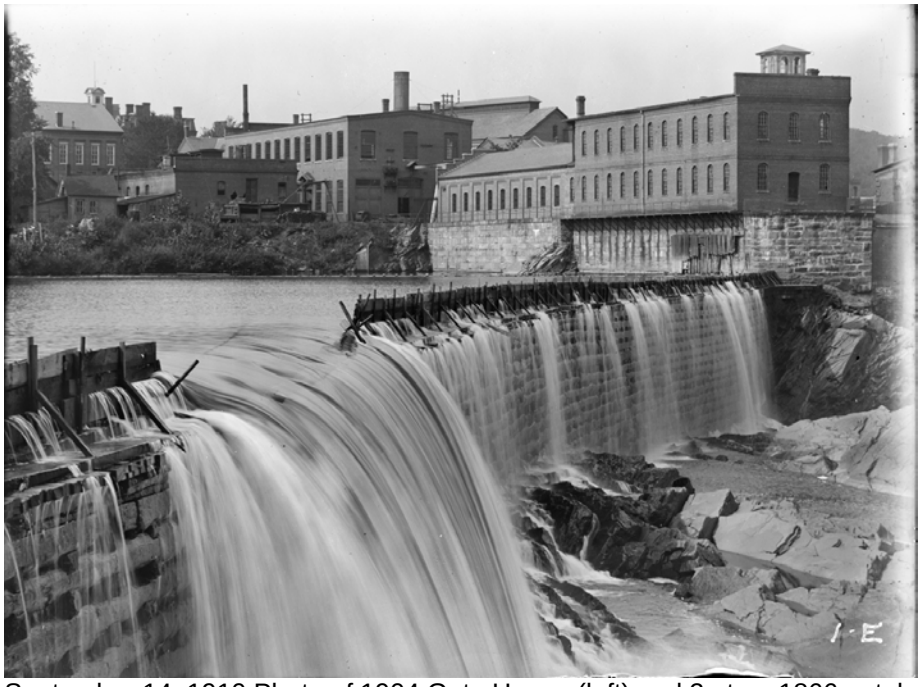
1913 Dam and Headgates—Plan of New Bulkhead and Headgates. September 1913.

Turners Falls Power & Electric Company

1914a General Plan of Dam and Dam Construction. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. October 24, 1914.

1914b Dam and Headgates Cross Section. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. October 24, 1914.

ADDITIONAL PHOTOGRAPHS



September 14, 1910 Photo of 1904 Gate House (left) and 2-story 1866 gatehouse (demolished in 1913 for new gatehouse extension) and 1866 Dam (Source: FirstLight Photo Archives)

1913 Photo of Gate House After Demolition of the 1886 Section (Source: FirstLight Photo Archives)

May 27, 1915 Photo of Completed Addition to Gate House (Source: FirstLight Photo Archives)

2014 View of South and West Elevations (Source: TRC)

2014 View of Interior of Gate House (Source: TRC)

2008 Low-level oblique image of Gate House (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Turners Falls Gate House is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst

and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
101.0-0000-0120.0	Greenfield		TRC-37

Town/City: Gill/Montague

Place *(neighborhood or village):* Riverside (Gill)/Turners Falls (Montague)

Address or Location: Connecticut River between Riverside (Gill) and Turners Falls (Montague)

Name: Turners Falls Dams 1 and 2

Ownership: ☐ *Public* ☒ *Private*

Type of Structure ***(check one):***

___ boat or ship
___ canal
___ carousel
_X_ dam
___ fort
___ gate
___ kiln
___ lighthouse
___ other *(specify)*
___ pound
___ powderhouse
___ street
___ tower
___ tunnel
___ wall
___ windmill

Date of Construction: 1915-1917

Source: Written sources and engineering drawings

Architect, Engineer or Designer: Turners Falls Power & Electric Company

Materials: Concrete and stone

Alterations *(with dates)*: Gill Dam replaced in 1969. Sluice gates raised in 1969

Condition: Excellent

Moved: ☒ **no** ☐ **yes** **Date**:

Acreage: <1 acre

Setting: Urban/industrial

Photograph

Locus Map

MA GIS 2014

Recorded by: Geoffrey Henry/Ellen Rankin for FirstLight
Organization: TRC Environmental Corp.
Date (*month / year):* March 2014

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other structures within the community.

The Turners Falls Dam is located at approximately river mile 122 (above Long Island Sound) on the Connecticut River in the towns of Gill and Montague, MA. The dam creates an impoundment extending upstream approximately 20 miles to the base of TransCanada's Vernon Hydroelectric Project Dam in VT/NH. At the Turners Falls Dam is a gate house with headgates extending from the Montague shoreline controlling flow into the Turners Falls Power Canal. A fishway was added on the Montague side in 1973.

The Turners Falls Dam consists of two individual concrete gravity dams, referred to as the Gill Dam (Dam No. 1) and Montague Dam (Dam No. 2), which are connected by a natural rock island known as Great Island. The 630-foot-long Montague Dam, completed in 1913 and raised in height in 1968-1969, is founded on bedrock and connects Great Island to the east bank of the Connecticut River. It includes four bascule type gates and a fixed crest section which is normally not overflowed. When fully upright, the top of the bascule gates are at elevation 185.5 feet mean sea level (msl). The 493-foot-long Gill Dam was completed in 1914 and connects Great Island to the west bank of the Connecticut River, and includes three tainter spillway gates. When closed, the elevation atop the tainter gates is at elevation 185.5 feet msl. As a part of the raising of the water level of the Connecticut River above the Turners Falls Dams to create the lower impoundment for the Northfield Mountain Project, the original Gill Dam was breached following construction of a new Gill Dam, which includes three taintor gates and a non-overflow section. The Montague Dam was raised by the addition of four 120 foot long thirteen foot high bascule gates placed atop the dam crest and a non-overflow section.

HISTORICAL NARRATIVE

Explain the history of the structure and how it relates to the development of the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1908: 8.1). The dam provided a power source for several adjoining small lumber mills and remained profitable. By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

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The earliest use of waterpower at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, "a small company of public-spirited citizens" leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls and in 1892, the gatehouse was expanded for greater water flow. The Power

Canal also was improved by widening it and increasing its depth. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydro-electric market (Jenkins 1980: 8.3). In 1906, the company completed Power Station No. 1, located some distance south of the existing dam.

In 1908, Phillip Cabot of Boston assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new direction. Cabot's ambitious plans called for the construction of a second powerhouse, named Cabot Station in his honor, replacing and raising the original Crocker-built dam, and extending and widening the power canal. Work began on dam construction in 1912 and was completed in 1915 along with the Cabot Station and the newly improved power canal.

World War I and the post-war period created ever increasing demands for electricity for both industrial and residential use, so the Turners Falls Company expanded its transmission system southward and by 1923 had reached the Springfield MA area. Another line went westward across the Berkshire foothills to Pittsfield. The 1920s and 1930s saw the expansion of hydroelectricity throughout western Massachusetts. In 1942, the biggest merger was made when three pre-existing companies were merged into Western Massachusetts Electric Company (WMECO): Turners Falls Power & Electric Company, Pittsfield Electric Company, and United Electric Light Company. That year WMECO was issued a license to operate the water power development at Turners Falls.

In the 1950s, several studies had concluded that by 1971, the Connecticut Valley Electrical Exchange (CONVEX), of which WMECO was a member, would have a deficit of 314, 000 kilowatts if no further expansion was made to its power generating facilities. In 1965 WMECO joined three other Connecticut Valley power companies to form Northeast Utilities Service Company (NE). By that point, NE was actively studying construction of a new pumped storage unit located at Northfield Mountain in northern Franklin County. When the Northfield Pumped Storage facility was constructed between 1968 and 1972, the old Gill Dam was breached and a new Gill Dam was constructed with three large radial arm gates. Four bascule gates were placed atop the old Montague Dam, both raising the height of the dam.

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February 1889 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
March 1895 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Sept 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Stone & Webster Engineering Company

Continuation sheet 2

1968a General Plan—Existing Structures. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1968.
1968b New Gill Dam—Modifications and Additions. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1968.
1968c General Arrangement Montague Dam Bascule Gates. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1968.
1968d Tainter Gates for Gill Dam. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1968.
1969 Excavation—Existing Montague Dam. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1969.
1973 Gatehouse Sluices Additions to Piers. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, October 31, 1973
1975 Gatehouse Fishway, Plan and Details. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, May 31, 1975.

Turners Falls Company
1903 Plan of Bulkhead (section and elevation). Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. February 1903.
1913 Dam and Headgates—Plan of New Bulkhead and Headgates. September 1913.

Turners Falls Power & Electric Company
1914a General Plan of Dam and Dam Construction. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. October 24, 1914.
1914b Dam and Headgates Cross Section. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. October 24, 1914.

ADDITIONAL PHOTOGRAPHS

December 4, 1914 Photo of Montague Dam from Great Island (Source: FirstLight Photo Archives)

December 4, 1914 Photo of Gill Dam from Gill Shoreline (Source: FirstLight Photo Archives)

2014 View of Montague Dam (Source: TRC)

2008 Low-level oblique image of Turners Falls Dam (Left: Gill Dam, Right: Montague Dam) (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Turners Falls Dams 1 and 2 (Montague and Gill Dams) are a counted as a single contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

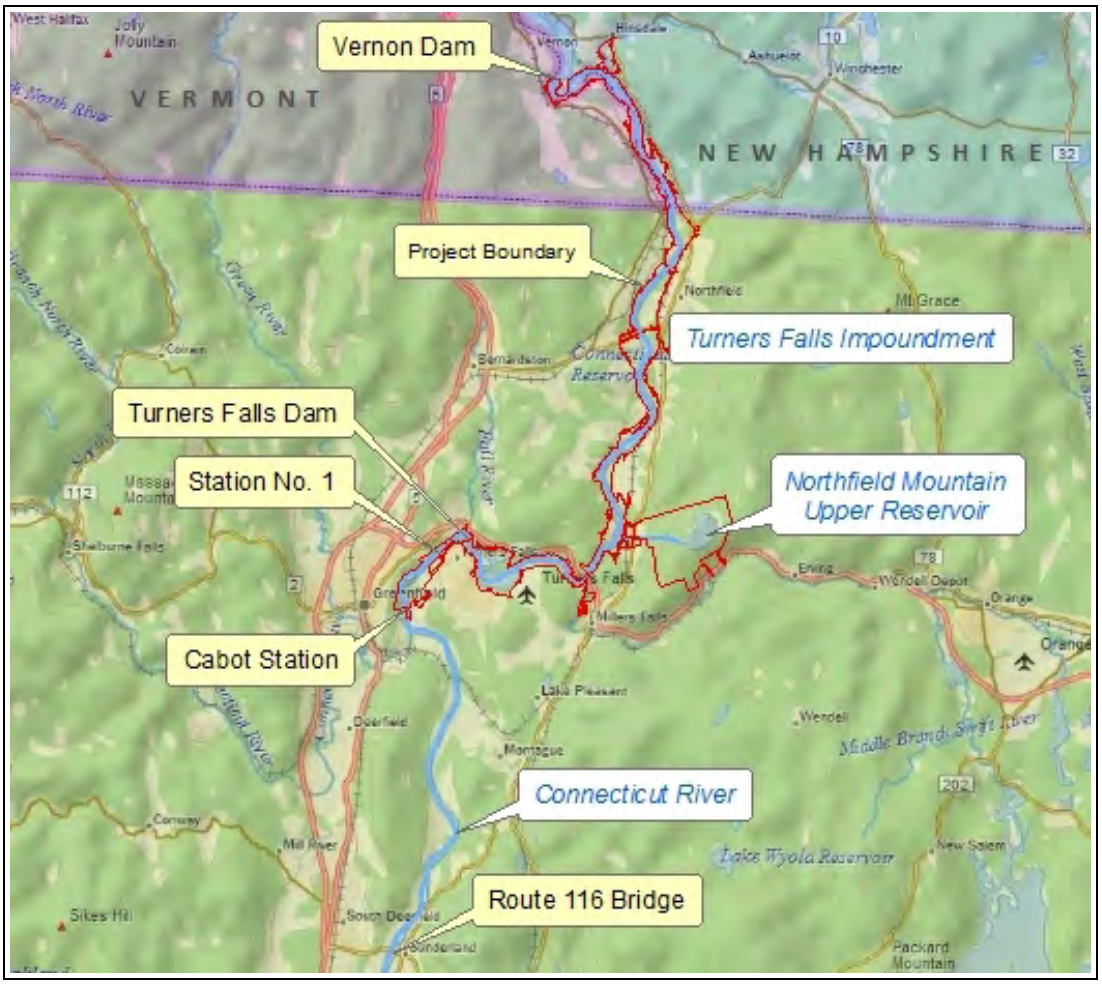
- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

Locational Map for Turners Falls Dams 1 and 2



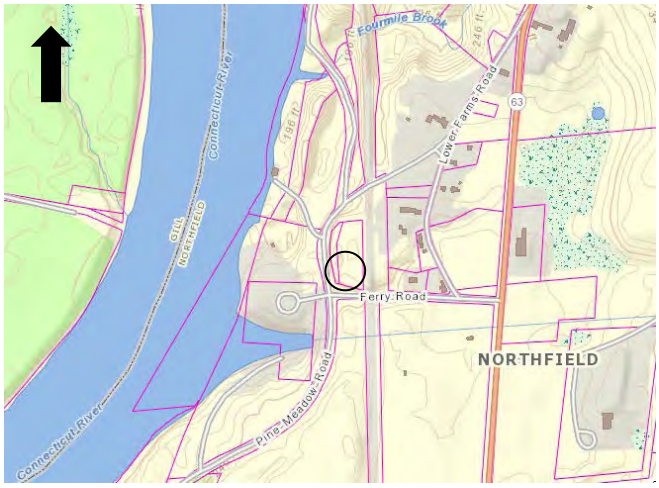
FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Orange	I	TRC-1

Photograph

Locus Map



MA GIS 2014

UTM Reference: 18 0706968E 4720880N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Northfield

Place *(neighborhood or village):* Northfield Farms

Street/Route: Central Vermont Railroad (former)

Carried over: Ferry Road, Northfield
(Railroad, river, brook, canal or road)

Historic/Common name: Central Vermont Railroad Bridge over Ferry Road

Ownership: New England Central Railroad/Amtrak
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Deck girder

Bridge typology code 306

Date of Construction: 1912

Source: Date Plaque

Engineer/Designer: Central Vermont Railroad

Bridge company/Contractor: Detroit Bridge & Ironworks

Material (s): Granite and concrete piers, metal bridge superstructure

Alterations *(with dates):* None observed

Posted load limit *(if any):* N/A

Condition: Good

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural, just east of the Riverview Picnic Area

Superstructure:

Overall length: 44 ft. Deck width: 6 ft Skew: None
Main unit: No. of spans: 1 Span length: 44 ft
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 25 ft. (approx.) Material of abutments or piers: Granite with concrete caps

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This single-span, riveted-plate, deck-girder bridge carries the single-track former Central Vermont Railroad (now New England Central Railroad) line over Ferry Road, west of Route 63 in Northfield. The bridge is supported on either end by tapered piers of coursed and cut granite topped by a concrete cap. The railroad ties extend over the sides of the bridge about a foot on either side. There is a metal date plaque on the southeast corner stamped "Built in 1912 by the Detroit Bridge & Ironworks, Detroit, MI." The bridge is typical of several other small deck-girder railroad bridges from that date built by the Central Vermont Railroad in this area of Franklin County and southern Vermont.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Central Vermont Railroad connected Montreal, Quebec with New London, Connecticut using a route along the shores of Lake Champlain, through the Green Mountains and along the Connecticut River valley, as well as Montreal to Boston, Massachusetts, through a connection with the Boston & Maine Railroad at White River Junction, Vermont. Chartered in 1843, the railroad reached Northfield from the north on October 10, 1848. It has operated under several companies since the 1890s, including the Grand Trunk Railway, Canadian National, and New England Central Railroad. The route along the Connecticut River also handles the twice-daily Amtrak Vermonter. This bridge was built in 1912.

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1982 *MHC Reconnaissance Town Report: Northfield*. MHC: Boston, MA.
1984 *Historic and Archaeological Resources of the Connecticut River Valley: A Framework for Preservation Decisions.* MHC: Boston, MA. February 1984, re-printed 1987, PDF version 2007.

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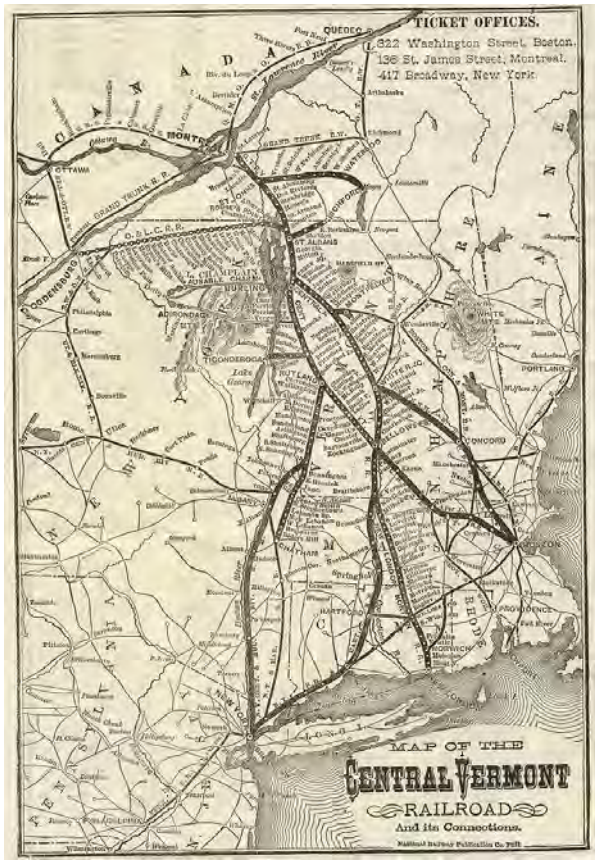
1991 "Where the Central Vermont Railway Came From," The Ambassador (Publication of the Central Vermont Railway Historical Society), Vol. 2, No. 1, Spring, 1991.

ADDITIONAL PHOTOGRAPHS

2014 View of South Abutment (Source: TRC)

2014 View of Date Plaque (Source: TRC)

2008 Low-level oblique image of B&M Railroad Bridge (Source: MASSDOT GIS)



1879 Map of the Central Vermont Railroad

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☐ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Potential Central Vermont Railroad Linear Historic District (Criterion A)

This resource is recommended NRHP-eligible as a contributing resource in a potential Central Vermont Railroad Linear Historic District in Massachusetts and Vermont (with boundaries and resource count as yet undefined). This linear historic district is recommended NRHP-eligible under Criterion A for its association with the history of railroads in northwestern Massachusetts and southern Vermont during the nineteenth and early twentieth centuries.

In the 1840s, railroads took over the major transportation role in western Massachusetts and southern Vermont once briefly enjoyed by canals in the early 1800s. Among the earliest railroads in the region was the Vermont & Massachusetts Railroad, chartered in 1844 and immediately merged with the Brattleboro & Fitchburg Railroad of Vermont. Further extensions opened to Athol and Miller's Falls in Massachusetts in 1848, and to Brattleboro, Vermont in 1850. Later in 1850, a branch from Grout's Corner west to Greenfield, Massachusetts opened. A short branch to Turner's Falls opened in 1870-1871, spurring economic growth in this industrial center founded only a few years earlier in 1866.

The original main line north from Miller's Falls was leased to the Vermont Central Railroad in 1871, which became the Central Vermont Railroad in 1872. Chartered in 1843, the railroad reached Northfield from the north on October 10, 1848. It has operated under several companies since the 1890s, including the Grand Trunk Railway, Canadian National, and New England Central Railroad.

This bridge was built in 1912 by the Detroit Bridge & Ironworks and is still in use today along the single-track line for both rail freight and passenger service.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
18-0-015	Orange		TRC-5

Town/City: Montague

Place: *(neighborhood or village)*: Millers Falls (French King Rock vic.)

Address: 169 East Mineral Road

Historic Name: Cabot Camp

Uses: Present: Corporate retreat, currently vacant

Original: Summer camp

Date of Construction: ca. 1913

Source: Written sources

Style/Form: New England Colonial Revival

Architect/Builder: Unknown Boston architect

Exterior Material:

Foundation: Stone

Wall/Trim: Stone, wood

Roof: Slate shingle

Outbuildings/Secondary Structures: Carriage house, two other outbuildings of unknown use

Major Alterations *(with dates):* None observed. Building reputedly incorporates an early-19th-century canal-related structure, although this is unverified.

Condition: Good, although vacant

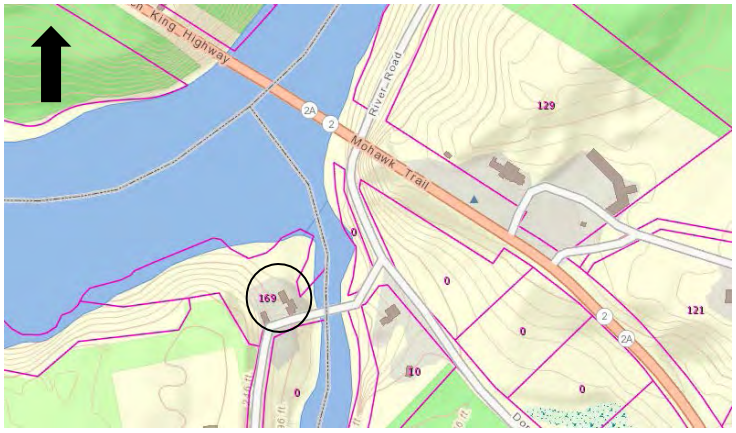
Moved: **no** ☒ **yes** ☐ **Date:**

Acreage:

Setting: Rural setting, at confluence of Millers and Connecticut Rivers at foot of East Mineral Road bridge. Small parking lot is located across East Mineral Road.

Photograph

Locus Map



MA GIS 2014

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp. for FirstLight

Date (*month / year)*: March 2014

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

The Cabot Camp complex is located on the northwest side of East Mineral Road, at the confluence of the Millers and Connecticut Rivers, just south of the East Mineral Road Bridge over the Millers River and within sight of the French King Bridge over the Connecticut River. The property is bordered by a low, dry-laid fieldstone wall that runs at the east property line along East Mineral Road. A second wall also links the house to the carriage house creating a small courtyard. The land slopes steeply on the north and west towards the two rivers.

The main house and outbuildings date from 1913 and are built in a rustic variant of the New England Colonial Revival Style. The house consists of three identifiable sections: the easternmost section is a 1-story, 3-bay frame house on a fieldstone foundation with a side-gable roof covered with slate shingles. This section is clad with clapboard siding and is trimmed with corner boards and a box cornice. There is a central off-peak, brick chimney north of the roofline. The windows are presently covered with original board shutters with metal strap hinges, so the number of window lights was not visible. A louvered attic window is on the east gable end. There is a single-leaf wood door on the south façade; the north elevation was not accessible for inspection.

A 1-story, 3-bay, frame hyphen on a stone foundation and slate-shingled, side-gable roof is on the west. It has a central entrance on the south with a single-leaf batten door with strap hinges. The flanking windows are sealed with batten shutters with metal hinges.

The westernmost section extends from the southwest corner of the hyphen. It has a solid fieldstone gable end and an interior-end stone chimney. The rest of the building is frame, covered with dark-stained board-and-batten siding. The side-gable roof is covered with slate shingles and has exposed rafter ends. The windows on the south and west gable ends are sealed with single-leaf wood shutters.

Outbuildings on the property include a fieldstone carriage house and two frame storage buildings of undetermined use. The 1-story, 6-bay carriage house is built of fieldstone and has a side-gable roof with slate shingles. It is open on the north and each bay is marked by a single wood Tuscan column. Arched doorways are at the south and the west gable end, with single-leaf batten doors. There is a 1-story, 3-bay, frame outbuilding with board-and-batten siding, slate-shingled side-gable roof, and an exterior-end brick chimney. There is also a small frame building with board-and-batten siding and a ventilator atop its gable roof; the structure may have been built to house tamed birds.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

The property is the site of a former toll house associated with the canal and lock system in operation by 1798 built by the Proprietors of the Upper Locks and Canals to bypass the French King Gorge and the Great Falls at Turners Falls. One source also claims that the property contains the site of the Dark Tavern, built to accommodate travelers along the canal route (Abercrombie 1973: 1). The canal proved commercially successful for its first 30 years, but suffered from competition from the emerging railroads beginning in the 1840s, and by 1856 the canal was closed to boat traffic.

In 1866, Colonel Alvah Crocker and his associates bought the land and water rights of the canal company. Beginning in 1868, Crocker and his newly formed Turners Falls Company developed the village of Turners Falls as an industrial hub deriving water power from the Turners Falls and turning the former navigational canal into a power canal (Jenkins 1980: 8.2).

By 1886, the Clarke and Chapman Machine Company in Turners Falls began converting water from the dam at Turners Falls for electrical power and by the early 1900s the Turners Falls Company made the crucial decision to go into the hydroelectric power business. Changing its name to the Turners Falls Power & Electric Company, the company constructed a Power Station (Power Station No. 1) at Turners Falls, and widened and lengthened the existing power canal (Montague Bicentennial Committee 1954: 5).

The company had by then attracted the attention of financier Phillip Cabot of Boston. Born in Brookline in 1872, Cabot graduated from Harvard and soon became a partner in the investment form of White, Weld & Company.

> *"About this time, Turners Falls stockholders had begun to dispose of their shares to a group of Boston investors represented by Philip Cabot, who had also purchased substantial holdings in the stocks of the Amherst Gas Company, the Greenfield Electric Light and Power Company and the East Hampton Gas Company. Cabot was invited to become a director of all these companies and for the first time in its history the Turners Falls Company became associated with others in the electric utility field.*
>
> *Philip Cabot and the men working with him were largely responsible for the rapid and successful development of the Turners Falls project and for the starting of the associations which eventually led to the formation of the Western Massachusetts Companies and the Western Mass. Electric Company. In 1908, Cabot succeeded Char1es T. Crocker as president of the Company, a position he held for the next 11 years."* (Abercrombie 1973: 4)

The hydroelectric development at Turners Falls that Cabot planned, financed, and pushed through included far-reaching decisions to build a new concrete dam at Turners Falls; widen, deepen and extend the power canal two miles; and at its lower end build a 42,000-kilowatt hydroelectric station utilizing a 60-foot head. Work was begun in 1912 and in 1916, No. 2 Station (later renamed Cabot Station in honor of Phillip Cabot) started commercial operation. When completed, Cabot Station was the largest hydroelectric plant in Massachusetts and was in fact the largest hydroelectric generating station east of Niagara Falls. By 1914, separate generating and transmission companies seemed unnecessary and Amherst Power was absorbed by the Turners Falls Power & Electric Company (Montague Bicentennial Committee 1954: 12)

Cabot resigned as president of the Company in 1919 because of ill health. General Manager George W. Lawrence succeeded him. When Lawrence died in 1939, Fred C. Abercrombie was elected president and served until consolidation with the Western Mass. Electric Company in 1942. After his retirement, Cabot moved to a career in teaching at Harvard University, leading courses in business and public utility management. Phillip Cabot died in 1941.

The site of Cabot Camp was sold in two separate transactions to the Turners Falls Company. In 1883, the northwestern section was sold by Alfred Cobb (Franklin County Deed Book 369-95); an undated land map shows both an "old mill foundation" and an "old dam abutment" (Western Mass. Electric Company n.d.). In 1903, Sarah Briggs sold the part adjoining East Mineral Road that may have contained a section of an earlier toll house (Deed Book 503-51).

Around 1913, Cabot decided to redesign the former Briggs and Cobb properties as his rural retreat, the property having been purchased by the power company for flowage rights. "With the help of a Boston architect, Cabot closely supervised the construction of a large stone meeting room or dining hall. The heavy beams, rafters, heavy roof and side wall boards were procured from an old barn in Ashfield. The old "ship-knees" holding up the cross beams came from Salem or the eastern Massachusetts area to be re-erected on the site at the mouth of the Millers River" (Abercrombie 1973: 7).

> *"Especially noteworthy are the thick stone masonry walls, the slanted keystone arch, huge fireplace and chimney easily capable of burning logs cut into four foot lengths, and the extremely heavy roof construction topped off by a quarry stone roof rarely seen today. He added an ell and kitchen area connecting the old toll house to the new meeting room, and a carriage or garden house with thick stone walls, heavy beams, rafters, roof boards and tremendous slabs of slate.*
>
> *A stone-lined circular well was constructed with an underground pipe running into the cellar area of the old toll house where a hand pump provided water for general household use. Cabot, under a long-term lease, spent a*

Continuation sheet 2

good deal of his free time at this camp, whiling away some of it working with plaster of Paris forms designing various ceiling molds and wall pillars which today still remain in the ell part of the house. He himself attached them to these specific locations with fish line he provided back in the 1900s.

Following Cabot's retirement in 1919, Fred Abercrombie, then treasurer and later president of the Turners Falls Power & Electric Company, took over the long-term lease from the power company when Cabot began teaching at Harvard. Under this lease, the Abercrombie family maintained and enjoyed Cabot Camp for over 40 years. When construction for the Northfield Mountain Pumped Storage Station began in 1968, Fred's son Allen Abercrombie voluntarily cancelled the long-term lease on Cabot Camp (Abercrombie 1973: 7). From 1968 to the present, Cabot Camp has been owned and maintained by the successor companies to Western Massachusetts Electric, including FirstLight.

BIBLIOGRAPHY and/or REFERENCES

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1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

ADDITIONAL PHOTOGRAPHS

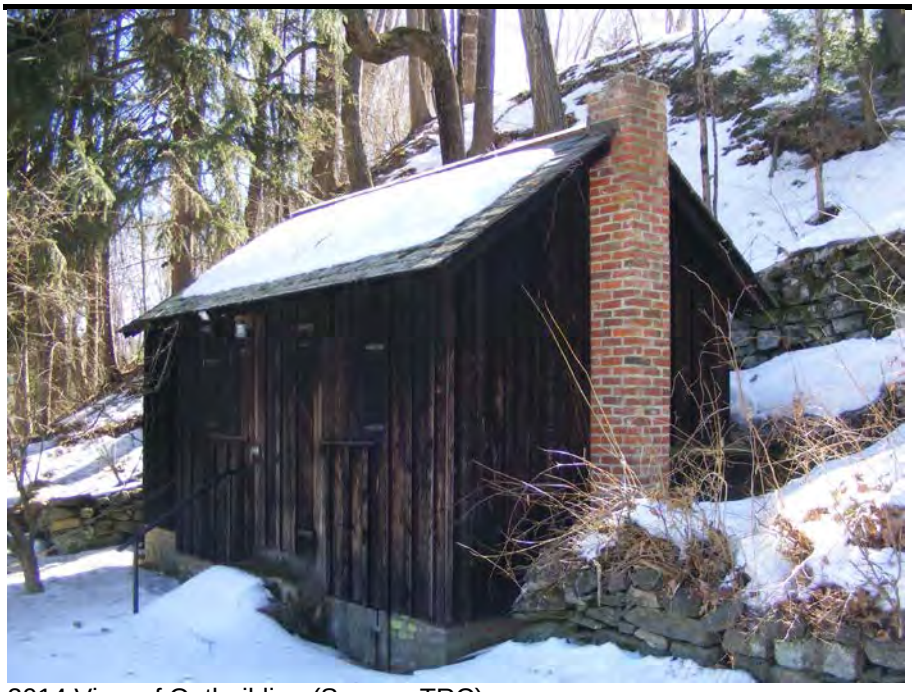
2014 View of Eastern Section (Source: TRC)

2014 View of Hyphen (Source: TRC)

2014 View of Western Section (Source: TRC)

2014 View of East and South Elevations of Carriage House (Source: TRC)

2014 View of North and West Elevations of Carriage House (Source: TRC)



2014 View of Outbuilding (Source: TRC)

2014 View of Outbuilding (Source: TRC)

2008 Low-level oblique image of Cabot Camp (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Criterion A
This resource is recommended NRHP-eligible under Criterion A with a period of significance from ca. 1913 to 1964. Cabot Camp is significant for its association with the Turners Falls Power & Electric Company (TFP&E) and its successor companies up to and including its current owner, FirstLight. The property consists of two parcels on the Connecticut and Millers Rivers purchased in 1883 and 1903 respectively and upon which TFP&E president Phillip Cabot erected these buildings as a summer residence. Cabot was instrumental in the early growth and development of TFP&E, including construction of the company's two power stations, dam, and power canal at Turners Falls, as well as merging the company with other regional electric utility companies. Cabot leased the property from the power company for his own use, and when he retired in 1919, his successor Fred Abercrombie took up the lease and resided there. In 1968, the property was given a new purpose as a corporate retreat.

Criterion B
Although the Cabot Camp is associated with the life of financier and Turners Falls Power Company executive Phillip Cabot, it is not known whether there are other extant buildings elsewhere outside of the Projects' APE more closely associated with Cabot's productive life, as required by Criterion B. The NRHP-eligibility of Cabot Camp under Criterion B is undetermined.

Criterion C
Cabot Camp is recommended NRHP-eligible under Criterion C as they embody characteristics of rustic New England Colonial Revival that were popular in the design of rural retreats and summer residences of the early 20th century. The Colonial Revival harkened back to simple and unornamented architecture that was felt to be more in keeping with rural and rustic settings such as this. According to a history of the camp, Boston native Phillip Cabot engaged an unnamed Boston architect and was instrumental in several of the house's design features. Prominent features include the use of uncut fieldstone, slate roofs, working wood shutters, over-sized chimneys, and a mix of wood and stone for the exterior.

Statement of Integrity
Although there was no interior access, Cabot Camp appears to be in good and unaltered condition and retains all seven aspects of integrity (location, design, setting, materials, workmanship, association, and feeling).

FORM F – STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
74-A1-1 and 2-0-6	Orange		TRC-34

Town/City: Northfield/Erving

Place *(neighborhood or village):* Northfield Farms vicinity

Address or Location: Route 63 (Northfield Road)

Name: Northfield Mountain Pumped Storage Facility

Ownership: ☐ *Public* ☒ *Private*

Type of Structure *(check one):*

___ boat or ship
___ canal
___ carousel
___ dam
___ fort
___ gate
___ kiln
___ lighthouse
___ pound
___ powderhouse
___ street
___ tower
___ tunnel
___ wall
___ windmill
_x_other *(specify)* Pumped storage hydropower facility

Date of Construction: 1968-1972

Source: Written sources; drawings, specifications

Architect, Engineer or Designer: Stone & Webster, Boston MA (Source: Design specifications)

Materials: Concrete, metal, stone

Alterations *(with dates)*: None known. Former engineers' office is now the Visitors Center for the facility.

Condition: Excellent

Moved: ☒ **no** ☐ **yes** **Date**:

Acreage: >300 acres

Setting: Rural setting in Northfield Farms with surrounding facility-related recreational facilities.

Photograph

Locus Map

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* March/2014

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

DESIGN ASSESSMENT

Describe important design features.

The Northfield Mountain Pumped Storage Facility is located in the towns of Erving and Northfield, Franklin County, MA on the east side of the Connecticut River and approximately 5.5 miles upstream from the Turners Falls Dam in Montague. The principal structures comprising the project are the impervious-core, rock-fill dam and dikes forming the upper reservoir; intake channel and intake structure; pressure conduit system; underground powerhouse cavern with four Francis-type reversible pump-turbines and generator-motors; tailrace tunnel; surge suppression chambers and shafts; tailrace exit structure and tailrace canal; vertical ventilation and emergency exit shaft; and the main access tunnel leading to the underground structures.

Turners Falls Impoundment

The 20-mile reach of the Connecticut River between the dams at Vernon, VT and at Turners Falls, MA serves as the Lower Reservoir of the Northfield Project and has a drainage area of 7,138 square miles. There are two project gage houses on the Turners Falls Impoundment: Gage House L2 is located on the Connecticut River on the north side of the tailrace canal. Gage House L3 is downstream on the Turners Falls Impoundment, on the south side of the river 0.3 miles upstream of the Turners Falls Dam.

Upper Reservoir

The upper reservoir is located on top of Northfield Mountain in the Briggs Brook drainage area. The reservoir is formed by the main compacted earth-core rock-fill dam; a concrete gravity spillway structure; a concrete gravity dam, three compacted earth core rock fill dikes; and four natural ridges. A low-level reservoir outlet is located in the main dam. The water supply intake is also located under the main dam. The gated structure at the inboard toe of the dam is equipped with fish screens.

Main Dam and Dikes

The main dam and dikes are constructed of compacted rock-fill embankments utilizing a central impervious rock-filter design. The crests of the rock fill embankments are at El 1010 and are approximately 30 feet wide. Founded on sound groutable rock, the core is 12-feet wide. There are sand and gravel filter zones upstream and downstream of the impervious core with oversize rock zones forming the upstream and downstream faces. The impervious core was raised in 1979 on the downstream portion of the crest in the Main Dam to elevation 1,006.25 feet in response to settlement shortly after construction. This dam contains an intake structure and sub-foundation pipe for possible future water-supply diversion to the Quabbin Reservoir, a principal water supply for the City of Boston and parts of the Greater Boston metropolitan area.

The three dikes, known as the North, Northwest and West Dikes, are constructed in a similar manner and to the same crest elevation as the main rock fill dam, with a central impervious core-filter and compacted rock-filled embankments. They help form the upper reservoir.

Concrete Gravity Dam

At the west end of the intake channel, the reservoir is enclosed by a low concrete gravity dam. The main section is situated at the channel's end, is 327-feet long and varies from 10 to 20 feet in height. The concrete walls at both ends of the gravity section are constructed to a higher level, allowing a parapet wall to be constructed against the retaining wall on the right side of the

intake. A series of 19 control monuments are located on the crests of the dam and dikes. A low-level outlet located in the main dam is used for releasing storm runoff from the reservoir.

Concrete Gravity Spillway Structure

The two-stage, un-gated spillway is designed to discharge natural rainfall runoff of the upper reservoir drainage area when the reservoir is full, and to protect the embankments from accidental overtopping. This spillway discharges into the Packard Brook valley which flows into the Millers River, and consists of a concrete gravity-type weir section, approximately 550 feet long located in a shallow channel excavated in bedrock and a 20 foot long notch near the center of the structure.

Intake Channel

The intake channel, approximately 1890 feet long, directs the flow of water from the upper reservoir to the pressure conduit intake. The intake channel stop log and gate structure forms a low dam between the upper reservoir and the intake channel and prevents stormwater from entering the pressure conduit when the intake channel is dewatered. The submerged dam is 63 feet long with two manually operated sluice gates and two 18 foot wide stoplog slots which usually hold eight concrete stoplogs. The intake structure consists of a reinforced concrete intake portal that is 55 feet wide and 80 feet high to the crown of the arched roof. A vertical concrete pier 3.5 feet thick supports the portal roof and provides support for the intake trashracks. A welded steel trash rack system of 28 individual panels covers the intake portal and limits the entrance of debris into the pressure conduit.

Pressure Shaft

The pressure shaft and two elbows connect the pressure conduit intake to the pressure manifold. The manifold is formed by the branching of the pressure shaft into two 22 foot diameter concrete-lined conduits which in turn branch into four 14-foot diameter tunnels leading to the four welded steel-lined penstocks. The four welded steel penstocks connect the manifold with the powerhouse cavern. Each is 340 feet long with wall thickness varying from one to two inches. During pumping operation, water is pumped from the Turners Falls Impoundment via the powerhouse through the pressure shaft to the upper reservoir. During generation, water flows from the intake channel through the pressure shaft to the powerhouse.

Surge Chambers

The surge chambers consist of four vertical surge shafts interconnected by three horizontal surge galleries. Each of the four surge shafts is connected to one of the draft tube tunnels which controls the rate of flow between the draft tube tunnel and the surge chamber. Three surge galleries running parallel to the powerhouse interconnect the four vertical surge chambers.

Powerhouse

The powerhouse consists of an underground chamber excavated in the bedrock of Northfield Mountain. The powerhouse contains the four reversible pump-turbine motor-generator units and their spherical valves and governors, and the two main transformers. Two overhead bridge cranes service the entire length of the powerhouse. The powerhouse cavern is unlined and is laid out with the long axis running north and south measuring 328 feet long and 70 feet wide. There are four unit bays starting with Unit 1 at the north end. South of Unit 4 is the service and erection bay which also contains the control room. Access and ventilation air into the powerhouse are provided by the access tunnel which connects the south end of the powerhouse.

Tailrace Tunnel

Water flows between the powerhouse and the Turners Falls Impoundment via the tailrace tunnel. There are four draft tubes connected by a manifold to a common tailrace tunnel. The tailrace tunnel is concrete-lined, horseshoe shaped and 5,136 feet long, with a maximum width of 33 feet and a height of 31 feet. The exit structure into the Turners Falls Impoundment includes a transition from the horseshoe shape into a trapezoidal shape. Steel stop logs are used in the exit structure when needed to dewater the tailrace tunnel. A floating boom is provided across the exit channel to provide a barrier to large debris and boaters.

Culverts and Weirs

There is a series of 28 culverts and weirs as part of the Northfield Project. Culverts are constructed of corrugated metal pipe. Weirs are constructed of precast concrete.

MDC Facilities

The intake works for the MDC water supply line leading to the Quabbin Reservoir (Diversion Intake Works) is located at the east side of the upper reservoir along the main earth fill dam. It consists of an octagonal-footprint concrete structure, 94 feet high and 30 feet wide. Access to the tower is by means of a steel beam-reinforced concrete slab bridge leading from the roadway to main dam.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1908: 8.1). The dam provided a power source for several adjoining small lumber mills and remained profitable for several decades. By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, a group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the water rights from the Proprietors and formed the Turners Falls Company. In 1866, the company replaced the old wooden crib dam with a new 1,200-foot-long and 300-foot-high, wood-and-stone dam and built a fishway, log sluice gate and granite head gatehouse on the Montague shore to control water flow to the proposed power canal (Gregory 2006: 14). Soon, the canal was powering new manufacturers moving to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, “a small company of public-spirited citizens” leased water to drive a 35-kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls and in 1892, the gatehouse was expanded for greater water flow. The Power Canal also was improved by widening it and increasing its depth. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1906, the company completed Power Station No. 1, located some distance south of the existing dam.

In 1908, Boston financier Phillip Cabot assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company’s new direction. Cabot’s ambitious plans called for the construction of a second powerhouse, named Cabot Station in his honor, replacing and raising the original Crocker-built dam, and extending and widening the power canal. Work began on dam construction in 1912 and was completed in 1915 along with the Cabot Station and the newly improved power canal.

World War I and the post-war period created ever increasing demands for electricity for both industrial and residential use, so the Turners Falls Company expanded its transmission system southward and by 1923 had reached the Springfield MA area.

Another line went westward across the Berkshire foothills to Pittsfield. The 1920s and 1930s saw the expansion of hydroelectricity throughout western Massachusetts. Increasing demand for electric power in the post-World War I years led to construction of a steam turbine generating plant at the confluence of the Chicopee and Connecticut Rivers. The plant was projected to function principally when the waters of the Connecticut were low and when hydroelectric power from Turners Falls was not sufficient (Samartino 1991: 25).

After extensive studies, the Turners Falls Power & Electric Company and the Connecticut River Power Company of New Hampshire joined forces as the Connecticut River Conservation Company. Its purpose was to "develop a system of reservoirs on the headwaters and tributaries of the Connecticut whereby the tremendous spring runoff might be stored for use during the period of low flow in the River." It was projected that 5 billion cubic feet of storage water could be made available for power purposes, saving 10,000 tons of coal annually (Samartino 1991: 26).

In 1942, the biggest merger was made when three pre-existing companies were merged into Western Massachusetts Electric Company (WMECO): Turners Falls Power & Electric Company, Pittsfield Electric Company, and United Electric Light Company. That year WMECO was issued a license to operate the water power development at Turners Falls. The several power companies continued to expand and to cooperate in transmission exchanges. By 1965, the Connecticut Valley Electrical Exchange (CONVEX) covered six thousand square miles, generated up to three million kilowatts, and served about three million people within southern New England (Stephenson 1982: 650). Combined, nearly two dozen major hydroelectric stations along the Connecticut River were capable of producing collectively 700 thousand kilowatts of power.

On July 1, 1966, three Connecticut Valley power companies—Western Massachusetts Electric Company, Connecticut Light & Power Company, and the Hartford Light Company—joined forces to form Northeast Utilities Service Company (NU), creating the first new multi-state public utility holding company since the mid-1930s (WMECO 1987: 4). In 1967, Holyoke Water Power Company (HWP) joined the NU System, followed by the Public Service Company of New Hampshire (PSNH) in 1992. Reports estimated that by 1971 CONVEX would have a deficit of 314 thousand kilowatts, and by 1973 that deficit would increase to 666 thousand kilowatts. Studies to increase the generating capacity at the Turners Falls plants were well underway in 1961.

The economic boom of the 1950s and 1960s and consequent demand for energy caused investor-owned utility companies like NU to respond to market needs by diversifying their energy portfolio. They did so by constructing large-scale steam (coal-fired) stations, nuclear plants, and later, natural gas facilities. In addition, because of the limited number of suitable sites combined with the large environmental footprint required for hydropower, construction of hydroelectric facilities by investor-owned utilities declined in the late twentieth century. Hydropower continued to play a critical role in the electric power supply, however, in that it provided peaking power, was more cost-efficient to put online (or take offline) as required by electrical demands, and proved a viable method of balancing thermal base loads. For its part, in order to plan for future power demands, NU started an expansion plan in the 1960s which involved three multi-million dollar projects, including the Northfield Mountain Pumped Storage Facility in Massachusetts.

1. Connecticut Yankee Nuclear Power Plant at Haddam Neck CT began commercial operation in 1968 and produced more than 110 billion kilowatt-hours of electricity during its 28-year operating history. In 1996, the CY Board of Directors voted to permanently close and decommission the power plant. After two years of planning and preparation, actual decommissioning began in 1998 and was completed successfully in 2007 with all plant structures removed.
2. Millstone Nuclear Power Station is the only nuclear power generation site in Connecticut. It is located at a former quarry (from which it takes its name) in Waterford. Of the three reactors built here, units two and three are still operating at a combined output rating of 2020 MW. In terms of generating capacity, Millstone is the largest electrical generating facility in New England, and the plant contains the second (unit 3) and third (unit 2) largest individual generating units on the New England electrical grid.
3. Northfield Mountain Pumped Storage Facility at Northfield MA was planned as the largest such facility in the world, surpassing both the Niagara (Robert Moses) Power Project and Blenheim-Gilboa Project, both in New York State, and both built in the 1960s (Samartino 1991: 26). The pumped storage facility would store water in reservoirs to be released during periods of peak electrical use, usually during the day or during periods of extreme weather. Northfield Mountain was chosen for the project location because of its 1000-foot summit crowned by a 300-acre natural basin, as well as for its proximity to the Connecticut River. The shape and geologic make-up of the land also enabled the powerhouse portion

Continuation sheet 4

of the plant to be built underground and not rely on the natural flow of the river for its operation, another major design innovation (WMECO 1987: 13).

The Northfield Mountain facility operates by siphoning Connecticut River water into a tailrace and employing electrically driven pumps to direct that water through a tunnel to a mountaintop holding reservoir. The reservoir is approximately 800 feet above river level, so that when the system's operation is reversed, water returns through the tunnel by force of gravity. The tunnel system directs the kinetic energy of the falling water over turbines at the foot of the mountain, thereby generating an average of one million kilowatts of electricity per hour. From the turbines, the falling water is directed back into the Connecticut River (Stephenson 1982).

The philosophy of Northfield's operation is to systematically exploit fluctuations in wholesale electric rates, thereby minimizing overall cost of meeting demand for electrical energy. When consumer demand is low, generally late at night, during weekends, and on holidays, the wholesale price of electricity declines. During those periods, the power company purchases the electricity necessary to pump water up to the storage reservoir. Conversely, when the wholesale price electricity commands is high, Northfield releases stored water and generates electricity. This permits the power company to meet peak consumer demand with less frequent reliance on electricity purchased from other suppliers. Additionally, any surplus energy generated at Northfield may be sold to other utilities at elevated peak demand prices (Stephenson 1982).

In September 1964, an application for a preliminary permit had been filed with the Federal Power Commission; by January 1966, a license for construction and operation had been requested, and by May 1968, an operating license had been issued for the Northfield Project. On August 15, 1968 the final petitions for rehearing had been denied and the Northfield Project was free to move to the construction stage. The relative ease of obtaining permits was due in part to strong public support.

Construction of the Northfield Project began in late 1968, with the major job being the drilling and dynamiting of a 2500-foot tunnel, 565-foot ventilation shaft, 1130-foot pressure shaft, and the mile-long tail race between the powerhouse and the river, as well as the 10-story-high underground power house. Over 4.9 billion tons of rock were blasted to create the tunnels, shafts, and powerhouse (Samartino 1991: 26). Four 250,000-kilowatt capacity turbine generators were placed in the powerhouse cavern 700 feet below the surface. Also built were the 300-acre reservoir, the rock-fill dam 144 feet high and 5600 feet long, and other dikes totaling 5600 feet.

At the same time, the Turners Falls dam downriver was raised (Stone & Webster 1968). This enabled more water to be backed up behind the dam, creating a 2,500 acre reservoir on the Connecticut River. The Northfield Mountain Pumped Storage Facility began operation in early 1972. As part of the development, WMECO created the Northfield Recreation and Environmental Center, with exhibits on the area's geology, history, and ecology, along with facilities and trails for hiking, skiing, and snowshoeing (Samartino 1973: 139).

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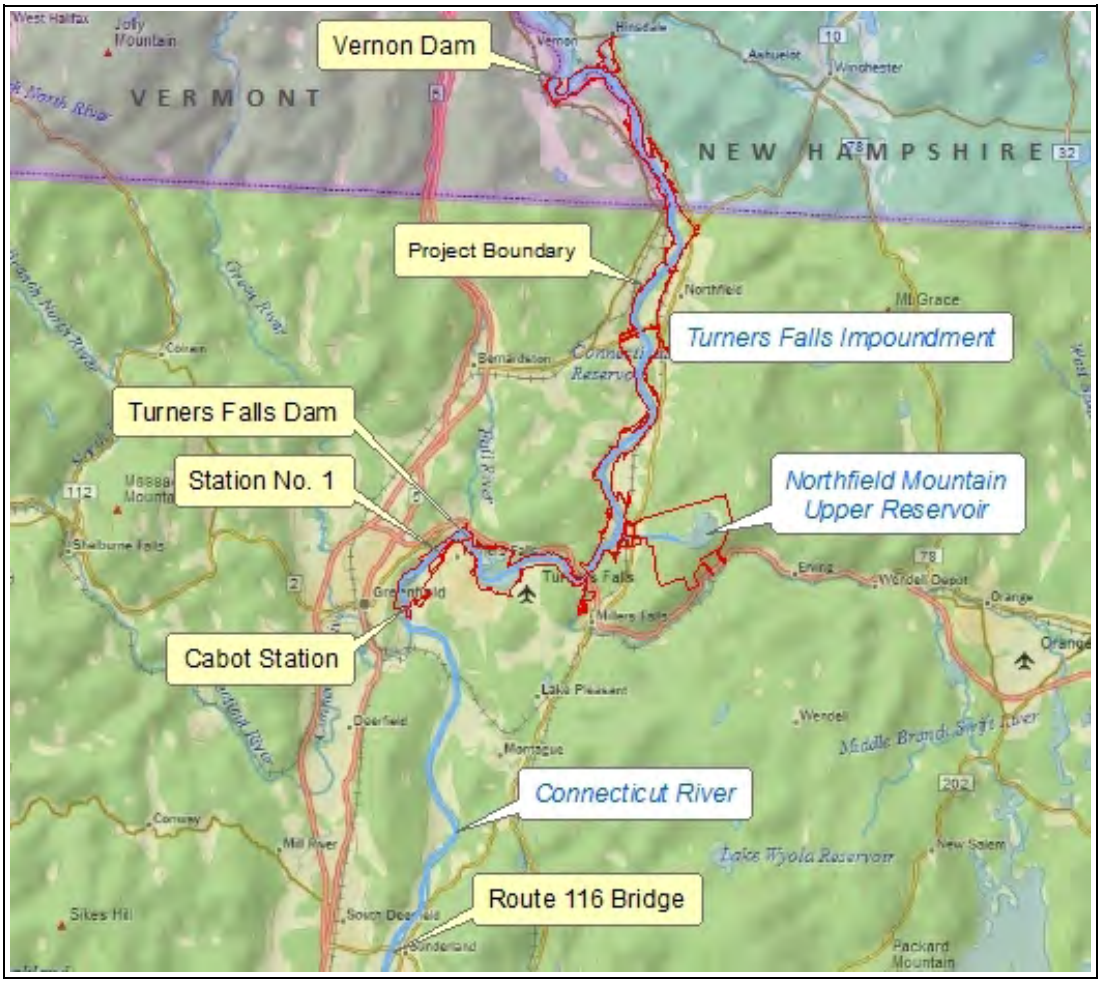
Locational map for Northfield Mountain Pumped Storage Facility and Visitors Center



Key Features of the Northfield Mountain Pumped Storage Facility


2014 View of Entrance (Source: TRC)


2014 View of Visitor's Center (Source: TRC)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☒ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

The Northfield Mountain Pumped Storage Facility meets the standards for eligibility for the NRHP under Criteria A and C. It is significant as being the world's largest pumped storage facility at the time of its completion and for its association with the more than century-long history of hydroelectric power in the Connecticut River Valley. The Northfield Mountain facility, built between 1968 and 1972, will be eligible for the NRHP in 2018.

Criterion A

The Northfield Mountain Pumped Storage facility meets Criterion A for its association with the more than 200-year history of harnessing the Connecticut River in western Massachusetts for manufacturing and hydroelectric power purposes. As the demand for electricity grew in the twentieth century throughout western Massachusetts, many smaller regional utility companies merged to form larger entities capable of financing and building ever bigger hydroelectric facilities, culminating in the formation of Northeast Utilities in 1966 and construction of the Northfield Mountain Project in 1968-1972. The resource is significant on the state and local levels with a period of significance from 1968 to 1972.

Development of the Connecticut River for transportation and power purposes dates to 1794, when the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. In 1864, a group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the water rights from the Proprietors and formed the Turners Falls Company. Soon, the improved canal was powering new manufacturers moving to Turners Falls (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1908, Boston financier Phillip Cabot assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new direction. In 1942, the biggest merger was made when three pre-existing companies were merged into Western Massachusetts Electric Company (WMECO): Turners Falls Power & Electric Company, Pittsfield Electric Company, and United Electric Light Company.

On July 1, 1966, three Connecticut Valley power companies—Western Massachusetts Electric Company, Connecticut Light & Power Company, and the Hartford Light Company—joined forces to form Northeast Utilities Service Company (NU). Despite such a great generating capacity, reports estimated that by 1971 CONVEX would have a deficit of 314 thousand kilowatts, and by 1973 that deficit would increase to 666 thousand kilowatts. Studies to increase the generating capacity at the Turners Falls plants were well underway in 1961. For its part, in order to plan for future power demands, NU started an expansion plan in the 1960s which involved three multi-million dollar projects, including two nuclear power plants in Connecticut and the Northfield Mountain Pumped Storage Facility in Massachusetts.

The Northfield Mountain pumped storage facility at Northfield MA was planned as the largest such facility in the world. In September 1964, an application for a preliminary permit had been filed with the Federal Power Commission and by May 1968, an operating license had been issued for the Northfield Project. Construction of the Northfield Project began in late 1968 (Samartino 1991: 26). The Northfield Mountain Pumped Storage Facility began operation in early 1972, greatly increasing overall capacity and bringing NU firmly to the forefront of American utilities.

Criterion C

The Northfield Mountain Pumped Storage facility meets the standards of Criterion C for embodying the distinctive design and engineering characteristics of a pumped storage hydroelectric facility. It is significant on the national and state levels with a period of significance from 1968 to 1972.

Some of the first uses of pumped storage technology occurred in the 1890s in the Alpine regions of Switzerland and northern Italy. In the 1930s reversible hydroelectric turbines became available. These turbines could operate as both turbine-generators and in reverse as electric motor driven pumps. The first use of pumped-storage in the United States was in 1930 by the Connecticut Electric & Power Company, using a large reservoir located near New Milford, CT pumping water from the Houstatonic River to the storage reservoir 230 feet above.

During the early twentieth century, utilities relied heavily on electricity generated by conventional hydroelectric power plants as well as conventional steam units. By the mid-twentieth century, as average electric loads doubled each decade, utilities began developing a more diverse energy portfolio to account for base and peak load variability. Technological advancements in steam-power generation and the introduction of nuclear power helped stabilize the increasing demands for base load capacity. However, using those types of generation for peak power production could potentially lead to mechanical stresses in the units. Utilities, therefore, began looking to pumped-storage facilities for addressing peak demands and typically designed the projects to operate in conjunction with other generation facilities. The 1960s and 1970s witnessed a sharp increase in the number of proposed pumped storage developments across the country (Dames and Moore 1981: 2.7-2.9).

Pumped storage hydroelectric plants continued to be built in the US throughout the 1950s and early 1960s, as innovations in engineering and pumping technology made their construction ever more appealing to power companies looking to harness water power. Pumped storage technology was an alternative to conventional damming of a river where there were considerations of aesthetics, the environment, or political opposition.

FORM H – PARKS AND LANDSCAPES

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	Area(s)	Form No.	Forms within
N/A		TRC-41	

Town/City: Athol, Orange, Erving, Gill, Greenfield, Shelburne, Buckland, Charlemont, Florida, North Adams, and Williamstown

Place *(neighborhood or village):* Various

Address or Location: Route 2, Route 2A (Old Route 2)

Name: Mohawk Trail

Ownership: ☒ *Public* ☐ *Private*

Type of Landscape *(check one):*

___ park
___ green/common
___ garden
_X_ boulevard/parkway
___other *(specify):*
___ farm land
___ mine/quarry
___ training field

Date or Period: 1912-1914, 1931-32

Source: Historic American Engineering Record

Landscape Architect: Massachusetts Highway Commission

Location of Plans: Not known

Alterations/Intrusions *(with dates):* Re-routed in Gill and Erving (1932-32), Repairs and widening (Various), Repairs due to flood/washout (2011)

Condition: Good

Acreage: 69-miles-long

Setting: Meandering parkway through rural areas, forested areas, villages and towns, sometimes following rivers.

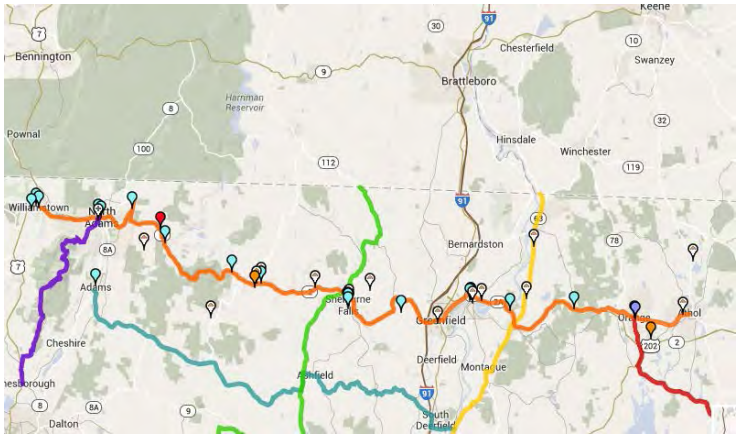
Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* March 2014

Photograph

Locus Map



Orange Line indicates Route Location
Source: Western MA Scenic Byways

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

VISUAL/DESIGN ASSESSMENT

Describe topography and layout. Note structures such as bandstands, gazebos, sheds, stone walls, monuments, and fountains. Note landscaping features such as formal plantings, agricultural plantings, and bodies of water. If possible, compare current appearance with original.

The Mohawk Trail opened in 1914 as one of the first auto-touring roads in the country. The highway known today as the Mohawk Trail is a section of State Highway 2 and Route 2A (the original Route 2 before re-routing took place). There are various formal and informal designations of the Mohawk Trail's endpoints, but the most common reference is between Williamstown, on the New York State border and Athol, along the Millers River. This road traverses a part of the state that is famous for its scenery and its association with Native Americans. In 1914, the most mountainous miles of the Mohawk Trail were graded and specifically dedicated to auto touring. This stretch begins in the small city of North Adams and zig-zags its way up the Hairpin Turn to the western summit of Hoosac Mountain. It runs eastward along heavily wooded ridges, then drops into the long-settled Deerfield Valley, and finally descends into the broad Connecticut River Valley (Tree and Davis 2011).

There are numerous points of interest along the way, including many scenic viewpoints, roadside attractions and gift shops including:

- Longview Tower Specialty Shops: Opened in 1923, the five-story observation tower was rebuilt of steel in 1952 providing a panorama of the Connecticut River with its farms and the town of Greenfield.
- Natural Bridge State Park: The centerpiece of the 49-acre park is a white-marble formation bridging a gorge, a tourist attraction since the 1830s.
- Hairpin Turn-Western Summit: Cars from the 1920s frequently required a stop to cool their radiators at the top of a steep climb, such as the ascent of some 2,000 feet in the couple miles between North Adams and the Western Summit of Hoosac Mountain. The Wigwam and Western Summit Gift Shop at the top of the Hairpin Turn no longer has its wooden viewing tower.
- Whitcomb Summit: The highest point on the route (2,173 feet) is marked by a steel version of a wooden tower placed here in 1915. The cottages here date from the 1920s.
- Mohawk Trail State Forest: This is a 6,457-acre forest with 56 campsites and six ca. 1920s log cabins.
- "Hail To The Sunrise" Statue at Mohawk Park: Erected in 1932, it features a tribute to Native American heritage.
- Bridges: A portion of the trail parallels the Deerfield River for several miles, and passes near the village of Shelburne Falls, and the Bridge of Flowers. The route crosses the Connecticut River via the historic French King Bridge.

HISTORICAL NARRATIVE

Discuss history of use. Evaluate the historical associations of the landscape/park with the community.

One of the oldest designated tourist and scenic routes in the country, the Mohawk Trail traces its roots to Native American trails. Because Indian trails, as a general rule, followed the natural grades of the landscape, they often later became roads for traders and settlers. The early European settlers used the Indian Path, as it was then called, to travel between the English settlements of Boston and Deerfield, and the Dutch settlements in New York. The settlers and traders brought with them the horse and wagon, which required the widening and slight relocation of the original path. After the close of the Revolutionary War the establishment of privately owned "turnpikes" became common place (Bennett 1990: 3).

Chartered March 8, 1797, the Second Massachusetts Turnpike was authorized from Charlemont to just east of North Adams on the western side of Hoosac Mountain. This route over Hoosac Mountain followed approximately the line of the old Indian trail. Three years later, the General Court of Massachusetts granted a charter to the proprietors of The Fifth Massachusetts Turnpike,

authorizing them to lay out a toll road from Greenfield and Northfield to Leominster. This road was the first road to open a direct line from east to west across Massachusetts. A few years later, in 1802, a group of men from Greenfield chartered The Fourteenth Massachusetts Turnpike, to complete the section of turnpikes from Boston to the Hudson River, essentially by connecting the Fifth Massachusetts Turnpike with the Second Massachusetts Turnpike. Eventually, the turnpike corporations dissolved, and the roads were turned over to the counties as free roads (Bennett 1990: 3).

With the advent of the automobile in the early 1900s, the inadequacies of the old wagon roads in western Massachusetts for motorized vehicles became evident, and the Massachusetts Highway Commission made plans to improve all the state's roads, including the section of highway from Greenfield to North Adams. Work was begun in September of 1912 and completed in November of 1914, at a cost of $350,000. At the opening ceremonies, October 24, 1914, the highway was officially dedicated as "The Mohawk Trail," after the Mohawk Indians of that region (Bennett 1990: 1).

In the early 1920s, the Massachusetts Department of Public Works began a project to relocate a particularly hazardous seven-mile stretch of the Mohawk Trail Highway between Erving and Greenfield. The old route had wound through the villages of Millers Falls and Turners Falls on a course marked by steep grades, sharp curves, and narrow bridges. The relocated Route ran north of both villages on an alignment whose principal challenge was the crossing of the precipitous Connecticut River gorge near the French King Rock (Bennett 1990: 11). After looking at several plans, the engineers decided to cross the Connecticut River with a bridge at the height of the hills on either side, about 135 feet above the water. When completed, the entire project would include the construction of about six miles of new state highway, a highway grade separation, a bridge over the Central Vermont Railroad, and the construction of a large high-level steel arch bridge over the Connecticut River (Bennett 1990: 5). During the summer of 1931, the contracts for the Erving-Greenfield cutoff were awarded to Kelleher Corporation of Montague, Massachusetts (for the western section, from Greenfield to the Connecticut River) and to Lawton Construction Company of Providence, Rhode Island (for the eastern section, from the Connecticut River to the road to Millers Falls, just east of the road to Northfield, now Highway 63). Work on these two contracts commenced immediately, and the highway was completed in July of 1932 (Bennett 1990: 5).

The challenge of driving over rather than riding through Hoosac Mountain drew families from throughout the Northeast. Recognized as a destination in its own right from the 1920s through the 1950s, this initial stretch of the Mohawk Trail sprouted tea shops and motor courts, trading posts and campgrounds, both private and state. In the 1960s vacation patterns including the new method of air travel and highway routes changed. The 1965 opening of the Massachusetts Turnpike (Route 90) provided a quicker route to cross the state resulted in the decline in the use of Route 2, and also the deterioration and demolition of the lookout towers, motor courts, tearooms, and trading posts (Tree and Davis: 2011).

BIBLIOGRAPHY and/or REFERENCES

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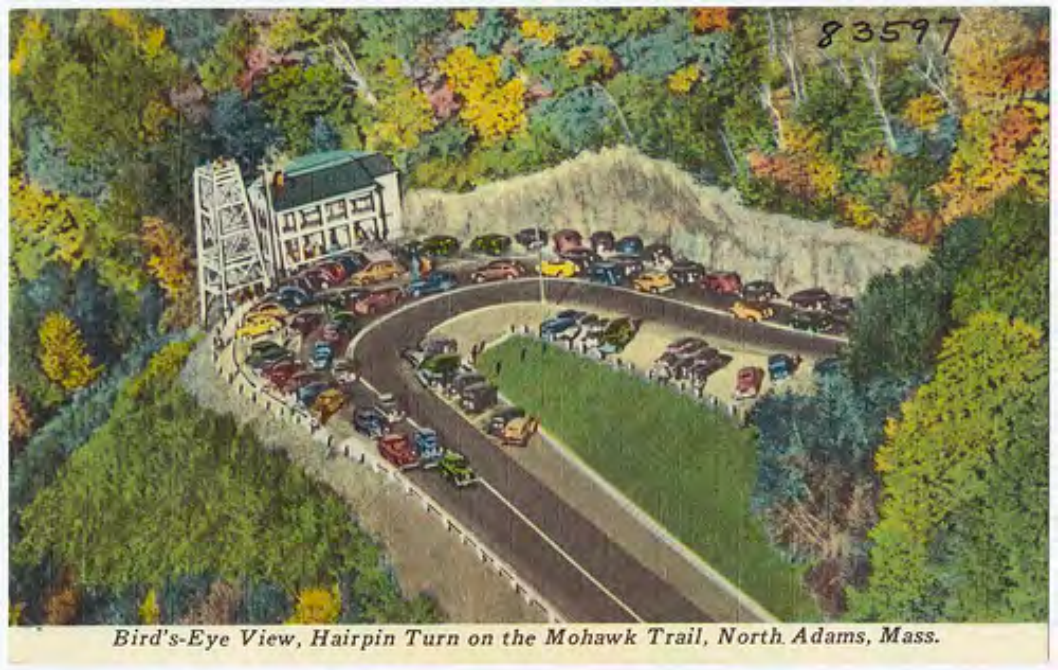
1990 *French King Bridge Spanning the Connecticut River Between Gill and Erving (HAER No. MA-100).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

Mohawk Trail Regional Association
2013 *Mohawk Trail Regional Guidebook.* Accessed Online 2014: http://www.mohawktrail.com/order-download-a-guidebook.html

Tree, Christina and William Davis
2011 *The Berkshire Hills & Pioneer Valley.* Countryman Press, Woodstock, VT.



Ca. 1930-45 Historic Photograph of Hairpin Turn (Source: Boston Public Library)

Undated Historic Photograph of Mohawk Trail Near Charlemont (Source: www.epodunk.com)

French King Bridge along Mohawk Trail (Source: MassDOT)

2004 Image of Mohawk Trail with Todd Mountain in the Background (Source: Mohawk Trail Regional Guidebook)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☒ Potential historic district

Criteria: ☒ **A** ☐ **B** ☐ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

The Mohawk Trail is NRHP-eligible under Criterion A with a period of significance from ca. 1912 to 1960. The resource surveyed is the automobile Mohawk Trail route. The "Mohawk Trail" that is currently listed in the National Register (1973) is a segment of the ancient footpath that the Native Americans traveled between the Hudson River and Connecticut River. The NRHP-listed corridor follows the Cold River valley between Florida, MA and Charlemont, MA.

Criterion A:
This resource is NRHP-eligible under Criterion A. The Mohawk Trail is significant for its association with the transportation history of Massachusetts and the expanding movement for conservation, public outdoor recreation, and regional planning that gained momentum in the 1920s and became the hallmark of Federal policy in the 1930s. The trail demonstrated a new form of outdoor recreation based on recreational motoring. This road possesses statewide significance in New England as one of the best preserved scenic byways that continues to evoke a sense of time and place as an early twentieth-century automobile route. The original alignment of this road remains largely intact allowing the resource to retain integrity of location, design, and workmanship. The rural characteristics of the landscape and environs have been retained, contributing to the significance of the road and its integrity of setting, feeling, and association as an early twentieth-century roadway.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Northfield		NFL.926

Photograph

Locus Map

MA GIS 2014

Town/City: Northfield

Place *(neighborhood or village):* West Northfield/East Northfield

Street/Route: Central Vermont Railroad (former)

Carried over: Connecticut River and Caldwell Road (W. Northfield)

(Railroad, river, brook, canal or road)

Historic/Common name: Central Vermont Railroad Bridge

Ownership: New England Central Railroad/Amtrak

(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: (N to S): Deck Plate Girder, Pratt deck truss, Warren deck truss, deck plate girder

Bridge typology code 309 303

Date of Construction: 1904, 1936

Source: Plaques; written sources

Engineer/Designer: Unknown

Bridge company/Contractor: American Bridge Company

Material (s): Steel, Concrete, Stone

Alterations *(with dates):* Warren deck truss added after 1936 flood

Posted load limit *(if any):* Unknown

Condition: Good

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural

UTM Reference: 18 0708117E 4731307N

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* 04/2014

INVENTORY FORM F CONTINUATION SHEET

TOWN: NORTHFIELD
ADDRESS: RR over CT River and Caldwell Rd.

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): | Form No.: NFL.926

Superstructure:

Overall length: 800 ft. (approx.) Deck width: Single-track Skew: None

Main unit: No. of spans: 4 Span length: 165 ft. (approx.)

Approaches: No. of spans: 2 Span length: 90 ft. north, 50 ft. south (approx.)

Substructure *(structure below deck)*

Height above feature spanned: 300 ft. (approx.) Material of abutments or piers: Ashlar Cut Granite, concrete

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Central Vermont Railroad Bridge over the Connecticut River is an approximately 800-foot, six-span bridge. Originally constructed in 1904, the end spans are steel deck-plate girders and the main four spans were steel Pratt deck trusses. Only one of these is extant, that on the northern end. After the 1936 flood, the remaining three trusses were replaced with steel Warren deck trusses. As part of the reconstruction, the original stone piers were repurposed and were topped with concrete due to the new truss design. It is noted in the annual reports of the railroad that the 1904 bridge was constructed as part of a complete rebuilding of an 1840s two-tier wooden railroad/vehicular toll bridge, thus the stone piers and abutments may predate the 1904 bridge (Central Vermont Railway Company 1905: 11).

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Central Vermont Railroad connected Montreal, Quebec, with New London, Connecticut, using a route along the shores of Lake Champlain, through the Green Mountains and along the Connecticut River valley, as well as Montreal to Boston, Massachusetts, through a connection with the Boston & Maine Railroad at White River Junction, Vermont. Chartered in 1843, the railroad reached Northfield from the north on October 10, 1848. It has operated under several companies since the 1890s, including the Grand Trunk Railway, Canadian National, and New England Central Railroad. The route along the Connecticut River also handles the twice-daily Amtrak Vermonter.

Shortly after the Bennett's Meadow Bridge in Northfield was completed in 1899, the Massachusetts railroad commission condemned the 50-year-old, two-tier wooden railroad/vehicular toll bridge located just upstream on the Connecticut River. The Central Vermont Railway then petitioned the legislature for authority to build a new bridge in cooperation with the town of Northfield. At first, the town favored the construction of another joint railroad and highway bridge, and an agreement was reached by which the town was to pay $10,000 toward the cost of a steel bridge. Public sentiment shifted towards building a separate highway bridge, which would not only relieve them of paying rent for their portion of the railroad bridge, but would also do away with the nuisance of passing overhead trains (Bennett 1990: 6). At this time, it is presumed that the railroad began to erect the 4-span, Pratt-truss deck bridge with deck plate girder approach spans. As mentioned in the annual reports of the railroad, the existing stone piers and abutments may date to the two-tier wooden railroad/vehicular toll bridge (Central Vermont Railway Company 1905: 11). Severely damaged in the 1936 flood, the three southern spans were replaced with new spans of a Warren truss deck design. This new design called for taller piers in order to keep the original rail bed at grade and concrete was added to the top of the stone piers (Roper 1989). Due to these alterations, MHC has determined the bridge to be ineligible for listing in the NRHP.

BIBLIOGRAPHY and/or REFERENCES

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1990 *Schell Memorial Bridge Spanning the Connecticut River, Northfield, MA (HAER No. MA-111).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

Central Vermont Railroad
1905 *Sixth Annual Report of the Directors of the Central Vermont Railway Company.* June 30, 1905.

Roper, S.J.
1989 "Central Vermont Railroad Bridge," Massachusetts Historic Bridge Inventory. Massachusetts Historical Commission, Boston, MA.

ADDITIONAL PHOTOGRAPHS

July 6, 1915 Photo of Central Vermont Railroad Bridge, looking upstream (Source: First Light Photo Archives)

2014 View of Upstream Face (Warren Deck Truss: Left; Pratt Deck Truss: Right) (Source: TRC)

2014 View of Deck Girder over Caldwell Road (Source: TRC)

2008 Low-level oblique image of Vermont Central Bridge over Connecticut River (Left to Right: 1-span 1904 Deck Girder, 3-span 1936 Warren Deck Truss, 1-span 1904 Pratt Deck Truss, 1-span Deck Girder), (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
71-B7-1	Orange	NFL.I	NFL.178

Town/City: Northfield

Place: *(neighborhood or village)*:
Northfield Farms

Address: 153 Millers Falls Road (Route 63)

Historic Name: Frederick Morgan Sr. House.

Uses: Present: Residential, Agricultural

Original: Residential, Agricultural

Date of Construction: Sometime between 1802-1831

Source: Franklin Co. Registry of Deeds

Style/Form: Vernacular/Central-hall, double-pile

Architect/Builder: Reuben Morgan or Frederick Morgan Sr.

Exterior Material:
Foundation: Stone

Wall/Trim: Vinyl

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
Garage, Mixed-use barn, dairy barn, outbuildings

Major Alterations *(with dates):*
Windows, siding, and doors (post 1978); Addition on the rear (unknown)

Condition: Fair

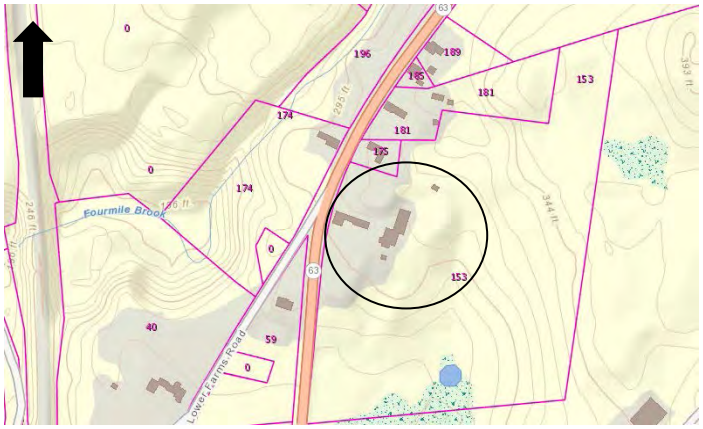
Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: 19 acres (approx.)

Setting: Rural area just north of entrance to Northfield Mountain facility and visitors center

Photograph

Locus Map



MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: April 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: NORTHFIELD
ADDRESS 153 Route 63

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): I
Form No.: NFL.178

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Set on a stone foundation, the 2-story, 5-bay dwelling is of wood-frame construction with a central-hall, double-pile plan. Originally surveyed in 1978, significant alterations have occurred to the dwelling since then, including replacing the clapboard with vinyl siding, the 2/2 sash windows with 1/1 vinyl sash, and recessing the single-leaf door with sidelights and replacing with modern replacements. The asphalt-shingled, side-gable roof has off-peak interior brick chimneys and cornice returns. A 1-story addition with standing-seam, gable roof is attached to the rear elevation. An open hyphen off the rear elevation connects the dwelling to a 3-bay garage. The western-bay of the garage sits on a fieldstone foundation and most likely the modern garage expanded upon an older building. The remainder of the garage has a concrete foundation, vinyl siding, and corrugated metal gable roof.

There are four agricultural buildings located east of the dwelling. A pasture and pond are located further east of these buildings. The largest of the agricultural buildings is a mixed-use barn. Set on a concrete foundation, the bank bark has a central aisle accessed by double-leaf sliding doors. The side-gable roof is corrugated metal and the walls are board-and-batten. The windows are 6-light hopper windows. One-story additions are located on the façade and side elevations. Concrete block in construction and clad with board-and-batten, weatherboard, and brick-tex siding, these additions provide access into the larger barn. A one-story addition on the banked (rear) elevation spans the full elevation and connects the mixed use barn to a 1-story dairy barn. The dairy barn is of concrete-block construction with weatherboard siding on the upper-half of the walls, a corrugated metal roof with vents, and evenly spaced 6-light hopper windows at the stalls. Two wood-frame outbuildings are located north and south of the connected barns.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

The 1740 Dwight survey added land to the south boundary of Northfield known as Northfield Farms. This area became important agriculturally and still has a number of large dairy farms plus some small agricultural enterprises. This homestead traces its land origins back to the original "Pembroke Grant" of 1736. Sold by the five grantees in 1802 to Noah and Reuben Morgan as part of a 500 acre tract of land, the parcel came to Frederick Morgan, Sr. in 1811 after the death of Reuben Morgan. There is no mention of the house until the 1831 deed when Frederick Morgan Sr. conveys to his sons Gerizim and Calvin "the home where he now lives." Although heavily altered, the house most likely dates from the Reuben Morgan era (1802-1811) or early in the ownership of Frederic Morgan Sr. beginning in 1811. Calvin relinquished his rights to the property in 1834 and the property was passed onto Nancy Morgan in the 1850 will of Gerizim Morgan when the property was divided into seven parcels. A Mrs. Morgan is noted as residing on the property on both the 1858 Franklin County Map and the 1871 F.W. Beers & Co. Franklin Co. Atlas. The Morgan family holdings in the Farms area of Northfield represented a significant element in the growth of the agricultural economy of the town, particularly to the Farms section.

In 1884 the property was sold to Edward Nash (1838-1902) who also bought three additional surrounding parcels. According to the 1900 U.S. Census, Edward and his son Ernest lived on the property operating a farm. According to the 1910 census Ernest, who was willed the property in 1902, lived on the property with his wife, Mary, and a 57-year-old Polish farmhand, Joe Smith and operated a dairy farm. By 1920 he was a widower, operating a general farm and his mother-in-law, Irene Osgood, resided on the property. The 1930 census shows the same information, although Irene Osgood is listed as a housekeeper. In 1940 the property was valued at $7000 and Ernest was the only resident. Ernest Nash sold the property to Frank Fuller in 1950. The property was

deeded by Frank and his wife Irene to the Western Massachusetts Electric Company on September 23, 1965 (Franklin County Deed Book 1187, Page 151). The property is currently owned by FirstLight Power Resources-GDF Suez Energy.

BIBLIOGRAPHY and/or REFERENCES

Arts Council of Franklin County
1978 "Frederick Morgan Sr." Massachusetts Historic Building Inventory. Massachusetts Historical Commission, Boston, MA.

Franklin County Registry of Deeds

United States Population Censuses
1830–1940 Franklin County (Northfield Farms). Electronic document, http://www.ancestry.com.

ADDITIONAL PHOTOGRAPHS

2014 View of Facade and South Gable End with Attached Garage (Source: TRC)

2014 View of Garage (Source: TRC)

2014 View of Mixed-Use Barn (Source: TRC)

2014 View of Dairy Barn (Source: TRC)

2014 View of Outbuilding North of Dairy Barn (Source: TRC)

2014 View of Outbuilding South of Mixed-Use Barn (Source: TRC)

2008 Low-level oblique image of Frederick Morgan House (Source: MASSDOT GIS)

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
101.0-0000-0119.0	Greenfield	GIL.D	GIL.907

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0700837E 4720605N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Gill, Montague

Place *(neighborhood or village):* Riverside, Turners Falls

Street/Route: Riverside Drive

Carried over: Formerly carried over Connecticut River
(Railroad, river, brook, canal or road)
Historic/Common name: Red Suspension Bridge

Ownership: Unknown
(Name of state agency or municipality)
Mass. Highway bridge no.: N/A

Bridge type: Suspension Bridge

Bridge typology code 313

Date of Construction: 1878

Source: Drawings in the H. Hobart Holly Collection

Engineer/Designer: Design by John A. Roebling's Sons

Bridge company/Contractor: James W. Shipman

Material (s): Stone (Extant Abutments); Steel (Demolished)
Alterations *(with dates):* Demolished 1942 , leaving only the abutments

Posted load limit *(if any):* N/A

Condition: Demolished except for abutments

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Residential (Gill side), Park (Montague side)

Superstructure:

Overall length: 563 ft.	Deck width: 39.1 ft.	Skew:	
Main unit: No. of spans:	1	Span length:	550 ft.
Approaches: No. of spans:	0	Span length:	N/A

Substructure *(structure below deck)*

Height above feature spanned: 20 ft.

Material of abutments or piers: Stone

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Red Suspension Bridge was built by James W. Shipman in 1878 at the site of a ferry landing that had run for almost a century. Built at a cost of $48,000, it was a 563-foot-long suspension bridge, designed with the Roebling system of inclined stays (Montague Bicentennial Committee 1954: 110). Although damaged by the 1936 Flood, it remained standing until 1942, when it was dismantled and sold for scrap metal during World War II. Today the only remnants of the bridge are the stone abutments in Gill and Montague. Copies of the original bridge specifications and contract survive in the H. Hobart Holly Collection, Boston Society of Civil Engineers Section, Boston, Massachusetts. The construction contract states:

> The parties of the first part [Hutchinson & Shipman] agree to furnish a certificate from John A. Roebling's Sons that the materials used in the cables and stays in the above bridge is of ample strength to sustain a rolling load of forty pounds per square foot in addition to its own weight with a factor of 4. Also that the elastic limit of each 2 1/4" steel wire rope is not less than 6-9 tons and the breaking strength is no less than 15-6 tons (Buonopane 2006: 13).

This statement implies that the Roebling Company is certifying the actual design of the bridge—the relationship between applied loads and strength of the bridge elements. Thus, the Red Bridge stands as evidence that the Roebling Company was closely involved with the structural design of bridges for which they supplied wire and cable. Although it was demolished in 1942, the bridge was designated a Massachusetts Historic Civil Engineering Landmark by the Boston Society of Civil Engineers in 1990.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Upper Suspension Bridge, or "Red Suspension Bridge," connected Turners Falls with Riverside, located across the Connecticut River. The bridge was built in 1878 on the upstream edge of Turners Falls, at the site of a ferry landing that had run for almost a century, and was complemented by the Lower or "White" Suspension Bridge, constructed in 1872 on the downstream side of Turners Falls. Built at a cost of $48,000, the bridge was 563 feet long and stood 20 feet above the water level (Montague Bicentennial Committee 1954: 110). It survived the great flood of 1936, which wiped out many other bridges on the Connecticut River in Franklin County, but after the completion of the Turners Falls-Gill Bridge in 1938 it was closed to all but bicycle and foot traffic. As a part of the World War II salvage movement, the bridge was dismantled in September 1942.

The suspension bridge was designed with the Roebling system of inclined stays which was also used for the Lower Suspension Bridge. John A. Roebling was the preeminent suspension bridge designer in late-19th-century America, building suspension bridges for aqueducts, road, and rail use. Over the course of his career, John Roebling designed and constructed a series of

Continuation sheet 1

suspension bridges of increasing length and his final design for the Brooklyn Bridge (main span of 1595 ft.) was completed in 1883 under the direction of his son Washington A. Roebling. The stayed suspension bridge system developed by John A. Roebling and continued by Washington was highly successful and had a widespread influence on suspension bridge design in the late 19th century (Buonopane 2006: 12).

For construction of the 1868 Harrison Bridge over the Whitewater River between Ohio and Indiana, the county commissioners hired John A. Roebling & Sons to write the specifications for a 425-ft.-span suspension bridge. Washington Roebling actually submitted a bid in partnership with a local engineer, but the contract was awarded to James W. Shipman & Co. of Cincinnati. By 1877, Shipman was practicing under the name of the New York Bridge Co. and the Roebling-style suspension bridge figured prominently in their advertising and letterhead (Buonopane 2006: 13). In 1878, Shipman's New York Bridge Co. (also known as Hutchinson & Shipman) won the contract for a suspension bridge of 563 ft. over the Connecticut River at Turners Falls in Massachusetts, later to become known as the "Red Bridge."

BIBLIOGRAPHY and/or REFERENCES

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2006 *The Roeblings and the Stayed Suspension Bridge: Its Development and Propagation in 19th Century United States.* Cambridge, MA.

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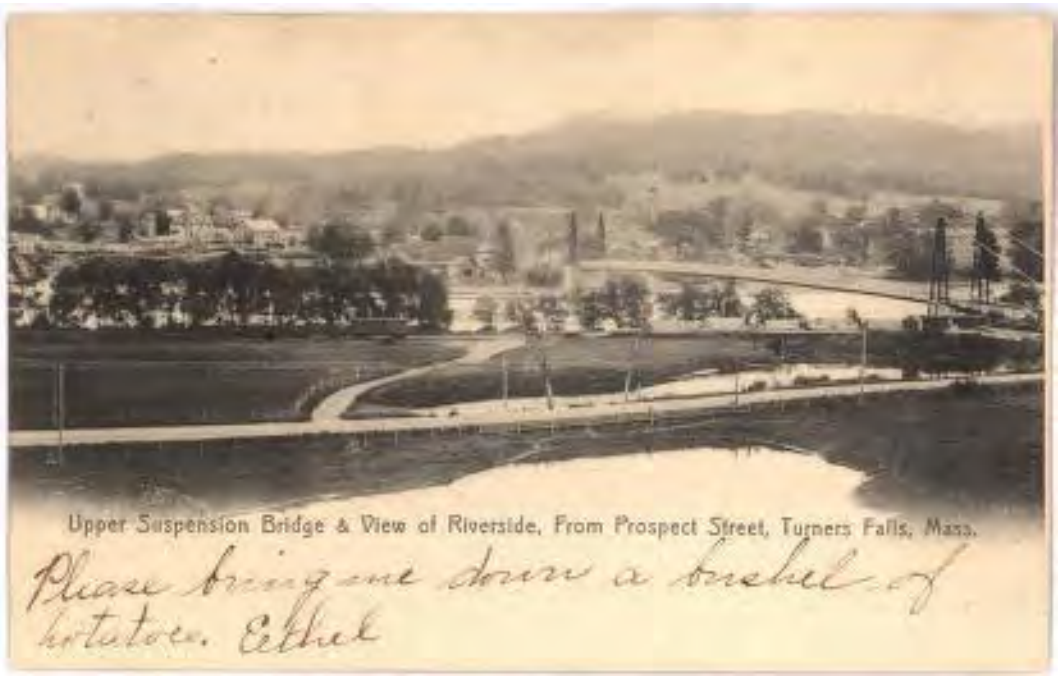
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

Scott, Kyle J.
2005 *Montague: Labor and Leisure.* Arcadia Publishing, SC.

ADDITIONAL PHOTOGRAPHS



Undated View of Red Suspension Bridge from Turners Falls (Source: www.cardcow.com)

1906 View of Red Suspension Bridge from Turners Falls (Source: www.cardcow.com)


1906 View of Red Suspension Bridge Approach from Turners Falls (Source: Montague: Labor and Leisure: 31)

2014 View of Extant Abutment in Gill (Source: TRC).

2014 View of Former Location from Riverside towards Turners Falls (Source: TRC).

2008 Low-level oblique image of Red Suspension Bridge Abutment (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-018	Greenfield		TRC-7

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: End of Rod and Gun Club Road

Historic Name: Turners Falls Rod & Gun Club

Uses: Present: Sporting Club House

Original: Residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Board-and-batten

Roof: Standing seam metal

Outbuildings/Secondary Structures:
Non-historic shed and comfort station.

Major Alterations *(with dates):*
Siding; windows and doors; side ell

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural, water frontage on Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
END OF ROD AND GUN CLUB ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.
TRC-7

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1½-story, 3-bay frame building on a concrete block foundation has a side-gable roof and a 4-bay shed-roofed front dormer. The wrap-around porch is enclosed. Formerly a residence, the building was converted to a clubhouse at an unknown date and a large addition for meeting space was added to the west elevation. The west entrance is original; the north porch entrance with wooden hood is later. The board-and-batten siding, windows, doors and rear hip-roofed ell and the large side-gable-roofed ell are not original. The interior features knotty pine paneling and an original stone fireplace and hearth.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of East and Rear Elevations (Source: TRC)

2014 View of Façade and West Elevation with Addition (Source: TRC)

2014 View of Interior of Enclosed Porch (Source: TRC)

2014 View of Interior with Stone Fireplace (Source: TRC)

2008 Low-level oblique image of Turners Falls Rod and Gun Club (Camp 1E) (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-018	Greenfield		TRC-8

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: Off Industrial Boulevard

Historic Name: Camp 2-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1950

Source: Historic Maps

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Asphalt shingle

Roof: Asphalt shingle

Outbuildings/Secondary Structures: None.

Major Alterations *(with dates):*
Siding; windows and doors; porch enclosed; deck.

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
OFF INDUSTRIAL BOULEVARD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-8

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 2-story, 3-bay frame house on concrete-block piers has a side-gable roof with exposed rafter ends, wood corner boards, and brick-tex siding. The central entrance with double-leaf door on the north is flanked by 6/6 windows with wood frames. There are paired 6-pane wood pivot windows in the attic story. On the south is a 2-story, 2-bay shed-roofed wing with a glassed-in porch on the second story. A modern wood deck is on the south.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

1947 USGS Map of Greenfield

1954 USGS Map of Greenfield

ADDITIONAL PHOTOGRAPHS

2014 View of Facade and Wing (Source: TRC)

2014 View of Façade and South Elevation (Source: TRC)

2008 Low-level oblique image of Camp 2E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-017	Greenfield		TRC-9

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: Off Industrial Boulevard

Historic Name: Camp 3-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Asphalt shingle

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Wood shed and Storage Shed.

Major Alterations *(with dates):*
Siding; windows and doors; porch enclosed; side ell

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
OFF INDUSTRIAL BOULEVARD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-9

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame building on a concrete-block foundation has a front-gable roof with exposed rafter ends, wood corner boards, and a partially enclosed porch with plain posts. Most of the metal and vinyl sliding windows and sash windows are not original; the 3-part attic windows appear original. The house has asphalt shingle siding. There is a below-grade entrance on the north below the enclosed porch in the concrete block foundation possibly for storage.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of West Elevation (Source: TRC)

2014 View of Storage Shed (Source: TRC)

2014 View of Wood Shed (Source: TRC)

2008 Low-level oblique image of Camp 3E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-012	Greenfield		TRC-10

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: West Camp Road

Historic Name: Camp 11-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Wood shed.

Major Alterations *(with dates):*
Rear addition; windows and doors; porch enclosed.

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
WEST CAMP ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-10

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house on concrete-block foundation has a side-gable roof with exposed rafter ends, wood corner boards, and German siding. Entrances are on the south, west and east. The west entrance appears original and has a door with four panels and 3-pane light above. On the east is an exterior-end shouldered brick chimney. There is a shed-roofed porch, presently screened, on the north. The shed-roofed addition on the south is not original and has a deck. The house has 1/1 windows with wood frames.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of West and South Elevations (Source: TRC)

2014 View of East Elevation and Addition on South Elevation (Source: TRC)

2008 Low-level oblique image of Camp 11E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-012	Greenfield		TRC-11

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: West Camp Road

Historic Name: Camp 10-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: 1942

Source: Current Owner (Mitch Citchy)

Style/Form: Vernacular

Architect/Builder: Mr. Stone of Gill

Exterior Material:

Foundation: Concrete block

Wall/Trim: Vinyl siding

Roof: Standing seam metal

Outbuildings/Secondary Structures:
Two shed with sliding doors and wood siding are located north and southeast of the house.

Major Alterations *(with dates):*
Side addition; siding; windows and doors; porch enclosed, deck.

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This building was constructed by a Mr. Stone in 1942 who resided here throughout the year (Interview with Leena Newcomb). This 2-story, 1-bay frame house on concrete-block foundation has a front-gable roof with exposed rafter ends and vinyl siding. The house has been greatly enlarged on the east and west with shed-roofed and gable roofed-additions. Windows and doors are not original. The wrap-around porch is enclosed and is further extended by a deck.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of North Elevation (Source: TRC)

2014 View of Added In-Law Suite and Shed (Source: TRC)

2008 Low-level oblique image of Camp 10E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-012	Greenfield		TRC-12

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: West Camp Road

Historic Name: Camp 9-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Rubble stone

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Shed

Major Alterations *(with dates):*
Rear addition; siding; some windows; porch enclosed.

Condition: Good

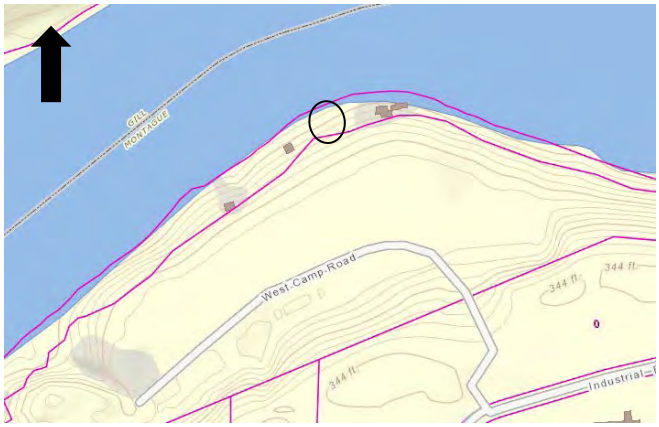
Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map



MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
WEST CAMP ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-12

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house on a rubble-stone foundation has a side-gable roof with exposed rafter ends, German siding, and wood corner boards. There is an exterior-end brick chimney on the east gable end. The door on the north is flanked by 15-pane casement windows. Additionally, there are paired 1/1 sash windows. The north porch has been enlarged and now wraps around the west gable end where it is enclosed. The porch vertical-board siding is not original. The house was added on to on the south with a shed-roofed ell.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of North and West Elevations (Source: TRC)

2014 View of West and South Elevations (Source: TRC)

2008 Low-level oblique image of Camp 9E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-012	Greenfield		TRC-13

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: West Camp Road

Historic Name: Camp 8-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1942

Source: Current Owner (Walter Patton)

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Some windows replaced; porch enclosed.

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
WEST CAMP ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-13

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house on a concrete-block foundation has a side-gable roof, German siding, and wood corner boards. There is an exterior-end brick chimney on the west gable end. The west door has four panels and a 2-pane window above the panels. There are original 2/2 sash windows with wood frames on the west and east. Most of the other windows are modern replacements. The shed-roofed porch on the north is enclosed and there is a modern deck on the west.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

Patton, Walter
2014 Personal Communication. May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of East and North Elevations (Source: TRC)

2008 Low-level oblique image of Camp 8E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-012	Greenfield		TRC-14

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: West Camp Road

Historic Name: Camp 7-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1950

Source: Historic USGS Maps

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Some windows replaced; porch enclosed.

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

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ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 2-story, 3-bay frame house on a concrete-block foundation has a front-gable roof, German siding, and wood corner boards. There is an interior brick chimney. There are original 2/2 sash windows with wood frames. The 2-story, shed-roofed porch on the north is enclosed. Due to the slope of the land, there is a full-basement level with porch and 3-light windows.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

1947 USGS Map of Greenfield

1954 USGS Map of Greenfield

ADDITIONAL PHOTOGRAPHS

2014 View of Enclosed Porch on the North Elevation (Source: TRC)

2014: View of East Elevation (Source: TRC)

2008 Low-level oblique image of Camp 7E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-034	Greenfield		TRC-15

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: End of West Mineral Road

Historic Name: Camp 16-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block piers

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Shed

Major Alterations *(with dates):*
None observed.

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
END OF WEST MINERAL ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-15

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house has concrete-block piers, a side-gable roof, German siding, and wood corner boards. The windows have wood frames and wood shutters which were closed, obscuring the window sash. A single 4-light window is on the attic level of each gable end. The central entrance on the west is set within a 3-bay, shed-roofed porch with brick piers, plain posts and balustrade. There is a secondary entrance on the east with a small shed-roofed ell.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of West and Rear Elevation (Source: TRC)

2014 View of Shed (Source: TRC)

2008 Low-level oblique image of Camp 16E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-034	Greenfield		TRC-16

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: End of West Mineral Road

Historic Name: Camp 15-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Clapboard siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None.

Major Alterations *(with dates):*
Chimney, rear ell altered.

Condition: Poor

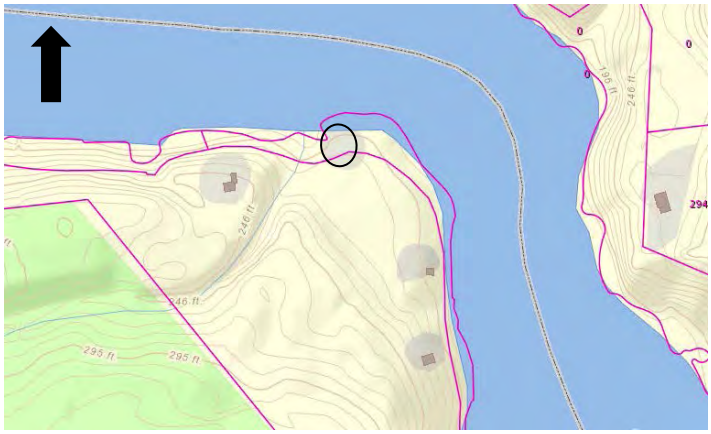
Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map



MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
END OF WEST MINERAL ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-16

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 2-story, 3-bay frame house has a concrete-block foundation, a side-gable roof, clapboard siding, and wood corner boards. The 12/2 windows have wood frames and some have wood shutters. There are louvered attic ventilators in the gable ends. The 2-story front porch is supported on unfinished cedar posts and is screened on the second story, with a wood-shingled kneewall. The 1-story, 2-bay gable-roofed rear ell has 2-pane pivot windows with wood shutters. The exterior brick chimney has a replaced metal flue. The house is in generally unaltered but deteriorated condition.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of East Elevation and Rear Ell (Source: TRC)

2014 View of West and Rear Elevations (Source: TRC)

2008 Low-level oblique image of Camp 15E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-034	Greenfield		TRC-17

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: End of West Mineral Road

Historic Name: Camp 17-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1910

Source: Owner (Thomas Bertrang)

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block piers

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Shed

Major Alterations *(with dates):*
None observed.

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
END OF WEST MINERAL ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-17

☐ Recommended for listing in the National Register of Historic Places.
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ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

According to the current owner, his great uncle, Frank Bertrang purchased the camp in 1916. The building was reportedly built by a group of wealthy men from Turners Falls around 1910. This 1-story, 3-bay frame house has concrete-block piers, a side-gable roof, German siding, and wood corner boards. The windows have wood frames and wood shutters which were closed, obscuring the window sash. A single 2-light window is on the attic level of each gable end. There is a concrete exterior-end chimney on the south elevation. A 1-story porch with shed roof is on the east elevation. It has been screened in and has a wood-shingled kneewall. A shed roofed addition is on the west elevation and is partially open.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

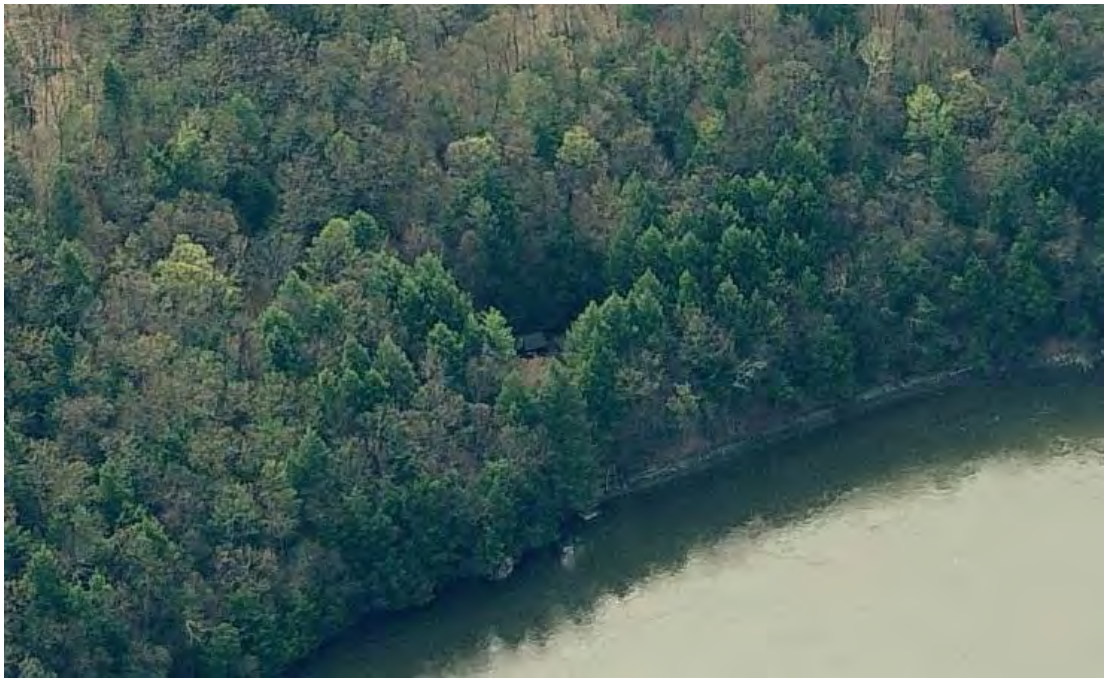
BIBLIOGRAPHY and/or REFERENCES

Bertrang, Thomas
2014 Personal Communication. May 2014.

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of South and Rear Elevations (Source: TRC)



2008 Low-level oblique image of Camp 17E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
229.0-0000-0005.0	Greenfield		TRC-18

Town/City: Gill

Place: *(neighborhood or village)*: Riverside

Address: End of Trenholm Way

Historic Name: Camp 7-W

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1946

Source: Owner (Natalie Hunter)

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
One-bay, gable-roofed frame garage with flush-board siding is located to the rear of the house.

Major Alterations *(with dates):*
Some windows and a door altered.

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
END OF TRENHOLM WAY

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-18

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ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

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This 1-story, 3-bay frame house has a concrete-block foundation, a front-gable roof with exposed rafter tails, German siding, and wood corner boards. The 1/1 sash windows have wood frames and some are paired. A 1-story, 2-bay rear section has a full-width side-gable roof and a shed-roofed section with separate entrance and both sash and casement windows is to its rear. There is a modern deck on the east. Interior brick chimneys are on the north and south.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

Hunter, Natalie
2014 Personal Communication. May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of Façade and Side Addition (Source: TRC)

2014 View of Rear Elevation (Source: TRC)

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
END OF TRENHOLM WAY

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-18

2008 Low-level oblique image of Camp 7W (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
229.0-0000-0005.0	Greenfield		TRC-19

Town/City: Gill

Place: *(neighborhood or village)*: Riverside

Address: Off Peterson Way

Historic Name: Camp 7-W

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Shed

Major Alterations *(with dates):*
Chimney, porch enclosed.

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
OFF PETERSON WAY

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-19

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house has a concrete-block foundation, a front-gable roof with exposed rafter tails, German siding, and wood cornerboards. The 1/1 sash windows have wood frames and some are paired. A 1-story, 2-bay rear section has a full-width side-gable roof and a shed-roofed section with separate entrance and both sash and casement windows is to its rear. There is a modern deck on the east. Interior brick chimneys are on the north and south.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of Façade (Source: TRC)

2014 View of Side Elevation (Source: TRC)

2008 Low-level oblique image of Camp 2W (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
219.0-0000-0006.0	Bernardston		TRC-20

Town/City: Gill

Place: *(neighborhood or village)*: Gill Center

Address: End of Grist Mill Road

Historic Name: Camp 16W

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Clapboard siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Shed

Major Alterations *(with dates):*
Porch enclosed, windows and doors altered, chimney stack altered.

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 2-story-with basement, 3-bay frame house has a concrete-block foundation, a side-gable roof, clapboard siding, and wood corner boards. The 6-pane pivot windows have wood frames. Built on a steep slope, the house has a basement entrance on the west. A full-width shed-roofed porch is cantilevered over the basement on the east. An entrance on the north end of the porch serves as the principal entrance to the house. The porch wraps around on the south and has been enclosed. An exterior-end brick chimney has had its upper portion removed.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS


2014 View of North Elevation (Source: TRC)


2014 View of South Elevation (Source: TRC)

2008 Low-level oblique image of Camp at the End of Grist Mill Road (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
219.0-0000-0003.0	Bernardston		TRC-21

Town/City: Gill

Place: *(neighborhood or village)*: Gill Center

Address: 40 Grist Mill Road

Historic Name:

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1934

Source: Franklin County Property Records

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block; wood posts w/ lattice infill

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
None observed

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
40 GRIST MILL ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.
TRC-21

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house has a partial concrete-block foundation, a front-gable roof, German siding, and wood corner boards. Built on a steep slope, the house has a shed-roofed rear section on wood posts with lattice infill. A shed-roofed porch, partially screened, is on the east and has an entrance on the north. The windows have wood shutters which were closed at time of survey, so window panes were not visible.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Franklin County Property Records

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of North Elevation (Source: TRC)

2008 Low-level oblique image of Camp at 40 Grist Mill Road (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
212.0-0000-0013.0	Bernardston		TRC-22

Town/City: Gill

Place: *(neighborhood or village)*: Gill Center

Address: 37 Vassar Way

Historic Name:

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: 1958

Source: Franklin County Property Records

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Vinyl siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Vinyl siding

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

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ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house has a concrete-block foundation, a side-gable roof with exposed rafter tails, and vinyl siding. Built on a steep slope, the house has a full basement on the rear. There are a variety of sash, sliding, fixed, and picture windows, most with vinyl-coated frames.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Franklin County Property Records

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2008 Low-level oblique image of Camp at 37 Vassar Way (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
229.0-0000-0005.0	Greenfield		TRC-23

Town/City: Gill

Place: *(neighborhood or village)*: Riverside

Address: End of Taylor Place

Historic Name: Camp 11-W

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Windows; chimneys replaced. Porch not original

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
END OF TAYLOR PLACE

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.
TRC-23

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ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This house consists of two sections: a 1-story, 3-bay frame section with a concrete-block foundation, a side-gable roof with exposed rafter tails, replaced sash windows, and German siding. Two cinder-block chimneys are at either gable end. Built on a steep slope, the house has another 2-story-with-basement section on the south with a shed roof and porch on the second story. An entrance is on the west.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of South and East Elevations (Source: TRC)

2008 Low-level oblique image of Camp 11W (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
229.0-0000-0005.0	Greenfield		TRC-24

Town/City: Gill

Place: *(neighborhood or village)*: Riverside

Address: Off of an unnamed road, south of Route 2

Historic Name: Camp 15-W

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1920

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Wood shingle siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Two sheds

Major Alterations *(with dates):*
None observed

Condition: Fair

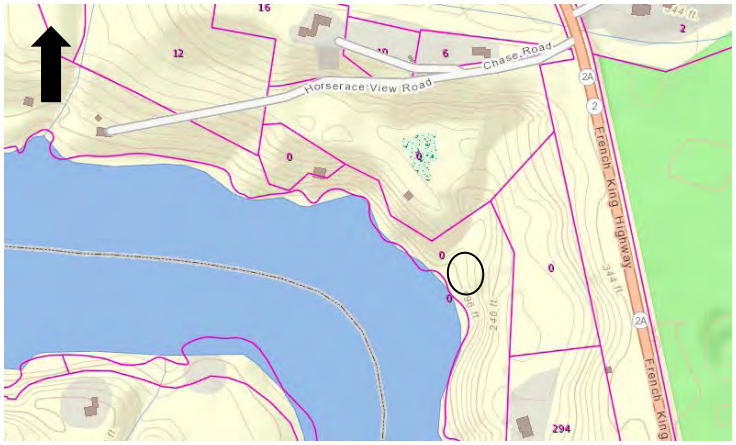
Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map



MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
OFF OF CHASE ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-24

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ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This house is built on an L plan, with the main section being a tall 1-story, 3-bay frame section with a concrete-block foundation, a side-gable roof with exposed rafter tails, steeply pitched roof, and wood shingle siding. Set at right angles is a shorter, 2-bay gable-roofed frame section with shingle siding. The entrance is set within the intersection of the two, in its own canted bay, and beneath the incised porch. The house has both 2-pane and single-pane windows, most of which appear to be modern replacements.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS


2014 View of South Elevation (Source: TRC)


2014 View of Rear Elevation (Source: TRC)

2014 View of Large Shed (Source: TRC)

2014 View of Small Shed (Source: TRC)

2008 Low-level oblique image of Camp 15W (Source: MASSDOT GIS)

FORM F – STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
5 C4 1	Orange	NFL.D	TRC-25

Photograph

Locus Map

MA GIS 2014

Town/City: Northfield

Place *(neighborhood or village):* Northfield-Mt. Hermon School campus vicinity, East Northfield, Northfield

Address or Location: Intersection of Routes 63 and 10

Name: Dam, Lake Wanamaker

Ownership: ☐ *Public* ☒ *Private*

Type of Structure *(check one):*

___ boat or ship
___ canal
___ carousel
_X_ dam
___ fort
___ gate
___ kiln
___ lighthouse
___ other *(specify)*
___ pound
___ powderhouse
___ street
___ tower
___ tunnel
___ wall
___ windmill

Date of Construction: ca.1880-1890

Source: Published sources

Architect, Engineer or Designer: Charles Lowrie and Hugh Findlay designers of Northfield Seminary campus landscape, although not known if they designed this lake.

Materials: Stone

Alterations *(with dates)*: Lake Wanamaker no longer exists and dam is in partial ruins.

Condition: Ruin

Moved: ☒ **no** ☐ **yes** **Date**:

Acreage: <1 acre

Setting: Rural area adjacent to Northfield-Mount Hermon School campus

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* March 2014

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other structures within the community.

This dam is located on a parcel at the northwest corner of the intersection of Route 63 (Northfield-Hinsdale Road) and Route 10 (Wanamaker Road) in East Northfield. The dam spans Pauchaug Brook, a tributary of the Connecticut River which is located a short distance to the west. The structure formerly functioned as the dam for the man-made Lake Wanamaker, part of the designed landscape of the late-nineteenth-century Northfield Seminary for Girls located on the east side of Wanamaker Road. In its present condition, the dam consists of a bottom layer of rough fieldstone capped by a top row of squared granite. Lake Wanamaker was drained at some unknown date and the dam is presently in ruins.

HISTORICAL NARRATIVE

Explain the history of the structure and how it relates to the development of the community.

In 1879, the evangelist Dwight Moody established a school at Northfield Village for “girls of limited means” known as the Northfield Seminary for Young Ladies. Three years later, Moody established a similar school for boys, the Mount Hermon School, just across the Connecticut River, in the neighboring town of Gill. Beginning in the summer of 1880, Moody held a national conference of Christian workers at the Northfield Seminary. “These summer conferences eventually brought world-wide reknown to the otherwise peaceful and unassuming village of Northfield” (Parson et al 2010: 14).

Drawing on his many patrons and admirers in the upper reaches of Boston, New York, and Philadelphia society, Moody was able to engage the services of several prominent architects and landscape architects of the day, including Peabody & Stearns, Delano & Aldrich, Charles Nassau Lowrie (one of the 11 founding members of the American Society of Landscape Architects), and Hugh Findlay, Professor of Landscape Architecture at Cornell University.

According to the MHC area form for Northfield Seminary written in 2006: “The designed (Northfield Seminary) campus landscape is significant as the embodiment of the vision of Dwight Moody and the founder of Wellesley College, Henry Durant, who applied the romantic landscape aesthetic to the campus as a means of creating a successful educational environment-both academic and religious. The layout created distant viewsheds of the Connecticut River, of the hills of New Hampshire and Vermont. It created in the middle ground views of undulating lawns, meadows, and, as it grew, views of trees, and shrubbery, which defined walks, shaded buildings, and provided color and texture in all seasons. It is significant for the work of landscape designers Charles Lowrie and Hugh Findlay” (Parson 2006).

Lake Wanamaker was conceived as a part of the overall landscape plan, although it is not known whether the two landscape architects Lowrie and Findlay had any direct hand in its design. An 1892 description of the school campus stated: “A very pretty little lake, called Wanamaker is included in the 'Seminary grounds and is much used for boating and skating. Many of the girls play tennis and various courts adorn the grounds.”

According to Peter Weir, Northfield school archivist: “Our information on the dam and associated lake is limited. The June 9, 1888 issue of "The Hermonite," the newspaper which served both schools in the 19th and early 20th centuries, notes the existence of the lake, the gift of John Wanamaker, the Philadelphia department store magnate. It was a swimming destination for many years, and until the advent of gas refrigeration, was a source of ice. It was abandoned in the late 1960s or perhaps early 1970s. We have many photographic images, but very little printed material gathered on the subject.” (Personal communication via e-mail May 20, 2014)

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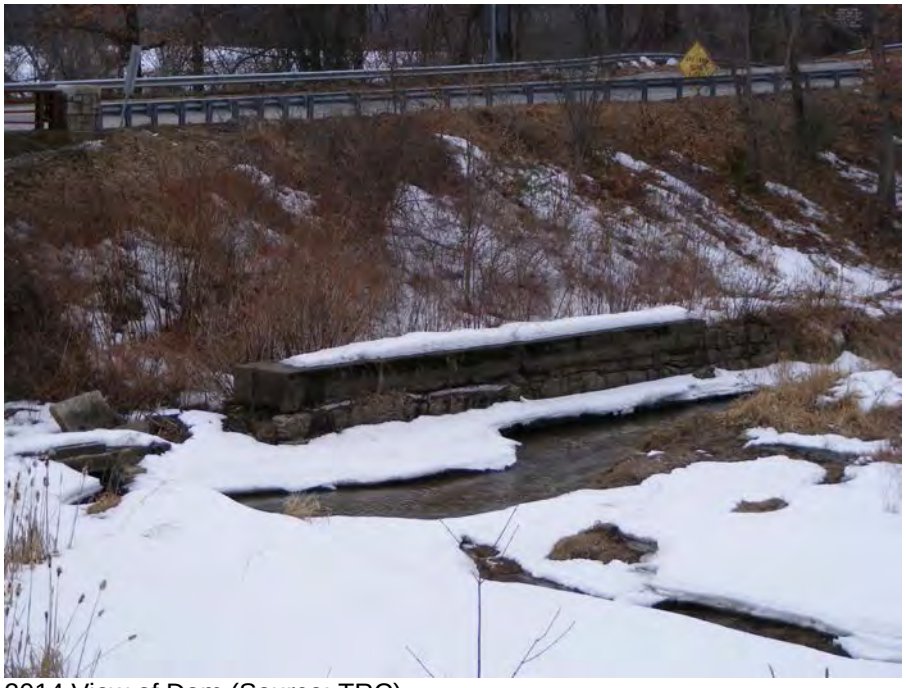
2010 *Lift Thine Eyes: The Landscape, the Buildings, the Heritage Of Northfield Mount Hermon School*

Parson, Bonnie
2006 "Northfield-Mt. Hermon School." MHC Form B, NFL-967

Personal communication with Peter Weir, Northfield School archivist via email May 20, 2014

ADDITIONAL PHOTOGRAPHS



2014 View of Dam (Source: TRC)

2008 Low-level oblique image of Former Wannamaker Lake and Dam (Source: MASSDOT GIS)

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Northfield		TRC-26

Photograph

Locus Map

MA GIS 2014

Town/City: Northfield

Place *(neighborhood or village):* East Northfield

Street/Route: Route 63 (Northfield-Hinsdale Road)

Carried over: Pauchaug Brook
(Railroad, river, brook, canal or road)

Historic/Common name: Route 63 Bridge over Pauchaug Brook

Ownership: MassDOT
(Name of state agency or municipality)

Mass. Highway bridge no.: N-22-005

Bridge type: Concrete T beam

Bridge typology code 302

Date of Construction: 1938; 1954

Source: Engineering records; Date stone

Engineer/Designer: Department of Public Works

Bridge company/Contractor: Unknown

Material (s): Metal; concrete

Alterations *(with dates):* Deck widened in 1954

Posted load limit *(if any):* Unknown

Condition: Fair

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural

UTM Reference: 18 0709080E 4732775N

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* March/2014

INVENTORY FORM F CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

TOWN: NORTHFIELD
ADDRESS: RT 63 OVER PAUCHAUG BROOK
Area(s): | Form No.: TRC-26

Superstructure:

Overall length: 49'-3" Deck width: 44' Skew: None
Main unit: No. of spans: 1 Span length: 18
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 25 ft. (approx.). Material of abutments or piers: Concrete

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This single-span reinforced-concrete T-beam bridge with metal railings and concrete abutments with wing-walls is located near the intersection of Route 63 (Northfield-Hinsdale Road) and Route 10 (Wanamaker Road) in East Northfield. The two-lane bridge spans Pauchaug Brook, a tributary of the Connecticut River which is located a short distance to the west. The approaches have metal W-railings terminating in square blocks with formstone veneer and a date plaque inscribed with the 1954 date and Massachusetts state seal. The metal bridge railings have some decorative scrollwork but are in rusted and deteriorated condition.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The bridge was designed by Mass DPW and constructed in 1938. The bridge originally carried a 30' roadway, which was widened to 44' in 1954. This extension was also designed by Mass DPW. The original open concrete parapets were removed and replaced with the existing steel "Type B" railings with stone-faced concrete endposts. It adjoins the dam of Lake Wanamaker, a man-made lake created as part of the Northfield Seminary landscape plan but drained at an unknown date. The bridge is an undistinguished example of this common bridge type from the mid-20th century.

BIBLIOGRAPHY and/or REFERENCES

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2014 Personal communication with Mass DOT Architectural Historian via email May 2014

Parsons, Bonnie
2006 "Northfield-Mt. Hermon School." MHC Form B, NFL-967

Parsons, Bonnie; W.S. Saunders, C. Doty, and P. Weis
2010 *Lift Thine Eyes: The Landscape, the Buildings, the Heritage Of Northfield Mount Hermon School*

ADDITIONAL PHOTOGRAPHS

2014 View of Date Plaque (Source: TRC)

2014 View of Railing Detail (Source: TRC)

2014 View of Bridge (Source: TRC)

2008 Low-level oblique image of Route 63 Bridge (Source: MASSDOT GIS)

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Greenfield		TRC-38

Photograph

Locus Map

MA GIS 2014

Town/City: Montague-Greenfield

Place *(neighborhood or village):* Turners Falls

Street/Route: Turners Falls Road (Old Route 2A)

Carried over: Connecticut River
(Railroad, river, brook, canal or road)

Historic/Common name: White Bridge/Greenfield-Montague Bridge

Ownership: Mass DOT
(Name of state agency or municipality)

Mass. Highway bridge no.: G-12-002/M-28-002

Bridge type: Metal stringer, multi-beam girder

Bridge typology code 302

Date of Construction: 1936

Source: Published sources; MassDOT

Engineer/Designer: Unknown

Bridge company/Contractor: T. Stuart & Son, Boston

Material (s): Metal, with reinforced concrete piers

Alterations *(with dates):* Built as a temporary bridge in 1936; deck replaced in 1946. Railings replaced unknown date.

Posted load limit *(if any):* 51.5 tons

Condition: Good

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/industrial

UTM Reference: 18 0700033E 4720298N

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp. for FirstLight

Date (*month / year):* March 2014

INVENTORY FORM F CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
TURNERS FALLS ROAD OVER CT RIVER

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.
TRC-38

Superstructure:

Overall length: 445 ft. Deck width: 27 ft. Skew: None
Main unit: No. of spans: 6 Span length: 75 ft.
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: Approx. 50 feet Material of abutments or piers: Reinforced Concrete

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This six-span, metal stringer, multi-beam highway bridge carries two-lane Turners Falls Road (formerly Route 2A) over the Connecticut River between Greenfield and the village of Turners Falls in Montague. At its eastern end, the road continues over the Turners Falls Power Canal via the Warren thru-truss Fifth Street Bridge. The bridge has a reinforced concrete deck supported on reinforced concrete piers, with reinforced concrete bridge seats added on top of earlier mortared rubble stone abutments. The bridge has a maximum span of 75 feet, a total length of 446 feet, and the deck measures 27 feet in width, from edge to edge. It was designed in 1936 as a temporary replacement bridge for the White Bridge, destroyed earlier that year I n a flood. Plans indicate that the replacement bridge was designed by Mass. DPW, but do not indicate the name of the particular engineer involved. The temporary bridge was originally constructed with a timber deck, and was built by T. Stuart & Son. When the bridge was made permanent in 1946, the timber deck was replaced with the present reinforced concrete deck by W.W. Wyman Inc. (Jergensen, 2014).

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

After the John Russell Cutlery and Montague Mill factories were built along the Turners Falls power canal in the late 1860s, demand grew for erecting a bridge for the convenience of workers traveling between the factories and Greenfield (Jenkins 1980: 8.4). On November 16, 1871 work started on the White Bridge (also known as the Lower Suspension Bridge) across the Connecticut River, and it was completed by the contractor Charles MacDonald the following spring. Costing $36,000 the White Bridge was a 445-foot-long, stone-and-brick suspension bridge with steel cables (Montague Bicentennial Committee 1954: 110; Vogt 1877).

The original White bridge was destroyed by the Flood of 1936. Its replacement was made a priority of the Massachusetts DOT, as several other bridges across the Connecticut River had also been destroyed. The new bridge, built by T. Stuart & Son of Boston, cost $150,000. The Stuart Bridge Company was responsible for several Boston area bridges during this period, the best-known being the 1936-1937 Chelsea Street Bridge in Boston, “More than 3,500 tons of concrete were used on the bridge and its five abutments, piers were 50 feet high, and the structure is 450 feet long and 20 feet wide” (Montague Bicentennial Committee 1954: 110).

BIBLIOGRAPHY and/or REFERENCES

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1877 "Turners Falls, Mass." (Bird's eye view). C.H. Vogt & Co., Milwaukee, WI.

Great Falls Discovery Center
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Gregory, Ed (Turners Falls historian). Personal communication, May 3, 2014.

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Jergensen, Kurt
2014 Personal communication with Mass DOT Architectural Historian via email May 2014

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

ADDITIONAL PHOTOGRAPHS

2008 Low-level oblique image of Greenfield-Montague Bridge (Source: MASSDOT GIS)

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION

Describe architectural, structural and landscape features and evaluate in terms of other areas within the community.

The Turners Falls Historic District is located on a knoll along the eastern bank of Connecticut River near the falls from which it gains its name. The historic district is approximately 130 acres and according to the 1980 National Register nomination form contained 285 properties: 266 contributing resources and 19 non-contributing resources. The boundaries are roughly defined as follows: On the north and west by the Connecticut River (although the Turners Fall-Gill Bridge (MNT.920/GIL.901) which spans the Connecticut River is a contributing resource); on the east along L Street, and on the south by Ninth Street. Boundaries were selected to include as much of the intact planned community as possible. The western and northern boundaries reflect the course of the river and were drawn to include mill buildings, bridges and the power canal while excluding vacant lots and new construction. The eastern boundary reflects an abrupt change in elevation and the original extent of the plan. The southern boundary marks the end of dense construction.

The Turners Falls Historic District, which was still largely intact during the 2014 survey by TRC, consists of a cohesive grouping of industrial, residential, commercial, institutional & religious structures built mostly between 1866 and the early 1900s in accordance with Col. Alvah Crocker's original concept of a planned industrial community. The industrial and commercial buildings are usually of brick construction. Residential structures represent a wide variety of single and multi-family configurations. In each building type, there are many examples of late nineteenth century vernacular design.

The district was developed according to a plan laid out in 1867 by Crocker. Turners Falls is shown in an 1877 birds eye view as a planned community superimposed on the natural landscape and bisected by the power canal. A basic component of the plan was to develop mill sites along the river which would obtain water to power their machinery from the new power canal and dam system. The rest of the village was laid out in a horizontal grid pattern with the main avenues labelled alphabetically and the cross streets numerically. Avenue A was designed as a 100-foot wide tree-lined street for commercial and governmental buildings while other streets are 60-feet wide for the building of single- and multi-family residences.

For individual building descriptions, see the 1980 Turners Falls Historic District Nomination.

HISTORICAL NARRATIVE

Explain historical development of the area. Discuss how this relates to the historical development of the community.

The Turners Falls Historic District gains its significance as a rare surviving example of a planned industrial community of the 1860s-1870s. It was laid out and developed with the distinct purpose of capitalizing on the abundant water supply and the technological developments which made it possible to harness the Connecticut River's energy to power the mills. The town reached the peak of its economic prosperity in the first quarter of the 20th century and gained the nickname "Home of the White Coal (Jenkins 1980: 8.1)."

Turners Falls was developed in the 1870s as a planned industrial community along the lines of Lowell or Holyoke under the aegis of the Turners Falls Company and its founder Col. Alvah Crocker. Crocker and his business associates purchased the rights of the old Proprietors of the Upper Locks and Canals at Turners Falls and embarked on converting the old navigational canal into a power canal for the use of mills and factories that would locate to Turners Falls. By the late 1870s several significant industries, chief among them the John Russell Cutlery Company had built plants along the

power canal at its northern end. Soon joined by the Montague, Turners Falls, and Keith paper mills, Turners Falls' factories provided employment for hundreds of local residents, many of whom lived in company-built housing in the village (Great Falls Discovery Center 1996: 6).

By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydro-electric market (Jenkins 1980: 8.3). Beginning in 1903, the company widened the power canal and erected the east half of the present gate house appended to the east gable end of the 1866 gate house. In 1906, the company completed Power Station No. 1, located some distance south of the existing dam. In 1908, Phillip Cabot of Boston assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new direction. Cabot's ambitious plans called for the construction of a second powerhouse, named Cabot Station in his honor, replacing and raising the original Crocker-built dam, and extending and widening the power canal. Work began on dam construction in 1912 and was completed in 1915 along with the Cabot Station in 1917-1918 and the newly improved power canal.

The late 19th century and early 20th century also saw growth and change in the downtown area, as commercial enterprises, as well as entertainment and social institutions developed. Commercial buildings were erected by individual businessmen during the 1870's and 1880's, and consisted largely of three- and four-story brick buildings with storefront entrances at grade and professional offices and tradesmen housed on the upper floors. From 1895 to 1934 an Electric Trolley ran up Avenue A on its route from Greenfield to Montague and Millers Falls. During the construction of the expanded dam and power canal the village supported four hotels and direct rail service from New York City (Great Falls Discovery Center 1996: 6).

Turners Falls experienced a decline beginning in the 1930s, as several major mills and factories closed or relocated elsewhere. Although a few of the historic factories are still partially operated, they no longer provide much employment for Turners Falls residents, most of who work elsewhere. As a result, there has been little new construction in the village since the 1940s and the area has preserved most of its appearance intact.

For a more detailed developmental history, see the 1980 Turners Falls Historic District Nomination.

BIBLIOGRAPHY and/or REFERENCES

Arts Council OF Franklin County
1978 "Cabot Station" MHC Survey Form MNT.449. Boston MA.

Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

C.H. Vogt & Co.
1877 "Turners Falls, Mass." (Bird's eye view). C.H. Vogt & Co., Milwaukee, WI.

F.W. Beers & Co.
1871 *Franklin County, Massachusetts.*

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

ADDITIONAL PHOTOGRAPHS

1877 Bird's Eye View (Source: C.H. Vogt & Co.)

Ca. 1900 View of Turners Falls (Source: Montague Bicentennial Committee)

2014 View of Power Canal and Industrial Buildings (Source: TRC)

2008 Low-level oblique image of Turners Falls Historic District (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☐ Listed Historic District ☐ Potential historic district

Criteria: ☒ **A** ☒ **B** ☒ **C** ☒ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

The Turners Falls Historic District was listed in the NRHP in 1982 under Criteria A (Engineering, Commerce, Community Planning and Development, Industry, and Social History); B (Colonel Alvah Crocker); C (Architecture); and D (Historic - Non-Aboriginal). The Period of Significance is 1800-1932.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
03-0-086	Greenfield	G, H	MNT.129

Photograph

Locus Map

Town/City: Montague

Place: *(neighborhood or village)*:
Turners Falls

Address: West Side of Turners Falls Power Canal

Historic Name: Turners Falls Paper Co. Building

Uses: Present: Commercial

Original: Industrial

Date of Construction: ca.1880

Source: Sanborn Maps, Written sources

Style/Form: Vernacular Italianate/Industrial

Architect/Builder: Turners Falls Paper Company

Exterior Material:
Foundation: Stone

Wall/Trim: Brick (8:1 Common Bond)

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Windows and doors, addition, removal of most of the mill complex and mill machinery

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/industrial

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE
ADDRESS W. Side of Power Canal at 6th Street.

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) G,H
Form No. MNT.129

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Once part of a larger complex, the extant remains of the ca. 1884 Turners Falls Paper Company complex consist of a 1-story 8:1 common bond brick structure that once housed the office, shipping room, and machine room. Set on a stone foundation, the main block of the building which faces the power canal has an asphalt-shingled, side-gable roof with a corbelled brick cornice, corbelled dentils, and returns. A 1-story wing of like construction is attached to the west elevation and originally served as the office. The original doors have arched lintels and the 4/4 sash windows have stone stills and segmental arched lintels with corbelled vousoirs. Alterations to the building include a modern roll-up door on the east elevation, an original window opening bricked-in and modern windows added on the east elevation, and a 1-story addition added to the north elevation.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

The Turners Falls Paper Company was incorporated in 1879 with a capital of $120,000. According to an 1892 description, "The main building is divided into a machine room, engine room, and pulp mill. There is an addition for the beating engines, and another building, just completed to be used for finishing and repairs. The mill equipment is very complete and includes two 1200-lb washers, two 500-pound beating engines, and one 84-inch Foudronier paper machine. These require the use of 1000-horse water power. Employment is given to upwards of seventy hands and the output is some 16,000 pounds of newspaper per day" (Greenfield Gazette 1892: 3). The plant is shown on the 1884, 1889, and 1895 Sanborn maps of Turners Falls, after 1902 it is shown on these insurance maps as being owned by the International Paper Company.

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Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

Sanborn Map Company

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February 1889 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
March 1895 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Sept 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Wade, Warner & Company
1891 "Picturesque Franklin." Northampton, MA.

ADDITIONAL PHOTOGRAPHS

MILLS OF THE TURNERS FALLS PAPER COMPANY.

1891 Image (Source: Wade, Warner & Company)

2014 View of East and South Elevations (Source: TRC)

2014 View of East Elevation Looking Across Turners Falls Power Canal (Source: TRC)

2012 Low-level oblique image of former Turners Falls Paper Company Buildings (Source: Bing.com)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by_____
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District
The Turners Falls Paper Company Building is a contributing resource in the NRHP-listed Turners Falls Historic District, listed under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

Integrity: As the most of the complex has been demolished and most of the windows have been boarded over, the building no longer retains the integrity of design.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
03-0-002	Greenfield	MNT.G, MNT.H	MNT.130

Photograph

Locus Map

Town/City: Montague

Place: *(neighborhood or village)*:
Turners Falls

Address: West Side of Turners Falls Power Canal, north of 5th Street

Historic Name: Marshall Paper Co. , Esleeck Paper Co.

Uses: Present: Industrial

Original: Industrial

Date of Construction: 1896

Source: Sanborn Maps, Written sources

Style/Form: Industrial

Architect/Builder: Marshall Paper Company

Exterior Material:
Foundation: Stone

Wall/Trim: Brick

Roof: Asphalt

Outbuildings/Secondary Structures:
Boiler Stack

Major Alterations *(with dates):*
Windows and doors, addition on south end

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/industrial

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE

ADDRESS W. Side of Power Canal at 5th Street.

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s)	Form No.
MNT.G,MNT.H	MNT.130

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Originally used as the finishing and stock dry rooms, the dominant mass of the 1896 brick industrial complex is a 4-story, flat-roofed building with a dentilled brick cornice. The windows are rhythmically spaced, 6/6 and 9/9 sash with segmental arch lintels and stone sills. There are groupings of 2- and 3-story brick buildings attached to the finishing and stock dry room block and serves as the bleach house, engine rooms, and machine room. A brick boiler stack which reads "E.M.P.C." is located within the complex. Added between 1914 and 1940, there is a 3-story brick building that features identical 6/6 and 9/9 sash windows with segmental arch lintels and stone sills. Added in ca. 2006, a 3-story brick and concrete building is set within this later addition and the finishing and stock dry rooms block.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

The predecessor of the Esleeck Paper Company was the Marshall Paper Company, founded in 1895 by Frank W. Marshall, inventor of the Marshall Refining Engine. Marshall built his enterprise on the Connecticut River bank and west of the power canal, between the Turners Falls and Keith Paper Companies' manufacturing plants (Great Falls Discovery Center 1996: 4).

Marshall's company was in business only until 1899, when bookkeeper Augustine W. Esleeck and Alfred T. Judd of the Valley Paper Company of Holyoke founded the Monadnock Paper Company in the old Marshall Company Building (Montague Bicentennial Committee 1954: 125). The firm's name was changed to Esleeck Paper Company in 1901. The factory complex is shown on the 1902 Sanborn Map of Turners Falls, identified still as the Marshall Paper Company (Sanborn Map Co. 1902: Sheet 3). A finishing building was added on the south end by 1909 (Sanborn Map Co. 1909: Sheet 3).

From the beginning, the company specialized in the manufacture of high-grade onionskin and manifold papers. By 1912, the company was recognized as the leading manufacturer of this paper type (Great Falls Discovery Center 1996: 4). After more than 100 years of continuous operation, the Esleeck Company was purchased by Southworth Company in 2006. Southworth sold the plant in 2012 and closed its operations soon afterwards, although the plant is still in use for paper production.

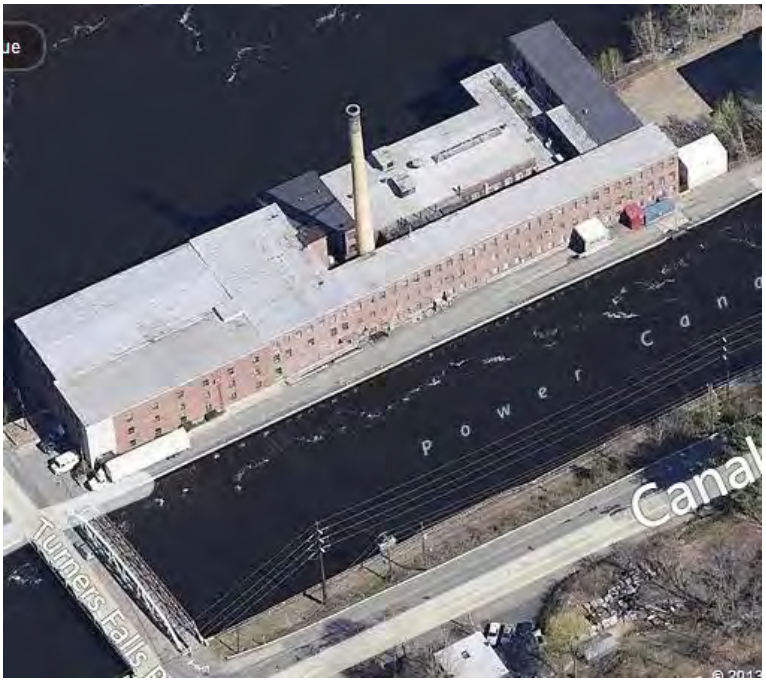
BIBLIOGRAPHY and/or REFERENCES

Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

Sanborn Map Company
September 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
December 1909" "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

2014 View of East and South Elevations (Source: TRC)



2012 Low-level oblique image of Esleeck Paper Company (Bing Maps)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District
The Esleeck Paper Company Building is a contributing resource in the NRHP-listed Turners Falls Historic District, listed in 1983 under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-01	Greenfield	MNT.G, MNT.H	MNT.131

Photograph

Locus Map

Town/City: Montague

Place: *(neighborhood or village)*:
Turners Falls

Address: West Side of Turners Falls Power Canal

Historic Name: Keith Paper Company

Uses: Present: Vacant

Original: Industrial

Date of Construction: 1877; 1893-1896

Source: Sanborn Maps, Written sources

Style/Form: Industrial

Architect/Builder: George F. Hardy

Exterior Material:
Foundation: Stone

Wall/Trim: Brick

Roof: Asphalt, Metal

Outbuildings/Secondary Structures:
Boiler Stack, Connected Paper Mill Complex

Major Alterations *(with dates):*
Windows and doors, additions and demolitions

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/Industrial

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE

ADDRESS W. Side of Power Canal

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s)	Form No.
MNT.G, MNT.H	MNT.131

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

The Keith Paper Mill complex is a grouping of connected brick industrial buildings dating from 1877 and designed by George F. Hardy. The main buildings, sited directly along the Connecticut River, are 4 stories in height and have asphalt-shingled gable roofs with dentilled brick cornices. The windows are 9/9 sash with segmental arch lintels and stone sills. Two square towers with flat roofs are located toward the east and west ends of these three buildings. Originally housing the bleachery, a 3-story brick building with front-gable roof projects from the center of the buildings along the river. The buildings have similar architectural features including a dentilled cornice. The gable dormers have been removed. Several 1- and 2-story brick buildings as well as a brick boiler stack reading “K. P. Co.” are also located on the southern portion of the parcel. The southern-most building on the site was constructed to store finished products and rag storage. The 4-story building has brick pilasters with movable glass panels running in between and can cover the segmental arched windows.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

John Keith, founder of the company and mill that bore his name, was a paper salesman from Worcester, MA who later was affiliated with the Valley Paper Company of Holyoke. Lacking capital of his own, he obtained $250,000 in backing for a paper mill to be built in Turners Falls from by Turners Falls founder and chief driving force, Colonel Alvah Crocker. Keith became first president and treasurer of the firm on August 29, 1871 (Montague Bicentennial Committee 1954: 125).

After the John Russell Cutlery Company (1868) and Montague Paper Mill (1870), the Keith Mill was the third major industrial complex built along the power canal, where it purchased power from Crocker’s Turners Falls Company. The original mill building was destroyed by fire on November 7, 1877, but was reconstructed soon after. “Spring water so essential to the manufacture of fine paper is brought to the mill through a 12-inch pipe from a spring at Deep Hole, two miles up the river” (Greenfield Gazette 1892: 4). In 1893-1896 the plant was expanded to house two additional machines, nearly doubling output (Montague Bicentennial Committee 1954: 125). The Keith Block, a block-long row of brick apartments on Canal Street and joined to the paper mill by a metal pedestrian bridge over the power canal, was built by the Keith Paper Company to house its workers. Rent was deducted from workers’ pay and the Keith Block housed both families and single workers (Jenkins 1980: 8.4).

In 1916, the original power plant, seven flumes, and water wheels were removed and replaced with a more efficient hydroelectric plant. Further modernization was accomplished in 1935 and again in 1953, when several new machines were installed. The Keith Paper Company was known for its high-grade ledger, index, and bond papers and in the 1940s provided employment for about 200 people. On November 4, 1953 the company was sold by the last Keith Paper Company president to the Strathmore Paper Company of West Springfield, MA (Montague Bicentennial Committee 1954: 125). The plant closed in 1994 and the building is currently vacant.

BIBLIOGRAPHY and/or REFERENCES

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

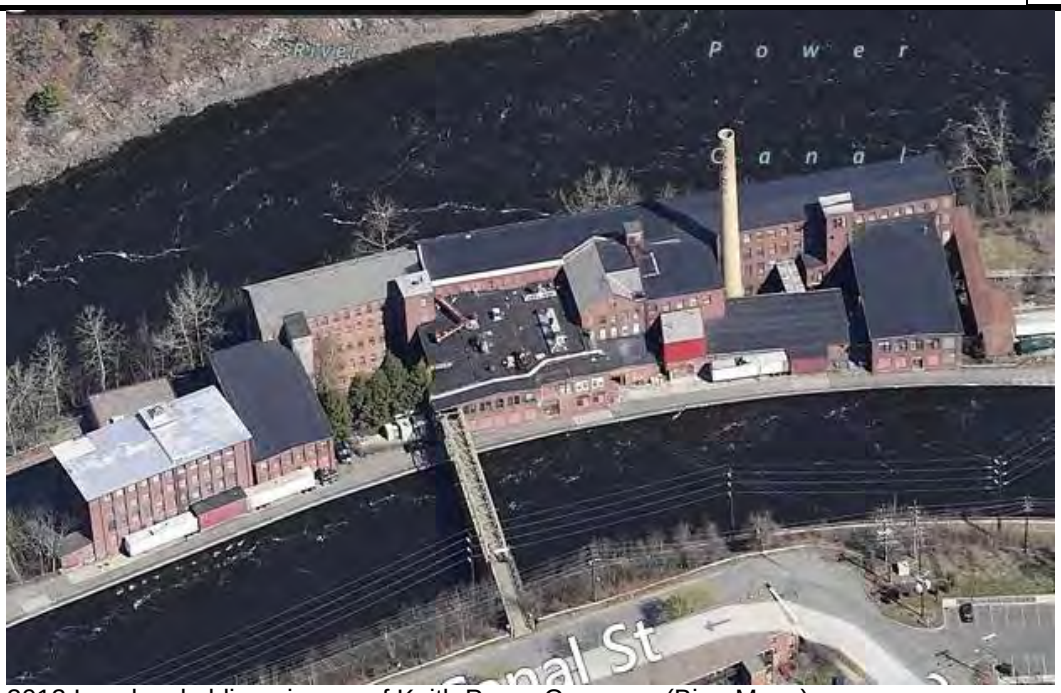
Sanborn Map Company
September 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
December 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Wade, Warner & Company
1891 "Picturesque Franklin." Northampton, MA.

Ca. 1891 View of Keith Paper Mill (Source: Wade, Warner & Company).

2014 View of South Elevations (Source: TRC)


2014 View of Southern Storage Building (Source: TRC)



2012 Low-level oblique image of Keith Paper Company (Bing Maps)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Keith Paper Company Complex is a contributing resource in the NRHP-listed Turners Falls Historic District listed in the National Register in 1983 under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
04-0-0001	Greenfield	MNT.G, MNT.H	MNT.132

Town/City: Montague

Place: *(neighborhood or village)*:
Turners Falls

Address: 2 Avenue A

Historic Name: Montague Paper Company: Carpentry shop and administrative offices

Uses: Present: Great Falls Discovery Museum

Original: Industrial

Date of Construction: 1902-1909

Source: Sanborn Maps

Style/Form: Industrial

Architect/Builder: Montague Paper Company

Exterior Material:
Foundation: Stone

Wall/Trim: Weatherboard

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Sporting goods store; converted to Great Falls Discovery Museum in 1995

Condition: Excellent

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/industrial

Photograph

Locus Map

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE
ADDRESS 2 Avenue A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): MNT.G, MNT.H
Form No.: MNT.132

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Set on a stone foundation, the former Montague Paper Company carpentry shop and administrative offices buildings are of wood-frame construction clad with weatherboard. Originally two separate buildings, by 1940, the buildings were combined to form a 1-story building with an L-shaped plan. The smaller of the two buildings served as the offices and is 5 bays in width and 3 bays deep. The windows are paired 2/2 double-hung sash on the façade and single 2/2 double-hung sash on the side elevations all with lipped lintels. The windows in the gables are large 9/6 sash with segmental-arched lintels. Off-center, double-leaf paneled doors are present on the façade and west elevation. The long ell moving eastward from the small block features 12/12 sash windows and both single- and double-leaf doors. A modern addition connects this building to the former machine shop (MNT.133). The two buildings now comprise the Great Falls Discovery Museum.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

These buildings located on Avenue A in Turners Falls are the only two still standing of the vast 15-building Montague Paper (later International Paper) Company complex built at the head of the Turners Falls Power Canal. Water from the canal at one time supplied 3,000 horsepower for heating, steaming, and drying the company's primary product, newsprint. The company was started in 1868 by Colonel Alvah Crocker, founder of Turners Falls and its driving force for many years (Great Falls Discovery Center 1996: 12).

According to an 1879 description: "In 1871, a three-story brick mill, 128 by 55 feet, with a ground area of 15,000 square feet and floor space of 43,700 feet, was erected just west of the Russell Company's works, and the work of manufacturing news-printing paper begun. In 1872 the manufacture of book-paper was inaugurated, and to the production of these two kinds of paper the mill is still devoted. In 1874 the works were enlarged by the addition of a wing three stories in height, and measuring 100 by 55 feet, and in 1875 the company purchased the works of the Turner's Falls Pulp Company, directly east, and consisting of a two-story brick edifice, measuring 200 by 55 feet. The latter was soon afterward enlarged, so that now, in 1879, the company has a front on the river of 560 feet" (Everts 1879).

An 1892 description provided an update on buildings at the mill site: "The buildings which have been erected from time to time since then have been constructed of brick in the most substantial manner and have a frontage along the river of nearly 900 feet" (Greenfield Gazette 1892: 2).

The brick gable-roofed building served as the company machine shop and first appears on the 1884 Sanborn map, while the attached wooden buildings were built sometime between 1902 and 1909 to serve as the company carpentry shop and administrative offices (Sanborn Map Company, 1889, 1902, 1909)(Great Falls Discovery Center 1996: 12). In 1994-1995, the two buildings were converted for use as the Great Falls Discovery Museum.

BIBLIOGRAPHY and/or REFERENCES

Everts, Louis H.
1879 *History of the Connecticut Valley in Massachusetts*, Volume II." Louis H. Everts, publisher, Philadelphia PA.

Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

Greenfield Gazette
1892 "Centennial Edition." Greenfield Gazette, publishers, Greenfield, MA.

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September 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
December 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

MILLS OF THE MONTAGUE PAPER COMPANY, TURNERS FALLS.

Pre 1912 historic view of Montague Paper Company (Source: Great Falls Discover Center)

2014 View of South and West Elevations (Source: TRC)

2014 View of East Elevation (Source: TRC)

2012 Low-level oblique image of former Montague Paper Company Buildings (Source: Bing.com)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Montague Paper Company building (now the Great Falls Discovery Center Museum) is a contributing resource in the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
04-0-0001	Greenfield	MNT.G, MNT.H	MNT.133

Photograph

Locus Map

Town/City: Montague

Place: *(neighborhood or village)*:
Turners Falls

Address: 2 Avenue A

Historic Name: Montague Paper Company: Machine Shop

Uses: Present: Great Falls Discovery Museum

Original: Industrial

Date of Construction: ca. 1880

Source: Sanborn Maps

Style/Form: Vernacular Italianate/Industrial

Architect/Builder: Montague Paper Company

Exterior Material:
Foundation: Stone

Wall/Trim: Brick (Stretcher Bond)

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Sporting goods store; Converted to Great Falls Discovery Museum in 1994-1995

Condition: Excellent

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/industrial

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year*): March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE
ADDRESS 2 Avenue A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): MNT.G, MNT.H
Form No.: MNT.133

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Set on a stone foundation, the 1-story, 3-bay former Montague Paper Company machine shop and blacksmith building has stretcher-bond brick exterior walls. The asphalt-shingled, front-gable roof features a corbelled brick, dentilled cornice with pedimented gable ends and a round window in the gable end. The façade has a central double-leaf door with paneled transom. The side elevation has an arched, double-leaf door with strap hinges. The rear elevation has a replacement, single-leaf door with a segmental arched lintel. Both doors on the side and rear elevations are no longer used. The windows consist of 9/9 sash windows with stone lintels and segmental arched transoms with stone keystones and voussoirs. The windows are set within slightly recessed bays topped by brick dentils. A 1-story ell, added 1889-1895, is attached to the rear of the side elevation and is of consistent materials and windows as the main block. Originally serving as an engine room and later as a blacksmith shop, a modern addition off the ell connects this building to the former carpentry shop and administrative offices (MNT.132). Used as a sporting goods store in the 1970s and 1980s, the two buildings were converted for use as the Great falls Discovery center Museum in 1994-1995.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

These buildings located on Avenue A in Turners Falls are the only two still standing of the vast 15-building Montague Paper (later International Paper) Company complex built at the head of the Turners Falls Power Canal. Water from the canal at one time supplied 3,000 horsepower for heating, steaming, and drying the company's primary product, newsprint. The company was started in 1868 by Colonel Alvah Crocker, founder of Turners Falls and its driving force for many years (Great Falls Discovery Center 1996: 12).

According to an 1879 description: "In 1871, a three-story brick mill, 128 by 55 feet, with a ground area of 15,000 square feet and floor space of 43,700 feet, was erected just west of the Russell Company's works, and the work of manufacturing news-printing paper begun. In 1872 the manufacture of book-paper was inaugurated, and to the production of these two kinds of paper the mill is still devoted. In 1874 the works were enlarged by the addition of a wing three stories in height, and measuring 100 by 55 feet, and in 1875 the company purchased the works of the Turner's Falls Pulp Company, directly east, and consisting of a two-story brick edifice, measuring 200 by 55 feet. The latter was soon afterward enlarged, so that now, in 1879, the company has a front on the river of 560 feet" (Everts 1879).

An 1892 description provided an update on buildings at the mill site: "The buildings which have been erected from time to time since then have been constructed of brick in the most substantial manner and have a frontage along the river of nearly 900 feet" (Greenfield Gazette 1892: 2).

The brick gable-roofed building served as the company machine shop and first appears on the 1884 Sanborn map, while the attached wooden buildings were built sometime between 1902 and 1909 to serve as the company carpentry shop and administrative offices (Sanborn Map Company, 1889, 1902, 1909) (Great Falls Discovery Center 1996: 12).

BIBLIOGRAPHY and/or REFERENCES

Everts, Louis H.
1879 *History of the Connecticut Valley in Massachusetts*, Volume II." Louis H. Everts, publisher, Philadelphia PA.

Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

Greenfield Gazette
1892 "Centennial Edition." Greenfield Gazette, publishers, Greenfield, MA.

Sanborn Map Company
September 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
December 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

MILLS OF THE MONTAGUE PAPER COMPANY, TURNERS FALLS.

Pre 1912 historic view of Montague Paper Company (Source: Great Falls Discovery Center)

2014 View of South and East Elevations (Source: TRC)

2014 View of East Elevation (Source: TRC)

INVENTORY FORM B CONTINUATION SHEET

TOWN: MONTAGUE
ADDRESS 2 Avenue A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): MNT.G, MNT.H
Form No.: MNT.133

2012 Low-level oblique image of former Montague Paper Company Buildings (Source: Bing.com)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Montague Paper Company Building (converted for use as the Great Falls Discovery Center Museum) is a contributing resource in the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

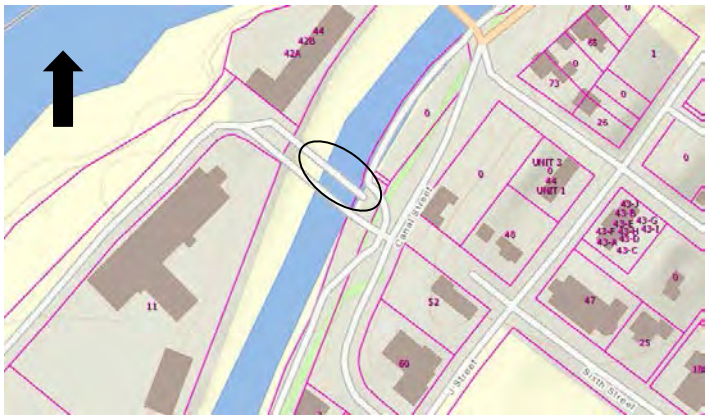
FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.G	MNT.909

Photograph

Locus Map



MA GIS 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Sixth Street

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Sixth Street Bridge over Power Canal

Ownership: Town of Montague
(Name of state agency or municipality)

Mass. Highway bridge no.: M-28-16

Bridge type: Warren thru-truss

Bridge typology code 310

Date of Construction: 1912

Source: Date Plaque; Engineering Plans

Engineer/Designer: Eastern Bridge & Structural Company

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Steel, Concrete

Alterations *(with dates):* Closed for traffic

Posted load limit *(if any):* None-closed for traffic

Condition: Poor

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban (Industrial area of Turners Falls)

UTM Reference: 18 0700050E 4720117N

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* March 2014

Superstructure:

Overall length: 139 ft. Deck width: 20.5 ft. Skew: 16 degrees
Main unit: No. of spans: 1 Span length: 136 ft.
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 4 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Sixth Street Bridge was constructed across the Turners Falls Power Canal in 1912. It is a 136'-long, single-span, riveted, double-intersection Warren thru-truss bridge, designed by the Eastern Bridge & Structural Company of Worcester MA, and erected by a crew of workers from the Turners Falls Power Company. It is the sixth oldest of the seven double-intersection Warren thru-trusses in the Massachusetts bridge inventory. It is technologically notable for the use of inclined end posts of different angles of inclination to absorb the 16 degree skew. The bridge is in poor condition, is closed to traffic, and a temporary "Bailey" type bridge has been built immediately to its south.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Sixth Street Bridge was one of several built at the expense of the Turners Falls Power Company to provide vehicular and pedestrian access to the paper mills located across the company's power canal from the rest of town. The Eastern Bridge & Structural Company also built footbridges at Fifth Street (MNT.924) and to the Keith's Mill (MNT.925).

Among other enterprises, the Turners Falls Power & Electric Company built and maintained the Turners Falls Power Canal and dam, as well as financing and building several vehicular and pedestrian bridges crossing the canal between the village and the mills. The construction of bridges over the canal at Sixth Street and Eleventh Street was crucial to the development of the village, as any proposed southern extension of the power canal would, in effect, create an "island" in the south-center of Turners Falls (Bennett 1990: 4).

The section of town known as the "South End" or "the Patch" would consequently be bordered on all sides with water--the Connecticut River on the north and west, and the power canal on the east and south--and connected to the rest of the village by only a small strip of land to the north. While a substantial steel suspension bridge already spanned the river at Fifth Street, and there were several small bridges crossing the upper part of the canal, the lower section of the canal would need to be bridged between the center of the village and the south end at Sixth Street and Eleventh Street (Bennett 1990: 4).

BIBLIOGRAPHY and/or REFERENCES

Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Turners Falls Power Company
1916 Plan and Profile, 5th and 6th Bridges, Raising of Upper Canal, Turners Falls Power Company, Engineering Department-Turners Falls Office, January 2, 1919.
1918 General Layout Plan—Raising Canal Walls. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. December 20, 1918.

ADDITIONAL PHOTOGRAPHS

June 27, 1915 Photo of 6th Street Bridge (Source: FirstLight Photo Archives)

2014 View of East Approach and Downstream Face (Source: TRC)

2012 Low-level oblique image of 6th Street Bridge over Power Canal (Bridge is the abandoned on the left) (Source: Bing.com)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☒ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Sixth Street Bridge over the Turners falls Power Canal is a contributing resource in the NRHP-listed Turners Falls Historic District, listed under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)

The Sixth Street Bridge is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A

The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during

Continuation sheet 4

the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Greenfield	MNT.H	MNT.910

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0700118E 4720204N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Fifth Street

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Fifth Street Bridge over Power Canal

Ownership: Town of Montague
(Name of state agency or municipality)

Mass. Highway bridge no.: M-28-15

Bridge type: Warren Pony Truss

Bridge typology code 310

Date of Construction: 1954

Source: MASS DOT Bridge Files

Engineer/Designer: C.J. Cray (Boston)

Bridge company/Contractor: Warner Brothers Co.

Material (s): Steel, Concrete

Alterations *(with dates):* Rehabilitated (1992)

Posted load limit *(if any):* Not Known

Condition: Fair

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban (Industrial area of Turners Falls)

Superstructure:

Overall length: 136 ft. Deck width: 28.4 ft. Skew: None

Main unit: No. of spans: 1 Span length: 134 ft.

Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 4 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Fifth Street Bridge was constructed across the Turners Falls power canal in 1954 and replaced an earlier bridge on the site. Immediately adjacent to the Fifth Street pedestrian bridge, it is a 136'-long, single-span riveted, single-intersection Warren pony truss with a 5-slope upper chord. It was designed by C.J. Cray of Boston MA, and erected by the Warner Brothers Company. The polygonal upper chord was the common bridge design for all Warren pony trusses erected in Massachusetts after 1925, however this bridge is the longest span of the type.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Fifth Street Bridge was constructed across the power canal in 1954 when Route 2A was routed over this route, possibly in order to accommodate heavier traffic patterns. It is a riveted Warren pony truss, designed by C.J. Cray of Boston MA, and erected by the Warner Brothers Company. The bridge crosses the canal at a point where it directly lines up with the white bridge to Greenfield. Both of these bridges replaced earlier bridges located at the same site. The bridge was one of several built to provide vehicular and pedestrian access to the paper mills located across the Turners Falls power canal from the rest of town.

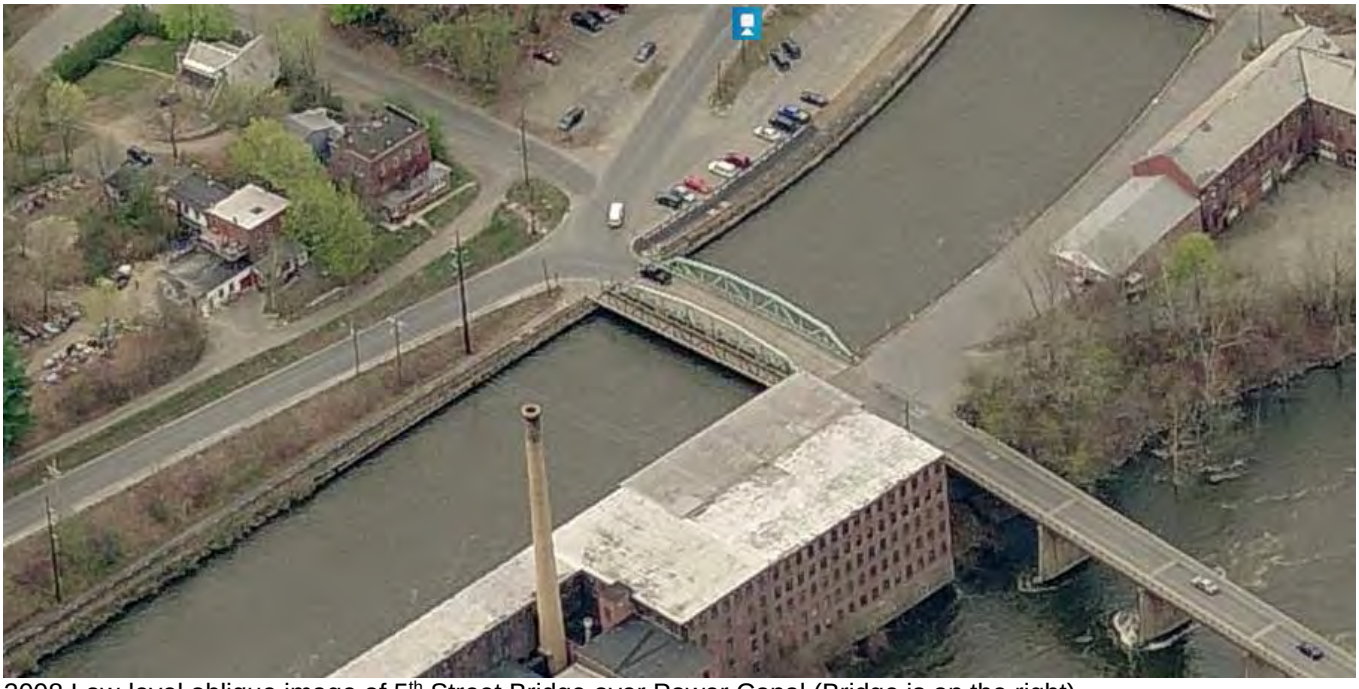
BIBLIOGRAPHY and/or REFERENCES

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Roper, S.J.
1987 "5th Street Bridge," Massachusetts Historic Bridge Inventory. Massachusetts Historical Commission, Boston, MA.

ADDITIONAL PHOTOGRAPHS

2014 View of Downstream Face (Source: TRC)



2008 Low-level oblique image of 5th Street Bridge over Power Canal (Bridge is on the right)
(Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District
The Fifth Street Bridge over the Turners Falls Power Canal is a contributing resource to the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late nineteenth century industrial communities of Massachusetts, and particularly of the Connecticut River Valley. This bridge built in 1954 to replace an earlier bridge at this location is a common type and previously was determined not eligible for individual listing in the NRHP.

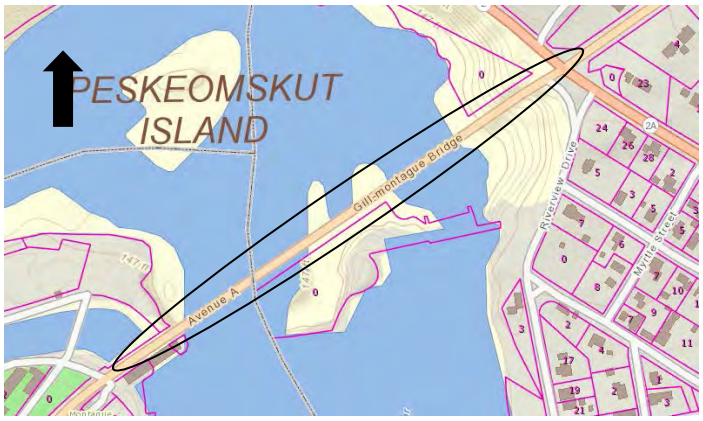
FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Greenfield	MNT.H, GIL.C	GIL.901/MNT.920

Photograph

Locus Map



MA GIS 2014

UTM Reference: 18 0700837E 4720605N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* 03/2014

Town/City: Montague, Gill

Place *(neighborhood or village):* Turners Falls and Riverside

Street/Route: Route 2A (Avenue A)

Carried over: Connecticut River, B&M Railroad Bed
(Railroad, river, brook, canal or road)

Historic/Common name: Turners Falls-Gill Bridge (Historic), Gill-Montague Bridge (Current)

Ownership: MassDOT
(Name of state agency or municipality)

Mass. Highway bridge no.: G-4-10/M-28-31

Bridge type: Warren Deck Truss

Bridge typology code 409 309 302

Date of Construction: 1937-38

Source: Date Plaque; written sources

Engineer/Designer: Massachusetts Department of Public Works (Plans-no engineer/designer indicated)

Bridge company/Contractor: Daniel O'Donnell's Sons

Material (s): Steel, Concrete, Stone

Alterations *(with dates):* Concrete Deck replaced (ca. 1985), Rehabilitation of existing steel truss (2010-2014)

Posted load limit *(if any):* 20 tons

Condition: Excellent

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban (Industrial area of Turners Falls, residential area of Riverside)

Superstructure:

Overall length: 1733 ft.	Deck width: 39.1 ft.	Skew: 23 degrees	
Main unit: No. of spans:	3	Span length:	1 at 449 ft. 2 at 400 ft.
Approaches: No. of spans:	3	Span length:	SW to NE: 1 at 62 ft. (approx.), 1 at 211 ft. (approx.), 1 at (177 ft. (approx.)

Substructure *(structure below deck)*

Height above feature spanned: 300 ft. (approx.) Material of abutments or piers: Concrete, Stone veneer

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

Designed by the Massachusetts Department of Public Works and built by Daniel O'Donnell's Sons of Holyoke, MA, the Turners Falls-Gill Bridge was constructed over the Connecticut River in 1937-38. It is a 1733'-long, 3-span, single-intersection riveted-steel, Warren deck truss with verticals and haunched lower chords over the two intermediate piers. There are also two approach spans on each side of the river; both are Warren deck trusses with alternate verticals. Immediately southwest of the Turners Falls Gatehouse is a steel stringer approach span to carry the roadway over the non-extant Boston & Maine Railroad line. All of the piers and abutments are concrete. The two central piers are stone faced. The piers flanking these rise above the truss and roadway to terminate in Art Deco-style stepped pylons ornamented with eagles, shields, and fluted panels. The Art Deco motif is continued onto the steel balustrade designs as well as the open-panel reinforced guardrails on the approaches.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The current Turners Falls-Gill Bridge was a major Depression-era public works project in western Massachusetts and began construction on May 17, 1937 (Jenkins 1980: 8.7). The bridge was completed in September 1938 by the contractor Daniel O'Donnell's Sons of Holyoke (Montague Bicentennial Committee 1954: 111). The firm was founded in 1879 by Daniel O'Donnell, then Superintendent of Streets in Holyoke and went on to become a prominent bridge building firm in Massachusetts. Since 1979, the firm has been known as the O'Donnell Companies and is still in business.

Spanning over the two Turners Falls Dams, and built at a cost of more than a million dollars, the Turners Falls-Gill Bridge was dedicated on September 10, 1938 and is one of the largest three-span bridges on the Connecticut River and at the time the longest bridge in the state (Montague Bicentennial Committee 1954: 111). It is significant as well for its fine Art Deco-style detailing, particularly the concrete pylons with carved eagles. By 2010, the road deck of the bridge had become riddled with potholes and uneven pavement. A major renovation project began in summer 2010 and was completed in 2014 at an estimated cost of $40.7 million. At this time the bridge is now known as the Gill-Montague Bridge.

BIBLIOGRAPHY and/or REFERENCES

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Jessen, Klark
2010 Gill-Monatgue Bridge Reconstruction. June 25, 2010. Accessed Online 2014: http://blog.mass.gov/transportation/massdot-highway/gillmontague-bridge-reconstruction/

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

ADDITIONAL PHOTOGRAPHS

2014 View of Upstream Face (Source: TRC)

2014 View of Southwest Approach (Source: TRC).

2014 View of Art Deco-Style Pylon (Source: TRC).

2008 Low-level oblique image of Turners Falls-Gill Bridge over the Connecticut River (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Individually NRHP-eligible under Criteria A and C

The Turners Falls-Gill Bridge previously has been determined individually eligible for listing in the NRHP by the MHC. Built at a cost of more than a million dollars, the Turners Falls-Gill Bridge was dedicated on September 10, 1938 and is one of the largest three-span bridges on the Connecticut River and was at the time the longest bridge in the state (Montague Bicentennial Committee 1954: 111). The Turners Falls-Gill Bridge was part of major overhaul and rebuilding of the highway system in this area during the 1930s that included building the Mohawk Trail highway (Route 2) and the French King Bridge farther upriver. The bridge is architecturally significant as well for its fine Art Deco-style detailing, particularly the concrete pylons with carved eagles.

Contributing Resource in Turners Falls Historic District

The Turners Falls-Gill Bridge is a contributing resource in the NRHP-listed Turners Falls Historic District, listed in 1983 under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

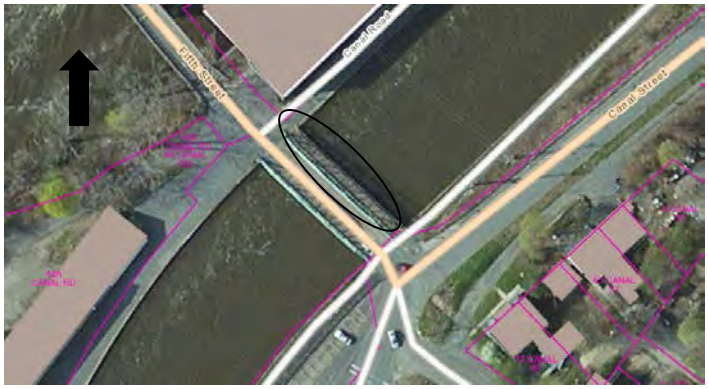
FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.H	MNT.924

Photograph

Locus Map



MA GIS 2014

UTM Reference: 18 0700124E 4720215N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Pedestrian Walkway Adjacent to 5th Street Bridge over Turners Falls Power Canal

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: 5th Street Pedestrian Bridge

Ownership: FirstLight Power Resources-GDF Suez Energy
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Warren Thru-truss

Bridge typology code 310

Date of Construction: 1912

Source: Turners Falls HD Nomination; date plaque

Engineer/Designer: Eastern Bridge & Structural Company

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Steel, Concrete

Alterations *(with dates):* None Known; closed to traffic

Posted load limit *(if any):* N/A

Condition: Fair

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/Industrial

Superstructure:

Overall length: 139 ft. (approx.) Deck width: 12 ft. (Approx.) Skew: None

Main unit: No. of spans: 1 Span length: 134 ft. (approx..)

Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 4 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Fifth Street Pedestrian Bridge was constructed across the Turners Falls Power Canal in 1912 in order to provide workers at the Esleeck and Keith Paper Mills access across the canal. Immediately adjacent to the Fifth Street vehicular bridge, it is a136'-long, single-span riveted, Warren thru-truss, designed by the Eastern Bridge & Structural Company of Worcester MA, and erected by a crew of workers from the Turners Falls Power Company. The bridge currently is closed to pedestrian traffic.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Fifth Street Pedestrian Bridge was constructed across the power canal in 1912. It is a riveted Warren thru-truss, designed by the Eastern Bridge & Structural Company of Worcester MA, and erected by a crew of workers from the Turners Falls Company. The bridge was one of several built at the expense of the Turners Falls Power Company to provide vehicular and pedestrian access to the paper mills located across the company's power canal from the rest of town. The Eastern Bridge & Structural Company also built the adjacent vehicular bridge at Fifth Street (MNT.910) and the Keith's Mill pedestrian bridge (MNT.925).

BIBLIOGRAPHY and/or REFERENCES

Arts Council OF Franklin County
1978 "Fifth Street Bridge" MHC Survey Form A. Boston MA.

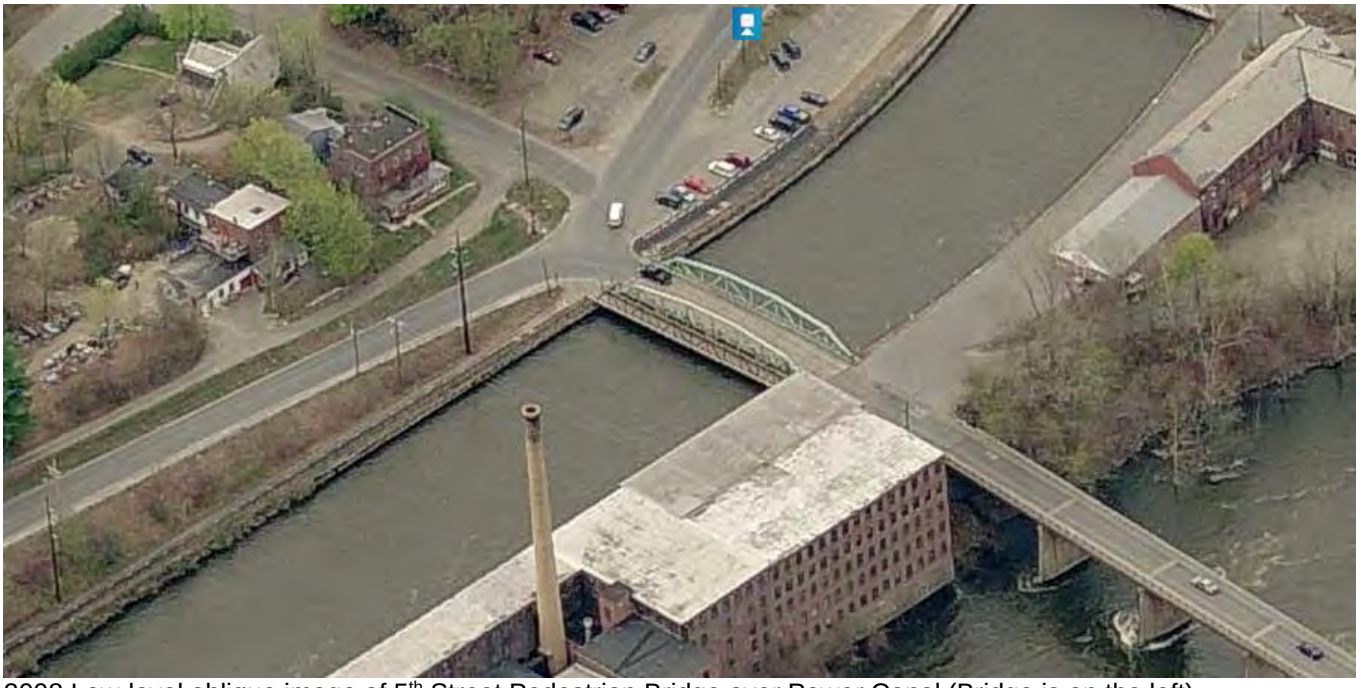
Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Turners Falls Power Company
1916 Plan and Profile, 5th and 6th Bridges, Raising of Upper Canal, Turners Falls Power Company, Engineering Department-Turners Falls Office, January 2, 1919.

ADDITIONAL PHOTOGRAPHS

2014 View of East Approach (Source: TRC)



2008 Low-level oblique image of 5th Street Pedestrian Bridge over Power Canal (Bridge is on the left) (Source: MASSDOT GIS)

Continuation sheet 2

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☒ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Fifth Street Pedestrian Bridge over the Turners Falls Power Canal is a contributing resource in the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Fifth Street Pedestrian Bridge over the Turners Falls Power Canal is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A

The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.H	MNT.925

Photograph

Locus Map

MA GIS 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Canal Street Between 2nd and 3rd Streets

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Keith Mill Pedestrian Bridge over Power Canal

Ownership: FirstLight Power Resources-GDF Suez Energy
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Pratt Thru-truss

Bridge typology code 310

Date of Construction: ca. 1913-14

Source: Turners Falls HD Nomination, 1914 Sanborn map

Engineer/Designer: Eastern Bridge & Structural Company

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Steel, Concrete

Alterations *(with dates):* None Known

Posted load limit *(if any):* None-closed to pedestrian traffic

Condition: Poor

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/industrial

UTM Reference: 18 0700279E 4720365N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Superstructure:

Overall length: 230 ft. Deck width: 12 ft. (Approx.) Skew: None

Main unit: No. of spans: 1 Span length: 135 ft.

Approaches: No. of spans: 1 Span length: 95 ft.

Substructure *(structure below deck)*

Height above feature spanned: 47 ft. (approx.) Material of abutments or piers: Concrete, metal

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

Totaling 230 feet in length, the 135-foot span over the Turners Falls Power Canal is accessed by a 95-foot deck plate girder span with concrete deck. Built ca. 1913-1914 by the Eastern Bridge & Structural Company the single-span bridge is an eleven-panel rivet-connected Pratt thru-truss design. This unique riveted truss bridge provides direct pedestrian access to the historic Keith paper mill. The bridge actually rests on part of the building, and the bridge deposits pedestrians right on the second floor of the mill. The original lattice railing that is on the bridge continues on this "porch" of the building, emphasizing the connection and relationship of bridge to building. This unique connection makes this historic bridge a critical part of the mill building.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

Built ca. 1913-1914 by the Eastern Bridge & Structural Company for the Turners Falls Company, the bridge is one of several built to provide pedestrian access for workers to the mills on the opposite side of the canal. In this case, the footbridge led from the Keith Block apartments on Canal Street directly into the mill building and is shown on the 1914 Sanborn map. The Eastern Bridge & Structural Company also built the vehicular bridge at Sixth Street and a footbridge at Fifth Street (Arts Council of Franklin County 1978g, h, j, n).

BIBLIOGRAPHY and/or REFERENCES

Arts Council OF Franklin County
1978g “Eleventh Street Bridge” MHC Survey Form A. Boston MA.
1978h “Fifth Street Bridge” MHC Survey Form A. Boston MA.
1978j “Keith Paper Mill” MHC Survey Form A. Boston MA.
1978n “Sixth Street Bridge” MHC Survey Form A. Boston MA.

Sanborn Map Company
September 1902 “Turners Falls, Mass.” Sanborn Map Company, Broadway, NY.
December 1909 “Turners Falls, Mass.” Sanborn Map Company, Broadway, NY.
August 1914 “Turners Falls, Mass.” Sanborn Map Company, Broadway, NY.

ADDITIONAL PHOTOGRAPHS

2014 View of Southeast Approach from Canal Street and Downstream Face (Source: TRC)

2014 View of Underside and Upstream Face (Source: TRC)

2008 Low-level oblique image of Keith's Mills Pedestrian Bridge over Power Canal (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☒ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Keith Mill Pedestrian Bridge over the Turners Falls Power Canal is a contributing resource in the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Keith Mill Pedestrian Bridge over the Turners Falls Power Canal is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A

The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.H	MNT.933

Town/City: Montague

Place *(neighborhood or village):* Turners Falls/Montague City

Address or Location: Connects Turners Falls Dam with Cabot Power Station east of Connecticut River

Name: Turners Falls Power Canal

Ownership: ☐ *Public* ☒ *Private*

Type of Structure ***(check one):***

___ boat or ship
_X_ canal
___ carousel
___ dam
___ fort
___ gate
___ kiln
___ lighthouse
___ other *(specify)*
___ pound
___ powder house
___ street
___ tower
___ tunnel
___ wall
___ windmill

Date of Construction: 1798; 1866; 1906; and 1915-17

Source: Written records, engineering drawings

Architect, Engineer or Designer: Benjamin Prescott (1798); Turners Falls Company (1866); Turners Falls Power & Electric Company (1915-1917)

Materials: Concrete and stone

Alterations *(with dates)*: Original 1798 navigational canal lengthened, widened, and re-routed in 1866 as a power canal for factories, and in 1906 and again in 1915-17 as a hydroelectric canal serving two power stations. Canal walls raised in 1920s and 1930s.

Condition: Good

Moved: _☒_ **no** ☐ **yes** **Date**:

Acreage: Approximately 85 acres

Setting: Urban/industrial

Photograph

Locus Map

2014 MA GIS

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp. for FirstLight

Date (*month / year):* March 2014

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other structures within the community.

The Turners Falls Power Canal is a concrete-lined canal that runs between the Turners Falls Dam and the Cabot Power Station east of the Connecticut River in Montague. The canal incorporates a small part of the 1798 navigational canal built to bypass Turners Falls, while including improvements and a realignment completed in 1866 when it was converted to an industrial power canal, and again in 1915-1917 when it was widened, deepened, and lengthened for hydroelectric purposes. As a result of the canal widening in 1915-1917, numerous rail, vehicular, and pedestrian bridges were built spanning the canal by the power company to replace the earlier bridges now rendered obsolete. Today, the power canal is approximately 2.1 miles long and ranges in width from approximately 920 feet in the Cabot forebay (downstream end of canal) to 120 feet in the canal proper. The power canal has a design capacity of approximately 18,000 cubic feet per second. A short extension of the canal on its west serves as the forebay for Power Station No. 1

HISTORICAL NARRATIVE

Explain the history of the structure and how it relates to the development of the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1908: 8.1). The canal, designed by Benjamin Prescott of Northampton, was 2.5 miles long and 14 feet wide, with ten locks. A second dam and lock downstream from the confluence of the Connecticut and Millers Rivers to the north of Turners Falls raised the water in order that boats could navigate the French King rapids (MHC 1982c: 6). By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, the legislature granted the Proprietors the right to lease the canal waters for power purposes. A group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the rights from the Proprietors and formed the Turners Falls Company. The company replaced the older dam with a new wood-and-stone dam and rebuilt the canal. Soon, the canal was powering new manufacturers moving to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, “a small company of public-spirited citizens” leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls gatehouse and in 1892, the gatehouse was expanded for greater water flow. The Power Canal also was improved by widening it and increasing its depth.

By 1900, many of the mills and factories in Turners Falls and western Massachusetts began to lose business to Southern mills with their cheaper labor supply and as a consequence a few mills and small start-up power companies turned their attention to harnessing hydroelectric power. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1904, Charles Hazelton, treasurer of the Turners Falls Company, proposed to his board of directors that that they make better use of the water power being wasted by widening and extending the

canal, and establishing a hydro-electric generating plant of 5,000 kilowatt capacity. “His proposal met with unanimous agreement, and was carried out during the next three years” (Bennett 1990a: 5).

Construction of Power Station No. 1 in 1905 increased the importance of the power canal to the success of hydroelectric operations at Turners Falls. As built, the canal bypasses approximately 2.7 miles of the Connecticut River. Fall River, located near the head of the bypass channel, discharges into the bypass reach. In 1906, the Turners Falls Company had completed the widening of the power canal to 125 feet, increasing its depth to 15 feet, and extended it south by 1,000 feet.

In 1914, the Turners Falls Company consolidated with the Amherst Power Company, becoming the Turners Falls Power & Electric Company. During the 1920s, the company continued to acquire other smaller electric companies in western Massachusetts (WMECO 1987: 2).

Among other enterprises, the Turners Falls Power & Electric Company built and maintained the Turners Falls Canal and Dam, as well as financing and building several vehicular and pedestrian bridges crossing the canal between the village and the mills. The construction of bridges over the canal at Sixth Street and Eleventh Street were crucial to the development of the village, as any proposed extension of the power canal would, in effect, create an "island" in the center of Turners Falls.

In 1915, the Turners Falls Power & Electric Company completed its second power station at Cabot Station. Located two miles below the dam on the Connecticut River, the station required a 1.5-mile extension of the existing power canal. It utilized 54 feet of head, high by New England standards. Raising the canal embankment in 1917 allowed an increase to 48,000 kw (Clouette 1987: 2). By 1917, the canal was extended to its present length of approximately 2.5 miles. Final work on the canal's excavation was completed that year when it reached its present depth of between 25-40 feet and between 100-920 feet (the latter at the Cabot forebay) in width; canal walls were raised in 1919 and again in 1922 and the early 1930s (Holmes 1991: 28).

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Jenkins, Candace
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Massachusetts Historical Commission (MHC)
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1982c *MHC Reconnaissance Town Report: Montague*. MHC: Boston, MA.

Continuation sheet 2

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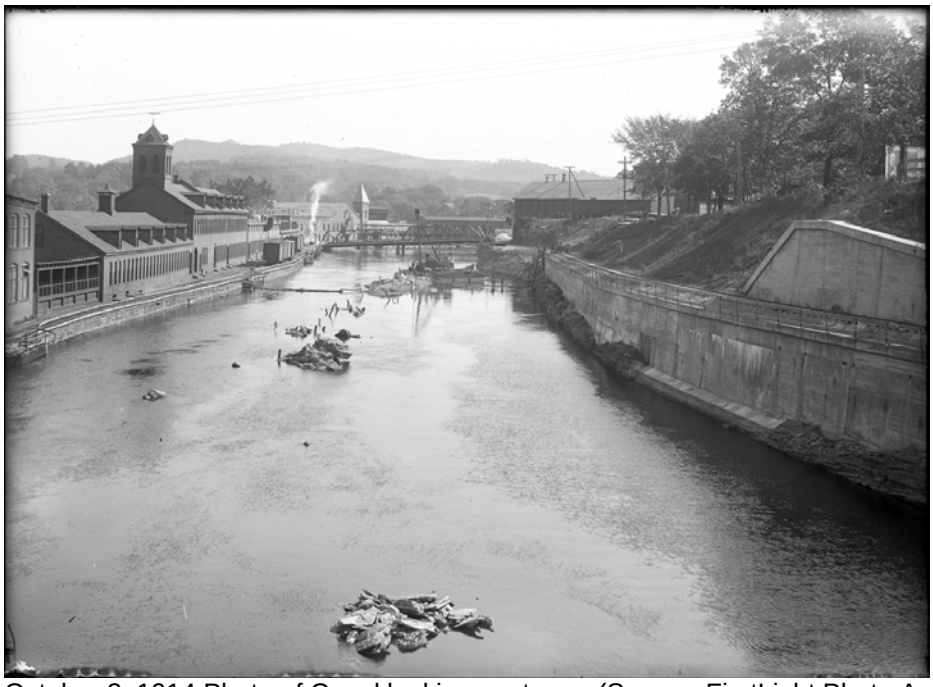
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Turners Falls Power & Electric Company
1917 Plan and Profiles I.P. Mill, Raising Upper Canal Walls. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. February 23, 1917.
1918 General Layout Plan—Raising Canal Walls. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. December 20, 1918.

Western Massachusetts Electric Company (WMECO)
1987 *Before the Federal Energy Regulatory Commission: Turners Falls Project FERC Project No. 1889, Application for Amendment of License, Proposed Cabot Unit 7.* WMECO, Springfield, MA

ADDITIONAL PHOTOGRAPHS

August 12, 1912 Photo looking upstream from S.E. corner on top of Keith's Mills stock house (Source: FirstLight Photo Archives).



October 2, 1914 Photo of Canal looking upstream (Source: FirstLight Photo Archives).

March 2, 1915 Photo of Upper end of upper canal looking upstream (Source: FirstLight Photo Archives).

August 31, 1915 Photo of Canal from 11th Street Bridge looking downstream (Source: FirstLight Photo Archives).

2014 View of Power Canal from Eleventh Street Bridge (Source TRC)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☒ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Turners Falls Historic District

The Turners Falls Power Canal between the Turners Falls Dam and Sixth Street Bridge is a contributing resource in the NRHP-listed Turners Falls Historic District. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The entire length of the Turners Falls Power Canal between the Turners Falls dam and the Cabot Power Station is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging

hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.H	TRC-6

Photograph

Locus Map

MA GIS 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Canalside Trail

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Montague Paper (International Paper) Company Bridge over Turners Falls Power Canal

Ownership: FirstLight Power Resources-GDF Suez Energy
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Warren pony truss

Bridge typology code 310

Date of Construction: ca. 1914

Source: 1914 Engineering Drawings, 1914 Sanborn map

Engineer/Designer: Unknown

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Metal, with concrete piers

Alterations *(with dates):* Deck replaced (unknown date)

Posted load limit *(if any):* N/A

Condition: Good

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/industrial

UTM Reference: 18 0700565E 4720471N

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp. for FirstLight

Date (*month / year):* March 2014

Superstructure:

Overall length: 134 ft Deck width: 10 ft Skew: None
Main unit: No. of spans: 2 Span length: 67 ft. (total)
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: Varies with water level of canal Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This two-span, six-panel, rivet-connected Warren pony truss bridge spans the Turners Falls power canal between the site of the Montague Paper (later International Paper) Company plant and the parking area for the Great Falls Discovery center in Turners Falls. The Gill-Montague Bridge and Turners Falls Dam/Gatehouse are located a short distance to the east. Like the two other remaining pedestrian bridges that span the power canal, this bridge was built to provide access for workers coming from downtown Turners Falls to one of the former paper mills located on the opposite side. According to one source, there was at this site an earlier bridge built in 1870 (Gregory 2006: 6).The present bridge was built ca. 1914 by the Turners Falls Company and is shown on the 1914 Sanborn map.

The bridge is 134 feet long and 10.5 feet wide and has two unusual design features. Most unusual is that the central pier sits lower than one of the abutments, but equal to the height of the other abutment, so only one of the two spans angle down toward the center slightly, rather than having a constant slope throughout the bridge. This is due to the fact that the canal wall on the east was raised. In addition, one of the end posts was constructed to have two angles to it, so that it bows out slightly. Additional bracing is present between the hip vertical and this second end post connection that allows this shape. The purpose of these two features is unclear. According to the 1914 plans, the bridge was intended to be extended at its southern end. The bridge's built-up beams are riveted but all connections are bolted. It is unclear if this is a later truss bridge that was built with bolted connections, or if it was altered by having all connection rivets replaced with bolts.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

Beginning in 1914, the Turners Falls Power Company widened and lengthened the Turners Falls Power Canal that formerly ran only as far south as Sixth Street. The power company replaced the many existing railroad, vehicular, and pedestrian bridges that spanned the canal with new bridges to accommodate the widened canal. The other footbridges across the power canal were built by the Eastern Bridge and Structural Company of Worcester MA and it is assumed that this one was as well.

BIBLIOGRAPHY and/or REFERENCES

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2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

Sanborn Map Company
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Turners Falls Power Company

1914 Dimension Sheet, Bridge, Canal Enlargement, Turners Falls Company, Engineering Department-Turners Falls Office, July 25, 1914.

ADDITIONAL PHOTOGRAPHS

2014 View of Southern Approach (Source: TRC)

2014 View of Northern Approach (Source: TRC)

2008 Low-level oblique image of Keith's Mills Pedestrian Bridge over Power Canal (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Montague Paper (International Paper) Company Bridge over Turners Falls Power Canal is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during

Continuation sheet 4

the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-06	Greenfield		TRC-39

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: Power Canal at International Paper Co. Bridge

Historic Name: Electrical Switch Building

Uses: Present: Vacant

Original: Electrical Switch Building

Date of Construction: Late 19th century

Source: Historic Photographs

Style/Form: Vernacular Italianate/Industrial

Architect/Builder: Turners Falls Company

Exterior Material:

Foundation: Concrete

Wall/Trim: Brick

Roof: Asphalt

Outbuildings/Secondary Structures: None

Major Alterations *(with dates):* Building is vacant

Condition: Deteriorated

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Urban/Industrial

Photograph

Locus Map

MA GIS 2014

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp. for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

TOWN
MONTAGUE

ADDRESS
POWER CANAL AT I.P. BRIDGE

Area(s) Form No.

TRC-39

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

This building is located on the northeast side of the Turners Falls Power Canal at the site of both the John Russell Cutlery Company and the Montague (International Falls) Paper Company complexes. The 1-story, 3-bay-by-2-bay brick building has a shed roof, corbelled brick cornice, entrance on the northeast with a segmental-arched head, and window openings with segmental arched brick lintels. The building is vacant and abandoned and no longer has its door or window sash.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

This section of Turners Falls' industrial area was once occupied by the John Russell Cutlery Company and Montague Paper Company complexes, massive brick mills and factories built in the late 1860s and 1870s along the newly converted power canal. Although this building does not appear on historic Sanborn Maps of the area, according to one source it served as an electrical switch building for both complexes (Gregory 2014). The cutlery factory was damaged by the 1936 flood, and the company moved out of their buildings soon afterwards and the complex was demolished in 1958. Most of the Montague Paper Company was also demolished in the mid-20th century, leaving two small buildings on the south side of the canal and leaving only this small electrical switch building as the sole industrial-related building on the north side of the canal.

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1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

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1892 "Centennial Edition." Greenfield Gazette, publishers, Greenfield, MA.

Sanborn Map Company
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December 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

ADDITIONAL PHOTOGRAPHS

2014 View of West and South Elevations (Source: TRC)

2008 Low-level oblique image of Electrical Switch Building (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

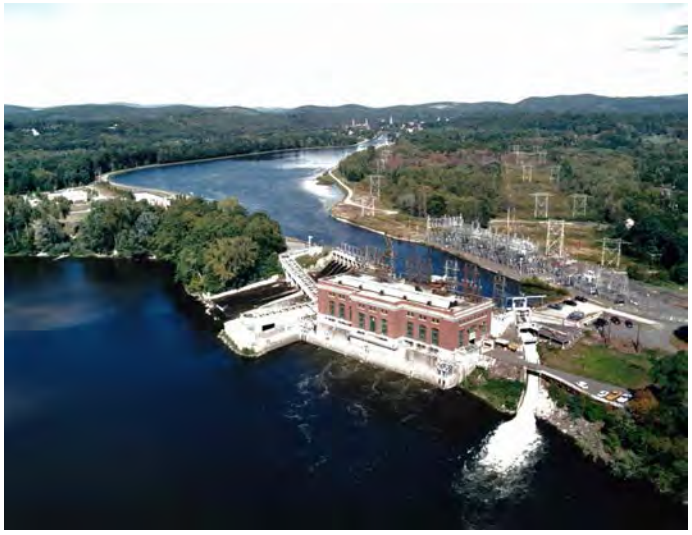
Contributing Resource in Turners Falls Historic District
This building is a contributing resource in the NRHP-listed Turners Falls Historic District, listed on the National Register in 1983 under Criteria A and C. The district is associated with events that have made a direct contribution to the industrial development of Massachusetts and the nation and embodies distinctive characteristics of the type, period, and methods of construction typical of late-nineteenth-century industrial communities of Massachusetts, and particularly of the Connecticut River Valley.

FORM F – STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
12-0-001	Greenfield		MNT.449

Photograph



Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* April 2014

Town/City: Montague

Place *(neighborhood or village):* Montague City

Address or Location: South End of Turners Falls Power Canal

Name: Cabot Hydroelectric Power Generating Station

Ownership: ☐ *Public* ☒ *Private*
FirstLight Power Resources-GDF Suez Energy

Type of Structure ***(check one):***

___ boat or ship	___ pound
___ canal	___ powderhouse
___ carousel	___ street
___ dam	___ tower
___ fort	___ tunnel
___ gate	___ wall
___ kiln	___ windmill
___ lighthouse	
_X_ other *(specify)*	Hydroelectric Generating Station

Date of Construction: 1914-15 (Units 1-4); 1916-17 (Units 5-6)

Source: Original Records

Architect, Engineer or Designer: Turners Falls Power & Electric Co.; Contractor: Fred F. Ley, Inc., Springfield, MA

Materials: Substructure: Concrete; Superstructure: Steel-frame with brick exterior and concrete details
Alterations *(with dates)*:
1930s: Small addition on river side of building
1980: Fish Ladder
1987: Replacement of the Gantry Crane

Condition: Good

Moved: _☒_ **no** ☐ **yes** **Date**:

Acreage: 5 acres (approx.)

Setting: Urban/Industrial

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other structures within the community.

Cabot Station is located on the east bank of the Connecticut River, south of the Village of Turners Falls, in the Town of Montague, Massachusetts. It receives water from an extension of the Turners Falls Canal, which was completed in 1915. Cabot Station is located at the downstream terminus of the power canal and one mile upstream of the confluence of the Connecticut and Deerfield Rivers.

Set on concrete (which is partially exposed) and bedrock, the powerhouse is a 1-story with clerestory, 3-bay steel-frame, brick curtain wall structure with a 5:1 common bond of Roman brick. While industrial in nature, decorative details can be traced to elements of the Beaux Arts style. The flat roof with parapet has concrete cast-stone coping and brick dentils. A long skylight is placed on top of the main roof to light and air the generator room below. Below the dentils is a signage panel and on the south elevation it originally read “Turners Falls P.&E. Co.” and later “Western Massachusetts Electric Company,” the latter still has ghost marks. The current signage reads “Cabot Station.” Below the signage panel on all elevations is a concrete cast stone cornice with a cavetto molding.

One the south elevation, a ribbon window with the original metal 12-light awning windows and concrete cast stone sill course is below the cornice. The ribbon window terminates directly above the symmetrical three-bay opening below. There are three 2-story arched openings, the central one serving as a door is slightly larger. The original opening, with full-height double doors, was large enough for the delivery of the machinery by train. The lower 2/3 of the door has been removed and a security panel with single-leaf door installed. Above the doors is a segmental-arched, multi-light transom, Flanking the entry are segmental-arched, multi-light windows with 10-light hopper windows placed in the center. All three openings have a raised brick surround. Between the windows and the door are two, original metal lights with cavetto-shaped curved undersides and an integrated “TF” logo on the exterior sides. The north elevation is a reflection of the south elevation, however, the central bay is also a window, not a door, and there are no lights.

This symmetrical pattern of 12-light hopper windows over three 2-story arched openings is also present on the 9-bay west elevation facing the Connecticut River. This elevation features a central, slightly projecting bay with triangular cap on the parapet. Additionally, paired 12-light hopper windows are above each 2-story window rather than a continuous ribbon window as is on the south elevation. Below the opening are the concrete draft tubes to allow for water discharge into the river.

Only the upper story of the east elevation is exposed, as the lover levels are below the forebay. The ribbon windows continue on this elevation as well. A central bay also projects from this elevation and features a stepped parapet which once was used as a signage panel. A secondary entrance for access to the office space is located at the southeast corner. Set within a projecting bay, the single-leaf door is flanked by 4/4 sash windows with soldier-course lintels and concrete cast stone sills. Above the windows are original metal lights with cavetto-shaped curved undersides and an integrated “TF” logo on the exterior sides as are found on the south elevation. The coping and dentils are consistent with the main block, however the cornice features an ovolo molding. Running in front of this elevation is the trash rack opening (217’-wide by 31’-high) A gantry crane (installed in 1987 to replace the original crane) runs on top of the trash racks. This crane is used to clean the trash racks and control the lift gates at the powerhouse. After passing through the trash racks, water flow is conveyed through one of six penstocks to turbines housed in the powerhouse.

The interior of the powerhouse is comprised of exposed brick and steel as well as the truss systems: a truss with integrated skylight n the generator room to the west and a truss above the operations and office areas to the east. The generator room encloses six vertical Francis units manufactured by I. P. Morris. The room also contains a 60-ton overhead bridge crane which is

used to maintain the turbine/generators. In this room there is a repetition of the lamps on the exterior which feature a cavetto curve underside and an integrated "TF" logo. A square bay housing the original operations center projects slightly out over the generator room, features paired 10-light windows, and is supported by curved brackets.

At the downstream terminus of the power canal and adjacent to the northern end of the Cabot Powerhouse are eight wooden 16'-8" high by 13'-7" wide spillway gates. These gates are used to rapidly draw down the power canal in the event of a Cabot Station load rejection or canal dike breach or to sluice ice and debris. In addition, there is a 16'-2" wide by 13'-1" high log sluice located near the bottom of the forebay, at the southern end of the powerhouse that can be used for de-watering the power canal. A concrete wall with recessed panels runs on top of the sluice.

Except for the presence of the nearby modern fish ladder and a small addition to the river-side wall of the building, the overall outward appearance of Cabot Station is virtually the same as when it was constructed in 1914-1917. Although its basic generating equipment components are original, modifications, repairs, and in some instances replacement of these has occurred over the years as parts wear out and/or break down. Generation components consist of:

- o Wheels: (6) single runner, vertical, Francis-type (I.P. Morris Co.) were replaced in 2001-04 with (6) vertical Francis-type units manufactured by VA Tech
- o Generators: (6) direct connected, vertical (General Electric Co.) basically original
- o Transformers: some originals may remain, but most are replacements
- o Bus Structures: basically original (one band removed)
- o High Tension Rooms (2): basically original (some oil switches removed)
- o Oiling System: basically original (Peterson Engineering Co., Milwaukee)
- o Governors: (6) all replaced about 1970 with Woodward governors
- o Penstock Gates: replaced 1950-60
- o Gantry Crane: Replaced in 1987
- o Penstocks: 3 for each unit, all concrete, 13'6" high 9'4" wide (Some gunnite repairs).

There is a former garage which also has similar architectural details of the powerhouse. The 1-story, 7-bay former garage is steel-framed with a brick curtain wall of 5:1 bond. The flat roof with parapet has concrete cast stone coping and brick dentils. The original design had centrally located triangular parapets on each elevation which have been removed. The concrete cast stone cornice has an ovolo-shaped molding and plain frieze. The west elevation has five vehicular door openings; the right two are original brick panels and the left two have been adapted to windows with T-III and 1/1 vinyl sash so that only the central bay still operates as a roll-up door. Original metal lights with cavetto-shaped curved undersides and an integrated "TF" logo on the exterior sides as are found on the powerhouse flank the right three bays. Flanking the vehicular doors are single-leaf doors with half-hipped hood supported by triangular braces. The 3-bay south elevation has a central vehicular door flanked above with the same metal lights and on the side by 6/6 sash windows with soldier-course lintels and concrete cast-stone sills. The 5-bay east elevation features four 6/6 sash windows with soldier-course lintels and concrete cast-stone sills and a single-leaf door in the north bay with half-hipped hood supported by triangular braces. The north elevation is not visible due to machinery within the adjacent substation.

HISTORICAL NARRATIVE

Explain the history of the structure and how it relates to the development of the community.

Historically, Cabot Station represents the last major industrial development of the water resource at Turners Falls on the Connecticut River. Constructed during World War I, it was preceded first by navigation improvements (1797-1864), hydro-mechanical power generation (1864-1900s) and finally by small hydroelectric generation (1880s-1904). The station is named for financier Philip Cabot of Boston, who was largely responsible for its construction, first as President of The Turners Falls Company, and then as Founder and President of the Turners Falls Power & Electric Company. The latter company was formed in May 1914 as the consolidation of The Turners Falls Company with the Amherst Gas Company, of which Mr. Cabot was also the President (WMECO 1987: E-54).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the

Continuation sheet 2

purpose of generating electricity at night. Soon afterward, “a small company of public-spirited citizens” leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990: 5). In late 1886, an electric generating station opened at the Turners Falls gatehouse and in 1892, the gatehouse was expanded for greater water flow.

By 1900, many of the mills and factories in Turners Falls and western Massachusetts began to lose business to Southern mills with their cheaper labor supply and as a consequence a few mills and small start-up power companies turned their attention to harnessing hydroelectric power. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1904, Charles Hazelton, treasurer of the Turners Falls Company, proposed to his board of directors that that they make better use of the water power being wasted by widening and extending the canal, and establishing a hydro-electric generating plant of 5,000 kilowatt capacity. “His proposal met with unanimous agreement, and was carried out during the next three years” (Bennett 1990: 5).

Construction of Power Station No. 1 in 1906 increased the importance of the power canal to the success of hydroelectric operations at Turners Falls. In 1914, the Turners Falls Company consolidated with the Amherst Power Company, becoming the Turners Falls Power & Electric Company. During the 1920s, the company continued to acquire other smaller electric companies in western Massachusetts. In 1915, the Turners Falls Power & Electric Company completed its second power station at Cabot Station. It utilized 54 feet of head, high by New England standards (WMECO 1987: 2).

Cabot Station was originally conceived to accommodate six 6,000 kW units, for a total of 36,000 kW. The Turners Falls Power & Electric Company first put the station into service in 1915 equipped with four 7000 kW units (Units 1-4), after the original plan was changed to raise the total capacity to 42,000 kW. By the time all six units were put in service in 1918, each unit had a capacity of 8000 kW, for a total output of 48,000 kW. The station, now rated at 51,000 kW, has a gross head of 60 feet (WMECO 1987: E-55).

When it was completed, Cabot Station was the largest hydroelectric facility in Massachusetts, and the principal source of power for the Turners Falls Power & Electric Company. It represents a stage in the development of major hydroelectric stations along the Connecticut River Valley in the first half of this century, a sequence which includes Vernon Station (VT /NH: 1909 with 8 units, 2000 kW each, for a total of 16,000 kW, increased and upgraded in the 1920's to 10 units and 28,000 kW), Deerfield Units 3-5 (MA: 1912-13, 6,000-15,000 kW each), and culminating in the 140,000 kW project at Comerford (NH/VT, 1930, 179 ft. head). In Massachusetts, Cabot is still the largest conventional hydroelectric station along the Connecticut River. As an engineering work, it incorporates certain novel achievements (e.g. large-scale, double-curvature concrete formwork). Vertical turbines of comparable size and dating back to the same period exist elsewhere in New England (WMECO 1987: E-54).

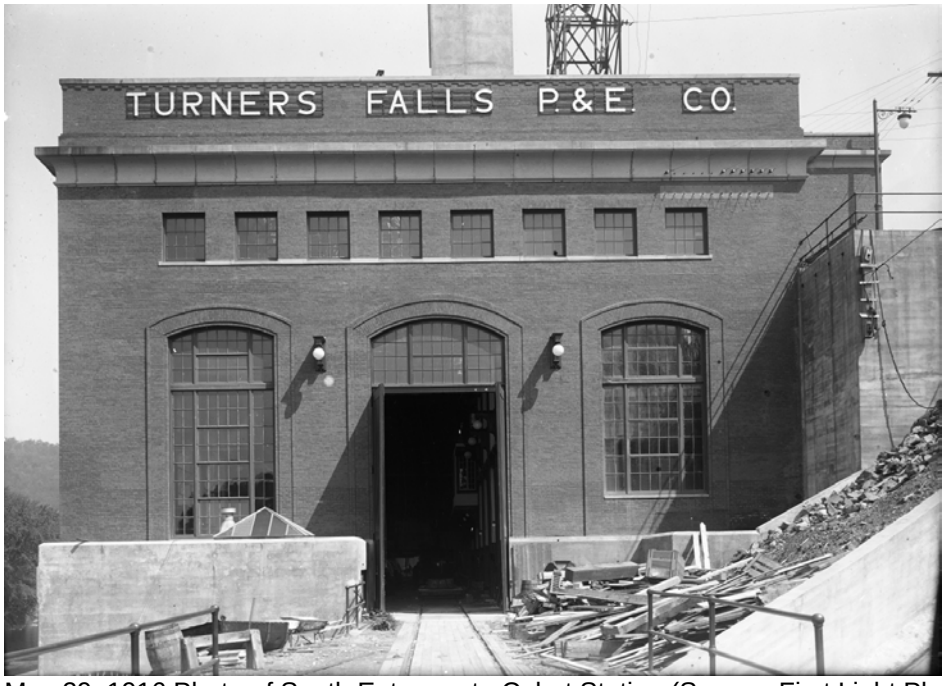
BIBLIOGRAPHY and/or REFERENCES

Bennett, Lola (Historic American Buildings Survey [HAER] Historian)
1990 *Eleventh Street Bridge Spanning the Turners Falls Power Canal (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

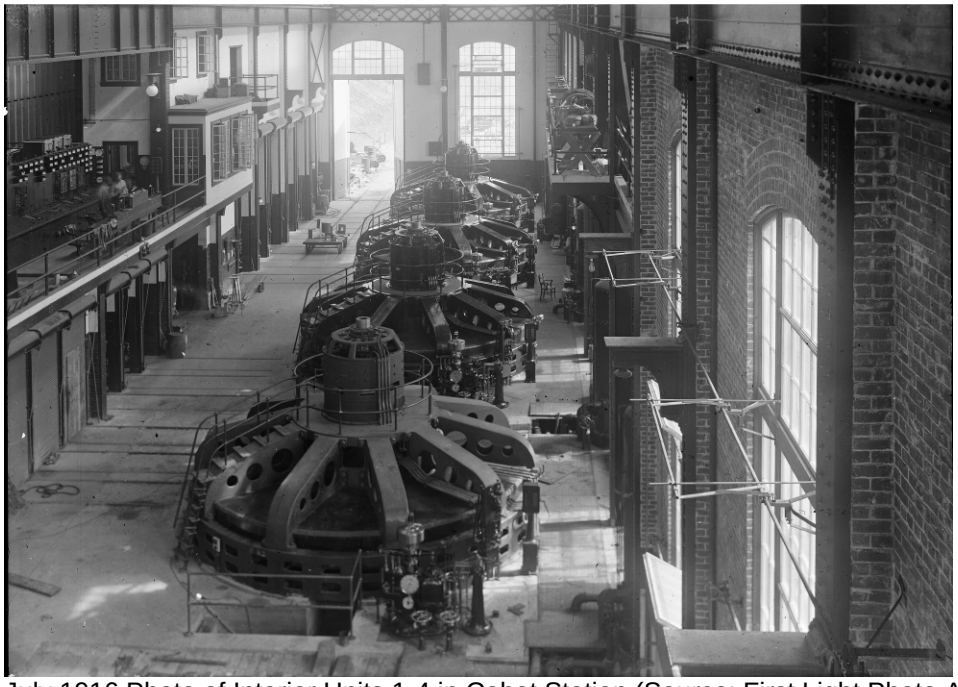
Western Massachusetts Electric Company (WMECO)
1987 *Before the Federal Energy Regulatory Commission: Turners Falls Project FERC Project No. 1889, Application for Amendment of License, Proposed Cabot Unit 7.* WMECO, Springfield, MA

ADDITIONAL PHOTOGRAPHS



May 29, 1916 Photo of South Entrance to Cabot Station (Source: First Light Photo Archives)

July 1, 1916 Photo of East Elevation with Forebay in Foreground, Original Gantry Crane is on the Right (Source: First Light Photo Archives)



July 1916 Photo of Interior Units 1-4 in Cabot Station (Source: First Light Photo Archives)

June 9, 1917 Photo of Garage at Cabot Station (Source: First Light Photo Archives)

2014 View of South Elevation, Sluiceway and Concrete Wall to the Right (Source: TRC)

2014 View of Second Story Entrance and Metal Lights (Source: TRC)

2014 View of Interior of Generator Room Including Truss System and Skylight (Source: TRC)

2014 View of Interior of Generator Room Including Projecting Bay and Metal Light (Source: TRC)

2014 View of 1987 Gantry Crane (Left), Spillway Gates (Right), and Forebay (Foreground) (Source: TRC)

2014 View of Former Garage (Source: TRC)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

NRHP-Eligible, Criteria A and C
In 1987, the MHC determined Cabot Station NRHP-eligible under Criteria A and C. Cabot Station is historically significant as the largest hydroelectric facility in Massachusetts at the time it was completed in 1917. It represents the last major industrial development utilizing the water as a resource at Turners Falls and was for many years the primary power source for the region. Architecturally, it is significant as an intact example of a well-articulated early-twentieth-century industrial architecture and is noteworthy for the retention of the original power generation components. The resource retains all aspects of integrity, except for the loss of the original gantry crane in 1987.

Contributing Resource in Turners Falls Power & Electric Company Historic District, Criteria A and C
This resource is also a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gatehouse
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street eligible for the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A

The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the late 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts's hydroelectric grid, as it extended in Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1916 by the Boston & Maine across the newly widened canal.

Criterion C

The Turners Falls Power & Electric Company Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield	MNT.C	MNT.904

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0700279E 4720365N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Eleventh Street

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Eleventh Street Bridge over Power Canal

Ownership: Town of Montague
(Name of state agency or municipality)

Mass. Highway bridge no.: MA-28-17

Bridge type: Warren Thru-truss

Bridge typology code 310

Date of Construction: 1915

Source: Historic American Engineering Record; Plaque

Engineer/Designer: Eastern Bridge & Structural Company

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Steel, Concrete

Alterations *(with dates):* None Known

Posted load limit *(if any):* Unknown

Condition: Good

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/Industrial and Residential Areas of Turners Falls

Superstructure:

Overall length: 198 ft. Deck width: 27 ft. (road), 7.5 ft. (sidewalk) Skew: None

Main unit: No. of spans: 1 Span length: 167 ft.

Approaches: No. of spans: 2 Span length: 15.5 ft. each

Substructure *(structure below deck)*

Height above feature spanned: 4 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Eleventh Street Bridge is a triple-barrel, 167-foot, riveted-steel double-intersection Warren through truss bridge that carries 2-lane Eleventh Street over the Turners Falls Power Canal. The main configuration is a central roadway barrel with no overhead lateral bracing, with a through truss sidewalk barrel on either side. Each of the four trusses is identical. The upper chord of each truss is comprised of two channels, connected with a plate on the upper side and lacing and tie plates on the lower side. The floor system is comprised of I-section steel beams and steel stringers, and corrugated steel decking, which support a poured concrete deck, and an asphalt-paved roadway, 27'-0" wide. On either side of the roadway is a raised sidewalk, 7'-6" wide, with latticed railings on the outer sides. Above each sidewalk is overhead lateral bracing and portal bracing, consisting of two angles riveted together and connecting the outer and inner trusses. Both ends of the bridge rest on concrete piers, with a short stringer approach span extending from pier to abutment at either end.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

Between 1914 and 1918, the Turners Falls Power Canal was extended south about a mile and a half, and a second electric generating plant, later named Cabot Station, was built. The construction of the bridges over the canal at Sixth Street and Eleventh Street were a significant part of this project, because the extension of the power canal would, in effect, create an "island" in the center of Turners Falls. The section of town known as the "South End" would be bordered on all sides with water and connected to the rest of the village by only a small strip of land to the north. While a suspension bridge spanned the Connecticut River at Fifth Street, and there were several smaller bridges crossing the upper part of the canal, the lower section of the canal would need to be bridged between the center of town and the South End (Bennett 1990: 4).

Documentary evidence for the Eleventh Street Bridge seems to indicate that it was originally designed to be very similar to the bridge at Sixth Street. The original plans for the bridge, drawn up by the Eastern Bridge & Structural Company in May of 1914, show a double- intersection Warren through truss, with a 21-foot wide roadway, upper lateral bracing, and no sidewalks. A second set of plans for the same bridge, dated May 1915, shows a pair of double-intersection Warren trusses on either side of a roadway 27 feet wide, with a 6-foot-wide sidewalk running between each pair of trusses. Rather than the standard upper lateral bracing over the center barrel, the second set of plans shows lateral bracing only over the sidewalk barrels. This change in design is attributed to a discrepancy between the Turners Falls Company, which was paying for the bridge, and the residents of the town, who were the beneficiaries of whatever infrastructure changes the company were required to make (Bennett 1990: 4).

Increasing the size of the bridge and adding sidewalks meant that the already fabricated trusses would have had greater dead and live loads to carry, probably more than they could withstand. Instead of designing and fabricating a new bridge and scrapping the old, which could have been quite costly, the engineers increased the load-carrying capacity of the old trusses by adding two identical trusses to the design. As finally constructed, the Eleventh Street Bridge represented a unique engineering solution to a project influenced by both public and private interests (Bennett 1990: 4).

BIBLIOGRAPHY and/or REFERENCES

Bennett, Lola
1990 *Eleventh Street Bridge over the Turners Falls Power Canal, Turners Falls, MA (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

Sanborn Map Company
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

ADDITIONAL PHOTOGRAPHS

August 2, 1915 Photo of 11th Street Bridge, looking upstream (Source: First Light Photo Archives)

2014 View of Western Approach and Upstream Face (Source: TRC)

2014 View of Eastern Approach at Sidewalks (Source: TRC)

2008 Low-level oblique image of 11th Street Bridge over Power Canal (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Eligible Patch Historic District (Criteria A and C)
MHC has included the Eleventh Street Bridge as a contributing resource in the Patch Historic District (MNT.C), surveyed by the Arts Council of Franklin County in 1978, but not evaluated for the NRHP.

Individually NRHP-eligible Criterion C
The Eleventh Street Bridge previously has been determined NRHP-eligible by the MHC under Criterion C as a rare double-intersection Warren thru-truss bridge; with no lateral bracing over the roadway, it may be one of a kind in Massachusetts. The bridge is still in use today as the only vehicular and pedestrian bridge in Turners Falls' South End. It is significant as a unique configuration of a double-intersection Warren through truss, and is the unique result of a project in which political factors played a major role in the final appearance of the structure. The bridge was paid for and erected by the Turners Falls Company for the town of Montague, during a very significant period (1912-1915) of the hydroelectric development of western Massachusetts. The bridge fabricator, Eastern Bridge & Structural Company, was an important regional bridge-manufacturing company in the early- to mid-twentieth century.

Contributing Resource in Eligible Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Eleventh Street Bridge is a contributing resource in the NRHP-eligible Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A

The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Northfield	H	NFL.924

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0708563E 4731990N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Northfield

Place *(neighborhood or village):* West Northfield/East Northfield

Street/Route: East Northfield Road

Carried over: Connecticut River
(Railroad, river, brook, canal or road)
Historic/Common name: Schell Memorial Bridge

Ownership: Town of Northfield
(Name of state agency or municipality)
Mass. Highway bridge no.: N-22-2

Bridge type: Cantilever Pennsylvania-type through truss

Bridge typology code 310 410

Date of Construction: 1901-1903

Source: Historic American Engineering Record

Engineer/Designer: Edward S. Shaw (Boston)

Bridge company/Contractor: New England Structural Company, East Everett, Massachusetts (superstructure); Ellis & Buswell, Woburn, Massachusetts (substructure)

Material (s): Steel, Concrete, Stone

Alterations *(with dates):* Stringers replaced and wood block decking (1932); Repairs after 1936 flood (1936); Repairs (1958). Closed to traffic.

Posted load limit *(if any):* Unknown, closed to traffic due to deterioration

Condition: Poor, slated for demolition

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural

Superstructure:

Overall length: 515 ft. Deck width: 18 ft. Skew: None

Main unit: No. of spans: 1 Span length: 352 ft.

Approaches: No. of spans: 2 Span length: 80 ft. each

Substructure *(structure below deck)*

Height above feature spanned: 90 ft. (approx.) Material of abutments or piers: Ashlar Cut Granite

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Schell Memorial Bridge is a 515-foot, riveted-steel cantilever Pennsylvania-type through truss. The bridge was designed to function as a three-span continuous truss under live load, and as a simple truss span with cantilevered ends under dead load. This was accomplished by means of freight car springs, placed under the abutment ends of the bridge, to counter upward movement of the ends when the bridge had a live load in the center. The original wooden stringers have been replaced with steel stringers, which support a wood block deck paved with asphalt. The portals are defined by the inclined end posts of each truss, with cast iron finials at the top, and an ornamental Gothic portal strut crossing overhead. The portal strut is pierced with small Gothic arches and trefoils. Other unique details include Gothic-arch sway bracing between the panel points directly above the piers, stone pylons with pyramidal caps, and connecting low stone parapets at each end of the bridge. The bridge rests on quarry-faced granite ashlar piers and granite-faced concrete abutments.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

Shortly after the Bennett's Meadow Bridge in Northfield was completed in 1899, the Massachusetts railroad commission condemned the 50-year-old, two-tier wooden railroad/vehicular toll bridge located just upstream on the Connecticut River. The Central Vermont Railway then petitioned the legislature for authority to build a new bridge in cooperation with the town of Northfield (Bennett 1990: 6).

At first, the town favored the construction of another joint railroad and highway bridge, and an agreement was reached by which the town was to pay $10,000 toward the cost of a steel bridge. Public sentiment shifted towards building a separate highway bridge, which would not only relieve them of paying rent for their portion of the railroad bridge, but would also do away with the nuisance of passing overhead trains. One of the strongest proponents of a separate bridge was the Northfield Seminary, which advocated building the bridge farther up the river, and asked for a delay in the plans (Bennett 1990; 6).

Enter Francis R. Schell, a successful New York City banker, who first started attending Rev. Dwight Moody's evangelistic summer conferences in Northfield beginning in 1890. In 1900, Schell inherited his father's considerable banking fortune, and decided to build a country estate at Northfield (Bennett 1990: 4).

Schell determined to take the matter of the new bridge and its location into his own hands. "Francis Schell had a great fondness for the town of Northfield, and perhaps an even greater fondness for Dwight L. Moody and the Northfield Schools. This was demonstrated in 1901, when, in an act of extreme generosity, Schell offered to pay for a bridge that was badly needed by both the town and the two schools" (Bennett 1990: 4).

In 1901, Schell composed a proposal for a new bridge that he submitted to the town of Northfield:

> *Desiring to leave an enduring memorial to my honored father, Robert Schell, in Northfield, and also desiring that a bridge be built across the Connecticut River at a point within 500 feet north of the boundary line between lands of the Northfield Seminary and one William D. Alexander, I hereby for myself, my executors and administrators, do offer, covenant and agree that if the Town of Northfield shall cause a bridge to be constructed at such location ,I will, and my executors and administrators shall, pay to the said Town the cost of such bridge to an amount not exceeding Thirty Two Thousand Dollars.* (Bennett 1990: 5)

Edward S. Shaw, the engineer of the Bennett's Meadow Bridge, had already been asked to design this new highway bridge. As first projected, the bridge was designed for utilitarian purposes only, with three simple and independent spans, but after Schell decided to have the bridge erected in memory of his father, the plans were changed substantially. The revised plans for the bridge showed a structure with considerably more ornamental details than the earlier bridge.

The March 1, 1902 edition of the *Greenfield Gazette & Courier* detailed Shaw's design process for the Schell Memorial Bridge:

> *Upon careful consideration, it was found that the original plan would result in a structure that was not pleasing architecturally. In order to remedy this lack, especially as it was to be a memorial and it was desired that no detail should be wanting to its perfection, an additional cost of $6000 was authorized by Mr. Schell, and now a bridge will be erected with a single ground arch leaping from one bank of the river to its opposite 400 feet away. Bridge builders who have seen the plans of the proposed structure characterize it as highly artistic in effect and beautiful in all its details. In fact, it is stated that the New England Structural Company, to whom the contract is awarded, submitted a bid for the contract only after the plans had been modified as described above and the superstructure designed in such a manner as to make it a great credit to the company that was fortunate enough to erect it* (Bennett 1990: 7).

After Francis Schell died in 1928, his widow sold their estate to the Northfield Schools, but The Chateau eventually fell into disrepair and was torn down in the 1960s, leaving only the bridge as a reminder of the Schell's days at Northfield. The Schell Memorial Bridge has remained virtually unaltered over time, with the exception of the floor system which was replaced in 1932 with new stringers and a wood block deck. The bridge was maintained by the state until the 1970s, when Highway 142 was rerouted over a new highway bridge at Bennett's Meadow, at which time the Schell Bridge became the sole responsibility of the town. In response to a 1977 engineering study, the town studied proposals for the bridge's rehabilitation or replacement, but concluded that they just did not have the money to fund such an undertaking. The bridge has been closed since 1985, and the bridge is barricaded with metal plates across the portal ends (Bennett 1990: 8). In May of 2014, the Massachusetts Department of Transportation announced its plans to demolish the bridge and replace it with a bicycle bridge modeled after the 1903 structure (Rainville 2014).

BIBLIOGRAPHY and/or REFERENCES

Bennett, Lola (Historic American Buildings Survey [HAER] Historian)
1990 *Schell Memorial Bridge Spanning the Connecticut River, Northfield, MA (HAER No. MA-111).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

n.a.
1901 "Northfield's Good Fortune: Francis Schell Gives the Town a Bridge over the Connecticut River." *Northfield Gazette & Courier*, August 31, 1901.

Rainville, David
2014 "Schell Bridge 'summit' set for Thursday." The Recorder, Greenfield, MA.

Spaulding, Maureen and Sue Ross
2007 "Schell Memorial Bridge Threatened," *Society for Industrial Archeology Newsletter*, Volume 36, No. 2.

Tercentary Committee of Northfield, MA
1973 *Northfield's 300th Anniversary: Official Souvenir Tercentary Program*. Northfield, MA.

ADDITIONAL PHOTOGRAPHS

Ca. 1902 Photo of Schell Bridge Under Construction (Source: Northfield School)

Historic Photograph of Schell Bridge (Source: www.cardcow.com)

2013 View of Western Approach and Downstream Face (Source: TRC)

2008 Low-level oblique image of Schell Bridge over Connecticut River (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

NRHP-eligible, Criteria A and C
The Schell Memorial Bridge has been determined eligible for listing in the National Register by the MHC. It is the third oldest of five known Pennsylvania truss bridges identified in the Massachusetts Department of Public Works database. It is a unique variation—at least in Massachusetts-of a Pennsylvania truss, in that it was designed to function as a three-span continuous truss under live load, and as a simple truss span with cantilevered ends under dead load. The bridge also has some unusual Gothic Revival-style decorative elements. The bridge is a significant structure in Northfield's social history, in that it was built for the Town by one of its most prominent citizens and benefactors, Francis R. Schell. Although no longer in use and barricaded, the resource retains all aspects of integrity.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Orange		GIL.900/ERV.904

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0705372E 4719186N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Gill, Erving

Place *(neighborhood or village):* West Northfield/East Northfield

Street/Route: Route 2 (Mohawk Trail)

Carried over: Connecticut River
(Railroad, river, brook, canal or road)
Historic/Common name: French King Bridge

Ownership: Massachusetts Department of Transportation
(Name of state agency or municipality)
Mass. Highway bridge no.: E-10-14/G-4-9

Bridge type: Riveted steel deck arch bridge

Bridge typology code 411

Date of Construction: 1931-32

Source: Historic American Engineering Record, Plaque

Engineer/Designer: George E. Harkness, Bridge Engineer, Albert E. Kleinert, Jr., Asst. Structural Engineer

Bridge company/Contractor: McClintic-Marshall Construction Co., Pittsburgh (steelwork); Simpson Brothers Construction Co., Boston (substructure)

Material (s): Steel, Concrete

Alterations *(with dates):* Deck replaced (1955)

Posted load limit *(if any):* Unknown

Condition: Excellent

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Superstructure:

Overall length: 890 ft. Deck width: 47.9 ft. Skew: None
Main unit: No. of spans: 3 Span length: 460 ft. (center), 161 ft. (ends)
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 135 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The French King Bridge rises 135-feet above the level of the Connecticut River, and spans the narrow French King Gorge just above the Connecticut's confluence with the Millers River. The bridge itself is a 782-foot, riveted steel, three-span continuous spandrel-braced deck arch, resting on two concrete river piers and two concrete abutments. It has a parabolic lower chord, and a very slightly arched upper chord, which are connected by a series of verticals and diagonals patterned after the Pratt system. The trusses, spaced 41-feet apart and divided into thirty-four panels each, are identical. The vertical truss members support plate girder floor beams, on top of which are rolled I-beam stringers and a reinforced concrete deck. The deck carries a 40-foot roadway and a 6-foot sidewalk on the north side of the bridge. Concrete pylons extend upward from the abutments, above the level of the roadway, to form the portals of the bridge. These pylons have decorative Art Deco-style paneling on their outer surfaces, and are stepped at the top. On top of each pylon is an ornamental, Neoclassical, wrought iron electrolier with decorative lanterns on either side, and an eagle on top. A decorative iron balustrade runs along both sides of the deck, and is bolted to steel castings set in the concrete of the sidewalks.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The French King Bridge was conceived as part of a state-financed project to relocate a particularly hazardous seven-mile stretch of the old Mohawk Trail Highway (State Route 2) between Erving and Greenfield. The old route had wound through the villages of Millers Falls and Turners Falls on a course marked by steep grades, sharp curves, and narrow bridges. The relocated State Route 2 ran north of both villages on an alignment whose principal challenge was the crossing of the precipitous Connecticut River gorge near the French King Rock (Bennett 1990: 11).

After looking at several plans, the engineers decided to cross the Connecticut River with a bridge at the height of the hills on either side, about 135 feet above the water. When completed, the entire project would include the construction of about six miles of new state highway, a highway grade separation, a bridge over the Central Vermont Railroad, and the construction of a large high-level steel arch bridge over the Connecticut River (Bennett 1990: 6).

The selection of a specific structural type for this high-level bridge was based on the highway department's desire to fit the bridge into this dramatic setting, while responding to such factors as the height and steepness of the gorge's bank and the swiftness of the river current. “The graceful 3-span arch design which resulted takes advantage of the favorable foundation conditions (critical for an arch) while it avoided the construction of either permanent piers or temporary falsework in the river itself” (Bennett 1990: 6).

Albert E. Kleinert, Assistant Structural Engineer at the Massachusetts Department of Public Works in 1931, stated that in selecting the type of bridge to be erected on the chosen site, "the endeavor was made to develop a bridge which not only fitted the site, but which could be erected by cantilever construction, since the deep water, rocky river bed, and the swift current discouraged the use of falsework in the river. The result of our studies is a steel deck structure, continuous over four supports, two of which are abutments placed at the ends of the bridge, high on the banks, and the other two are piers placed at the edges of the river" (Bennett 1990: 6).

In naming the type of this structure Kleinert used the term "steel continuous spandrel braced arch," because it is a steel spandrel-braced arch between the piers, and is continuous to each abutment where it receives vertical support (Bennett 1990: 9).

During the summer of 1931, the contracts for the Erving-Greenfield cutoff were awarded to Kelleher Corporation of Montague, Massachusetts (for the western section, from Greenfield to the Connecticut River) and to Lawton Construction Company of Providence, Rhode Island (for the eastern section, from the Connecticut River to the road to Millers Falls, just east of the road to Northfield, now Highway 63)(Bennett 1990: 5).

Construction of the French King Bridge began in September of 1931, was completed at a cost of $385,000 and opened to travel on September 10, 1932. The French King Bridge is one of four known steel deck-arch vehicular bridges in Massachusetts, and has the sixth-longest span of any vehicular bridge in the state. "It is of engineering interest as an unusual development of the uncommon three-span, cantilever arch bridge type, in that definite reactions were jacked into its steelwork at the conclusion of construction, resulting in a bridge which is structurally continuous across four supports. The American Institute of Steel Construction named the French King Bridge the most beautiful steel bridge of its class erected in America in 1932" (Bennett 1990: 3).

Local historian John A. Taggart wrote movingly of the beauty of the French King Bridge for the 1932 opening souvenir program:

> *Today we dedicate a magnificent addition to the justly famous Mohawk Trail system. The imposing structure of steel and concrete which here spans the Connecticut River is a noble monument to man's skill and ingenuity. The miles of newly constructed highway which approach the bridge from west and east open up a territory rich in history and replete with views which delight the eyes* (Daily Recorder-Gazette, September 10, 1932).

BIBLIOGRAPHY and/or REFERENCES

Bennett, Lola (Historic American Buildings Survey [HAER] Historian)
1990 *French King Bridge Spanning the Connecticut River Between Gill and Erving (HAER No. MA-100).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

Daily Recorder-Gazette
1932 "Souvenir Program on the Occasion of the Dedication of the French King Bridge" Greenfield Daily Recorder-Gazette, Greenfield, MA.

ADDITIONAL PHOTOGRAPHS

Historic Postcard Photograph of French King Bridge (Source: www.cardcow.com)

2014 View of Eastern Approach (Source: TRC)

2014 View of Framing System (Source: TRC)

2008 Low-level oblique image of French King Bridge over Connecticut River (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☐ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

NRHP-Eligible under Criterion C

The French King Bridge previously has been determined eligible for NRHP listing by the MHC. The French King Bridge is significant as one of four known steel deck arch bridges in Massachusetts, and one of the longest spans in the state. It is of engineering interest as an unusual development of the uncommon three span, "cantilever arch" bridge type, in that definite reactions were jacked into the steelwork at the conclusion of its construction, making the bridge structurally continuous across four supports. The bridge fabricator, McClintic-Marshall Company of Pittsburgh, was a very significant bridge building firm in the early to mid-twentieth century. The French King Bridge was the crucial link in the establishment of a safe and efficient highway across northwestern Massachusetts in the 1930s, and is a reminder of the great strides made in transportation technology during that period.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Orange		MNT.917

Photograph

Locus Map

MA GIS 2014

Town/City: Montague, Erving

Place *(neighborhood or village):* Miller's Falls

Street/Route: East Mineral Road

Carried over: Millers River
(Railroad, river, brook, canal or road)

Historic/Common name: East Mineral Road Bridge

Ownership: Towns of Erving, Northfield, and Montague
(Name of state agency or municipality)

Mass. Highway bridge no.: E-10-1/M-28-14

Bridge type: Pratt through truss

Bridge typology code 910 302

Date of Construction: 1888, 1939

Source: Erving/Montague Annual Reports

Engineer/Designer: George P. Carver Engineering Co. (1939)

Bridge company/Contractor: Wrought Iron Bridge Company (Canton, OH)

Material (s): Wrought Iron, Stone, Concrete

Alterations *(with dates):* Replacement of span and western abutment, pier encased in concrete (1939)

Posted load limit *(if any):* Unknown, closed to vehicular traffic due to deterioration

Condition: Fair

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural

UTM Reference: 18 0705425E 4718969N

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* 04/2014

Superstructure:

Overall length: 157 ft. Deck width: 13.6 ft. Skew: None

Main unit: No. of spans: 1 Span length: 105 ft.

Approaches: No. of spans: 1 Span length: 52 ft.

Substructure *(structure below deck)*

Height above feature spanned: 135 ft. (approx.) Material of abutments or piers: Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The East Mineral Road Bridge was constructed in 1888 to replace a covered bridge for the cost of $5,500. Composed of two spans, the approach span, which was reconstructed in 1939 and replaced a Pratt half-hip pony truss, is 52 feet long and has steel stringers with a reinforced concrete deck. The 105 foot main span is a pin connected Pratt truss with wrought iron floor beams. Unusual structurally, the western end of the through truss span is carried on a 2-column braced bent, rather than directly on a masonry pier. The bridge also has a number of unusual structural details, such as the upper lateral struts and the double eyes of the lower ends of the hip verticals. It was closed to vehicular traffic in 1987 and in 2005 it was rehabilitated for pedestrian, bicycle and equestrian use.

HISTORICAL NARRATIVE

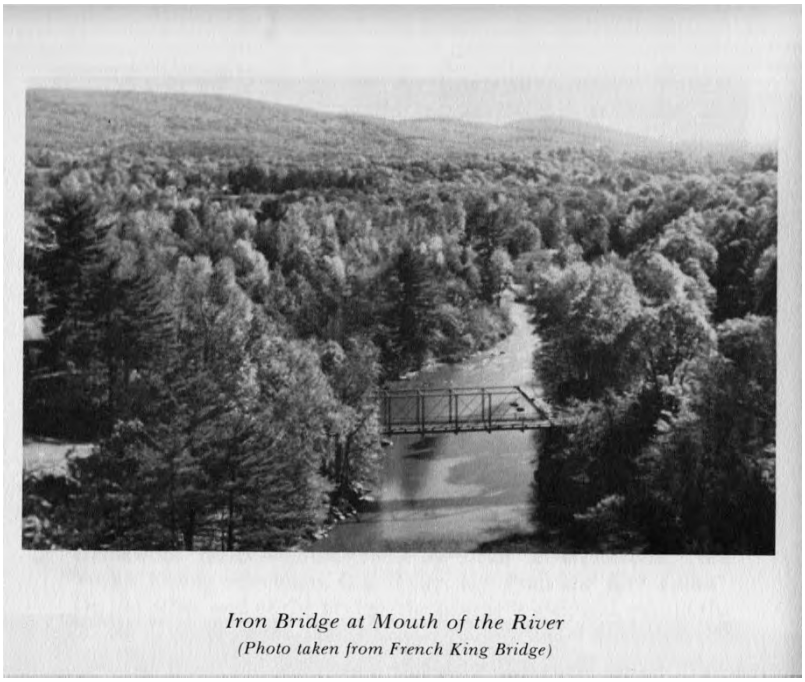
Explain the history of bridge and how it relates to the development of the community.

A covered bridge was erected on the site in 1774. In 1888 it was replaced with the current bridge for a cost of $5,500 The cost was paid by the towns of Montague (50%), Erving (25%), and Northfield (25%). According to the 1927 Erving Town report, this bridge “was not as important these days as it was in the past.” It was built by the Wrought Iron Bridge Company of Canton, Ohio, which specialized, as the name would suggest, in the fabrication of iron truss bridges and was a prolific bridge builder in the late 19th century. It was one of the 28 firms consolidated by J. P. Morgan into the American Bridge Company in 1900. In 1939, the approach span which was a Pratt half-hip pony truss, was replaced as was the western abutment (with concrete) and the stone pier was encased with concrete.

BIBLIOGRAPHY and/or REFERENCES

Keller, Charles
1987 *Town Forced to Close Erving-Montague Span. The Greenfield Recorder.* May 9, 1987.

ADDITIONAL PHOTOGRAPHS



Undated Photograph of East Mineral Springs Bridge (Source: http://historycruise.blogspot.com/)

2013 View of Eastern Approach (Source: TRC)

2014 View of Plaque (Source: TRC)

2008 Low-level oblique image of French King Bridge over Connecticut River (Source: MASSDOT GIS)

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☐ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)

The criteria that are checked in the above sections must be justified here.

National Register Eligible, Criterion C

The MHC has determined the East Mineral Springs Bridge eligible the NRHP under Criterion C. The bridge is the third oldest of nine known Pratt through trusses in Massachusetts. Somewhat altered, the original pony truss approach span on the west was replaced in 1939. It was built by one of the largest and most innovative late-19th-century bridge building firms, the Wrought Iron Bridge Company of Canton, Ohio. Unusual structurally, the western end of the through truss span is carried on a 2-column braced bent, rather than directly on a masonry pier. The bridge also has a number of unusual structural details, such as the upper lateral struts and the double eyes of the lower ends of the hip verticals.

FORM A - AREA

Assessor's Sheets	USGS Quad	Area Letter	Form Numbers in Area
05-0-11 to 05-0-144	Greenfield	MNT. C	MNT.907

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Photograph

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Name of Area: "The Patch"

Present Use: Residential, some commercial

Construction Dates or Period: Late 19th to Early 20th Century

Overall Condition: Fair to Good

Major Intrusions and Alterations: No major intrusions. Most buildings have some replacement siding.

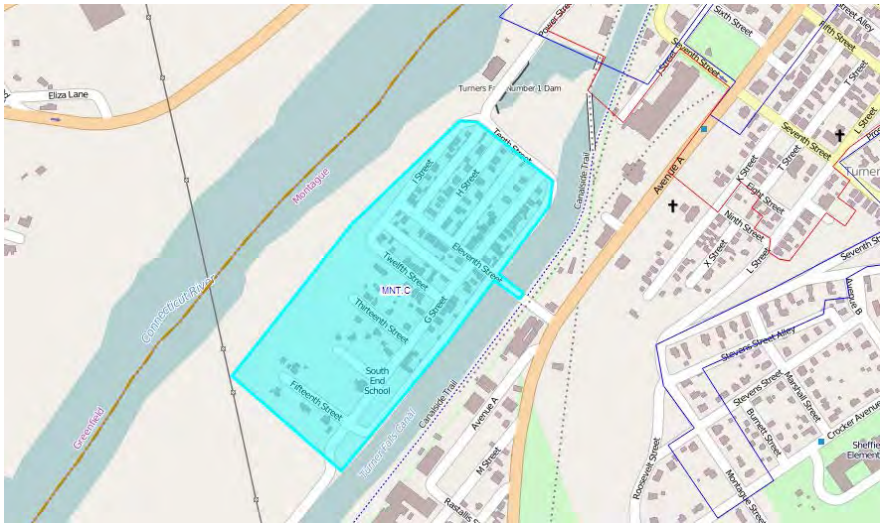
Acreage: > 10 acres

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date *(month/year):* March 2014

Locus Map



MACRIS 2014

☒ *see continuation sheet*

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION

Describe architectural, structural and landscape features and evaluate in terms of other areas within the community.

The area of southwest Turners Falls known locally as "The Patch" is a rectangular three-block-by-five-block area bounded on the west by the Connecticut River, north by Tenth Street, east by the Turners Falls Power Canal, and south by Fifteenth Street. Access to The Patch from the rest of Turners Falls is at only two points: from the east via the Eleventh Street Bridge (which is included as part of this district) and from the north by Power Street over the Station No. 1 dam. Streets are laid out on a grid pattern, with north-south lettered streets and east-west numbered streets, as is true for the rest of Turners Falls.

The Patch is a primarily residential area consisting of approximately 85 houses and auxiliary buildings, although a few commercial buildings are located near Eleventh Street. Buildings date from the late nineteenth to early twentieth centuries, coinciding with Turners Falls' prominence as an industrial and manufacturing center on the Connecticut River. Single- and multi-family dwellings are either of frame or brick construction, one or two stories in height, with side- or front-gable roofs. They are mostly vernacular variants of nationally popular styles such as the Italianate, Queen Anne and Colonial Revival Styles. Some residences have retained their original detached garages. There are no major modern intrusions or demolitions in the district, with most alterations confined to the use of replacement siding and replacement windows and doors. Buildings range from fair to good in condition.

Typical buildings in The Patch include:

- MNT-124 South End School, early 1900s Classical Revival, 3-story brick school house
- MNT-125 House #83 G Street, a 2-story brick house with front-gable roof and replaced front porch
- MNT-126 Eleventh Street, 2-story frame apartment building with 2-story front porch
- MNT-127 #25 Eleventh Street, a 3-story Italianate-style brick commercial/apartment building

HISTORICAL NARRATIVE

Explain historical development of the area. Discuss how this relates to the historical development of the community.

Along with the rest of Turners Falls, "The Patch" was developed in the 1870s primarily by Polish immigrants as a planned industrial community along the lines of Lowell or Holyoke under the aegis of the Turners Falls Company and its founder Col. Alvah Crocker. Crocker and his business associates purchased the rights of the old Proprietors of the Upper Locks and Canals at Turners Falls and embarked on converting the old navigational canal into a power canal for the use of mills and factories that would locate to Turners Falls. By the late 1870s several significant industries, chief among them the John Russell Cutlery Company had built plants along the power canal at its northern end. Soon joined by the Montague, Turners Falls, and Keith paper mills, Turners Falls' factories provided employment for hundreds of local residents, many of whom lived in company-built housing in the village (Jenkins 1980: 8.1).

Turners Falls is shown in an 1877 birds eye view as a planned community superimposed on the natural landscape and bisected by the power canal. The Turners Falls Company laid out a town with the prime sites along the river reserved for the factories, with a broad tree-lined street (Avenue A) for commercial and governmental buildings, and the remaining area laid out in a grid pattern for the building of single- and multi-family residences. Nearly all of these housed workers at

one of the local mills and factories, as well as some who worked for the logging operations along the Connecticut River. "The Patch" neighborhood, consisting mostly of Polish immigrants, developed a decade or two later than the original heart of Turners Falls, as is shown by Sanborn insurance maps beginning in 1884 and continuing into 1914.

By the early 1900s, the Turners Falls Company had expanded its operations to include development of hydroelectric power for industrial and residential use. As part of this, the Turners Falls Power & Electric Company (as it became known) widened and extended the power canal south of Seventh Street and constructed two new power stations. The first one, known as Station No. 1, was completed in 1906 just north of Eleventh Street within sight of the north end of The Patch, with the new Branch Canal and dam cutting the area off from the rest of Turners Falls to the north. When the canal was extended south to the new Cabot Station south of the Patch in 1915, the area became a virtual island, relieved only by the building of the Eleventh Street Bridge that same year.

Like the rest of Turners Falls, The Patch experienced a decline beginning in the 1930s, as several major mills and factories closed or relocated elsewhere. Although a few of the historic factories are still partially operated, they no longer provide much employment for Turners Falls' residents, most of whom work elsewhere. As a result, there has been little new construction in the village since the 1940s and The Patch has preserved most of its appearance intact.

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1938 *Crossing and Re-Crossing the Connecticut River*. New Haven, Connecticut: The Tuttle, Morehouse & Taylor Company.

ADDITIONAL PHOTOGRAPHS

2013 View of street typical of The Patch along G Street (Source: TRC)

2013 View of commercial area of The Patch at 11th Street (Source: TRC)


2008 Low-level oblique image of The Patch (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☒ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)

The criteria that are checked in the above sections must be justified here.

The Patch Historic District was previously surveyed by the Franklin County Arts Council during its survey of Turners Falls in 1978 but was not assessed for NRHP eligibility by the MHC. Since "The Patch" is a previously defined historic district with a separate history and period of significance, as well as geographical separation from the NRHP-listed Turners Falls Historic District, it is appropriate to consider it as a separate district rather than attempt to modify the boundaries and historic context for the Turners Falls Historic District. The Patch Historic District is NRHP-eligible under Criteria A and C on the local level with a period of significance between the early 1880s and 1932 (within the period of significance of the NRHP-listed Turners Falls Historic District, located five blocks to the north). The Eleventh Street Bridge (MNT.904), previously determined NRHP-eligible by MHC, is also a contributing resource in the Patch Historic District.

NRHP-eligible "The Patch" Historic District, Turners Falls (Criteria A and C)

This district in southwest Turners Falls is a rectangular three-block-by-five block area bounded on the west by the Connecticut River, north by Tenth Street, east by the Turners Falls Power Canal, and south by Fifteenth Street. The historic district is a primarily residential area consisting of approximately 85 houses and auxiliary buildings, although a few commercial buildings are located along and near Eleventh Street. Buildings date from the late nineteenth to early twentieth centuries, coinciding with Turners Falls' prominence as an industrial and manufacturing center on the Connecticut River.

Criterion A

The Patch Historic District is NRHP-eligible under Criterion A for its association with the development of Turners Falls as a major industrial center in western Massachusetts following its founding as a planned industrial community in 1866. The village grew throughout the late nineteenth and early twentieth centuries as a center of paper-making mills and a cutlery factory whose workers lived within walking distance along the grid-pattern streets designed by the Turners Falls Company. Originally settled in the 1880s and 1890s by Polish immigrants to Turners Falls, after 1906 "The Patch" developed somewhat of a separate identity due to the fact that it was physically cut off by expansion of the Turners Falls power canal, and became accessible only by the Eleventh Street Bridge.

Criterion C

The Patch Historic District is NRHP-eligible under Criterion C for its largely intact collection of late-nineteenth and early-twentieth-century architecture in vernacular variants of the Italianate, Colonial Revival, and Queen Anne styles, along with some Italianate-style commercial buildings and a Classical Revival-style school. The district has had few intrusions or demolitions and retains all seven aspects of integrity.

FORM A - AREA

Assessor's Sheets	USGS Quad	Area Letter	Form Numbers in Area
101, 102	Greenfield	D	GIL. 9, 10, 23-59, 118-172

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Photograph

Town/City: Gill

Place *(neighborhood or village):* Riverside

Name of Area: Riverside

Present Use: Residential, commercial

Construction Dates or Period: ca. 1760-1945

Overall Condition: Good

Major Intrusions and Alterations: Contemporary commercial buildings on French King Highway, inappropriate alterations to historic houses

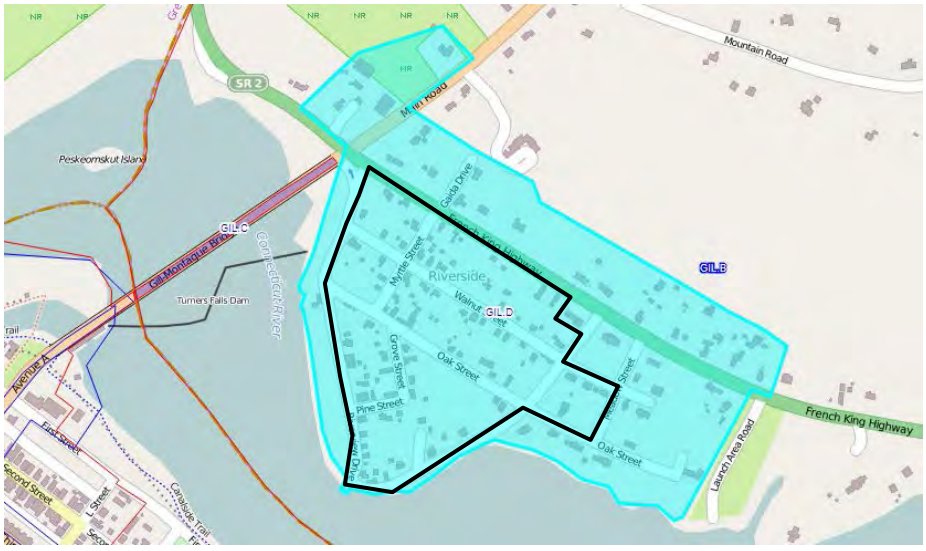
Acreage: over 50 acres

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date *(month/year):* April 2014

Locus Map



Proposed Riverside Historic District

MACRIS 2014

☒ *see continuation sheet*

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION

Describe architectural, structural and landscape features and evaluate in terms of other areas within the community.

Location

Riverside in the Town of Gill is located on the north side of the Connecticut River where the river makes a short turn to the west. The village is just east of a major dammed falls in the river and east of the entry from the north of the Fall River into the Connecticut. Route 2 known in this area as "French King Highway" runs through the village in an east-west direction and Main Road running to the northeast connects Riverside with Gill Center. The village lies along a flood plain of the river made narrow by a series of hill on its north side. Fall River marks the boundary with Greenfield on the west and the Connecticut River marks the boundary with Erving on the west and Montague (Turners Falls) to the south.

Historically, Riverside was considered all of the section of Gill south of Gill Center including a small area of industry on Fall River, as well as farmland and alluvial flood plain that extended to the Connecticut River on the east. The most densely settled section of the village, a former manufacturing village, occupies a shallow peninsula extending into the river between Barton's Cove on the east and the falls on the west and the south side of the French King Highway (Route 2). The following descriptions are a representative selection of the best-preserved buildings, a structure, and a monument found in the area as written by Bonnie Parsons of the Gill Historical Commission in 1999.

Architectural Description

The George and Clara Harris House, 4 Grove Street, ca. 1869 (GIL.35) is an Italianate cottage that is 1½ stories in height beneath a front-gabled, slate roof. Three bays wide and two bays deep, the clapboard house has a one-story rear ell that incorporates a garage. Stone foundations mark it as one of the earliest houses in the manufacturing village of Riverside, the majority being brick. A trabeated door surround remains, although its sidelights and original opening have been filled in and reduced.

Another early house, the Field-Foster House, 8 Grove Street, 1870 (GIL.37) is late Gothic Revival in style. It is a front-gabled, one-and-a-half story, side-hall plan house. Like many of the buildings in Gill it has a slate roof. The main block of the vinyl-sided house is two bays deep and three bays wide and there is a rear one-and-a-half story ell with a glassed-in porch room added to each side. Two gabled dormers, Gothic Revival-style, rise on the south side of the ell and one on the north. Sash is 2/2. A column-supported, shed-roof porch, Colonial Revival in style, was added to the house as well as an exterior chimney.

The Turners Falls Lumber Company Office and Riverside Library, 17 Riverview Drive, ca. 1872 (GIL. 187) has been altered by the addition of the double-width door in its street facade, but it retains much of its early appearance as a one-and-a-half story, front-gabled building two bays wide and one bay in depth. It is clapboard sided and has an asphalt shingle roof. The attenuated proportions of the corner pilasters, a broad frieze and eaves returns mark the building as post-1850.

Larger in scale and Italianate in style is the house at 21 Riverview Drive, ca. 1870 (GIL.58). This is a 2½-story house on brick foundations with a side-gabled roof that was set sideways on its lot to be south facing. A transverse gable wing on the south creates an L-shaped plan in whose angle is the building entry through a shed-roof porch that is enclosed. Three bays wide and one bay deep, the house has a paneled, three-sided bay on its street facade. The wide overhang of the

roof, an arched, louvered gable vent and capped window surrounds remain from its Italianate origins. Sash is mainly replacement 1/1, but the house retains its clapboard exterior.

At 7 Walnut Street, a Charles Stoughton House, 1883 (GIL.55) is a large-scale, but modestly ornamented Italianate style house. The main block of the two-story clapboard building is L-shaped in plan with an entry in its inner corner beneath a chamfered-pier-supported porch. A two-story rear ell has a side porch on Italianate piers as well. Three-sided bays on the south and west facades add visual appeal to the elevations. The thinly boxed eaves with no returns have a wide overhang and there is a single roundel window in the gable ends. The house retains its clapboard exterior.

Three Queen Anne style cottages retain the ornamental bargeboards popularized during the Gothic Revival period. At 9 Walnut Street, a Charles Stoughton House, 1883 (GIL.23) is the largest of the three. The 2 ½-story, front-gabled house, now shingle-sided, is three bays wide and five bays deep. There is a transverse gable bay on the west. Unusual are the exaggerated shed-roof lintels supported by scrolled braces over both first and second story windows. Also unique in Riverside are the arched king-post trusses in the gables that are further ornamented with bargeboards with wave-like jigsaw work at their ends. A shed roof porch has been enclosed but retains its pedimented roof with a modified version of the king-post truss.

Next door at 11 Walnut Street, a Charles Stoughton-Peleg Adams House, 1883 (GIL. 166) is a small Queen Anne cottage one-and-a-half stories in height beneath a front-gabled roof. It is three bays by three bays and has a one-and-a-half story, followed by a one-story, ell at the rear for a long rectangular plan. Principal ornaments are the scroll-cut bargeboards in the front gable and a shed roof porch on posts with elaborate scroll-cut brackets. 2/2 sash and simple flat stock window surrounds complete its modest appearance.

The third house, the Katherine and John Pfersich House, 27 Oak Street ca. 1890 (GIL.31) is vinyl-sided and has 1/1 vinyl replacement windows, but retains some of its trim including barge boards in the front gable of its rather steeply pitched slate roof. The house is three bays wide and two bays deep and has a flat-roofed porch across its east facade supported by posts, linked by solid brackets that are connected by spindle work.

Typical of the small, side-hall-plan Queen Anne-style houses found in the area is the house at 35 Riverview Drive, ca. 1890 (GIL. 162) This is a one-and-a-half story, front-gabled and asbestos shingle-sided house whose front corners at the first floor have been canted beneath a pendent-ornamented overhang for a three-bay elevation. An entry with half-length, angled sidelights is placed in a shallow projecting bay just beyond the overhang.

A pair of Queen Anne-style multi-family houses is found at the David A. Wood House, 7 Riverview Drive, ca. 1869 (GIL.27) and the Curtis Johnson House, 25 Riverview Drive, ca. 1869 (GIL.40). Originally nearly identical, the two are 2 ½-stories in height with slate roofs that present their gable ends to the street and have porch-covered entries on both sides. The two houses are four bays wide with a pair of three-sided bays at the first floor on the street or west facades. At the Wood House a flat-roofed, two-story bay on the north creates two corner porch-covered entries. The porches have turned supports and lattice scrollwork in the Johnson House the same double porches exist although they have been altered with replacement posts and removal of the brackets. A one-and-a-half story rear ell has two gabled dormers while at the Wood House there is a two-and-a-half story ell. Sash in both houses is 2/2.

A more simply designed multifamily house is the Ernest and Mary Yukl House, 45-47 Riverview Drive, ca. 1910 (GIL.41). The large scale, 2½-story house is five, irregularly spaced bays wide and two bays deep under a side-gable, asphalt shingle roof whose eaves make returns. Clapboard-sided, the house sits on a high brick foundation and has a single center chimney. It is entered beneath a double stacked Colonial Revival style porch on half-length columns that sit on solid clapboard porch walls. The porch has a shed roof. A glass, metal and concrete greenhouse was added to the east facade of the house.

More architecturally elaborate is the multifamily Turners Falls Lumber Company Workers' Housing at 32 Walnut Street, ca. 1900 (GIL.51). Here the units are side-by-side rather than stacked as at 45-47 Riverview Drive. The 2 ½-story house has a side-gable, asphalt shingle roof, with two interior chimneys, from which projects a centered, transverse gable. The building is only four bays wide with a pair of entries in the center flanked by paired sash. A shed-roof porch with paired pediments shelters the entries. The porch rests on posts with simple braces that echo a king-post truss motif in the transverse roof gable. Windows have replacement 6/6 and 1/1 sash. The eaves have a relatively wide overhang and do not make returns in the gable ends, features that support its early 20th century date.

Close in date is the Angelina and Obed Murley House, 41 Riverview Drive, ca. 1909 (GIL.42). This is a two-by-two-bay, front-gabled cottage. There is a one-story kitchen ell on the north. The house shares with its Italianate neighbors in Riverside its tall proportions, medium-width frieze and cornerboards. Here, however, its full-width, hipped-roof porch rests on Queen Anne-style turned posts with scroll-cut supporting brackets. Originally three bays in width; the house has a large window replacing two on the south facade, which overlooks the Connecticut River.

Across the street on Riverview Drive from the Albert Smith House is a remaining bridge abutment, 1878 (GIL.907) from the Red Suspension Bridge, an iron bridge that crossed into Montague between 1878 and 1942 when it was demolished as scrap for World War II. The abutment has been designated as a Massachusetts Historic Civil Engineering landmark and is of interest to geologists as it was constructed from local stone that contains armored mudballs, or petrified, encased fossils.

At the south west corner of Riverview Drive and the French King Highway is the Turner Monument, erected in 1900 (GIL .906) to commemorate the English settlers' ambush of Native Americans led by Captain William Turner at the natural falls in the Connecticut River. It is a granite monument five feet high by approximately three and a half feet by three and a half feet. It is rusticated and has a pyramidal top and is inscribed with a description of the event as follows: "Captain William Turner with one hundred and forty five men surprised and destroyed over three hundred Indians encamped at this place, May 19, 1676".

HISTORICAL NARRATIVE

Explain historical development of the area. Discuss how this relates to the historical development of the community.

The following narrative has been adapted from the 1999 Area Form written by Bonnie Parsons of the Gill Historical Commission:

As a result of King Phillips War in 1676, the area remained unsettled until just before the middle of the 18th century. One of its earliest residents, arriving in 1743 was George Howland who built the Howland Tavern, ca. 1760 (GIL. 10) close to the Connecticut River where he served the river boat traffic that was carting goods above and below the falls. A few farms were established prior to the Revolutionary War in Riverside including Timothy Stoughton whom bought a 300 acre piece of property from Native Americans. This section of Gill was suited to farming and particularly sheep farming and by 1838 Stoughton was among the more successful sheep farmers with a house, two barns, numerous outbuildings, a cider mill, a few dairy cows and 210 acres. In addition to the farms, a ferry operated across the Connecticut River from Riverside at the foot of Riverview Drive and a sawmill was operated nearby at the falls.

A small settlement grew up around a textile mill in the 1830s in a part of Riverside known as Factory Hollow, but most of this settlement was on the Greenfield side of Falls River. On the Gill side were a blacksmith shop, a machine shop and several dwellings, all since demolished. The area remained sparsely populated until 1867 when Amos Perry, David Wood, and Nathaniel Holmes bought water rights on the Connecticut River from the Turners Falls Company along with a small parcel of land in Riverside at the edge of the river for a grist and sawmill. A farmer, Cornelius Allen, owned most of the land in Riverside at that point but in 1870 Perry, Wood and Holmes together with Timothy Stoughton, descendent of one of the earliest farmers of Riverside, bought Allen's farmland as the mills began operation. Stoughton invested in land with the three men and perhaps in the company as well. The Holmes, Wood and Company sawmill provided vast amounts of

lumber for the development of Turners Falls across the river and lumber production soon outstripped the gristmill. The need for lumber workers prompted housing construction. It was from 1869-70 that the concentration of buildings comprising the manufacturing village of Riverside was constructed. Many were built by the company for their mill hands, some of these by Timothy Stoughton; others were speculatively built by associates or speculators from nearby towns.

In 1872, Holmes, Wood and Perry incorporated as the Turners Falls Lumber Company bringing logs downriver to their sawmill from Vermont and Canada. This was also the year in which Riverside got its own post office and with it, the official village name. Underscoring the lumber company's role in village growth, David Wood became the first postmaster. The three partners lost control of their business the following year and they were bought out by Timothy Stoughton. The Turners Falls Lumber Company ran log drives every year between 1869 and about 1900 bringing millions of board feet into Riverside each year, where it was processed and sold.

Stoughton was an astute entrepreneur and a person of extensive interests. When it was ascertained that prints found in sandstone in the Gill area were prints of prehistoric animals it was Stoughton who turned their collection into a commercial enterprise, quarrying the prints, selling and distributing them to colleges and museums throughout the country. The Tax Valuation List of 1885 suggests some of his interests and investments, for that list shows he owned six houses including a tenement or workers' housing, and a blacksmith shop, a "bird track house" (storage building for the dinosaur prints), that he continued to run a farm that included several tobacco barns and had a substantial amount of cash, $17,400. Prior to his involvement with the lumber company, he had torn down the family homestead and built the house at 13 Main Road ca. 1860 where he proceeded to develop a model farm with the most up-to-date technology.

Stoughton was an early proponent of connecting Gill to Turners Falls with a bridge that would put Riverside within easy reach of the larger industrial Turners Falls. Without a bridge the lumber company had to ship materials on the ferry run by Albert Smith or overland in a circuitous route across Falls River. Accordingly, he began publicly to advocate for the structure and in 1878 the Red Suspension Bridge (demolished in World War II for scrap metal) was constructed connecting the two towns. The bridge represented a prosperous future for Riverside. In 1879 Louis Everts wrote in his *History of the Connecticut Valley in Massachusetts* that Riverside was "rapidly growing in popularity among businessmen at Turners Falls Village as a place of suburban residences" and that when Turners Falls succeeded "Riverside will be an architectural garden place."

The village did continue to grow, although more modestly than predicted. A second industry was added at the foot of Riverview Drive in 1885, known as the Kindling Wood Factory. A spin-off industry from the lumber mill, the kindling wood factory bought waste wood from the Turners Falls Lumber Company, cut, dried, bundled and sent it to city markets. When the company organization faltered, it was bought by the Turners Falls Lumber Company and continued until 1891 when it burned down and was not reconstructed. Housing continued to be built in Riverside both in high style and as workers housing. Several stores and a community building (all now gone) went up in the area and residents not employed by the lumber company followed various cottage industries from dressmaking to knife handle manufacturing. Improvements to the village included a water system that Timothy Stoughton had constructed in 1870 from a spring on his property and connected to village homes. The system was expanded in 1884 becoming the Riverside Water Company that ran water lines to all the buildings in the village.

In 1903, the Turners Falls Lumber Company burned down. It was not rebuilt and though there were subsequent development plans that aimed to build the area up into a suburban neighborhood, it never recovered from the loss of its industrial base. Rather, Riverside grew gradually partly for its proximity to the French King Highway, Route 2, as automobiles made their way across the state, and partly for its proximity to the industry of Turners Falls. Two plans for residential subdivision date from 1908. One was proposed as a Plan of Riverside Park and covered the southern portion of Riverview Drive, Elm and Walnut Streets. The second plan, proposed the same year, divided land that had formerly belonged to Timothy Stoughton into small house lots on the northern section of Riverview Drive (Bridge Street), French King Highway, Oak, Myrtle, Maple and Pine Streets. Street layouts proposed by the two plans were completed, but the dense lot divisions were never completely developed.

While residences continued gradually to be added to Riverside and other buildings were lost, the focus of the area shifted away from the River and towards the main road through Riverside that later became Route 2 or the French King Highway. The ca. 1920 Crawford Socony-Mobil Gas Station was a roadside development brought about by the automobile. One new business that merged Riverside's agriculture with roadside culture of the automobile is the Yukl vegetable stand where the Yukls established their market and nursery for over fifty years. Also indicative of the age of the automobile, in 1931 the French King Highway and new bridge across the Fall River were constructed as part of a Route 2 cutoff. The Red Suspension Bridge, that had shown signs of deterioration in 1918, was severely compromised in the floods of 1936. A more substantial bridge was needed and built in 1937-38, the Turners Falls-Gill Bridge.

BIBLIOGRAPHY and/or REFERENCES

Parsons, Bonnie
1999 "Riverside" Massachusetts Historic Building Inventory-Area Form. Massachusetts Historical Commission, Boston, MA.

Stoughton, Ralph
1978 History of the Town of Gill.

[Delete this page if no Criteria Statement is prepared]

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☒ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Potential Riverside Historic District, Criteria A and C

In 1999, the village of Riverside was surveyed by Bonnie Parson of the Gill Historical Commission and an MHC Area Form (GIL.D) was completed that recommended a Riverside Historic District eligible for National Register listing under Criteria A and C. The area was re-surveyed as part of the 2014 survey by TRC, the potential boundaries verified, and the overall condition of resources noted and recorded with photographs.

Riverside's Native American resources already are recognized as the Riverside Archeological District, listed in the National Register in 1975.

The proposed Riverside Historic District is a roughly triangular-shaped area bounded on the northwest by Bridge Street, at the north by French King Highway (Route 2), and on the east and southeast by the east sides of Meadow Street and Riverview Avenue. The district contains approximately 60 contributing resource and only a few non-contributing (thee boundaries are drawn to exclude mostly non-historic commercial buildings.

The Riverside Historic District is eligible for National Register listing on the local level as a representative Connecticut River Valley colonial era settlement, then former manufacturing village, then suburb. Several different facets and periods of Riverside's history and architectural heritage are represented within the district boundaries. Late eighteenth- and early-nineteenth century residences reflect the rural and agricultural character of the community, which also relied on timbering and yearly log drives. Riverside's greatest period of expansion occurred after the damming of the river at Turners Falls and the founding of the Turners Falls Lumber Company in

the 1860s and 1870s. The community was both economically and physically linked to Turners Falls after the building of the Red Suspension Bridge in 1878, enabling workers to commute to jobs and business on both sides of the river. Late-nineteenth and twentieth- century architecture reflects Riverside's role as a suburb of Turners Falls, and a desirable place for wealthier residents escaping the more industrial village across the river.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
101.0-0000-0103.0	Greenfield	D	GIL.037

Town/City: Gill

Place: *(neighborhood or village)*:
Riverside

Address: 9 Grove Street, Riverside

Historic Name: "Home Nook": Hunt-Sanderson-Jones House

Uses: Present: Residential

Original: Residential

Date of Construction: ca. 1869-70

Source: *History of Town of Gill* (p. 245)

Style/Form: Vernacular Greek Revival/Side-hall with ell

Architect/Builder: Unknown

Exterior Material:

Foundation: Brick; concrete block

Wall/Trim: Vinyl Siding

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
Carriage House

Major Alterations *(with dates):*
Side ell enlarged (1902-09), porch enclosed, windows and doors altered, siding added (post 1992)

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Residential

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year*): April 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: GILL

ADDRESS: 9 Grove Street

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): D

Form No.: GIL.037

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Based on historic photographs and deed records, this house was originally constructed ca. 1869-70 as a 1-story, 3-bay vernacular Greek Revival-style frame house with clapboard siding, a front-gable roof with cornice returns and corner boards, and a side-hall plan with entrance on the southeast. The single-leaf entrance door was flanked by rectangular sidelights and topped by a ramped lintel. The 2/2 double-hung sash windows had working louvered shutters and ramped lintels. The 1-story, 3-bay side ell on the east (probably a kitchen wing) had a full-width shed-roofed front porch and on-peak brick chimney.

Sometime between 1902 and 1909, the side ell was raised an additional half story, two gabled wall dormers added, and an additional bay added on the east end, turning the porch into an incised porch with turned posts. This porch has since been enclosed with 1/1 metal windows and a concrete-block foundation added. After 1992, the present 1/1 vinyl sash windows with square surrounds were added, the ramped lintels removed, and the door replaced with the present one.

Set on a brick foundation with basement, the 1-story, 3-bay dwelling with front-gable roof and 1 1/2-story, 3-bay side ell with side-gable roof is of wood-frame construction with replacement vinyl siding. The house has asphalt-shingled cross-gable roof has two on-peak interior brick chimneys and two gable wall dormers on the ell. Both the main roof and the dormers have cornice returns. The original 2/2 sash windows with working shutters and a triangular lintels were replaced after 1992 with 1/1 vinyl sash windows and square surrounds. The off-central, single-leaf door with shutters and triangular lintel has also been replaced and the surround removed. Original constructed as a 1-story ell with porch, likely as a kitchen and informal entrance, the side ell was raised ca. 1902-09 to 1 ½ stories, the gable wall dormers added, and the porch became incised into the massing with turned posts. The porch was later enclosed with 1/1 metal windows and concrete block placed under for a foundation. To the rear of the property is a 1-story garage. Square in plan, it has a pyramidal roof, weatherboard siding, and 2/2 sash windows.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

This house is reported to have been the first building erected on Grove Street (Stoughton 1978: 245). The date of the erection of this home can be closely fixed to 1869-1870 since a March 23, 1870 deed between Edwin Hunt and T.M. Stoughton mentions, apart from the "40 rods of ground" in Gill,...and also the new dwelling house recently erected upon the land and now occupied by me" (Franklin County Deed [FCD] Book 282, Page 67). Since the building was occupied by Hunt at the time of his recorded purchase, it is quite possible that he was the actual builder. On the same March day, Hunt deeded the property to his sister Elizabeth ("Lizzie") Sanderson, a widow from Sunderland (Stoughton 1978: 245). Lizzie Sanderson soon married Horatio Marsh and apparently lived at the house until her death sometime in 1883.

The property then passed into the possession of its most notable occupant, Frank D. Jones, who purchased it from Lizzie's heirs at an auction in 1884 for the price of $1,050.60 (FCD Book 370, Page 350). Frank Jones and his family would live in this home into the 1930s-1940s. During that time he operated a local general store, which was a necessary institution for the growing community of Riverside. He also performed other civic duties, at times acting as a town juror (1891-92), town auditor (1894), and as the Riverside librarian from 1890 to 1922 (Stoughton 1978: 200, 247). During 1902-09, Jones enlarged the house although it is not known if these changes reflect stylistic or economic adaptations.

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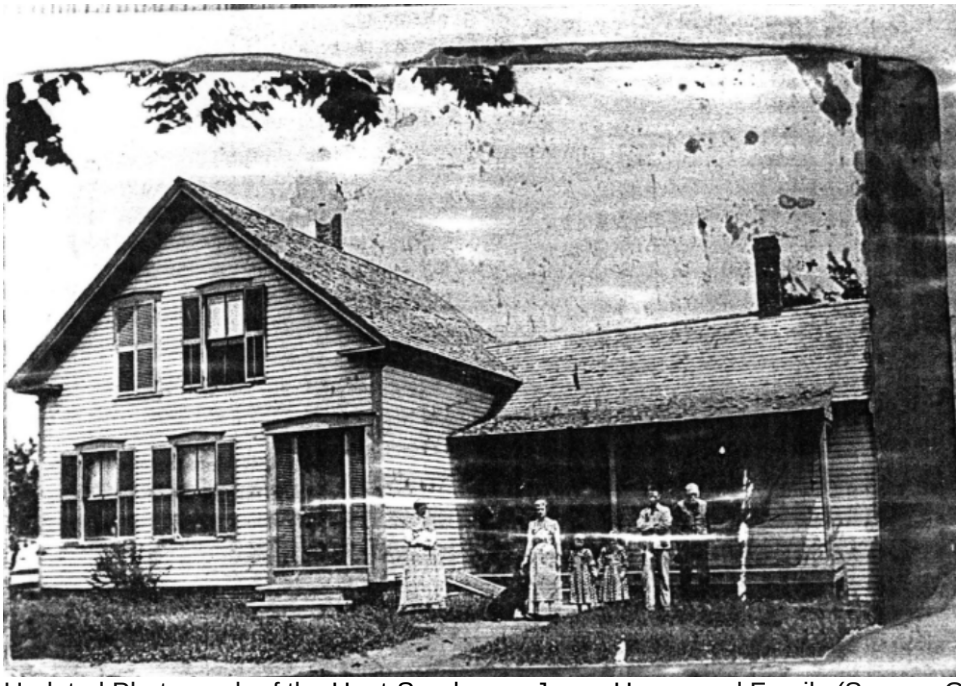
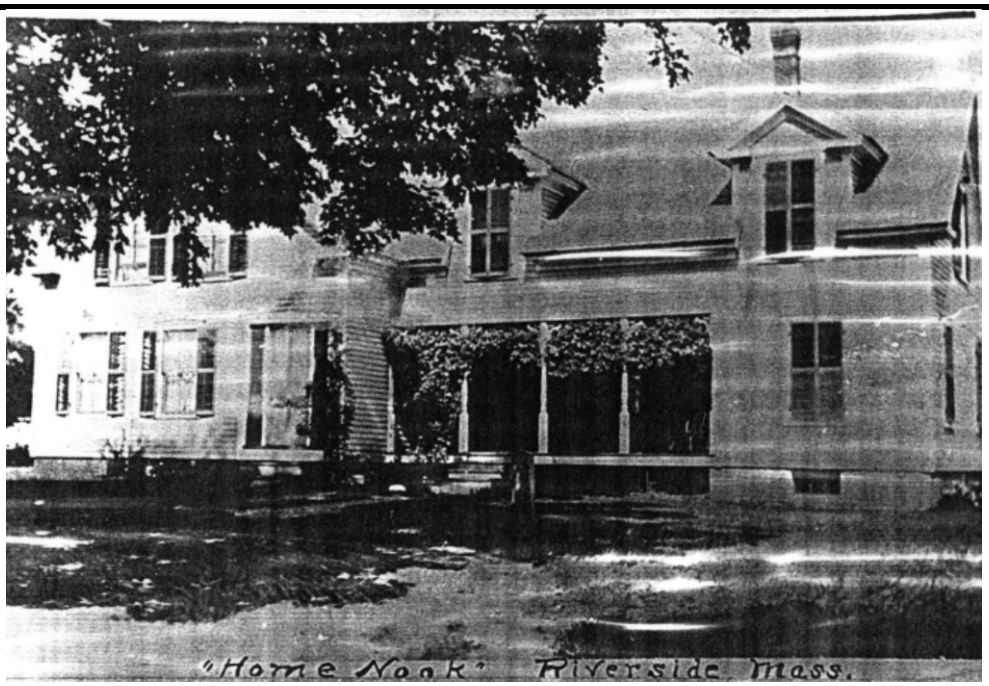
Gill Historical Society Photograph Collection

Stoughton, Ralph.
1978 *History of the Town of Gill*, Greenfield, MA.



Undated Photograph of the Hunt-Sanderson-Jones House and Family (Source: Gill Historical Society)



Undated Photograph of the Hunt-Sanderson-Jones House (Source: Gill Historical Society)

2014 View of Hunt-Sanderson-Jones Garage (Source: TRC)

2008 Low-level oblique image of Hunt-Sanderson-Jones House (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Riverside Historic District

The Hunt-Sanderson-Jones House is a contributing resource to the NRHP-eligible Riverside Historic District.

Potential Riverside Historic District, Criteria A and C

In 1999, the village of Riverside was surveyed by Bonnie Parson of the Gill Historical Commission and an MHC Area Form (GIL.D) was completed that recommended a Riverside Historic District eligible for National Register listing under Criteria A and C. The area was re-surveyed as part of the 2014 survey by TRC, the potential boundaries verified, and the overall condition of resources noted and recorded with photographs.

Riverside's Native American resources already are recognized as the Riverside Archeological District, listed in the National Register in 1975.

The proposed Riverside Historic District is a roughly triangular-shaped area bounded on the northwest by Bridge Street, at the north by French King Highway (Route 2), and on the east and southeast by the east sides of Meadow Street and Riverview Avenue. The district contains approximately 60 contributing resource and only a few non-contributing (thee boundaries are drawn to exclude mostly non-historic commercial buildings.

The Riverside Historic District is eligible for National Register listing on the local level as a representative Connecticut River Valley colonial era settlement, then former manufacturing village, then suburb. Several different facets and periods of Riverside's history and architectural heritage are represented within the district boundaries. Late eighteenth- and early-nineteenth century residences reflect the rural and agricultural character of the community, which also relied on timbering and yearly log drives. Riverside's greatest period of expansion occurred after the damming of the river at Turners Falls and the founding of the Turners Falls Lumber Company in the 1860s and 1870s. The community was both economically and physically linked to Turners Falls after the building of the Red Suspension Bridge in 1878, enabling workers to commute to jobs and business on both sides of the river. Late-nineteenth and twentieth- century architecture reflects Riverside's role as a suburb of Turners Falls, and a desirable place for wealthier residents escaping the more industrial village across the river.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
101.0-0000-0112.0	Greenfield	D	GIL.043

Town/City: Gill

Place: *(neighborhood or village)*: Riverside

Address: 39 Riverview Drive, Riverside

Historic Name: Frank Smith House

Uses: Present: Residential

Original: Residential

Date of Construction: ca. 1882

Source: *History of Town of Gill* (pps. 245, 249)

Style/Form: Vernacular with T-shaped plan

Architect/Builder: Unknown

Exterior Material:

Foundation: Brick

Wall/Trim: Clapboard

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
Carriage House

Major Alterations *(with dates):*
1 ½-story wing added on east (1884-1907), porch partially enclosed (unknown date).

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Residential

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: April 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: GILL

ADDRESS 39 Riverview Drive.

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s)	Form No.
D	GIL.043

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Based on historic photographs and deed records, this residence was built ca. 1882 as a 2-story, gable-roofed frame house with a T plan on a brick foundation, consisting of a front-gabled, 1-bay section perpendicular to the street on the east and a 3-bay, side-gabled ell with on-peak brick on the west. The west gable end is canted, with scrolled brackets at the eaves of the cut-away corners. A 1-story, shed-roofed front porch (now partially enclosed) is set within the two sections. A smaller secondary shed-roofed porch (since enclosed) is on the east. There are original single and paired 2/2 wood sash windows. The primary porch has been enclosed with removable storm windows and enclosed weatherboard balustrade. Based on an 1895 photograph, the 1 ½-story east wing with side-gable roof and enclosed shed-roofed front porch is a later addition, although the similarity of architectural details suggests it was built not long after the original house.

To the rear of the property is a 1-story carriage house. It is of wood-frame construction with wood shingles. The building has an asymmetrical front-gable roof with a salt-box profile. The south elevation has a double-leaf vehicular door and a single-leaf entrance door. The windows are 6-light on the east elevation and are boarded over on the west elevation.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

This home is believed to have been built by Frank W. Smith ca. 1882. Smith was the son of an important local personage, the ferryman Albert Smith whose house is located next door at 39 Riverside Drive (GIL.059). Frank Smith purchased the adjacent property from T. M. Stoughton and had the dwelling erected (Stoughton 1978: 245). An 1894 photo shows the details of the home, along with Smith family members. Frank's first wife Rose would pass away some time after this date and he remarried a woman named Margaret. Upon Frank's death in 1897, his wife and family of four children inherited the property. Smith had most likely engaged in farming activities in Gill and seems to have been relatively well-off since a record of his estate describes four houses, a shop, two barns, a poultry house, and some small acreage (Gill Town Report 1901: 2) In 1930, Mrs. Mary Smith Warren (Franks' second wife) is recorded as owning a house, barn, two poultry houses and several small plots in Riverside.

BIBLIOGRAPHY and/or REFERENCES

Gill Historical Society Photograph Collection

Howes Brothers Photograph Collection (On File Ashfield Historical Society)

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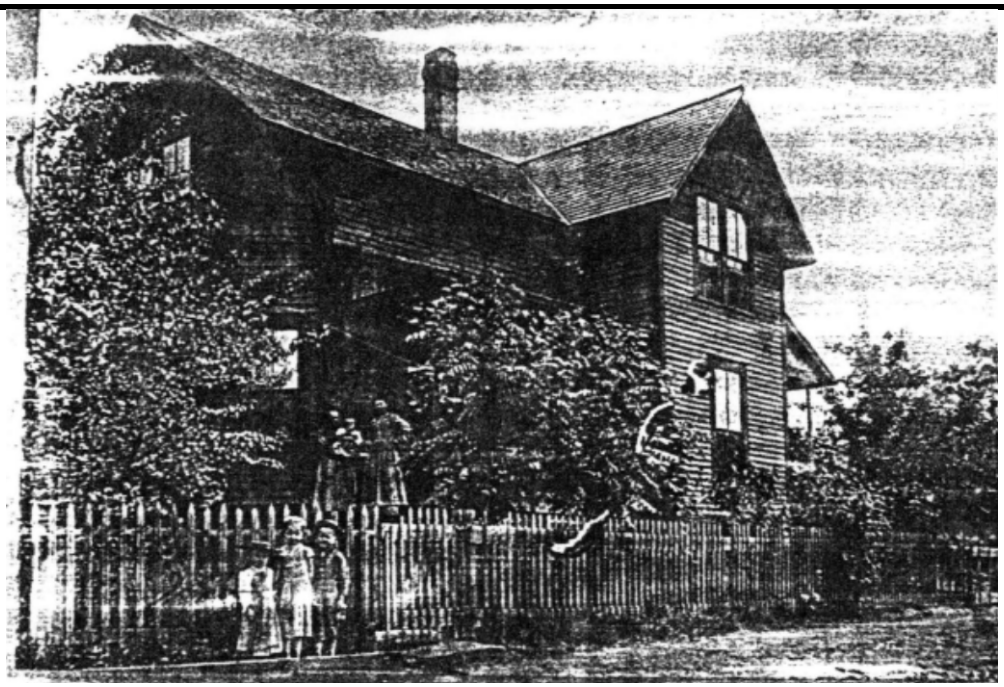
Town of Gill
1901 *Gill Town Reports*, Gill, MA.



1895 Photograph of Frank Smith House and Family (Source: Gill Historical Society)

Ca.1905 Howes Brothers Photograph (No. 4953A) (Source: Ashfield Historical Society)

2014 View of Facade and East Elevation (Source: TRC)

2014 View of Carriage House (Source: TRC)

2008 Low-level oblique image of Frank Smith House (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Riverside Historic District

The Frank Smith House is a contributing resource to the NRHP-eligible Riverside Historic District.

Potential Riverside Historic District, Criteria A and C

In 1999, the village of Riverside was surveyed by Bonnie Parson of the Gill Historical Commission and an MHC Area Form (GIL.D) was completed that recommended a Riverside Historic District eligible for National Register listing under Criteria A and C. The area was re-surveyed as part of the 2014 survey by TRC, the potential boundaries verified, and the overall condition of resources noted and recorded with photographs.

Riverside's Native American resources already are recognized as the Riverside Archeological District, listed in the National Register in 1975.

The proposed Riverside Historic District is a roughly triangular-shaped area bounded on the northwest by Bridge Street, at the north by French King Highway (Route 2), and on the east and southeast by the east sides of Meadow Street and Riverview Avenue. The district contains approximately 60 contributing resource and only a few non-contributing (thee boundaries are drawn to exclude mostly non-historic commercial buildings.

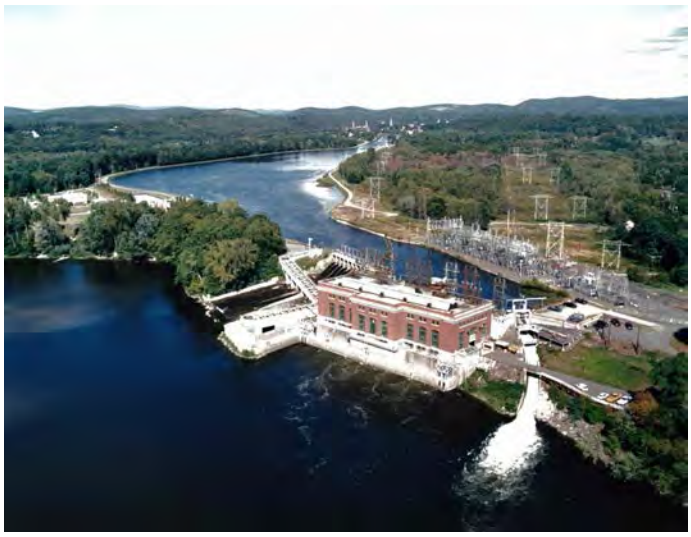
The Riverside Historic District is eligible for National Register listing on the local level as a representative Connecticut River Valley colonial era settlement, then former manufacturing village, then suburb. Several different facets and periods of Riverside's history and architectural heritage are represented within the district boundaries. Late eighteenth- and early-nineteenth century residences reflect the rural and agricultural character of the community, which also relied on timbering and yearly log drives. Riverside's greatest period of expansion occurred after the damming of the river at Turners Falls and the founding of the Turners Falls Lumber Company in the 1860s and 1870s. The community was both economically and physically linked to Turners Falls after the building of the Red Suspension Bridge in 1878, enabling workers to commute to jobs and business on both sides of the river. Late-nineteenth and twentieth- century architecture reflects Riverside's role as a suburb of Turners Falls, and a desirable place for wealthier residents escaping the more industrial village across the river.

FORM A - AREA

Assessor's Sheets	USGS Quad	Area Letter	Form Numbers in Area
	Greenfield		TRC-40

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Photograph



Town/City: Montague/Gill

Place *(neighborhood or village):* Turners Falls

Name of Area: Turners Falls Power & Electric Company Historic District

Present Use: Hydroelectric power facility; vehicular, railroad, and pedestrian bridges; power canal; dam.

Construction Dates or Period: 1904-late 1920s

Overall Condition: Good

Major Intrusions and Alterations: None observed. Fifth Street Bridge built in 1954. Cabot Station gantry crane removed in 1987.

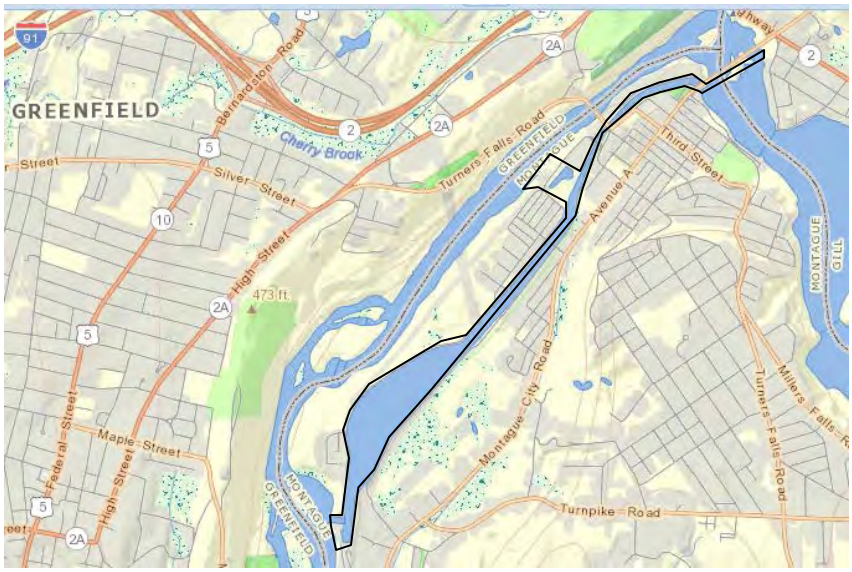
Acreage:

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date *(month/year):* March 2014

Locus Map



☒ *see continuation sheet*

INVENTORY FORM A CONTINUATION SHEET

TOWN
MONTAGUE

NAME OF AREA
Turners Falls Power & Electric Company Historic District

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area Letter | Form Nos.
TRC-40

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION

Describe architectural, structural and landscape features and evaluate in terms of other areas within the community.

The Turners Falls Power & Electric Company (TFP&EC) Historic District in Montague and Gill extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. The district consists of hydroelectric power facilities and related structures built by the Turners Falls Power & Electric Company between 1904 and 1929 and is bounded on the south by the Cabot Power Station, on the west and northwest by the Connecticut River and/or the west bank of the Power Canal, on the northeast by the Turners Falls Dam (the only portion of the district in Gill), and on the east and southeast by the east bank of the Power Canal. The resources are all physically connected by the Power Canal, which is also spanned by two railroad bridges, two pedestrian bridges and four vehicular bridges. All of the hydroelectric structures and buildings and the power canal within the historic district boundaries are owned by FirstLight Power Resources-GDF Suez Energy who also owns the Fifth Street Footbridge, Keith Mill Footbridge, and International Paper Company Footbridge (the footbridges and vehicular bridges were built by the Turners Falls power company, with the exception of the Fifth Street Bridge). The Fifth Street, Sixth Street, and Eleventh Street vehicular bridges are owned and maintained by the Town of Montague.

The TFP&EC Historic District contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983, as well as previously surveyed resources that are outside the TFHD boundaries, in addition to resources that were newly surveyed by TRC in 2014. The TFP&EC Historic District's contributing resources include (running from north to south):

- Turners Falls Dams 1 and 2 (Montague and Gill dams) (TRC Survey # 37)
- Turners Falls Gate House (TRC Survey # 36)
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district) (MNT.933)
- International Paper Company Bridge (THFD-listed) (TRC Survey # 6)
- Keith's Mill Footbridge (THFD-listed) (MNT.925)
- Fifth Street Pedestrian Bridge (THFD-listed)(MNT.924)
- Sixth Street Bridge (THFD-listed) (MNT.909)
- Eleventh Street Bridge (determined NRHP-eligible for individual listing by MHC) (MNT.904)
- Power Station No. 1 (TRC Survey # 35)
- Cabot Station (determined NRHP-eligible for individual listing by MHC in 1987) (MNT.449)

The following two structures are non-contributing resources:

- Boston & Maine Railroad Bridge over the Power Canal (TRC Survey # 2)
- Boston & Maine Railroad Bridge over the Branch Canal (TRC Survey # 3)

The Fifth Street Bridge over the Power Canal (vehicular bridge) (MNT.910) was built in 1954 and has no known historical association with the Turners Falls Power & Electric Company or its successor utility companies and is not a contributing resource although it is a contributing resource in the National Register-listed Turners Falls Historic District.

HISTORICAL NARRATIVE

Explain historical development of the area. Discuss how this relates to the historical development of the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1980: 8.1). The canal, designed by Benjamin Prescott of Northampton, was 2.5 miles long and 14 feet wide, with ten locks. A second dam and lock downstream from the confluence of the Connecticut and Millers Rivers to the north of Turners Falls raised the water in order that boats could navigate the French King rapids (MHC 1982c: 6). By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, the state legislature granted the Proprietors the right to lease the canal waters for power purposes. A group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the rights from the Proprietors and formed the Turners Falls Company. The company replaced the older dam with a new wood-and-stone crib dam and rebuilt the canal. Soon, the canal was powering new manufacturers attracted by Crocker to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, “a small company of public-spirited citizens” leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls gatehouse and in 1892 the gatehouse was expanded for greater water flow. The Power Canal also was improved by widening it and increasing its depth.

By 1900, many of the mills and factories in Turners Falls and western Massachusetts began to lose business to Southern mills with their cheaper labor supply and as a consequence a few area mills and small start-up power companies turned their attention to harnessing hydroelectric power. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1904, Charles Hazelton, treasurer of the Turners Falls Company, proposed to his board of directors that that they make better use of the water power being wasted by widening and extending the canal, and establishing a hydro-electric generating plant of 5,000 kilowatt capacity. “His proposal met with unanimous agreement, and was carried out during the next three years” (Bennett 1990a: 5). Changing its name to the Turners Falls Power & Electric Company, the company constructed a Power Station (Power Station No. 1) at Turners Falls, and widened and lengthened the existing power canal (Montague Bicentennial Committee 1954: 5).

Construction of Station No. 1 in 1904-1906 increased the importance of the power canal to the success of hydroelectric operations at Turners Falls. As built, the canal bypasses approximately 2.7 miles of the Connecticut River. Fall River, located near the head of the bypass channel, discharges into the bypass reach. In 1906, the Turners Falls Company had completed the widening of the power canal to 125 feet, increasing its depth to 15 feet, and extended it south by 1,000 feet.

The company had by then attracted the attention of financier Phillip Cabot of Boston. Born in Brookline in 1872, Cabot graduated from Harvard and soon became a partner in the investment form of White, Weld & Company.

> *"About this time, Turners Falls stockholders had begun to dispose of their shares to a group of Boston investors represented by Philip Cabot, who had also purchased substantial holdings in the stocks of the Amherst Gas Company, the Greenfield Electric Light and Power Company and the East Hampton Gas Company. Cabot was invited to become a director of all these companies and for the first time in its history the Turners Falls Company became associated with others in the electric utility field.*
>
> *Philip Cabot and the men working with him were largely responsible for the rapid and successful development of the Turners Falls project and for the starting of the associations which eventually led to the formation of the Western Massachusetts Companies and the Western Mass. Electric Company. In 1908, Cabot succeeded Char1es T. Crocker as president of the Company, a position he held for the next 11 years."* (Abercrombie 1973: 4)

The hydroelectric development at Turners Falls that Cabot planned, financed, and pushed through included far-reaching decisions to build a new concrete dam at Turners Falls; widen, deepen, and extend the power canal by two miles; and at its lower end build a 42,000-kilowatt hydroelectric station utilizing a 60-foot head. Work was begun in 1912 and in 1916, No. 2 Station (later renamed Cabot Station in honor of Phillip Cabot) started commercial operation. When completed in 1918, Cabot Station was the largest hydroelectric plant in Massachusetts and was in fact the largest hydroelectric generating station east of Niagara Falls. By 1914, separate generating and transmission companies seemed unnecessary and Amherst Power was absorbed by the Turners Falls Power & Electric Company (Montague Bicentennial Committee 1954: 12) (WMECO 1987: 2).

Among other enterprises, the Turners Falls Power & Electric Company built and maintained the Turners Falls Canal and Dam, as well as financing and building several vehicular and pedestrian bridges crossing the canal between the village and the mills. The construction of bridges over the canal at Fifth Street, Sixth Street and Eleventh Street were crucial to the development of the village, as any proposed extension of the power canal would, in effect, create an "island" in the center of Turners Falls.

Raising the canal embankment in 1917 allowed an increase to 48,000 kw (Clouette 1987: 2). By 1917, the canal was extended to its present length of approximately 2.5 miles. Final work on the canal's excavation was completed that year when it reached its present depth of between 25-40 feet and between 100-920 feet (the latter at the Cabot forebay) in width; canal walls were raised in 1919 and again in 1922 and the late 1920s (Holmes 1991: 28).

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Sept 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
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1903a Plan of Bulkhead (section and elevation). Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. February 1903.
1903b Turners Falls Gatehouse, Rear Elevation and Floorplan. Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. September, 1903.
1913 Dam and Headgates—Plan of New Bulkhead and Headgates. September 1913.

Turners Falls Power & Electric Company
1914a General Plan of Dam and Dam Construction. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. October 24, 1914.
1914b Dam and Headgates Cross Section. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. October 24, 1914.
1917 Plan and Profiles I.P. Mill, Raising Upper Canal Walls. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. February 23, 1917.
1918 General Layout Plan—Raising Canal Walls. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. December 20, 1918.

Western Massachusetts Electric Company (WMECO)
1987 *Before the Federal Energy Regulatory Commission: Turners Falls Project FERC Project No. 1889, Application for Amendment of License, Proposed Cabot Unit 7.* WMECO, Springfield, MA

ADDITIONAL PHOTOGRAPHS

2014 View of Power Canal and Boston & Maine Bridge over Power Canal (Source: TRC)

2014 View of Station No. 1 (Source: TRC)

2014 View of Power Canal and Keith's Mill Footbridge

2014 View of Gate House and Montague Dam (Source: TRC)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☒ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the late 1920s). This defines the period of significance between 1904 and 1929.

This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its principal investor and later president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal. However, due to their deteriorated condition and lack of integrity, these two railroad bridges are non-contributing resources.

Criterion C
The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

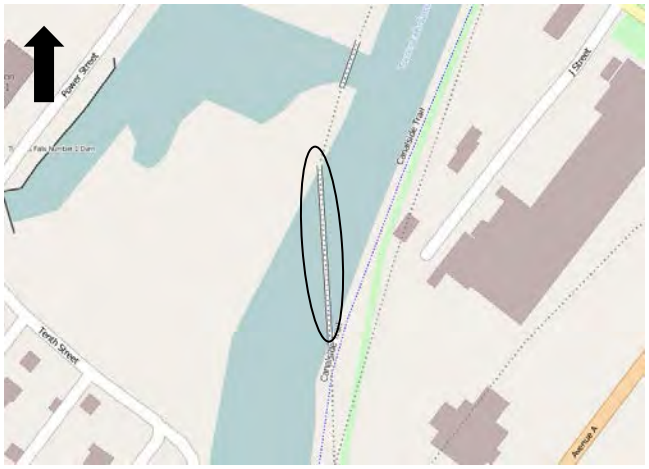
FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield		TRC-2

Photograph

Locus Map



MA GIS 2014

UTM Reference: 18 0699946E 4719842N
Recorded by: Geoffrey Henry/Ellen Rankin
Organization: TRC Environmental Corp. for FirstLight
Date (*month / year):* March 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Boston & Maine Railroad (former)

Carried over: Turners Falls Power Canal
(Railroad, river, brook, canal or road)

Historic/Common name: Boston & Maine Railroad Bridge over Turners Falls Power Canal

Ownership: FirstLight Power Resources-GDF Suez Energy
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Half-Pony

Bridge typology code 306

Date of Construction: ca. 1915

Source: 1915 Photographs; Engineering drawings

Engineer/Designer: Unknown

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Metal, with concrete piers

Alterations *(with dates):* Tracks removed in 1990s

Posted load limit *(if any):* N/A

Condition: Deteriorated

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/industrial

INVENTORY FORM F CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

TOWN: MONTAGUE
ADDRESS: B&M RR OVER POWER CANAL
Area(s): | Form No.: TRC-2

Superstructure:

Overall length: 200 | Deck width: 7 ft | Skew:
Main unit: No. of spans: 3 | Span length: 66 ft
Approaches: No. of spans: 0 | Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: Varies with water level of canal | Material of abutments or piers: Concrete

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This three-span, riveted-plate girder, half-pony railroad bridge carries the single-line "Mill Track" of the former Boston & Maine Railroad over the Turners Falls Power Canal. The railroad's main line ran on the east side of the canal and had a three-part curve on the east that followed the curve of the canal before crossing the canal at an oblique angle, continuing north via an additional curve on the west before crossing over the Power Station 1 forebay and continuing north to the former paper mills at Turners Falls. The bridge rests on a concrete retaining wall on the east and the canal wall on the west and has two tapered concrete piers. The railroad ties are either deteriorated or have been removed and the bridge is not accessible by foot.

Passenger service to Turners Falls on the Boston & Maine ceased in 1957, and freight service ended sometime in the early 1990s. The tracks were removed on both sides of the power canal and converted to bicycle and pedestrian use. The two railroad bridges spanning the branch canal and the power canal were sealed off, most of the ties removed, and both are now in deteriorated condition.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

Beginning in 1915, the Turners Falls Power Company widened and lengthened the Turners Falls Power Canal that formerly ran only as far south as Sixth Street. The power company replaced the many existing railroad, vehicular, and pedestrian bridges that spanned the canal with new bridges to accommodate the widened canal. This Boston & Maine Railroad Bridge was built ca. 1915 at an oblique angle and with a decided curve to carry the line over the canal and north to the paper mills that lined the western bank of the canal in Turners Falls.

Non-Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Boston & Maine Railroad Bridge over the Turners Falls Power Canal is a non-contributing resource in the NRHP-eligible Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. Due to its deteriorated condition, the resource does not retain the integrity of materials, workmanship, association, and setting.The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station.

BIBLIOGRAPHY and/or REFERENCES

Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

Turners Falls Power & Electric Company
1916 Railroads 5th Street to 11th Street, Raising Canal Walls, Turners Falls Power & Electric Company, Engineering Department, Turners Falls office, June 22, 1916.

ADDITIONAL PHOTOGRAPHS

April 1, 1915 Photo of B&M Railroad Bridge During Construction on the Power Canal (Source: First Light Photo Archives)

2014 Photo of Interior of Bridge (Source: TRC)

2008 Low-level oblique image of B&M Railroad Bridge over Power Canal (Source: MASSDOT GIS)

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-02	Greenfield		TRC-3

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0699948E 4719915N
Recorded by: Geoffrey Henry/Ellen Rankin
Organization: TRC Environmental Corp. for FirstLight
Date (*month / year):* March 2014

Town/City: Montague

Place *(neighborhood or village):* Turners Falls

Street/Route: Boston & Maine Railroad (former)

Carried over: Branch Canal for Station No. 1
(Railroad, river, brook, canal or road)

Historic/Common name: Boston & Maine Railroad Bridge over Branch Canal

Ownership: FirstLight Power Resources-GDF Suez Energy
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Half-Pony

Bridge typology code 306

Date of Construction: ca. 1905

Source: Photographs, Written records; engineer's drawings

Engineer/Designer: Unknown

Bridge company/Contractor: Turners Falls Power Co.

Material (s): Metal, with stone and concrete piers

Alterations *(with dates):* Tracks removed 1990s

Posted load limit *(if any):* N/A

Condition: Deteriorated

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/industrial

Superstructure:

Overall length: 40 ft Deck width: 7 ft Skew: None
Main unit: No. of spans: 1 Span length: 40 ft. (total)
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: Varies with water level of canal
Material of abutments or piers: Stone, Concrete

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This single-span, riveted-plate girder, half-pony railroad bridge formerly carried the single-track spur line of the Boston & Maine Railroad over the Branch Canal, a narrow channel that connects the Turners Falls Power Canal with the forebay of Turners Falls Power Station 1. The bridge rests on a concrete retaining wall on the south and on the north rests on a stone-and-concrete abutment with wing walls. The railroad spur formerly ran along the west side of the Power Canal, and some old ties are still visible north and south of the bridge. The ties have partially been removed from the bridge and the others are in deteriorated condition. There is a wooden walkway on the east, although the bridge is only partially accessible for pedestrian use. The bridge was built ca. 1905 as a result of the construction of Station No. 1. Historic photos show that it had stone abutments; these were encased with concrete at a later date. Also, the bridge may have been moved or repositioned ca. 1915 during the widening of the power canal.

Passenger service to Turners Falls on the Boston & Maine ceased in 1957, and freight service ended sometime in the early 1990s. The tracks were removed on both sides of the power canal and converted to bicycle and pedestrian use. The two railroad bridges spanning the branch canal and the power canal were sealed off, most of the ties removed, and are now in deteriorated condition.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

This Boston & Maine Railroad Bridge was built ca. 1905 to cross the short channel that connects the power canal with the forebay of the Power Station No. 1. The bridge carried the line north to the mills and factories that lined the western bank of the canal in Turners Falls. Beginning in 1915, the Turners Falls Power Company widened and lengthened the Turners Falls Power Canal that formerly ran only as far south as Sixth Street. The power company replaced the many existing railroad, vehicular, and pedestrian bridges that spanned the canal with new bridges to accommodate the widened canal.

Non-Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Boston & Maine Railroad Bridge over the Branch Canal is a non-contributing resource in the NRHP-eligible Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. Due to its deteriorated condition, the resource does not retain the integrity of materials, workmanship, association, and setting. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station.

BIBLIOGRAPHY and/or REFERENCES

Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

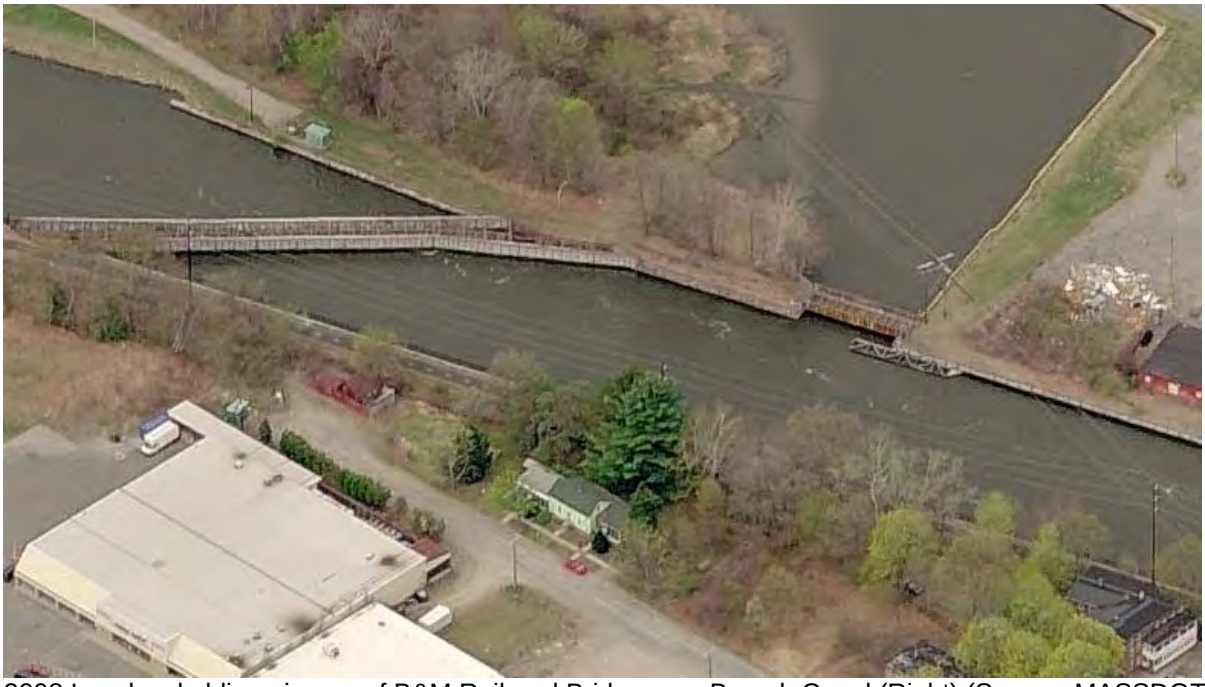
Turners Falls Power & Electric Company
1916 "Railroads 5th Street to 11th Street, Raising Canal Walls, Turners Falls Power & Electric Company, Engineering Department, Turners Falls office, June 22, 1916.

ADDITIONAL PHOTOGRAPHS

May 29, 1905 View of B&M Railroad Bridge over Branch Canal (Source: FirstLight Photo Archives)

June 1, 1905 View of B&M Railroad Bridge over Branch Canal (Source: FirstLight Photo Archives)

2014 View of Interior of B&M Railroad Bridge over Branch Canal (Source: TRC)



2008 Low-level oblique image of B&M Railroad Bridge over Branch Canal (Right) (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
05-0-151	Greenfield		TRC-35

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: 26 Power Street

Historic Name: Turners Falls Power Station No. 1

Uses: Present: Hydroelectric Powerhouse

Original: Hydroelectric Powerhouse

Date of Construction: 1904-1906

Source: Engineering drawings; written sources

Style/Form: Industrial

Architect/Builder: Turners Falls Power Company

Exterior Material:

Foundation: Stone

Wall/Trim: Brick

Roof: Gravel

Outbuildings/Secondary Structures: Forebay and spillway

Major Alterations *(with dates):* River façade enlarged

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: <1 acre

Setting: Urban/industrial location on the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: Geoffrey Henry/Ellen Rankin for FirstLight

Organization: TRC Environmental Corp.

Date (*month / year)*: March 2014

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

The Turners Falls Power Station No. 1 is located on the east bank of the Connecticut River at the western terminus of the Turners Falls Branch Canal. The complex consists of the Power Station and the Branch Canal/Forebay with gates at the west end leading to the concrete-and-stone spillway (not in use).

The Power Station was built in 1904-1906 in a vernacular Italianate Style adapted for an industrial building. The building is built into an embankment consisting of the natural rock ledge and earth fill, so that the rear of the building appears as only a half-story building. The foundation consists of coursed granite with 40-foot-wide, stone-and-brick arches on the west face for water to empty into the short tailrace and the Connecticut River. The one-story-with-clerestory brick building is basically cruciform in plan with 3-bay arms on the north and south, a short west ell (the "wire tower") and the longer ell that contains the penstocks between the forebay and the main section of the power station (The northwest corner of the building was filled in with an additional two bays at an unknown date).

The building has a shallow-pitched roof with gravel top and paired wood brackets beneath the wide eaves. Originally, windows on the ground level had tall 12/12 double-hung sash with segmental-arched heads, with 2/2 sash windows on the clerestory, also with segmental-arched heads and concrete sills. Most of the windows have been either filled in or had their sash replaced with modern 1/1 sash. The main entrance is on the north with a double-leaf paneled wood door set within an arched opening. An identical entrance (not in use) is on the south end. A secondary entrance with glass-and wood door set within a segmental-arched opening is on the northwest.

The interior is open to the ceiling with painted brick walls and exposed roof timbers. The enclosed control room and stair are on the north. The turbine generators are at ground level: four 1,000 kW, two 300kW and one 80kW exciter; all are connected to the four 12"-diameter penstocks carrying water from the Branch Canal above. The generator's manufacturer nameplates visible include Bullocks Mfg., Allis-Chalmers, and General Electric Co.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1908: 8.1). The dam provided a power source for several adjoining small lumber mills and remained profitable. By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, a group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the rights from the Proprietors and formed the Turners Falls Company. In 1866, the company replaced the old wood-crib dam with a new 1,200-foot-long and 300-foot-high, wood-and-stone dam and built a fishway, log sluice gate and granite headgate house on the Montague shore to control water flow to the proposed power canal (Gregory 2006: 14). Soon, the canal was powering new manufacturers moving to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, "a small company of public-spirited citizens" leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls and in 1892, the gatehouse was expanded for greater water flow. The Power Canal also was improved by widening it and increasing its depth. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydro-electric market (Jenkins 1980: 8.3). In 1906, the company completed Power Station No. 1, located some distance south of the existing dam. The power station was fitted with four 1000kW and two 300 kW generators and operated between 1906 and 1973, and again since 1982.

In 1908, Phillip Cabot of Boston assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new focus on hydroelectric power and its transmission. Cabot's ambitious plans called for the construction of a second powerhouse, named Cabot Station in his honor, replacing and raising the original Crocker-built dam with the present Gill and Montague dams, and extending and widening the power canal and headgate house. Work began on dam construction in 1912 and was completed in 1915 along with the Cabot Station in 1917 and the newly improved power canal by the early 1920s.

World War I and the post-war period created ever increasing demands for electricity for both industrial and residential use, so the Turners Falls Company expanded its transmission system southward and by 1923 had reached the Springfield MA area. Another line went westward across the Berkshire foothills to Pittsfield. The 1920s and 1930s saw the expansion of hydroelectricity throughout western Massachusetts. In 1942, the biggest merger was made when three pre-existing companies were merged into Western Massachusetts Electric Company (WMECO): Turners Falls Power & Electric Company, Pittsfield Electric Company, and United Electric Light Company. That year WMECO was issued a license to operate the water power development at Turners Falls.

BIBLIOGRAPHY and/or REFERENCES

Bennett, Lola (Historic American Buildings Survey [HAER] Historian)
1990a *Eleventh Street Bridge Spanning the Turners Falls Power Canal (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

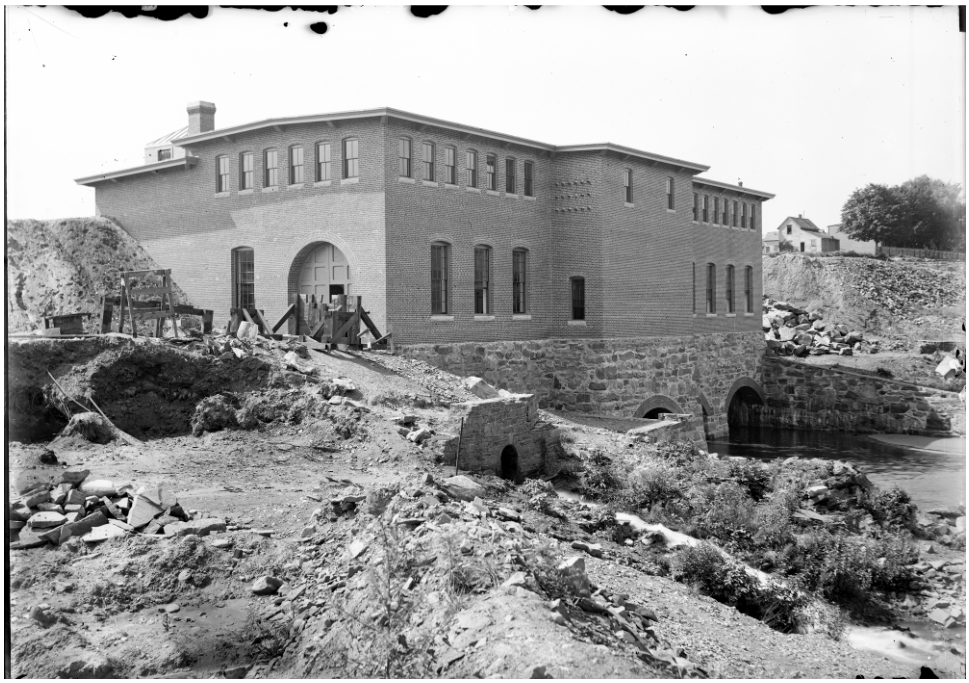
Sanborn Map Company
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Turners Falls Company
1904 Floor Plan of Powerhouse. Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. September, 1904.
1907 Plan of 44" Wheels for Power House. Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. March, 1907.

Turners Falls Power & Electric Company
1912 Power Station No. 1. Sketch of Proposed Unit Nos. 1 and 2. April 25, 1912.

ADDITIONAL PHOTOGRAPHS

October 3, 1904 Photo of Excavations at Canal Entrance to Station (Source: FirstLight Photo Archives).



April 1, 1905 Photo of Station During Construction (Source: FirstLight Photo Archives).

June 1, 1905 Photo of Erection of Plant Machinery (Source: FirstLight Photo Archives).

2014 View of West and South Elevations of Station No. 1 (Source: TRC).

2014 Interior View of Station No. 1 (Source: TRC).

2014 View of Forebay of Station No. 1 (Source: TRC).

2014 View of Concrete and Stone Spillway (Source: TRC)

2008 Low-level oblique image of Station No. 1 (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
Turners Falls Power Station No. 1 is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

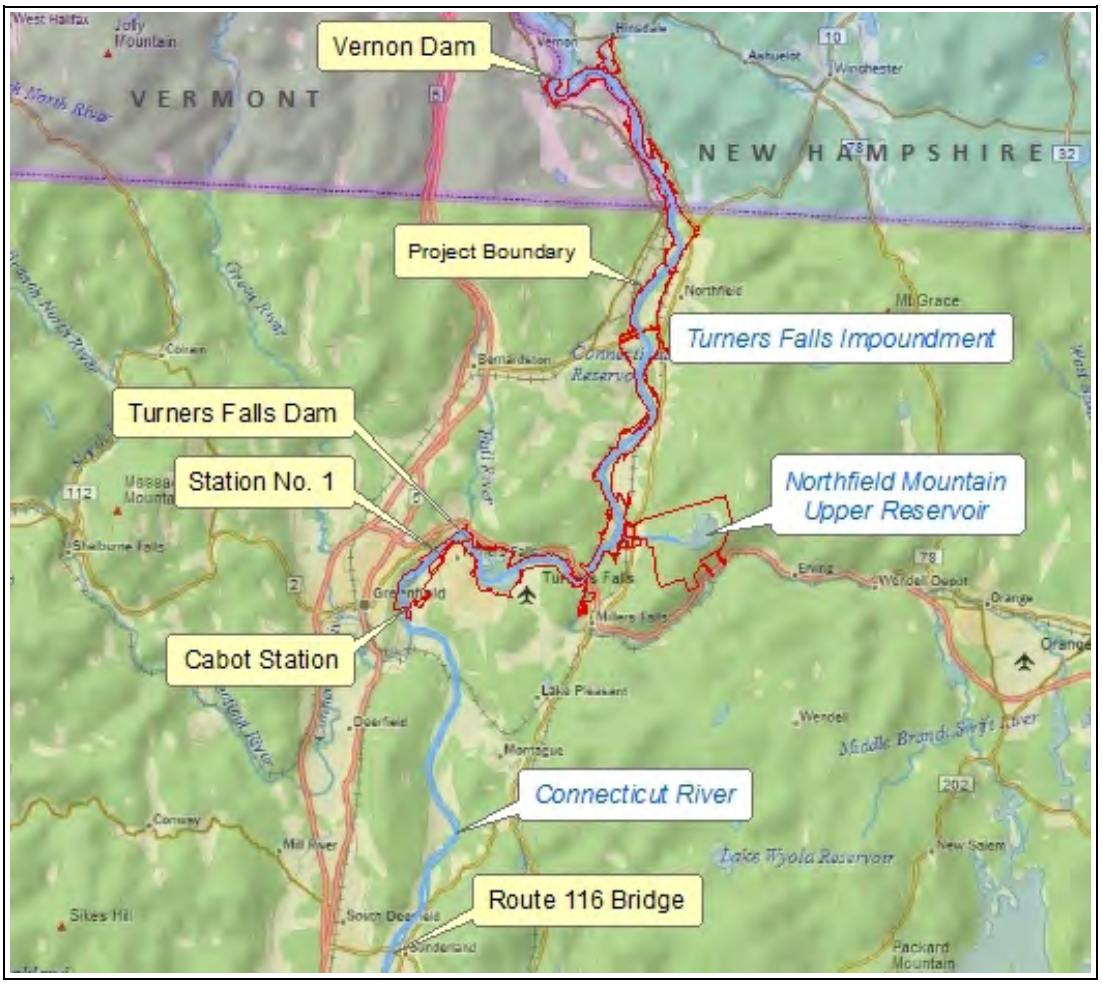
Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian

bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

Locational Map for Turners Falls Power Station No. 1



FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
02-0-04	Greenfield		TRC-36

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: At Turners Falls Dam, Montague side

Historic Name: Turners Falls Gate House

Uses: Present: Hydroelectric Facility

Original: Hydroelectric Facility

Date of Construction: 1903-04; 1913-1914

Source: Engineering Drawings; historic photographs

Style/Form: Industrial

Architect/Builder: Edwin Ball (engineer, 1903 drawings)

Exterior Material:

Foundation: Stone; concrete

Wall/Trim: Brick

Roof: Asphalt single

Outbuildings/Secondary Structures: Attached to Turners Falls Dam on Montague side

Major Alterations *(with dates):* 1866 gatehouse removed for 1913-1914 addition

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < I acre

Setting: Industrial location at Turners Falls on the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp.for FirstLight

Date (*month / year)*: April 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
AT TURNERS FALLS DAM

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.
TRC-36

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

The Turners Falls Gatehouse consists of two clearly identifiable sections that span the head of the Turners Fall Power Canal at the Turners Falls Dam. The east section, built in 1903-1904 is a 1-story, 10-bay-long, 2-bay-wide brick building adjoining the Montague shoreline and has a gable roof with crow-step gable topped by rough-cut granite caps. The foundation consists of 16 courses of cut granite and arches over 8 gate openings. Decorative features include the brick dentil and corbelled cornice and brick pilasters marking each bay. The 1903 drawings showed a single-leaf wood-paneled door and entrance on the east gable end, however the entrance is now on the northeast corner with a glass-and-wood-paneled single-leaf door within a segmental arched opening. The 6/6 sash windows on the north elevation have segmental heads. On the south, some windows are single 6-pane fixed windows, others are double hung sash with the lower half filled in. A modern metal roll-up door is on the west gable end.

In 1913-1914, the gatehouse was extended on the west and on the other side of the natural rock ledge at this point by demolishing the existing 1866 2-story brick gate house. Of nearly identical design to the 1904 gatehouse, the extension is 13 bays long with a concrete foundation, a crow-step gable end and nine gate openings.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1908: 8.1). The dam provided a power source for several adjoining small lumber mills and remained profitable. By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, a group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the rights from the Proprietors and formed the Turners Falls Company. In 1866, the company replaced the old wood-crib dam with a new 1,200-foot-long and 300-foot-high, wood-and-stone dam and built a fishway, log sluice gate and 2-story granite gate house on the Montague shore to control water flow to the proposed power canal (Gregory 2006: 14). Soon, the canal was powering new manufacturers moving to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of waterpower at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, “a small company of public-spirited citizens” leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls and in 1892, the headgate house was expanded for greater water flow. The Power Canal also was improved by widening it and increasing its depth. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydro-electric market (Jenkins 1980: 8.3). Beginning in 1903, the company widened the power canal and erected the east half of the present headgate house appended to the east gable end of the 1866 headgate house. In 1906, the company completed Power Station No. 1, located some distance south of the existing dam.

In 1908, Phillip Cabot of Boston assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new direction. Cabot's ambitious plans called for the construction of a second powerhouse, named Cabot Station in his honor, replacing and raising the original Crocker-built dam, and extending and widening the power canal. Work began on dam construction in 1912 and was completed in 1915 along with the Cabot Station and the newly improved power canal. As part of this building program, the headgate house at Turners Falls was more than doubled in length in 1914 by demolishing the old 1866 headgate house and adding a 13-bay extension on the west, adding 9 additional gates.

BIBLIOGRAPHY and/or REFERENCES

Bennett, Lola (Historic American Buildings Survey [HAER] Historian)

1990a *Eleventh Street Bridge Spanning the Turners Falls Power Canal (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

C.H. Vogt & Co.

1877 "Turners Falls, Mass." (Bird's eye view). C.H. Vogt & Co., Milwaukee, WI.

Gregory, Ed

2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

Jenkins, Candace

1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Sanborn Map Company

June 1884 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
February 1889 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
March 1895 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Sept 1902 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Stone & Webster Engineering Company

1969 Excavation—Existing Montague Dam. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1969.

1973 Gatehouse Sluices Additions to Piers. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, October 31, 1973

1975 Gatehouse Fishway, Plan and Details. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, May 31, 1975.

Turners Falls Company

1903a Plan of Bulkhead (section and elevation). Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. February 1903.

1903b Turners Falls Gatehouse, Rear Elevation and Floorplan. Turners Falls Company, Edwin C. Ball Engineer. Turners Falls, Mass. September, 1903.

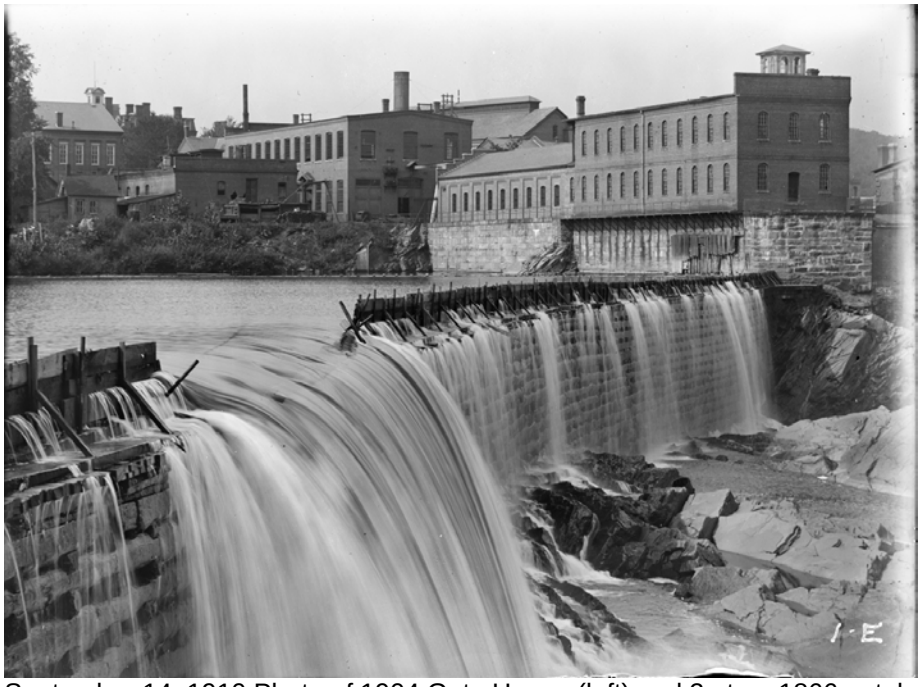
1913 Dam and Headgates—Plan of New Bulkhead and Headgates. September 1913.

Turners Falls Power & Electric Company

1914a General Plan of Dam and Dam Construction. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. October 24, 1914.

1914b Dam and Headgates Cross Section. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. October 24, 1914.

ADDITIONAL PHOTOGRAPHS



September 14, 1910 Photo of 1904 Gate House (left) and 2-story 1866 gatehouse (demolished in 1913 for new gatehouse extension) and 1866 Dam (Source: FirstLight Photo Archives)

1913 Photo of Gate House After Demolition of the 1886 Section (Source: FirstLight Photo Archives)

May 27, 1915 Photo of Completed Addition to Gate House (Source: FirstLight Photo Archives)

2014 View of South and West Elevations (Source: TRC)

2014 View of Interior of Gate House (Source: TRC)

2008 Low-level oblique image of Gate House (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Turners Falls Gate House is a contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

- Turners Falls Dams 1 and 2 (Montague and Gill dams)
- Turners Falls Gate House
- Turners Falls Power Canal (THFD-listed south to Sixth Street, with the section south of Sixth Street contributing to the TFP&EC district)
- International Paper Company Bridge (THFD-listed)
- Keith Mill Bridge (THFD-listed)
- Fifth Street Pedestrian Bridge (THFD-listed)
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst

and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

FORM F – STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
101.0-0000-0120.0	Greenfield		TRC-37

Town/City: Gill/Montague

Place *(neighborhood or village):* Riverside (Gill)/Turners Falls (Montague)

Address or Location: Connecticut River between Riverside (Gill) and Turners Falls (Montague)

Name: Turners Falls Dams 1 and 2

Ownership: ☐ *Public* ☒ *Private*

Type of Structure ***(check one):***

___ boat or ship
___ canal
___ carousel
_X_ dam
___ fort
___ gate
___ kiln
___ lighthouse
___ other *(specify)*
___ pound
___ powderhouse
___ street
___ tower
___ tunnel
___ wall
___ windmill

Date of Construction: 1915-1917

Source: Written sources and engineering drawings

Architect, Engineer or Designer: Turners Falls Power & Electric Company

Materials: Concrete and stone

Alterations *(with dates)*: Gill Dam replaced in 1969. Sluice gates raised in 1969

Condition: Excellent

Moved: ☒ **no** ☐ **yes** **Date**:

Acreage: <1 acre

Setting: Urban/industrial

Photograph

Locus Map

MA GIS 2014

Recorded by: Geoffrey Henry/Ellen Rankin for FirstLight
Organization: TRC Environmental Corp.
Date (*month / year):* March 2014

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other structures within the community.

The Turners Falls Dam is located at approximately river mile 122 (above Long Island Sound) on the Connecticut River in the towns of Gill and Montague, MA. The dam creates an impoundment extending upstream approximately 20 miles to the base of TransCanada's Vernon Hydroelectric Project Dam in VT/NH. At the Turners Falls Dam is a gate house with headgates extending from the Montague shoreline controlling flow into the Turners Falls Power Canal. A fishway was added on the Montague side in 1973.

The Turners Falls Dam consists of two individual concrete gravity dams, referred to as the Gill Dam (Dam No. 1) and Montague Dam (Dam No. 2), which are connected by a natural rock island known as Great Island. The 630-foot-long Montague Dam, completed in 1913 and raised in height in 1968-1969, is founded on bedrock and connects Great Island to the east bank of the Connecticut River. It includes four bascule type gates and a fixed crest section which is normally not overflowed. When fully upright, the top of the bascule gates are at elevation 185.5 feet mean sea level (msl). The 493-foot-long Gill Dam was completed in 1914 and connects Great Island to the west bank of the Connecticut River, and includes three tainter spillway gates. When closed, the elevation atop the tainter gates is at elevation 185.5 feet msl. As a part of the raising of the water level of the Connecticut River above the Turners Falls Dams to create the lower impoundment for the Northfield Mountain Project, the original Gill Dam was breached following construction of a new Gill Dam, which includes three taintor gates and a non-overflow section. The Montague Dam was raised by the addition of four 120 foot long thirteen foot high bascule gates placed atop the dam crest and a non-overflow section.

HISTORICAL NARRATIVE

Explain the history of the structure and how it relates to the development of the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1908: 8.1). The dam provided a power source for several adjoining small lumber mills and remained profitable. By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, a group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the rights from the Proprietors and formed the Turners Falls Company. In 1866, the company replaced the old wood-crib dam with a new 1,200-foot-long and 300-foot-high, wood-and-stone dam and built a fishway, log sluice gate and granite headgate house on the Montague shore to control water flow to the proposed power canal (Gregory 2006: 14). Soon, the canal was powering new manufacturers moving to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of waterpower at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, "a small company of public-spirited citizens" leased water to drive a thirty-five kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls and in 1892, the gatehouse was expanded for greater water flow. The Power

Canal also was improved by widening it and increasing its depth. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydro-electric market (Jenkins 1980: 8.3). In 1906, the company completed Power Station No. 1, located some distance south of the existing dam.

In 1908, Phillip Cabot of Boston assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new direction. Cabot's ambitious plans called for the construction of a second powerhouse, named Cabot Station in his honor, replacing and raising the original Crocker-built dam, and extending and widening the power canal. Work began on dam construction in 1912 and was completed in 1915 along with the Cabot Station and the newly improved power canal.

World War I and the post-war period created ever increasing demands for electricity for both industrial and residential use, so the Turners Falls Company expanded its transmission system southward and by 1923 had reached the Springfield MA area. Another line went westward across the Berkshire foothills to Pittsfield. The 1920s and 1930s saw the expansion of hydroelectricity throughout western Massachusetts. In 1942, the biggest merger was made when three pre-existing companies were merged into Western Massachusetts Electric Company (WMECO): Turners Falls Power & Electric Company, Pittsfield Electric Company, and United Electric Light Company. That year WMECO was issued a license to operate the water power development at Turners Falls.

In the 1950s, several studies had concluded that by 1971, the Connecticut Valley Electrical Exchange (CONVEX), of which WMECO was a member, would have a deficit of 314, 000 kilowatts if no further expansion was made to its power generating facilities. In 1965 WMECO joined three other Connecticut Valley power companies to form Northeast Utilities Service Company (NE). By that point, NE was actively studying construction of a new pumped storage unit located at Northfield Mountain in northern Franklin County. When the Northfield Pumped Storage facility was constructed between 1968 and 1972, the old Gill Dam was breached and a new Gill Dam was constructed with three large radial arm gates. Four bascule gates were placed atop the old Montague Dam, both raising the height of the dam.

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1990 *Eleventh Street Bridge Spanning the Turners Falls Power Canal (HAER No. MA-107).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

C.H. Vogt & Co.
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Gregory, Ed
2006 "Power Canal," No publisher. Vertical file at Turners Falls (Carnegie) Library, Turners Falls, MA

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Dec 1909 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.
August 1914 "Turners Falls, Mass." Sanborn Map Company, Broadway, NY.

Stone & Webster Engineering Company

Continuation sheet 2

1968a General Plan—Existing Structures. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1968.
1968b New Gill Dam—Modifications and Additions. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1968.
1968c General Arrangement Montague Dam Bascule Gates. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1968.
1968d Tainter Gates for Gill Dam. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1968.
1969 Excavation—Existing Montague Dam. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1969.
1973 Gatehouse Sluices Additions to Piers. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, October 31, 1973
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1914b Dam and Headgates Cross Section. Turners Falls Power & Electric Company, Engineering Division, Turners Falls Office. October 24, 1914.

ADDITIONAL PHOTOGRAPHS

December 4, 1914 Photo of Montague Dam from Great Island (Source: FirstLight Photo Archives)

December 4, 1914 Photo of Gill Dam from Gill Shoreline (Source: FirstLight Photo Archives)

2014 View of Montague Dam (Source: TRC)

2008 Low-level oblique image of Turners Falls Dam (Left: Gill Dam, Right: Montague Dam) (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Potential Turners Falls Power & Electric Company Historic District (Criteria A and C)
The Turners Falls Dams 1 and 2 (Montague and Gill Dams) are a counted as a single contributing resource in a potential Turners Falls Power & Electric Company (TFP&EC) Historic District in Turners Falls. The potential historic district extends south from the Turners Falls Dam along the Turners Falls Power Canal approximately 2 miles to the Cabot Power Station. This potential historic district contains several resources that are also contributing resources in the Turners Falls Historic District (identified as TFHD-listed), listed in the National Register in 1983. The TFP&EC district's contributing resources include:

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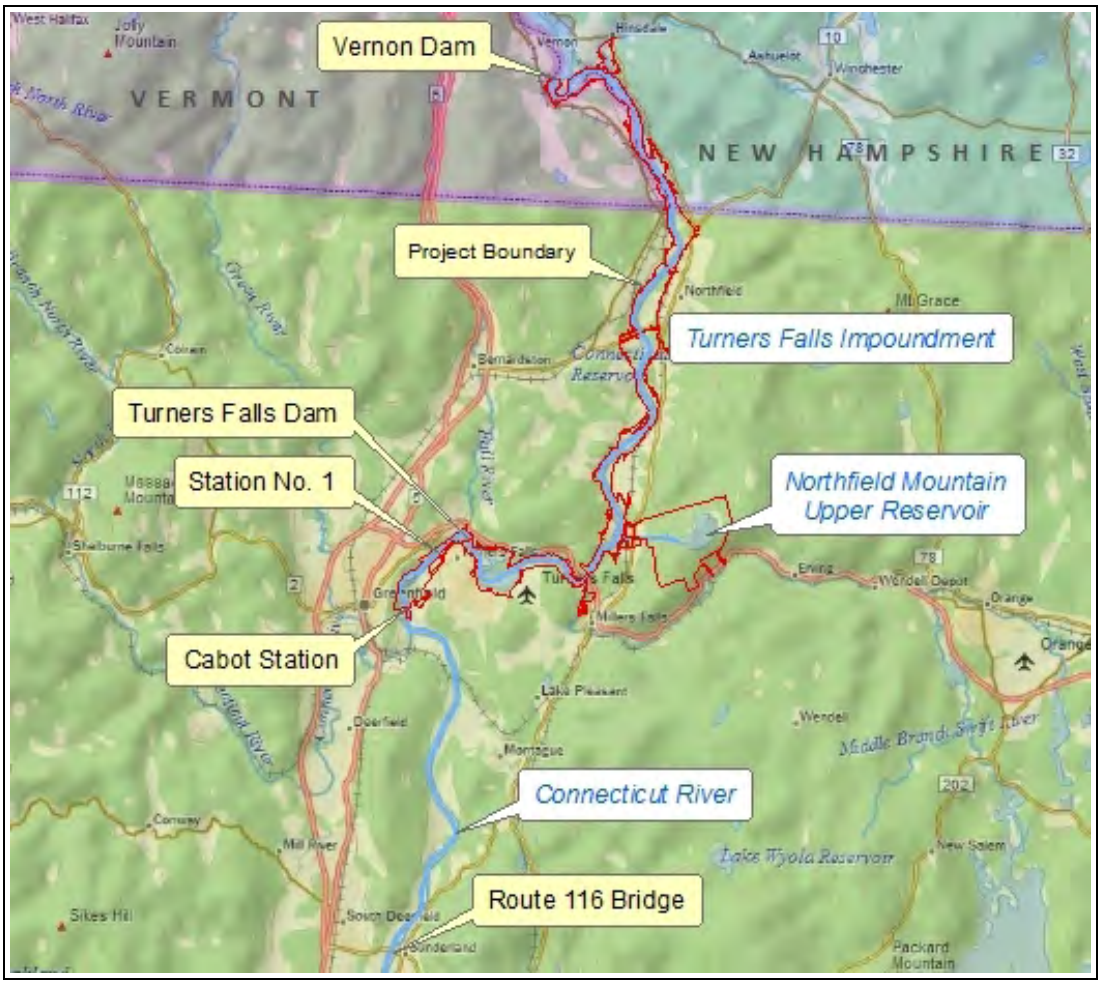
- Sixth Street Bridge (THFD-listed)
- Eleventh Street Bridge (determined NRHP-eligible by MHC)
- Power Station No. 1
- Cabot Station (determined NRHP-eligible by MHC in 1987)

Criterion A
The TFP&EC Historic District is significant under Criterion A for its association with the history of hydroelectric power in Turners Falls, specifically the construction program of the Turners Falls Power & Electric Company between 1904 and 1918 (and in the case of the power canal, into the 1920s). This construction program undertaken by the Turners Falls Company (as it was then called) moved the company away from solely relying on supplying water power to industries and mills located along the Connecticut River in Turners Falls and re-focused its energy on the emerging hydroelectric market. The company merged with several other electric companies in western Massachusetts during the 1920s. Under the leadership of its president Phillip Cabot (1908-1919), the company built two power stations, rebuilt the Turners Falls Dam and Gatehouse, and significantly lengthened and widened the power canal in Turners Falls. The Cabot Station, completed in 1918, was at the time the largest such power station east of Niagara Falls, and made Turners Falls the center of western Massachusetts' hydroelectric grid, extending to Greenfield, Amherst and Springfield. As a result of the power canal widening, the TFP&EC built numerous vehicular and pedestrian bridges across the canal; two railroad bridges were also built ca. 1915 by the Boston & Maine across the newly widened canal.

Criterion C

The TFP&EC Historic District is significant under Criterion C for the significant works of engineering it contains. These include the Cabot Station, which when completed and fully operational in 1918 was the largest and most powerful hydroelectric station in Massachusetts and east of Niagara Falls. The power canal was greatly widened and lengthened during the 1910s and 1920s. Both of the Turners Falls dams and the power canal were significant engineering works in their day. The double-intersection Warren thru-truss Sixth Street and Eleventh Street Bridges were built by the Eastern Structural Bridge Company for the Turners Falls Company and are rare examples of this bridge type in Massachusetts.

Locational Map for Turners Falls Dams 1 and 2



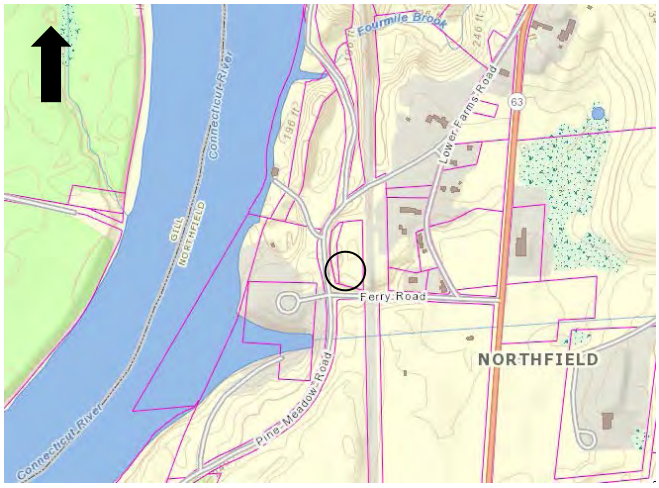
FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Orange	I	TRC-1

Photograph

Locus Map



MA GIS 2014

UTM Reference: 18 0706968E 4720880N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Northfield

Place *(neighborhood or village):* Northfield Farms

Street/Route: Central Vermont Railroad (former)

Carried over: Ferry Road, Northfield
(Railroad, river, brook, canal or road)

Historic/Common name: Central Vermont Railroad Bridge over Ferry Road

Ownership: New England Central Railroad/Amtrak
(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: Deck girder

Bridge typology code 306

Date of Construction: 1912

Source: Date Plaque

Engineer/Designer: Central Vermont Railroad

Bridge company/Contractor: Detroit Bridge & Ironworks

Material (s): Granite and concrete piers, metal bridge superstructure

Alterations *(with dates):* None observed

Posted load limit *(if any):* N/A

Condition: Good

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural, just east of the Riverview Picnic Area

Superstructure:

Overall length: 44 ft. Deck width: 6 ft Skew: None
Main unit: No. of spans: 1 Span length: 44 ft
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 25 ft. (approx.) Material of abutments or piers: Granite with concrete caps

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This single-span, riveted-plate, deck-girder bridge carries the single-track former Central Vermont Railroad (now New England Central Railroad) line over Ferry Road, west of Route 63 in Northfield. The bridge is supported on either end by tapered piers of coursed and cut granite topped by a concrete cap. The railroad ties extend over the sides of the bridge about a foot on either side. There is a metal date plaque on the southeast corner stamped "Built in 1912 by the Detroit Bridge & Ironworks, Detroit, MI." The bridge is typical of several other small deck-girder railroad bridges from that date built by the Central Vermont Railroad in this area of Franklin County and southern Vermont.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Central Vermont Railroad connected Montreal, Quebec with New London, Connecticut using a route along the shores of Lake Champlain, through the Green Mountains and along the Connecticut River valley, as well as Montreal to Boston, Massachusetts, through a connection with the Boston & Maine Railroad at White River Junction, Vermont. Chartered in 1843, the railroad reached Northfield from the north on October 10, 1848. It has operated under several companies since the 1890s, including the Grand Trunk Railway, Canadian National, and New England Central Railroad. The route along the Connecticut River also handles the twice-daily Amtrak Vermonter. This bridge was built in 1912.

BIBLIOGRAPHY and/or REFERENCES

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1982 *MHC Reconnaissance Town Report: Northfield*. MHC: Boston, MA.
1984 *Historic and Archaeological Resources of the Connecticut River Valley: A Framework for Preservation Decisions.* MHC: Boston, MA. February 1984, re-printed 1987, PDF version 2007.

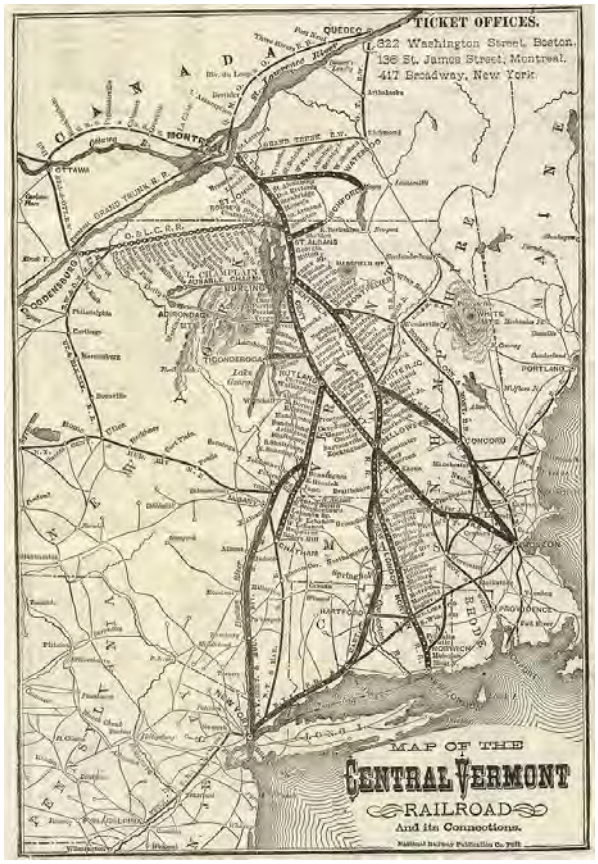
Murphy, James
1991 "Where the Central Vermont Railway Came From," The Ambassador (Publication of the Central Vermont Railway Historical Society), Vol. 2, No. 1, Spring, 1991.

ADDITIONAL PHOTOGRAPHS

2014 View of South Abutment (Source: TRC)

2014 View of Date Plaque (Source: TRC)

2008 Low-level oblique image of B&M Railroad Bridge (Source: MASSDOT GIS)



1879 Map of the Central Vermont Railroad

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☒ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☐ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Contributing Resource in Potential Central Vermont Railroad Linear Historic District (Criterion A)

This resource is recommended NRHP-eligible as a contributing resource in a potential Central Vermont Railroad Linear Historic District in Massachusetts and Vermont (with boundaries and resource count as yet undefined). This linear historic district is recommended NRHP-eligible under Criterion A for its association with the history of railroads in northwestern Massachusetts and southern Vermont during the nineteenth and early twentieth centuries.

In the 1840s, railroads took over the major transportation role in western Massachusetts and southern Vermont once briefly enjoyed by canals in the early 1800s. Among the earliest railroads in the region was the Vermont & Massachusetts Railroad, chartered in 1844 and immediately merged with the Brattleboro & Fitchburg Railroad of Vermont. Further extensions opened to Athol and Miller's Falls in Massachusetts in 1848, and to Brattleboro, Vermont in 1850. Later in 1850, a branch from Grout's Corner west to Greenfield, Massachusetts opened. A short branch to Turner's Falls opened in 1870-1871, spurring economic growth in this industrial center founded only a few years earlier in 1866.

The original main line north from Miller's Falls was leased to the Vermont Central Railroad in 1871, which became the Central Vermont Railroad in 1872. Chartered in 1843, the railroad reached Northfield from the north on October 10, 1848. It has operated under several companies since the 1890s, including the Grand Trunk Railway, Canadian National, and New England Central Railroad.

This bridge was built in 1912 by the Detroit Bridge & Ironworks and is still in use today along the single-track line for both rail freight and passenger service.

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
18-0-015	Orange		TRC-5

Town/City: Montague

Place: *(neighborhood or village)*: Millers Falls (French King Rock vic.)

Address: 169 East Mineral Road

Historic Name: Cabot Camp

Uses: Present: Corporate retreat, currently vacant

Original: Summer camp

Date of Construction: ca. 1913

Source: Written sources

Style/Form: New England Colonial Revival

Architect/Builder: Unknown Boston architect

Exterior Material:

Foundation: Stone

Wall/Trim: Stone, wood

Roof: Slate shingle

Outbuildings/Secondary Structures: Carriage house, two other outbuildings of unknown use

Major Alterations *(with dates):* None observed. Building reputedly incorporates an early-19th-century canal-related structure, although this is unverified.

Condition: Good, although vacant

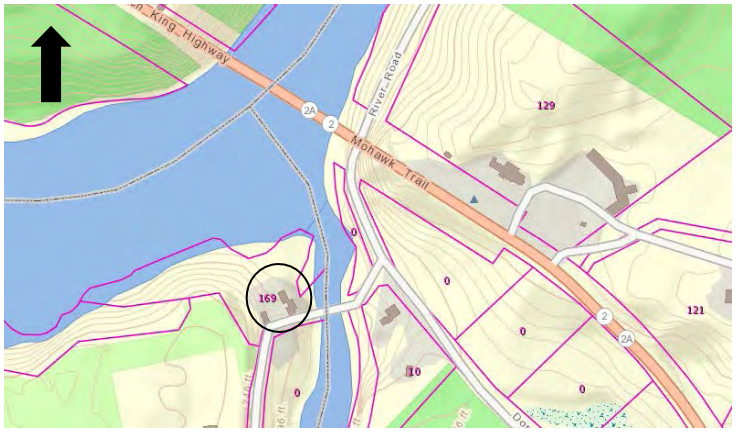
Moved: **no** ☒ **yes** ☐ **Date:**

Acreage:

Setting: Rural setting, at confluence of Millers and Connecticut Rivers at foot of East Mineral Road bridge. Small parking lot is located across East Mineral Road.

Photograph

Locus Map



MA GIS 2014

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp. for FirstLight

Date (*month / year)*: March 2014

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

The Cabot Camp complex is located on the northwest side of East Mineral Road, at the confluence of the Millers and Connecticut Rivers, just south of the East Mineral Road Bridge over the Millers River and within sight of the French King Bridge over the Connecticut River. The property is bordered by a low, dry-laid fieldstone wall that runs at the east property line along East Mineral Road. A second wall also links the house to the carriage house creating a small courtyard. The land slopes steeply on the north and west towards the two rivers.

The main house and outbuildings date from 1913 and are built in a rustic variant of the New England Colonial Revival Style. The house consists of three identifiable sections: the easternmost section is a 1-story, 3-bay frame house on a fieldstone foundation with a side-gable roof covered with slate shingles. This section is clad with clapboard siding and is trimmed with corner boards and a box cornice. There is a central off-peak, brick chimney north of the roofline. The windows are presently covered with original board shutters with metal strap hinges, so the number of window lights was not visible. A louvered attic window is on the east gable end. There is a single-leaf wood door on the south façade; the north elevation was not accessible for inspection.

A 1-story, 3-bay, frame hyphen on a stone foundation and slate-shingled, side-gable roof is on the west. It has a central entrance on the south with a single-leaf batten door with strap hinges. The flanking windows are sealed with batten shutters with metal hinges.

The westernmost section extends from the southwest corner of the hyphen. It has a solid fieldstone gable end and an interior-end stone chimney. The rest of the building is frame, covered with dark-stained board-and-batten siding. The side-gable roof is covered with slate shingles and has exposed rafter ends. The windows on the south and west gable ends are sealed with single-leaf wood shutters.

Outbuildings on the property include a fieldstone carriage house and two frame storage buildings of undetermined use. The 1-story, 6-bay carriage house is built of fieldstone and has a side-gable roof with slate shingles. It is open on the north and each bay is marked by a single wood Tuscan column. Arched doorways are at the south and the west gable end, with single-leaf batten doors. There is a 1-story, 3-bay, frame outbuilding with board-and-batten siding, slate-shingled side-gable roof, and an exterior-end brick chimney. There is also a small frame building with board-and-batten siding and a ventilator atop its gable roof; the structure may have been built to house tamed birds.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

The property is the site of a former toll house associated with the canal and lock system in operation by 1798 built by the Proprietors of the Upper Locks and Canals to bypass the French King Gorge and the Great Falls at Turners Falls. One source also claims that the property contains the site of the Dark Tavern, built to accommodate travelers along the canal route (Abercrombie 1973: 1). The canal proved commercially successful for its first 30 years, but suffered from competition from the emerging railroads beginning in the 1840s, and by 1856 the canal was closed to boat traffic.

In 1866, Colonel Alvah Crocker and his associates bought the land and water rights of the canal company. Beginning in 1868, Crocker and his newly formed Turners Falls Company developed the village of Turners Falls as an industrial hub deriving water power from the Turners Falls and turning the former navigational canal into a power canal (Jenkins 1980: 8.2).

By 1886, the Clarke and Chapman Machine Company in Turners Falls began converting water from the dam at Turners Falls for electrical power and by the early 1900s the Turners Falls Company made the crucial decision to go into the hydroelectric power business. Changing its name to the Turners Falls Power & Electric Company, the company constructed a Power Station (Power Station No. 1) at Turners Falls, and widened and lengthened the existing power canal (Montague Bicentennial Committee 1954: 5).

The company had by then attracted the attention of financier Phillip Cabot of Boston. Born in Brookline in 1872, Cabot graduated from Harvard and soon became a partner in the investment form of White, Weld & Company.

> *"About this time, Turners Falls stockholders had begun to dispose of their shares to a group of Boston investors represented by Philip Cabot, who had also purchased substantial holdings in the stocks of the Amherst Gas Company, the Greenfield Electric Light and Power Company and the East Hampton Gas Company. Cabot was invited to become a director of all these companies and for the first time in its history the Turners Falls Company became associated with others in the electric utility field.*
>
> *Philip Cabot and the men working with him were largely responsible for the rapid and successful development of the Turners Falls project and for the starting of the associations which eventually led to the formation of the Western Massachusetts Companies and the Western Mass. Electric Company. In 1908, Cabot succeeded Char1es T. Crocker as president of the Company, a position he held for the next 11 years."* (Abercrombie 1973: 4)

The hydroelectric development at Turners Falls that Cabot planned, financed, and pushed through included far-reaching decisions to build a new concrete dam at Turners Falls; widen, deepen and extend the power canal two miles; and at its lower end build a 42,000-kilowatt hydroelectric station utilizing a 60-foot head. Work was begun in 1912 and in 1916, No. 2 Station (later renamed Cabot Station in honor of Phillip Cabot) started commercial operation. When completed, Cabot Station was the largest hydroelectric plant in Massachusetts and was in fact the largest hydroelectric generating station east of Niagara Falls. By 1914, separate generating and transmission companies seemed unnecessary and Amherst Power was absorbed by the Turners Falls Power & Electric Company (Montague Bicentennial Committee 1954: 12)

Cabot resigned as president of the Company in 1919 because of ill health. General Manager George W. Lawrence succeeded him. When Lawrence died in 1939, Fred C. Abercrombie was elected president and served until consolidation with the Western Mass. Electric Company in 1942. After his retirement, Cabot moved to a career in teaching at Harvard University, leading courses in business and public utility management. Phillip Cabot died in 1941.

The site of Cabot Camp was sold in two separate transactions to the Turners Falls Company. In 1883, the northwestern section was sold by Alfred Cobb (Franklin County Deed Book 369-95); an undated land map shows both an "old mill foundation" and an "old dam abutment" (Western Mass. Electric Company n.d.). In 1903, Sarah Briggs sold the part adjoining East Mineral Road that may have contained a section of an earlier toll house (Deed Book 503-51).

Around 1913, Cabot decided to redesign the former Briggs and Cobb properties as his rural retreat, the property having been purchased by the power company for flowage rights. "With the help of a Boston architect, Cabot closely supervised the construction of a large stone meeting room or dining hall. The heavy beams, rafters, heavy roof and side wall boards were procured from an old barn in Ashfield. The old "ship-knees" holding up the cross beams came from Salem or the eastern Massachusetts area to be re-erected on the site at the mouth of the Millers River" (Abercrombie 1973: 7).

> *"Especially noteworthy are the thick stone masonry walls, the slanted keystone arch, huge fireplace and chimney easily capable of burning logs cut into four foot lengths, and the extremely heavy roof construction topped off by a quarry stone roof rarely seen today. He added an ell and kitchen area connecting the old toll house to the new meeting room, and a carriage or garden house with thick stone walls, heavy beams, rafters, roof boards and tremendous slabs of slate.*
>
> *A stone-lined circular well was constructed with an underground pipe running into the cellar area of the old toll house where a hand pump provided water for general household use. Cabot, under a long-term lease, spent a*

Continuation sheet 2

good deal of his free time at this camp, whiling away some of it working with plaster of Paris forms designing various ceiling molds and wall pillars which today still remain in the ell part of the house. He himself attached them to these specific locations with fish line he provided back in the 1900s.

Following Cabot's retirement in 1919, Fred Abercrombie, then treasurer and later president of the Turners Falls Power & Electric Company, took over the long-term lease from the power company when Cabot began teaching at Harvard. Under this lease, the Abercrombie family maintained and enjoyed Cabot Camp for over 40 years. When construction for the Northfield Mountain Pumped Storage Station began in 1968, Fred's son Allen Abercrombie voluntarily cancelled the long-term lease on Cabot Camp (Abercrombie 1973: 7). From 1968 to the present, Cabot Camp has been owned and maintained by the successor companies to Western Massachusetts Electric, including FirstLight.

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ADDITIONAL PHOTOGRAPHS

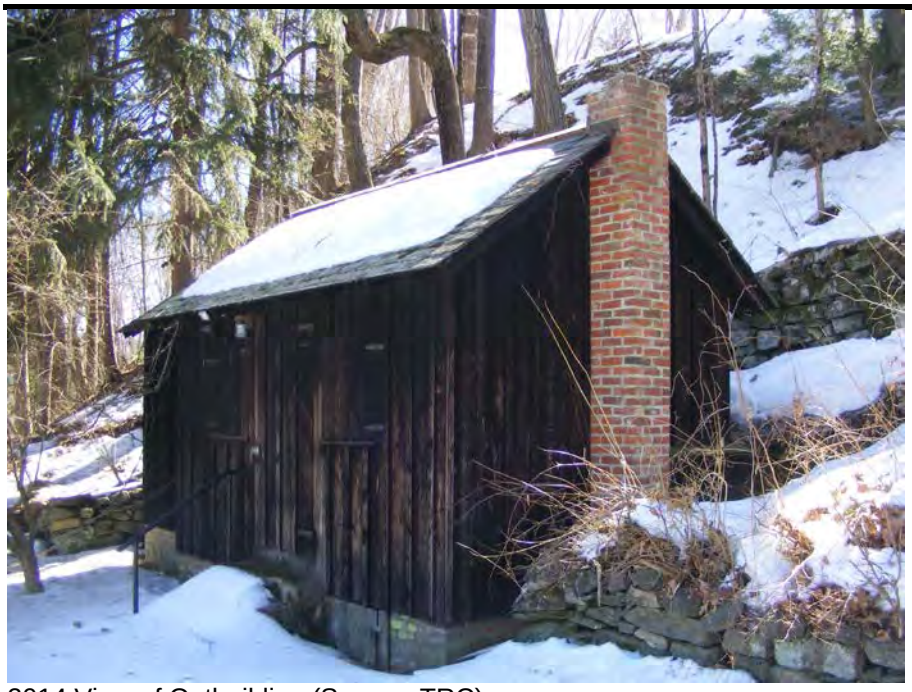
2014 View of Eastern Section (Source: TRC)

2014 View of Hyphen (Source: TRC)

2014 View of Western Section (Source: TRC)

2014 View of East and South Elevations of Carriage House (Source: TRC)

2014 View of North and West Elevations of Carriage House (Source: TRC)



2014 View of Outbuilding (Source: TRC)

2014 View of Outbuilding (Source: TRC)

2008 Low-level oblique image of Cabot Camp (Source: MASSDOT GIS)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

Criterion A
This resource is recommended NRHP-eligible under Criterion A with a period of significance from ca. 1913 to 1964. Cabot Camp is significant for its association with the Turners Falls Power & Electric Company (TFP&E) and its successor companies up to and including its current owner, FirstLight. The property consists of two parcels on the Connecticut and Millers Rivers purchased in 1883 and 1903 respectively and upon which TFP&E president Phillip Cabot erected these buildings as a summer residence. Cabot was instrumental in the early growth and development of TFP&E, including construction of the company's two power stations, dam, and power canal at Turners Falls, as well as merging the company with other regional electric utility companies. Cabot leased the property from the power company for his own use, and when he retired in 1919, his successor Fred Abercrombie took up the lease and resided there. In 1968, the property was given a new purpose as a corporate retreat.

Criterion B
Although the Cabot Camp is associated with the life of financier and Turners Falls Power Company executive Phillip Cabot, it is not known whether there are other extant buildings elsewhere outside of the Projects' APE more closely associated with Cabot's productive life, as required by Criterion B. The NRHP-eligibility of Cabot Camp under Criterion B is undetermined.

Criterion C
Cabot Camp is recommended NRHP-eligible under Criterion C as they embody characteristics of rustic New England Colonial Revival that were popular in the design of rural retreats and summer residences of the early 20th century. The Colonial Revival harkened back to simple and unornamented architecture that was felt to be more in keeping with rural and rustic settings such as this. According to a history of the camp, Boston native Phillip Cabot engaged an unnamed Boston architect and was instrumental in several of the house's design features. Prominent features include the use of uncut fieldstone, slate roofs, working wood shutters, over-sized chimneys, and a mix of wood and stone for the exterior.

Statement of Integrity
Although there was no interior access, Cabot Camp appears to be in good and unaltered condition and retains all seven aspects of integrity (location, design, setting, materials, workmanship, association, and feeling).

FORM F – STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
74-A1-1 and 2-0-6	Orange		TRC-34

Town/City: Northfield/Erving

Place *(neighborhood or village):* Northfield Farms vicinity

Address or Location: Route 63 (Northfield Road)

Name: Northfield Mountain Pumped Storage Facility

Ownership: ☐ *Public* ☒ *Private*

Type of Structure *(check one):*

___ boat or ship
___ canal
___ carousel
___ dam
___ fort
___ gate
___ kiln
___ lighthouse
___ pound
___ powderhouse
___ street
___ tower
___ tunnel
___ wall
___ windmill
_x_other *(specify)* Pumped storage hydropower facility

Date of Construction: 1968-1972

Source: Written sources; drawings, specifications

Architect, Engineer or Designer: Stone & Webster, Boston MA (Source: Design specifications)

Materials: Concrete, metal, stone

Alterations *(with dates)*: None known. Former engineers' office is now the Visitors Center for the facility.

Condition: Excellent

Moved: ☒ **no** ☐ **yes** **Date**:

Acreage: >300 acres

Setting: Rural setting in Northfield Farms with surrounding facility-related recreational facilities.

Photograph

Locus Map

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* March/2014

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

DESIGN ASSESSMENT

Describe important design features.

The Northfield Mountain Pumped Storage Facility is located in the towns of Erving and Northfield, Franklin County, MA on the east side of the Connecticut River and approximately 5.5 miles upstream from the Turners Falls Dam in Montague. The principal structures comprising the project are the impervious-core, rock-fill dam and dikes forming the upper reservoir; intake channel and intake structure; pressure conduit system; underground powerhouse cavern with four Francis-type reversible pump-turbines and generator-motors; tailrace tunnel; surge suppression chambers and shafts; tailrace exit structure and tailrace canal; vertical ventilation and emergency exit shaft; and the main access tunnel leading to the underground structures.

Turners Falls Impoundment

The 20-mile reach of the Connecticut River between the dams at Vernon, VT and at Turners Falls, MA serves as the Lower Reservoir of the Northfield Project and has a drainage area of 7,138 square miles. There are two project gage houses on the Turners Falls Impoundment: Gage House L2 is located on the Connecticut River on the north side of the tailrace canal. Gage House L3 is downstream on the Turners Falls Impoundment, on the south side of the river 0.3 miles upstream of the Turners Falls Dam.

Upper Reservoir

The upper reservoir is located on top of Northfield Mountain in the Briggs Brook drainage area. The reservoir is formed by the main compacted earth-core rock-fill dam; a concrete gravity spillway structure; a concrete gravity dam, three compacted earth core rock fill dikes; and four natural ridges. A low-level reservoir outlet is located in the main dam. The water supply intake is also located under the main dam. The gated structure at the inboard toe of the dam is equipped with fish screens.

Main Dam and Dikes

The main dam and dikes are constructed of compacted rock-fill embankments utilizing a central impervious rock-filter design. The crests of the rock fill embankments are at El 1010 and are approximately 30 feet wide. Founded on sound groutable rock, the core is 12-feet wide. There are sand and gravel filter zones upstream and downstream of the impervious core with oversize rock zones forming the upstream and downstream faces. The impervious core was raised in 1979 on the downstream portion of the crest in the Main Dam to elevation 1,006.25 feet in response to settlement shortly after construction. This dam contains an intake structure and sub-foundation pipe for possible future water-supply diversion to the Quabbin Reservoir, a principal water supply for the City of Boston and parts of the Greater Boston metropolitan area.

The three dikes, known as the North, Northwest and West Dikes, are constructed in a similar manner and to the same crest elevation as the main rock fill dam, with a central impervious core-filter and compacted rock-filled embankments. They help form the upper reservoir.

Concrete Gravity Dam

At the west end of the intake channel, the reservoir is enclosed by a low concrete gravity dam. The main section is situated at the channel's end, is 327-feet long and varies from 10 to 20 feet in height. The concrete walls at both ends of the gravity section are constructed to a higher level, allowing a parapet wall to be constructed against the retaining wall on the right side of the

intake. A series of 19 control monuments are located on the crests of the dam and dikes. A low-level outlet located in the main dam is used for releasing storm runoff from the reservoir.

Concrete Gravity Spillway Structure

The two-stage, un-gated spillway is designed to discharge natural rainfall runoff of the upper reservoir drainage area when the reservoir is full, and to protect the embankments from accidental overtopping. This spillway discharges into the Packard Brook valley which flows into the Millers River, and consists of a concrete gravity-type weir section, approximately 550 feet long located in a shallow channel excavated in bedrock and a 20 foot long notch near the center of the structure.

Intake Channel

The intake channel, approximately 1890 feet long, directs the flow of water from the upper reservoir to the pressure conduit intake. The intake channel stop log and gate structure forms a low dam between the upper reservoir and the intake channel and prevents stormwater from entering the pressure conduit when the intake channel is dewatered. The submerged dam is 63 feet long with two manually operated sluice gates and two 18 foot wide stoplog slots which usually hold eight concrete stoplogs. The intake structure consists of a reinforced concrete intake portal that is 55 feet wide and 80 feet high to the crown of the arched roof. A vertical concrete pier 3.5 feet thick supports the portal roof and provides support for the intake trashracks. A welded steel trash rack system of 28 individual panels covers the intake portal and limits the entrance of debris into the pressure conduit.

Pressure Shaft

The pressure shaft and two elbows connect the pressure conduit intake to the pressure manifold. The manifold is formed by the branching of the pressure shaft into two 22 foot diameter concrete-lined conduits which in turn branch into four 14-foot diameter tunnels leading to the four welded steel-lined penstocks. The four welded steel penstocks connect the manifold with the powerhouse cavern. Each is 340 feet long with wall thickness varying from one to two inches. During pumping operation, water is pumped from the Turners Falls Impoundment via the powerhouse through the pressure shaft to the upper reservoir. During generation, water flows from the intake channel through the pressure shaft to the powerhouse.

Surge Chambers

The surge chambers consist of four vertical surge shafts interconnected by three horizontal surge galleries. Each of the four surge shafts is connected to one of the draft tube tunnels which controls the rate of flow between the draft tube tunnel and the surge chamber. Three surge galleries running parallel to the powerhouse interconnect the four vertical surge chambers.

Powerhouse

The powerhouse consists of an underground chamber excavated in the bedrock of Northfield Mountain. The powerhouse contains the four reversible pump-turbine motor-generator units and their spherical valves and governors, and the two main transformers. Two overhead bridge cranes service the entire length of the powerhouse. The powerhouse cavern is unlined and is laid out with the long axis running north and south measuring 328 feet long and 70 feet wide. There are four unit bays starting with Unit 1 at the north end. South of Unit 4 is the service and erection bay which also contains the control room. Access and ventilation air into the powerhouse are provided by the access tunnel which connects the south end of the powerhouse.

Tailrace Tunnel

Water flows between the powerhouse and the Turners Falls Impoundment via the tailrace tunnel. There are four draft tubes connected by a manifold to a common tailrace tunnel. The tailrace tunnel is concrete-lined, horseshoe shaped and 5,136 feet long, with a maximum width of 33 feet and a height of 31 feet. The exit structure into the Turners Falls Impoundment includes a transition from the horseshoe shape into a trapezoidal shape. Steel stop logs are used in the exit structure when needed to dewater the tailrace tunnel. A floating boom is provided across the exit channel to provide a barrier to large debris and boaters.

Culverts and Weirs

There is a series of 28 culverts and weirs as part of the Northfield Project. Culverts are constructed of corrugated metal pipe. Weirs are constructed of precast concrete.

MDC Facilities

The intake works for the MDC water supply line leading to the Quabbin Reservoir (Diversion Intake Works) is located at the east side of the upper reservoir along the main earth fill dam. It consists of an octagonal-footprint concrete structure, 94 feet high and 30 feet wide. Access to the tower is by means of a steel beam-reinforced concrete slab bridge leading from the roadway to main dam.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

In 1794, the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. The company was empowered to collect tolls from all boats and lumber that passed through the canal. When completed in 1798, the locks and canals formed a vital link in the 300-mile system of waterways from Wells River, Vermont to Hartford, Connecticut (Jenkins 1908: 8.1). The dam provided a power source for several adjoining small lumber mills and remained profitable for several decades. By the mid-1800s however, the canal had lost most of its maritime business to the railroads, and the last boat went through the locks in 1856 (Great Falls Discovery Center 1996: 6).

In 1864, a group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the water rights from the Proprietors and formed the Turners Falls Company. In 1866, the company replaced the old wooden crib dam with a new 1,200-foot-long and 300-foot-high, wood-and-stone dam and built a fishway, log sluice gate and granite head gatehouse on the Montague shore to control water flow to the proposed power canal (Gregory 2006: 14). Soon, the canal was powering new manufacturers moving to Turners Falls, such as the John Russell Cutlery Company, the Keith Paper Company, the Griswold Cotton Company, and the Montague Paper Company (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. Soon afterward, “a small company of public-spirited citizens” leased water to drive a 35-kilowatt generator, and established the Franklin Electric Light Company (Bennett 1990a: 5). In late 1886, an electric generating station opened at the Turners Falls and in 1892, the gatehouse was expanded for greater water flow. The Power Canal also was improved by widening it and increasing its depth. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1906, the company completed Power Station No. 1, located some distance south of the existing dam.

In 1908, Boston financier Phillip Cabot assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company’s new direction. Cabot’s ambitious plans called for the construction of a second powerhouse, named Cabot Station in his honor, replacing and raising the original Crocker-built dam, and extending and widening the power canal. Work began on dam construction in 1912 and was completed in 1915 along with the Cabot Station and the newly improved power canal.

World War I and the post-war period created ever increasing demands for electricity for both industrial and residential use, so the Turners Falls Company expanded its transmission system southward and by 1923 had reached the Springfield MA area.

Another line went westward across the Berkshire foothills to Pittsfield. The 1920s and 1930s saw the expansion of hydroelectricity throughout western Massachusetts. Increasing demand for electric power in the post-World War I years led to construction of a steam turbine generating plant at the confluence of the Chicopee and Connecticut Rivers. The plant was projected to function principally when the waters of the Connecticut were low and when hydroelectric power from Turners Falls was not sufficient (Samartino 1991: 25).

After extensive studies, the Turners Falls Power & Electric Company and the Connecticut River Power Company of New Hampshire joined forces as the Connecticut River Conservation Company. Its purpose was to "develop a system of reservoirs on the headwaters and tributaries of the Connecticut whereby the tremendous spring runoff might be stored for use during the period of low flow in the River." It was projected that 5 billion cubic feet of storage water could be made available for power purposes, saving 10,000 tons of coal annually (Samartino 1991: 26).

In 1942, the biggest merger was made when three pre-existing companies were merged into Western Massachusetts Electric Company (WMECO): Turners Falls Power & Electric Company, Pittsfield Electric Company, and United Electric Light Company. That year WMECO was issued a license to operate the water power development at Turners Falls. The several power companies continued to expand and to cooperate in transmission exchanges. By 1965, the Connecticut Valley Electrical Exchange (CONVEX) covered six thousand square miles, generated up to three million kilowatts, and served about three million people within southern New England (Stephenson 1982: 650). Combined, nearly two dozen major hydroelectric stations along the Connecticut River were capable of producing collectively 700 thousand kilowatts of power.

On July 1, 1966, three Connecticut Valley power companies—Western Massachusetts Electric Company, Connecticut Light & Power Company, and the Hartford Light Company—joined forces to form Northeast Utilities Service Company (NU), creating the first new multi-state public utility holding company since the mid-1930s (WMECO 1987: 4). In 1967, Holyoke Water Power Company (HWP) joined the NU System, followed by the Public Service Company of New Hampshire (PSNH) in 1992. Reports estimated that by 1971 CONVEX would have a deficit of 314 thousand kilowatts, and by 1973 that deficit would increase to 666 thousand kilowatts. Studies to increase the generating capacity at the Turners Falls plants were well underway in 1961.

The economic boom of the 1950s and 1960s and consequent demand for energy caused investor-owned utility companies like NU to respond to market needs by diversifying their energy portfolio. They did so by constructing large-scale steam (coal-fired) stations, nuclear plants, and later, natural gas facilities. In addition, because of the limited number of suitable sites combined with the large environmental footprint required for hydropower, construction of hydroelectric facilities by investor-owned utilities declined in the late twentieth century. Hydropower continued to play a critical role in the electric power supply, however, in that it provided peaking power, was more cost-efficient to put online (or take offline) as required by electrical demands, and proved a viable method of balancing thermal base loads. For its part, in order to plan for future power demands, NU started an expansion plan in the 1960s which involved three multi-million dollar projects, including the Northfield Mountain Pumped Storage Facility in Massachusetts.

1. Connecticut Yankee Nuclear Power Plant at Haddam Neck CT began commercial operation in 1968 and produced more than 110 billion kilowatt-hours of electricity during its 28-year operating history. In 1996, the CY Board of Directors voted to permanently close and decommission the power plant. After two years of planning and preparation, actual decommissioning began in 1998 and was completed successfully in 2007 with all plant structures removed.
2. Millstone Nuclear Power Station is the only nuclear power generation site in Connecticut. It is located at a former quarry (from which it takes its name) in Waterford. Of the three reactors built here, units two and three are still operating at a combined output rating of 2020 MW. In terms of generating capacity, Millstone is the largest electrical generating facility in New England, and the plant contains the second (unit 3) and third (unit 2) largest individual generating units on the New England electrical grid.
3. Northfield Mountain Pumped Storage Facility at Northfield MA was planned as the largest such facility in the world, surpassing both the Niagara (Robert Moses) Power Project and Blenheim-Gilboa Project, both in New York State, and both built in the 1960s (Samartino 1991: 26). The pumped storage facility would store water in reservoirs to be released during periods of peak electrical use, usually during the day or during periods of extreme weather. Northfield Mountain was chosen for the project location because of its 1000-foot summit crowned by a 300-acre natural basin, as well as for its proximity to the Connecticut River. The shape and geologic make-up of the land also enabled the powerhouse portion

Continuation sheet 4

of the plant to be built underground and not rely on the natural flow of the river for its operation, another major design innovation (WMECO 1987: 13).

The Northfield Mountain facility operates by siphoning Connecticut River water into a tailrace and employing electrically driven pumps to direct that water through a tunnel to a mountaintop holding reservoir. The reservoir is approximately 800 feet above river level, so that when the system's operation is reversed, water returns through the tunnel by force of gravity. The tunnel system directs the kinetic energy of the falling water over turbines at the foot of the mountain, thereby generating an average of one million kilowatts of electricity per hour. From the turbines, the falling water is directed back into the Connecticut River (Stephenson 1982).

The philosophy of Northfield's operation is to systematically exploit fluctuations in wholesale electric rates, thereby minimizing overall cost of meeting demand for electrical energy. When consumer demand is low, generally late at night, during weekends, and on holidays, the wholesale price of electricity declines. During those periods, the power company purchases the electricity necessary to pump water up to the storage reservoir. Conversely, when the wholesale price electricity commands is high, Northfield releases stored water and generates electricity. This permits the power company to meet peak consumer demand with less frequent reliance on electricity purchased from other suppliers. Additionally, any surplus energy generated at Northfield may be sold to other utilities at elevated peak demand prices (Stephenson 1982).

In September 1964, an application for a preliminary permit had been filed with the Federal Power Commission; by January 1966, a license for construction and operation had been requested, and by May 1968, an operating license had been issued for the Northfield Project. On August 15, 1968 the final petitions for rehearing had been denied and the Northfield Project was free to move to the construction stage. The relative ease of obtaining permits was due in part to strong public support.

Construction of the Northfield Project began in late 1968, with the major job being the drilling and dynamiting of a 2500-foot tunnel, 565-foot ventilation shaft, 1130-foot pressure shaft, and the mile-long tail race between the powerhouse and the river, as well as the 10-story-high underground power house. Over 4.9 billion tons of rock were blasted to create the tunnels, shafts, and powerhouse (Samartino 1991: 26). Four 250,000-kilowatt capacity turbine generators were placed in the powerhouse cavern 700 feet below the surface. Also built were the 300-acre reservoir, the rock-fill dam 144 feet high and 5600 feet long, and other dikes totaling 5600 feet.

At the same time, the Turners Falls dam downriver was raised (Stone & Webster 1968). This enabled more water to be backed up behind the dam, creating a 2,500 acre reservoir on the Connecticut River. The Northfield Mountain Pumped Storage Facility began operation in early 1972. As part of the development, WMECO created the Northfield Recreation and Environmental Center, with exhibits on the area's geology, history, and ecology, along with facilities and trails for hiking, skiing, and snowshoeing (Samartino 1973: 139).

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1968c General Arrangement Montague Dam Bascule Gates. Turners Falls Project for Western Massachusetts Electric Company. Stone & Webster, Boston, MA, June 1968.
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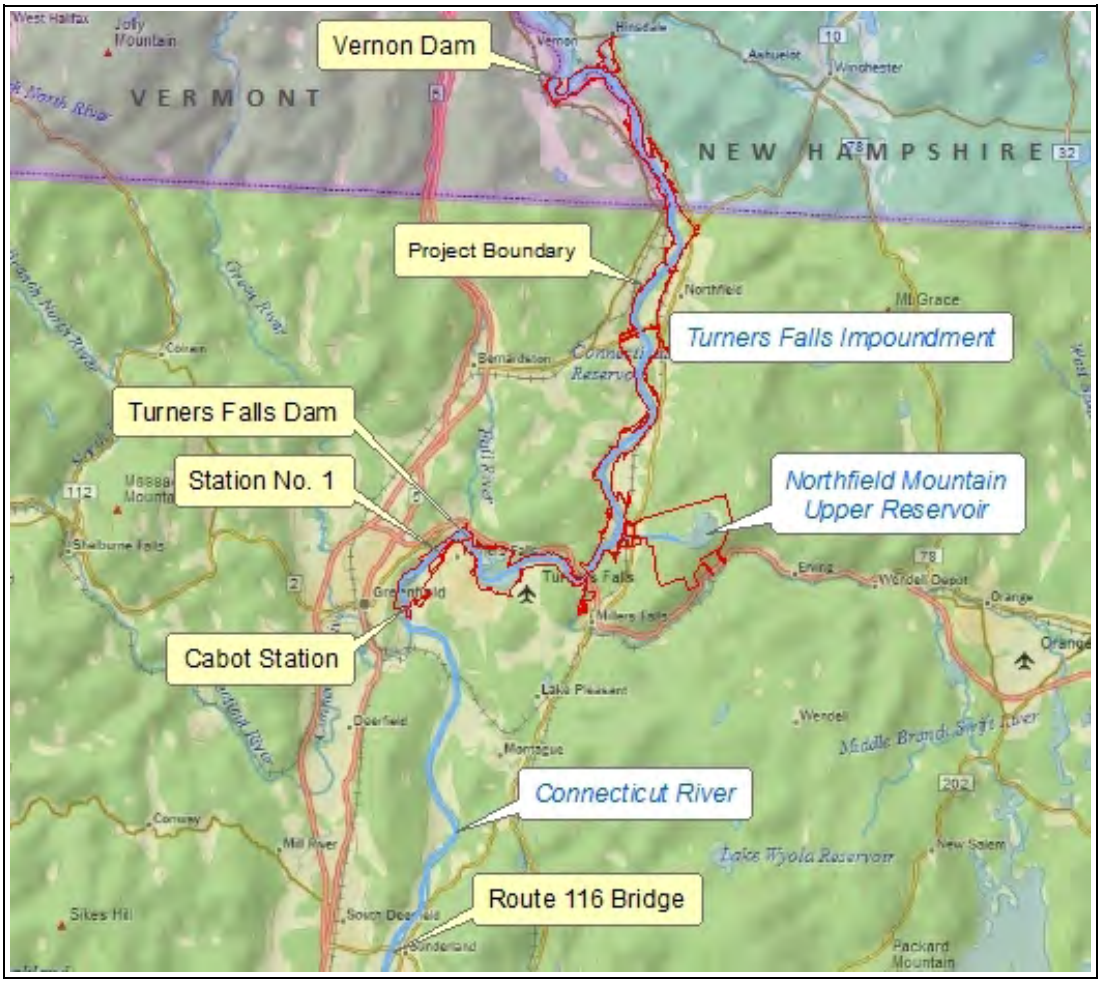
Locational map for Northfield Mountain Pumped Storage Facility and Visitors Center



Key Features of the Northfield Mountain Pumped Storage Facility


2014 View of Entrance (Source: TRC)


2014 View of Visitor's Center (Source: TRC)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☒ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☐ Potential historic district

Criteria: ☒ **A** ☐ **B** ☒ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☒ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

The Northfield Mountain Pumped Storage Facility meets the standards for eligibility for the NRHP under Criteria A and C. It is significant as being the world's largest pumped storage facility at the time of its completion and for its association with the more than century-long history of hydroelectric power in the Connecticut River Valley. The Northfield Mountain facility, built between 1968 and 1972, will be eligible for the NRHP in 2018.

Criterion A

The Northfield Mountain Pumped Storage facility meets Criterion A for its association with the more than 200-year history of harnessing the Connecticut River in western Massachusetts for manufacturing and hydroelectric power purposes. As the demand for electricity grew in the twentieth century throughout western Massachusetts, many smaller regional utility companies merged to form larger entities capable of financing and building ever bigger hydroelectric facilities, culminating in the formation of Northeast Utilities in 1966 and construction of the Northfield Mountain Project in 1968-1972. The resource is significant on the state and local levels with a period of significance from 1968 to 1972.

Development of the Connecticut River for transportation and power purposes dates to 1794, when the Massachusetts legislature granted the Proprietors of the Upper Locks and Canals of the Connecticut River permission to build and manage a dam, a canal, and a system of locks to aid river navigation around both Turners Falls and South Hadley. In 1864, a group of businessmen led by Col. Alvah Crocker of Fitchburg, bought the water rights from the Proprietors and formed the Turners Falls Company. Soon, the improved canal was powering new manufacturers moving to Turners Falls (Great Falls Discovery Center 1996: 6).

The earliest use of water power at Turners Falls for electrical purposes dates to June 9, 1886, when A.S. Clarke of the Clarke & Chapman Machine Company made arrangements with the Turners Falls Company for a six-hour additional use of water for the purpose of generating electricity at night. By the beginning of the twentieth century, the Turners Falls Company had moved into the emerging hydroelectric market (Jenkins 1980: 8.3). In 1908, Boston financier Phillip Cabot assumed the post of president of the Turners Falls Company, which was reorganized and renamed the Turners Falls Power & Electric Company, reflecting the company's new direction. In 1942, the biggest merger was made when three pre-existing companies were merged into Western Massachusetts Electric Company (WMECO): Turners Falls Power & Electric Company, Pittsfield Electric Company, and United Electric Light Company.

On July 1, 1966, three Connecticut Valley power companies—Western Massachusetts Electric Company, Connecticut Light & Power Company, and the Hartford Light Company—joined forces to form Northeast Utilities Service Company (NU). Despite such a great generating capacity, reports estimated that by 1971 CONVEX would have a deficit of 314 thousand kilowatts, and by 1973 that deficit would increase to 666 thousand kilowatts. Studies to increase the generating capacity at the Turners Falls plants were well underway in 1961. For its part, in order to plan for future power demands, NU started an expansion plan in the 1960s which involved three multi-million dollar projects, including two nuclear power plants in Connecticut and the Northfield Mountain Pumped Storage Facility in Massachusetts.

The Northfield Mountain pumped storage facility at Northfield MA was planned as the largest such facility in the world. In September 1964, an application for a preliminary permit had been filed with the Federal Power Commission and by May 1968, an operating license had been issued for the Northfield Project. Construction of the Northfield Project began in late 1968 (Samartino 1991: 26). The Northfield Mountain Pumped Storage Facility began operation in early 1972, greatly increasing overall capacity and bringing NU firmly to the forefront of American utilities.

Criterion C

The Northfield Mountain Pumped Storage facility meets the standards of Criterion C for embodying the distinctive design and engineering characteristics of a pumped storage hydroelectric facility. It is significant on the national and state levels with a period of significance from 1968 to 1972.

Some of the first uses of pumped storage technology occurred in the 1890s in the Alpine regions of Switzerland and northern Italy. In the 1930s reversible hydroelectric turbines became available. These turbines could operate as both turbine-generators and in reverse as electric motor driven pumps. The first use of pumped-storage in the United States was in 1930 by the Connecticut Electric & Power Company, using a large reservoir located near New Milford, CT pumping water from the Houstatonic River to the storage reservoir 230 feet above.

During the early twentieth century, utilities relied heavily on electricity generated by conventional hydroelectric power plants as well as conventional steam units. By the mid-twentieth century, as average electric loads doubled each decade, utilities began developing a more diverse energy portfolio to account for base and peak load variability. Technological advancements in steam-power generation and the introduction of nuclear power helped stabilize the increasing demands for base load capacity. However, using those types of generation for peak power production could potentially lead to mechanical stresses in the units. Utilities, therefore, began looking to pumped-storage facilities for addressing peak demands and typically designed the projects to operate in conjunction with other generation facilities. The 1960s and 1970s witnessed a sharp increase in the number of proposed pumped storage developments across the country (Dames and Moore 1981: 2.7-2.9).

Pumped storage hydroelectric plants continued to be built in the US throughout the 1950s and early 1960s, as innovations in engineering and pumping technology made their construction ever more appealing to power companies looking to harness water power. Pumped storage technology was an alternative to conventional damming of a river where there were considerations of aesthetics, the environment, or political opposition.

FORM H – PARKS AND LANDSCAPES

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	Area(s)	Form No.	Forms within
N/A		TRC-41	

Town/City: Athol, Orange, Erving, Gill, Greenfield, Shelburne, Buckland, Charlemont, Florida, North Adams, and Williamstown

Place *(neighborhood or village):* Various

Address or Location: Route 2, Route 2A (Old Route 2)

Name: Mohawk Trail

Ownership: ☒ *Public* ☐ *Private*

Type of Landscape *(check one):*

___ park
___ green/common
___ garden
_X_ boulevard/parkway
___other *(specify):*
___ farm land
___ mine/quarry
___ training field

Date or Period: 1912-1914, 1931-32

Source: Historic American Engineering Record

Landscape Architect: Massachusetts Highway Commission

Location of Plans: Not known

Alterations/Intrusions *(with dates):* Re-routed in Gill and Erving (1932-32), Repairs and widening (Various), Repairs due to flood/washout (2011)

Condition: Good

Acreage: 69-miles-long

Setting: Meandering parkway through rural areas, forested areas, villages and towns, sometimes following rivers.

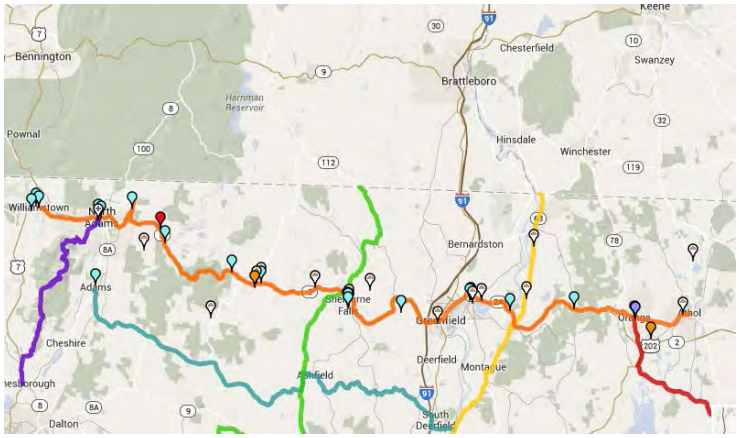
Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* March 2014

Photograph

Locus Map



Orange Line indicates Route Location
Source: Western MA Scenic Byways

☒ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

VISUAL/DESIGN ASSESSMENT

Describe topography and layout. Note structures such as bandstands, gazebos, sheds, stone walls, monuments, and fountains. Note landscaping features such as formal plantings, agricultural plantings, and bodies of water. If possible, compare current appearance with original.

The Mohawk Trail opened in 1914 as one of the first auto-touring roads in the country. The highway known today as the Mohawk Trail is a section of State Highway 2 and Route 2A (the original Route 2 before re-routing took place). There are various formal and informal designations of the Mohawk Trail's endpoints, but the most common reference is between Williamstown, on the New York State border and Athol, along the Millers River. This road traverses a part of the state that is famous for its scenery and its association with Native Americans. In 1914, the most mountainous miles of the Mohawk Trail were graded and specifically dedicated to auto touring. This stretch begins in the small city of North Adams and zig-zags its way up the Hairpin Turn to the western summit of Hoosac Mountain. It runs eastward along heavily wooded ridges, then drops into the long-settled Deerfield Valley, and finally descends into the broad Connecticut River Valley (Tree and Davis 2011).

There are numerous points of interest along the way, including many scenic viewpoints, roadside attractions and gift shops including:

- Longview Tower Specialty Shops: Opened in 1923, the five-story observation tower was rebuilt of steel in 1952 providing a panorama of the Connecticut River with its farms and the town of Greenfield.
- Natural Bridge State Park: The centerpiece of the 49-acre park is a white-marble formation bridging a gorge, a tourist attraction since the 1830s.
- Hairpin Turn-Western Summit: Cars from the 1920s frequently required a stop to cool their radiators at the top of a steep climb, such as the ascent of some 2,000 feet in the couple miles between North Adams and the Western Summit of Hoosac Mountain. The Wigwam and Western Summit Gift Shop at the top of the Hairpin Turn no longer has its wooden viewing tower.
- Whitcomb Summit: The highest point on the route (2,173 feet) is marked by a steel version of a wooden tower placed here in 1915. The cottages here date from the 1920s.
- Mohawk Trail State Forest: This is a 6,457-acre forest with 56 campsites and six ca. 1920s log cabins.
- "Hail To The Sunrise" Statue at Mohawk Park: Erected in 1932, it features a tribute to Native American heritage.
- Bridges: A portion of the trail parallels the Deerfield River for several miles, and passes near the village of Shelburne Falls, and the Bridge of Flowers. The route crosses the Connecticut River via the historic French King Bridge.

HISTORICAL NARRATIVE

Discuss history of use. Evaluate the historical associations of the landscape/park with the community.

One of the oldest designated tourist and scenic routes in the country, the Mohawk Trail traces its roots to Native American trails. Because Indian trails, as a general rule, followed the natural grades of the landscape, they often later became roads for traders and settlers. The early European settlers used the Indian Path, as it was then called, to travel between the English settlements of Boston and Deerfield, and the Dutch settlements in New York. The settlers and traders brought with them the horse and wagon, which required the widening and slight relocation of the original path. After the close of the Revolutionary War the establishment of privately owned "turnpikes" became common place (Bennett 1990: 3).

Chartered March 8, 1797, the Second Massachusetts Turnpike was authorized from Charlemont to just east of North Adams on the western side of Hoosac Mountain. This route over Hoosac Mountain followed approximately the line of the old Indian trail. Three years later, the General Court of Massachusetts granted a charter to the proprietors of The Fifth Massachusetts Turnpike,

authorizing them to lay out a toll road from Greenfield and Northfield to Leominster. This road was the first road to open a direct line from east to west across Massachusetts. A few years later, in 1802, a group of men from Greenfield chartered The Fourteenth Massachusetts Turnpike, to complete the section of turnpikes from Boston to the Hudson River, essentially by connecting the Fifth Massachusetts Turnpike with the Second Massachusetts Turnpike. Eventually, the turnpike corporations dissolved, and the roads were turned over to the counties as free roads (Bennett 1990: 3).

With the advent of the automobile in the early 1900s, the inadequacies of the old wagon roads in western Massachusetts for motorized vehicles became evident, and the Massachusetts Highway Commission made plans to improve all the state's roads, including the section of highway from Greenfield to North Adams. Work was begun in September of 1912 and completed in November of 1914, at a cost of $350,000. At the opening ceremonies, October 24, 1914, the highway was officially dedicated as "The Mohawk Trail," after the Mohawk Indians of that region (Bennett 1990: 1).

In the early 1920s, the Massachusetts Department of Public Works began a project to relocate a particularly hazardous seven-mile stretch of the Mohawk Trail Highway between Erving and Greenfield. The old route had wound through the villages of Millers Falls and Turners Falls on a course marked by steep grades, sharp curves, and narrow bridges. The relocated Route ran north of both villages on an alignment whose principal challenge was the crossing of the precipitous Connecticut River gorge near the French King Rock (Bennett 1990: 11). After looking at several plans, the engineers decided to cross the Connecticut River with a bridge at the height of the hills on either side, about 135 feet above the water. When completed, the entire project would include the construction of about six miles of new state highway, a highway grade separation, a bridge over the Central Vermont Railroad, and the construction of a large high-level steel arch bridge over the Connecticut River (Bennett 1990: 5). During the summer of 1931, the contracts for the Erving-Greenfield cutoff were awarded to Kelleher Corporation of Montague, Massachusetts (for the western section, from Greenfield to the Connecticut River) and to Lawton Construction Company of Providence, Rhode Island (for the eastern section, from the Connecticut River to the road to Millers Falls, just east of the road to Northfield, now Highway 63). Work on these two contracts commenced immediately, and the highway was completed in July of 1932 (Bennett 1990: 5).

The challenge of driving over rather than riding through Hoosac Mountain drew families from throughout the Northeast. Recognized as a destination in its own right from the 1920s through the 1950s, this initial stretch of the Mohawk Trail sprouted tea shops and motor courts, trading posts and campgrounds, both private and state. In the 1960s vacation patterns including the new method of air travel and highway routes changed. The 1965 opening of the Massachusetts Turnpike (Route 90) provided a quicker route to cross the state resulted in the decline in the use of Route 2, and also the deterioration and demolition of the lookout towers, motor courts, tearooms, and trading posts (Tree and Davis: 2011).

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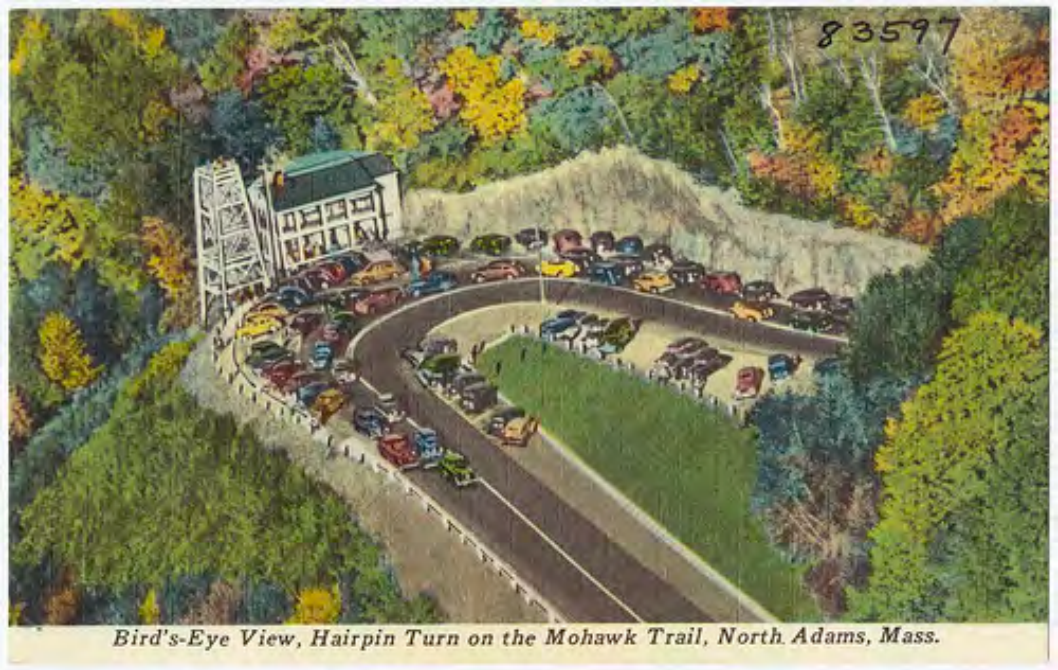

Ca. 1930-45 Historic Photograph of Hairpin Turn (Source: Boston Public Library)

Undated Historic Photograph of Mohawk Trail Near Charlemont (Source: www.epodunk.com)

French King Bridge along Mohawk Trail (Source: MassDOT)

2004 Image of Mohawk Trail with Todd Mountain in the Background (Source: Mohawk Trail Regional Guidebook)

National Register of Historic Places Criteria Statement Form

Check all that apply:

☐ Individually eligible ☐ Eligible **only** in a historic district

☐ Contributing to a potential historic district ☒ Potential historic district

Criteria: ☒ **A** ☐ **B** ☐ **C** ☐ **D**

Criteria Considerations: ☐ **A** ☐ **B** ☐ **C** ☐ **D** ☐ **E** ☐ **F** ☐ **G**

Statement of Significance by G. Henry/E.Rankin (TRC Environmental for FirstLight)
The criteria that are checked in the above sections must be justified here.

The Mohawk Trail is NRHP-eligible under Criterion A with a period of significance from ca. 1912 to 1960. The resource surveyed is the automobile Mohawk Trail route. The "Mohawk Trail" that is currently listed in the National Register (1973) is a segment of the ancient footpath that the Native Americans traveled between the Hudson River and Connecticut River. The NRHP-listed corridor follows the Cold River valley between Florida, MA and Charlemont, MA.

Criterion A:
This resource is NRHP-eligible under Criterion A. The Mohawk Trail is significant for its association with the transportation history of Massachusetts and the expanding movement for conservation, public outdoor recreation, and regional planning that gained momentum in the 1920s and became the hallmark of Federal policy in the 1930s. The trail demonstrated a new form of outdoor recreation based on recreational motoring. This road possesses statewide significance in New England as one of the best preserved scenic byways that continues to evoke a sense of time and place as an early twentieth-century automobile route. The original alignment of this road remains largely intact allowing the resource to retain integrity of location, design, and workmanship. The rural characteristics of the landscape and environs have been retained, contributing to the significance of the road and its integrity of setting, feeling, and association as an early twentieth-century roadway.

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Northfield		NFL.926

Photograph

Locus Map

MA GIS 2014

Town/City: Northfield

Place *(neighborhood or village):* West Northfield/East Northfield

Street/Route: Central Vermont Railroad (former)

Carried over: Connecticut River and Caldwell Road (W. Northfield)

(Railroad, river, brook, canal or road)

Historic/Common name: Central Vermont Railroad Bridge

Ownership: New England Central Railroad/Amtrak

(Name of state agency or municipality)

Mass. Highway bridge no.: N/A

Bridge type: (N to S): Deck Plate Girder, Pratt deck truss, Warren deck truss, deck plate girder

Bridge typology code 309 303

Date of Construction: 1904, 1936

Source: Plaques; written sources

Engineer/Designer: Unknown

Bridge company/Contractor: American Bridge Company

Material (s): Steel, Concrete, Stone

Alterations *(with dates):* Warren deck truss added after 1936 flood

Posted load limit *(if any):* Unknown

Condition: Good

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural

UTM Reference: 18 0708117E 4731307N

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* 04/2014

INVENTORY FORM F CONTINUATION SHEET

TOWN: NORTHFIELD
ADDRESS: RR over CT River and Caldwell Rd.

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): | Form No.: NFL.926

Superstructure:

Overall length: 800 ft. (approx.) Deck width: Single-track Skew: None

Main unit: No. of spans: 4 Span length: 165 ft. (approx.)

Approaches: No. of spans: 2 Span length: 90 ft. north, 50 ft. south (approx.)

Substructure *(structure below deck)*

Height above feature spanned: 300 ft. (approx.) Material of abutments or piers: Ashlar Cut Granite, concrete

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Central Vermont Railroad Bridge over the Connecticut River is an approximately 800-foot, six-span bridge. Originally constructed in 1904, the end spans are steel deck-plate girders and the main four spans were steel Pratt deck trusses. Only one of these is extant, that on the northern end. After the 1936 flood, the remaining three trusses were replaced with steel Warren deck trusses. As part of the reconstruction, the original stone piers were repurposed and were topped with concrete due to the new truss design. It is noted in the annual reports of the railroad that the 1904 bridge was constructed as part of a complete rebuilding of an 1840s two-tier wooden railroad/vehicular toll bridge, thus the stone piers and abutments may predate the 1904 bridge (Central Vermont Railway Company 1905: 11).

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Central Vermont Railroad connected Montreal, Quebec, with New London, Connecticut, using a route along the shores of Lake Champlain, through the Green Mountains and along the Connecticut River valley, as well as Montreal to Boston, Massachusetts, through a connection with the Boston & Maine Railroad at White River Junction, Vermont. Chartered in 1843, the railroad reached Northfield from the north on October 10, 1848. It has operated under several companies since the 1890s, including the Grand Trunk Railway, Canadian National, and New England Central Railroad. The route along the Connecticut River also handles the twice-daily Amtrak Vermonter.

Shortly after the Bennett's Meadow Bridge in Northfield was completed in 1899, the Massachusetts railroad commission condemned the 50-year-old, two-tier wooden railroad/vehicular toll bridge located just upstream on the Connecticut River. The Central Vermont Railway then petitioned the legislature for authority to build a new bridge in cooperation with the town of Northfield. At first, the town favored the construction of another joint railroad and highway bridge, and an agreement was reached by which the town was to pay $10,000 toward the cost of a steel bridge. Public sentiment shifted towards building a separate highway bridge, which would not only relieve them of paying rent for their portion of the railroad bridge, but would also do away with the nuisance of passing overhead trains (Bennett 1990: 6). At this time, it is presumed that the railroad began to erect the 4-span, Pratt-truss deck bridge with deck plate girder approach spans. As mentioned in the annual reports of the railroad, the existing stone piers and abutments may date to the two-tier wooden railroad/vehicular toll bridge (Central Vermont Railway Company 1905: 11). Severely damaged in the 1936 flood, the three southern spans were replaced with new spans of a Warren truss deck design. This new design called for taller piers in order to keep the original rail bed at grade and concrete was added to the top of the stone piers (Roper 1989). Due to these alterations, MHC has determined the bridge to be ineligible for listing in the NRHP.

BIBLIOGRAPHY and/or REFERENCES

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1990 *Schell Memorial Bridge Spanning the Connecticut River, Northfield, MA (HAER No. MA-111).* Massachusetts Historic Bridge Recording Project, HAER, Washington, DC.

Central Vermont Railroad
1905 *Sixth Annual Report of the Directors of the Central Vermont Railway Company.* June 30, 1905.

Roper, S.J.
1989 "Central Vermont Railroad Bridge," Massachusetts Historic Bridge Inventory. Massachusetts Historical Commission, Boston, MA.

ADDITIONAL PHOTOGRAPHS

July 6, 1915 Photo of Central Vermont Railroad Bridge, looking upstream (Source: First Light Photo Archives)

2014 View of Upstream Face (Warren Deck Truss: Left; Pratt Deck Truss: Right) (Source: TRC)

2014 View of Deck Girder over Caldwell Road (Source: TRC)

2008 Low-level oblique image of Vermont Central Bridge over Connecticut River (Left to Right: 1-span 1904 Deck Girder, 3-span 1936 Warren Deck Truss, 1-span 1904 Pratt Deck Truss, 1-span Deck Girder), (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
71-B7-1	Orange	NFL.I	NFL.178

Town/City: Northfield

Place: *(neighborhood or village)*:
Northfield Farms

Address: 153 Millers Falls Road (Route 63)

Historic Name: Frederick Morgan Sr. House.

Uses: Present: Residential, Agricultural

Original: Residential, Agricultural

Date of Construction: Sometime between 1802-1831

Source: Franklin Co. Registry of Deeds

Style/Form: Vernacular/Central-hall, double-pile

Architect/Builder: Reuben Morgan or Frederick Morgan Sr.

Exterior Material:
Foundation: Stone

Wall/Trim: Vinyl

Roof: Asphalt Shingles

Outbuildings/Secondary Structures:
Garage, Mixed-use barn, dairy barn, outbuildings

Major Alterations *(with dates):*
Windows, siding, and doors (post 1978); Addition on the rear (unknown)

Condition: Fair

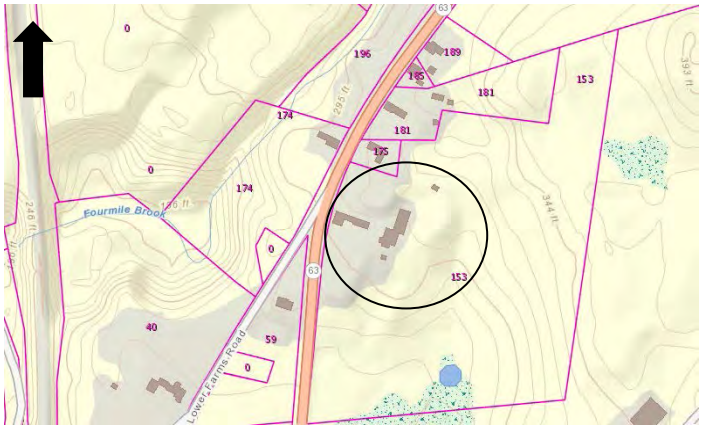
Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: 19 acres (approx.)

Setting: Rural area just north of entrance to Northfield Mountain facility and visitors center

Photograph

Locus Map



MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: April 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN: NORTHFIELD
ADDRESS 153 Route 63

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s): I
Form No.: NFL.178

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Set on a stone foundation, the 2-story, 5-bay dwelling is of wood-frame construction with a central-hall, double-pile plan. Originally surveyed in 1978, significant alterations have occurred to the dwelling since then, including replacing the clapboard with vinyl siding, the 2/2 sash windows with 1/1 vinyl sash, and recessing the single-leaf door with sidelights and replacing with modern replacements. The asphalt-shingled, side-gable roof has off-peak interior brick chimneys and cornice returns. A 1-story addition with standing-seam, gable roof is attached to the rear elevation. An open hyphen off the rear elevation connects the dwelling to a 3-bay garage. The western-bay of the garage sits on a fieldstone foundation and most likely the modern garage expanded upon an older building. The remainder of the garage has a concrete foundation, vinyl siding, and corrugated metal gable roof.

There are four agricultural buildings located east of the dwelling. A pasture and pond are located further east of these buildings. The largest of the agricultural buildings is a mixed-use barn. Set on a concrete foundation, the bank bark has a central aisle accessed by double-leaf sliding doors. The side-gable roof is corrugated metal and the walls are board-and-batten. The windows are 6-light hopper windows. One-story additions are located on the façade and side elevations. Concrete block in construction and clad with board-and-batten, weatherboard, and brick-tex siding, these additions provide access into the larger barn. A one-story addition on the banked (rear) elevation spans the full elevation and connects the mixed use barn to a 1-story dairy barn. The dairy barn is of concrete-block construction with weatherboard siding on the upper-half of the walls, a corrugated metal roof with vents, and evenly spaced 6-light hopper windows at the stalls. Two wood-frame outbuildings are located north and south of the connected barns.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

The 1740 Dwight survey added land to the south boundary of Northfield known as Northfield Farms. This area became important agriculturally and still has a number of large dairy farms plus some small agricultural enterprises. This homestead traces its land origins back to the original "Pembroke Grant" of 1736. Sold by the five grantees in 1802 to Noah and Reuben Morgan as part of a 500 acre tract of land, the parcel came to Frederick Morgan, Sr. in 1811 after the death of Reuben Morgan. There is no mention of the house until the 1831 deed when Frederick Morgan Sr. conveys to his sons Gerizim and Calvin "the home where he now lives." Although heavily altered, the house most likely dates from the Reuben Morgan era (1802-1811) or early in the ownership of Frederic Morgan Sr. beginning in 1811. Calvin relinquished his rights to the property in 1834 and the property was passed onto Nancy Morgan in the 1850 will of Gerizim Morgan when the property was divided into seven parcels. A Mrs. Morgan is noted as residing on the property on both the 1858 Franklin County Map and the 1871 F.W. Beers & Co. Franklin Co. Atlas. The Morgan family holdings in the Farms area of Northfield represented a significant element in the growth of the agricultural economy of the town, particularly to the Farms section.

In 1884 the property was sold to Edward Nash (1838-1902) who also bought three additional surrounding parcels. According to the 1900 U.S. Census, Edward and his son Ernest lived on the property operating a farm. According to the 1910 census Ernest, who was willed the property in 1902, lived on the property with his wife, Mary, and a 57-year-old Polish farmhand, Joe Smith and operated a dairy farm. By 1920 he was a widower, operating a general farm and his mother-in-law, Irene Osgood, resided on the property. The 1930 census shows the same information, although Irene Osgood is listed as a housekeeper. In 1940 the property was valued at $7000 and Ernest was the only resident. Ernest Nash sold the property to Frank Fuller in 1950. The property was

deeded by Frank and his wife Irene to the Western Massachusetts Electric Company on September 23, 1965 (Franklin County Deed Book 1187, Page 151). The property is currently owned by FirstLight Power Resources-GDF Suez Energy.

BIBLIOGRAPHY and/or REFERENCES

Arts Council of Franklin County
1978 "Frederick Morgan Sr." Massachusetts Historic Building Inventory. Massachusetts Historical Commission, Boston, MA.

Franklin County Registry of Deeds

United States Population Censuses
1830–1940 Franklin County (Northfield Farms). Electronic document, http://www.ancestry.com.

ADDITIONAL PHOTOGRAPHS

2014 View of Facade and South Gable End with Attached Garage (Source: TRC)

2014 View of Garage (Source: TRC)

2014 View of Mixed-Use Barn (Source: TRC)

2014 View of Dairy Barn (Source: TRC)

2014 View of Outbuilding North of Dairy Barn (Source: TRC)

2014 View of Outbuilding South of Mixed-Use Barn (Source: TRC)

2008 Low-level oblique image of Frederick Morgan House (Source: MASSDOT GIS)

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
101.0-0000-0119.0	Greenfield	GIL.D	GIL.907

Photograph

Locus Map

MA GIS 2014

UTM Reference: 18 0700837E 4720605N
Recorded by: G. Henry/E. Rankin
Organization: TRC Environmental for FirstLight
Date (*month / year):* March 2014

Town/City: Gill, Montague

Place *(neighborhood or village):* Riverside, Turners Falls

Street/Route: Riverside Drive

Carried over: Formerly carried over Connecticut River
(Railroad, river, brook, canal or road)
Historic/Common name: Red Suspension Bridge

Ownership: Unknown
(Name of state agency or municipality)
Mass. Highway bridge no.: N/A

Bridge type: Suspension Bridge

Bridge typology code 313

Date of Construction: 1878

Source: Drawings in the H. Hobart Holly Collection

Engineer/Designer: Design by John A. Roebling's Sons

Bridge company/Contractor: James W. Shipman

Material (s): Stone (Extant Abutments); Steel (Demolished)
Alterations *(with dates):* Demolished 1942 , leaving only the abutments

Posted load limit *(if any):* N/A

Condition: Demolished except for abutments

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Residential (Gill side), Park (Montague side)

Superstructure:

Overall length: 563 ft.	Deck width: 39.1 ft.	Skew:	
Main unit: No. of spans:	1	Span length:	550 ft.
Approaches: No. of spans:	0	Span length:	N/A

Substructure *(structure below deck)*

Height above feature spanned: 20 ft.

Material of abutments or piers: Stone

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The Red Suspension Bridge was built by James W. Shipman in 1878 at the site of a ferry landing that had run for almost a century. Built at a cost of $48,000, it was a 563-foot-long suspension bridge, designed with the Roebling system of inclined stays (Montague Bicentennial Committee 1954: 110). Although damaged by the 1936 Flood, it remained standing until 1942, when it was dismantled and sold for scrap metal during World War II. Today the only remnants of the bridge are the stone abutments in Gill and Montague. Copies of the original bridge specifications and contract survive in the H. Hobart Holly Collection, Boston Society of Civil Engineers Section, Boston, Massachusetts. The construction contract states:

> The parties of the first part [Hutchinson & Shipman] agree to furnish a certificate from John A. Roebling's Sons that the materials used in the cables and stays in the above bridge is of ample strength to sustain a rolling load of forty pounds per square foot in addition to its own weight with a factor of 4. Also that the elastic limit of each 2 1/4" steel wire rope is not less than 6-9 tons and the breaking strength is no less than 15-6 tons (Buonopane 2006: 13).

This statement implies that the Roebling Company is certifying the actual design of the bridge—the relationship between applied loads and strength of the bridge elements. Thus, the Red Bridge stands as evidence that the Roebling Company was closely involved with the structural design of bridges for which they supplied wire and cable. Although it was demolished in 1942, the bridge was designated a Massachusetts Historic Civil Engineering Landmark by the Boston Society of Civil Engineers in 1990.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The Upper Suspension Bridge, or "Red Suspension Bridge," connected Turners Falls with Riverside, located across the Connecticut River. The bridge was built in 1878 on the upstream edge of Turners Falls, at the site of a ferry landing that had run for almost a century, and was complemented by the Lower or "White" Suspension Bridge, constructed in 1872 on the downstream side of Turners Falls. Built at a cost of $48,000, the bridge was 563 feet long and stood 20 feet above the water level (Montague Bicentennial Committee 1954: 110). It survived the great flood of 1936, which wiped out many other bridges on the Connecticut River in Franklin County, but after the completion of the Turners Falls-Gill Bridge in 1938 it was closed to all but bicycle and foot traffic. As a part of the World War II salvage movement, the bridge was dismantled in September 1942.

The suspension bridge was designed with the Roebling system of inclined stays which was also used for the Lower Suspension Bridge. John A. Roebling was the preeminent suspension bridge designer in late-19th-century America, building suspension bridges for aqueducts, road, and rail use. Over the course of his career, John Roebling designed and constructed a series of

Continuation sheet 1

suspension bridges of increasing length and his final design for the Brooklyn Bridge (main span of 1595 ft.) was completed in 1883 under the direction of his son Washington A. Roebling. The stayed suspension bridge system developed by John A. Roebling and continued by Washington was highly successful and had a widespread influence on suspension bridge design in the late 19th century (Buonopane 2006: 12).

For construction of the 1868 Harrison Bridge over the Whitewater River between Ohio and Indiana, the county commissioners hired John A. Roebling & Sons to write the specifications for a 425-ft.-span suspension bridge. Washington Roebling actually submitted a bid in partnership with a local engineer, but the contract was awarded to James W. Shipman & Co. of Cincinnati. By 1877, Shipman was practicing under the name of the New York Bridge Co. and the Roebling-style suspension bridge figured prominently in their advertising and letterhead (Buonopane 2006: 13). In 1878, Shipman's New York Bridge Co. (also known as Hutchinson & Shipman) won the contract for a suspension bridge of 563 ft. over the Connecticut River at Turners Falls in Massachusetts, later to become known as the "Red Bridge."

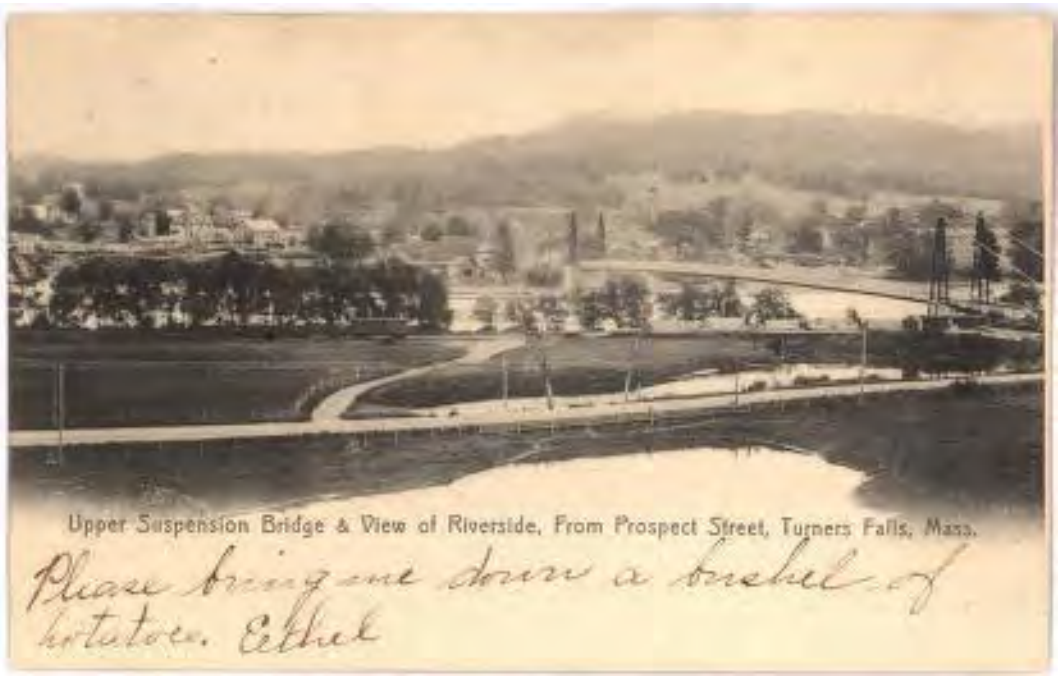
BIBLIOGRAPHY and/or REFERENCES

Buonopane, Stephen
2006 *The Roeblings and the Stayed Suspension Bridge: Its Development and Propagation in 19th Century United States.* Cambridge, MA.

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

Scott, Kyle J.
2005 *Montague: Labor and Leisure.* Arcadia Publishing, SC.

ADDITIONAL PHOTOGRAPHS



Undated View of Red Suspension Bridge from Turners Falls (Source: www.cardcow.com)

1906 View of Red Suspension Bridge from Turners Falls (Source: www.cardcow.com)


1906 View of Red Suspension Bridge Approach from Turners Falls (Source: Montague: Labor and Leisure: 31)

2014 View of Extant Abutment in Gill (Source: TRC).

2014 View of Former Location from Riverside towards Turners Falls (Source: TRC).

2008 Low-level oblique image of Red Suspension Bridge Abutment (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-018	Greenfield		TRC-7

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: End of Rod and Gun Club Road

Historic Name: Turners Falls Rod & Gun Club

Uses: Present: Sporting Club House

Original: Residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Board-and-batten

Roof: Standing seam metal

Outbuildings/Secondary Structures:
Non-historic shed and comfort station.

Major Alterations *(with dates):*
Siding; windows and doors; side ell

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural, water frontage on Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
END OF ROD AND GUN CLUB ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.
TRC-7

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1½-story, 3-bay frame building on a concrete block foundation has a side-gable roof and a 4-bay shed-roofed front dormer. The wrap-around porch is enclosed. Formerly a residence, the building was converted to a clubhouse at an unknown date and a large addition for meeting space was added to the west elevation. The west entrance is original; the north porch entrance with wooden hood is later. The board-and-batten siding, windows, doors and rear hip-roofed ell and the large side-gable-roofed ell are not original. The interior features knotty pine paneling and an original stone fireplace and hearth.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of East and Rear Elevations (Source: TRC)

2014 View of Façade and West Elevation with Addition (Source: TRC)

2014 View of Interior of Enclosed Porch (Source: TRC)

2014 View of Interior with Stone Fireplace (Source: TRC)

2008 Low-level oblique image of Turners Falls Rod and Gun Club (Camp 1E) (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-018	Greenfield		TRC-8

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: Off Industrial Boulevard

Historic Name: Camp 2-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1950

Source: Historic Maps

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Asphalt shingle

Roof: Asphalt shingle

Outbuildings/Secondary Structures: None.

Major Alterations *(with dates):*
Siding; windows and doors; porch enclosed; deck.

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
OFF INDUSTRIAL BOULEVARD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-8

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 2-story, 3-bay frame house on concrete-block piers has a side-gable roof with exposed rafter ends, wood corner boards, and brick-tex siding. The central entrance with double-leaf door on the north is flanked by 6/6 windows with wood frames. There are paired 6-pane wood pivot windows in the attic story. On the south is a 2-story, 2-bay shed-roofed wing with a glassed-in porch on the second story. A modern wood deck is on the south.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

1947 USGS Map of Greenfield

1954 USGS Map of Greenfield

ADDITIONAL PHOTOGRAPHS

2014 View of Facade and Wing (Source: TRC)

2014 View of Façade and South Elevation (Source: TRC)

2008 Low-level oblique image of Camp 2E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-017	Greenfield		TRC-9

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: Off Industrial Boulevard

Historic Name: Camp 3-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Asphalt shingle

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Wood shed and Storage Shed.

Major Alterations *(with dates):*
Siding; windows and doors; porch enclosed; side ell

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
OFF INDUSTRIAL BOULEVARD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-9

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame building on a concrete-block foundation has a front-gable roof with exposed rafter ends, wood corner boards, and a partially enclosed porch with plain posts. Most of the metal and vinyl sliding windows and sash windows are not original; the 3-part attic windows appear original. The house has asphalt shingle siding. There is a below-grade entrance on the north below the enclosed porch in the concrete block foundation possibly for storage.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of West Elevation (Source: TRC)

2014 View of Storage Shed (Source: TRC)

2014 View of Wood Shed (Source: TRC)

2008 Low-level oblique image of Camp 3E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-012	Greenfield		TRC-10

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: West Camp Road

Historic Name: Camp 11-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Wood shed.

Major Alterations *(with dates):*
Rear addition; windows and doors; porch enclosed.

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
WEST CAMP ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-10

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house on concrete-block foundation has a side-gable roof with exposed rafter ends, wood corner boards, and German siding. Entrances are on the south, west and east. The west entrance appears original and has a door with four panels and 3-pane light above. On the east is an exterior-end shouldered brick chimney. There is a shed-roofed porch, presently screened, on the north. The shed-roofed addition on the south is not original and has a deck. The house has 1/1 windows with wood frames.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of West and South Elevations (Source: TRC)

2014 View of East Elevation and Addition on South Elevation (Source: TRC)

2008 Low-level oblique image of Camp 11E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-012	Greenfield		TRC-11

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: West Camp Road

Historic Name: Camp 10-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: 1942

Source: Current Owner (Mitch Citchy)

Style/Form: Vernacular

Architect/Builder: Mr. Stone of Gill

Exterior Material:

Foundation: Concrete block

Wall/Trim: Vinyl siding

Roof: Standing seam metal

Outbuildings/Secondary Structures:
Two shed with sliding doors and wood siding are located north and southeast of the house.

Major Alterations *(with dates):*
Side addition; siding; windows and doors; porch enclosed, deck.

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This building was constructed by a Mr. Stone in 1942 who resided here throughout the year (Interview with Leena Newcomb). This 2-story, 1-bay frame house on concrete-block foundation has a front-gable roof with exposed rafter ends and vinyl siding. The house has been greatly enlarged on the east and west with shed-roofed and gable roofed-additions. Windows and doors are not original. The wrap-around porch is enclosed and is further extended by a deck.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of North Elevation (Source: TRC)

2014 View of Added In-Law Suite and Shed (Source: TRC)

2008 Low-level oblique image of Camp 10E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-012	Greenfield		TRC-12

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: West Camp Road

Historic Name: Camp 9-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Rubble stone

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Shed

Major Alterations *(with dates):*
Rear addition; siding; some windows; porch enclosed.

Condition: Good

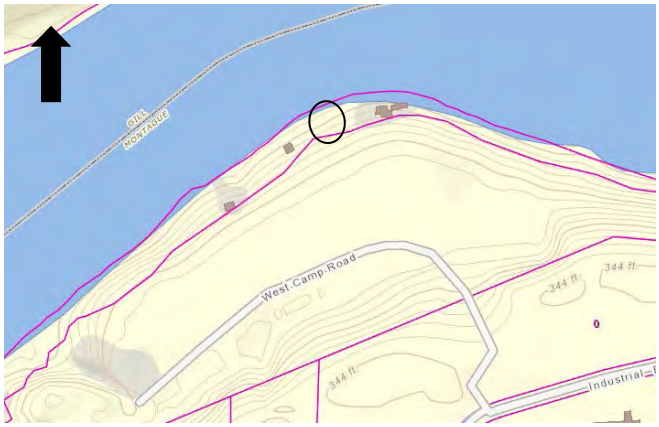
Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map



MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
WEST CAMP ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-12

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house on a rubble-stone foundation has a side-gable roof with exposed rafter ends, German siding, and wood corner boards. There is an exterior-end brick chimney on the east gable end. The door on the north is flanked by 15-pane casement windows. Additionally, there are paired 1/1 sash windows. The north porch has been enlarged and now wraps around the west gable end where it is enclosed. The porch vertical-board siding is not original. The house was added on to on the south with a shed-roofed ell.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of North and West Elevations (Source: TRC)

2014 View of West and South Elevations (Source: TRC)

2008 Low-level oblique image of Camp 9E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-012	Greenfield		TRC-13

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: West Camp Road

Historic Name: Camp 8-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1942

Source: Current Owner (Walter Patton)

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Some windows replaced; porch enclosed.

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
WEST CAMP ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-13

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house on a concrete-block foundation has a side-gable roof, German siding, and wood corner boards. There is an exterior-end brick chimney on the west gable end. The west door has four panels and a 2-pane window above the panels. There are original 2/2 sash windows with wood frames on the west and east. Most of the other windows are modern replacements. The shed-roofed porch on the north is enclosed and there is a modern deck on the west.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

Patton, Walter
2014 Personal Communication. May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of East and North Elevations (Source: TRC)

2008 Low-level oblique image of Camp 8E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-012	Greenfield		TRC-14

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: West Camp Road

Historic Name: Camp 7-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1950

Source: Historic USGS Maps

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Some windows replaced; porch enclosed.

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 2-story, 3-bay frame house on a concrete-block foundation has a front-gable roof, German siding, and wood corner boards. There is an interior brick chimney. There are original 2/2 sash windows with wood frames. The 2-story, shed-roofed porch on the north is enclosed. Due to the slope of the land, there is a full-basement level with porch and 3-light windows.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

1947 USGS Map of Greenfield

1954 USGS Map of Greenfield

ADDITIONAL PHOTOGRAPHS

2014 View of Enclosed Porch on the North Elevation (Source: TRC)

2014: View of East Elevation (Source: TRC)

2008 Low-level oblique image of Camp 7E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-034	Greenfield		TRC-15

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: End of West Mineral Road

Historic Name: Camp 16-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block piers

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Shed

Major Alterations *(with dates):*
None observed.

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
END OF WEST MINERAL ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-15

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house has concrete-block piers, a side-gable roof, German siding, and wood corner boards. The windows have wood frames and wood shutters which were closed, obscuring the window sash. A single 4-light window is on the attic level of each gable end. The central entrance on the west is set within a 3-bay, shed-roofed porch with brick piers, plain posts and balustrade. There is a secondary entrance on the east with a small shed-roofed ell.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of West and Rear Elevation (Source: TRC)

2014 View of Shed (Source: TRC)

2008 Low-level oblique image of Camp 16E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-034	Greenfield		TRC-16

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: End of West Mineral Road

Historic Name: Camp 15-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Clapboard siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None.

Major Alterations *(with dates):*
Chimney, rear ell altered.

Condition: Poor

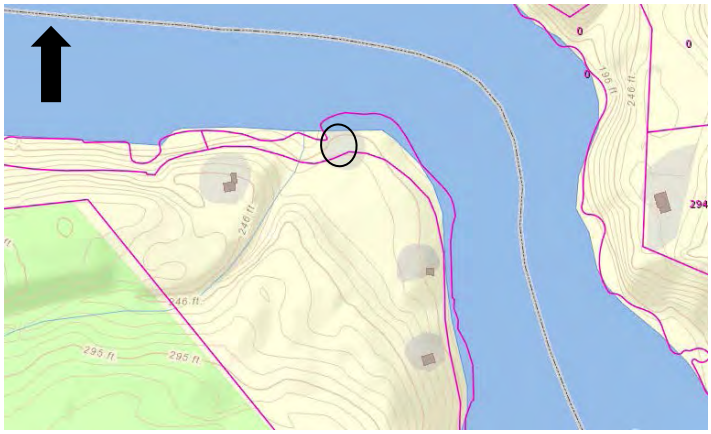
Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map



MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
END OF WEST MINERAL ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-16

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 2-story, 3-bay frame house has a concrete-block foundation, a side-gable roof, clapboard siding, and wood corner boards. The 12/2 windows have wood frames and some have wood shutters. There are louvered attic ventilators in the gable ends. The 2-story front porch is supported on unfinished cedar posts and is screened on the second story, with a wood-shingled kneewall. The 1-story, 2-bay gable-roofed rear ell has 2-pane pivot windows with wood shutters. The exterior brick chimney has a replaced metal flue. The house is in generally unaltered but deteriorated condition.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of East Elevation and Rear Ell (Source: TRC)

2014 View of West and Rear Elevations (Source: TRC)

2008 Low-level oblique image of Camp 15E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
17-0-034	Greenfield		TRC-17

Town/City: Montague

Place: *(neighborhood or village)*: Turners Falls

Address: End of West Mineral Road

Historic Name: Camp 17-E

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1910

Source: Owner (Thomas Bertrang)

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block piers

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Shed

Major Alterations *(with dates):*
None observed.

Condition: Good

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
END OF WEST MINERAL ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-17

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

According to the current owner, his great uncle, Frank Bertrang purchased the camp in 1916. The building was reportedly built by a group of wealthy men from Turners Falls around 1910. This 1-story, 3-bay frame house has concrete-block piers, a side-gable roof, German siding, and wood corner boards. The windows have wood frames and wood shutters which were closed, obscuring the window sash. A single 2-light window is on the attic level of each gable end. There is a concrete exterior-end chimney on the south elevation. A 1-story porch with shed roof is on the east elevation. It has been screened in and has a wood-shingled kneewall. A shed roofed addition is on the west elevation and is partially open.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

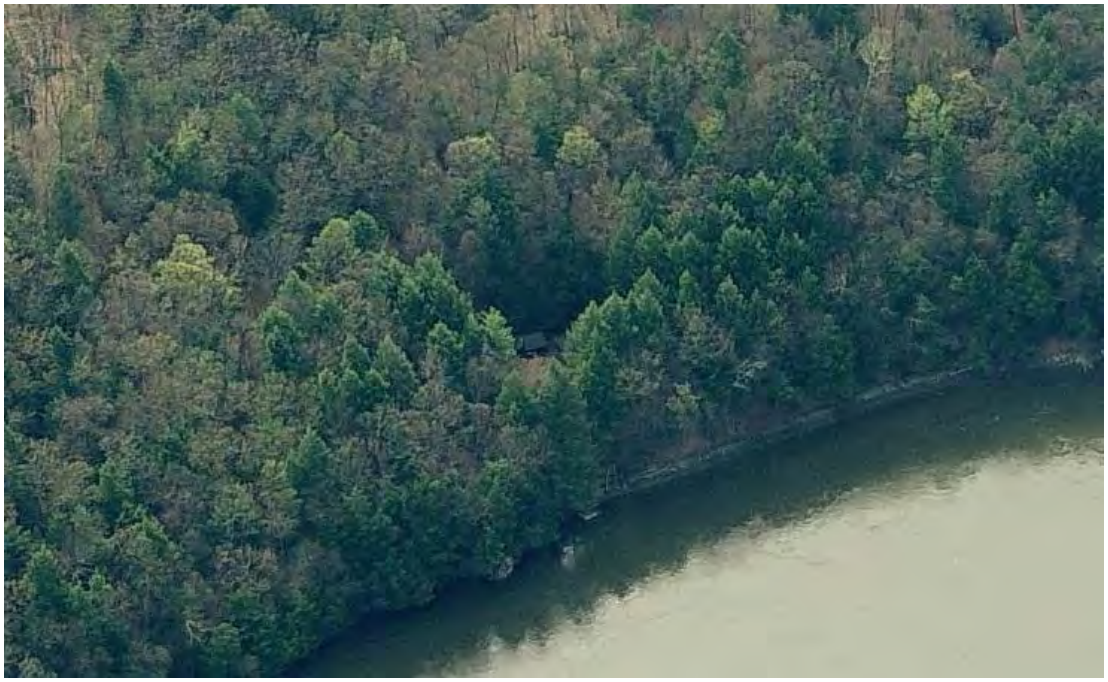
BIBLIOGRAPHY and/or REFERENCES

Bertrang, Thomas
2014 Personal Communication. May 2014.

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of South and Rear Elevations (Source: TRC)



2008 Low-level oblique image of Camp 17E (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
229.0-0000-0005.0	Greenfield		TRC-18

Town/City: Gill

Place: *(neighborhood or village)*: Riverside

Address: End of Trenholm Way

Historic Name: Camp 7-W

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1946

Source: Owner (Natalie Hunter)

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
One-bay, gable-roofed frame garage with flush-board siding is located to the rear of the house.

Major Alterations *(with dates):*
Some windows and a door altered.

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
END OF TRENHOLM WAY

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-18

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house has a concrete-block foundation, a front-gable roof with exposed rafter tails, German siding, and wood corner boards. The 1/1 sash windows have wood frames and some are paired. A 1-story, 2-bay rear section has a full-width side-gable roof and a shed-roofed section with separate entrance and both sash and casement windows is to its rear. There is a modern deck on the east. Interior brick chimneys are on the north and south.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

Hunter, Natalie
2014 Personal Communication. May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of Façade and Side Addition (Source: TRC)

2014 View of Rear Elevation (Source: TRC)

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
END OF TRENHOLM WAY

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-18

2008 Low-level oblique image of Camp 7W (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
229.0-0000-0005.0	Greenfield		TRC-19

Town/City: Gill

Place: *(neighborhood or village)*: Riverside

Address: Off Peterson Way

Historic Name: Camp 7-W

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Shed

Major Alterations *(with dates):*
Chimney, porch enclosed.

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
OFF PETERSON WAY

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-19

☐ Recommended for listing in the National Register of Historic Places.
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ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house has a concrete-block foundation, a front-gable roof with exposed rafter tails, German siding, and wood cornerboards. The 1/1 sash windows have wood frames and some are paired. A 1-story, 2-bay rear section has a full-width side-gable roof and a shed-roofed section with separate entrance and both sash and casement windows is to its rear. There is a modern deck on the east. Interior brick chimneys are on the north and south.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of Façade (Source: TRC)

2014 View of Side Elevation (Source: TRC)

2008 Low-level oblique image of Camp 2W (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
219.0-0000-0006.0	Bernardston		TRC-20

Town/City: Gill

Place: *(neighborhood or village)*: Gill Center

Address: End of Grist Mill Road

Historic Name: Camp 16W

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Clapboard siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Shed

Major Alterations *(with dates):*
Porch enclosed, windows and doors altered, chimney stack altered.

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

☐ Recommended for listing in the National Register of Historic Places.
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ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

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This 2-story-with basement, 3-bay frame house has a concrete-block foundation, a side-gable roof, clapboard siding, and wood corner boards. The 6-pane pivot windows have wood frames. Built on a steep slope, the house has a basement entrance on the west. A full-width shed-roofed porch is cantilevered over the basement on the east. An entrance on the north end of the porch serves as the principal entrance to the house. The porch wraps around on the south and has been enclosed. An exterior-end brick chimney has had its upper portion removed.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS


2014 View of North Elevation (Source: TRC)


2014 View of South Elevation (Source: TRC)

2008 Low-level oblique image of Camp at the End of Grist Mill Road (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
219.0-0000-0003.0	Bernardston		TRC-21

Town/City: Gill

Place: *(neighborhood or village)*: Gill Center

Address: 40 Grist Mill Road

Historic Name:

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1934

Source: Franklin County Property Records

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block; wood posts w/ lattice infill

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
None observed

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
40 GRIST MILL ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.
TRC-21

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ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This 1-story, 3-bay frame house has a partial concrete-block foundation, a front-gable roof, German siding, and wood corner boards. Built on a steep slope, the house has a shed-roofed rear section on wood posts with lattice infill. A shed-roofed porch, partially screened, is on the east and has an entrance on the north. The windows have wood shutters which were closed at time of survey, so window panes were not visible.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

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BIBLIOGRAPHY and/or REFERENCES

Franklin County Property Records

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of North Elevation (Source: TRC)

2008 Low-level oblique image of Camp at 40 Grist Mill Road (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
212.0-0000-0013.0	Bernardston		TRC-22

Town/City: Gill

Place: *(neighborhood or village)*: Gill Center

Address: 37 Vassar Way

Historic Name:

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: 1958

Source: Franklin County Property Records

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Vinyl siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Vinyl siding

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

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This 1-story, 3-bay frame house has a concrete-block foundation, a side-gable roof with exposed rafter tails, and vinyl siding. Built on a steep slope, the house has a full basement on the rear. There are a variety of sash, sliding, fixed, and picture windows, most with vinyl-coated frames.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Franklin County Property Records

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2008 Low-level oblique image of Camp at 37 Vassar Way (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
229.0-0000-0005.0	Greenfield		TRC-23

Town/City: Gill

Place: *(neighborhood or village)*: Riverside

Address: End of Taylor Place

Historic Name: Camp 11-W

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1930

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: German siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
None

Major Alterations *(with dates):*
Windows; chimneys replaced. Porch not original

Condition: Fair

Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map

MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
END OF TAYLOR PLACE

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.
TRC-23

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ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This house consists of two sections: a 1-story, 3-bay frame section with a concrete-block foundation, a side-gable roof with exposed rafter tails, replaced sash windows, and German siding. Two cinder-block chimneys are at either gable end. Built on a steep slope, the house has another 2-story-with-basement section on the south with a shed roof and porch on the second story. An entrance is on the west.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS

2014 View of South and East Elevations (Source: TRC)

2008 Low-level oblique image of Camp 11W (Source: MASSDOT GIS)

FORM B – BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
229.0-0000-0005.0	Greenfield		TRC-24

Town/City: Gill

Place: *(neighborhood or village)*: Riverside

Address: Off of an unnamed road, south of Route 2

Historic Name: Camp 15-W

Uses: Present: Summer residence

Original: Summer residence

Date of Construction: ca. 1920

Source: Field observation

Style/Form: Vernacular

Architect/Builder: Unknown

Exterior Material:

Foundation: Concrete block

Wall/Trim: Wood shingle siding

Roof: Asphalt shingle

Outbuildings/Secondary Structures:
Two sheds

Major Alterations *(with dates):*
None observed

Condition: Fair

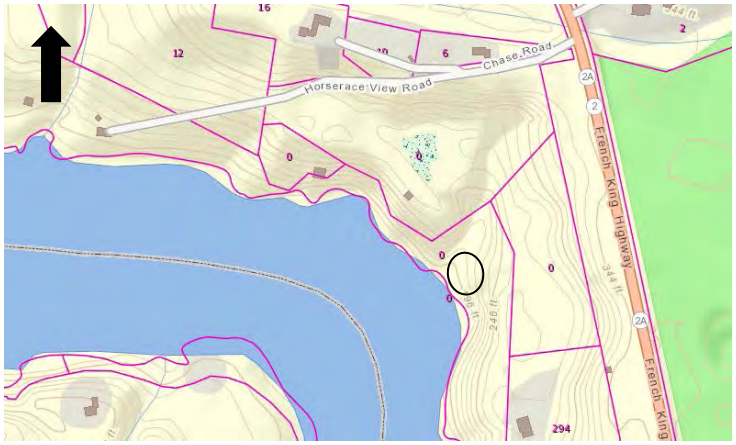
Moved: **no** ☒ **yes** ☐ **Date:**

Acreage: < 1 acre

Setting: Rural fronting the Connecticut River

Photograph

Locus Map



MA GIS 2014

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year)*: March 2014

INVENTORY FORM B CONTINUATION SHEET

TOWN
GILL

ADDRESS
OFF OF CHASE ROAD

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

TRC-24

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

Through much of the 20th century, the shoreline along the Connecticut River contained over 150 summer cottages. Most were constructed by individual families during the 1930s and into the 1950s without formal plans and do not adhere to any architectural style. They are most typically located on the shorefront, but sometimes are set within the woods or on a hillside, although all face toward the water. The road approach often brings one past outbuildings to a back entrance. Driveways are seldom paved and are often winding, contouring to the topography. It is not uncommon for the driveway to stop far short of the camp; owners carried luggage, groceries and even people by wheelbarrow or other means. Lots on which camps were located lack formal landscaping; instead, natural vegetation, ledge, boulders, railings of saplings, footpaths and boardwalks characterize the land. Buildings are sited to harmonize with and cause minimal disturbance of the landscape, and land under them is seldom graded. While a small clearing is usually found around the camp, a few trees are left close by the building. Even when camps are sited close together, the natural vegetation provides well-screened visual buffers for a sense of privacy and isolation. Over time, many of these cottages were demolished and only 18 remain relatively unaltered.

This house is built on an L plan, with the main section being a tall 1-story, 3-bay frame section with a concrete-block foundation, a side-gable roof with exposed rafter tails, steeply pitched roof, and wood shingle siding. Set at right angles is a shorter, 2-bay gable-roofed frame section with shingle siding. The entrance is set within the intersection of the two, in its own canted bay, and beneath the incised porch. The house has both 2-pane and single-pane windows, most of which appear to be modern replacements.

HISTORICAL NARRATIVE

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

Several early- to mid-20th-century summer camp dwellings are located along the Connecticut River on land acquired by the Turners Falls Power & Electric Company and/or its successor companies (Western Massachusetts Electric Co. and Northeast Utilities). FirstLight currently leases the land although individuals, several of whom are descendants of the original owners, own the buildings. The camps along the Connecticut River represent the area's summer residents in the early 20th century and are among the first summer dwellings in the area. Throughout the years, these camps became a common domestic building type. They are the epitome of rusticity, reflecting the emphasis on low-impact construction so as not to destroy the area's natural surroundings. The camps also reflect settlement patterns. Farmers often sold their shorefront land to summer people to build camps on. In other instances, summer residents acquired the entire farm and added a camp close to the water to be used by the family, guests, or both. During the season, these properties were also used by those conducting the log drives (Interview with Leena Newcomb).

BIBLIOGRAPHY and/or REFERENCES

Newcomb, Leena
2014 Personal Communication. April and May 2014.

ADDITIONAL PHOTOGRAPHS


2014 View of South Elevation (Source: TRC)


2014 View of Rear Elevation (Source: TRC)

2014 View of Large Shed (Source: TRC)

2014 View of Small Shed (Source: TRC)

2008 Low-level oblique image of Camp 15W (Source: MASSDOT GIS)

FORM F – STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
5 C4 1	Orange	NFL.D	TRC-25

Photograph

Locus Map

MA GIS 2014

Town/City: Northfield

Place *(neighborhood or village):* Northfield-Mt. Hermon School campus vicinity, East Northfield, Northfield

Address or Location: Intersection of Routes 63 and 10

Name: Dam, Lake Wanamaker

Ownership: ☐ *Public* ☒ *Private*

Type of Structure *(check one):*

___ boat or ship
___ canal
___ carousel
_X_ dam
___ fort
___ gate
___ kiln
___ lighthouse
___ other *(specify)*
___ pound
___ powderhouse
___ street
___ tower
___ tunnel
___ wall
___ windmill

Date of Construction: ca.1880-1890

Source: Published sources

Architect, Engineer or Designer: Charles Lowrie and Hugh Findlay designers of Northfield Seminary campus landscape, although not known if they designed this lake.

Materials: Stone

Alterations *(with dates)*: Lake Wanamaker no longer exists and dam is in partial ruins.

Condition: Ruin

Moved: ☒ **no** ☐ **yes** **Date**:

Acreage: <1 acre

Setting: Rural area adjacent to Northfield-Mount Hermon School campus

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* March 2014

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other structures within the community.

This dam is located on a parcel at the northwest corner of the intersection of Route 63 (Northfield-Hinsdale Road) and Route 10 (Wanamaker Road) in East Northfield. The dam spans Pauchaug Brook, a tributary of the Connecticut River which is located a short distance to the west. The structure formerly functioned as the dam for the man-made Lake Wanamaker, part of the designed landscape of the late-nineteenth-century Northfield Seminary for Girls located on the east side of Wanamaker Road. In its present condition, the dam consists of a bottom layer of rough fieldstone capped by a top row of squared granite. Lake Wanamaker was drained at some unknown date and the dam is presently in ruins.

HISTORICAL NARRATIVE

Explain the history of the structure and how it relates to the development of the community.

In 1879, the evangelist Dwight Moody established a school at Northfield Village for “girls of limited means” known as the Northfield Seminary for Young Ladies. Three years later, Moody established a similar school for boys, the Mount Hermon School, just across the Connecticut River, in the neighboring town of Gill. Beginning in the summer of 1880, Moody held a national conference of Christian workers at the Northfield Seminary. “These summer conferences eventually brought world-wide reknown to the otherwise peaceful and unassuming village of Northfield” (Parson et al 2010: 14).

Drawing on his many patrons and admirers in the upper reaches of Boston, New York, and Philadelphia society, Moody was able to engage the services of several prominent architects and landscape architects of the day, including Peabody & Stearns, Delano & Aldrich, Charles Nassau Lowrie (one of the 11 founding members of the American Society of Landscape Architects), and Hugh Findlay, Professor of Landscape Architecture at Cornell University.

According to the MHC area form for Northfield Seminary written in 2006: “The designed (Northfield Seminary) campus landscape is significant as the embodiment of the vision of Dwight Moody and the founder of Wellesley College, Henry Durant, who applied the romantic landscape aesthetic to the campus as a means of creating a successful educational environment-both academic and religious. The layout created distant viewsheds of the Connecticut River, of the hills of New Hampshire and Vermont. It created in the middle ground views of undulating lawns, meadows, and, as it grew, views of trees, and shrubbery, which defined walks, shaded buildings, and provided color and texture in all seasons. It is significant for the work of landscape designers Charles Lowrie and Hugh Findlay” (Parson 2006).

Lake Wanamaker was conceived as a part of the overall landscape plan, although it is not known whether the two landscape architects Lowrie and Findlay had any direct hand in its design. An 1892 description of the school campus stated: “A very pretty little lake, called Wanamaker is included in the 'Seminary grounds and is much used for boating and skating. Many of the girls play tennis and various courts adorn the grounds.”

According to Peter Weir, Northfield school archivist: “Our information on the dam and associated lake is limited. The June 9, 1888 issue of "The Hermonite," the newspaper which served both schools in the 19th and early 20th centuries, notes the existence of the lake, the gift of John Wanamaker, the Philadelphia department store magnate. It was a swimming destination for many years, and until the advent of gas refrigeration, was a source of ice. It was abandoned in the late 1960s or perhaps early 1970s. We have many photographic images, but very little printed material gathered on the subject.” (Personal communication via e-mail May 20, 2014)

BIBLIOGRAPHY and/or REFERENCES

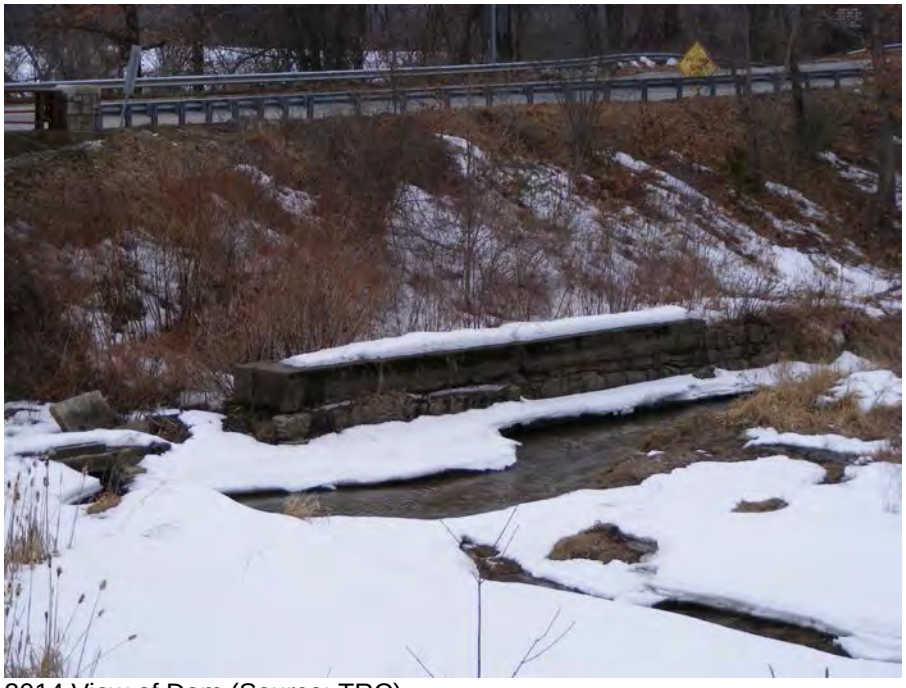
n.a.
1892 "Northfield Seminary." *The Normal Offering*, Vol. 11, No. 4, May 1892

Parsons, Bonnie; W.S. Saunders, C. Doty, and P. Weis
2010 *Lift Thine Eyes: The Landscape, the Buildings, the Heritage Of Northfield Mount Hermon School*

Parson, Bonnie
2006 "Northfield-Mt. Hermon School." MHC Form B, NFL-967

Personal communication with Peter Weir, Northfield School archivist via email May 20, 2014

ADDITIONAL PHOTOGRAPHS



2014 View of Dam (Source: TRC)

2008 Low-level oblique image of Former Wannamaker Lake and Dam (Source: MASSDOT GIS)

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Northfield		TRC-26

Photograph

Locus Map

MA GIS 2014

Town/City: Northfield

Place *(neighborhood or village):* East Northfield

Street/Route: Route 63 (Northfield-Hinsdale Road)

Carried over: Pauchaug Brook
(Railroad, river, brook, canal or road)

Historic/Common name: Route 63 Bridge over Pauchaug Brook

Ownership: MassDOT
(Name of state agency or municipality)

Mass. Highway bridge no.: N-22-005

Bridge type: Concrete T beam

Bridge typology code 302

Date of Construction: 1938; 1954

Source: Engineering records; Date stone

Engineer/Designer: Department of Public Works

Bridge company/Contractor: Unknown

Material (s): Metal; concrete

Alterations *(with dates):* Deck widened in 1954

Posted load limit *(if any):* Unknown

Condition: Fair

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Rural

UTM Reference: 18 0709080E 4732775N

Recorded by: G. Henry/E. Rankin

Organization: TRC Environmental for FirstLight

Date (*month / year):* March/2014

INVENTORY FORM F CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

TOWN: NORTHFIELD
ADDRESS: RT 63 OVER PAUCHAUG BROOK
Area(s): | Form No.: TRC-26

Superstructure:

Overall length: 49'-3" Deck width: 44' Skew: None
Main unit: No. of spans: 1 Span length: 18
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: 25 ft. (approx.). Material of abutments or piers: Concrete

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This single-span reinforced-concrete T-beam bridge with metal railings and concrete abutments with wing-walls is located near the intersection of Route 63 (Northfield-Hinsdale Road) and Route 10 (Wanamaker Road) in East Northfield. The two-lane bridge spans Pauchaug Brook, a tributary of the Connecticut River which is located a short distance to the west. The approaches have metal W-railings terminating in square blocks with formstone veneer and a date plaque inscribed with the 1954 date and Massachusetts state seal. The metal bridge railings have some decorative scrollwork but are in rusted and deteriorated condition.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

The bridge was designed by Mass DPW and constructed in 1938. The bridge originally carried a 30' roadway, which was widened to 44' in 1954. This extension was also designed by Mass DPW. The original open concrete parapets were removed and replaced with the existing steel "Type B" railings with stone-faced concrete endposts. It adjoins the dam of Lake Wanamaker, a man-made lake created as part of the Northfield Seminary landscape plan but drained at an unknown date. The bridge is an undistinguished example of this common bridge type from the mid-20th century.

BIBLIOGRAPHY and/or REFERENCES

Jergensen, Kurt
2014 Personal communication with Mass DOT Architectural Historian via email May 2014

Parsons, Bonnie
2006 "Northfield-Mt. Hermon School." MHC Form B, NFL-967

Parsons, Bonnie; W.S. Saunders, C. Doty, and P. Weis
2010 *Lift Thine Eyes: The Landscape, the Buildings, the Heritage Of Northfield Mount Hermon School*

ADDITIONAL PHOTOGRAPHS

2014 View of Date Plaque (Source: TRC)

2014 View of Railing Detail (Source: TRC)

2014 View of Bridge (Source: TRC)

2008 Low-level oblique image of Route 63 Bridge (Source: MASSDOT GIS)

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION
MASSACHUSETTS ARCHIVES BUILDING
220 MORRISSEY BOULEVARD
BOSTON, MASSACHUSETTS 02125

Assessor's Number	USGS Quad	Area(s)	Form Number
N/A	Greenfield		TRC-38

Photograph

Locus Map

MA GIS 2014

Town/City: Montague-Greenfield

Place *(neighborhood or village):* Turners Falls

Street/Route: Turners Falls Road (Old Route 2A)

Carried over: Connecticut River
(Railroad, river, brook, canal or road)

Historic/Common name: White Bridge/Greenfield-Montague Bridge

Ownership: Mass DOT
(Name of state agency or municipality)

Mass. Highway bridge no.: G-12-002/M-28-002

Bridge type: Metal stringer, multi-beam girder

Bridge typology code 302

Date of Construction: 1936

Source: Published sources; MassDOT

Engineer/Designer: Unknown

Bridge company/Contractor: T. Stuart & Son, Boston

Material (s): Metal, with reinforced concrete piers

Alterations *(with dates):* Built as a temporary bridge in 1936; deck replaced in 1946. Railings replaced unknown date.

Posted load limit *(if any):* 51.5 tons

Condition: Good

Moved ☒ **no** ☐ **yes** **Date:**

Acreage: < 1 acre

Setting: Urban/industrial

UTM Reference: 18 0700033E 4720298N

Recorded by: Geoffrey Henry/Ellen Rankin

Organization: TRC Environmental Corp. for FirstLight

Date (*month / year):* March 2014

INVENTORY FORM F CONTINUATION SHEET

TOWN
MONTAGUE

ADDRESS
TURNERS FALLS ROAD OVER CT RIVER

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.
TRC-38

Superstructure:

Overall length: 445 ft. Deck width: 27 ft. Skew: None
Main unit: No. of spans: 6 Span length: 75 ft.
Approaches: No. of spans: 0 Span length: N/A

Substructure *(structure below deck)*

Height above feature spanned: Approx. 50 feet Material of abutments or piers: Reinforced Concrete

☐ Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

This six-span, metal stringer, multi-beam highway bridge carries two-lane Turners Falls Road (formerly Route 2A) over the Connecticut River between Greenfield and the village of Turners Falls in Montague. At its eastern end, the road continues over the Turners Falls Power Canal via the Warren thru-truss Fifth Street Bridge. The bridge has a reinforced concrete deck supported on reinforced concrete piers, with reinforced concrete bridge seats added on top of earlier mortared rubble stone abutments. The bridge has a maximum span of 75 feet, a total length of 446 feet, and the deck measures 27 feet in width, from edge to edge. It was designed in 1936 as a temporary replacement bridge for the White Bridge, destroyed earlier that year I n a flood. Plans indicate that the replacement bridge was designed by Mass. DPW, but do not indicate the name of the particular engineer involved. The temporary bridge was originally constructed with a timber deck, and was built by T. Stuart & Son. When the bridge was made permanent in 1946, the timber deck was replaced with the present reinforced concrete deck by W.W. Wyman Inc. (Jergensen, 2014).

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

After the John Russell Cutlery and Montague Mill factories were built along the Turners Falls power canal in the late 1860s, demand grew for erecting a bridge for the convenience of workers traveling between the factories and Greenfield (Jenkins 1980: 8.4). On November 16, 1871 work started on the White Bridge (also known as the Lower Suspension Bridge) across the Connecticut River, and it was completed by the contractor Charles MacDonald the following spring. Costing $36,000 the White Bridge was a 445-foot-long, stone-and-brick suspension bridge with steel cables (Montague Bicentennial Committee 1954: 110; Vogt 1877).

The original White bridge was destroyed by the Flood of 1936. Its replacement was made a priority of the Massachusetts DOT, as several other bridges across the Connecticut River had also been destroyed. The new bridge, built by T. Stuart & Son of Boston, cost $150,000. The Stuart Bridge Company was responsible for several Boston area bridges during this period, the best-known being the 1936-1937 Chelsea Street Bridge in Boston, “More than 3,500 tons of concrete were used on the bridge and its five abutments, piers were 50 feet high, and the structure is 450 feet long and 20 feet wide” (Montague Bicentennial Committee 1954: 110).

BIBLIOGRAPHY and/or REFERENCES

C.H. Vogt & Co.
1877 "Turners Falls, Mass." (Bird's eye view). C.H. Vogt & Co., Milwaukee, WI.

Great Falls Discovery Center
1996 "Walking Tour of Downtown Turners Falls, Massachusetts." Great Falls Discovery Center, Turners Falls, MA.

Gregory, Ed (Turners Falls historian). Personal communication, May 3, 2014.

Jenkins, Candace
1980 "Turners Falls Historic District," National Register of Historic Places Nomination Form, Massachusetts Historical Commission, Boston, MA.

Jergensen, Kurt
2014 Personal communication with Mass DOT Architectural Historian via email May 2014

Montague Bicentennial Committee
1954 *Montague: 1754-1954.* Private publisher, Montague, MA.

ADDITIONAL PHOTOGRAPHS

2008 Low-level oblique image of Greenfield-Montague Bridge (Source: MASSDOT GIS)

Appendix C: New Hampshire Area Form

AREA FORM **AREA NAME: FIRSTLIGHT NORTHFIELD MTN. PROJECT AREA**

1. Type of Area Form
Town-wide: ☐
Historic District: ☐
Project Area: ☒

2. Name of area: FirstLight Northfield Mountain Project Area

3. Location: Ashuelot River (tributary of Connecticut River)

4. City or town: Hinsdale

5. County: Cheshire

6. USGS quadrangle name(s): Brattleboro VT

7. USGS scale: 1:24,000

8. UTM/SP reference:

18 4734748N/0707692E (TRC-29)
18 4738730N/0705574E (TRC-30)
18 4740107N/0705610E (TRC-31)
18 4740126N/0705600E (TRC-32)
18 4740086N/0705618E (TRC-33)

9. Inventory numbers in this area:
Fort Hill Branch of Boston & Maine RR surveyed in 1994, but no survey numbers assigned. Hinsdale Historic District surveyed in 2005, but no survey numbers were assigned to individual resources in the district.

10. Setting: Hinsdale Village is densely settled with mostly 19th- and 20th-century residential and commercial buildings; The Ashuelot River is crossed by a ca. 1940 highway bridge; the area between Hinsdale and the Connecticut River is wooded and sparsely settled and is crossed by an abandoned early-20th-century railroad bridge, now part of a bike/hike trail.

11. Acreage: >100 acres

12. Preparer(s): G. Henry/E. Rankin

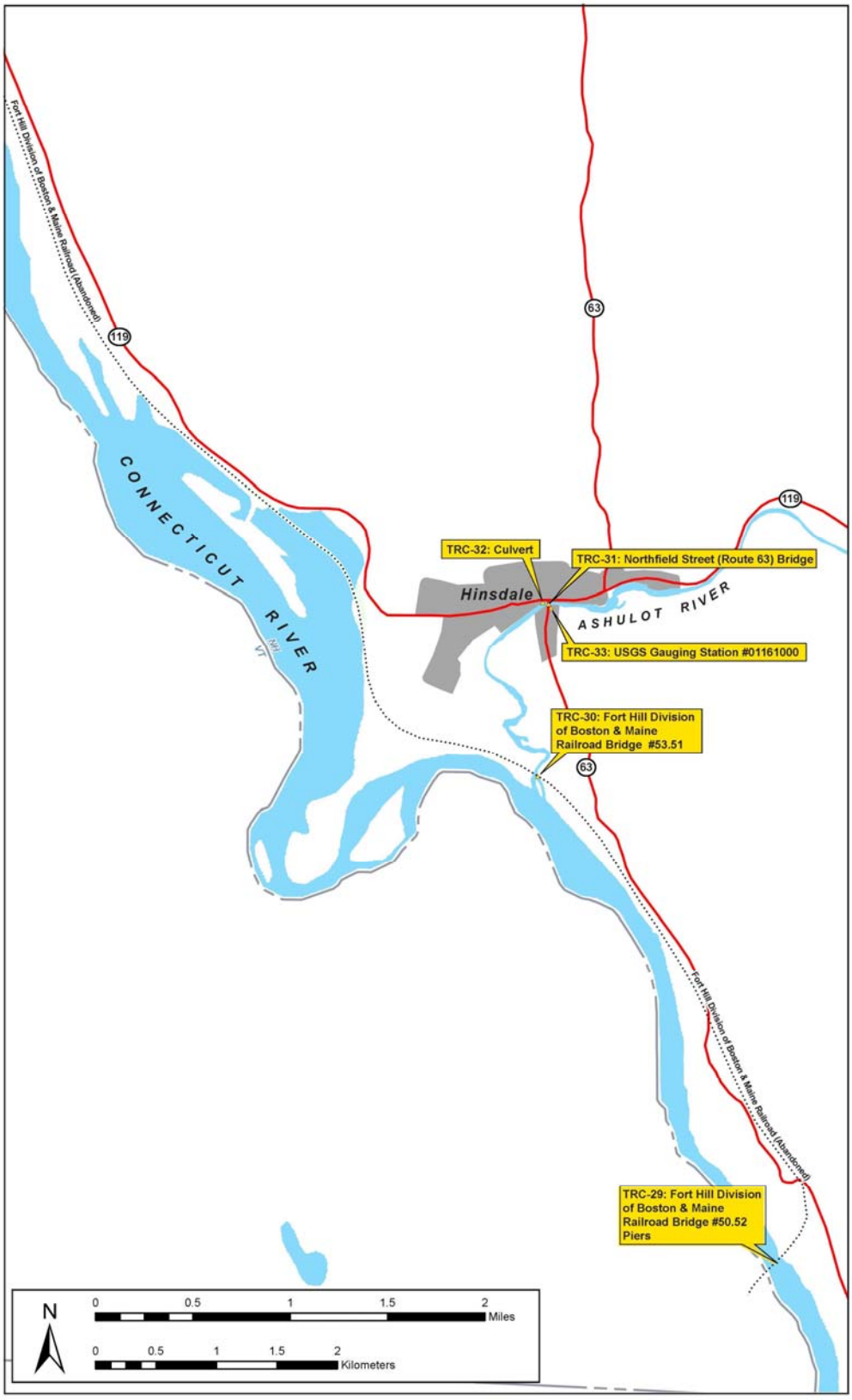
13. Organization: TRC Environmental for FirstLight

14. Date(s) of field survey: March 2014

15.

15. Location map

16. Sketch map



17. Methods and Purpose

Project Purpose FirstLight has initiated with FERC the process of relicensing the 67.709-megawatt (MW) Turners Falls Hydroelectric Project (Turners Falls Project), FERC No. 1889 and the 1,119.2 MW Northfield Mountain Pumped Storage Project (Northfield Mountain Project), FERC No. 2485 located in Massachusetts, Vermont, and New Hampshire. The license for the Turners Falls Project was issued on May 5, 1980 and expires on April 30, 2018. The license for the Northfield Mountain Project was issued on May 14, 1968 and also expires on April 30, 2018. FERC's final study plan determination required FirstLight to conduct a survey and evaluation of historic architectural resources within the Project boundaries, a small portion of which lies within New Hampshire.

Survey Methodology: Between November 2013 and March 2014, TRC Environmental Corporation (TRC) conducted an historic architectural survey and NRHP evaluation of all buildings, structures, objects, sites, and districts 50 years or older within the two Projects' boundaries. The survey had the following purposes: identify historic resources within the Projects' boundaries currently listed in or determined eligible for listing in the NRHP and conduct fieldwork and provide evaluations of NRHP eligibility for all previously and newly surveyed resources, based on their historic significance and integrity. The architectural assessment of the Projects' boundaries included a review of historic maps, a literature search, and a review of historical documents at local and state repositories in Massachusetts, New Hampshire, and Vermont, as well as on-site fieldwork and evaluation.

On November 27, 2013, FERC defined the APE for the Project in accordance with Section 106 of the NHPA and in consultation with the three State Historic Preservation Offices (SHPOs) for the states included within the Project boundaries: the Massachusetts Historical Commission (MHC), the New Hampshire Division of Historical Resources (NHDHR), and the Vermont Division for Historic Preservation (VDHP). The Project APE is defined as "*…all lands within the current FERC Project Boundary of the two projects in addition to any other lands outside the FERC Project Boundary where historic properties could be affected by project-related adverse effects. The Projects' APEs include lands within Franklin County, Massachusetts, Windham County, Vermont, and Cheshire County, New Hampshire. On lands adjacent to the project boundaries, the APEs would also include an additional 10 meters (33 feet) of lands inland from the top of banks of the Connecticut River and associated tributaries."*

The TRC survey conducted between November 2013 and March 2014 consisted of consultation (in person and written) with the NH SHPO to define the survey boundaries and survey methodology; a site file search at NH SHPO's archives for previously identified architectural resources; general background and historical research conducted at various local and state repositories; and an initial "windshield" survey to verify the background research. This was followed by a more intensive-level survey of all resources 50 years and older, including digital photography; data synthesis, including production of this project area survey form; and an evaluation of NRHP eligibility of the surveyed resources.

TRC conducted background research on the history and development of the Project APE and its surroundings for the preparation of an historic context. Published histories and previous architectural and historical studies of individual towns and villages in Cheshire County, NH were consulted, as were historic maps and atlases of the county. Additional research was conducted at local libraries and historical societies.

In November 2013, TRC conducted a "windshield" survey to confirm the results of the background research and to determine the presence of any additional historic architectural resources within the project area. In March 2014, TRC conducted a comprehensive field survey which consisted of a systematic walkover of the lands within the Project APEs. The survey team of TRC architectural historians visited each of the previously identified resources and documented through field notes and descriptions any other resource that appeared to be 50 years or older.

Information about the current appearance, including the setting, physical condition, and character-defining architectural features of the resources and any secondary buildings were recorded. For identification purposes, TRC used temporary "field numbers" (TRC-1, TRC-2 etc.) for all resources as the previously identified resources did not have SHPO-assigned survey numbers. High-resolution digital photographs of multiple views were taken of each resource including general context views that show the resource in relation to one another and their surroundings. TRC mapped the locations of the previously and newly surveyed resources on the relevant USGS quadrangle maps.

18. Geographical Context

The Turners Falls Project and Northfield Mountain Project are located on the Connecticut River in the states of Massachusetts, New Hampshire, and Vermont. The greater portion of the Turners Falls Project and Northfield Mountain Project, including developed facilities and most of the lands within the Project boundary, are located in Franklin County, MA; specifically, in the towns of Erving, Gill, Greenfield, Montague, and Northfield. The northern reaches of the Turners Falls Project and Northfield Mountain Project boundaries extend into the towns of Hinsdale, in Cheshire County, NH, and Vernon, in Windham County, VT.

Hinsdale is located in the southwestern corner of New Hampshire. It is bounded on the north by the town of Chesterfield, on the east by Winchester, on the south by Northfield, MA, and on the west by the Connecticut River which separates it from Vernon and Brattleboro, VT.

Most of Hinsdale along the Connecticut River is flat or rolling land, much of it used as fields or pasture. The Ashuelot River enters the town from the east and flows into the Connecticut River south of the main settlement of Hinsdale. Cooper's Point, a peninsula jutting into the Connecticut River, is in the central part of the town.

19. Historical Background

Colonial settlement of the Turners Falls/Northfield Mountain Project area (present-day towns of Gill, Greenfield, Montague, Erving and Northfield, MA; Vernon, VT; and Hinsdale, NH) in the seventeenth century was scattered and short-term and is for the most part poorly documented. Considered a northern outpost of colonial settlement, southern New Hampshire and Vermont were largely abandoned during King Philip's War and only lightly re-settled after the conclusion of Queen Anne's War in 1714. In 1723, the Massachusetts General Court decided to build a defensive block-house manned by 40 colonial and Mohawk soldiers on the west bank of the Connecticut River above Northfield, within the southerly limits of the town of Brattleboro.

Confusion over the town boundaries of Northfield in relation to the New Hampshire colony to the north resulted in several inconclusive surveys that muddied settlement claims in the area for many years (NHDOT 2007: 4). A 1753 decree by New Hampshire's Royal Governor created two towns north of Northfield on either side of the Connecticut River, both named Hinsdale (Holmes 1991: 56). On March 4, 1791 Vermont gained statehood. In October 1802, the town on the Vermont side of the Connecticut River changed its name from Hinsdale to Vernon, in honor of the British Admiral William Vernon (Child 1884: 304; Holmes 1991: 56).

The area began to lose some of its frontier character thanks to transportation improvements in the early 1800s that encouraged both economic development and resultant in-migration from other parts of New England. In 1828, a power canal and dam were constructed on the Ashuelot River in Hinsdale; these were joined to neighboring Keene by a turnpike, ushering in Hinsdale's industrial era (NHDOT 2007: 7).

Railroads opened up the entire Connecticut River Valley area to sustained economic development beginning in the 1840s and remained the area's transportation backbone for nearly a century. The first was the Connecticut River Railroad, a north-south line between New Haven CT and Greenfield MA which began service in 1846 (Holmes 1991: 24). This line was extended to Brattleboro, VT in 1851. The Vermont & Massachusetts Railroad

reached South Vernon at the Massachusetts state line in 1849. The Ashuelot Railroad opened in 1850 between Keene, New Hampshire and South Vernon, VT (Hostutler et al 1994: 2).

By the early 1880s, Hinsdale possessed a well-developed industrial infrastructure, centered on several paper and cotton mills built along the Ashuelot River. High, Hancock, and Prospect Streets were laid out on the north side of town, reflecting the steep hillside on which the village is built. High Street, located above the heat and noise of the valley below, was soon lined with spacious architect-designed residences (NHDOT 2007: 8).

In the 1800's, the area's Connecticut and Ashuelot Rivers powered mills and shops at Hinsdale. An early woolen mill begun by Caleb Todd was acquired by Rufus S. Frost and New Hampshire governor William Haile. The company was a large producer of Cashmerettes and flannels. C. J. Amindon & Son, successors of Bishop & Boynton, made the same types of goods. The Brightwood Mills, operated by George C. Fish, and a company owned by G. & G. A. Robertson, where large producers of manila paper. Newhall & Stebbins manufactured mowing machines and the Jennings & Griffin Manufacturing Company produced knives, cutlery and precision hand tools (NHDOT 2007: 8).

In 1892, the Boston & Maine Railroad acquired the entire Connecticut River Railroad, made up of the former 21-mile Ashuelot Railroad and the Cheshire Railroad, among others (Wallace et al 2001: 36). In 1911, the railroad extended its line from Dole Junction, NH to Brattleboro, VT on the other side of the river. Known as the Fort Hill Branch of the Boston & Maine Railroad, the rail line at one time included eight bridges, a 2,800-foot causeway and numerous stone culverts and drains. The Fort Hill Branch was the last line constructed in a system of four railroads that centered on the city of Keene, the transportation hub of southwestern New Hampshire. The line was abandoned in the 1980s and several of the bridges have been removed. At its south end, the line crossed the Connecticut River via a six-span metal truss bridge on concrete-encased piers. This bridge was closed in 1970 and the superstructure has been removed, leaving only the deteriorated bridge piers (Hostutler et al 1994: 3-4).

20. Applicable NHDHR Historic Context(s) (See appendix C)

New Hampshire Railroads

21. Architectural Description and Comparative Evaluation

There are four (4) resources 50 years or older located within the Project APE: One linear district (Fort Hill Branch of the Boston & Maine Railroad) and three individual resources (a highway bridge, a culvert, and a USGS gauging station) located within what has previously identified as the Hinsdale Historic District in Hinsdale Village.

1. *Fort Hill Division of Boston & Maine Railroad (TRC-29 and TRC-30):* There are two surveyed resources associated with this former railroad line within the Northfield Mountain Project APE: the remains of a bridge across the Connecticut River (Photo 1), and a bridge across the Ashuelot River (Photos 2 and 3). Constructed in 1911, the 8.5-mile-long Fort Hill Division of the Boston & Maine Railroad runs from the NH-VT state line on the Connecticut River at Brattleboro VT south along the east riverbank in Hinsdale NH to Dole Junction, where it connected with the 21.75-mile-long Ashuelot Branch and crossed the Connecticut River again into Vernon VT. At one time, the line consisted of eight bridges, a 2800-foot causeway, eight mile marker posts, and a number of culverts and drains.

   TRC-30, a riveted-plate deck-girder bridge (Bridge # 53.51) with cut-stone abutments carried the single-track line over the Ashuelot River, west of the village of Hinsdale. The rail line was abandoned in 1974, and tracks and ties have been removed. The rail bed and structures were purchased by NH DOT in 1995. This bridge, along with the other railroad bridges and structures still standing, was incorporated into a hiking/bike/snowmobile trail and was re-decked with boards and metal safety railings added.

TRC-29, the six-span metal bridge (Bridge #50.52) over the Connecticut River at the line's southern terminus was closed in 1970 and based on historic aerial images the superstructure was removed between 1981 and 1997. The structure's six concrete-sheathed piers in the river have been left in place and are in deteriorated condition.

2. *Northfield Street (Route 63) Bridge over the Ashuelot River, Hinsdale Village (TRC-31):* Bridge # 132/133, known locally as the Northfield Street Bridge, is a two-span concrete rigid-frame bridge that carries two-lane Northfield Street (NH Route 63) over the Ashuelot River in Hinsdale Village (Photos 4 and 5). The immediate surroundings are residential on the south end and a mix of commercial and residential on the north end. Built ca. 1940, this bridge replaced an earlier metal bridge with stone abutments and pier, possibly as a result of flood damage in 1936. An historic (undated) postcard view of the present bridge shows concrete bases at either end of the bridge topped by street lamps. These were removed at an unknown date. The bridge otherwise retains its integrity.

3. *Culvert, Hinsdale Village (TRC-32):* A culvert, consisting of a rectangular concrete slab facing with a circular opening, is located on the north bank of the Ashuelot River, adjacent to the northwest corner of the Northfield Street Bridge (Photo 6). According to Hinsdale Town records, the culvert dates to ca. 1942, is in good condition, and retains its integrity.

4. *USGS Gauging Station #01161000 (TRC-33):* This rectangular concrete USGS gauging station with pyramidal concrete cap is built into the south bank of the Ashuelot River, near the southeast corner of the Northfield Street Bridge in Hinsdale Village (Photo 7). Wooden steps lead to the station from Northfield Street. There is a single-leaf hinged metal door on the south face and meters are placed on the east and west faces. According to USGS records, the gauging station dates from 1907. This structure retains its integrity.

22. Statement of Significance

1. *Fort Hill Division of Boston & Maine Railroad:* In 1994, a Project Area Form was prepared for this linear resource in anticipation of its purchase by the State of New Hampshire for possible conversion to a hike/bike/snowmobile trail. According to the 1994 Project Area Form, "Due to its loss of integrity, the Fort Hill Branch is not eligible for the National Register. Nor do any of the bridges associated with the line appear to have enough significance to be individually eligible for the Register" (Hostutler 1994). In June 1994, the NHSHPO concurred with this evaluation. Based on TRC's 2014 field observations, the former railroad line and its remaining bridges remain not eligible for the NRHP.

2. *Northfield Street (Route 63) Bridge over the Ashuelot River, Culvert and USGS Gauging Station, Hinsdale Village Historic District:* In 2005, NH DOT conducted a partial survey of Hinsdale Village in connection with repairs undertaken along Route 63, following flood damage that same year. Based on historic map research and fieldwork, NH DOT defined an NRHP-eligible Hinsdale Village Historic District, eligible under Criteria A and C. According to the Project Area Form: "The village continues to function as the commercial, civic, religious, and residential center of Hinsdale" (NH DOT 2006). Based on TRC's 2014 field observations, the Hinsdale Village Historic District remains eligible for the NRHP. The three resources surveyed by TRC in 2014 all relate to the Ashuelot River, historically the driving force behind Hinsdale's economic growth in the 19th and early 20th centuries and contribute to the district's NRHP eligibility under Criterion A.

23. Periods(s) of Significance

1. *Fort Hill Division of Boston & Maine Railroad:* As a resource determined previously to be not eligible for the National Register, a period of significance is not applicable.

2. *Northfield Street (Route 63) Bridge over the Ashuelot River, Culvert and USGS Gauging Station, Hinsdale Village Historic District:* The NH DOT identified a period of significance between 1828 and 1956. The three resources surveyed by TRC in 2014 fall within this period of significance and are considered contributing resources in the NRHP-eligible district.

24. Statement of Integrity

1. *Fort Hill Division of Boston & Maine Railroad:* According to the 1994 Project Area Form: "This former railroad line has lost a great deal of integrity since its abandonment in 1983. These losses include the removal of tracks and related signals and equipment, the demolition of the line's only station, and the partial demolition of the branch's eight bridges. The line no longer has integrity of materials, workmanship, feeling, setting, and association" (Hostutler 1994). In June 1994, the NHSHPO concurred with this evaluation. Since then, the line has been converted to a bike/hike/snowmobile trail and the bridges (with the exception of the Connecticut River Bridge at its southern end) have been re-decked and converted for recreational use.

2. *Route 63 (Northfield Street) Bridge over the Ashuelot River: This* resource retains all seven aspects of integrity, except for integrity of design (an undated postcard view shows the bridge once had lamps at either end.

3. *Culvert at Route 63 Bridge:* This resource retains all seven aspects of integrity.

4. *Gauging Station at Route 63 Bridge:* This resource retains all seven aspects of integrity.

25. Boundary Justification

1. *Fort Hill Division of Boston & Maine Railroad:* As a resource not eligible for the NRHP, there is no boundary for the former railroad line.

2. *Hinsdale Historic District:* Boundaries for the Hinsdale Historic District were drawn as part of the 2005 Project Area Form and are coterminous with the 19th century maps of the village drawn in 1858 and 1892 (see maps later in this form). The boundaries include the 19th and 20th century development patterns and the variety of resources that make up Hinsdale today. The three resources surveyed in 2014 fall within this boundary.

26. Boundary Description

1. *Fort Hill Division of Boston & Maine Railroad:* As a resource not eligible for the NRHP, there is no boundary for the former railroad line.

2. *Hinsdale Historic District:* Boundaries for the Hinsdale Historic District were drawn as part of the 2005 Project Area Form and are coterminous with the 19th century maps of the village drawn in 1858 and 1892 (see maps later in this form).

27. Bibliography and/or References

Cardcow Historic Postcard Collection: Accessed Online 2014: www.cardcow.com

C.H. Vogt & Co.
1886 "Hinsdale, NH." (Bird's eye view). C.H. Vogt & Co., Cleveland, OH.

Epodunk Historic Postcard Collection: Accessed Online 2014: www.epodunk.com

Hostutler, Elizabeth and Worthen Muzzey
1994 "Fort Hill Division of Boston & Maine Railroad," New Hampshire Division of Historical Resources Area Form. Concord NH.

Murphy, James
1991 "Where the Central Vermont Railway Came From," *The Ambassador* (Publication of the Central Vermont Railway Historical Society), Vol. 2, No. 1, Spring, 1991.

Stephenson, Charles
1982 "Interstate Water Rights to the Waters of the Connecticut River: Issues Raised by the Proposed Northfield Diversion." *Western New England Law Review*, Vol. 4, pps 641-682.

Wallace, R Stuart and Lisa Mausolf
2001 *New Hampshire Railroads: Historic Context Statement.* New Hampshire Department of Transportation, Concord, NH.

Whittlesey, Charles W.
1938 *Crossing and Re-Crossing the Connecticut River*. New Haven, Connecticut: The Tuttle, Morehouse & Taylor Company.

28. Surveyor's Evaluation for ***Fort Hill Branch of Boston & Maine Railroad***

NR listed:	district	☐	NR eligible:		NR Criteria:	A	☐
	individuals		district	☐		B	☐
	within district	☐	not eligible	☒		C	☐
Integrity:	yes	☐				D	☐
	no	☒	more info needed	☐		E	☐

If this Area Form is for a Historic District: # of contributing resources: _____
# of noncontributing resources: _____

Based on 2014 field observations, no further fieldwork or research is needed to confirm Not Eligible determination by NH SHPO

28. Surveyor's Evaluation for ***Hinsdale Village Historic District***

NR listed:	district	☐	NR eligible:		NR Criteria:	A	☒
	individuals		district	☒		B	☐
	within district	☐	not eligible	☐		C	☒
Integrity:	yes	☒				D	☐
	no	☐	more info needed	☐		E	☐

If this Area Form is for a Historic District: # of contributing resources: 3 surveyed in 2014
# of noncontributing resources: _____

Based on 2014 field observations, no further fieldwork or research is needed to confirm the NRHP-Eligible status of Hinsdale Village Historic District and that these three resources (Northfield Street Bridge, culvert, and USGS Gauging Station) are contributing resources.

Photo 1 description: Axiometric Aerial View of Bridge #50.52 Piers
Roll: _____ Frame: _____ Direction: N Date taken: 05/14 Negative stored: TRC

Photo 2 description: View of Bridge #53.51 Piers and Girder
Roll: _____ Frame: _____ Direction: NW Date taken: 03/14 Negative stored: TRC

Photo 3 description: View of Bridge #53.51 from Abandoned Railroad Bed
Roll: _____ Frame: _____ Direction: SE Date taken: 03/14 Negative stored: TRC

Photo 4 description: View of Northfield Street Bridge
Roll: _____ Frame: _____ Direction: SE Date taken: 03/14 Negative stored: TRC

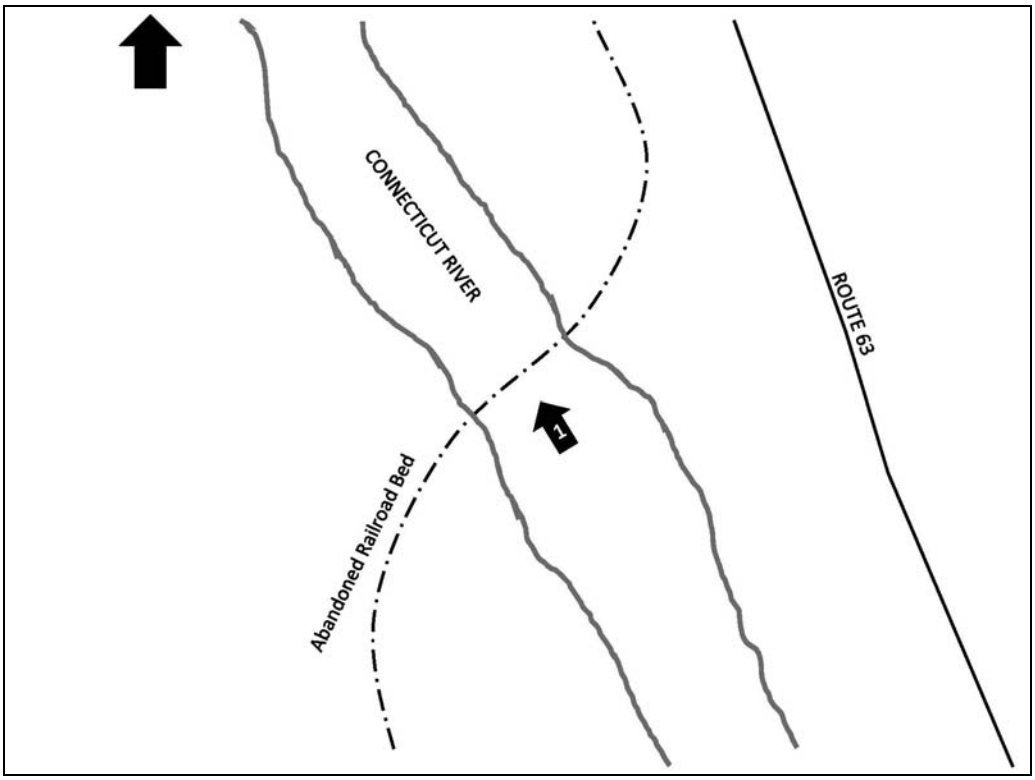
Photo 5 description: View of Northfield Street Bridge
Roll: _____ Frame: _____ Direction: N Date taken: 03/14 Negative stored: TRC

Photo 6 description: View of Culvert
Roll: _____ Frame: _____ Direction: N Date taken: 03/14 Negative stored: TRC

Photo 7 description: View of Gauging Station
Roll: _____ Frame: _____ Direction: NW Date taken: 03/14 Negative stored: TRC

PHOTO KEY IS LOCATED ON PAGES 13-14

I, the undersigned, confirm that the photos in this inventory form have not been digitally manipulated and that they conform to the standards set forth in the NHDHR Photo Policy. These photos were printed at the following commercial printer OR were printed using the following printer, ink, and paper: HP Photosmart, HP 100 Greyscale Ink, HP Premium Paper.
(Color photos must be professionally printed.)
The negatives or digital files are housed at/with:
TRC .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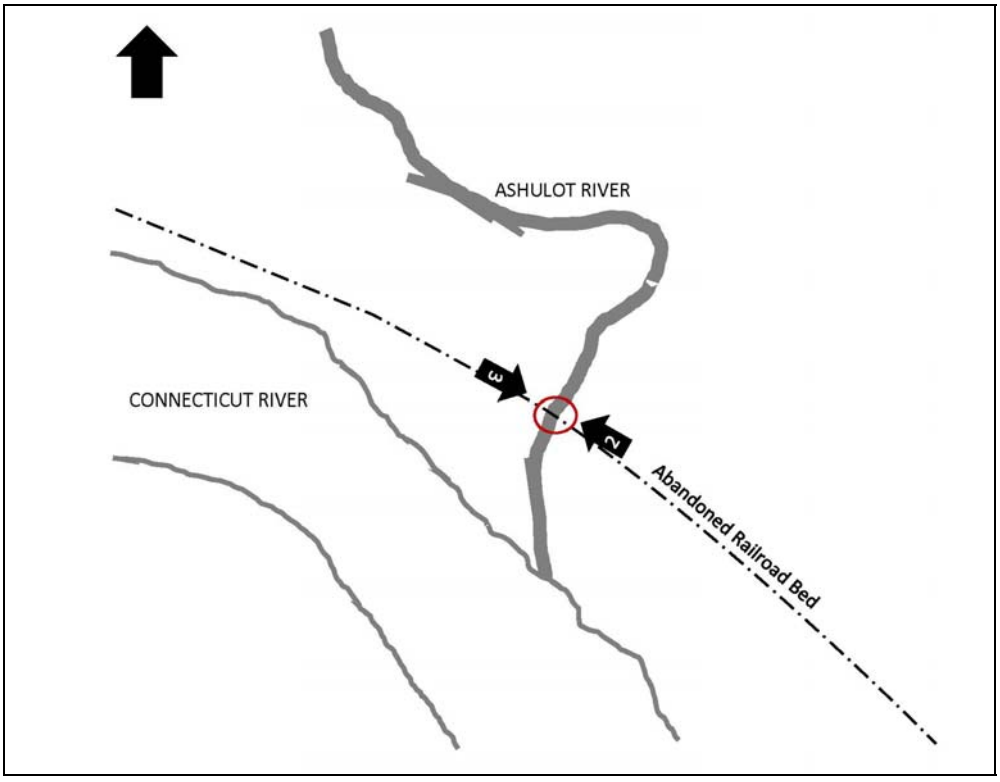
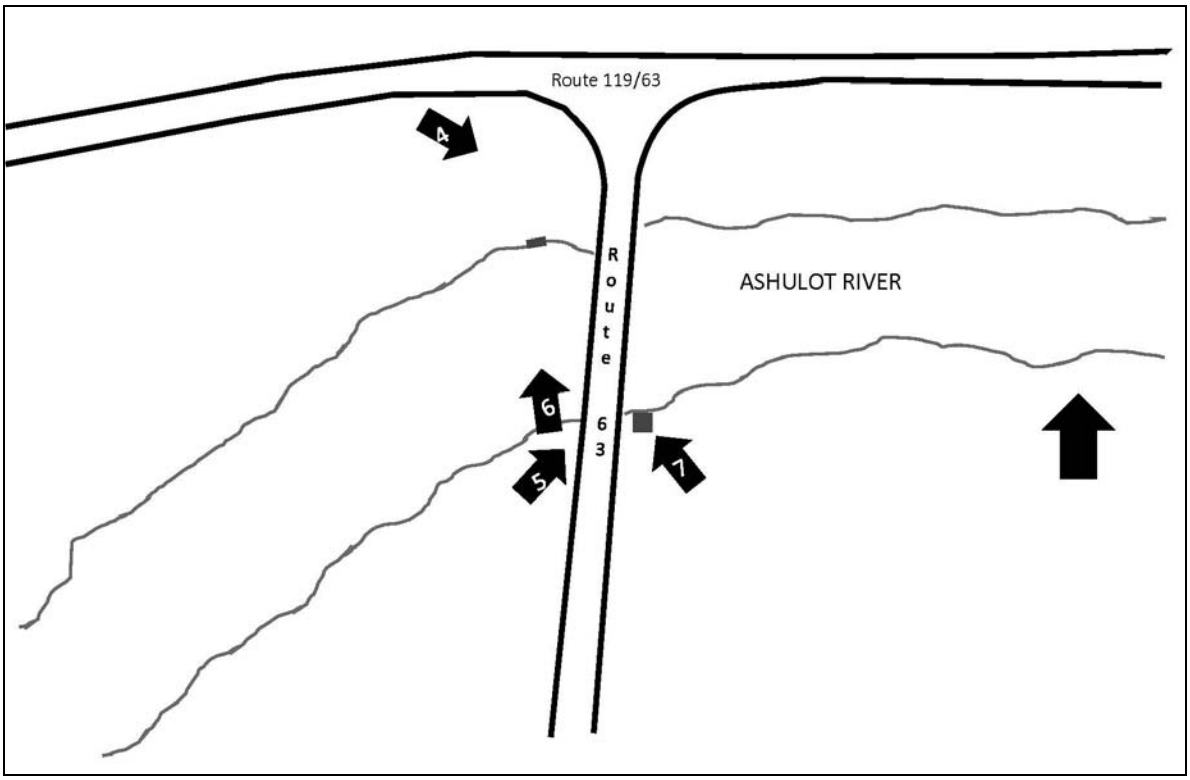
ROUTE 63
1
Abandoned Railroad Bed


ASHULOT RIVER
3
CONNECTICUT RIVER
2
Abandoned Railroad Bed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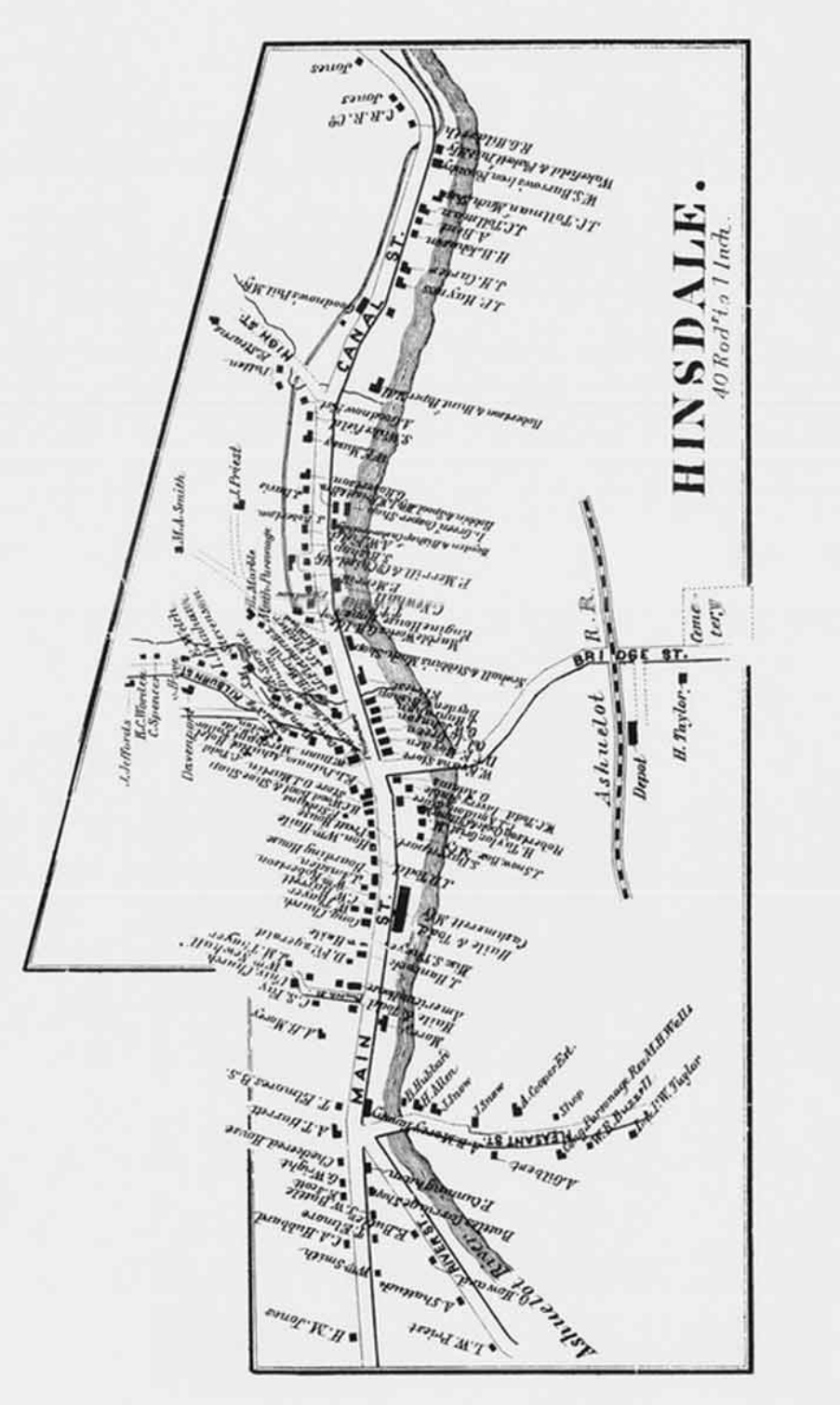
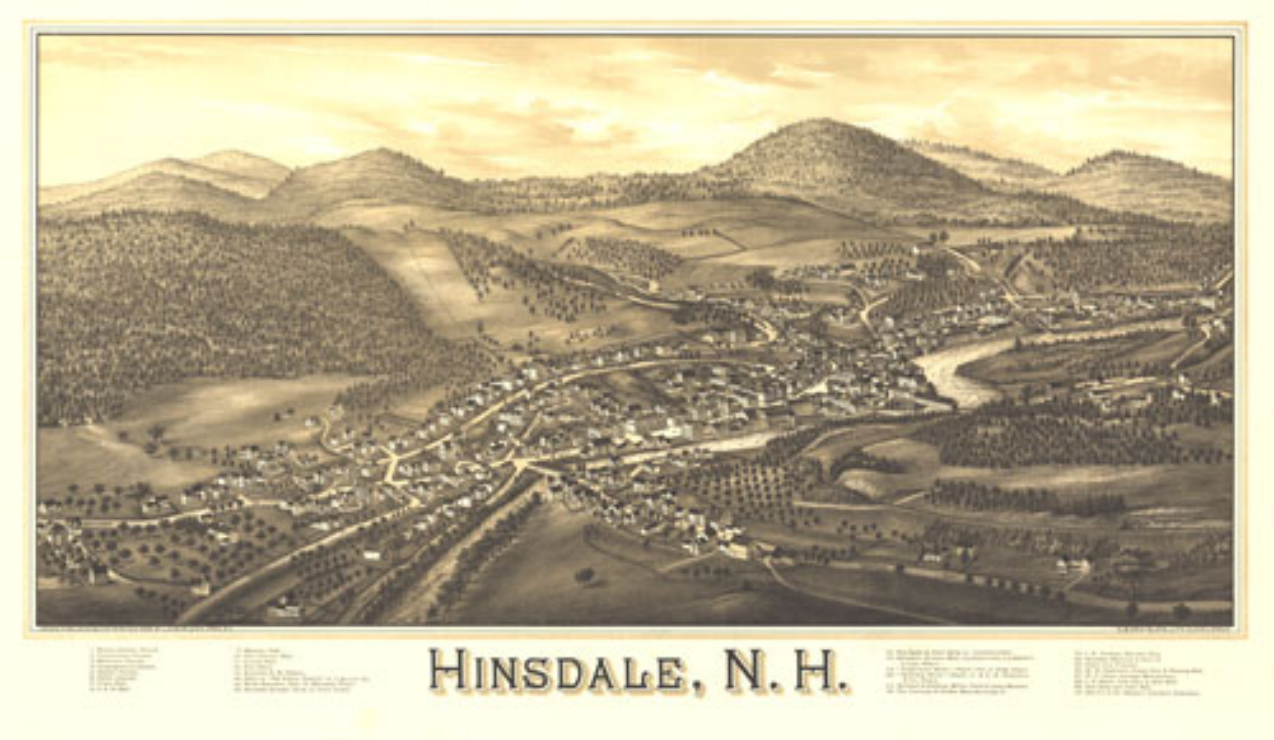
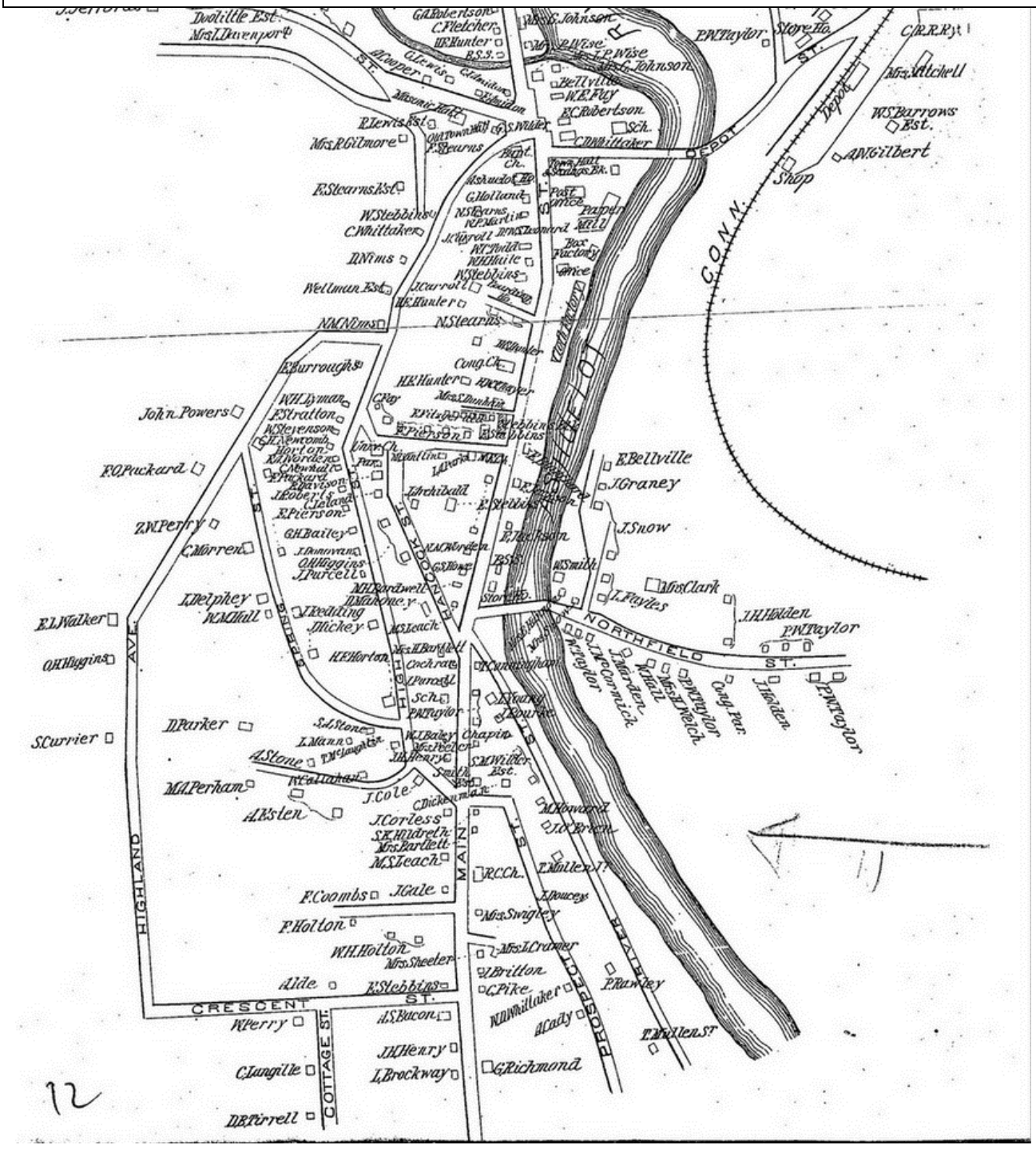
4
Route 63
ASHULOT RIVER
6
5
7



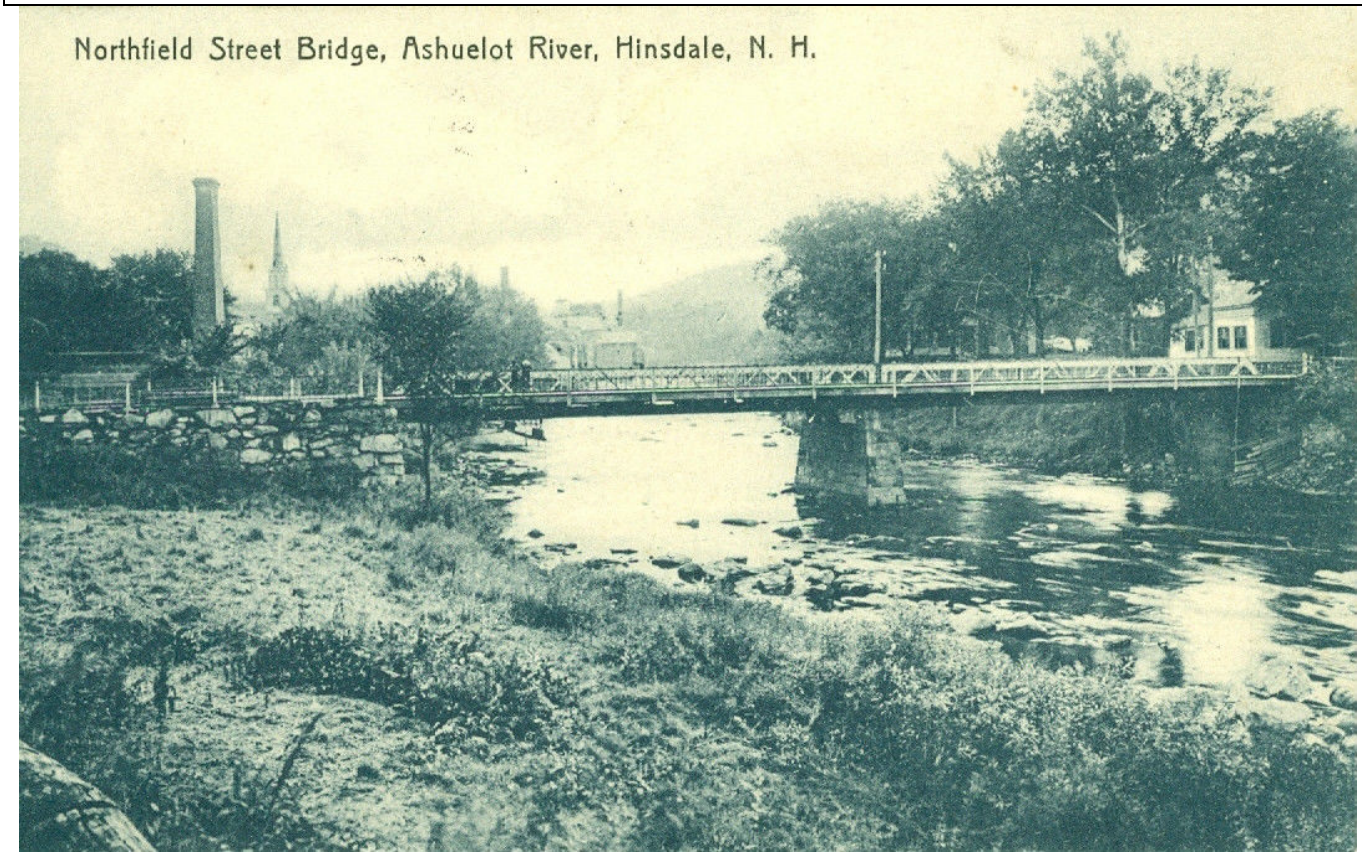
Map of Cheshire County, (1858) Surveyed by Lawrence Fagan. Published by Smith & Morley, Philadelphia PA.



C.H. Vogt & Co's 1886 Bird's Eye View of Hinsdale, NH. (C.H. Vogt & Co., Cleveland, OH). Old Northfield Street Bridge is in Middle Distance.

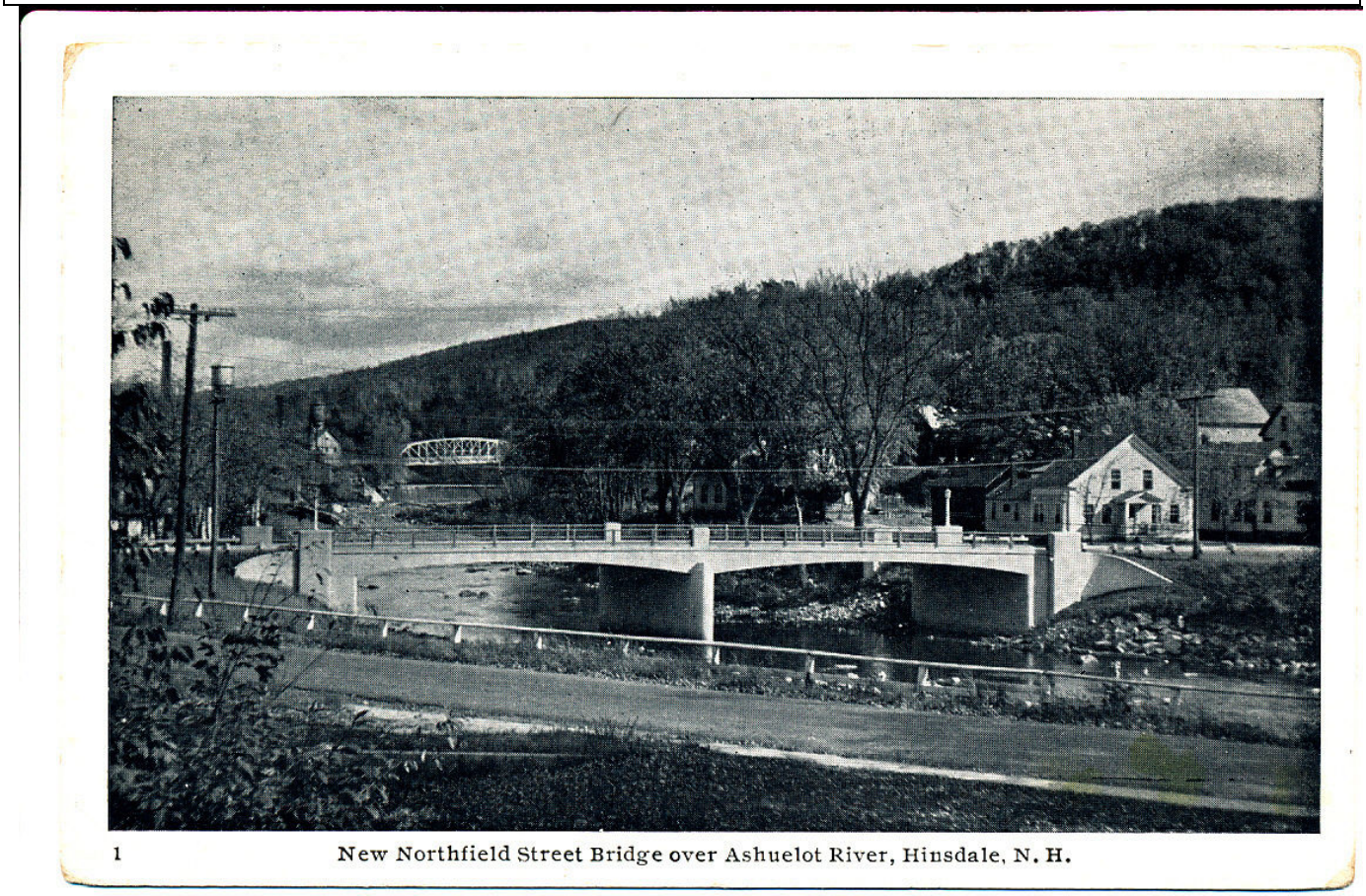


Town and County Atlas of the State of New Hampshire (1892). Compiled by DH Hurd & Co., Boston.



Circa 1907 View of Northfield Street Bridge, looking Southeast. Source: Cardcow Historic Postcard Collection: Accessed Online 2014: www.cardcow.com

Circa 1908-1910 View of Northfield Street Bridge, looking Southeast. Source: Epodunk Historic Postcard Collection: Accessed Online 2014: www.epodunk.com



Undated Postcard View of "New Northfield Street Bridge" Looking Southeast, Source: Source: Epodunk Historic Postcard Collection: Accessed Online 2014: www.epodunk.com

Appendix D: Vermont Division for Historic Preservation Forms

STATE OF VERMONT
Division For Historic Preservation
1 National Life Drive, Floor 6
Montpelier, VT 05620
HISTORIC SITES & STRUCTURES SURVEY
Individual Structure Survey Form

SURVEY NUMBER: To be assigned by SHPO

NEGATIVE FILE NUMBER: N/A

UTM REFERENCES: Zone/Easting/Northing 18/703512E/4737375N

U.S.G.S. QUAD. MAP: Brattleboro

PRESENT FORMAL NAME: George's Mill and Vernon Post Office

COUNTY: Windham

ORIGINAL FORMAL NAME: Whithed's Mill/Whithed & Ball Mill

TOWN: Vernon

PRESENT USE: Vacant

LOCATION: East side of Route 142, Vernon Village

ORIGINAL USE: Gristmill/Sawmill/Blacksmithh

COMMON NAME: Whithed's Mill; Bushnell's Mill

ARCHITECT/ENGINEER: Unknown

PROPERTY TYPE: Gristmill foundations with dam; mill pond

BUILDER/CONTRACTOR: Marshall Whithed and David Ball

OWNER:
ADDRESS: Unknown

PHYSICAL CONDITION OF STRUCTURE:
Excellent ☐ Good ☐ Fair ☐ Poor ■

Only foundation, wheel pit and mill pond are original; mill burned in 1962 and reconstructed in 1978

ACCESSIBILITY TO PUBLIC:
Yes ■ No ☐ Restricted ■

STYLE: No style

LEVEL OF SIGNIFICANCE:
Local ■ State ☐ National ☐

DATE BUILT: 1839-1845; Mill burned in 1962, reconstructed on original foundation in 1978.

GENERAL DESCRIPTION:

Structural System

1. Foundation: Stone ■ Brick ☐ Concrete ☐ Concrete Block ☐
2. Wall Structure
   a. Wood Frame: Post & Beam ☐ Balloon ■
   b. Load Bearing Masonry: Brick ■ Stone ■ Concrete ☐ Concrete Block ☐
   c. Iron ☐ d. Steel ☐ e. Other:
3. Wall Covering: Clapboard ☐ Board & Batten ☐ Wood Shingle ☐ Shiplap ☐
   Novelty ☐ Asbestos Shingle ☐ Sheet Metal ☐ Aluminum ε Asphalt Siding ☐
   Brick Veneer ☐ Stone Veneer ☐ Bonding Pattern: Other:
4. Roof Structure
   a. Truss: Wood ■ Iron ☐ Steel ☐ Concrete ☐ b. Other:
5. Roof Covering: Slate ☐ Wood Shingle ☐ Asphalt Shingle ■ Sheet Metal ☐
   Built Up ☐ Rolled ☐ Tile ☐ Other:
6. Engineering Structure: 7. Other:

Appendages: Porches ☐ Towers ☐ Cupolas ■ Dormers ☐ Chimneys ☐ Sheds ☐
Ells ■ Wings ☐ Bay Window ☐ Other:

Roof Styles: Gable ■ Hip ☐ Shed ☐ Flat ☐ Mansard ☐ Gambrel ☐ Jerkinhead ☐
Saw Tooth ☐ With Monitor ☐ With Bellcast ☐ With Parapet ☐ With False Front ☐
Other:

Number of Stories: 2

Entrance Location: Center Facade, Multiple on sides and basement of rear

Number of Bays: Facade-5, Side-6, Rear-4

Approximate Dimensions: 50' wide x 80'long

SIGNIFICANCE: Architectural ☐ Historic ■ Archeological ■

Historic Contexts: Industry

RELATED STRUCTURES: (Describe)

The former Whithed's (also Whithed & Ball and Bushnell's) Mill is located on the east side of Route 142 where the road makes a sharp bend in Vernon Village, Windham County. The complex consists of the original (1839-1845) granite gristmill foundation, reconstructed brick wheel pit with metal overshot wheel in poor condition; stone dam with metal sluice gate; and a mill pond encircled with cut-stone border. Above the mill's stone foundation, but still below-grade, is a brick-and-stone basement level with entrances on the east. The present 2-story, 5-bay-by-6-bay, gable-roofed building with decorative center cupola is a 1978 reconstruction of the original mill that burned in 1962. Historic photographs indicate that the mill building had clapboard siding on all three levels except at the northeast corner where the basement level was stone; a gable roof without cupola and 6/6 double-hung sash windows with wood frames. The building is currently vacant. Also on the property, but unrelated to the gristmill complex, is a one-story, gable-roofed non-historic building that houses the Vernon Post Office.

STATEMENT OF SIGNIFICANCE:

Born in Lincoln, Massachusetts in 1797, Marshall Whithed settled in Vernon in 1810 and soon became an enterprising businessman and landowner. In partnership with David Ball of Winchester, New Hampshire, he built a large 3-story, timber-framed mill on Town Brook, sometime between 1839 and 1845. The stone dam and wheel pit were reportedly constructed at a cost of $6,500, while the slate-roofed mill building cost $1,500. A blacksmith shop stood slightly away from the building.

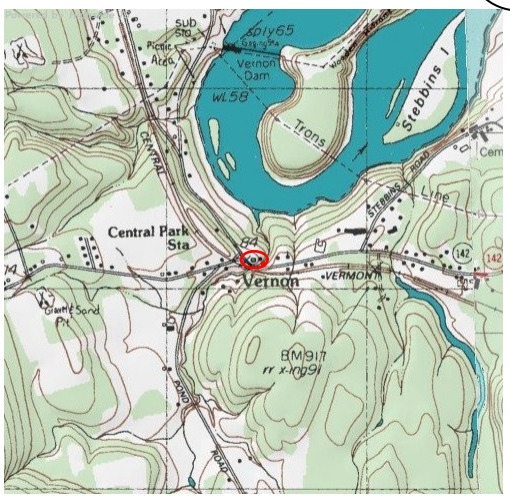
Power was furnished by a 25-foot overshot water wheel. The building's basement held the gristmill, a sawmill was at ground level, and there was a bone mill on the upper floor for grinding bones of dead animals to produce bone meal for fertilizer and chicken feed. By 1859, Marshall Whithed sold the mill and adjoining road to David Ball, who thereupon sold it to John Hunt for $600. Lafayette Whithed, Marshall's son, regained the property in 1867. The Whithed & Hunt Mill is shown in the Vernon Village inset on the Beers' Atlas of Windham County of 1869.

By the early 1900s, business had slowed at the mill, and the Whithed family, by then somewhat geographically dispersed, sold the mill property to the Town of Vernon in 1908. The town stored its snow roller and other equipment in the mill building. In 1927, Jason Bushnell, a Brattleboro grocer, bought the mill from the town for $700, and turned it into a private museum of his vast and varied collection of rural items. The mill burned in 1962, leaving only the dam, mill foundation, and wheel pit. A reconstruction of the old mill was built on site in 1978 and in the 1980s housed an acrylic housewares manufacturer, Clear Solutions, Inc. The building is currently vacant.

REFERENCES:

1928 Annual Report of the Financial Condition of the Town of Vernon; Walton's Vermont Register for Farmers, Businesses, and Professional Men.; Washburn, Artemus Henry, Esq. 1885 History of Town of Vernon. Miss A. M. Hemenway, publisher, Ludlow, VT.

MAP: (Indicate North in Circle)



SURROUNDING ENVIRONMENT:

Open Woodland ☐ Woodland ☐
Scattered Buildings ▣
Moderately Built Up ☐
Densely Built Up ☐
Residential ☐ Commercial ☐
Agricultural ☐ Industrial ☐
Roadside Strip Development ☐
Other:

RECORDED BY:
G. Henry/E. Rankin

ORGANIZATION:
TRC Environmental for FirstLight

DATE RECORDED:
March 2014

Whithead's Mill Photo Index

1. View of Façade and side (south) elevation with brick wheel pit and wheel, Looking Northeast (TRC March 2014)
2. View of Façade and side (north) elevation with mill pond in foreground, Looking Southeast (TRC March 2014)
3. View of side (south) elevation with millpond and dam to far left, Looking Northwest (TRC March 2014)
4. View of rear elevation, Looking Southwest (TRC March 2014)
5. Detail view of millpond, dam, wheel pit, and wheel, Looking Northwest (TRC March 2014)

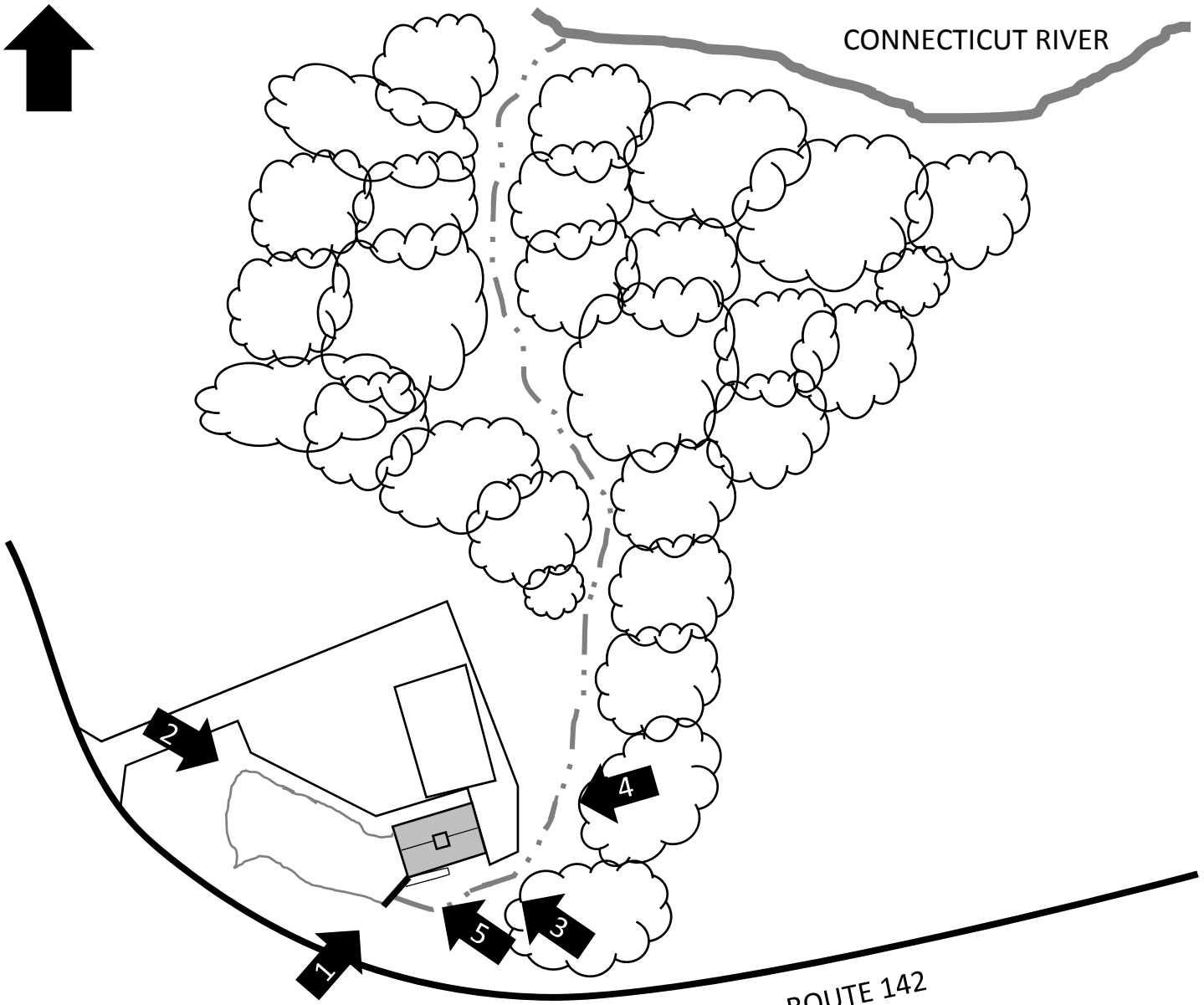
Photo 1

Photo 2

Photo 3

Photo 4

Photo 5


CONNECTICUT RIVER
1
2
3
4
5
ROUTE 142

STATE OF VERMONT
Division For Historic Preservation
1 National Life Drive, Floor 6
Montpelier, VT 05620
HISTORIC SITES & STRUCTURES SURVEY
Individual Structure Survey Form

SURVEY NUMBER: To be assigned by SHPO

NEGATIVE FILE NUMBER: N/A

UTM REFERENCES: Zone/Easting/Northing 18/703512E/4737375N

U.S.G.S. QUAD. MAP: Brattleboro

PRESENT FORMAL NAME: George's Mill and Vernon Post Office

COUNTY: Windham

ORIGINAL FORMAL NAME: Whithed's Mill/Whithed & Ball Mill

TOWN: Vernon

PRESENT USE: Vacant

LOCATION: East side of Route 142, Vernon Village

ORIGINAL USE: Gristmill/Sawmill/Blacksmithh

COMMON NAME: Whithed's Mill; Bushnell's Mill

ARCHITECT/ENGINEER: Unknown

PROPERTY TYPE: Gristmill foundations with dam; mill pond

BUILDER/CONTRACTOR: Marshall Whithed and David Ball

OWNER:
ADDRESS: Unknown

PHYSICAL CONDITION OF STRUCTURE:
Excellent ☐ Good ☐ Fair ☐ Poor ☒

Only foundation, wheel pit and mill pond are original; mill burned in 1962 and reconstructed in 1978

ACCESSIBILITY TO PUBLIC:
Yes ☒ No ☐ Restricted ☒

STYLE: No style

LEVEL OF SIGNIFICANCE:
Local ☒ State ☐ National ☐

DATE BUILT: 1839-1845; Mill burned in 1962, reconstructed on original foundation in 1978.

GENERAL DESCRIPTION:

Structural System

1. Foundation: Stone ☒ Brick ☐ Concrete ☐ Concrete Block ☐
2. Wall Structure
   a. Wood Frame: Post & Beam ☐ Balloon ☒
   b. Load Bearing Masonry: Brick ☒ Stone ☒ Concrete ☐ Concrete Block ☐
   c. Iron ☐ d. Steel ☐ e. Other:
3. Wall Covering: Clapboard ☐ Board & Batten ☐ Wood Shingle ☐ Shiplap ☐
   Novelty ☐ Asbestos Shingle ☐ Sheet Metal ☐ Aluminum ε Asphalt Siding ☐
   Brick Veneer ☐ Stone Veneer ☐ Bonding Pattern: Other:
4. Roof Structure
   a. Truss: Wood ☒ Iron ☐ Steel ☐ Concrete ☐ b. Other:
5. Roof Covering: Slate ☐ Wood Shingle ☐ Asphalt Shingle ☒ Sheet Metal ☐
   Built Up ☐ Rolled ☐ Tile ☐ Other:
6. Engineering Structure: 7. Other:

Appendages: Porches ☐ Towers ☐ Cupolas ☒ Dormers ☐ Chimneys ☐ Sheds ☐
Ells ☒ Wings ☐ Bay Window ☐ Other:

Roof Styles: Gable ☒ Hip ☐ Shed ☐ Flat ☐ Mansard ☐ Gambrel ☐ Jerkinhead ☐
Saw Tooth ☐ With Monitor ☐ With Bellcast ☐ With Parapet ☐ With False Front ☐
Other:

Number of Stories: N/A
Entrance Location: N/A
Number of Bays: N/A
Approximate Dimensions: 5' high x 4' wide

SIGNIFICANCE: Architectural ☐ Historic ☒ Archeological ☒

Historic Contexts: Industry

RELATED STRUCTURES: (Describe)

The former Whithed's (also Whithed & Ball and Bushnell's) Mill is located on the east side of Route 142 where the road makes a sharp bend in Vernon Village, Windham County. The complex consists of the original (1839-1845) granite gristmill foundation, reconstructed brick wheel pit with metal overshot wheel in poor condition; stone dam with metal sluice gate; and a mill pond encircled with cut-stone border. Above the mill's stone foundation, but still below-grade, is a brick-and-stone basement level with entrances on the east. The present 2-story, 5-bay-by-6-bay, gable-roofed building with decorative center cupola is a 1978 reconstruction of the original mill that burned in 1962. Historic photographs indicate that the mill building had clapboard siding on all three levels except at the northeast corner where the basement level was stone; a gable roof without cupola and 6/6 double-hung sash windows with wood frames. The building is currently vacant. Also on the property, but unrelated to the gristmill complex, is a one-story, gable-roofed non-historic building that houses the Vernon Post Office.

STATEMENT OF SIGNIFICANCE:

Born in Lincoln, Massachusetts in 1797, Marshall Whithed settled in Vernon in 1810 and soon became an enterprising businessman and landowner. In partnership with David Ball of Winchester, New Hampshire, he built a large 3-story, timber-framed mill on Town Brook, sometime between 1839 and 1845. The stone dam and wheel pit were reportedly constructed at a cost of $6,500, while the slate-roofed mill building cost $1,500. A blacksmith shop stood slightly away from the building.

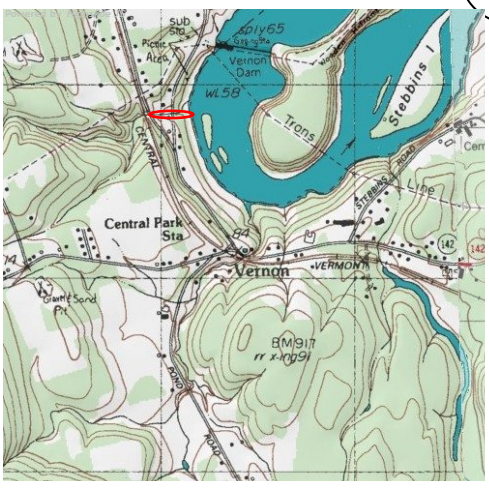
Power was furnished by a 25-foot overshot water wheel. The building's basement held the gristmill, a sawmill was at ground level, and there was a bone mill on the upper floor for grinding bones of dead animals to produce bone meal for fertilizer and chicken feed. By 1859, Marshall Whithed sold the mill and adjoining road to David Ball, who thereupon sold it to John Hunt for $600. Lafayette Whithed, Marshall's son, regained the property in 1867. The Whithed & Hunt Mill is shown in the Vernon Village inset on the Beers' Atlas of Windham County of 1869.

By the early 1900s, business had slowed at the mill, and the Whithed family, by then somewhat geographically dispersed, sold the mill property to the Town of Vernon in 1908. The town stored its snow roller and other equipment in the mill building. In 1927, Jason Bushnell, a Brattleboro grocer, bought the mill from the town for $700, and turned it into a private museum of his vast and varied collection of rural items. The mill burned in 1962, leaving only the dam, mill foundation, and wheel pit. A reconstruction of the old mill was built on site in 1978 and in the 1980s housed an acrylic housewares manufacturer, Clear Solutions, Inc. The building is currently vacant.

REFERENCES:

1928 Annual Report of the Financial Condition of the Town of Vernon; Walton's Vermont Register for Farmers, Businesses, and Professional Men.; Washburn, Artemus Henry, Esq. 1885 History of Town of Vernon. Miss A. M. Hemenway, publisher, Ludlow, VT.

MAP: (Indicate North in Circle)



SURROUNDING ENVIRONMENT:

Open Woodland ☐ Woodland ☐
Scattered Buildings ☒
Moderately Built Up ☐
Densely Built Up ☐
Residential ☐ Commercial ☐
Agricultural ☐ Industrial ☐
Roadside Strip Development ☐
Other:

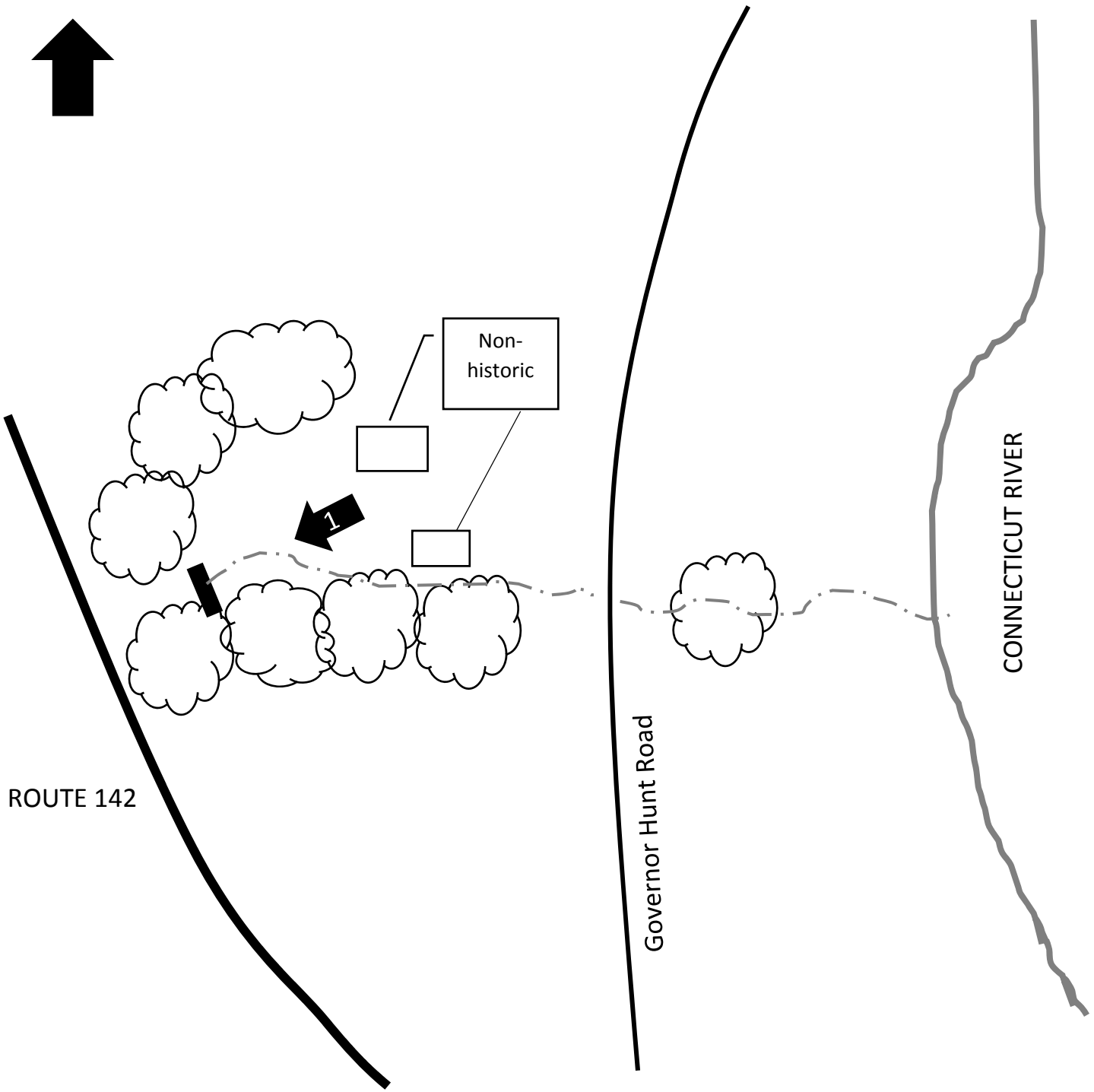
RECORDED BY:
G. Henry/E. Rankin

ORGANIZATION:
TRC Environmental for FirstLight

DATE RECORDED:
March 2014

Culvert on Gov. Hunt Road Photo Index

1. View of East Face, Looking Southwest (TRC March 2014)


Non-
historic
1
ROUTE 142
Governor Hunt Road
CONNECTICUT RIVER

Appendix E: Agency Correspondence

ORIGINAL

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

June 21, 2013

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First St NE Room 1A
Washington, DC 20426

Attn: Frank Winchell, Hydro Power

RE: Federal Energy Regulatory Commission Relicensing of the Turners Falls Hydroelectric Project
And Northfield Mountain Pumped Storage Project, Franklin County, MA. MHC # RC.1099.
FERC No. 1889-081 and No. 2485-063.

Dear Ms. Bose:

Staff of the Massachusetts Historical Commission (MHC), office of the Massachusetts State Historic Preservation Officer have reviewed the Project Notification Form (PNF), received by the MHC on June 3, 2013, and the MHC's files, for the project referenced above.

The MHC, as the office of the Massachusetts State Historic Preservation Officer, is reviewing and commenting on the project pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), to assist and advise the Federal Energy Regulatory Commission (FERC) in fulfilling its responsibilities.

The USGS maps provided in the PNF outline a proposed project area of potential effect. As project planning is refined, the MHC looks forward to reviewing additional information, including scaled existing and proposed conditions project plans, for any proposed new construction, demolition, rehabilitation or other activities, at the existing facilities, if any, that may cause effects to significant historic and archaeological resources. Please provide the MHC with the FERC's determination of the area of potential effect (36 CFR 800.4(a)(1)).

The PNF indicates that Firstlight has retained the TRC Companies as its cultural resources consultant. Project information should be provided to TRC to assist in its evaluation efforts for proposed impacts to significant historic and archaeological resources during the proposed cultural resource survey. TRC will apply for a State Archaeologist's Field Investigation Permit (950 CMR 70) to conduct the previously requested archaeological reconnaissance survey. The archaeological survey Research Team should include individuals with previous relevant experience in ancient and historical period archaeology of the glaciated Northeast and in the Connecticut River Valley region of New England (see 950 CMR 70.10). The MHC's review and comment on the proposed research design and methodology will assist FERC in developing the scope of the identification efforts (36 CFR 800.4(a)).

The MHC looks forward to reviewing the scope of the proposed identification and evaluation efforts proposed as part of the Firstlight Study Plans, including the State Archaeologist's permit application and archaeological research design and methodology, and the proposed scope for the historic properties identification effort, the research design and methodology, and CVs of the qualified professional historic

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

preservation consultants on the research team. The archaeological research design and methodology should include a description of TRC's facilities, equipment, staffing, and other resources necessary to undertake archaeological research, fieldwork, laboratory processing, analysis, and reporting to carry projects to completion in accordance with the Standards for Field Investigation (950 CMR 70.13). An adequate curatorial facility for the archaeological materials and records of the investigation should be located prior to submitting the permit application, with preference for curation within Massachusetts for the Massachusetts survey area.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800). Please contact Jonathan K. Patton at this office if you have any questions at this time.

Sincerely,

Brona Simon

Brona Simon
State Historic Preservation Officer
Executive Director
State Archaeologist
Massachusetts Historical Commission

xc: John Howard, Director FERC Hydro Compliance, Firstlight Power Resources GDF Suez
Charles Momney, Firstlight GDF Suez
Lana Khitrik, Gomez and Sullivan Engineers, P.C.
Mickey Marcus, New England Environmental, Inc.
Representative Stephen Kulik, Attn: Paul Dunphy
Karen Kirk Adams, USACOE-NED, Regulatory
Kate Atwood, USACOE-NED
Marc Paiva, USACO-NED
Cheryl White, Stockbridge-Munsee Tribal Historic Preservation Officer
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
Ramona Peters, Mashpee Wampanoag Tribe
John Eddins, ACHP
Giovanna Peebles, VT SHPO
Elizabeth Muzzey, NH SHPO
Bill Lellis, Acting Chief, Conte Anadromous Fish Laboratory
John Wilson, USFW
Local Historical Commissions: Towns of Northfield, Gill, Greenfield, Montague, and Erving

Document Content(s)

ORIGINAL

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

August 26, 2013

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First St NE Room 1A
Washington, DC 20426

Attn: Frank Winchell, Hydro Power

RE: Federal Energy Regulatory Commission Relicensing of the Turners Falls Hydroelectric Project And Northfield Mountain Pumped Storage Project, Franklin County, MA. MHC # RC.1099. **FERC No. 1889-081 and No. 2485-063.**

Dear Ms. Bose:

Staff of the Massachusetts Historical Commission (MHC), office of the Massachusetts State Historic Preservation Officer have reviewed the revised Proposed Study Plan dated August 14, 2013, received by the MHC on August 19, 2013, for the project referenced above.

Section 3.7 of the revised plan incorporates information included in the MHC's April 24 and June 21, 2013 comments. The results of the 2013 Full River Reconnaissance survey (Study No. 3.1.1; pp. 3-402 and 3-403) and an archaeological sensitivity assessment for the Fuller Farm property within the Northfield Mountain portion of the project area will be incorporated into the proposed archaeological reconnaissance technical report.

Scopes for the proposed identification and evaluation efforts proposed as part of the revised Proposed Study Plan, including the State Archaeologist's permit application and archaeological research design and methodology, and the proposed scope for the historic properties identification effort, the research design and methodology, and CVs of the qualified professional historic preservation consultants on the research team, should be submitted to the MHC for review and comment as they are developed.

The project area of potential effect for archaeological and historic resources is shown in figures 3.7.1-1 through 3.7.1-6 and 3.7.2-1 through 3.7.2-5. The project area of potential effect shown in these figures is adequate for preliminary identification efforts, although as project planning is refined, the MHC looks forward to reviewing additional information, including scaled existing and proposed conditions project plans, for any proposed new construction, demolition, rehabilitation or other activities, at the existing facilities, if any, that may cause effects to significant historic and archaeological resources. The MHC notes that Firstlight proposes to conduct a teleconference in October 2013 to discuss further refinements to the project area of potential effect. The MHC looks forward to further consultation with FERC on FERC's determination of the area of potential effect (36 CFR 800.4(a)(1)).

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The paper copy of the document received by the MHC includes only Appendices A and B. Copies of MHC comments on previous submittals for the project are not included in these appendices, although they may be included in Appendix H, Stakeholder Comments on Updated PSP. Appendix H was not included in the submittal to the MHC. To assist in future review of the project and consultation with FERC, the MHC would appreciate the incorporation of a separate cultural resources comments matrix into future project filings. The cultural resources comments matrix should include a list and summaries of all comment letters received to date from State Historic Preservation offices (MA, NH, VT), Tribal Historic Preservation Offices, local historical commissions and interested groups/individuals for potential project effects to cultural resources.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800). Please contact Jonathan K. Patton at this office if you have any questions at this time.

Sincerely,

Brona Simon

Brona Simon
State Historic Preservation Officer
Executive Director
State Archaeologist
Massachusetts Historical Commission

xc: John Howard, Director FERC Hydro Compliance, Firstlight Power Resources GDF Suez
Charles Momney, Firstlight GDF Suez
Lana Khitrik, Gomez and Sullivan Engineers, P.C.
Mickey Marcus, New England Environmental, Inc.
Representative Stephen Kulik, Attn: Paul Dunphy
Karen Kirk Adams, USACOE-NED, Regulatory
Kate Atwood, USACOE-NED
Marc Paiva, USACO-NED
Cheryl White, Stockbridge-Munsee Tribal Historic Preservation Officer
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
Ramona Peters, Mashpee Wampanoag Tribe
Doug Harris, NITHPO
John Eddins, ACHP
Giovanna Peebles, VT SHPO
Elizabeth Muzzey, NH SHPO
Victor Mastone, MBUAR
Bill Lellis, Acting Chief, Conte Anadromous Fish Laboratory
John Wilson, USFW
Local Historical Commissions: Towns of Northfield, Gill, Greenfield, Montague, and Erving

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

August 26, 2013

Lana Khitrik
Gomez and Sullivan Engineers, P.C.
1961 Wehrle Drive
Williamsville, NY 14221-5776

RE: Federal Energy Regulatory Commission Relicensing of the Turners Falls Hydroelectric Project And Northfield Mountain Pumped Storage Project, Franklin County, MA. MHC # RC.1099. **FERC No. 1889-081 and No. 2485-063.**

Dear Ms. Khitrik:

Staff of the Massachusetts Historical Commission (MHC), office of the Massachusetts State Historic Preservation Officer, have reviewed the revised Proposed Study Plan dated August 14, 2013, received by the MHC on August 19, 2013, for the project referenced above.

Three paper copies of the updated study plan, including only Appendices A and B, were received by the MHC. The MHC requires only one paper copy of complete project documents for review and comment.

For future project submittals, please submit one (1) paper copy of project documents, including all appendices, to this office. The submittal cover letter should reference MHC # RC.1099.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800). Please contact Jonathan K. Patton at this office if you have any questions at this time.

Sincerely,

Brona Simon

Brona Simon
State Historic Preservation Officer
Executive Director
State Archaeologist
Massachusetts Historical Commission

xc: Kimberly D. Bose, Federal Energy Regulatory Commission, Attn: Frank Winchell, Hydro Power
John Howard, Director FERC Hydro Compliance, Firstlight Power Resources GDF Suez
Charles Momney, Firstlight GDF Suez
Mickey Marcus, New England Environmental, Inc

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FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426
November 27, 2013

OFFICE OF ENERGY PROJECTS

Project No. 2485-063--Massachusetts
Project No. 1889-081--Massachusetts
FirstLight Hydro Generating Company

Reference: Concurrence on the Area of Potential Effects for the Turner Falls and Northfield Mountain Projects.

To the parties addressed:

We consulted with the Massachusetts, Vermont, New Hampshire State Historic Preservation Officers (SHPOs), along with the Narragansett Indian Tribe, Nolumbeka Project, FirstLight, and others with regard to the areas of potential effects (APEs) involving the relicensings for the Turner Falls Hydroelectric Project and the Northfield Mountain Pumped Storage Project (projects). Based on those consultations, we determine that the APEs should include all lands within the current project boundaries of the two projects, in addition to any other lands outside the project boundaries where historic properties could be affected by project-related adverse effects.

The projects' APEs include lands within Franklin County, Massachusetts, Windham County, Vermont, and Cheshire County, New Hampshire. On lands adjacent to the project boundaries, the APEs would also include an additional 10 meters (33 feet) of lands inland from the top of banks of the Connecticut River and associated tributaries. The enclosed maps demarcate the general geographic and topographic coverage of the APEs for these projects. (See enclosure maps).

At this time, we seek formal concurrence from the Massachusetts, Vermont, and New Hampshire SHPO on our defined APEs for the Turner Falls and Northfield Mountain projects.

If you have any questions, please contact Dr. Frank Winchell at 202-502-6104.

Sincerely,

Timothy J. Welch, Chief
West Branch
Division of Hydropower Licensing

Addressees:

Brona Simon, SHPO
Executive Director and State Archeologist
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125

Laura Trieschmann, SHPO
State of Vermont
Division for Historic Preservation
One National Life Drive, Floor 6
Montpelier, VT 05620-0501

Elizabeth Muzzey, SHPO
Director
New Hampshire Division of Historical Resources
State of Department of Cultural Resources
19 Pillsbury Street
Concord, NH 03301-3570

Enclosures: APE maps

cc: Mailing List
Public Files

Document Content(s)

Northfield Mountain Station
99 Millers Falls Road
Northfield, MA 01360
Ph: (413) 659-4489
Fax: (413) 659-4459
Email: john.howard@gdfsuezna.com

John S. Howard
Director FERC Hydro Compliance
Chief Dam Safety Engineer

December 5, 2013

Nadine Peterson
New Hampshire Division of Historical Resources
State Historic Preservation Office
19 Pillsbury Street
Concord, NH 03301-3570

VIA CERTIFIED MAIL

Re: FirstLight Hydro Generating Company, Turners Falls Hydroelectric Project (FERC Project No. 1889) and Northfield Mountain Pumped Storage Project (FERC Project No. 2485)

Dear Ms. Peterson:

On November 21, 2013, Geoffrey Henry and Ellen Rankin from TRC met with you and Edna Feighner to discuss the Area of Potential Effect (APE) for surveying historic structures, survey methodology, and reporting format in connection with the proposed relicensing of FirstLight Hydro Generation Company's (FirstLight) Turners Falls Hydroelectric Project and Northfield Mountain Pumped Storage Project. Your office asked that TRC submit a memorandum of the meeting for your review and concurrence. Accordingly, TRC has prepared the attached memorandum of the discussions of the meeting for your review and concurrence. FirstLight would appreciate obtaining your concurrence or suggested changes to the memorandum by January 6, 2014 by responding to Geoffrey Henry of TRC ghenry@trcsolutions.com.

One of the topics discussed was the status of a letter from the Federal Energy Regulatory Commission (FERC) requesting your concurrence with the proposed APE for historic structures. We note that FERC issued its letter requesting concurrence on November 27, 2013. I have attached a copy for your convenience in the event you haven't received it.

If you have any questions regarding the meeting memorandum, please contact me at the above address or Geoffrey Henry at ghenry@trcsolutions.com.

Please feel free to contact me if you have any questions.

Sincerely,

John Howard
Director FERC Hydro Compliance

cc: Edna Feighner

Enclosure

MEETING MEMO

MEETING WITH NEW HAMPSHIRE SHPO TO DISCUSS FIRSTLIGHT TURNERS FALLS/NORTHFIELD MOUNTAIN PROJECTS

ATTENDEES: Edna Feighner and Nadine Peterson, New Hampshire SHPO and Geoffrey Henry and Ellen Rankin, TRC Environmental

PLACE/DATE/TIME: New Hampshire SHPO, Concord, NH, November 21, 2013, 1:00 PM

---

1. Meeting was requested by TRC to discuss the FirstLight Turners Falls/Northfield Mountain APE for historic structures, survey methodology, and reporting format.
2. NH SHPO stated that they are awaiting the letter from FERC to confirm the APEs for the Projects.
3. TRC presented summary of windshield survey conducted 11/20/2013 within NH portion of the Project boundaries:
   a. Bridge piers, abutments, roadbed, and trestles of abandoned Boston & Maine Railroad line over the Connecticut River and through Town of Hinsdale.
   b. Bridge carrying Route 63 over Ashuelot River at Hinsdale.
   c. Gaging station just east of Route 63 bridge (south bank) at Hinsdale.
   d. Concrete culvert just west of Route 63 bridge (north bank) at Hinsdale.
4. TRC stated that FERC may request one report for all three (MA, VT and NH) SHPOs with one historic context but separate chapters for the NRHP evaluations for each state, with survey forms for each state attached as appendices. NHSHPO stated that they do not accept conventional survey reports as required by other SHPOs. Instead, they request all information be submitted on the NH SHPO "Project Area Form" found at http://www.nh.gov/nhdhr/programs/survey.htm. The Project Area Form is intended to minimize unnecessary survey work not consistent with the Project purpose and anticipated effects.
5. The Project Area Form should include a description of the project, geographic context, discussion of the 50+ year old resources in the APE, and an historic context relevant both to the survey area and the architectural resources identified. The historic context should utilize existing historic contexts (Ms. Peterson identified an existing NH railroad context), as well as Area Forms already completed for Hinsdale. The Project Area Form should conclude with recommendations on the need for further, more intensive survey to determine NRHP eligibility. The Project Area Form is submitted to NH SHPO for review by their DOE committee which meets twice-monthly.
6. Ms. Peterson stated that the anticipated project effects may determine TRC's recommendations for further survey efforts. For a re-licensing where there are no other anticipated actions (demolitions, construction, etc.), the Project Area Form may recommend no further survey work is warranted at this time. Ms. Peterson cautioned that the report should not use terms "effect" or "no effect" in accordance with Section 106 but rather "impacts" or "no anticipated consequences," as discussions of effects before NRHP determinations have been made are premature.

7. If normal project operations and variance in river flow may affect the B&M bridge piers/abutments in the CT River , then a recommendation should be made for intensive survey work for this resource. A Project Area Form for the Fort Hill Division of the B&M near Hinsdale was submitted to NH SHPO in 1994. Ms. Peterson stated that a new Project Area Form should be submitted updating the results of the 1994 survey.
8. Ms. Peterson stated that the Project Area Form is a planning document that may serve as the basis for NRHP decisions should there be future construction/demolition activities within the Project area that have the potential to affect historic resources.
9. NH SHPO requested TRC prepare a meeting memo and submit to them for review and concurrence for their project files.

VERMONT

State of Vermont
Division for Historic Preservation
One National Life Drive, Floor 6
Montpelier, VT 05620-0501
www.HistoricVermont.org

[phone] 802-828-3211
[division fax] 802-828-3206

Agency of Commerce and Community Development

July 15, 2013

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

Re: VT SHPO Comments on the June 28, 2013 Updated Proposed Study Plan for the Turners Falls (FERC No. 1889) and Northfield Mountain Pumped Storage (FERC No. 2485) Projects, First Light Power Resources.

Dear Secretary Bose:

Thank you for the opportunity to comment on the above referenced project.

The Vermont Division for Historic Preservation (Division) is providing the Federal Energy Regulatory Commission (FERC) with the following comments pursuant to 36 CFR 800.4, regulations established by the Advisory Council on Historic Preservation to implement Section 106 of the National Historic Preservation Act. Project review consists of assisting FERC in identifying the project's potential impacts to historic buildings, structures, historic districts, historic landscapes and settings, and known or potential archeological resources that are listed in or may be eligible for inclusion in the National Register of Historic Places (National Register).

As currently defined, the Cultural Resources Study Plan (Section 3.7) presented by First Light is limited to a Phase IA Archaeological Survey and a Reconnaissance Level Historic Resources Survey. While these study plan components represent necessary first steps in the cultural resource review process, they are first steps only and will by no means provide all the data necessary to identify and evaluate the full suite of cultural resources present in the Project area.

By definition, the Phase IA study will only provide background information on known archeological resources and a preliminary assessment of the potential location of additional archeological resources within the project area. Similarly, the Reconnaissance Level Historic Resource Survey will identify and compile information on known historic structures but not evaluate the structures to determine their eligibility to the National Register or assess the project's effect on National Register eligible or listed structures.

The Division would also like to clarify that our statements during the June 14, 2013 Study Plan conference call concerning an APE determination of 10 meters (33 feet) from the top of bank along the Project boundary were made in reference to a discussion of Phase IB site identification and Phase II site evaluation study efforts. In general terms, a Phase IA study usually includes a larger zone of review in order to identify the broadest spectrum of cultural resources that may be affected by any project.

The current Phase IA study plan includes provisions for further consultation with the relevant SHPOs, the Narrangansett THPO, and any other interested Native American tribes with regard to APE definition, the

development of a archeological sensitivity model, and an archeological field reconnaissance methodology. The Division looks forward to this consultation and recommends that a specific consultation schedule be provided in the Revised Study Plan. In addition, the Revised Study Plan should also provide specific reference to the development and implementation of the following Cultural Resource Study Plan components that will be necessary subsequent to the completion of the Phase IA:

- A Phase IB site identification survey within all archeologically sensitive areas and potential site locations within the APE that are actively eroding. This study should include strategies to implement deep testing methods for identification of deeply buried cultural components.

- Phase II site evaluation of any archeological site identified in the Project APE as a result of the Phase IB survey or any known site that is located within a portion of the APE that is actively eroding to determine their boundaries and eligibility for inclusion on the National Register of Historic Places.

- A phased plan to complete Phase II site evaluation of any remaining currently recorded archeological sites in the Project APE to determine their boundaries and eligibility for inclusion on the National Register of Historic Places.

- Identification of Traditional Cultural Properties.

- Historic Structures Assessment and Evaluation Report

The above studies will provide the basis for the development of a project specific Historic Properties Management as well inform on the development of Mitigation Plans and Programmatic Agreements to address any adverse effects to historic properties. Completion of these actions will ensure that this Projects relicensing fully considers potential impacts to historic properties in compliance with the National Historic Preservation Act.

Sincerely:
VERMONT DIVISION FOR HISTORIC PRESERVATION

Noelle MacKay
Acting State Historic Preservation Officer

Document Content(s)

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426
November 27, 2013

OFFICE OF ENERGY PROJECTS

Project No. 2485-063--Massachusetts
Project No. 1889-081--Massachusetts
FirstLight Hydro Generating Company

Reference: Concurrence on the Area of Potential Effects for the Turner Falls and Northfield Mountain Projects.

To the parties addressed:

We consulted with the Massachusetts, Vermont, New Hampshire State Historic Preservation Officers (SHPOs), along with the Narragansett Indian Tribe, Nolumbeka Project, FirstLight, and others with regard to the areas of potential effects (APEs) involving the relicensings for the Turner Falls Hydroelectric Project and the Northfield Mountain Pumped Storage Project (projects). Based on those consultations, we determine that the APEs should include all lands within the current project boundaries of the two projects, in addition to any other lands outside the project boundaries where historic properties could be affected by project-related adverse effects.

The projects' APEs include lands within Franklin County, Massachusetts, Windham County, Vermont, and Cheshire County, New Hampshire. On lands adjacent to the project boundaries, the APEs would also include an additional 10 meters (33 feet) of lands inland from the top of banks of the Connecticut River and associated tributaries. The enclosed maps demarcate the general geographic and topographic coverage of the APEs for these projects. (See enclosure maps).

At this time, we seek formal concurrence from the Massachusetts, Vermont, and New Hampshire SHPO on our defined APEs for the Turner Falls and Northfield Mountain projects.

CONCUR
Vermont Division for Historic Preservation
State Historic Preservation Office
1/9/14
Date

If you have any questions, please contact Dr. Frank Winchell at 202-502-6104.

Sincerely,

Timothy J. Welch, Chief
West Branch
Division of Hydropower Licensing

Addressees:

Brona Simon, SHPO
Executive Director and State Archeologist
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125

Laura Trieschmann, SHPO
State of Vermont
Division for Historic Preservation
One National Life Drive, Floor 6
Montpelier, VT 05620-0501

Elizabeth Muzzey, SHPO
Director
New Hampshire Division of Historical Resources
State of Department of Cultural Resources
19 Pillsbury Street
Concord, NH 03301-3570

Enclosures: APE maps

cc: Mailing List
Public Files

Document Content(s)