FORM A - AREA

MASSACHUSETTS HISTORICAL COMMISSION 80 BOYLSTON STREET, BOSTON, MA 02116



MDC - TRA, MASS.

F7-2,7-3,7-4,7-5,7-6,7-7, 7-8,7-9,7-10,7-11 F

Town Southborough Name of Area (if any)

Sudbury Dam Historic District

Present Use water supply minative des sub as notably

General Date or Period 1894-1940

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General Condition good

and real activation activity and the Acreage

FRM.U / SBR.F

Recorded by Martha Bowers

Organization Louis Berger & Associates, Inc.

m Gar Date February 1984; revised 1989

Sketch Map. Draw a general map of the area indicating properties within it. Number each property for which individual inventory forms have been completed.

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3000	BI	Mountain
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k / k	228	MASSACHO
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NATIONAL REGISTER CRITERIA STATEMENT (if applicable)

The Sudbury Dam Historic District is significant as representing the intersection of three phases in the development of the metropolitan Boston water supply system: construction of Sudbury Res ervoir (1893-98), last and largest in the "additional supply system" begun in 1875; the Weston Aqueduct (D12-1), built in 1901-3 to augment the supply from Sudbury Reservoir to Chestnut Hill and to supply the northern distribution facility at Spot Pond; and the Hultman Aqueduct, built in 1939-40 to convey water directly from the Wachusett Aqueduct (see Wachusett Aqueduct Historic District) to the Weston and to distribution in the first of a series of bypasses of existing portions of the system. Dominating the district is Sudbury Dam (F7-2), with its 1800-foot earth embankment and 300-foot spillway, the largest dam structure by far built to that time in the water supply system. The rising granite face of the overfall likely suggested the theme for other construction at the site, beginning with the dam's gate chamber (F7-3). The structure's (see continuation sheet)

ARCHITECTURAL SIGNIFICANCE Describe important architectural features and evaluate in terms of other areas within the community.

The district covers about 1/4 square mile below (and including) Sudbury Dam (F7-2), on Stony Brook. The dam is the dominant feature, consisting of an 1800-foot earthen embankment with a 300-foot, rubble and cut stone spillway near the center, the whole rising some 70 feet above the valley floor. Below the dam are the structures associated with several phases in the development of the water supply system. The eastern edge of the area is bounded by U.S. Route 30 across which are located several light industries. The valley is roughly bisected by a granitelined open channel leading from the spillway to Framingham Reservoir No. 3. The open channel is lined with arborvitae and conifers; and tall maples line the road that leads from Route 30 throug the valley to the dam. The Route 30 bridge (F7-5) is a two-arch span of granite-faced concrete, which carries that road over the open channel. The next structures encountered are agroup of three farm structures (F7-9) that were moved from their original location, near the site of the dam, during development of the reservoir. The house, appearing to date from the late 19th century, is a two-story, hipped-roofed frame structure. Behind the house are two gable-roofed outbuildings, of the same general period and frame construction. See continuation sheet)

HISTORICAL SIGNIFICANCE Explain historical importance of area and how the area relates to the development of other areas of the community.

The Sudbury Dam historic district was "developed" in increments betinning about 1894 and achieved its present character in 1940. The features associated with the Sudbury dam and Weston aqueduct were built under the Metropolitan Water Board, with Wheelwright & Haven of Boston as architects for the former, and Shepley, Rutan & Coolidge for the latter. Hultman Shaft 4 was designed by the engineering staff of the Metropolitan District Water Supply Commission, with Densmore, LeClear & Robbins, of Boston, as architects.

BIBLIOGRAPHY and/or REFERENCES Metropolitan Water Board Annual Reports, 1897, 1898 Metropolitan Water & Sewerage Board Annuel Reports 1904, 1915 Metropolitan District Water Supply Commission Annual Reports, 1940-45. FRM.U / SBR.F

MDC - TRA, MASS.

INVENTORY FORM CONTINUATION SHEET

MASSACHUSETTS HISTORICAL COMMISSION Office of the Secretary, Boston

Community:	Form No:
Southborough	F
Property Name: Sudbury Da District	am Historic

Indicate each item on inventory form which is being continued below.

NATIONAL REGISTER CRITERIA STATEMENT:

simple, rectangular form, gray grantie exterior and round-arched openings were adopted, with variation, in the Weston head chamber (F7-7) and Hultman Shaft 4 headhouse (F7-8). Together these structures illustrate the continuity of form and materials that characterized the metropolitan water supply system through completion of the Quabbin system in the 1940's. Contributing features include the single-arch Section 1 bridge (F7-6), and the doublearch Route 30 bridge (F-7-5). The two most recent buildings (F7-10,11), however, are singularly intrusive, their forms, scale and materials assembled without regard to the architectural traditions and standards demonstrated in the major structures in the district. The district retains integrity of location, design, materials, and workmanship, and meets National Register criteria A and C.

ARCHITECTURAL SIGNIFICANCE:

Northwest of the farm structures, on the east side of the drive, are two non-contributing buildings, one containing fluoridation facilities, the other housing laboratory and administrative space. Built in 1975 and 1938, respectively, these are one-story flat-roofed buildings with exterior walls of textured ochre-hued concrete.

Near the foot of Sudbury Dam, the road crosses the open channel on a single-arch concrete bridge faced with granite. This bridge (called Section 1 bridge (F7-6)) was built in 1902-3 during construction of the Weston Aqueduct. North of the bridge is a circle, with a short drive leading east to the Hultman Shaft 4 headhouse (F7-8), erected in 1940. The rectangular hipped-roofed building is three bays deep, of concrete construction with coursed gray granite exterior facing. The side walls have very tall, round-arched windows with flush keystones. The copper entrance frontiepiece at the west end features double doors below a triangular pediment. North of the Shaft 4 headhouse is the Weston Aqueduct head chamber (F7-7). Built in 1903, the building is square in plan, with a concrete substructure and superstructure clad with coursed gray granite ashlar. The rectangular engrance is framed by a heavy, slightly projecting architrave with prominent keystone, and the corners are quoined. The narrow eaves of the hipped, clay tile roof feature a dentil cornice of granite. The side walls are divided into three bays, with tall round-arched windows. At the north end of the dam is a low, hipped-roofed granite building dug partially into the hillside. It was built as a storehouse (F7-4) in 1900, and from 1916 to about 1970 also served as a lightning arrester chamber for the Sudbury hydroelectric power facility contained within the gatehouse. The Sudbury dam gatehouse (F7-3) is located on the dam at the north end of the spillway. It is nearly square in plan, with tiled hipped roof and coursed gray granite exterior walls. Each elevation is divided into three bays with round-arched window and door openings. At the northeast corner is a stylized stone dolphin of gray granite, shaped rather like a large console bracket. The gatehouse was modified in 1915 for hydroelectric power generation, but with discontinuation of power production in the early 1970's, the generating equipment was removed.

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CHESTNUT HILL RESERVOIR HISTORIC DISTRICT

Property Name	<u>Inv.</u> #	Date	NR/C/NC	Town
Effluent Gatehouse #2	13-2	1900-1901	C	Boston (Brighton)
Low Service Pumping Station	13-3	1001-6881	C	Boston (Brighton)
High Service Pumping Station	13-4	1888	C	Boston (Brighton)
Sudbury Terminal Chamber	13-5	1876-1878	C	Newton
Connection Terminal	13-6	1901	C	Boston (Brighton)
Effluent Gatehouse #1	13-7	1869-1870	C	Boston (Brighton)
Intermediate Gatehouse	13-8	1868-1870	C	Boston (Brighton)
Chestnut Hill Reservoir	13-9	1865-1870	C	Boston (Brighton)
Pipeyard	13-10	mid 20th c.	NC	Boston (Brighton)
Garage	13-11	ca. 1866	C	Boston (Brighton)

		SUDBURY DAM HISTORIC DISTR AREA F	HISTORIC DISTRICT AREA F	Ţ
Property Name	Inv. #	Date	NR/C/NC	Town
Sudbury Dam	7-2	1893-1898	C	Southborough
Gatehouse	7-3	1897	C	Southborough
Storehouse	7-4	1900	C	Southborough
Route 30 Bridge	7-5	1898	C	Framingham
Section 1 Bridge	7-6	1902-1903	C	Southborough
Weston Head Chamber	7-7	1903	C	Southborough

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SUDBURY DAM HISTORIC DISTRICT (CONTINUED)

<u>Property Name</u> Hultman Shaft #4 Farmhouse/barns Laboratory #1	<u>Inv. #</u> 7-8 7-9 7-10	DateNR/C/NCTownDateNR/C/NCTown1939-1940NCSouthbca. 1880CSouthb1975NCSouthb	NR/C/NC NC NC	<u>Town</u> Southborough Southborough Southborough	
		WACHUSETT DAM HISTORIC AREA G	A G	СТ	
Property Name	<u>Inv. #</u>	Date	NR/C/NC	Town	
Wachusett Dam	9-2	1900-1906	C	Clinton	
Central Mass. Railroad Bridge	9-3	1905	C	Clinton	
Grove St. Bridge	9-4	1904	C	Clinton	
Wach. Lower Gate Chamber & Powerhouse	9-5	1903-1904	C I	Clinton	
Lightening Arrestor Chamber	9-6	1911	C	Clinton	
Maintenance Buildings	9-7	ca, 1920	NC	Clinton	
	MIDDLE	MIDDLESEX FELLS RESERVOIR AREA H	RESERVOIRS HISTORIC DISTRICT AREA H	DISTRICT	
Property Name	Inv. #	Date	NR/C/NC	Town	
Spot Pond Reservoir	14-2	1870	C	Stoneham	
Pumping Station	14-3	0061-8681	NR 1985	Stoneham	
East Gatehouse	14-4	1897	C	Stoneham	

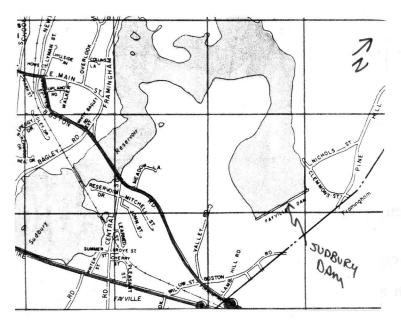
Owner

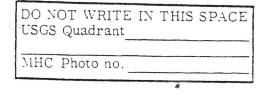
FORM F - STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION Office of the Secretary, State House, Boston



4. Map. Draw sketch of structure location in relation to nearest cross streets, buildings, other structures, natural features. Indicate north.





In Area no,	Form no.
7-1	7-2

1. Town Southborough

Address North of U.S. Rte 30, in
village of Fayville
Name Sudbury Dam
Present use Dam
Present owner MDC-Boston

3. Type of structure (check one)

	bridge		pound	
	canal	andread and a state of the stat	powder house	and the second second second
	dam	×	street	$(\mathbf{x}_{i},\mathbf{x}_{i}) \in \mathcal{X}_{i} \in \mathcal{X}_{i} \in \mathcal{X}_{i}$
	fort		tower	And the second second second second
•	gate		tunnel	
	kiln		wall	and the second sec
	lighthouse		windmill	The second secon
				and the second
	other			

5. Description

Date 1893-1898

SourceMetro. Water Board, 3rd Annual

Report (1898): 37, 64, 72

Construction material <u>Earth</u>, <u>concrete</u>, rubble and cut stone Dimensions <u>1865' at Water line</u>, with 300' spillway, approx. 70' high Setting <u>In Broad Valley</u>, <u>above Sud-</u> bury Dept. Offices-area Landscaped with maples and conifers

Condition Good

6. Recorded by M.H.Bowers

Organization Louis Berger & Associates

Date February 1984

3/73

7. Original owner (if known) Metropolitan Water Board

Original use To dam Stony Brook on the North Sudbury Watershed

8. Historical significance

This dam was built to create Sudbury Reservoir, and thus collect water from the Stony Brook branch of the Sudbury River (the south branch had been developed previously through construction of Reservoirs #1, 2, and #4). Utilization of the Sudbury River was begun by the city of Boston, which built the south Sudbury Reservoirs, Sudbury Aqueduct, and Framingham Reservoirs #1, 2, 3 and 4 in the 1870's. With creation of the Metropolitan Water District, these, as well as the Sudbury Reservoir and Dam (then under construction) were taken from Boston, and the latter were completed under the Metropolitan Water Board.

The dam consists of an earth embankment with a concrete core wall, and a 300' spillway of rubble and cut stone at the center. At the north end of the spillway is the gatechamber (see structure form). It was built by Moulton & O'Mahoney of Boston.

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

Metropolitan Water Board, 2nd Annual Report (1897):13; 3rd Annual Report (1898):37, 64, 72. Metropolitan Water Board contract with Moulton & O'Mahoney, 27 July 1893. MDC Drawing Files, Case 19, Drawer 101.

FORM F - STRUCTURE In Area no. Form no. 7-1 7-3 JN 1. Town Southborough Address North of U.S. Rte 30, village of Fayville Name Sudbury Dam Gatehouse Present use Not in service Present owner MDC-Boston 3. Type of structure (check one) bridge pound canal powder house dam street fort tower gate in tunnel ngs, kiln wall cate lighthouse windmill other Gatehouse 5. Description Date 1897 Source Metro. Water Board, 3rd Annual Report (1898): 65, 66 Construction material Concrete, Granite, Brick Dimensions Setting At north end of Sudbury Dam Spillway Condition Good DO NOT WRITE IN THIS SPACE 6. Recorded by M.H.Bowers USGS Quadrant Organization Louis Berger & Associates MHC Photo no. Date February 1984

7. Original owner (if known) Metropolitan Water Board

Original use Control flow of water thru Sudbury Dam into Weston Aqueduct and waste channel

Subsequent uses (if any) and dates Weston Aqueduct Control House, 1907-c.1940?; Hydropower Facility, 1916-c. 1970

8. Historical significance

This structure, located at the north end of the Sudbury Dam spillway, contains the mechanism for opening and closing the gates that allow water to flow through the dam into the waste channel leading to Framingham Reservoir No. 3. After 1907 it also served as the control house for the Weston Aqueduct, put in service four years previously. In 1915-16, the gatehouse was remodeled for hydroelectric power generation. This work included the construction of surge tanks and installation of three generators (plus two exciters) from Westinghouse, three vertical S. Morgan Smith turbines, and two step-up transformers. Transmission of power began in 1916, and continued until the early 1970's when all generating equipment was removed.

The superstructure of the gatehouse was designed by the Boston firm of Wheelwright & Haven. Contractor for the original construction was J.W. Bishop & Co., of Worcester. The building is square in plan, with tiled hipped roof and walls of gray, coursed ashlar granite. Each elevation is divided into 3 bays, and all openings are round-arched with keystones. The dentil cornice is also of granite, as are the half-round sills. At the northeast corner is a granite dolphin-like "gargoyle" shaped rather like a large inverted console bracket. A large metal plaque with the state emblem commemorates construction of the dam and gatehouse.

The open interior contains three original geared floorstands by which to operate the gates. A portion of the floor is slightly elevated on tile, and marks the former location of the hydropower generators. A manual chain hoist hangs from an I-beam, which is run on I-beams set along the side walls. The ceiling is faced with narrow beaded board. On the upstream wall is a truncated stone chimney, supported on heavy, curved granite brackets. A double-walled communication booth also remains.

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

Metropolitan Water Board, 3rd Annual Report (1898):65,66. Metropolitan Water & Sewerage Board, 15th Annual Report (1915): 54, 55, 56ff. MDC Drawing Files, Case 19, Drawers 29, 101. MWB Contract with J.W. Bishop & Co., 9 April 1897.

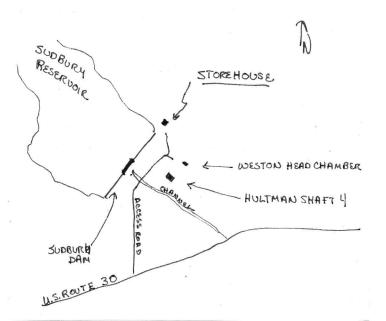
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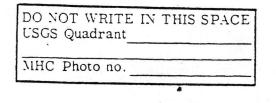
FORM F - STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION Office of the Secretary, State House, Boston



4. Map. Draw sketch of structure location in relation to nearest cross streets, buildings, other structures, natural features. Indicate north.





In Area no. Form no. 7-1 7-4

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1.	Town Southborough
	Address North of U.S. Rte 30,
	village of Fayville
	Name Sudbury Dam Storehouse
	Present use Storehouse
	Present owner MDC-Boston
3.	Type of structure (check one)
	bridge pound canal powder house dam street fort tower gate tunnel kiln wall lighthouse windmill
	other Storehouse
<u>5</u> .	Description
	Date1900
	Source Metro.Water & Sewerage
	Board, 15th Annual Report (1915): 56 Construction material <u>Concrete</u> , <u>Quarry</u> Faced stone, brick Dimensions <u>19'x13'</u> (interior measure- ments) Setting North end of Sudbury Dam Condition <u>Fair-good</u>
6	Recorded by M. H. Bowers
	INCLUSION IN DOWNERS

necoraca by_			
Organization_	Louis Berger & Associates	ouis Berger & Associates	
Date	February 1984	oruary 1984	

7. Original owner (if known) Metropolitan Water Board

Original use Storage of stop planks for Sudbury Dam

Subsequent uses (if any) and dates Part used as Lightning Arrester House, 1916 - c. 1973

8. Historical significance

This structure was originally built to house stop planks used in the Sudbury Dam Gatehouse in 1915. After the Edison Electric Illuminating Co. contracted to purchase electricity, the Sudbury Dam Gatehouse was remodeled to include hydropower turbines and generators. At that time, the storehouse was partly converted for use as a lighting arrester house. As such, it protected the power facility from electrical surges caused by lighting during storms. Most of the electrical equipment has been removed, and the structure now serves primarily for miscellaneous storage.

The one-room structure has exterior walls of quarry-faced gray granite, a concrete floor, and a wood-framed, hipped roof. The foundation is dug into a bank that rises to the north. At the northwest corner, the concrete chamber added during modification in 1915 contains remains of electrical apparatus.

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

Metropolitan Water & Sewerage Board, 15th Annual Report (1915):56. MDC Drawing Files, Case 19, Drawer 60

Form no.

7-5

7-1

FORM F - STRUCTURE In Area no. MASSACHUSETTS HISTORICAL COMMISSION Office of the Secretary, State House, Boston 1. Town Framingham Address Mass. Route 30, below intersection w/Pine Hill Road Name Route 30 Bridge Present use vehicular bridge Present owner MDC-Boston bridge canal dam fort 4. Map. Draw Sketch of Structure rocation in gate relation to nearest cross streets, buildings, kiln other structures, natural features. Indicate lighthouse north. SUDBURY RESERVOIR, 5. Description ROUTE 30 FROMINGUOM RESERVOIR #3 ROTE 30 BRIDGE ROUTE

3. Type of structure (check one) pound powder house street tower tunnel wall windmill other Date 1898_____ Source Desmond Fitzgerald, Internal Report to F.P. Stearns, 1898 Construction material concrete, granite Dimensions Settingnear light industrial complex Condition good

6. Recorded by M.H.Bowers

Organization Louis Berger & Associates

Date January 1984

(over)

MASS PIKE

USGS Quadrant

MHC Photo no.

DO NOT WRITE IN THIS SPACE

7. Original owner (if known) Metropolitan Water Board

Original use vehicular bridge

Subsequent uses (if any) and dates

8. Historical significance.

This twin-arch concrete and granite gridge is believed to have been built in 1898 as part of the Sudbury Reservoir project. Upon completion of the reservoir and dam, an open channel was excavated from which waste water could be discharged into Framingham Reservoir No. 3. This bridge appears to have been built to carry traffic on Route 30 over the open channel. In form and materials it resembles other arched spans built in the Metropolitan Water System in the late 19th and early 20th centuries.

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

Desmond Fitzgerald, Internal Report to Frederic P. Stearns, June 1898.

SBR.912

FORM F - STRUCTURE		In Area no.	Form no.	
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and the second s	1. Town Southbo	rough		
	Address Nort	h of U.S.30,	Village of	
	Fayvill	e		
MILE STATE	Name Bridge	on Section 1,	Weston Aque	edu
and the second sec	Present use	vehichlar bri	idge	
The second second	' Present owner	MDC-Boston		
		HDC DOSCON		
	eria dalah <u>ter fader</u> a bela ka			
	3. Type of struct	are (check one)	
	bridge ,	pound		
	canal		house	
A THE A	- dam	street		
	- dam fort	tower	-	
	n gate	tunnel wall	-	
	gs, kiln ate lighthouse		ill -	
north.			-	
E B B C LEWENT ST.	other			
Part Userer F				
DOBURY EQUOIR	5. Description			
4 WESTON WAUEN	Date 1902-03	1		
Headory E				
	Source_Metr	o. Water & S		
PLEASANT	Contract with			
PLEASANT ST. PLEASANT ST.	Construction n			
	Dimensions			
	setting <u>near</u>		ury Dam	
FRAMINGHAM RES. # 3	Condition_good	1		
DO NOT WRITE IN THIS SPACE USGS Quadrant	6. Recorded by	M.H.Bowers		
MHC Photo no.	Organization	ouis Berger	& Assoc.	
	Date Februar	1004		

7. Original owner (if known) Metro. Water & Sewerage Board

Original use To carry a service drive over waste channel below Sudbury Dam

Subsequent uses (if any) and dates

8. Historical significance

This concrete and granite, single-arch span was built as part of work on Section 1 of the Weston Aqueduct. At this section, an outlet chamber, head chamber and other features were constructed, requiring a realignment of a portion of the brook channel leading to Framingham Reservoir #3. To provide a crossing over the channel, the bridge was built in 1902-1903 by T.H. Gill & Co., of Somerville. Its form and construction are typical of other highway bridges built by the Metropolitan Water Board between 1895 and c. 1910. Although part of the Weston Aqueduct construction phase, the bridge is by virtue of its location a contributing element in the complex of structures at Sudbury Dam (see Area Form).

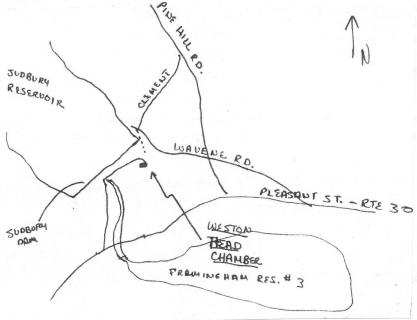
9. Bibliography and/or references such as local histories, deeds, assessor's records, early maps, etc.

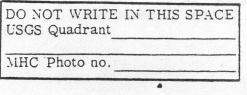
Metropolitan Water & Sewerage Board, 3rd Annual Report (1904):116 MWSB contract with T.H. Gill & Co., 19 Jan 1902

FORM F - STRUCTURE In Area no. Form no. 7-1 7-7 MASSACHUSETTS HISTORICAL COMMISSION Office of the Secretary, State House, Boston 1. Town Southborough Address village of Fayville, north of U.S. 30 Name Weston Head Chamber Present use Head Chamber Present owner MDC-Boston 3. Type of structure (check one) bridge pound canal powder house dam street fort tower gate tunnel wall kiln windmill lighthouse other aqueduct head chamber 5. Description Date 1903 SourceMetro. Water & Sewerage Bd. 3rd Annual Report (1904): 132-3. PLEASOUT ST. - RTE 30 Construction materiaboncrete, granite, brownstone, clay tile Dimensions 26'x30' Setting northeast of Sudbury Dam: edge of wooded area Condition very good 6. Recorded by M.H.Bowers Organization Louis Berger & Assoc. Date February 1984



4. Map. Draw sketch of structure location in relation to nearest cross streets, buildings, other structures, natural features. Indicate north.





7. Original owner (if known) Metropolitan Water and Sewerage Board

Original use To screen flow of water into Weston Aqueduct from Sudbury

Reservoir

Subsequent uses (if any) and dates

8. Historical significance

This head chamber is an integral part of the Weston Aqueduct, which was put into operation in 1903. The chamber contains screens and hoisting mechanisms. The superstructure was one of several structures designed for the Weston Aqueduct project by Shepley, Rutan & Coolidge of Boston. It was built by C.A. Dodge & Co., also of Boston. The style is adapted from the Renaissance Revival popular at the time and used with variations throughout the Metropolitan water system during this period. Unlike other structures on the Weston System, however, the head chamber utilizes round-arched windows and monochrome gray granite, in stylistic conformance with nearby structures associated with Sudbury Reservoir (designed by Wheelwright & Haven in the mid-1890's). The smooth coursed-ashlar walls are articulated by slightly projecting quoins, beltcourse and keystones, and a slightly splayed entrance architrave. Granite is also used for the dentil frieze below a metal cornice and tiled hipped roof. The windows are wood, casement-type, with 2/2 lights below blind Tympana. The interior features a concrete floor, brick walls, brownstone sills, and beaded board ceiling. A stone course is projected on brick corbelling on east and west walls, and supports track for an I-beam from which is hung a chain hoist and pulley for raising and lowering screens. A truncated chimney, with opening for a stove flue, is supported on two I-beams spanning the width of the room.

Actively used, and well-maintained, this structure is an important element in the group of structures at Sudbury Dam (see Area Form).

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

Metro. Water & Sewerage Board, 3rd Annual Report (1904):132-34 MWSB Contract with C.A. Dodge & Co., 6 July 1903 MDC Drawing Files, Case 19, Drawer 106, Plan Section & Elevations.

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Form no.

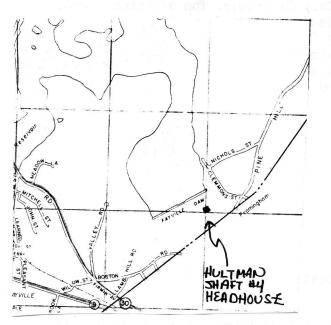
7-8

FORM F - STRUCTURE

MASSACHUSETTS HISTORICAL COMMISSION Office of the Secretary, State House, Boston



4. Map. Draw sketch of structure location in relation to nearest cross streets, buildings, other structures, natural features. Indicate north.



DO NOT WRITE USGS Quadrant	IN THIS SPACE
MHC Photo no.	

Town_	Southborough	
Addres	^{ss} North of U.S. Rte. 30, i	n
villa	ge of Fayville	
Name_	Hultman Shaft #4 Headhous	е

In Area no.

7-1

Present use Headhouse

Present owner MDC-Boston

3. Type of structure (check one)

bridge	pound	
canal	powder house	
dam	street	
fort	tower	
gate	tunnel	
kiln	wall	
lighthouse	windmill	
0		

other Headhouse

5. Description

Date 1939-1940

Source Metro. District Water Supply

Commission, Annual Reports 1940-45 (1945): 12 Construction material Concrete, Granite

Dimensions

Setting <u>Rising</u> ground north of waste channel to Frame. Res. #3 Condition Excellent

6. Recorded by Martha H. Bowers

Organization Louis Berger & Assoc.

Date March 1984

(over)

7. Original owner (if known) Metro. District Water Supply Commission

Original use Diversion of water from Hultman Aqueduct to Weston Aqueduct

Subsequent uses (if any) and dates

8. Historical significance

This structure was built in 1940 as part of construction of the Southborough Tunnel section of the Hultman Pressure Aqueduct, which extends from the Wachusett Aqueduct open channel to Norumbega Reservoir in Weston. At Shaft #4, a portion of the Hultman water is diverted into the Weston Aqueduct. The structure contains five valves with floorstands, two blow-off valves (to release pressure) and a large traveling crane suspended from I-beams. In the northwest corner is a spiral stair leading to a 200' dry shaft and pump room. Steel roof trusses are coated with gunite.

The exterior of Shaft #4 headhouse continues architectural themes displayed in the earlier, nearby Sudbury Dam Gatehouse and Weston Aqueduct head chamber. The rectangular structure is 3 bays long, with a central entrance on the west side. The exterior is faced with coursed grey granite ashlar, and has a standing-seam copper hipped roof. The windows are very tall, with round arches. The entrance features a pedimented, double doorway framed with fluted plasters and flanked by tall sidelights, all of which are executed in copper. Two large octagonal lanterns are hung from the wall on either side of the entrance.

Contractor for the work was John F. Griffin Co., Cambridge. The architects were Densmore, LeClear & Robbins, of Boston. The designs for the superstructures were originally developed in 1928, during planning for construction of the Ware-Wachusett Tunnel and its westward extension to Quabbin Reservoir. Similar structures (in terms of exterior treatment) are found at Shaft #1 and Shaft #8 of the Quabbin Aqueduct, both of which were built 1929-32.

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

Metropolitan District Water Supply Commission, Annual Reports for the 1940-1945 (1945): 12, 29.