PH0169013 DATA SHEET ? 1920

Form 10-306
(Oct. 1972)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY – NOMINATION FORM

FOR FEDERAL PROPERTIES

(Type all entries - complete applicable sections)

STATE: Massachusetts
COUNTY: Essex
FOR NPS USE ONLY
ENTRY DATE: 10/15/66

SEE INSTRUCTIONS

1. NAME

COMMON: Saugus Iron Works National Historic Site
AND/OR HISTORIC: Hammersmith

2. LOCATION

STREET AND NUMBER: 244 Central Street (Park Headquarters)
CITY OR TOWN: Saugus
CONGRESSIONAL DISTRICT:
STATE: Massachusetts — CODE: 25
COUNTY: Essex — CODE: 009

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP		STATUS	ACCESSIBLE TO THE PUBLIC
[XX] District [ ] Building	[XX] Public	Public Acquisition:	[ ] Occupied	Yes:
[ ] Site [ ] Structure	[ ] Private	[ ] In Process	[ ] Unoccupied	[X] Restricted
[ ] Object	[ ] Both	[ ] Being Considered	[XX] Preservation work in progress	[ ] Unrestricted
				[ ] No

PRESENT USE *(Check One or More as Appropriate)*

[ ] Agricultural	[XX] Government	[X] Park	[ ] Transportation	[ ] Comments
[ ] Commercial	[XX] Industrial	[ ] Private Residence	[ ] Other *(Specify)*	
[XX] Educational	[ ] Military	[ ] Religious		
[ ] Entertainment	[X] Museum	[ ] Scientific		

4. AGENCY

National Park Service
REGIONAL HEADQUARTERS: *(If applicable)* North Atlantic Region
STREET AND NUMBER: 150 Causeway Street
CITY OR TOWN: Boston
STATE: Massachusetts 02114 — CODE: 025

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC: Essex County Registry of Deeds
STREET AND NUMBER: 32 Federal Street
CITY OR TOWN: Salem
STATE: Massachusetts 01970 — CODE: 025

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:
DATE OF SURVEY: [ ] Federal [ ] State [ ] County [ ] Local
DEPOSITORY FOR SURVEY RECORDS:
STREET AND NUMBER:
CITY OR TOWN:
STATE: CODE:

RECEIVED DEC 30 1975 NATIONAL REGISTER

FOR NPS USE ONLY
ENTRY NUMBER
DATE

STATE: Massachusetts
COUNTY: Essex

7. DESCRIPTION

CONDITION	(Check One)					
	☐ Excellent	☐ Good	☐ Fair	☒ Deteriorated	☐ Ruins	☐ Unexposed
	(Check One)		(Check One)			
	☒ Altered	☐ Unaltered	☐ Moved	☒ Original Site		

DESCRIBE THE PRESENT AND ORIGINAL *(if known)* PHYSICAL APPEARANCE

Saugus Iron Works located on the south bank of the Saugus River, is a careful-though partly conjectural-reconstruction based on archeologically excavated foundations and traces of the major portions of New England's earliest most sophisticated and integrated ironworking plant. The reconstruction completed in 1954, was deemed well done but due to an extended period of practically no maintenance, the buildings and their associated machinery are in a fair to very poor condition. The following structures and site comprise the Saugus Iron Works.

1. Ironmaster's House, Building No. 1 - Over the years, the Ironmaster's house was extensively altered by its various occupants. In 1915 the house was restored by Wallace Nutting to what he believed to have been its 17th century appearance. At the same time, however, a later addition to the house was enlarged and remodeled into a caretaker's wing. The house consists of the original four rooms and entry hall, a rear lean-to which was added in either the late 17th century or the early 18th century, and the west wing which was enlarged in 1915. The gound floor of the original section is exhibited as a historic house with period furnishings. The remainder of the house, the lean-to, and the west wing are used for storage, administrative offices, and public rest rooms. Present condition of the house is good.

Significance: 2nd Order
Recommended treatment: Preservation
Preliminary Cost Estimate for Above: $100,000
Photograph enclosed

- - - - - - - - - - - - - - - - - - -

2. Slag Pile, Building No. 16 - The slag pile is composed of original materials but is presumedly smaller today than it should be. Weathering action and the fact that some of the material had been removed for fill has left the slag pile somewhat depleted. Despite its diminished condition, the slag pile remains one of the area's impressive attractions and prior to the reconstruction was the only surface evidence remaining from the original ironworks.

Significance: 2nd Order
Recommended treatment: Preservation
Preliminary Cost Estimate for Above: none
Photograph enclosed

- - - - - - - - - - - - - - - - - - -

3. Furnace, Building No. 8 - The reconstructed furnace, where iron ore was separated into cast iron and slag, consists of the stone furnace and its wooden charging bridge, a wooden casting shed, a pair of large leather bellows, and a 16' waterwheel with its shaft, and associated sluiceway and tail race. Present condition of the structure is fair.

SEE INSTRUCTIONS

Form 10-300a
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet)

STATE	
Massachusetts	
COUNTY	
Essex	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

(Number all entries)

7. (continued) Saugus Iron Works National Historic Site

3. Furnace, Building No. 8 (continued)

Significance: 2nd Order
Recommended treatment: Preservation
Preliminary Cost Estimate for Above $100,000
Photograph enclosed

— — — — — — — — — — — — — — — — — — —

4. Forge, Building No. 9 - In the forge, brittle cast iron was reworked into malleable wrought iron. This reconstructed building has two refining fires (finery) and one heating fire (chafery), three sets of bellows, a 500 pound water powered hammer, four waterwheels and their associated sluiceways and tailraces.

Significance: 2nd Order
Recommended treatment: Preservation
Preliminary Cost Estimate for Above: $100,000
Photograph enclosed

— — — — — — — — — — — — — — — — — — —

5. Rolling and Slitting Mill, Building No. 10 - (Reconstructed) Wrought iron was rolled into long flat bars and slit into rods in the rolling and slitting mill. The rods were the basic product for making hand-made nails, a valuable commodity for colonial Massachusetts Bay. The building has two 17' waterwheels and their associated sluiceways and tailraces, an internal gear system for operating one of the rollers, and a wood fired oven for heating up the iron prior to rolling and slitting.

Significance: 2nd Order
Recommended Treatment: Preservation
Preliminary Cost Estimate for Above: $100,000
Photograph enclosed

— — — — — — — — — — — — — — — — — — —

The machinery in all the above reconstructed buildings did operate, recreating in large part the noise, dirt, and feel of working in a 17th century iron plant. Due to the current deterioration of the wood, most of the equipment is now unsafe to run.

— —

6. The Fourth Ironworks Building to be reconstructed was the warehouse or ironhouse, Building No. 11. This small wooden structure was used to store products awaiting shipment to markets.

Significance: 2nd Order
Recommended Treatment: Preservation
Preliminary Cost Estimate for Above: $1,000
Photograph enclosed

8. SIGNIFICANCE

PERIOD *(Check One or More as Appropriate)*

☐ Pre-Columbian	☐ 16th Century	☒ 18th Century	☒ 20th Century
☐ 15th Century	☒ 17th Century	☒ 19th Century	

SPECIFIC DATE(S) *(If Applicable and Known)*

AREAS OF SIGNIFICANCE *(Check One or More as Appropriate)*

Aboriginal	☐ Education	☐ Political	☐ Urban Planning
☐ Prehistoric	☒ Engineering	☐ Religion/Phi-	☐ Other *(Specify)*
☐ Historic	☒ Industry	losophy	_____
☐ Agriculture	☐ Invention	☐ Science	_____
☒ Architecture	☐ Landscape	☐ Sculpture	_____
☐ Art	Architecture	☐ Social/Human-	_____
☐ Commerce	☐ Literature	itarian	_____
☐ Communications	☐ Military	☐ Theater	_____
☐ Conservation	☐ Music	☐ Transportation	_____

STATEMENT OF SIGNIFICANCE

Saugus Iron Works National Historic Site was established to preserve the site of America's first sustained integrated iron works. An earlier ironworks at Falling Creek, Virginia, was destroyed during an Indian war before production could begin. A furnace and forge were built at Braintree, Massachusetts but the location of the furnace was poor and the operation was moved to Saugus by the ironmaster.

The Saugus Ironworks has been called the forerunner of American big business. It was an iron factory and could convert raw iron ore into finished cast and wrought iron products including rod stock for nails. The rolling and slitting mill was one of only about 15 in the world and the only one in the western hemisphere. More significant than the actual technology at the Saugus plant was that it served as a training ground for ironworkers. From Saugus they spread out to start new ironworks in New England and New Jersey.

The Saugus ironworks has also been called the first chapter in "America's book". Here were the first known instances of wage and price controls, military exemptions for specialized skills, of the assimilation of a "foreign" culture (the ironworkers) into a "settled" culture (the Puritans), and of geographical and vocational mobility.

The Ironmaster's house is an outstanding example of 17th century English architecture. It is the oldest non-Indian house in the National Park System.

SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

E.N. Hartley, IRONWORKS ON THE SAUGUS, University of Oklahoma Press, 1957
"A Collection of Papers Relating to the Iron Works at Lynn and More Particularly to the Suit between Mr. John Gifford, the Agent for the Undertakers of the Iron Works, and the Inhabitants of the Massachusetts Bay Colony, Dated 1650 et seq.," manuscript located at the Baker Library, Harvard Business School library, Harvard College, Cambridge, Massachusetts
"First Iron Works Gazette" an occasional paper published by the First Iron Works Association, Vol. 1 No. 1, March 1951 to Vol. 5 No. 2, Fall 1955.

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY						OR	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES					
CORNER	LATITUDE			LONGITUDE				LATITUDE			LONGITUDE	
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
NW	42°	28'	10"	71°	00'	37"							
NE	42°	28'	10"	71°	00'	26"							
SE	42°	27'	54"	71°	00'	26"							
SW	42°	27'	54"	71°	00'	37"							

UTM on map

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 8.5 acres

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

RECEIVED
DEC 30 1975
NATIONAL REGISTER

SEE INSTRUCTIONS

11. FORM PREPARED BY

NAME AND TITLE: William Gray, park Manager; updated 2/75 NARO

DATE: 8/17/72

BUSINESS ADDRESS: Saugus Iron Works National Historic Site

STREET AND NUMBER: 244 Central Street

PHONE:

CITY OR TOWN: Saugus

STATE: Massachusetts 01907

CODE: 025

12. CERTIFICATION OF NOMINATION

State Liaison Officer recommendation:

☐ Yes
☐ No
☐ None

X

State Liaison Officer Signature

In compliance with Executive Order 11593, I hereby nominate this property to the National Register, certifying that the State Liaison Officer has been allowed 90 days in which to present the nomination to the State Review Board and to evaluate its significance. The recommended level of significance is ☑ National ☐ State ☐ Local

DEC 18 1975

Federal Representative Signature *Date*

Deputy Assistant Secretary

Title

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

Director, Office of Archeology and Historic Preservation

Date

ATTEST:

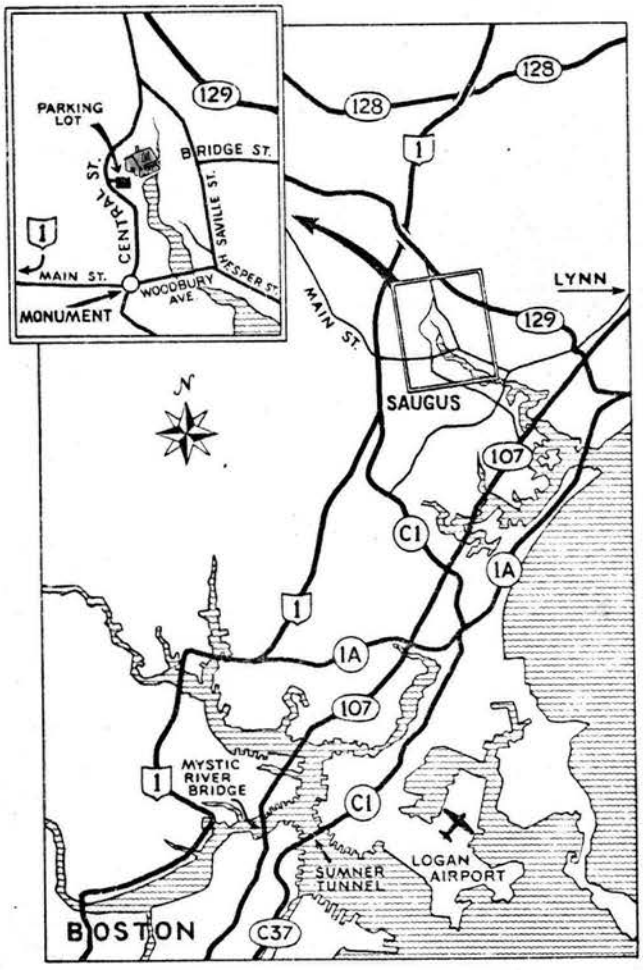
Keeper of The National Register

Date 10/20/76

GPO 938-449

Your Guide To

THE SAUGUS IRONWORKS RESTORATION

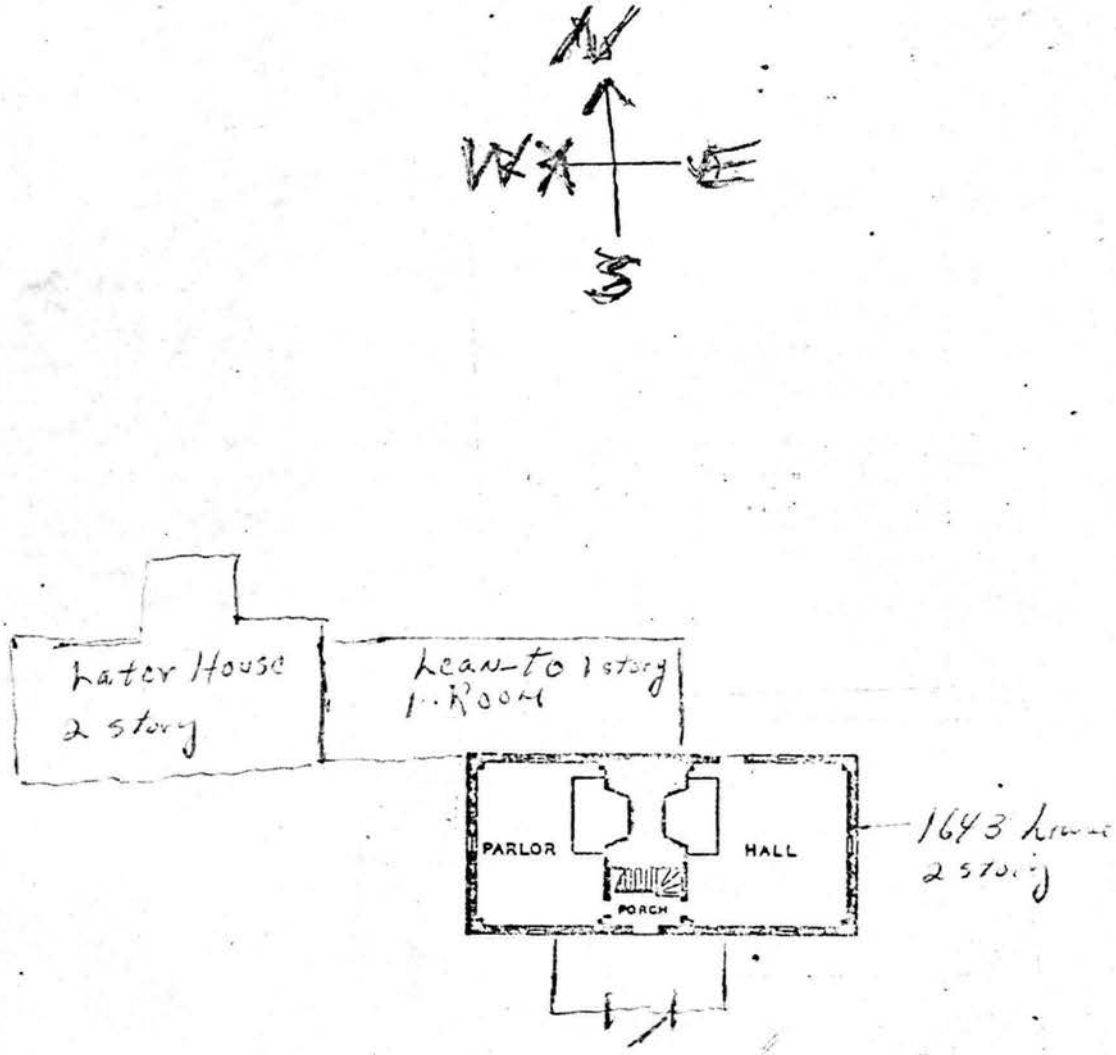


THE Restoration is just east of U. S. Route 1, at Saugus, Massachusetts, 10 miles north of Boston.

By Automobile

Driving north on U. S. 1, turn right at Main Street, Saugus, and follow signs a mile and a half to the Restoration parking area.

Driving south on U. S. 1, turn left on Route 129 and follow signs a mile and a half to the Restoration parking area.



Sketch Plan of
Iron Masters House
Saugus, Mass

C.W Snell – 11/28/67

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

PROPERTY PHOTOGRAPH FORM

(Type all entries - attach to or enclose with photograph)

STATE	
MASSACHUSETTS	
COUNTY	
ESSEX	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE
12/15/66	

SEE INSTRUCTIONS

1. NAME

COMMON: Saugus Iron Works National Historic Site

AND/OR HISTORIC: Hammersmith

2. LOCATION

STREET AND NUMBER:
244 Central Street

CITY OR TOWN:
Saugus

STATE:	CODE	COUNTY:	CODE
Massachusetts	25	Essex	009

3. PHOTO REFERENCE

PHOTO CREDIT: W. Glen Gray

DATE OF PHOTO: June 7, 1975

NEGATIVE FILED AT:
Saugus Iron Works - 75 - 4

4. IDENTIFICATION

DESCRIBE VIEW, DIRECTION, ETC.

Furnace building

1.76

GPO 921-737

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

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DATE OF PHOTO: June 7, 1975

NEGATIVE FILED AT:
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4. IDENTIFICATION

DESCRIBE VIEW, DIRECTION, ETC.

View of Slag Pile in background

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NATIONAL REGISTER

2 of 6

GPO 921-737

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

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(Type all entries - attach to or enclose with photograph)

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3. PHOTO REFERENCE

PHOTO CREDIT: W. Glen Gray

DATE OF PHOTO: June 7, 1975

NEGATIVE FILED AT:
Saugus Iron Works - 75 - 4

4. IDENTIFICATION

DESCRIBE VIEW, DIRECTION, ETC.

General View of the Forge building

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NATIONAL REGISTER

3 of 6

GPO 921-737

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

PROPERTY PHOTOGRAPH FORM

(Type all entries - attach to or enclose with photograph)

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MASSACHUSETTS	
COUNTY	
ESSEX	
FOR NPS USE ONLY	
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CITY OR TOWN:
Saugus

STATE:	CODE	COUNTY:	CODE
Massachusetts	25	Essex	009

3. PHOTO REFERENCE

PHOTO CREDIT: W. Glen Gray

DATE OF PHOTO: June 7, 1975

NEGATIVE FILED AT:
Saugus Iron Works - 75 - 4

4. IDENTIFICATION

DESCRIBE VIEW, DIRECTION, ETC.

General View of Rolling and Slitting building

RECEIVED
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NATIONAL REGISTER

4 of 6

GPO 921-737

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

PROPERTY PHOTOGRAPH FORM

(Type all entries - attach to or enclose with photograph)

STATE	
MASSACHUSETTS	
COUNTY	
ESSEX	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE
10/5/66	

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AND/OR HISTORIC: Hammersmith

2. LOCATION

STREET AND NUMBER:
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CITY OR TOWN:
Saugus

STATE:	CODE	COUNTY:	CODE
Massachusetts	25	Essex	009

3. PHOTO REFERENCE

PHOTO CREDIT: W. Glen Gray

DATE OF PHOTO: June 7, 1975

NEGATIVE FILED AT:
Saugus Iron Works - 75 - 4

4. IDENTIFICATION

DESCRIBE VIEW, DIRECTION, ETC.

General View of Ironmaster House

RECEIVED
DEC 30 1975
NATIONAL REGISTER

GPO 921-737

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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COUNTY	
ESSEX	
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STATE:	CODE	COUNTY:	CODE
Massachusetts	25	Essex	009

3. PHOTO REFERENCE

PHOTO CREDIT: W. Glen Gray

DATE OF PHOTO: June 7, 1975

NEGATIVE FILED AT:
Saugus Iron Works - 75 - 4

4. IDENTIFICATION

DESCRIBE VIEW, DIRECTION, ETC.

General View of Warehouse

RECEIVED
DEC 30 1975
NATIONAL REGISTER

GPO 921-737

4232

217 4232 Iron Master's House, 1643
South (Front) elevation, looking west
Saugus, Mass.

N.P.S. Photo, 1967

4233

218 4233 Iron Master's House, 1643
South (front) elevation, looking east,
Saugus, Mass.

N.P.S. Photo, 1967

4234

219 4234 Iron Master's House, 1643
South end and north (rear) elevation (left) of later house.
Saugus, Mass.

N.P.S. Photo, 1967

4235

220 4235 Iron Master's House, 1643
West end and South (front) side (right)
Saugus, Mass.

N.P.S. Photo, 1967

4238

221 4238 Iron Master's House, 1643
East ~~East~~ end (left) and ~~north~~ (rear) elevation
Saugus, Mass.

N.P.S. Photo, 1967

4239

222 4239 Iron Master's House, 1643
East End (left) and north (rear) elevation
Saugus, Mass.

N.P.S. Photo, 1967

Iron Master's House, 1643
South ~~West~~ (Front) Elevation (Looking ~~North~~ West)

Saugus, Massachusetts

Sept. 6, 1967

Charles W. Snell

Western Reg. Neg. 4232

Iron Master's House, 1643
South ~~West~~ (Front) Elevation, Looking ~~South~~ East

Saugus, Massachusetts

Sept. 6, 1967

Charles W. Snell

Western Reg. Neg. 4233

Iron Master's House, 1643
West ~~North~~ End (Right) and ~~East~~ NORTH (Rear) of Later Lean-to
Elevation

Saugus, Massachusetts

Sept. 6, 1967

Charles W. Snell

Western Reg. Neg 4234

Iron Master's House, 1643
West ~~North~~ end and ~~West~~ North Side of later house
Saugus, Massachusetts

Sept. 6, 1967

Charles W. Snell

Western Reg. Neg. 4235

Iron Master's House, 1643
East ~~South~~ End (Left) and ~~East~~ (Rear)
Elevation North

Saugus, Massachusetts

Sept. 6, 1967

Charles W. Snell

Western Reg. Neg. 4238

Iron Master's House, 1643
East ~~South~~ End (Left) and ~~West~~ North (Rear)
Elevation

Later House at right

Saugus, Massachusetts

Sept. 6, 1967

Charles W. Snell

Western Reg. Neg. 4239

Form No. 10-301
Rev. 7-72

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

PROPERTY MAP FORM

(Type all entries - attach to or enclose with map)

STATE	
Massachusetts	
COUNTY	
Essex	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

1. NAME

COMMON: Saugus Iron Works National Historic Site

AND/OR HISTORIC:

2. LOCATION

STREET AND NUMBER:
244 Central Street

CITY OR TOWN:
Saugus

STATE:	CODE	COUNTY:	CODE
Massachusetts	25	Essex	009

3. MAP REFERENCE

SOURCE:
USGS 7.5' Series, Boston North Quadrangle

SCALE: 1: 24000

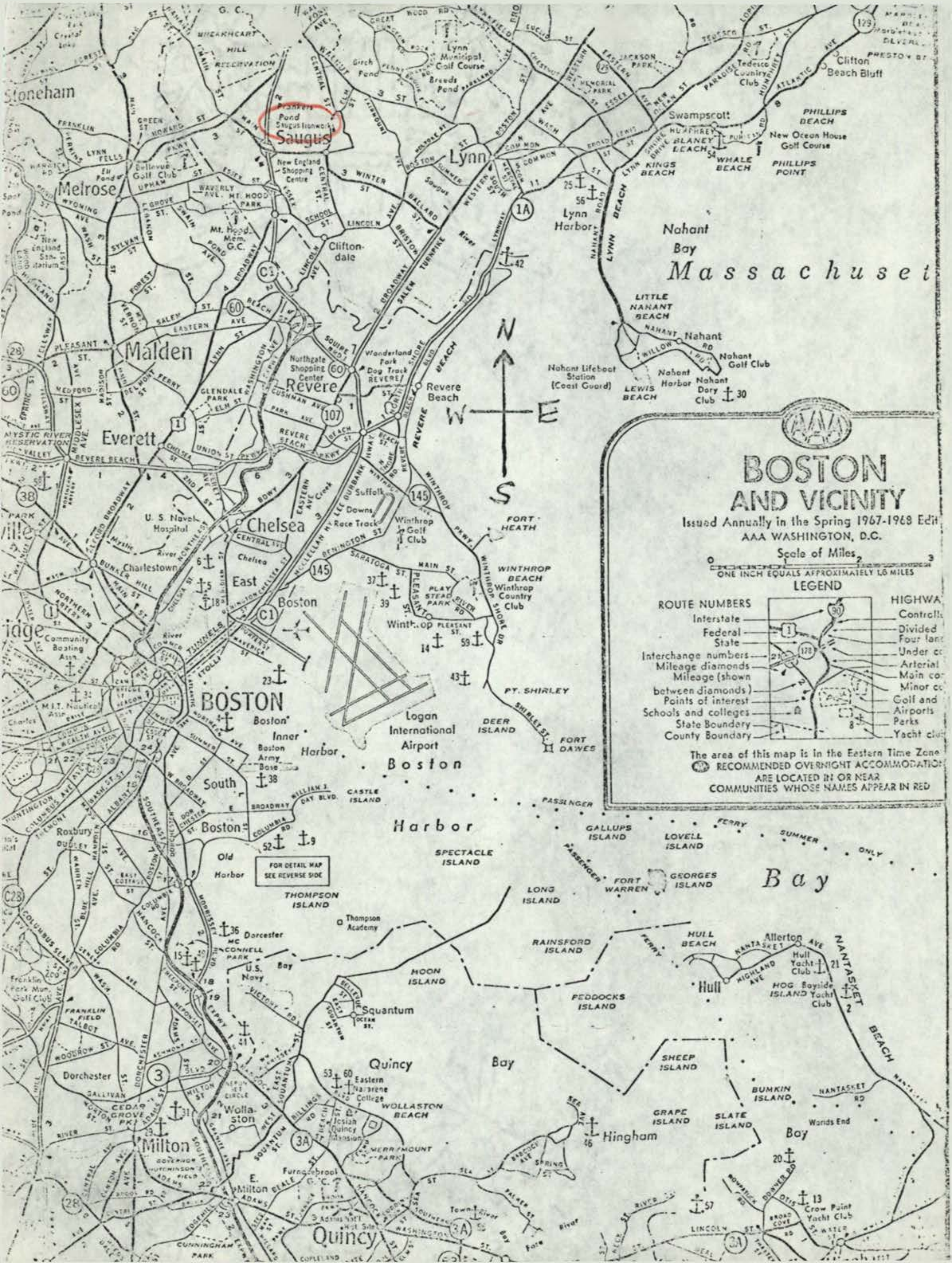
DATE: 1971

4. REQUIREMENTS

TO BE INCLUDED ON ALL MAPS

1. Property broundaries where required.
2. North arrow.
3. Latitude and longitude reference.

U.S. GOVERNMENT PRINTING OFFICE : 876-170



BOSTON
AND VICINITY
Issued Annually in the Spring 1967-1968 Edit
AAA WASHINGTON, D.C.
Scale of Miles
ONE INCH EQUALS APPROXIMATELY 1.6 MILES
LEGEND
ROUTE NUMBERS
Interstate
Federal
State
Interchange numbers
Mileage diamonds
Mileage (shown between diamonds)
Points of interest
Schools and colleges
State Boundary
County Boundary
HIGHWA
The area of this map is in the Eastern Time Zone
RECOMMENDED OVERNIGHT ACCOMMODATIO
ARE LOCATED IN OR NEAR
COMMUNITIES WHOSE NAMES APPEAR IN RED
FOR DETAIL MAP SEE REVERSE SIDE
N
S
W
E
Stoneham
Saugus
Melrose
Malden
Everett
Revere
Chelsea
Charlestown
East Boston
BOSTON
South Boston
Roxbury
Dorchester
Milton
Quincy
Wollaston
Squantum
Hingham
Hull
Lynn
Swampscott
Nahant
Cliftondale
Revere Beach
Winthrop
Logan International Airport
Lynn Harbor
Nahant Bay
Massachuset
Boston Harbor
Quincy Bay
Bay
Lynn Municipal Golf Course
Breakheart Hill Reservation
Bellevue Golf Club
New England Shopping Centre
Northgate Shopping Center
Wonderland Park Dog Track
Suffolk Downs Race Track
Winthrop Golf Club
Winthrop Country Club
U.S. Naval Hospital
Nahant Lifeboat Station (Coast Guard)
Nahant Golf Club
New Ocean House Golf Course
Tedesco Country Club
Clifton Beach Bluff
Phillips Beach
Kings Beach
Whale Beach
Phillips Point
Lewis Beach
Little Nahant Beach
Fort Heath
Winthrop Beach
Pt. Shirley
Deer Island
Fort Dawes
Castle Island
Spectacle Island
Gallups Island
Lovell Island
Georges Island
Fort Warren
Long Island
Thompson Island
Thompson Academy
Rainsford Island
Moon Island
Peddocks Island
Hog Island
Sheep Island
Grape Island
Slate Island
Bumkin Island
Hull Beach
Nantasket Beach
Hull Yacht Club
Bayside Yacht Club
Crow Point Yacht Club
Wollaston Beach
Eastern Nazarene College
Merrymount Park
Furnace Brook G.C.
Mystic River Reservation
Franklin Park Mun. Golf Club
Franklin Field
Boston Army Base
U.S. Navy
Community Boating Assn.
M.I.T. Nautical Assn.
Old Harbor
Passenger Ferry
Summer Only

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

BOSTON NORTH QUADRANGLE
MASSACHUSETTS
7.5 MINUTE SERIES (TOPOGRAPHIC)

6769 II SW (WILMINGTON) · 6769 II SE (READING) · 6869 II SW (SALEM)

Long. NW 71° 00′ 37″
NE 71° 00′ 26″
SE 71° 00′ 26″
SW 71° 00′ 37″

Lat. NW 42° 28′ 10″
NE 42° 28′ 10″
SE 42° 27′ 54″
SW 42° 27′ 54″

zone 19

A- 4703- 660
334- 980

B- 4703- 240
334- 980

C- 4703- 240
334- 720

D- 4703- 660 N
334- 720 E

Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and Massachusetts Geodetic Survey

Topography by planetable surveys 1943. Revised from aerial photographs taken 1969. Field checked 1971

Selected hydrographic data compiled from USC&GS Chart 248 (1971)
This information is not intended for navigational purposes

Polyconic projection. 1927 North American datum
10,000-foot grid based on Massachusetts coordinate system, mainland zone
1000-meter Universal Transverse Mercator grid ticks, zone 19, shown in blue

Boundaries in tidewater areas from information supplied by Massachusetts Department of Public Works

Red tint indicates areas in which only landmark buildings are shown

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 9.5 FEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION
Primary highway, hard surface
Light-duty road, hard or improved surface
Secondary highway, hard surface
Unimproved road
Interstate Route · U. S. Route · State Route

BOSTON NORTH, MASS.
N4222.5—W7100/7.5

1971

AMS 6768 I NE–SERIES V814

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National Register of Historic Places

Note to the record

Additional Documentation: 2018

NPS Form 10-900
United States Department of the Interior
National Park Service

OMB No. 1024-0018

AD 66000047

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic name: Saugus Iron Works National Historic Site

Other names/site number: Hammersmith

Name of related multiple property listing:

N/A

(Enter "N/A" if property is not part of a multiple property listing

2. Location

Street & number: 244 Central Street

City or town: Saugus State: Massachusetts County: Essex

Not For Publication: ☐ Vicinity: ☐

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property X meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

X **national** ___ **statewide** ___ **local**

Applicable National Register Criteria:

X **A** X **B** X **C** X **D**

Lucinda A. Cave, Deputy FPO 3-1-2018

Signature of certifying official/Title: **Date**

National Park Service

State or Federal agency/bureau or Tribal Government

In my opinion, the property meets does not meet the National Register criteria.

Signature of commenting official: **Date**

Brona Simon June 29, 2017

Title : SHPO **State or Federal agency/bureau or Tribal Government**

4. National Park Service Certification

I hereby certify that this property is:

___entered in the National Register

___determined eligible for the National Register

___determined not eligible for the National Register

___removed from the National Register

✓ other (explain:) Accept Additional Documentation

Patrick Andrus 4/19/2018

Signature of the Keeper Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private:	☐
Public – Local	☐
Public – State	☐
Public – Federal	X

Category of Property

(Check only **one** box.)

Building(s)	☐
District	X
Site	☐
Structure	☐
Object	☐

Saugus Iron Works NHS | Essex, Massachusetts
Name of Property | County and State

Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
2	5	buildings
2	0	sites
11	3	structures
0	1	objects
15	9	Total

Number of contributing resources previously listed in the National Register 10

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6. Function or Use

Historic Functions

(Enter categories from instructions.)

INDUSTRY/PROCESSING/EXTRACTION/manufacturing facility
DOMESTIC/single dwelling

Current Functions

(Enter categories from instructions.)

RECREATION AND CULTURE/museum
LANDSCAPE/park

7. Description

Architectural Classification
(Enter categories from instructions.)
LATE 19TH AND 20TH CENTURY REVIVALS/Colonial Revival

Materials: (enter categories from instructions.)
Principal exterior materials of the property: __wood, stone_____

Narrative Description
(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

Saugus Iron Works National Historic Site (Saugus Iron Works NHS or "the Park") preserves and interprets historic and reconstructed resources associated with the first sustained integrated iron works in America. The boundaries of the Saugus Iron Works NHS Historic District ("the District") are coterminous with the park boundaries, which encompass 8.51 acres on the east and west banks of the Saugus River in Saugus, Massachusetts. The District is bordered by Central Street on the west; Riverbank Road on the east; portions of Bridge Street, Central Street, and private property on the north; and private property and commercial development on the south. Two small, discontiguous parcels on the west side of Central Street are also within the District boundary. The District contains 25 contributing resources consisting of 6 buildings, 15 structures, and 4 sites, and 9 non-contributing resources consisting of 5 buildings, 3 structures, and 1 object.

Saugus Iron Works NHS was designated a National Historic Landmark on November 27, 1963, administratively listed in the National Register of Historic Places on October 15, 1966 (NRIS 66000047), and authorized by an Act of Congress (PL 90-282) as a unit of the National Park Service (NPS) on April 5, 1968. Saugus Iron Works NHS is also part of the Essex National Heritage Area, designated in 1996 as part of the Omnibus Parks and Public Lands Management Act (PL 104-333). The first National Register documentation for the Saugus Iron Works NHS Historic District was accepted by the Keeper of the National Register on October 20, 1976. The District boundary at that time encompassed 8.5 acres and included 10 contributing resources: the Saugus Iron Works Site, the Ironmaster's House (now the Iron Works House), the Slag Pile, the Furnace (now Blast Furnace), the Forge, the Rolling and Slitting Mill, the sluiceways and tailraces (now 3 resources—the Blast Furnace Sluiceway and Tailrace, the Forge Sluiceways and Tailraces, and the Rolling and Slitting Mill Sluiceway and Tailrace), and the Warehouse. The purpose of this National Register registration form is to update and expand on the information contained in the 1976 registration form in order to address all applicable areas, periods, and levels of significance and to provide a full accounting of contributing and non-contributing resources in accordance with current National Register standards.

Narrative Description

Setting

The Saugus Iron Works NHS Historic District is in the eastern part of the town of Saugus, Essex County, Massachusetts, approximately 11 miles north of Boston via U.S. Route 1. The District is situated on the east and west banks of a fall in the Saugus River at the upper end of the Saugus River estuary, where the river flows down from the Breakheart Reservation to the coastal lowlands and marshes in neighboring Lynn before emptying into Broad Sound in Massachusetts Bay. The town of Saugus is a suburb of Boston and is densely developed with residential neighborhoods throughout the town and commercial strip malls along U.S. Route 1. The District is generally bounded on the west and north by Central Street, a north–south thoroughfare which was once a main road in Saugus; Lothrop Street and Riverbank Road on the east; and the Saugus River on the south. It is immediately surrounded on the east and west by post-World War II residential neighborhoods and on the north by a group of former mill buildings and residences that have been converted for commercial purposes. The Saugus town center at the junction of Central, Hamilton, and Main streets is immediately southwest of the District.

Contributing Resources

The **Saugus Iron Works Site (LCS No. none, ASMIS Nos. SAIR00010.000 and 00011.000, MHC No. none, contributing site, Map No. 1, Photos 1-3)** encompasses the entire 8.51-acre District.[1] The site is an industrial landscape that was re-created by utilizing information from archeological excavations conducted by local archeologist Roland Wells Robbins in the late 1940s and early 1950s. The site is divided into two functional areas: the Industrial Area, which was the location of the iron processing facilities during the iron works period (1646–1670); and the West Bluff, where the Iron Works House and the NPS visitor facilities are located. The west bluff is on top of a steep slope that rises about 20 feet (ft) above the bank of the river and the industrial area. Two discontiguous parcels associated with the site and included in the historic district boundary are west of Central Street on the north and south sides of Pleasant Street.

The site is predominantly grass-covered with several groupings of shade trees, vegetation screens, and scattered shrubs and flower beds. Successional growth forest along the east bank (south of the maintenance area), and several old growth trees, including a copper beech along its north boundary, screen portions of the site from the surrounding residential neighborhood. From the west bluff, visitors have a view of the entire re-created industrial site. The downstream view from the industrial site has been impacted by twentieth-century suburban and commercial development and by silt build-up in the Saugus River from periodic dam breaches and failures, causing swampy vegetation to narrow the river. A 4-ft-high, vertical-board fence runs along the south and east sides of the Park Headquarters and along the north and east sides of the visitor parking lot. Vehicular access to the site is via a short, asphalt-paved

[1] The authorized boundary of the NHS represents a little more than 1 percent of the total 600-acre tract that Richard Leader acquired in 1643 for the purpose of establishing an iron works. Numerous resources associated with the iron works, including the charcoal house to the north, a bog to the west, and Pranker's Pond and associated water system components to the north, are outside the federally legislated boundary and are thus excluded from this documentation.

drive running east from Central Street and terminating at the visitor parking lot in the southwestern area of the site.

A **System of Paths (MHC No. none, contributing structure, Map No. 2, Photo 13)** provide the primary means for visitors to navigate through the site. The paths were constructed by the First Iron Works Association (FIWA) in in 1954 and consist of winding, chip-sealed, walking lanes, approximately 3 feet in width. The paths were altered in 2005–2008 by the NPS through regrading and resurfacing to make them compliant with the American Disabilities Act; this did not substantially affect their integrity, as the route was unchanged. In the 1970s, the NPS constructed a set of granite steps that lead down to the industrial site from the upper bluff.

The **Saugus Iron Works Nature Trail (MHC No. none, contributing structure, Map No. 3, Photo 15)** was laid out by FIWA ca. 1954, and expanded by the Youth Conservation Corps (YCC) about 1978–1980. The trail was designated a National Recreational Trail in 1989. The nature trail, on the east bank of the Saugus River, is part of a 0.5-mile-long trail which runs east through the industrial site from its official beginning at the Visitor Contact Station, before crossing the river then turning south to run along the bank of the Saugus River to the southern property boundary. On the east side of the river, the northern portion of the trail is paved, then changes to a mixture of wood chips, compacted soil, and grass once past the maintenance area.

Before the late 1940s archeological excavations that provided evidence for the re-creation of the site, the west bluff was part of the surrounding suburban neighborhood. At least a dozen early to mid-twentieth-century houses were intermixed with earlier residential buildings on the site, including the seventeenth-century Iron Works House and two nineteenth-century houses known as the Rafferty House and the Mansfield House. The work to re-create the industrial landscape began in the late 1940s under the auspices of the FIWA, which removed a number of the houses and did a significant amount of regrading that included the creation of the steep slope of the west bluff. As part of that work, Central Street was rerouted to the west around the site about 1952. Two residences on the north and south sides of the former Central/Pleasant Street intersection were demolished at that time. The remaining portions of those properties comprise the two discontiguous parcels of the Saugus Iron Works Site that are located on the west side of Central Street.

In the early 1950s, a house on the west side of the former Central Street near where the blast furnace charging bridge is today was removed to facilitate the archeological investigations. Two more houses formerly on Marion Road—a portion of which became Central Street—were relocated to Appleton Street, north of the Park, shortly after the re-creation in the 1950s. Additional demolition of houses occurred after the Saugus Iron Works NHS was created and incorporated into the National Park System in 1968. The Rafferty House, which sat southeast of the Iron Works House, was destroyed by fired in 1969; the NPS removed the garage and the ruins of the house in 1974 to make room for the Maintenance Garage/Lunchroom, which was constructed that same year. Immediately south of the Iron Works House on Central Street was the Mansfield House and outbuildings, which were demolished by the NPS in the 1970s.

West Bluff Area

The **Iron Works House (LCS No. 005426, ASMIS No. SAIR00001.000, MHC No. SAU.27, contributing building, Map No. 4, Photos 4-8)** was originally built about 1689, but its current appearance reflects a conjectural reconstruction of a First Period colonial house undertaken during the

Colonial Revival-era by antiquarian Wallace Nutting (1861–1941) and Boston architect Henry Charles Dean (1855–1918) from 1915 to 1917.[2] The house faces south and consists of rectangular, side-gable-roof main block with a cross-gable dormers and a center gable projection, and a cross-gable addition with a center gable dormer. The main block is a two-and-one-half story, three-bay-by-one-bay, timber framed building seated on a fieldstone foundation. The timber framed structural system, which is characteristic of buildings constructed during Massachusetts' First Colonial Period of settlement (1625–1725), consists of a hand-hewn oak frame with pit-sawn studs and braces connected by mortise and tenon joints held with treenails. The second story projects slightly forward of the first story on the south side, creating a narrow overhang accentuated with carved wood drop pendants.[3] The roof structures are surfaced with wood shingles and the exterior walls are sided with wood clapboards. Decorative carved wood finials are affixed to the gable points of the main roof and the center gable extension. A massive, corbelled, brick chimney with front and rear applied pilasters pierces the center ridgeline of the main roof. Fenestration in the main block consists of single diamond-paned casement windows. The main entrance is located in the center gable projection and consists of a single leaf, door with an ogee-shaped top and decorative nail heads arranged in diaper-pattern. A shed roof lean-to extends from the northwest corner of the main block. It has two 15-over-15-light, double-hung sash windows and a single leaf vertical-board door. A similar vertical-board door to the east of the lean-to provides access to the north elevation of the main block.

The cross-gable addition is one and one-half stories in height and extends from the west side of the main block and lean-to. It was likely constructed sometime between 1884 and 1915 and currently houses the NPS visitor center and bookstore. The addition has a corbelled brick chimney that rises above the roof ridge immediately east of the junction of the cross-gable units. Fenestration consists of single 9-light fixed sash and 15-over-15-light double-hung sash windows. The visitor center is accessed via a modern glass entry door on the west elevation of the addition.

The interior of the Iron Works House is arranged in a hall-and-parlor plan, with the hall on the east and parlor on the west, separated by a wide stairhall. The second story consists of three rooms, one each over the hall and parlor and one in the projecting center bay. The attic, or garret, spans the entire length of the building. A triple-run staircase connects the ground floor and the second floor and consists of three runs of stairs separated by two landings, and less ornate, single and double run stairs connect the first floor with the cellar and the second floor to the garret. The exposed ceiling joints are rough-finished, and many of the major visible framing members are embellished. For example, the chamfers on the summer beams span each of the major rooms and the vertical posts in each corner, many of which have been shouldered for additional support, making them wider at the top than the bottom. Walls are finished with plaster, and the floors consist of wide, face nailed, boards.

[2] The Iron Works House was initially believed to have been constructed in 1643 by yeoman farmer Thomas Dexter, but dendrochronology performed in 1999 and a study of deed and probate information by Abbott Lowell Cummings indicate the house was possibly constructed by Samuel Appleton Jr., or for James Taylor, the Treasurer and Receiver General of the Massachusetts Bay Colony. (See **Criterion C – Architecture** for further discussion.)

[3] Portions of the Iron Works House and Museum descriptions are taken from *Historic Structures Report – Iron Works House, Saugus Iron Works NHS*, prepared by John Albright, Orville W. Carroll, and Abbott Lowell Cummings, Denver Service Center, Historic Preservation Division, National Park Service, 1977. (See **Criterion C – Architecture** for further discussion of the evolution of the Iron Works House.)

When Wallace Nutting acquired what was at the time referred to as the Ironmaster's House in 1915, it had been heavily altered from its original appearance.[4] Consequently, the house as it appears today is a conjectural adaptation of what he and architect Henry Charles Dean believed it may have looked like. Their design was ostensibly based on observations made by preservationist William Sumner Appleton (1874–1947), and other period restorations, including the House of Seven Gables in Salem (see **Criterion A – Conservation and Commemoration** and **Criterion C – Architecture** for further discussion).

Appleton's contributions included the recreation of the cross-gable dormers on the main block. The projecting center bay was based on archeological investigations conducted at the time of restoration and possibly on James Taylor's 1714 probate record, which lists a porch chamber in the room inventory (Albright et al. 1977:379). The lean-to projecting off the west side of the north elevation of the main block was constructed to replace a full-width lean-to in that location, believed to have been added in the early eighteenth century. The overhang on the south elevation was obscured by a full-width, one-story, shed-roof veranda supported by a series of pillars; this veranda was removed to make way for the two-story projecting bay and to reveal the overhang, which Nutting ornamented with carved wooden drop pendants at the corners. Nutting and Dean also altered the addition off the west elevation, reconfiguring the interior to create a six-room cottage for the caretaker of the Iron Works House and grounds.

A **Visitor Contact Station (LCS No. 040300, MHC No. SAU.263, contributing building, Map No. 5, Photo 9)** is southeast of the Iron Works House. Constructed in 1954 by the FIWA, the south-facing, one-story, clapboard-clad building is seated on a concrete foundation and topped with a side gable roof sheathed with wood shingles. The one-room building is accessed via a modern, two-panel, half-light door in the west side of the south elevation. The door is protected by an engaged entry porch. Fenestration consists of six-over-six, double-hung wood sash throughout the building and one single-pane, fixed window immediately west of the entrance. The building was altered by the NPS in 1986 when portions of the entry porch were enclosed to expand the interior space; the western third remains to shelter the building entrance. The building is now used for Junior Ranger and school activities.

The **Museum and Museum Annex (LCS Nos. 040301 and 040316, MHC Nos. SAU.264 and SAU.265, contributing building, Map No. 6, Photos 10-11)** is a result of a number of building campaigns in 1915, 1952, and 1978. The main Museum is a one-and-one-half story, end-gable, clapboard-clad building with a narrow overhang on the east elevation decorated with carved drop pendants that sits on concrete footings just north of the Iron Works House. The 1915 main building, constructed to create a blacksmith shop for Wallace Nutting's re-creation blacksmith, Edward Guy, was assembled using repurposed timbers recycled from two nineteenth-century buildings, believed to have been Edward Guy's shop from Newburyport. Guy initially worked out of a disused chicken coop while at Saugus, which he later connected to the main building for additional work space (Albright et al. 1977:29; White 2011:186).

The building was converted into a museum by the FIWA ca. 1952. At the same time, the FIWA constructed the Museum Annex off the west elevation. It has a one-story, shallow-pitch gable roof sheathed with rolled rubber and was clapboard-clad and sited perpendicularly to the museum building, attached by a one-story hyphen. A wide, wood-plank deck is attached to the Annex at the east side, north of the Museum. In 1978, restrooms were added to the south elevation of the Annex in a shed-roofed lean-to, with entrances in the southern face. Fenestration consists of eight-over-eight and sixteen-over-twelve,

[4] The original National Register documentation for the building lists a construction date of 1643, and the building was attributed to Thomas Dexter. Dendrochronology performed in the late twentieth century has yielded a much later construction date, attributing the building to ca. 1689 (see **Criterion A – Conservation and Commemoration** and **Criterion C – Architecture** for further discussion).

double-hung, wood sash. Entrances to the Museum are in the south elevation of the hyphen between the Museum and Annex, and in the east elevation of the Museum; the south door consists of a two-panel, half-light door, and the east door is composed of vertical boards.

A series of retaining walls were constructed during the re-creation of the Saugus Iron Works Site in the 1950s as part of the restoration of the landscape to what was believed to be its seventeenth-century contours and to support the rerouting of Central Street around the site.

Two retaining walls, the **Central Street Retaining Walls (LCS No. 040310, MHC No. SAU.937, contributing structure, Map No. 7, Photos 12-13)**, were constructed in 1953–1954 at the north and south ends of the site along the west bluff, near the former alignment of Central Street. The walls consist of dry-laid stone topped with a vertical-board fence with round posts and wide board stringers. The north wall follows the curve of Central Street, while the L-shaped south wall marks the ca. 1954 terminus of Central Street, which is now sod-covered.

The 1953–1954 **West Bluff Stone Wall (LCS No. 040309, MHC NO. SAU.932, contributing structure, Map No. 8, Photo 13)** runs north–south across the edge of the west bluff from near the southern Central Street Retaining Wall to the charging bridge of the Blast Furnace. The wall consists of large, dry-laid stones, laid one to two stones wide, and is about 2 ft high.

Industrial Area

The **Blast Furnace (LCS No. 005428, ASMIS No. SAIR00004.000, MHC No. SAU.900, contributing structure, Map No. 9, Photos 14, 19)**, at the base of the bluff near the north end of the site on the west bank of the river, is a 1951–1953 reconstruction of the original blast furnace that was built in 1647–1650 to convert raw bog iron and fluxing agents into workable iron. It is seated on the foundation of the original furnace, which was discovered during Robbins' excavations in 1948–1950. The roughly square structure, constructed of battered stone walls with stones recovered from rubble of the original furnace, is about 20 ft high, with a 50-ft-long wood timber and plank charging bridge running east from the top of the bluff to the charging hole at the top of the furnace. The truncated intact foundation, constructed from mortared, undressed stone, includes the bases for two arches recessed into the square plan of the furnace base along the north and east faces. The furnace was reconstructed with two roughly semi-circular arches recessed into the north and east elevations of the structure. The north-facing arch accommodates the waterpowered bellows and a nozzle-like inlet (a "tuyere") that directed air blasts into the furnace hearth. The east-facing arch is the "casting arch," which allowed access to the furnace hearth for tapping slag and iron and for some repairs to the lower hearth. A casting shed, used to cast hollowware and pig iron, extends from the east side of the furnace. The shed consists of a 27-ft-wide, board-and-batten, hipped-roof overhang supported by large, square oak timbers. The south side of the shed is enclosed with wide wood clapboards. The casting shed also protects two 18-ft-long bellows on the north side of the furnace that are powered by a 32-ft-long, 34-inch-diameter shaft attached to a 16-ft-diameter overshot waterwheel, which is seated in a wood-lined, rectangular wheel pit on the west side of the structure.

A **Slag Pile (LCS No. 005427, ASMIS No. SAIR00002.000, MHC No. SAU.901, contributing site, Map No. 10, Photo 15)** consisting of a 15- to 18-ft-high pile of waste resulting from the iron production process at the site in 1646–1670, is south of the Blast Furnace and extends approximately 140 ft into the Saugus River. The sloping pile is covered with vegetation that helps to protect it from erosion and potentially hazardous runoff.

The **Forge (LCS No. 005429, ASMIS No. SAIR00005.000, MHC No. SAU.28, contributing building, Map No. 11, Photos 16-17)** is a south-facing, one-story, end-gable, dropboard-clad, timber-frame building east of the Blast Furnace. It was reconstructed in 1953–1954 on an original masonry and posthole foundation of the building as identified during archeological excavations. Built to refine pig iron into wrought iron for use by blacksmiths and the adjacent rolling and slitting mill, the Forge was an essential element that made Saugus an integrated iron works. The clapboard-sheathed roof is pierced near the eave edges by three parged wood chimneys seated on stone bases—one in the approximate center of the west elevation and two in the east elevation. The north elevation is pierced by three window openings. Three entrances provide access to the building: two small, person-sized doors, one each in the east and west elevations near the north end; and a pair of large, vertical-board double loading doors in the south elevation that open onto a wooden ramp leading to a path down to the wharf area. The east and west sides of the building are flanked by two 16- to 17-ft-diameter waterwheels (for a total of four waterwheels). Each set consists of a mid-breast wheel (situated closer to the north elevation of the Forge building) and an undershot wheel (situated closer to the south elevation of the Forge building) built into wood-lined, rectangular wheel pits. Each wheel powers a specific piece of equipment. The two east side waterwheels operate bellows for two refinery hearths that are used for the initial conversion of pig iron to wrought iron. One west waterwheel operates a bellows for the chafery hearth at the interior southwestern corner of the Forge building and is used to reheat the spongy masses of wrought iron in the later stage of the pig iron to wrought iron conversion process. The fourth waterwheel provides power for a 500-pound trip hammer in the northwestern interior corner of the building that pounds the spongy wrought iron masses into square-sectioned "merchant bars" ready for use by blacksmiths or for use in the rolling and slitting mill.

A pegged timber retaining wall with diagonal braces, the **Blast Furnace Retaining Wall (LCS No. 040313, MHC No. SAU.941, contributing structure, Map No. 12, Photo 17)** varies in height from 2 to 3 ft and fronts a concrete wall between the Blast Furnace and the Forge, beginning at the north edge of the casting shed and running east to the edge of the waterwheel pits on the west side of the Forge.

The **Rolling and Slitting Mill (LCS No. 005430, ASMIS No. SAIR00006.000, MHC No. SAU.29, contributing building, Map No. 13, Photos 16, 18)**, built in 1953–1954, is a conjectural reconstruction that was based on knowledge of similar mill buildings and rolling and slitting technology and on archeological site data recovered by Robbins. Its location is on the approximate site of where the original rolling and slitting mill likely stood, but nearly all of the archeological evidence necessary to confirm that supposition was probably destroyed during the construction of Bridge and Central streets. The south-facing, one-story, timber-frame building sits on a granite foundation near the west bank of the Saugus River, east of the Forge. The dropboard-clad building has a moderately pitched, end-gable roof, which is pierced near the north end of the ridgeline by a parged wood chimney seated on a stone base. There are two small, person-sized doors (one each in the west and north elevations) and a large, vertical-board loading door in the south elevation opening onto a gravel walk leading to a path down to the wharf area. Fenestration consists of small, rectangular windows in the south, east, and west elevations, protected by vertical-board panels attached to the wall with metal hinges. Two 17-ft-diameter overshot wheels on the east side of the building provide power to an internal power transmission system.

The interior of the one-room building consists of an upper work area at the north end with a stone hearth centered on the north wall. The north work area also has gears connected to the waterwheels to power the rolling and splitting roll trains and a steel-clad "great shear" used for cutting iron bars to length. The reconstructed hearth was used to reheat bars of wrought iron before passing them through the "two-high" rolling mill roll train (two rollers, one positioned above the other). The rolling mill rollers are constructed

of cylindrical milled timbers sheathed in iron that rolled reheated thick-section wrought iron bars into flatter and longer lengths of wrought iron suitable for shearing, or "slitting," with the adjacent slitting mill. The slitting mill was intended to produce nail rod for the manufacture of hand-forged nails, which were bundled with small metal strips heated in a small hearth near a work bench on the lower level.

The waterwheels in all three industrial buildings are powered by the Park's water circulation system, which consists of two concrete tanks, one near the wharf and the other at the northern end of the site near Central Street. The lower tank collects water from the four tailraces, which is then transferred to the upper tank via a pumping system housed in the Warehouse. The headraces for the Blast Furnace and western Forge wheels are connected directly to the upper concrete tank. A series of pipes between the west Forge wheel and the east Forge wheel, as well as the Rolling and Slitting Mill, transfer water throughout the rest of the system. The computer-controlled water circulation system provides water to the sluiceways and tailraces for the reconstructed industrial buildings, described below.

The **Blast Furnace Sluiceway and Tailrace (LCS No. 040306, MHC No. SAU.935, contributing structure, Map No. 14, Photo 19)**, reconstructed in 1953–1954, provides water and drainage to the Blast Furnace waterwheel. The sluiceway, running south from the top of the bluff, is constructed of wood with plank sides that are supported by square wood timbers with corner braces. The tailrace, running southeast from the base of the wheel pit, is a rectangular culvert constructed of wood timbers and concrete that runs underground before emerging east of the Slag Pile to drain into the Saugus River approximately 100 ft away. A two-level, L-shaped, mortared stone wall, which may have been reconstructed based on Robbins' excavations, runs along the west side of the tailrace.

The Forge waterwheels are powered by the **Forge Sluiceways and Tailraces (LCS No. 040307, MHC No. SAU.934, contributing structure, Map No. 15, Photo 17)**, reconstructed in 1953–1954. The sluiceways, running south from near the north elevation of the Forge, are constructed of wood with plank sides supported by square wood timbers with corner braces. The west sluiceway slopes sharply downward to the tailrace, extending from the base of the wheel pit, which has cobblestone paving with a timber cascade and wooden sides. The east tailrace is a stone-lined trough without wood support walls that runs south from the base of the wheel pit.

The Rolling and Slitting Mill waterwheels are powered by the **Rolling and Slitting Mill Sluiceway and Tailrace (LCS No. 040308, MHC No. SAU.938, contributing structure, Map No. 16, Photo 18)**, constructed in 1953–1954 based on the layout of the Rolling and Slitting Mill. The sluiceways, running south from near the north elevation of the mill along the east elevation, are constructed of wood with plank sides supported by square wood timbers with corner braces. The south end of the sluiceway is staggered to accommodate the two overshot waterwheels, one near the center of the building and the other near the south end. The tailrace, running south from the wheel pit, consists of a wood trough with stepped sides that drains into a stone-lined channel.

A series of small **Tailrace Bridges (LCS No. 040304, MHC No. SAU.939, contributing structure, Map No. 17, Photo 20)**, constructed in 1953–1954, provides pedestrian access over tailraces near the south end of the industrial area. The timber stringer bridges have plank decks flanked by heavy timber railings with curved knee braces.

Between the tailraces of the Rolling and Slitting Mill and the east side of the Forge is the reconstructed **Corduroy Road (LCS No. 040305, MHC No. SAU.930, contributing structure, Map No. 18, Photo 21)**, a 9-ft-wide, 33-ft-long segment of a similar road found during archeological excavations in 1952. It

is the only circulation feature possibly dating to the iron works occupation found during the excavations. The road consists of evenly spaced wood fence poles running cross-wise and embedded in a dirt roadbed. The road has been rehabilitated several times, most recently in 2004.

An approximately 6-ft-wide, round, stone-lined **Well (LCS No. 040303, MHC No. SAU.933, contributing structure, Map No. 19, Photo 22)** sits just west of the path to the Rolling and Slitting Mill. It is composed of stones of varying sizes; some are mortared into place and others are dry-laid. A pipe at the base of the well feeds water from the well into the Park's water circulation system.

At the edge of the Saugus River, immediately south of the Forge, is the **Warehouse (LCS No. 005431, ASMIS No. SAIR00008.000, MHC No. SAU.30, contributing building, Map No. 20, Photos 15, 23)**, reconstructed in 1953–1954 adjacent to the wharf. The conjectural warehouse is a small, one-bay-by-one-bay, wood-framed, end-gable building. The west-facing building is south of the archeological remains of what Robbins believed was a warehouse (Griswold 2011d:238).[5] The dropboard clad building has a small vertical-board, hinged window in the center of the east elevation and a vertical-board door in the center of the west elevation. The roof is clad with wood clapboards. In about 1980, the interior of the warehouse was modified to accommodate machinery associated with the water circulation system and now functions as a pump house and storage area.

West of the Warehouse and projecting south into the Saugus River is the **Wharf (LCS No. 040302, ASMIS No. SAIR00007.000, MHC No. SAU.942, contributing structure, Map No. 21, Photo 23)**, originally reconstructed as part of the 1953–1954 site work based on excavations by Robbins, and rebuilt by the NPS in 2007–2008 as part of the restoration of the turning basin. The Wharf consists of a pier and bulkhead. The pier is an approximately 37-ft-long timber crib pier consisting of two cells of cribs anchored by 17 wood pilings and topped with a timber stringer and plank deck. The pier projects from an integrated 110-ft-wide, 5-ft-tall wood bulkhead along the waterline.

Two **Bridges over Saugus River (LCS No. 040311, MHC No. SAU.943, contributing structure, Map No. 22, Photo 24)** provide access between the two sides of the river. One bridge is for use by Park visitors; it consists of a wood plank deck, is 14-ft wide and 25-ft long, and rests on steel I-beams to allow passage of maintenance vehicles over the river. The other bridge, north of the visitor bridge, is outside the park grounds but within the authorized boundary and is used by the general public. It consists of a wood plank deck resting on timber girders with a metal pipe handrail and is separated from the rest of the site by a chain-link fence. Both bridges rest on a common pair of mortared stone abutments.

East and west of the Bridges over the Saugus River are the **Saugus River Stone Bulkheads (LCS No. 040312, MHC No. SAU.931, contributing structure, Map No. 23, Photo 24)**, a pair of dry-laid stone retaining walls built in 1953–1954 and rehabilitated by the NPS in 2010. The bulkheads form the turning basin, a widened area of the river where ships sailing up the Saugus River from Boston would turn to sail back down the river after picking up iron goods.

[5] The Warehouse is referred to as conjectural in a letter to Quincy Bent from Conover Fitch of Perry, Shaw, and Hepburn, Kehoe and Dean, dated May 7, 1953 (Box 1, Folder 6, Records of the First Iron Works Association, Saugus Iron Works NHS Archives, Saugus, MA).

Exposed Archeological Resources

Two small archeological resources sit at the base of the west bluff, near the edge of the Saugus River, on the west side of the Slag Pile.

The **West Bluff Stabilized Foundations (LCS No. 040314, ASMIS No. SAIR00003.000, MHC No. SAU.940, contributing site, Map No. 24, Photo 25-26)** are in the hillside of the west bluff and were uncovered during the re-creation of the industrial site in the late 1940s and early 1950s. The foundations consist of two dry-laid stone sections, one L-shaped and one linear; the linear section functions as a retaining wall for the upper bluff area. The foundations may be associated with a potter's shed, unidentified mill, or other ancillary structure.

The **Jenks Area Foundations (LCS No. 040315, ASMIS No. SAIR00009.000, MHC No. SAU.936, contributing site, Map No. 25, Photo 27)** consist of two stone concentrations west and northwest of the Slag Pile that are believed to be associated with Joseph Jenks' blacksmith shop, which was in operation during the iron works period. The concentration along the west edge of the Slag Pile comprises an oblong surface scatter of undressed, small- to medium-sized stone. The concentration northwest of the Slag Pile comprises a 6-ft-wide, 1-ft-6-in-deep, rock lined pit with an iron plate at its bottom.

Non-Contributing Resources

The five Park maintenance buildings are situated primarily on the east bank of the river near the north end of the site; two maintenance buildings are on the west bluff near the parking area. The park administrative offices are at the northwest corner of the site. A blacksmith forge is on the east bank of the river, northwest of the maintenance area.

The **Park Headquarters (MHC Nos. SAU.269 and SAU.270, non-contributing building, Map No. 26)** consists of two mid-twentieth-century residences at 230 and 232 Central Street that were constructed before the re-discovery and re-creation of the iron works site. 230 Central Street is a two-story, three-bay-by-two-bay Cape that was altered in 1975 to add the second story. The vinyl-clad building is seated on a concrete foundation on the south side of Central Street; a narrow brick chimney pierces the south slope of the asphalt-shingled roof. The entrance, centered in the north elevation, is accessed via a run of four stone steps with wrought metal handrails. Fenestration consists of one-over-one, double-hung, vinyl sash. An attached, side-gable, one-car garage projects off the east elevation, fronted by a concrete pad on the north elevation; the garage door has been removed. In 2005, an end-gable addition was constructed on the south elevation to create climate-controlled space for a library and meeting room.

232 Central Street is a one-and-one-half story, three-bay-by-two-bay Cape with two gable dormers in the west slope of the asphalt-clad roof. The vinyl-clad building is seated on a concrete foundation at the southwest corner of the intersection of Central Street and Marion Road. An attached, one-story, pent-roof, one-car garage projects off the south elevation; an ADA-accessible ramp runs east from an asphalt pad on the east side of the garage. The center entrance in the east elevation is accessed by a run of concrete and wood steps. Fenestration consists of one-over-one, double-hung, replacement sash. A short hyphen, accessed by the ADA ramp and a short run of composite stairs, connects the property at 232 Central Street and the library addition.

The southernmost maintenance building on the east bank is the **Carpenter Shop (MHC No. SAU.266, non-contributing building, Map No. 27)**, constructed by the NPS in 1976 on the east bank of the river

on the footprint of a ca. 1968 NPS carpentry shop. The east-facing, one-story, vertical-board clad building sits on wood piers and is topped with a shed roof. The east elevation, supported by a concrete foundation, is at grade, but the rest of the building is above grade. The space under the building is used for open storage of construction materials. The roof is sheathed with rolled rubber membrane. A metal, vertical-lift door is in the south end of the east elevation, with a smaller, person-sized door to the north. Fenestration consists of six-over-six, double-hung sash. A 1983–1984 single-occupancy restroom topped with a shed roof and clad with vertical-board siding is attached to the northeast corner of the Carpenter Shop.

North of the Carpenter Shop is the ca. 1988 **Assembly Shop (MHC No. SAU.945, non-contributing building, Map No. 28)**, formerly referred to as the wood storage shed. The formerly open-sided shed was enclosed in the late 1990s to create a workshop space. The one-story, east-facing building is supported by wood piers, with the east elevation at grade; the space under the building is used for storage. A vertical-lift aluminum door is in the center of the east elevation, with a steel person-sized door immediately to the south. The shed roof is sheathed with rolled rubber membrane. Fenestration consists of six-over-six, double-hung sash.

East of the Assembly Shop is the 1977 **Wood Storage Shed (MHC No. SAU.946, non-contributing structure, Map No. 29)**, formerly a picnic shelter, consisting of an asphalt-shingled, gable roof supported by a post-and-beam frame. The shed was subsequently semi-enclosed with chain-link fencing by the NPS for use as storage.

North of the east bank maintenance area is the **Blacksmith Forge (ASMIS No. SAIR00012.000, MHC No. SAU.271, non-contributing building, Map No. 30)**, constructed in 1972–1974 by the NPS for blacksmithing demonstrations. The building originally was an open-sided, shed-roof, post-and-beam shed that was enclosed with dropboard siding in 1974. The side-gable roof is clad with wide wood clapboards. A pair of wide, vertical-board doors fills nearly all of the west elevation, and small, hinged vertical-board panels cover window openings in the north and south elevations. A fieldstone hearth topped with a parged, wood chimney is in the east elevation.

The west bank maintenance area is immediately east of the parking area, screened from view by dense evergreen hedges. The ca. 1968 **Maintenance Garage/Lunchroom (MHC No. SAU.267, non-contributing building, Map No. 31)** is a west-facing, one-story, pent-roof building (constructed in multiple stages) clad with vertical-board siding and seated on a concrete block foundation. It has a rolled rubber membrane roof; the west slope is asphalt shingled. The center section of the garage was constructed in 1974. In 1978, a lunchroom was added to the north elevation and was expanded in 1980. A storage room was added to the south elevation by the Youth Conservation Corps in 1982, and a small office was added north of the lunchroom in 1984. The west elevation has multiple doors, including a vertical-lift door in the north side of the center section and a combination of solid wood and nine-light doors to access offices, storage, and the lunchroom. Fenestration consists of six-over-six, double-hung sash and fixed nine-light windows.

South of the Maintenance Garage is the ca. 1992 **Tool Shed (MHC No. SAU.268, non-contributing structure, Map. No. 32)**, consisting of a small, side-gable, wood-frame structure clad with dropboard siding and vertical boards in the gable peaks. The shed is accessed by a pair of vertical-board doors in the center of the east elevation. The tool shed was moved from the south yard of 230 Central Street to its current location when the 2005 library addition was constructed.

A narrow, dry-laid stone **YCC Stone Wall (MHC No. SAU.944, non-contributing structure, Map No. 33)** runs approximately north–south from the southern Central Street Retaining Wall toward the Slag Pile. Constructed by the Youth Conservation Corps in 1978, the YCC Stone Wall acts as a retaining wall for the pedestrian path running north from the granite stairs near the Visitor Contact Station. It is largely obscured by vegetative growth.

Near the Blast Furnace, on the edge of the west bluff, is the **Saugus Iron Works Scale Model (non-contributing object, Map No. 34)**, a round, cast-bronze model of the industrial area seated on a square metal pedestal that was installed in 2008. The model depicts the Blast Furnace, Forge, Warehouse, Wharf, Slag Pile, and associated sluiceways and tailraces in relation to the Saugus River.

Collections

The museum collections at the Saugus Iron Works NHS contribute to the historical significance of the site. The collections include pre-contact and post-contact Native American artifacts, large material collections related to the iron works occupation from 1646 to 1670, and objects related to the twentieth-century Colonial Revival movement and historic preservation efforts at the site in the early and mid-twentieth century. There are a total of 19,000 archeological objects and 1,280 historic objects, including seventeenth-century and reproduction period furnishings and domestic objects. Approximately 45,190 archival documents include archeological reports, historical research sources, administrative records, architectural drawings, and photographs.[6]

Statement of Integrity

The Saugus Iron Works NHS National Register District retains overall integrity of workmanship, feeling, design, materials, location, and association in the areas defined in Section 8 of this Registration Form. The District clearly conveys its significance as a re-creation of the colonial iron works on the banks of the Saugus River. It contains a portion of the industrial core of the original iron works at Saugus, which initially encompassed about 600 acres on the east and west banks of the Saugus River. The site was the subject of a major restoration and reconstruction effort in the late 1940s and early 1950s, when the majority of the contributing buildings on the site were reconstructed on the basis of archeological and documentary evidence. Reconstructed buildings and structures are relatively unaltered from the 1952–1954 reconstruction period, with replacement in kind of waterwheels, roofs, and siding as necessary due to deterioration. The Iron Works House, constructed ca. 1689 and restored by Wallace Nutting in 1915, remains relatively unaltered from Nutting's period, with replacement in kind of certain elements by the NPS.

[6] *State of the Parks–Saugus Iron Works National Historic Site*, U.S. Department of the Interior, National Park Service, Saugus Iron Works NHS, Saugus, MA, 2013.

HISTORIC DISTRICT DATA SHEET

CONTRIBUTING RESOURCES

Please Note: Resources marked with an asterisk (*) have been previously listed on the National Register of Historic Places.

RESOURCE NAME	DATE(S)	LCS ID/ ASMIS ID	MHC ID	MAP #	PHOTO #
Buildings = 6					
Iron Works House*	ca. 1689; restored 1915–1917	005426/ SAIR00001.000	SAU.27	4	4–8
Visitor Contact Station	1954; altered 1984	040300	SAU.263	5	9
Museum and Museum Annex	ca. 1870; Annex- ca. 1954–1955; altered 1978, 1990	040301; 040316	SAU.264; SAU.265	6	10–11
Forge*	1645–1670; reconstructed 1952–1954	005429/ SAIR00005.000	SAU.28	11	16–17
Rolling and Slitting Mill*	ca. 1670; reconstructed 1953–1954	005430/ SAIR00006.000	SAU.29	13	16, 18
Warehouse*	1645–1670; reconstructed 1954	005431/ SAIR00008.000	SAU.30	20	15, 23
Structures = 15					
System of Paths	1954; altered 2005	None	None	2	13
Saugus Iron Works Nature Trail	1954; altered ca.1980	None	None	3	15
Blast Furnace*	1645–1670; reconstructed 1951–1952	005428/ SAIR00004.000	SAU.900	9	14, 19
Blast Furnace Sluiceway and Tailrace*	1645–1670; reconstructed 1953–1954	040306	SAU.935	14	19
Forge Sluiceways and Tailraces*	1645–1670; reconstructed 1953–1954	040307	SAU.934	15	17

RESOURCE NAME	DATE(S)	LCS ID/ ASMIS ID	MHC ID	MAP #	PHOTO #
Rolling and Slitting Mill Sluiceway and Tailrace*	1645–1670; reconstructed 1953–1954	040308	SAU.938	16	18
Well	1953–1954	040303	SAU.933	19	22
Wharf	ca. 1645; reconstructed 1953–1954; rebuilt 2007–2008	040302/ SAIR00007.000	SAU.942	21	23
Tailrace Bridges	1953–1954	040304	SAU.939	17	20
Corduroy Road	1645–1670; reconstructed 1953–1954	040305	SAU.930	18	21
Bridges over Saugus River	1953–1954	040311	SAU.943	22	24
Saugus River Stone Bulkheads	1645–1670; reconstructed 1953–1954	040312	SAU.931	23	24
Central Street Retaining Walls	ca. 1953	040310	SAU.937	7	12–13
West Bluff Stone Wall	1953–1954	040309	SAU.932	8	13
Blast Furnace Retaining Wall	1953–1954	040313	SAU.941	12	17
Sites = 4					
Saugus Iron Works Site*	8000-450 B.P.; 1646–1670	SAIR00010.000, SAIR00011.000	SAU.A SAU.1 19-ES-248 19-ES-835 19-ES-855	1	1–3
Slag Pile*	ca. 1646–1670	005427/ SAIR00002.000	SAU.901	10	15
West Bluff Stabilized Foundations	Possibly ca. 1646–1670	040314/ SAIR00003.000	SAU.940	24	25–26
Jenks Area Foundations	ca. 1646–1670	040315/ SAIR00009.000	SAU.936	25	27
Total Contributing Resources = 25					

NON-CONTRIBUTING RESOURCES

RESOURCE NAME	DATE(S)	LCS ID/ ASMIS ID	MHC ID	MAP #
Buildings = 5				
Park Headquarters	ca. 1945; altered 2005	None	SAU.269, SAU.270	26
Carpenter Shop	1976	None	SAU.266	27
Assembly Shop	ca. 1988; altered late 1990s	None	SAU.945	28
Blacksmith Forge	1972–1974	SAIR00012.000	SAU.271	30
Maintenance Garage/Lunchroom	1974; altered 1978, 1980, and 1982	None	SAU.267	31
Structures = 3				
Wood Storage Shed	1977	None	SAU.946	29
Tool Shed	ca. 1992	None	SAU.268	32
YCC Stone Wall	ca. 1978	None	SAU.944	33
Objects = 1				
Saugus Iron Works Scale Model	2008	None	None	34
Total Non-Contributing Resources = 9				

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- [x] A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- [x] B. Property is associated with the lives of persons significant in our past.
- [x] C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- [x] D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)

- [ ] A. Owned by a religious institution or used for religious purposes
- [ ] B. Removed from its original location
- [ ] C. A birthplace or grave
- [ ] D. A cemetery
- [x] E. A reconstructed building, object, or structure
- [x] F. A commemorative property
- [ ] G. Less than 50 years old or achieving significance within the past 50 years

Areas of Significance
(Enter categories from instructions.)
INDUSTRY
CONSERVATION
OTHER: COMMEMORATION
ARCHEOLOGY: HISTORIC
ARCHITECTURE
ARCHEOLOGY: PREHISTORIC

Period of Significance
8000–450 B.P.
1646–1968

Significant Dates
1646 Operations commence at Iron works at Lynn
1670 Operations cease at Iron works at Lynn
ca. 1689 Iron Works House built
1915 Restoration of Iron Works House
1943 Formation of First Iron Works Association
1947 Archeological investigations at the site begin
1952 Reconstruction opens to the public
1963 Site designated a National Historic Landmark
1968 Site becomes a National Historic Site

Significant Person
(Complete only if Criterion B is marked above.)
Robbins, Roland Wells

Cultural Affiliation
Middle Archaic
Late Woodland

Architect/Builder
Nutting, Wallace
Perry, Shaw, and Hepburn, Kehoe and Dean
Dean, Henry Charles

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The Saugus Iron Works NHS Historic District (the District) is eligible for listing in the National Register at the national level under Criteria A, B, C, and D. The District derives its primary significance under Criterion A in the area of Industry as the site of the first sustained integrated iron works in the American Colonies. The District has additional significance under Criterion A in the areas of Conservation and Commemoration for its association with the early and mid-twentieth century Colonial Revival movement and the efforts to restore, recreate, and preserve the site, including the restoration of the Iron Works House in 1915 by Wallace Nutting. In particular, the site is significant as the first concerted attempt by a national industry to reclaim their earliest industrial past by working with and through the citizens of a local community. The District is additionally significant under Criterion A in the area of Archeology for its association with the origins of industrial archeology. Under Criterion B, the District possesses significance for its association with the archeological career of Roland Wells Robbins. Under Criterion C in the area of Architecture, the Iron Works House is a nationally significant example of a First Period dwelling in eastern Massachusetts that exhibits a regional framing variant. Under Criterion D, the District possesses significance in the area of Archeology: Historic, Non-Aboriginal for its demonstrated and potential ability to yield substantive information about the colonial iron works founded on the site and the earlier and later occupations. The District also possesses significance under Criterion D in the area of Archeology: Prehistoric for its demonstrated and potential ability to yield substantive information about lithic procurement and distribution patterns throughout the Saugus River basin and greater North Shore region, and as an illustration of 8,000 years of cultural continuity in one location based on stable and highly favorable environmental factors.

The District's reconstructed buildings and structures meet Criteria Consideration E because they have achieved significance in their own right for their association with important trends and events in the history of the United States. The reconstructed buildings and structures also meet Criteria Consideration F, as the significance of these resources arises from their value as expressions of the Colonial Revival movement and the commemoration and interpretation of the American past embodied in that movement. The district retains integrity and clearly conveys its significance as a re-creation of the colonial iron works on the banks of the Saugus River.

The period of significance for Saugus Iron Works NHS Historic District extends from 1646, the earliest date associated with an extant historic resource within the District, to 1968, when the Saugus Iron Works NHS was established by the U.S. Congress and incorporated into the National Park System. The period covers the years of primary significance from 1646 to ca. 1670 when the iron works was in operation, and other important events, including the restoration of the Iron Works House by Wallace Nutting from 1915 to 1917, and from 1947 to 1953, when the archeological investigations were performed at the site and when resources were reconstructed based on archeological and historical data. The period for pre-contact Native American occupation of the District dates from the Middle Archaic through Late Woodland periods (8000–450 B.P.)[7]

[7] Dates used in this section refer to radiocarbon years before present (B.P.) (A.D. 1950) unless otherwise stated.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

CRITERION A – INDUSTRY: The Saugus Iron Works and Its Influence on the Colonial American Iron Industry

The District possesses significance under Criterion A in the area of Industry for its influence on the development of the colonial American iron industry in the seventeenth and early eighteenth centuries. Established in 1646 and operated until about 1670, the Saugus iron works (historically known as "Hammersmith") was among the first integrated iron works developed in Britain's North American colonies. As such, it helped to launch the iron industry that became an important contributor to the early American economy and decreased reliance on imported iron goods from Great Britain. The iron works combined the production output of a blast furnace with that of a forge and rolling and slitting mills within a single site (thereby making it an *integrated* iron works) to manufacture a range of finished and semi-finished goods such as cast iron hollowware, wrought iron merchant bar, and rods for the manufacture of nails. Although the Saugus Iron Works operated only until about 1670, it demonstrated the feasibility of manufacturing a variety of metal products in the American colonies, and the men involved in the business ultimately used the knowledge they had gained at Saugus to found other ironmaking establishments and influence succeeding generations of American ironmakers. By the mid-eighteenth century American ironmakers were able to compete on relatively even terms with their European counterparts and had established an industry that proved critical to the Revolutionary War effort and the post-war economy.

European Ironmaking in the Mid-Seventeenth Century

By 1640, European iron makers had developed a suite of sophisticated technologies that allowed them to produce a far greater variety of iron goods with more efficiency than their late medieval predecessors. Many of these goods, from hardware and tools for building construction to armaments for warfare, were essential to rapidly expanding European global trade and colonization in the sixteenth and seventeenth centuries. The expansion of European ironmaking can be credited to the development of the blast furnace, which allowed for smelting larger quantities of iron ore than was possible through traditional bloomery forges. From 1500 to 1750—the centuries leading up to the early modern era—northern European iron makers began adapting bloomery forges for smelting iron ore to produce a liquid iron-carbon alloy (with approximately 2% to 4% carbon by mass) that could be cast into bells, hollowware, and cannons by using many of the well-established techniques for casting bronze and brass.[8] In the transition from bloomery forges to blast furnaces, ironmakers expanded the size of a conventional bloomery forge by creating a taller masonry stack and providing more draft, or blast, into the base of the stack with the aid of a waterpowered bellows (Diamond 1997:239–264; Rostoker and Bronson 1990:101–102).

A typical early blast furnace site in England included a 20- to 30-ft-tall masonry stack furnace with a round interior chamber that widened toward the bottom (an area often called the "boshes" of a furnace), before constricting at the base to form the "hearth" where molten iron and slag collected. The base of a

[8] Hollowware generally refers to bowls, pots, or other vessels used to contain objects, liquids, or other substances. At an iron works, hollowware would be created by pouring molten metal into a mold made out of sand or another material.

furnace was accessed through two or more arches built into the structure. Workers loaded, or "charged," materials into an opening at the top of the chamber that was connected to an adjacent slope through a bridge or deck. These materials consisted of charcoal for fuel, iron ore, and a fluxing agent in successive layers until the chamber was nearly full. The fluxing agent was usually a highly alkaline mineral such as limestone or, in the case of Saugus, local gabbro from Nahant, an igneous rock high in alkaline minerals (Ricketts 2000:37).

A set of waterpowered bellows provided blast through one or more of the access arches at the base of the furnace. The steady blast raised the temperature within the chamber to approximately 2200–2500°F and created conditions that drove off the oxygen bound to the iron ore with the molten iron gradually accumulating in the hearth. The silicon-rich minerals that separated from the iron with the aid of the flux formed the waste product known as slag. The "founder," a skilled tradesman who oversaw the pouring, or "founding," of molten iron into molds, and his assistants prepared an area of sand around the base of the casting arch (the larger of the furnace's two arches), tapping the furnace twice a day to first draw off the slag and then the iron. To operate at peak efficiency, a blast furnace was kept in continuous operation for several months with at least two shifts of workers maintaining the blast throughout an entire day for six days a week; workers typically filled, or "banked," a furnace at the end of the sixth day with a day's worth of combusting charcoal to keep the furnace ready for the following week (Gordon 1996:119; Temin 1964:87).

By the early sixteenth century, ironmakers had established blast furnaces in several northern European countries, including England. The form of iron produced with a blast furnace, essentially cast iron, lacks the ductility of wrought iron produced with a bloomery forge, but has greater strength in compression, making it useful for items for which rigidity is a more valued quality. With a blast furnace, an ironmaker could choose to produce finished or nearly finished goods, such as domestic cooking pots or firebacks cast directly from the furnace. The ironmaker could also choose to cast long, ingot-like bars called "pigs" or "pig iron" that could be further refined into wrought iron through what historians of ironmaking call the *indirect process* (Gordon 1996:125; Hyde 1977:12).

Wrought iron typically contained less than 0.5 percent carbon by mass, making it less brittle than cast iron, but it gained its ductile quality with the intentional inclusion of long fibrous strings of silicon-rich slag that were bound in the iron. By the seventeenth century, ironmakers in northern Europe had refined the indirect process to consistently produce greater quantities of wrought iron more cheaply than could be produced using the older *direct process* in which iron was made from iron ore in a single, but much higher, fuel-consuming step. Frequently referred to as the *Walloon* process after its region of origin in southern Belgium, the indirect process involved the use of a set of hearths and repeated consolidation through hammering in a two-step process. The first step involved the use of a finery hearth in which pig iron was heated to a molten or nearly molten state using a strong blast from a set of bellows (typically waterpowered) that drove off carbon and some silicon from the pig iron. In the second step, the iron and slag mass (called a "loup") was "consolidated" by repeatedly hammering it with the aid of a waterpowered trip hammer and occasionally reheating the loup in a nearby chafery hearth fired by a waterpowered air blast. Skilled hammermen consolidated the iron loup into bars that could be sold to blacksmiths or processed further into smaller stock (Gordon 1996:128–129).

Before the late sixteenth century, processing larger wrought iron bars into smaller stock was often done by blacksmiths and their assistants, sometimes with the aid of a waterpowered trip hammer, but more often by hand with a hammer and anvil. By 1600, millwrights familiar with waterpowered mill

construction had developed horizontal rolling mills that could produce similarly dimensioned bar stock (square in cross section) more cheaply than what was previously possible. The earliest mills included a pair of large timber rollers, sheathed in iron and operated by waterpower, through which workers passed reheated wrought iron bars to squeeze, or roll, into thinner and longer lengths sometimes called "plates," "plate iron," or "mill iron." Mill iron could be sold to blacksmiths to produce many items, including wheel sheathing or toolmaking stock. Mill iron could also be further processed with the use of a slitting mill into nail rod (a value-adding process) that was sold to blacksmiths and other tradesmen who made hand-wrought nails. Similar to rolling mills, slitting mills included a set of rollers with right-angled iron grooves set into the rollers and with each groove offset to the one below or above it. Workers would reheat mill iron and pass it through these grooved rollers that would cut, or shear, the iron lengthwise into nail rod, which was bound into bundles for shipping to market (Landes 2003:91; Schubert 1957:304–310).

The resource requirements of the major European methods for making and processing iron in the seventeenth century contributed to a wide geographic distribution of blast furnaces, forges for making wrought iron, and rolling and slitting mills. Once the indirect Walloon process had matured, ironmakers often built forges near or in the same district as a furnace or furnaces to keep pig iron transportation costs to a minimum; such areas were typically rural and close to sources of waterpower, iron ore, and forests suitable for charcoal production. Rolling and slitting mills, in contrast, were more often sited closer to the greatest concentrations of iron consumers in towns and cities to keep transportation costs lower. No more than 12 to 15 sites in Europe and elsewhere have been identified where all three operations—blast furnaces, forges, and rolling and slitting mills—were together in the same location, suggesting that full integration of ironmaking was a rare endeavor during the seventeenth century (Craddock 1995; Hyde 1977; Regan and White 2011:27).

The Iron Works on the Saugus River

The need for locally produced iron goods to support fishing, farming, timbering, and shipbuilding provided the impetus for the founding of iron works in the Massachusetts Bay Colony. The end of the Great Migration (1629–1640), a period marked by the emigration of hundreds of men, women, and children from England, meant fewer ships were sailing westward from Europe laden with iron goods for sale or trade. Further hindering the shipment of goods to the Thirteen Colonies was the English Civil War (1641–1651), during which many colonists returned to England to fight (Fischer 1989:16–17; Pineo 2013:2, 6–7).

In 1641, Massachusetts Bay Colony Governor John Winthrop, aware of the necessity of iron goods for the success of the fledgling colony, issued an ordinance encouraging colonists to seek out iron deposits. His son, John Winthrop Jr., traveled to England to solicit funding for an iron works and to recruit English iron workers. With the financial backing of 24 men in England and the Massachusetts Bay Colony, Winthrop Jr. formed the Company of Undertakers for the Iron Works in New England and was appointed its managing agent for overseeing ironmaking operations. The governor and the Massachusetts Bay Court of Assistants granted a 21-year monopoly on ironmaking in Massachusetts to the Company of Undertakers. The grant permitted the Company to develop multiple iron works within the colony provided certain conditions were met. The iron works had to be of the integrated type, meaning they would have a blast furnace and a forge, and be capable of producing both cast iron and wrought iron goods. The owners also had to ensure that local iron needs were met before any goods could be exported, and a firm price limit of 20 pounds per ton was set. Winthrop Jr. directed the establishment of the

Company's first iron works in Braintree in 1644, but resigned the following year and was replaced by Richard Leader, an experienced English ironmaker. Leader completed the construction of a blast furnace at Braintree, but iron deposits in the immediate area were of poor quality and an inadequate water supply required that the forge be constructed nearly two miles from the furnace site. Although the Company operated the Braintree furnace until at least 1659, it was never an economic success. In the meantime, Leader found a site along the Saugus River that was far better suited for an integrated iron works (Fischer 1989:16–17; Hartley 1957:121–123, 256, 266; Regan and White 2011:32).

Known as the "Ironworks[sic] at Linn" or Hammersmith—the town in England from which many of the iron workers may have hailed—was a 600-acre parcel at the fall line of the Saugus River purchased from yeoman farmer Thomas Dexter. Leader chose to construct the iron complex in an area of terraces adjacent to the Saugus River. The navigable Saugus River facilitated the transportation of both raw materials to the site and finished iron goods to Boston and provided above the iron works a location for an impoundment that provided an adequate supply of water for the site's several waterwheels. Sources of bog ore were located near the iron works and the surrounding forests provided ample wood for charcoal making (Albright et al. 1977:356–357; Fenton 1954; Hartley 1957:124–125; Regan and White 2011:27, 32–33).

The iron works at the **Saugus Iron Works Site (LCS No. none, ASMIS Nos. SAIR00010.000 and 00011.000, MHC No. none, contributing site, Map No. 1, Photos 1-3)** was in operation by 1646. Company records detail Leader's successful coordination of the construction of a blast furnace, forge, and rolling and slitting mill at the core of the Saugus undertaking. The supply of water for the numerous waterwheels was channeled into a holding pond above the works through a 1,600-ft-long canal leading from a dam and reservoir upstream of the site. Apart from its critical waterpower system, the iron works also included at least two blacksmith shops, a charcoal house, a warehouse, and a wharf on the Saugus River, and several other ancillary buildings. Skilled workers who tended the iron works were provided with housing in Hammersmith village, which was probably located on the opposite side of the Saugus River, east of the iron works. Company records show that Saugus employed about 35 skilled workers on a regular basis, and up to an additional 185 workers, typically local farmers, craftsmen, and boatmen who were paid for part-time or seasonal work (Regan and White 2011:34).

Wary of another underperforming iron works, the investors of the Company of Undertakers appear to have interfered in Leader's management of the operation and made it difficult for him to pay the iron works' creditors for supplies. Leader resigned his position in 1650 and was replaced by John Gifford, who had been a clerk at a large iron works in the Forest of Dean in England. That complex included three blast furnaces and three forges that were ordered destroyed during England's Commonwealth Period (1649–1653), leaving Gifford to find employment elsewhere. Under Gifford's management, the Saugus Iron Works reached its peak of production: an estimated annual 144 tons of pig iron, 20–25 tons of cast and hollowware, 96 tons of bar iron, and 12 tons of rod iron. These figures demonstrate that Saugus had achieved the goal of full integration that the initial investors had set for themselves in the 1640s, though maintaining lasting profitability proved more difficult. Ultimately, the Company was forced to close the iron works by 1670 due to mounting debts and associated legal troubles (Hartley 1957:134, 139–140, 162–163).[9]

[9] The records for the Iron Works are housed at the Baker Library at Harvard University in Cambridge, Massachusetts, and provide insight into the operation's legal and financial troubles.

The Skilled Ironmakers of Saugus

To create the integrated iron works at Saugus, investors and managers had to draw skilled ironmakers from elsewhere since very few workers with the necessary skills had traveled to the American colonies from England by the 1640s. By the 1650s, after aggressive recruiting, they had gathered a skilled workforce capable of maintaining several ironmaking operations at a single site. In his study of the skilled tradesmen at Saugus, historian E. Neal Hartley identified approximately 35 men who were responsible for carrying out the most essential ironmaking tasks at Saugus in the 1650s (a period for which Hartley could access the most records for the iron works): a founder and a blower, both skilled workers who kept the furnace in operation; 10 tradesmen who operated the refinery and chafery forges and the nearby rolling and slitting mill; at least 2 smiths who made tools and other hardware used by the iron works; and 9 skilled charcoal-makers, or "colliers," who produced charcoal consumed by the furnaces and forges. In addition to these skilled workers, nearly 150 additional semi-skilled and unskilled workers (many of whom were indentured servants) who worked on a part-time or full-time basis fulfilling numerous tasks. Hartley's research shows that nearly all, if not all, of the skilled tradesmen employed at Saugus originated from England, suggesting that the iron works' owners and managers sought out talent in England alone and neglected recruiting any potential skilled workers from other European countries with established ironmaking industries (Hartley 1957:188–190).

The **Blast Furnace (LCS No. 005428, ASMIS No. SAIR00004.000, MHC No. SAU.900, contributing structure, Map No. 9, Photos 14, 19)** at Saugus was a focal point for the iron works, producing valuable hollowwares (such as salt pans for the production of salt, a widely sought-after commodity in the colonies for preserving fish and meat) and pig iron, ingots of cast iron converted by the nearby forge into wrought iron. The furnace required constant tending when in production, or "blast," with semi-skilled or unskilled workers filling the furnace with charcoal, iron ore, and an alkaline-rich fluxing agent to aid smelting. Coordinating these activities at the furnace required skillful management by the "founder," who was chiefly responsible for tapping iron from the furnace that would be cast into finished products or into pig iron. The founder was assisted by the "blower," who maintained the waterpowered bellows that generated blast for the furnace. Assisting the founder was a skilled potter, who made molds from clay that were used in casting the different hollowwares that the furnace produced. In addition to using ceramic molds, the furnace at Saugus also used sand casting for some articles, especially the pigs cast for conversion into wrought iron (Gordon 1996:118–124).

The fillers who took on the tasks of loading or "charging" the top of the furnace with burden materials were typically not as skilled as the founder or blower but most likely had a close understanding of the day-to-day workings of the furnace and would have been valued for their roles in keeping it in regular operation. Though they did not typically work near the furnace, the charcoal-makers, or colliers, who were responsible for producing the substantial supply of fuel needed by the furnace and forges, possessed a special skill set that was difficult to acquire without lengthy experience. Colliers worked with wood-cutters who would fell trees and cut the timber into lengths suited for making into charcoal. For mid-seventeenth-century colliers, converting wood into charcoal involved the careful construction of rounded mounds of stacked cut timber, overlain with turf, with a controlled, slow-burning fire set at the center of the mound. The slow-burning, oxygen-deprived fire would gradually spread throughout the mound, reducing the lengths of wood to charcoal by driving off volatile, combustible compounds bound with the wood and leaving mostly charcoal once the fire had exhausted itself. Making charcoal by such a method was often fraught with challenges that required substantial experience and planning to overcome, so

attracting and keeping reliable colliers in regular employment was critical to the enterprise (Gordon 1996:34–36).

Adjacent to the furnace, iron workers operated a forge for the production of wrought iron. A minimum of 10 forge workers, at least half of whom were skilled, followed a number of steps in converting brittle, carbon-rich pig iron into tough, ductile wrought iron using two refinery hearths for heating pig iron and consolidating the iron into "loups"; a waterpowered trip hammer to further consolidate and refine loups into finished wrought iron; and a chafery forge for periodic reheating of the loups as they were converted into finished wrought iron. The skilled forge workers responsible for making wrought iron possessed specialized knowledge that, like other skills needed by the iron works, took several years to acquire and to adapt to new settings and resources. For these workers, experience in the forge could carry over to the rolling and slitting mill; reheating wrought iron in the hearth attached to the rolling and slitting mill would have been similar to the use of the chafery hearth in the forge, while the rolling and slitting of iron most likely required its own specialized experience. More importantly, their close understanding of the wrought iron they produced in the forge may have given them insight into how best to roll and slit that same iron (Gordon 1996:128–129; Hartley 1957:189).

Colonial American Ironmaking after 1670

In the 1650s and 1660s, the managers of the Saugus Iron Works were unable to maintain profitability due to high expenditures for equipment replacement (including several waterwheels) and the expansion of buildings. After 1653, the iron works ownership changed several times before falling into the hands of entrepreneur William Paine. After Paine's death in 1660, his son John took over the iron works, but he too was unable to make it profitable. By 1670, the operation was discontinued and, by 1678, the iron works site was entirely abandoned. The inability of the owners to maintain a profitable operation was likely related to the resumption of the importation of cheaper English-made iron after the end of the English Civil War in 1651. Following the abandonment of the iron works, residents of nearby Wakefield (then part of Reading) petitioned the Massachusetts General Court to clear the dam from the Saugus River so that alewives, a common salt-water fish, could return to their natural spawning grounds; this petition was denied, and the dam was breached by unknown persons. The crumbling iron works was likely buried by sediment following the dam removal, leaving only the slag pile as visual evidence of the works that had once operated on the site (FIWA 1953:23; Hartley 1957:162–163; Lewis and Newhall 1865:259; Pineo 2013:8; Regan and White 2011:50, 52, 54).

Despite its gradual failure, the Saugus Iron Works was critical to the growth of colonial American ironmaking after 1670 in several ways. It proved the feasibility of adapting European ironmaking methods to a colonial setting (if not in one setting due to cost limits, as the history of Saugus demonstrates) that had an increasing demand for iron goods. The initially well-supported iron works attracted skilled ironmakers to colonial Massachusetts who otherwise likely would not have emigrated to the colony. Some of the ironmakers who lost their jobs after the Saugus Iron Works failed found their skills in demand at other ironmaking operations in Massachusetts or went on to establish new ironmaking enterprises in other colonies. Among them were Joseph Jenks' sons and the brothers Henry and James Leonard, who went on to establish successful forges and furnaces in Massachusetts, Rhode Island, and New Jersey from the 1650s to 1670s that their descendants continued to operate well into the eighteenth century (Hartley 1957:209–210; Mulholland 1981:58–60).

CRITERION A – CONSERVATION AND COMMEMORATION

The District has significance under Criterion A in the areas of Conservation and Commemoration as a property that represents trends toward the preservation and restoration of colonial buildings during the years of the Colonial Revival movement of the late nineteenth and early twentieth centuries. The movement was manifested in the District by the preservation and restoration of the Iron Works House by Wallace Nutting and Henry Charles Dean from 1915 to 1917 and the application of the outdoor living history museum concept, which became a popular interpretive tool that arose out the historic preservation movement of the twentieth century. The District is also significant as an embodiment of the so-called "Corporate Roots" movement, which was expressed by the efforts of the iron and steel industry to commemorate their origins by sponsoring the reconstruction of the Saugus Iron Works.

Preservation in New England in the Early Twentieth Century

The historic preservation movement in the United States emerged during the nineteenth century as Americans gained an increasing sense of their national identity and a growing appreciation of historic buildings as tangible links to the past. This awareness led many wealthy citizens to save buildings from demolition and to stabilize, restore, and use them as continuing historical and cultural assets for the public's benefit. Late nineteenth-century preservation activities in the greater Boston area demonstrated the influence of the country's embrace of the Colonial Revival Movement in thought and design at the end of the nineteenth century and beginning of the twentieth century as a way to navigate between tradition and progress within the social and political context of the time. Later preservation efforts, undertaken in the years after World War II, would reflect growing concerns about the role of American industries on the world stage in the face of the globalization of many industries (Scofield et al. 2014).

In the first decade of the twentieth century, preservation efforts organized by socially and culturally elite citizens gained momentum in New England at the same time that the federal government was beginning to recognize the importance of historic resources. The region's most important preservation organization was the Society for the Preservation of New England Antiquities (SPNEA; now Historic New England [HNE]), which was founded in Boston in 1910 by William Sumner Appleton. Following the model of the English Society for the Protection of Ancient Buildings, Appleton preferred documentation and preservation over restoration of historic buildings and identified and purchased buildings that were deemed important because they represented aspects of Colonial architecture. Appleton, who attended architectural classes at Harvard in 1906, consulted with well-known architects who used scientific methods in their approach to the restoration of seventeenth- and eighteenth-century buildings. From 1910 to 1940, the SPNEA acquired more than 40 buildings and developed one of the first networks of historic house museums in the country (Lindgren 1995:3, 8, 41, 69; 2004:118; Murphy 1998:47; Murtagh 1997:80; Scofield et al. 2014).

The Colonial Revival Movement

The Colonial Revival movement in the United States was a response by the cultural elite to the instability of the country and the influx of Southern European immigrants. The movement gathered steam after colonial lifeways and building types were prominently featured at the Centennial Exposition in Philadelphia in 1876. Harkening back to simpler colonial times, the movement was a reaction against an increasingly complex industrial society and the destabilizing impact of mass immigration to the United States. The movement was multifaceted, spawning national patriotic organizations such as the Sons and

Daughters of the American Revolution and the Mayflower Society, and numerous smaller groups dedicated to commemorating historic persons and events or to preserving Colonial Period buildings. The Colonial Revival architectural style that became widely popular during the period relied on precedents established during the Georgian and Federal periods (1700–1780 and 1780–1820, respectively) with elements including double-hung windows, doors topped with fanlights or flanked with sidelights, and symmetric facades (McAlester 2013:409; Pineo 2013:13).

In the early twentieth century, visitation to historic house museums was a popular activity and helped to spur historic preservation activities, particularly in New England, which had a large stock of Colonial Period buildings. People in search of the imagined serenity of "Old New England" frequently found it in historic house museums and outdoor living history villages that opened in significant numbers throughout the region in the early twentieth century. Many of these houses were selected for preservation on the basis of who had lived, worked, or visited there, but some were chosen at least partially on the basis of architectural significance, as was the case for those preserved and often completely unrestored by William Sumner Appleton and by the SPNEA. It is the architectural significance of the **Iron Works House (LCS No. 005426, ASMIS No. SAIR00001.000, MHC No. SAU.27, contributing building, Map No. 4, Photos 4-8)** that prompted its purchase by noted antiquarian Wallace Nutting (Brown 1999:107–108; Pineo 2013:17–18).

Wallace Nutting and the Restoration of the Iron Works House

After the iron works operations permanently ceased, the site was occupied by a series of owners, beginning with Samuel Appleton Jr., a farmer, followed by James Taylor, treasurer of the Massachusetts Bay Colony, who purchased all but 20 acres of the site from Appleton Jr. in 1689.[10] The Iron Works House was constructed by either Appleton or Taylor; while no definitive evidence has yet been uncovered, probate records indicate that it was more likely Taylor, due to the significantly increased value of the property during his occupation (see **Criterion C – Architecture** for further discussion). Following Taylor's death, the site was subdivided by the probate court in 1724; by 1743, Daniel Mansfield, a mill owner, owned 17 acres of the former 600 acres, including the Iron Works House and associated outbuildings that are no longer extant. The property remained in the Mansfield family for the next 100 years, until it was sold to local industrialist Andrew Scott in 1868, who converted the Iron Works House into a series of tenements for the employees of his nearby mill. In 1911, the Iron Works House was for sale as part of the estate of Walter Scott, the youngest son of industrialist Andrew Scott, who had taken over the family business following the death of his father (Pineo 2013:9–10).

In 1911, the Scotts solicited the assistance of William Sumner Appleton in the disposition of the Iron Works House. Appleton approached several wealthy industrialists, including Henry Clay Frick, Andrew Carnegie, and the American Iron and Steel Institute (AISI), attempting to persuade them to purchase the property, but these efforts were unsuccessful, as were overtures made to the Lynn Historical Society and the local Sons and Daughters of the American Revolution chapters. Appleton finally found a buyer in 1915, when antiquarian Wallace Nutting agreed to purchase the property (Carlson 1991:5–6).

Wallace Nutting was a New England Congregational minister who had retired from the ministry and, in 1904, began restoring historic houses and recreating period interiors to use as backdrops in his production

[10] While Samuel Appleton Jr. and William Sumner Appleton may be somehow distantly related, based on limited genealogical research, there is no direct relation between the two men.

of hand-tinted photographs of staged views of historic New England. Nutting connected himself with the early twentieth century Colonial Revival movement by giving lectures on the idealized values of the American past, illustrated with his own photographs of staged colonial scenes. He capitalized on this connection, selling reproduction furniture and iron hardware to anyone who wanted a piece of the colonial era for themselves. As his prints grew in popularity, Nutting began to find it too difficult to find suitable settings for his colonial scenes, deciding instead to purchase five historic houses, dubbed his "Chain of Colonial Picture Houses," to streamline the process of finding "authentic" scenes to photograph. He advertised the chain to tourists wanting to experience Old America for themselves, declaring the houses to span "the entire development of American domestic architecture and furniture, from the settlement to the decline of taste" (quoted in Lyle 2015).[11] (Denenberg 2003:1, 19–20, 87, 110; Lyle 2015; Pineo 2013:23–24; Woods 1994:68).

In the early twentieth century, many historic preservationists and architects, among them Joseph Everett Chandler, who was responsible for the renovation of the Paul Revere House in 1908, used a less scientific method for determining what should and should not be preserved or re-created in a historic house. These preservationists often based decisions on what "felt" right for a building, or a particular time period, or how they believed the building should have looked. Other practitioners, like William Sumner Appleton, embraced a more methodical, research-based approach, preferring to document and preserve historic fabric regardless of when it was added to a building, and avoided making any changes to a building that were not backed up by documentation or were not reversible (Denenberg 2003:88–89; Lindgren 2004:120).

In 1914, Appleton visited the Iron Works House and conducted a series of architectural studies. Convinced that the house was "well worth preserving and something should be done about it" (quoted in Albright et al. 1977:16), Appleton visited again the following year, along with Nutting and Henry Charles Dean, who made a series of measured drawings of the building. Two months after the visit, Nutting purchased the house and began making plans to restore it. Appleton was concerned that Nutting was more interested in creating an idyllic scene to stage his photographs than doing an authentic restoration. He urged Nutting to donate the building to SPNEA, rather than conduct a restoration that would result in the building being "over-repaired or wrongly repaired, or restored to something very attractive indeed" (quoted in Denenberg 2003:92). Nutting was indeed more interested in focusing on preserving the historic character and the feeling of the building, rather than the fabric of the building, which would have been altered over the life of the building. Nutting's approach was counter to Appleton's preferred method of focusing on analyzing the frame and other building elements, frequently opting to preserve a building without restoring or re-creating elements that may have been added or removed over time (Denenberg 2003:92; Pineo 2013:20).

Despite Appleton's concern over Nutting's proposed restoration plan, the restoration moved forward and was conducted according to Dean's conjectural drawings of what it might have looked like about 1640.[12]

[11] The five houses in Nutting's Chain of Colonial Picture Houses were the Wentworth-Gardner House (Portsmouth, NH), the Cutler-Bartlett House (Newburyport, MA), the Hazen Garrison (Haverhill, MA), the Iron Works House (christened "Broadhearth" by Nutting) (Saugus, MA), and Hospitality Hall (Wethersfield, CT).

[12] For many years it was believed that the Iron Works House was constructed by Thomas Dexter ca. 1643. Dexter sold the land for the iron works to the Company of Undertakers for the Ironworks at Linn. Despite studies undertaken by noted architectural historian Abbott Lowell Cummings in the late 1970s, it was not until dendrochronology was performed in the late twentieth century that the 1643 date was definitively refuted (Cummings 2003:4).

Dean saw the project as an "effort to determine and duplicate the work done there when the first frame was raised" (quoted in Carlson 1991:6). A projecting two-story extension on the center of the south elevation was added and the rear lean-to was removed and rebuilt. Doors that had been added when the building was converted into a tenement were filled in with lath and plaster. Double-hung windows in the main block of the building were replaced with diamond-pane casement windows. Inside, lath and plaster was removed from the ceilings, exposing rough, pit-sawn joists; any boxing that may have been around major structural members, including summer beams, was removed, exposing the chamfers with lamb's tongue stops. Nutting also expanded the western addition into a cottage for his blacksmith, Edward L. Guy, who made reproduction ironwork for sale and for Nutting's use in his Chain of Colonial Picture Houses. Nutting set up a forge for Guy to work in, constructing a large, barn-like building from wood salvaged from two buildings in Newburyport (now the **Museum and Museum Annex [LCS Nos. 040301 and 040316, MHC Nos. SAU.264 and SAU.265, contributing building, Map No. 6, Photos 10-11]**) northwest of the Iron Works House. Nutting used the rooms of the Iron Works House, which he renamed "Broadhearth," as a backdrop for many of his hand-colored period photographs and as a showroom for his reproduction furniture and Edward Guy's ironwork. Nutting's use of the site connected his work to the industrial site of the past, invoking colonial blacksmith Joseph Jenks, who had worked at the Saugus iron works (Albright et al. 1977:379; Carlson 1991:6; Pineo 2013:19–20, 22).

Nutting operated his chain of houses until about 1920, after voluntary gas rationing during World War I had slowed tourism, and he was forced to sell the buildings to remain solvent. He offered to sell the Iron Works House to the SPNEA or the Museum of Fine Arts–Boston, but received no interest from those organizations. Nutting eventually found a buyer, Charles Cooney, a Boston antiques dealer who owned the house until his death in 1925. The house was subsequently acquired from Cooney's estate by a second antiques dealer, Philip Rosenberg, who owned the property until 1941 (Carlson 1991:7; Lyle 2015; Lindgren 1995:108; Nutting 1920; Pineo 2013:24).

American Industry, the Colonial Revival, and the Cold War

The period immediately following the end of the World War II and the beginning of the Cold War was one of renewed emphasis on the preservation and interpretation of museums and historic sites. The "American Century," a term coined by *Life* magazine founder Henry Luce in 1941 as he urged the United States to enter World War II, rather than continuing its isolationist ways. The American Century the beginning of which coincided with the early years of World War II, ushered in a period of great social and political upheaval. Fears centered on national security, sweeping social change, and "a sense of historical discontinuity" (Luce 1941) led to a reemergence of Colonial Revival principles, with industries joining with individuals and heritage groups to play the role of arbiter of history that had been held by cultural elites at the turn of the century. Referring to the premise that the United States entered World War II to protect and promote democratic ideals throughout the rest of the world, Luce argued that America must take its place in the world as a superpower and reject isolationist principles for more internationally minded ones. He believed that the promotion of democracy would fail unless the accepted idea of national identity embraced American ideals like freedom, opportunity, and "a tradition of self-reliance and independence and also of co-operation" (Luce 1941). Although Luce was writing during the early days of the World War II, his rallying cry for the promotion of American ideals throughout the world carried through to the end of the decade, resonating across American industry, and leading some to engage in preservation activities. With the beginning of the Cold War, the preservation, and projection, of American cultural touchstones became a focus for many with political agendas as a way of presenting an alternative to Communism (Linebaugh 2004:24; Luce 1941; Pineo 2013:33).

This period of restoration and preservation by large corporate entities has been called the "Corporate Roots" movement, a term most likely coined by historian Michael Wallace, and could best be described as a specific application of Colonial Revival principles, with industries seeking out and celebrating their colonial roots or company origins, just as cultural elites had traced their genealogy for decades. Examples include the Corning Museum of Glass in Corning, New York, founded in 1951 by Corning Glass Works (now Corning Incorporated); the National Register-listed Crane Museum of Paper Making (DAL.36) in Dalton, Massachusetts, founded by the Crane Paper Company; and the Hagley Museum in Wilmington, Delaware, which is a restoration of the first DuPont company factory and town. This corporate trend toward memorialization is viewed by some scholars as a rebuttal to the Colonial Revival belief that technology had ruined the agrarian paradise that once was the United States. Instead, corporations promoted technological and industrial progress as a crucial element of the development of America and a founding component of American identity alongside the yeoman farmer and the farmer-politician (Corning Museum of Glass 2002; Crane 2015; Hagley n.d.; Hartley 1957:19; Linebaugh 2004:24; Pineo 2013:34; West 1999:135–136).

The Re-creation of the Saugus Iron Works

Following the dissolution of Nutting's Chain of Colonial Picture Houses, public interest in the Iron Works House and its surroundings waned until the tercentenary celebration for the founding of Lynn, which Saugus had originally been a part of, in 1929. The Parson Roby Chapter of the Daughters of the American Revolution (DAR) erected a cast iron marker at the site (now part of the park's collections), and the owner of the Iron Works House, Philip Rosenberg, was invited to the dedication ceremony, where he promised to sell the house only to the DAR or the Town of Saugus. In the spring of 1930, a group of Saugus citizens approached the town about turning the house and iron works site into a park. Rosenberg's asking price of $7,225 was deemed too high, however, and nothing more came of the proposal (Carlson 1991:7, 9).

The Parson Roby Chapter of the DAR remained interested in the iron works site, which at the time was a separate parcel from the Iron Works House and, in 1937, purchased it for $50 from the Rochester Trust Co, which held the title through foreclosure. In 1941, Rosenberg sold the Iron Works House for $10,000 to the Alumni Association of the Henry Ford Trade School, which intended to present the building as a birthday gift to Henry Ford for inclusion in his Greenfield Village museum in Dearborn, Michigan. The prospect that the house would be moved to Ford's museum produced local public outcry calling for the house to stay in Saugus. After a failed attempt by the town to pass an amendment to zoning bylaws that would prevent the removal of the building, Louise Hawkes, an officer in the local DAR chapter, contacted William Sumner Appleton to solicit his assistance in saving the house. Appleton and Hawkes were able to get the school's alumni association to agree to abandon its plans to move the house provided it was reimbursed $12,000, including fees associated with the purchase of the house (Carlson 1991:9; Linebaugh 2011a:58; Pineo 2013:37–38).

Appleton and Hawkes immediately began soliciting donations from individuals and organizations, but were unable to raise the necessary funds. In late 1941, Appleton wrote to Edwin Small, the superintendent of Salem Maritime National Historic Site in Salem, Massachusetts, to see if the National Park Service (NPS) would be interested in acquiring the Iron Works House. Small responded that funds likely were not available and questioned whether the house was of national significance to warrant its acquisition by the federal government. Despite Small's negative response, Appleton believed that if the Town of Saugus

would acquire the property, the federal government would eventually accept it as a gift from the town after the end of the war. In 1943, the Town of Saugus agreed to pay $4,000, provided Appleton could raise the other $8,000. The Massachusetts legislature offered $4,000 in state funds provided, "said house shall be preserved and maintained as an ancient landmark, possessing historical and antiquarian interest" (quoted in Carlson 1991:11) (Appleton 1942; Carlson 1991:10–11; MGL 1943; Pineo 2013:38–40; Small 1941).

The remaining $4,000 was ultimately raised from private sources by the First Iron Works Association (FIWA). Chartered in 1943, the FIWA was formed by Appleton to solicit private contributions to complete the acquisition of the Iron Works House. Membership was drawn from various historical societies and persons with interest in historic preservation. Among the charter members were Henry W. Porter, the president of the Bay State Historical League; J. Sanger Attwill, the president of the Lynn Historical Society; and Louise DuPont Crowninshield, the wealthy heiress to the DuPont family fortune. Crowninshield's social connections with men in the iron and steel industry were crucial to the reconstruction of the **Saugus Iron Works Site (LCS No. none, ASMIS Nos. SAIR00010.000 and SAIR00011.000, MHC Nos. SAU.A, SAU.1, 19-ES-248, 19-ES-835 and 19-ES-855, contributing site)**. She had garnered a wealth of experience in historic preservation and a vast knowledge of early American decorative arts and furnishings. Her preservation activities included serving as the head of the Wakefield Memorial Association, which constructed and operated the Memorial House at George Washington Birthplace National Monument in Virginia in the 1930s and consulting with the NPS on the furnishing of the Derby House at Salem Maritime National Historic Site in Salem, Massachusetts. In 1947, Crowninshield brought Quincy Bent, a vice president of Bethlehem Steel Corporation, to visit the Iron Works House. Although Bent, a committee chairman for the AISI and chairman of the Newcomen Society of England, was uninterested in the house, the exposed **Slag Pile (LCS No. 005427, ASMIS No. SAIR00002.000, MHC No. SAU.901, contributing site, Map No. 10, Photo 15)** drew his interest, leading him to wonder if there might be any remains of the iron works that had produced the pile. The land where the ruins were buried had been given to the FIWA by the DAR in 1946 as part of the Parson Roby Chapter's 25th anniversary celebration. Bent was not the first to ask the question; other executives in the steel industry such as Walter Renton Ingalls and John Woodman Higgins had inquired about the slag in correspondence with Appleton. At Higgins' behest, Charles Rufus Harte, an engineer with the Connecticut Company, an electric street railway company, who had studied many of the remains of iron furnaces in New England, visited the site in 1945 and concluded that excavations might find a trace of the blast furnace. FIWA would hire local avocational archeologist Roland Wells Robbins (1908–1988) to conduct the excavations (see **Criterion A – Archeology: Historic–Non-Aboriginal**) (Carlson 1991:11–12; Hosmer 1981:607–609).

Following Robbins' successful unearthing of a small portion of the colonial iron works in 1948, a Reconstruction Committee was formed, with members of the AISI and the FIWA. The well-known architectural firm of Perry, Shaw, and Hepburn, Kehoe and Dean, previously Perry, Shaw, and Hepburn, was hired to execute the restoration. The earlier firm was responsible for the restoration and reconstruction of Colonial Williamsburg, which made them a good choice for the Saugus project (Wallace 1986:147).

The reconstruction was to focus only on the industrial portion of the site, further emphasizing the steel industry's connection. In a 1951 report to the Reconstruction Committee, Bent laid out his plan for the order of reconstruction: first, the blast furnace with all associated elements, including bellows and sand pit for casting sow bars; next the **Forge (LCS No. 005429, ASMIS No. SAIR00005.000, MHC No.**

SAU.28, contributing building, Map No. 11, Photos 16-17), with its two hammers and twin furnaces, and the **Rolling and Slitting Mill (LCS No. 005429, ASMIS No. SAIR00006.000, MHC No. SAU.29, contributing building, Map No. 13, Photos 16, 18)**; followed by the water courses that would turn the waterwheels that powered the machinery in each of the buildings (**Blast Furnace Sluiceway and Tailrace [LCS No. 040306, MHC No. SAU.935, contributing structure, Map No. 14, Photo 19]**, **Forge Sluiceways and Tailraces [LCS No. 040307, MHC No. SAU.934, contributing structure, Map No. 15, Photo 17]**, and **Rolling and Slitting Mill Sluiceway and Tailrace [LCS No. 040308, MHC No. SAU.938, contributing structure, Map No. 16, Photo 18]**). He also planned to delineate the outline of the original 600-acre iron works site, including areas from which wood to fuel the furnaces and bog ore to create the iron would have been harvested. After plans for the major buildings were completed, Bent's attention turned to more visitor-specific plans, such as construction of a museum, the building of "a suitable entrance and paths to the various elements of the Undertaking together with parking space," (FIWA 1951b) including the **Visitor Contact Station (LCS No. 040300, MHC No. SAU.263, contributing building Map No. 5, Photo 9)**, the **System of Paths (MHC No. none, contributing structure, Map No. 2, Photo 13)**, and the **Saugus Iron Works Nature Trail (MHC No. none, contributing structure, Map No. 3, Photo 15),** the removal of the late nineteenth-century addition on the west side of the Iron Works House, and finally, returning the landscape to its original contours (FIWA 1951b; Pineo 2013:45).

Other reconstructions at the site based on the work of Robbins and others included a small **Warehouse (LCS No. 005431, ASMIS No. SAIR00008.000, MHC No. SAU.30, contributing building, Map No. 20, Photos 15, 23)** on the edge of the river, a **Wharf (LCS No. 040302, ASMIS No. SAIR00007.000, MHC No. SAU.942, contributing structure, Map No. 21, Photo 23)**, a small **Well (LCS No. 040303, MHC No. SAU.933, contributing structure, Map No. 19, Photo 22)** near the forge, and a **Corduroy Road (LCS No. 040305, MHC No. SAU.930, contributing structure, Map No. 18, Photo 21)**. Various circulatory elements and retaining walls were also constructed as part of the plan, including the **Blast Furnace Retaining Wall (LCS No. 040313, MHC No. SAU.941, contributing structure, Map No. 12, Photo 17)**, **Tailrace Bridges (LCS No. 040304, MHC No. SAU.939, contributing structure, Map No. 17, Photo 20)**, **Central Street Retaining Walls (LCS No. 040310, MHC No. SAU.937, contributing structure, Map No. 7, Photos 12-13)**, **Bridges over Saugus River (LCS No. 040311, MHC No. SAU.943, contributing structure, Map No. 22, Photo 24)**, and **Saugus River Stone Bulkheads (LCS No. 040312, MHC No. SAU.931, contributing structure, Map No. 23, Photo 24)**.

As the liaison between the AISI and the FIWA, Bent exerted control over many aspects of the reconstruction. In a 1953 letter to Attwill, then president of the FIWA, he suggested that there were two divisions of responsibility for the site. The FIWA had responsibility for the day-to-day operations at the site, but the reconstruction work, which was funded by the AISI, was under Bent's purview. Bent went on to say "I would still want the final authority on the field work, et cetera, and I do not see how you could do it with the Institute contacts, et cetera" (Bent 1953). Bent was careful to retain control of the site for the steel industry, rejecting suggestions of partnering with any other industries that might try to make a connection to the site, such as the A.C. Lawrence Leather Company for the leather needed to construct the massive bellows for the forge and blast furnace (Bent 1950b).

Bent often made unilateral decisions about what would and would not be reconstructed without consulting the members of the Reconstruction Committee, causing at least one member to resign in protest. Among the critical decisions that Bent made on his own was the rejection of proposals to reconstruct workers' housing and the Joseph Jenks blacksmith forge. Although the Jenks forge was the

original industrial feature of the site, Bent saw it as peripheral to the theme of the reconstruction. The location of the workers' housing might have been too speculative to make for an accurate reconstruction (Bent 1950b; Carlson 1991:19).

Bent's vision for the site was carried out, with a few exceptions. Specifically, the planned museum was not constructed, but was installed in what had once been Mr. Guy's blacksmith shop, and the addition to the Iron Works House, which now serves as the Visitor Contact Station for the NPS, was used for public restrooms and quarters for the caretaker.

The costs associated with construction, maintenance, and general operation of the site escalated as time went on. Unanticipated expenditures for land purchases to reroute streets and expand the site boundaries added to the burden. The extent to which Bent's grandiose plans would be realized depended on the willingness of the AISI to continue funding. As Attwill noted in a letter to Bent:

> ...the directors of AISI should decide if they are willing to go the whole way to have this restoration as near perfect as possible, even if it requires the taking of more property and houses. Daily, it seems that this becomes more and more important in the industrial development of this country, and being of unique nature, it should be developed with the same purpose as Williamsburg was done. Interest is growing rapidly in this project, and I feel it will become as well known, eventually, as Williamsburg, and in some ways, its historical value is more important (Attwill 1952).

Saugus and Corporate Roots Movement

> In Saugus is to be found 'The Cradle of American Industry!' The great blast furnaces of Pittsburgh, the teaming automobile plants of Detroit, and the steel plants which furnished the rails for America's modern transportation system, all have their inception at that idyllic spot along the placid waters of the Saugus river [sic] (quoted in FIWA 1952:4).[13]

Prior to the official dedication of the reconstruction in 1954, the public relations firm retained by the AISI published pamphlets, articles, film strips, and other materials to publicize the site and the story being told at Saugus. The primary story was how the modern steel industry evolved from Hammersmith, and how steel benefitted America, with the men who worked and lived there as a secondary story. Lecture audiences, readers, and visitors to the site were not left to discern that for themselves, with booklets made available to the visiting public telling not only the story of the reconstruction and the industrial village that had existed there, but of what Steel writ large, and industrial advancement in general had accomplished, with passages such as:

> "...It is likely that thousands of Americans, seeing in the First Iron Works a symbol of the beginnings of our industrial economy, will take pride in the stalwart and imaginative character of the men who worked here to make iron...the restoration represents the first concerted attempt, by a national industry, working with and through the citizens of a local community, to reclaim their earliest industrial past." (FIWA 1953a:11); and

[13] The phrase "Cradle of American industry" is credited to Paul A. Haley, a columnist for the *Lynn Daily*.

> "The steel industry's growth in this century has helped give our nation all the defense weapons it required in winning two world wars—with armaments to spare for its allies—while also supporting the steady advance in the American standard of living.... The steel ingot's usefulness to man depends on what it is converted into, and is limited only by the imagination of man. Here in the United States, it is being used to help advance the well-being, the dignity, and the personal freedom of every American" (FIWA 1953a:27).

Filmstrips created for schools reminded students that "the iron works has significance for the present and the future and for all of you" (FIWA 1952:4). Journalists writing about the reconstruction referred to the site as not only the "cradle of American industry," but a "shrine to American industry" (FIWA 1953a:26–27; Pineo 2013:50).

The iron works reconstruction demonstrated the American values that were foremost in the minds of many during the 1950s. In a 1951 lecture with a viewing of the filmstrip about the iron works site, E. Neal Hartley explained that the iron works was an early example of the "Great American Melting Pot," describing how early workers, many of them indentured prisoners of war from Scotland or non-Puritan English, overcame difficulties in adjusting to life in the fledgling colony and finally assimilated into the country. With the influx of refugees from Europe in the 1940s and 1950s and rising Cold War concerns, the discussions about assimilation that likely accompanied these filmstrip presentations demonstrating American superiority would be a powerful tool in indoctrinating immigrant children into a life in American society (FIWA 1952:1).

Steel executives reinforced the industry's connection to the reconstruction and American values in speeches given at annual meetings of the FIWA and other venues. In his remarks at the FIWA annual meeting in 1952, Dr. R. E. Zimmerman of United States Steel encapsulated the Corporate Roots movement by connecting the iron and steel industries with their industrial roots and the glorious American past and the brave men who helped set the country on its current path, concluding:

> Call to witness the pioneers of Saugus that from their early beginnings has grown an instrument of immeasurable service to the American people, both in the pursuits of peacetime and in the rigors of war. Call to mind that this amazing development has grown and flourished in an atmosphere of freedom, guided by the spirit of private competitive enterprise and conducted by ambitious hardworking men who strove to give their best and reap commensurate rewards (Zimmerman 1952).

Zimmerman's message was reiterated at the site's dedication ceremony on September 17, 1954. The featured speaker, Edward Ryerson, an executive for the Inland Steel Company, stated, "It is significant that this great basic industry has rediscovered its humble birthplace and has rebuilt it for posterity. Here is an industry which realizes that in striving for progress, tradition and history must not be forgotten." Ryerson also commented on the need to educate the public about the industrial history of the United States, and the importance of the reconstructed iron works in fulfilling that mission:

> ...it seems to me that we in the field of business have a definite obligation to teach our children the lesson of our origins, of our history, and of the elements that make our country strong. An important phase of this education, too often overlooked in the past, is our industrial history and the story of our country's great economic development. And what better place is there for us to

> learn these lessons on the very spots where stirring events in our history took place? (Ryerson 1954)

The American Iron and Steel Institute's overall involvement with the Saugus restoration project ended in 1961, despite claims that the site was built as a shrine to the industry, and a promise Bent made at the 1949 Annual meeting when he stated, "the AISI would always take care of the iron works even after they were restored" (quoted in FIWA 1949). In July 1961, Max Howell, the executive Vice President of AISI, informed Attwill that the financial appropriation for the year would be just $25,000 and that there would be no future donations. The steel industry was facing financial challenges due to foreign competition and continuing to fund the restoration was an expensive luxury. The total cost of the reconstruction, including yearly contributions to fund maintenance of the site, had mounted to $2.35 million dollars. At the end of the 1961 operating season, the FIWA had $66,000 in its accounts, which they believed would be insufficient to cover site expenses for more than a year. Attwill still believed, however, that "somewhere, somehow, someone is going to come to our aid. For no one is going to let this fine historical reminder of the colonial pioneering era die just for lack of money" (quoted in NTHP 1961:3). In December of the same year Attwill wrote to the AISI asking them to reconsider the withdrawal of funding:

> This restoration is of considerable national importance, representing not only a $2,000,000 investment in its physical establishment but also representing the beginning of the steel industry which had its basis in individual enterprise. At the time of the dedication of the First Iron Works in 1954, it was pointed out that no other industry has been fortunate enough to rediscover and rebuild what was clearly its place of origin in this new country (Attwill 1961).

Attwill succeeded in convincing the AISI to make one final donation of $20,000, but it came with multiple caveats. Specifically, the AISI required the FIWA to dedicate its own funds (about $25,000) to site operation and maintenance and to look for more permanent sources of funding, with the Commonwealth of Massachusetts and the NPS suggested as possible avenues.[14] The letter also indicated that all of the property associated with the site that was purchased by the AISI was in the name of the FIWA and therefore the sole responsibility of the FIWA (Carlson 1991:29; FIWA 1961b, 1962a; Howell 1961, 1962; Pineo 2013:51–54; Schmidt 1967).

The End of the First Iron Works Association and the Beginning of the Saugus Iron Works NHS

Immediately after receiving the news from AISI, the FIWA board of directors discussed multiple options for maintaining the site, including approaching the Carnegie Corporation for funding, raising money for an endowment (initially estimated to require $2 million), or giving the site over to the federal government to become a unit of the NPS. Although Appleton had predicted that the site would one day become a unit of the National Park System, the FIWA leadership felt that option should be reserved as a worst case scenario. Some, including E. Neal Hartley, felt that the steel industry was planning to "slough off a responsibility and pass it along to 'government.' Its publicists might even manage to make such an action sound like a public service gesture" (Hartley 1962; Pineo 2013:61).

After a last ditch effort to get the AISI to fund a $1 million endowment failed in 1962, Attwill and other members of the FIWA board determined that the best remaining option was to turn over the site to the

[14] Atwill's 1961 letter implies that the AISI was funding everything at the site, including payroll and maintenance (Atwill 1961). Notations in the clerk's notebooks in the FIWA papers indicate that AISI was indeed supplying the entirety of the maintenance fund and covering payroll in emergency situations.

NPS and enlisted the aid of a group of representatives from the AISI led by Edward Ryerson to explore that course of action. Ryerson's group went to Washington, DC to talk with NPS officials and garner political support from members of the U.S. Congress.[15] Their efforts resulted in an agreement with the NPS that the Iron Works would be surveyed by the Advisory Board on National Parks, Historic Sites, Buildings and Monuments before September 1963. The Advisory Board found that the iron works was nationally significant and recommended that it be designated as a National Historic Landmark. It also recommended that the site be accepted as a unit of the National Park System, provided issues involving boundary, water supply, and other concerns were addressed.[16]
(FIWA 1961a, 1961b, 1962b; Pineo 2013:61–63).

Saugus Iron Works was officially declared a National Historic Landmark on November 27, 1963. Edwin Small, then superintendent of Minute Man National Historical Park in Lincoln and Concord, Massachusetts, presented the FIWA with the certificate stating the site's landmark status at the FIWA's June 24, 1964, annual meeting. The certificate read, "The Saugus Iron Works has been designated a registered national historic landmark under the provision of the Historic Sites Act of August 21, 1935. This site possesses exceptional value in commemorating and illustrating the history of the United States" (quoted in FIWA 1964). It marked the first time that the Advisory Board accepted a reconstructed site, describing it as a "spectacular, full scale model of what the original seventeenth-century works must have been like," and stating that it "has unique public interest and educational value" (NPS 1963b). In essence, the site was designated a landmark for its educational value, rather than its architectural or historic value––the site possessed virtually no aboveground resources for which the site would have been found worthy of National Historic Landmark status. The designation of the reconstructed site due to its educational potential is significant because the reconstructions are generally not eligible for designation as National Historic Landmarks until they reaching 50 years old (FIWA 1964; Henry 2011; NPS 1963a, 1963b; Pineo 2013:63–64).

On August 5, 1966, Stewart Udall, Secretary of the Interior, wrote to Wayne Aspinall, Chair of the House Committee on Interior and Insular Affairs, recommending that the site be established as a National Historic Site in concurrence with the findings of the 1965 meeting of the Advisory Committee. A park planning report presented at that meeting addressed the committee's previously stated concerns about the water supply and boundary. It took another three years of lobbying and letter writing by FIWA members and directors, as well as citizens of Saugus, and Congressional debate before the park was established under Public Law 90-282. The bill, sponsored by Representative Torbert MacDonald of Massachusetts and Senators Edward Kennedy and Leverett Saltonstall of Massachusetts, was introduced January 10, 1967, in the House of Representatives by Representative John Saylor of Pennsylvania, and on August 17, 1967, as S. 2309 in the Senate by Kennedy. Both bills were referred to the Committee on Interior and Insular Affairs, which had oversight of the Sub-Committee on Parks and Recreation. The final form of the bill, H.R. 1308, passed by the House of Representatives on October 2, 1967, and by the Senate on March

[15] Although specifics as to whom the AISI delegation met with are not in the meeting notes, they met likely met with Senator Edward Kennedy of Massachusetts; Representative John Saylor of Pennsylvania, one of the sponsors of the bill to declare Saugus Iron Works a National Historic Site; and George Hartzog, the director of the National Park Service. Saylor was presumably involved at the behest of AISI due to the significant steel industry presence in Pennsylvania (FIWA 1963).

[16] These issues included questions about water supply and usage, and abutting properties owned by the FIWA but considered non-contributing. If these issues could not be resolved, the site was unlikely to become a unit of the NPS (NPS 1963a).

26, 1968, and approved by President Lyndon B. Johnson on April 5, 1968, established Saugus Iron Works as a National Historic Site (Cain 1968; US Congress 1968a, 1968b; Smith et al. 1965; Udall 1966).

Following the acquisition of the site by the NPS, resources within the boundary of the site were assessed and designated historic or non-historic, with "historic" likely delineating those that were integral to the story of the site, and "non-historic" referring to those that were not. The majority of the buildings determined to be historic were less than 20 years old; today the preferred terms would be contributing and non-contributing. Non-historic resources included the ca. 1750–1775 Mansfield House and the ca. 1840–1850 Rafferty House, both of which are no longer extant. A 1970 interpretive prospectus called for the removal of the Mansfield and Rafferty houses and the "Nutting addition" to the Iron Works House (now the Visitor Center) and described the wharf area as a marsh. Visitors to the park today experience the site much as it existed at the time of transfer to the NPS, with the majority of construction projects occurring out of public view or consisting of replacement in kind of structural elements. A 2005–2008 accessibility project installed circulation paths throughout the site, and a 2007–2008 project restored the river basin, removing sediment and rebuilding the wooden pier and bulkhead, and constructed a cobble berm (Killion and Foulds 2003:27; NPS 2013:32; Pineo 2013:67–68).

CRITERION A – ARCHEOLOGY: HISTORIC—NON-ABORIGINAL

The District possesses significance under Criterion A in the area of Archeology for its role in the development of industrial archeology in the 1960s and 1970s as a legitimate subdiscipline of American historical archeology. The work undertaken by Roland W. Robbins at the Saugus Iron Works from 1948 to 1954 was the first extensive and sustained archeological study of a large American industrial site, and demonstrated the applicability of historical archeological research methods to the study of industrial sites. Robbins work at Saugus was unsystematic by today's standards, and undoubtedly resulted in the destruction of important data (Griswold 2011:106). Despite those issues, he was instrumental in establishing basic research, excavation, and recordation methods that would prove the value of industrial sites archaeology to the field of archaeology as a whole, and inform generations of professional industrial archaeologists to come.

Saugus Iron Works and the Origins and Professionalization of Industrial Archaeology

The archeological study of industrial sites, or simply *industrial archeology*, had rarely been practiced in any systematic way in the United States before the 1940s. The academic profile of historical archeology had been growing since the 1930s, owing in part to several New Deal archeology projects carried out on colonial era sites such as Jamestown, Virginia, from 1934 to 1941. Some of the projects involved the excavation of small-scale blacksmith shops and breweries, but were conducted without any explicit recognition of their industrial function or how that function influenced their infrastructure, organization, or historical significance. Specialized research on industrial sites, however, would grow over the next several decades and lead in the late 1960s to targeted case studies of specific industries. Research into New England textile mills, for example, led to the creation of the Historic American Engineering Record within the existing Historic American Buildings Survey of the NPS (Cotter 1993:4).

The creation of HAER in 1969 and the formation of the Society for Industrial Archeology in Washington, DC, two years later helped formalize industrial archeology as a professional discipline in its own right. Despite these advances, industrial archeology during that period more often than not involved the study

and documentation of *standing* structures, artifacts, and landscapes, rather than the excavation of buried resources; the wider application of excavation-driven research methods adapted from historical archeology for industrial sites would be more gradual. Considering this timeline, Roland Robbins' archaeological excavations at the Saugus Iron Works in the 1940s and 1950s is remarkable and significant for its innovation (Gordon and Malone 1994; SIA 2015).

Local and regional interest in the Saugus Iron Works led to the purchase of the site in 1943 by the newly created First Iron Works Association (FIWA), a dedicated volunteer group made up of heritage enthusiasts looking to promote important role of the Saugus Iron Works in American history. In 1947, several professionals and experts with backgrounds in the iron and steel industries joined with the FIWA to create the "Reconstruction Committee," a joint group of stakeholders that would guide archeological excavations to reconstruct and interpret key elements of the Saugus Iron Works for the public and promote a positive image of American iron and steel industries. This partnership encouraged the American Iron Steel Institute (AISI) to make significant financial contributions to the project in the years to come. AISI's leadership, however, decided that contributions would be contingent on the discovery of intact archeological features worth interpreting for the public. The Reconstruction Committee agreed and set out to find someone who could undertake the goals set by the AISI (Linebaugh 2011a:58).

In August 1948, J. Sanger Attwill, the second president of FIWA, wrote to Roland Robbins, a self-taught avocational archaeologist, after attending one of his lectures about his excavations of Henry David Thoreau's cabin site near Walden Pond. Attwill wanted to interest Robbins in an "antique treasure hunt" to relocate the remains of the blast furnace and forge within FIWA's recently purchased Saugus property, emphasizing that the endeavor would required "someone that has interest and will attack the situation with sympathy" (Linebaugh 2011a:60). Robbins agreed and, within a month, excavations were underway to locate the blast furnace. By mid-October, Robbins had uncovered and delineated the intact masonry of the furnace foundation and was in the process of excavating the sluiceway, or tailrace, that ran parallel to the west side of the furnace and the area of the furnace bellows set within the north-facing arch of the furnace. Encouraged by these early results, the FIWA, with financial backing from the AISI, committed to excavating the iron works, which was underway by May 1949 with Robbins as the lead archeologist (Linebaugh 2011a:64).

The Reconstruction Committee's choice of Robbins to direct excavations was most likely influenced by his success in quickly locating the furnace and his ability to clearly articulate plans for future excavations. The Committee also would have been hard pressed to find another candidate with the experience or willingness to "attack the situation with sympathy." For his part, Robbins eagerly took on the challenge of excavating the first integrated iron works site in Britain's North American colonies, and expressed a reassuring self-confidence in his ability to locate and excavate buried features and adapt methods as necessary.

In October 1948, Robbins set his crew to testing specific areas of the site, discovering first an intact deposit of slag fill along the Saugus River and then, four days later, the base of the blast furnace 3 ft beneath the existing ground surface. By the end of the 1948 field season, Robbins had fully excavated the surviving base of the blast furnace, fully delineating a tuyere arch for the bellows and the casting arch where furnace tenders tapped slag and iron from the furnace hearth. Robbins employed hand excavation to discover intact features, supplemented by mechanical excavation to more efficiently remove overburden and fill that post-dated the operational period of the site. As work progressed, Robbins

committed to a system of plan and profile drawings that allowed him to maintain horizontal and vertical provenience control over much of the excavation.

In 1949, Robbins was able to hire on a part-time basis a civil surveyor (John Bradford) and a photographer, (Richard Merrill), who provided much needed professional documentation skills to the project. Apart from helping Robbins maintain provenience control as excavations progressed, Bradford was instrumental in recording stratigraphic elevations, data that was useful in reconstructing the mid-seventeenth-century ground surfaces surrounding the reconstructed iron works features. Richard Merrill took thousands of large-format black-and-white photographs of the excavation in progress, features and artifacts, and people involved in the project, both in and out of the field. With the assistance of the Reconstruction Committee, Robbins also enlisted the help of other specialists, including a dendrochronologist, a faunal specialist, conservators, metallurgists, and ceramics experts. Robbins' willingness to include skilled specialists in the project demonstrated his understanding that Saugus required a multifaceted approach on a much greater scale than his investigation of Walden Pond. This team approach would be characteristic of Robbins' future projects and would provide a template for a collaborative research approach at other industrials sites excavated by professional archaeologists in the future (Linebaugh 2000:12; 2011a:62).

Informed by his research and that of historian E. Neal Hartley, Robbins proceeded throughout 1949 to follow and excavate features associated with the blast furnace such as the furnace waterwheel tailrace, wheel pit, and headrace leading toward a holding pond some distance from the furnace. Excavation of the furnace wheel pit led to the discovery of a lower section of the last waterwheel, with Robbins estimating that 40 percent of the 16-ft-diameter overshot wheel remained preserved. With a conservation issue at hand, Robbins enlisted the assistance of Dr. Elso Barghoorn, a noted paleobotanist at Harvard University, to devise a method for conserving the remaining waterwheel section. After experimenting with samples of water-logged wood taken from the wheel pit, Dr. Barghoorn chose to conserve the wheel section in a bath of heated paraffin wax that replaced the water content of the wood with wax, thereby stabilizing the remaining wood and preventing further decay.

Disagreements and personality conflicts between Robbins and the Reconstruction Committee would dog his investigations at the iron works, so much so that he never completed a final report detailing his excavations before his abrupt resignation from the project in 1953. Throughout most of the project, though, Robbins was mostly able to balance his goal of using the results of archeology to supplement the historical record of the site with the secondary aim of reconstruction with those of the Committee who prioritized reconstruction over research. The approach that Robbins developed and tailored to the challenges of excavating Saugus was key to understanding how he would investigate other ironmaking sites and – perhaps more importantly – provided a model for the use of industrial archeology as tool for historical research and public interpretation.

By 1951, Robbins had expanded his investigations to the raceways that fed water to the waterwheels and of the refinery forge and wharf areas. At the end of that year, the Reconstruction Committee decided that the level of feature delineation and background research was sufficient to fully reconstruct the blast furnace stack within the intact foundation that Robbins had excavated over the previous two years; the furnace was reconstructed using a quantity of disarticulated stone recovered from the immediate area of the foundation.

Excavations throughout 1952 focused on exploring and delineating features likely associated with the forge and nearby wharf and boat basins, with initial testing of the probable slitting mill area underway by year's end. A photograph of these excavations from December 1952 depicts field crew excavating orderly trenches in the slitting mill area. Much of the excavation of the slitting mill area, however, yielded inconclusive evidence consisting of sheet deposits of charcoal and disarticulated stone, but no evidence of more definitive built features such as intact masonry or post molds. As discussed in Linebaugh's "The Story of the Saugus Excavations," Robbins' admission that he could not definitively locate the slitting mill demonstrated his willingness to accept the limits of his methods and their results (Fitch 1954; Linebaugh 2011a:83).

Despite the soured relations between Robbins and the iron works benefactors, Robbins remained committed to and succeeded at popularizing his discoveries in the nascent discipline of industrial archeology through lectures, a book that summarized his earlier projects (*Hidden America*, co-authored with Evan Jones in 1959), and reports and articles for general audiences. As Donald Linebaugh writes, "Robbins was a pioneer in delivering archeology to the public, particularly children; his 600-plus lectures on archeology reached an audience of over 60,000" (Linebaugh 2000:30).

There is perhaps no better recent example of the influence of the Saugus Iron Works excavations to the professionalization and importance of industrial archaeology than a project carried out under Michigan Technological University's Industrial Archeology program in 2002–2008 at the West Point Foundry Site (c. 1817–1911) in Cold Spring, New York. Using many of the same strategies developed at Saugus more than 50 years earlier, the project employed a multidisciplinary approach to the study of various ironmaking, machining, and forging operations at the nineteenth-century foundry site (see Walton 2009). As valuable as the work is for understanding the physical layout, operation, and importance of the foundry to the history of American munitions production (among other things), it is equally important for its role in public interpretation and land conservation. The results of the archaeological investigations were used, in part, to define the boundaries and set aside the 87-acre site as the National Register-listed West Point Foundry Preserve, and develop a sensitive plan for public access, habitat restoration, historic preservation, and interpretation (The Sustainable Sites Initiative 2018).

Roland Robbins' legacy to industrial archaeology is complicated (see **CRITERION B – ARCHEOLOGY AND CONSERVATION: The Work of Roland Wells Robbins**). However, the legacy of his excavations at the Saugus Iron Works to the methodological and theoretical development of the field is not. While Robbins would go on to work at many other industrial sites after Saugus, Saugus was the first site to unambiguously demonstrate the value of archaeological data to understanding historical industrial processes. It also set a benchmark – however imperfect – for research, recordation, conservation, and disciplinary collaboration, and how that information can be used to inform historical reconstructions of ruined industrial sites for public interpretation.

CRITERION B – ARCHEOLOGY AND CONSERVATION: The Work of Roland Wells Robbins

The District is significant for its association with the early archeological career of Roland Wells Robbins. Robbins was a pioneer in industrial archeology who worked as a self-taught archeologist, or "pick and shovel historian," at a time when historical archeology was only beginning to be regarded as a separate discipline from pre-contact archeology in the United States. Robbins' Saugus excavations set the standard

for industrial archeology and its role the in public interpretation and preservation of America's industrial past.

Roland Wells Robbins (1908-1988)

Roland Wells Robbins was born in Worcester, Massachusetts, in 1908, to Fred and Lucy May Robbins, who both worked at the Concord Junction Depot in West Concord, Massachusetts. When Fred became a railroad machinist, the Robbins family—including Roland and his brothers Lawrence, Harland, Kenneth, and Reginald Leonard—moved frequently. Roland attended numerous schools and dropped out in 1924 during his freshman year of high school. He took a job as a clerk with R. G. Dun and Company, a credit reference bureau in Boston. In 1928, he became the manager of the Boston Reference Bureau, an employment agency; the reference bureau closed at the onset of the Depression in 1929 (Linebaugh 2000:7; 2005:29–30, 32).

Robbins began working odd jobs and eventually moved to Vermont, where he worked part-time as a hiking shelter attendant and had a small business washing windows and painting homes of upper-class Rutland residents. In 1934, Robbins met and married Geraldine Prior, after which they relocated to Lincoln, Massachusetts, where Robbins resumed his window washing and house painting business (Linebaugh 2000:8; 2005:32).

Robbins' career in historical archeology and related disciplines began with a research project in 1943 to understand how Daniel Chester French – a 22-year-old, relatively unknown sculptor – had won the 1874 commission to sculpt the Minute Man Statue at North Bridge (now within Minute Man National Historical Park). Robbins became interested in the details of the story after painting the living room of a client in Concord who told him that one of the client's relatives had posed for Daniel Chester French as he worked on the statue. Robbins published a short pamphlet, *The Story of the Minute Man*, in 1945, which established his local reputation as a researcher. Following a centennial event at Walden Pond, Robbins became interested in finding Henry David Thoreau's cabin, and used information in Thoreau's writings and those by Thoreau's contemporaries to find the building foundation, which he excavated from 1945 to 1946 (Linebaugh 2005:36–39; Robbins and Jones 1959:14).

In 1948, following a presentation about the Walden excavation, Robbins was approached by J. Sanger Attwill, then a member of the First Iron Works Association and president of the Lynn Historical Society, asking if he might like to "go on an antique treasure hunt" (quoted in Pineo 2013:41). Although Robbins had no formal training in archeology, he brought his Walden experiences and a natural inquisitiveness to bear on the site in the fall of 1948 when he began excavations to find the blast furnace foundations (see **Criterion A – Conservation/Commemoration** and **Criterion A – Archeology: Historic–Non-Aboriginal**).

Unconcerned with the lack of collegial support, Robbins' work displayed a sense of self-confidence to locate and excavate buried features and adapt methods as necessary; he would later confer with archeologists and researchers working on other historic ironmaking sites, such as John Cotter at the Hopewell Furnace Site in southeastern Pennsylvania, but those interactions had no impact on his work at Saugus (Linebaugh 2011a:96). Robbins' work at Saugus would continue until 1953, when he abruptly left the project due to conflicts with the FIWA and its Restoration Committee. Robbins' work at Saugus, however, would inform other excavations at iron works along the East Coast in terms of excavation

process and in understanding the general layout and function of those industrial sites (Griswold 2011b:101; Linebaugh 2005:69).

The Saugus excavations were the first of several important archeological digs that Robbins would conduct at industrial sites from Massachusetts to New Jersey, with 32 of 60 digs at seventeenth- and eighteenth-century industrial sites, and 20 of those at iron industry sites. At the time Robbins began working as an archeologist in the 1940s, few practitioners excavated historic sites, and industrial archeology was nearly unknown in the United States. During this period, Robbins was well-respected among his peers, despite his lack of formal training or university education. Robbins' eagerness to take on projects after his departure from Saugus in 1953, such as the Sterling Forest Iron Works in Sterling Lake, New York, and the John Winthrop Jr. Iron Furnace Site in Quincy, Massachusetts, illustrates his commitment to restoration-oriented industrial archeology by applying the strategies and methods he developed through his investigations at the Saugus Iron Works. Following the Saugus excavations, Robbins established himself as an authority on industrial sites – especially ironmaking sites – and excavated more of those sites than any of his peers.

By the mid-1960s historical archeology was emerging as a scholarly discipline separate from pre-historic archeology. As its university-trained practitioners sought to establish professional standards, methods, and theories, Robbins and other amateurs were increasingly shunned for their lack of education and unorthodox techniques. Robbins' use of heavy equipment and approach to excavation that generally followed the contours and features of a site instead digging test pits on a grid-based system were particularly bothersome to those who were working toward professionalizing historical archaeology. Further dismay was caused by Robbins' encouragement public visitation to sites and his habit of allowing visitors to take up shovels to assist in the excavation as a means of increasing interest and potential donations toward restoration of the site. Similarly, his major publications, including *Discovery at Walden* (1947), *Hidden America* (1959), *Pilgrim John Alden's Progress–Archaeological Investigations in Duxbury* (1969), and a book of his poetry, *Thru the Covered Bridge* (1938), were geared toward a popular, rather than strictly scholarly, audience (Griswold 2011b:101; Linebaugh 2000:7; 2005:60).

Despite the mounting criticism of his work, Robbins remained in high demand throughout the 1960s and 1970s, taking on relatively small projects for historical societies and house museums such as excavations at the Puddle Dock area of Strawbery Banke in Portsmouth, New Hampshire, and the Katahdin Furnace in Maine. He continued to survey and excavate sites through the mid-1980s; his final project was a preliminary survey of the Shaker village at Sabbathday Lake in Poland Springs, Maine. Toward the end of his life, Robbins worried more about the validation of his work and attempted to sell his papers and slides to a repository that would conserve them. Numerous institutions were willing to accept the collection as a donation, but Robbins continued to search in vain for a buyer to provide some financial security for his family until his death in 1988.

Although his work on industrial sites had largely been discounted or forgotten by most professional historic archeologists in the last quarter of the twentieth century, some saw selective value that they mined to inform their research at iron industries and sites throughout the Northeast and Middle Atlantic. For example, James M. Ransom's (1966) well-known and well-referenced *Vanishing Ironworks of the Ramapos* draws heavily from several of Robbins' projects in the ironmaking districts of northern New Jersey and west of the Hudson River, especially his intensive investigation of the Sterling Forest Iron Works. As Linebaugh (2000:30–31) explains

> Robbins' pursuit of and research on industrial sites resulted in the accumulation of a tremendous wealth of archeological and historical data on a variety of early enterprises that has real value to address present research questions and concerns and enhance interpretation to the public. A close look at Robbins' field records, fieldnotes and diaries, photographs, and maps demonstrates a high level of skill and resourcefulness…This research potential has been demonstrated by several projects that have taken advantage of Robbins' previous excavations.

Although Robbins did not live to see it, most archeologists have come to embrace many of his practices and acknowledge the value of his research on iconic industrial sites throughout the Northeast. He is also recognized as an early pioneer of professional contract archeology through his willingness to go from job to job rather than working from the safety of an academic position and his skill at engaging the public and garnering support of preserving ruins to tell the story of a site (Linebaugh 2000:31; 2005:195).

CRITERION C – ARCHITECTURE

The Iron Works House is significant under Criterion C in the area of Architecture for its timber framed structural system and as conjectural reconstruction of a Post-Medieval-style house executed during America's Colonial Revival period of the early twentieth century. Constructed about 1689 as part of the original house, the timber framed structural system is a rare example of its type dating from Massachusetts' First Colonial Period (First Period, 1625–1725). The reconstruction of the house was undertaken 1915-1917 by Wallace Nutting and Henry Charles Dean who used available structural evidence, precedents set by other Colonial restorations, and personal supposition as inspiration for their Post-Medieval-style design of the building.

First Period Houses in the English Colonies

Post-Medieval (or First Period) houses are generally considered those houses which date to between 1600 and 1700 (although some aspects of these construction elements may have persisted until almost 1740 in some areas) and are the importation of English Post-Medieval housing styles to the British colonies in America. Post-Medieval houses in the northern American colonies were generally two stories high and constructed of wood frames with clapboard or wood shingle sheathing and a large stone or brick central chimney. Houses in the southern colonies tended to be one story high with paired end chimneys; the majority of extant examples are built of brick. Most houses ranged from a single cell (or one room) with a chimney bay on one end to two-cell, single-pile (or one-room-deep) houses with a central chimney bay. These were frequently referred to as "hall and parlor" houses, with numerous variations in additions, including lean-tos and projecting porches, or double-pile configurations; overhanging second stories were common in Massachusetts and Connecticut. The majority of extant wood-frame First Period houses are found in Connecticut and coastal areas of colonial Massachusetts, which today encompasses eastern Massachusetts and portions of southern Maine and New Hampshire, although examples may be found farther inland along major rivers. A Rhode Island variant, with stone end walls and chimneys, is referred to as a "stone ender"; very few of these persist to the present (McAlester 2013:159–160).

The first houses constructed in the fledgling colonies were built by immigrant carpenters from Britain, who brought regional building traditions with them; these regional variations were further influenced by the regions in which the carpenters settled. By about 1660, however, houses were typically built by

carpenters raised in the colonies and trained in their respective regions, and thus demonstrated variation in style and construction techniques that reflected their immigrant antecedents and evolving local building traditions (Cummings 1979:202; McAlester 2013:159–160; Schuler et al. 1989:2–3).

The majority of extant First Period houses in eastern Massachusetts consist of a single-pile, three-bay-wide block, either one or two stories high, topped with a steep-pitch, side-gable roof pierced by a large central chimney.[17] Additions to the massing of the building often included one- to one-and-one-half story high, shed-roof, lean-tos off the rear elevation, or projecting front porches or cross gables in the center of the main block. In some instances, large gables were affixed to the slope of the roof to provide light to the attic if it was to be used for housing or as an exterior demonstration of wealth; the gables were frequently removed during modernization campaigns in the eighteenth and nineteenth centuries. First Period houses were initially constructed with flat front walls, until the last two decades of the seventeenth century, when overhanging second stories came into fashion; these overhangs, supported by cantilevered joists, were occasionally decorated with carved drop pendants at the corners. Exterior walls were sheathed with wood clapboards or shingles and roofs were covered with wood shingles, a change from the thatching that was used during the early settlement years, which proved to be unable to withstand New England winters (Cummings 1979:204; 2003; McAlester 2013:159–161; Schuler et al. 1989:2–5, 10).

Wooden First Period buildings were nearly universally constructed with oak frames, with massive structural members including vertical posts connected to horizontal beams and sills, which were attached to each other with wooden treenails. Roofs consisted of vertical rafters, horizontal purlins, or a combination of the two, also held by wooden treenails. The outer framing elements forming the exterior walls and roof were attached to each other by horizontal beams and braces. Some of these internal framing elements also served decorative purposes, with edges chamfered, or rounded, sometimes with decorative flourishes called "stops" at the ends. Outside of New England, where wood may not have been as readily available, houses were constructed of brick or masonry (Cummings 1979:52–53).

One such framing element, the summer beam, a large, load-bearing wood beam that spans the width or length of a room, could be longitudinal (parallel to the roof ridgeline) functioning as a bridging beam supporting the floor above, or transverse (perpendicular to the roof ridgeline) and function as tie beams between the front and back frames of the building. Typically, longitudinal summer beams are found on the first story to support the floor of a second story, with transverse beams on the second story (in a two story building) holding the frame stable against the weight of the roof. However, a variation, often found in Essex County, Massachusetts, involves a transverse summer beam in at least one room of the first story that is supported by carved posts (called story posts). This variant in summer beam position likely is a vestige of framing practices from the west of England that was brought to the Massachusetts Bay Colony by early seventeenth-century colonists (Cummings 1979:55, 74).

Several frame components were often used to demonstrate the wealth or status of the inhabitants. In particular, large facade gables and overhangs, both of which required additional framing and thus would cost more in terms of time and money, were frequent markers of economic well-being (Cummings 1979:55; Schuler et al. 1989:10).

[17] A significant number of First Period houses in eastern Massachusetts were constructed as single-cell dwellings, but were enlarged over time to two-cell, central chimney plans (Schuler et al. 1989:5).

The Iron Works House

The **Iron Works House (LCS No. 005426, MHC No. SAU.27, contributing building, Map No. 4, Photos 4-8)** is a two-story, single-pile, three-bay, timber framed house, dated to ca. 1689 via dendrochronology that was speculatively restored in 1915. The building was initially believed by many to have been constructed by 1643 by Thomas Dexter, the farmer who sold 600 acres of land to John Winthrop Jr. and the Undertakers of the Ironworks in New England. Studies done by Abbott Lowell Cummings, including deed and probate research, in 1977 as part of a Historic Structures Report indicated a later construction date of ca. 1680, attributed to Samuel Appleton Jr., a gentleman farmer. Later study by Cummings led him to believe the house may have been constructed instead by James Taylor, Treasurer and Receiver General of the Massachusetts Bay Colony, following his acquisition of the property from Appleton, as reflected in the increased value of the property at the time of Taylor's probate in 1716: from 500 pounds in 1688 or 1689 to 1,650 pounds. In *Framed Houses of the Massachusetts Bay 1625–1725*, Abbott Lowell Cummings suggests that framing elements, discussed below, were likely chosen by a member of a leading family, who would be viewed by others as a trend setter, lending further weight to the possibility that the house was constructed for Taylor, rather than Appleton. The later (i.e., ca. 1689) construction date is supported by data from a 1999 dendrochronology study as part of an effort undertaken by the SPNEA to create a standard tree ring chronology for dating First Period houses in eastern Massachusetts (Cummings 1979:36, 111, 203; Gray 1972; Pineo 2013:9).

The property changed hands numerous times over the next two centuries, with numerous factories and mills associated with or near the property. By 1889, the time of the earliest known image of the house painted by itinerant artist Edwin Whitehouse, the building had a veranda on the south elevation, and multiple entrances had been inserted into the eastern elevation. The large pilastered chimney was visible, as was the full-width lean-to; if the ell was extant at the time of Whitehouse's visit, it is not visible in the drawing, which depicts the east and south elevations (Albright et al. 1977:41, 45, 387; Pineo 2013:18).

In 1914, William Sumner Appleton, the founder of the SPNEA in 1910 and a well-connected proponent of preservation, visited the Iron Works House, which was for sale (see **Criterion A – Conservation** for further discussion). Appleton's report stated that he believed the house had originally been two stories tall, with a garret, and a rear lean-to added at some point after the initial construction that spanned the entire length of the rear elevation. He also believed there was evidence for gables on the south, or front, slope of the roof (the area where the eastern gable likely would be was plastered over at the time) and that the original projecting overhang was merely obscured by the veranda.

In 1915, working with Henry Charles Dean, Wallace Nutting reconstructed the house to what he and Dean believed was its original configuration based on Appleton's observations and Dean's knowledge of early houses in New England, including the two-story, projecting central bay and original slope of the roof; the rear lean-to was removed and rebuilt, and doors which had been added over time as the building was carved up into tenement housing in the late nineteenth century were removed. Little is known about the two-story, end-gable addition attached to the west elevation, which was likely added between 1885 and 1915, possibly by the owner of the nearby Scott Mill who had converted the house into tenements for workers. Nutting is believed to have enlarged the ell to be used as a residence for Edward L. Guy, who created replica iron hardware for Nutting and acted as the site caretaker (Albright et al. 1977:26; Cummings 1979:204; Pineo 2013:20).

Despite numerous alterations and Nutting's restoration work, the Iron Works House retains substantial late seventeenth-century fabric. Many framing elements demonstrate the wealth of the first owner, James Taylor, and regional stylistic variations associate it with Essex County building practices, particularly visible in Salem, a major port city in Essex County. The most readily visible demonstration of wealth on the exterior of the Iron Works House is the framed overhang. Inside, the west room, or parlor, was likely the finest room, with a transverse, rather than longitudinal, summer beam supported by story posts with carved shoulders in the center of the north and south walls; the longitudinal summer beam in the eastern room, referred to as the hall, rests on large framing elements in the chimney bay and outer wall (Albright et al. 1977:41; Cummings 1979:74).

Carpentry elements were used to convey the status of the person for whom the building was constructed. The triple-run, winding staircase, with two landings and carved balusters, was an architectural detail that by the standards of the day was very modern and sophisticated and much less steep than typical forms. Little original joinery persists to the present, but it is unknown how much was removed by Nutting and how much had been removed during previous renovations to the building and its conversion to tenements (Cummings 1979:167).

Of the 357 First Period properties listed in the Massachusetts Cultural Resources Inventory System (MACRIS) as of 2015, the majority are in eastern Massachusetts, and 127, including the Iron Works House, were constructed from 1636 to 1690 and many have also been altered over time. The intact frame of the Iron Works House makes it a rare surviving example of First Period architecture in the United States (MHC 2015).

CRITERION D – ARCHEOLOGY, HISTORIC – NON-ABORIGINAL AND PREHISTORIC

Twelve archeological projects were conducted at the **Saugus Iron Works Site (LCS No. None; ASMIS Nos. SAIR00010.000 and SAIR00011.000; MHC Nos. 19-ES-248, 19-ES-835, 19-ES-855, SAU.A and SAU.1, contributing site)** from 1948 to 2007. The investigations carried out by Roland Robbins from 1948 to 1954 in support of the FIWA reconstruction of the Saugus Iron Works were the most extensive and provided the most data about the construction and use of the original seventeenth-century iron works. Since 1953, the archeological profile of the site has been expanded and refined through research excavations at the Iron Works House and Carpenter Shop; two archeological collections assessments; Section 106 compliance surveys and excavations in support of park infrastructure and accessibility upgrades; and an archeological overview and assessment (Beaudry 1975; Brown III 1975; Johnson 1997; John Milner Associates [JMA] 1978; MacMahon 1988; McManamon 1978; Moran 1976a, 1976b; Parson 2006; Parson and Cassedy 2007; Pendery 2009; Piechota 1973).

As a result of this research, 12 ASMIS resources (extant buildings and structures, ruins, and documented archeological sites) have been inventoried for the District. Archeological resources with the demonstrated and potential ability to address the District's primary significance as the first sustained integrated iron works in America are discussed first, followed by the pre-contact occupation of the site.

The Rise, Fall, and Reconstruction of the Saugus Iron Works Site

English colonists began settling in the Saugus area by 1630, establishing scattered farmsteads along the Saugus River on lands formerly occupied by Native American Pawtucket communities. Thomas Dexter

owned and farmed a 600-acre parcel along the Saugus River that would eventually be purchased for the iron works. By 1639, Dexter had cleared 80 acres, constructed a weir across the river, and built a house and a gristmill (Johnson 1997:18).

In 1645, Richard Leader, an experienced ironmaker from Ireland, purchased Dexter's 600 acres and promptly began the design and construction of the Saugus Iron Works on behalf of the investors underwriting the venture. Leader chose the site for its location adjacent to the tidally influenced Saugus River, a reliable and navigable waterpower source that could be used to transport raw materials from interior locations and ship finished products to Boston and other coastal settlements. The series of natural terraces stepping up from the river also could be adapted for the iron works layout, resulting in convenient access to the top of the blast furnace for charging materials and an elevated location for a holding pond to provide a controlled water supply for the site's several waterwheels. Bog ore sources were located near the iron works, and the 600 forested acres provided ample wood for making charcoal (Regan and White 2011:32–33).

With the **Saugus Iron Works Site (LCS No. None; ASMIS No. SAIR00011.000; MHC Nos. 19-ES-248, 19-ES-835, 19-ES-855, SAU.A, contributing site)** in operation by 1646, company records detail Leader's successful construction of a blast furnace for the production of hollowwares and pig iron, a forge for the production of wrought iron, and a rolling and slitting mill. The water supply contained in the upstream holding pond was channeled through a 1,600-ft-long canal to the iron works' numerous waterwheels. In addition to its critical waterpower infrastructure, the iron works also encompassed at least two blacksmith shops, a charcoal house, a wharf and warehouse beside the Saugus River, and several other ancillary buildings. Robbins collected an enormous but exceedingly poorly provenienced artifact assemblage during his excavations (Regan and White 2007). The surviving level of documentation, however, is sufficient to break the assemblage down into several discrete activity/production areas consisting of the Blast Furnace, Forge, Slitting Mill, and Jenks Area. The collected materials are generally corroborative to the know function of the production areas, and it is reasonable assume that they may have been "cherry-picked" by Robbins and his excavators to reflect those known functions. Despite this presumed collection bias, the assemblage comprises a remarkably intact cross-section of seventeenth-century ironworking tools. A more recent re-evaluation of the notched bars, cast iron pots, and salt pan rings in the assemblage has also provided insights into innovative "research and development" going on at the iron from its earliest days of operation (Regan and White 2007:260–247).

Skilled workers who tended the iron works were provided with housing in Hammersmith Village, possibly located east of the iron works on the opposite side of the Saugus River (outside of the District boundaries). Although no archeological or structural evidence of the former village has been identified (Regan and White 2011:34), the village would have been home to the large number of people necessary to maintain the labor-intensive demands of a blast furnace. These workers – who likely included freemen, indentures, slaves, single men, and families – were paid based on the specialization required for their jobs and their relative social status. Married men, for example, would have earned more than single men with the same skill set. Slaves and indentures were paid nothing directly with their wages going to their "masters," although it is possible that highly skilled, non-free individuals would have commanded a higher rate than their free counterparts regardless of their lower social status.

These differing wage and social status issues no doubt were manifested to some degree in housing and portable material culture, all of which may be discernible in the archaeological record through foundation remains, sheet middens, and privy deposits. Given Robbins' focus on larger-scale structural remains

associated with the iron works production complex, smaller domestic landscape features received little or no attention, if in fact the signature of those features would have even been recognizable in the field to the excavators. Artifacts collected from the site, however, do provide some insights into its non-production oriented, residential aspects. Although the associated provenience information is exceedingly poor, the recovery of imported ball clay and locally-produced redware smoking pipe fragments, straight pins, a pair of scissors, several latten spoons, andirons, a variety of kitchen wares, a finger ring, brooches, and a pewter nursing nipple provide a glimpse into the domestic life of the iron works complex's resident population (Regan and White 2007:254).

The large working population also likely encouraged the development of a largely self-sustaining, non-industrial economy to supply food and domestic supplies in a "frontier" environment. While many – if not most - some of the needs of the workers and their families could have been met within the community, other supplies no doubt had to be procured from external sources. A comparative evaluation of internally produced supplies with those acquired from neighboring settlements or from overseas could illuminate the web of interdependencies that may have existed among them, and the degree to which the Saugus owners and managers were able to control and profit (or not) from goods accessed outside of the industrial and domestic spheres of the iron works (Griswold and Linebaugh 2011:19–20). Several fragments of cobalt-blue decorated Portuguese tin-glazed earthenware have been recovered from the site, and hint at some level of external exchange in the international markets (Pendery 1999: 69). Evidence for various trades – some of which were no doubt practiced at the iron works complex – also were recovered during Robbins' excavations including axes that would have been used by shipwrights, housewrights, and colliers; iron bands that would have been used for coopers' barrels; and iron cauldrons used by soapmakers for "boyleing sope in ye River" (Regan and White 2007:253–254).

Business mismanagement and crippling debt resulted in the complete abandonment of the iron works by 1670. Shortly thereafter, the site reverted to agricultural land under Samuel Appleton Jr., who purchased the property and may have constructed elements of the existing Iron Works House. The property remained farmland for most of the eighteenth century; by the mid-eighteenth century, the area also accommodated a public thoroughfare for transporting livestock to and from the river. From the late eighteenth through the nineteenth centuries, the former iron works site was home to several buildings and structures, including a ca. 1793 shoemaker's shop near the Iron Works House; a ca. 1809 workshop and corn barn, also near the Iron Works House; a barn and shed; and at least one dwelling separate from the Iron Works House that remained standing until 1976. By 1870, the Iron Works House had been purchased by local mill owner Andrew Scott, who converted the building into tenements for his employees. In 1915, noted restoration architect Wallace Nutting purchased the Iron Works House and proceeded with the restoration of the building to what he believed was its seventeenth-century appearance. Nutting's work also included the demolition of several older buildings on the property that did not conform to his vision for the site (Johnson 1997:19, 23).

Nutting sold the Iron Works House in 1920, after which the property had a series of owners before being acquired by FIWA in 1944. In 1948, with guidance and eventual funding from the American Iron and Steel Institute, FIWA hired Roland W. Robbins to undertake extensive and methodical archeological investigations of the iron works site to aid in the accurate reconstruction of its most recognizable features: the blast furnace, the forge, the rolling and slitting mill, the wharf and adjacent warehouse, and the numerous sluiceways that fed the iron work's waterwheels. The restoration emphasis on the iron works' major operational elements resulted in the alteration, disturbance, or destruction of much of the site's historical topography and smaller-scale features that were deemed less valuable, or anachronistic, to its

interpretation, as did the later construction of Central Street. However, three resources (the Slag Pile, the Jenks Area Foundations, and the West Bluff Stabilized Foundations) have survived the various restoration and construction impacts to the site and retain sufficient integrity to provide substantive information about the organization and output of the seventeenth-century ironmaking complex (Brown 1975:17, 23; Johnson 1997:31, 32)[18].

The **Slag Pile (LCS No. 005427, ASMIS No. SAIR00002.000, contributing site)** is directly south of the blast furnace and is the only element of the original iron works that has survived substantively intact. The archeometallurgical data contained in the slag material and the stratigraphy of the slag pile itself have the potential to provide important information about the operation of the blast furnace, the raw materials used at the furnace, and the origins of those materials; taken together, these activities constitute metallurgical engineering. Archeological investigations carried out under Robbins from 1948 to 1954 strongly suggest that the slag pile may contain much of the total slag produced by the furnace from 1646 to about 1670, thereby constituting a unique and nearly complete material record of the operation of the furnace.

Robbins tested ten samples from the Saugus slag pile as well as samples taken from the site of the nearby John Winthrop Jr. blast furnace in Braintree for comparison. The chemical analysis employed by Robbins characterized the slag samples by their major compounds and measured the amount of elemental phosphorous and sulfur contained in each sample; these data are useful for comparison with similar analyses conducted at other ironmaking sites. Similarities between the slag samples suggested that the managers at Saugus operated their furnace in a similar fashion to that of the earlier Braintree furnace, and perhaps adapted ironmaking knowledge, if not talent, directly from Braintree. This early comparative exercise illustrates the potential of the Slag Pile to supplement primary sources about the furnace's operation and provide information about ironmaking processes that are not otherwise contained in the documentary record (Griswold 2011c:132; Kotlensky 2007:135–171; Linebaugh 2000:22, 36).

The **Jenks Area Foundations (LCS No. 040315, ASMIS No. SAIR00009.000, MHC No. SAU.936, contributing site, Map No. 25, Photo 27)** are segments of masonry foundations located directly south of the blast furnace and adjacent to the slag pile. The foundations are likely the remains of Joseph Jenks' forge and metal-working shop, partially excavated by Roland Robbins in 1952 and further investigated during later excavations near the site. Joseph Jenks, a skilled blacksmith, millwright, and toolmaker, emigrated from England to Saugus and was given permission to construct a forge and blacksmith shop utilizing water discharged from the furnace's waterwheel to power waterwheels for his own forge. Structural elements of the Jenks forge remain intact, because FIWA, and the Reconstruction Committee that FIWA formed with the AISI, chose not to restore the site, thereby leaving it largely undisturbed as an archeological resource (JMA 1978; Moran 1976b; White 2011:188–198).

[18] Nutting's 1915 restoration efforts, later twentieth-century site alterations, and a 1969 fire resulted in the destruction of several historic properties not directly associated with the seventeenth-century ironworks. The most significant of these resources included a ca. 1793 shoemakers shop; the c. 1750–1775 Mansfield House, the c. 1840–1845 Rafferty House, and ca. 1809 workshop and corn barn, all of which were formerly located in proximity to the Iron Works House. No clear evidence of these buildings, structures, or associated landscape features have been recorded as part of any archeological investigations within the District. Elements of these resources, however, do have the potential to survive and may contribute substantive information about the farmers and, later, millworkers, who lived and worked there, and more generally about the period when Saugus was transformed from an agricultural town, to an industrial center, to a residential community (Johnson 1997).

The **West Bluff Stabilized Foundations (LCS No. 040314, ASMIS No. SAIR00003.000, MHC No. SAU.940, contributing site, Map No. 24, Photo 25-26)** are segments of masonry foundations located south of the blast furnace and west of the slag pile that were uncovered during Robbins' investigations in 1948–1954. The exact relationship between the foundations and the operation of the iron works is not known, but the foundations may have been associated with a potter's shed, unidentified mill, or other ancillary structure. Although not well understood, they represent the few intact masonry ruins exposed on the site that have not been altered or disturbed through reconstruction activities and may provide more information on the operation of the iron works through further investigations.

The Pre-Contact Occupation of the Saugus Iron Works Site

Although the District derives its primary significance as the birthplace of the American iron and steel industry, human occupation of the area began thousands of years earlier. The same environmental and topographic characteristics that made the Saugus Iron Works Site so valuable to seventeenth-century English entrepreneurs—an elevated bluff adjacent to steep falls, wetlands, a natural harbor, and dense woodlands—also made it a prime location for pre-contact settlement. A review of the Massachusetts Historical Commission's archeological site files indicates that pre-contact sites in the greater North Shore region tend to cluster in proximity to coastal and estuarine environments, major rivers, and ponds. On the basis of known site distributions, the Saugus River was a core pre-contact settlement area, with some large sites containing evidence of recurrent occupation over thousands of years.

More than 31 pre-contact sites have been identified within a 1-mile radius of the District. A review of the documentation for these sites in combination with regional cultural chronologies has been used to develop a context within which to interpret and assess the pre-contact significance of the **Saugus Iron Works Site LCS No. None; ASMIS No. SAIR00011.000; MHC Nos. 19-ES-248, 19-ES-835, 19-ES-855, SAU.A, contributing site)**[19] from the PaleoIndian to Late Woodland periods.

The retreat of the Laurentide ice sheet into northern New England approximately 16,000 years ago set into motion a series of profound environmental changes that shaped the landscape for the earliest inhabitants of Massachusetts during the PaleoIndian Period (12,500–10,000 before present [B.P.]). Megafauna such as elk, caribou, and mastodon, likely played a major role in the diet of these early populations. Settlement strategies during the PaleoIndian Period are poorly understood. Because of the range of variability at identified sites, large base camps, small residential camps, and very small task-specific loci have been advanced as the primary settlement models. There are six recorded PaleoIndian sites in Essex County; most are find spots of diagnostic fluted projectile points. The Bull Brook Site (19-ES-80) was a base camp likely created during a number of occupational episodes that yielded more than 175 fluted points and thousands of other tools (e.g., flake knives, gravers, and scrapers). The Saugus Quarry Site (19-ES-256), about 0.5 mile downstream of the District, contained a single diagnostic fluted point and evidence of the earliest quarrying and extraction of the high-quality, fine-grained, red-pink rhyolite known as Saugus jasper (Grimes et al. 1984).

The Early Archaic Period (10,000–8000 B.P.) coincided with the start of the Holocene epoch, which was marked by warmer and drier conditions than the preceding Pleistocene epoch. Early Archaic peoples

[19] State site numbers and ASMIS numbers for pre-contact resources within the District have been collapsed into a single designation because they are more properly understood as components of a single site occupied repeatedly for thousands of years.

continued a generalized subsistence strategy, hunting available game and harvesting available woodland and wetland vegetation and nuts. The identification of Early Archaic archeological deposits in Massachusetts typically has relied on the recovery of bifurcate-base lithic projectile points; concentrations of these points have been identified at the perimeters of ponds, marshes, and wooded wetlands and at the headwaters of major rivers in southeastern Massachusetts. The number of identified Early Archaic sites is very limited, and the period is characterized in the northern Boston Basin by find spots of bifurcate-base projectile points. No Early Archaic sites have been identified within a 1-mile radius of the District, but bifurcate-base projectile points have been found in small numbers on a few sites in the Saugus River drainage (Dumont 1981; Forrest 1999, Kuehn 1998; Meltzer and Smith 1986; Nicholas 1987; Taylor 1976).

Data from a broad reconnaissance survey of pre-contact cultural resources in the Boston area and analysis of extant artifact collections indicate that Middle Archaic Period (8000–5000 B.P.) settlement occurred in a range of environmental settings. Marine transgression through the late Holocene epoch inundated most of the Middle Archaic sites near the coastal zone environment of 7,500 to 6,000 years ago. Sites that date to that time that are along former estuaries at the mouths of the various coastal river drainages are likely to be under shallow offshore waters. Inland sites appear to cluster on the margins of rivers, wetlands, and lakes or large ponds in the general Boston Basin area. Middle Archaic groups occupied large site areas on the Saugus River estuary and locations farther upstream near the confluence of the Mill River. The Small Site (19-ES-581), for example, is on the east bank of the Saugus River across from the Saugus Iron Works; projectile points collected there for decades were later donated to the NPS. Diagnostic projectile points in the collection indicate a Middle Archaic occupation, although the nature of that occupation is unknown (Dincauze 1973, 1974).

Late Archaic Period (5000–3000 B.P.) components can be divided into three general cultural traditions: Laurentian, Small Stemmed, and Susquehanna. The clusters of sites in the Saugus River drainage that were core areas of settlement include locations that were intensively used during this period. Laurentian Tradition components in the riverine zone appear to have been much smaller than later occupations based on the low frequencies of diagnostic points (Otter Creek and Brewerton types) in artifact collections from these sites. By about 4500–4000 B.P., groups were using a range of site locations for resource collection and processing and settlement. After about 4000 B.P., the large pond side and riverine zone sites continued to be used as base camps by Susquehanna Tradition groups. Diagnostic projectile points (Atlantic type) have also been found at other smaller sites along the Saugus River, suggesting that these coastal, estuarine environmental settings were a focus of Susquehanna Tradition settlement. Felsites from the Wakefield section of the Lynn Volcanic Complex appear to have been an important lithic resource for Susquehanna Tradition groups in and just outside the northern Boston Basin. Several Late Archaic campsites and lithic workshops have been identified within a 1-mile radius of the District, including the Small Site, the Saugus Quarry Site, and the Indian Spring Vinegar Hill Site (19-ES-713).

About 3,000 years ago during the Terminal Archaic Period, hunter-gatherer populations in the northern Boston Basin continued to use some of the same base camp locations that had been elements of earlier settlement patterns A similar reuse of locations near the head of tidal/estuarine conditions probably occurred along the North Shore. Sites in Beverly Harbor and the lower Saugus River have yielded diagnostic artifacts attributable to the Susquehanna Tradition and Orient Complex, underscoring an intensified coastal focus through the period (Dincauze 1974).

Archeological data about settlement patterns during the Early Woodland Period (3000–1650 B.P.) are limited, particularly for the non-coastal, upland sections of the northern Boston Basin. The distribution of some projectile point types (Rossville, Meadowood, and untyped lobate stem types) indicates continued use of the large estuary head and pond base camps. With the slowing of sea level rise and stabilization of shorelines after about 2,500 years ago, settlement appears to have intensified in the coastal zone around Boston Harbor. A similar settlement pattern probably existed in the coastal zone environments of the North Shore. The Abbot Street Oyster Shell Heap (19-ES-341) at Beverly Harbor is one example. Described as a "shell heap in part," this site was surface collected about the turn of the twentieth century by John C. Clark, a local collector. The assemblage, now housed at the Peabody Essex Museum in Salem, includes examples of Atlantic, Orient Fishtail, Small Stemmed, and Meadowood projectile points. Identified Early Woodland components within a 1-mile radius of the District are restricted to lithic workshops (19-ES-690, 19-ES-700, and 19-ES-713) that were likely processing material quarried from the Saugus Quarry (Dincauze 1974:50; MHC site files).

With the stabilization of sea levels and the development of tidal flat habitat with shellfish beds, exploitation of various shellfish species (soft shell clam, scallop, and quahog) by hunter-gatherer groups intensified. Many shell midden sites were created around Boston Harbor and were used repeatedly for shellfish processing and temporary, seasonal settlement. Middle Woodland Period (1650–1000 B.P.) settlement along the North Shore also appears to have been concentrated at the estuary heads in areas such as the lower Saugus River. A burial exposed during construction at Revere Beach in the late nineteenth to early twentieth centuries contained a ceramic vessel, smoking pipe, and mica sheets typical of Middle Woodland grave good assemblages in southern New England. Two other Middle Woodland burials have been reported at Three Graves (BEV17) in Beverly and at Treadwell's Island (19-ES-98) in Ipswich. At the confluence of the Saugus and Mill rivers, a few multicomponent Archaic/Woodland Period sites (Ossini's Garden and the Woodville District) have yielded evidence of Middle Woodland occupation. (Dincauze 1974:51).

Settlement and subsistence activities continued to be concentrated in the coastal/estuarine zone of the North Shore in the Late Woodland Period (1000–450 B.P.). Several sites on the perimeter of the Beverly/Salem harbor appear to have evidence of Late Woodland use and this area was a local core of Native American settlement. Known Late Woodland site locations include the Mackerel Cove Site (19-ES-425) in Beverly and the Salem Neck/Winter Island area in Salem. Some sites were probably used on a seasonal basis for activities such as collecting and processing shellfish, fishing, and hunting waterfowl. The Salem Neck Sewer Plant Site (19-ES-471) is an example of a multiuse, coastal zone site with shell midden deposits created during Middle to Late Woodland periods.

Large settlements, possibly base camps occupied in the spring and fall, were probably located at the heads of estuaries such as those on the Saugus River. The Woodland Saugus Estuary Site (19-ES-257) was recorded in 1971 on the east terrace of the river immediately across from the park. According to a local collector, the site yielded many projectile points from an unknown location. The associated site form notes a possible Late Woodland fish weir in the area. No systematic archeological work had been done at the site, which was reportedly destroyed by residential development. Other small temporary hunting-collecting camps, including upland zone rockshelters, were probably used by groups of hunter-gatherers during the late fall and winter. Several distinct varieties of felsite or rhyolite from the Middlesex Fells and Saugus Quarry sites continued to be used for raw material in the manufacture of stone tools and may have served as territory markers for groups occupying these drainages (Dincauze 1974:53, 55–56; MacMahon 1988:109–110).

Robbins' excavations at the Saugus Iron Works Site in 1948–1953 did recover pre-contact materials, but because the focus of his work was on the seventeenth-century ironworking complex, the provenience data for the artifacts are vague at best. Analysis of Robbins' collections in 1973 identified a soapstone bowl fragment, several diagnostic Late Archaic projectile points, Woodland to Contact Period pottery sherds, larger triangular points, and trade objects such as metal hatchets and jaw harps. In 1976, an electrical resistivity and auger survey followed by the excavation of more than one hundred 2.5-x-2.5-ft excavation units were completed around the Iron Works House with the goal of locating, describing, and interpreting any surviving archeological remains. In addition to historic period materials related to the iron works, the work yielded a substantial pre-contact assemblage of 54 stone tools, 2,154 pieces of debitage, 4 pre-contact pottery fragments; 1 possible midden feature; and 3 untyped, shallow pit features. The stone tool and debitage assemblage, made primarily from locally or regionally available sources, included Steubenville Lanceolate and Stemmed, Susquehanna Broadspear, Atlantic, Squibnocket Triangular, and Levanna projectile points, and "secondary" flakes, produced in the intermediate stage of tool production, i.e., between "primary" reduction of cores from large quarried pieces and final "retouch" shaping of finished tools. The combined artifact and feature assemblage suggests repeated, and possibly longer-term, occupation of the site beginning at least as early as the Late Archaic Period into the Late Woodland Period (Barber 1973:13–14; JMA 1978:42–44; Moran 1976a, 1976b; Piechota 1973.

A 1988 reanalysis of the site's approximately 2,300 pre-contact artifacts collected during the Moran and JMA excavations identified several additional diagnostic artifact types from the Middle Archaic and Early to Middle Woodland periods and additional activity areas immediately east of the museum building and Iron Works House. Reanalysis of the tools and debitage also resulted in a revised interpretation of the assemblage that was more consistent with typical eastern Massachusetts archeological collections. Materials originally identified as basalt, rhyolite, or chert were reclassified as felsites (81% of the assemblage and the dominant stone type), followed by Saugus jasper (15%) and smaller numbers of quartzite, cherts, quartz, and argillite). The features identified by Moran and Milner were similarly reassessed. One of the pit features was disregarded as misidentified, and a second pit feature north of the Iron Works House was re-identified as a twentieth-century excavation of a Native American burial as reported by Edward L. Guy. Guy had worked as a blacksmith on the property, and described the burial as being found 2 ft below the ground surface during excavations for a water pipe to connect the museum with the house. According to Guy, the feature yielded hundreds of projectile points, but there is no known written or photographic documentation of the discovery or the disposition of the collected materials. There is also no indication in Moran's notes whether any human remains were retrieved and, if so, what happened to those remains. Moran found no additional evidence of the burial during his excavations in that location (MacMahon 1988:121–125).

Archeological work conducted at the Saugus Iron Works Site within the last decade has consisted of site identification through data recovery excavations in support of infrastructure upgrades. In 2009, NPS archeologists conducted a ground penetrating radar survey of an area west of the museum slated for the installation of water lines to feed a new water suppression system. The survey revealed that ground disturbance was limited to an existing water line and tree root disturbance. Two shovel test pits in the area recovered pre-contact materials (rhyolite, argillite, chert, quartz, and jasper flakes and a rhyolite bifacially worked tool [biface] tip fragment) in disturbed soil contexts with late nineteenth- and early twentieth-century artifacts (Pendery 2009).

Excavations in 2004 and 2005 have provided the most substantive and well-documented evidence of the pre-contact occupation of the District. Excavations in the northwest corner of the park, designated Area 7, yielded Archaic and Woodland occupation areas at the plow zone/subsoil interface that were deeply buried beneath fill deposits and thus preserved from modern disturbances such as grading and landscaping activities. A total of nearly 10,000 pre-contact artifacts and 10 pre-contact cultural features were identified. The cultural features consisted of four untyped pits, two hearths, three post molds, and a filled linear trench interpreted as a drainage swale or refuse dump. Most of the recovered artifact assemblage was collected from mixed plow zone and subsoil contexts and consisted of non-diagnostic stone toolmaking debris (i.e., flakes and shatter), but Neville Stemmed, Squibnocket Stemmed, Vosburg, Broadspear, Fox Creek, and Levanna points document a general Middle through Terminal Archaic and Middle to Late Woodland occupation of the site. A Fox Creek point and a Vosburg point recovered from the features provided secure Middle Woodland and Late to Transitional Archaic contexts, respectively, but overall the excavations did not identify sufficiently discrete components to stratify the occupational history of the site.

Despite the lack of a clear stratigraphic sequence, the Saugus Iron Works Site has the demonstrated and potential ability to yield important information about pre-contact lithic procurement patterns in the area. Site evaluation and data recovery excavations conducted in 2004 and 2005 recovered a large lithic assemblage dominated by rhyolite tools and debitage. Only 9 percent of the assemblage consisted of Saugus jasper, despite the proximity of the Saugus Quarry Site (19-ES-256) 0.5 mile to the south. This pattern is similar to that of the earlier Moran and JMA excavations, in which rhyolite also appeared to be the favored stone source, with Saugus jasper constituting only 15 percent of the combined assemblage. Moreover, the use of Saugus jasper seems to have been preferred for the production of projectile points. While the other stone types (i.e., rhyolites and felsites) account for similar percentages of tools versus debitage, Saugus jasper was used for a notably higher percentage of tools compared with debitage.

These data strongly suggest that 1) the primary reduction of Saugus jasper was being undertaken at or very close to its quarry source; 2) limited secondary and tertiary refinements were occurring at the iron works site; and 3) the site occupants appear to have preferred other readily available volcanic stones, such as rhyolite quarried from the nearby Vinegar Hills, for tool production. This preference is particularly pronounced during the Late Archaic through the Middle Woodland periods as indicated by the diagnostic rhyolite projectile points recovered from the site. The Castle Rock Quarry Site (19-ES-352) on Marblehead Neck, approximately 5 miles northeast of the iron works, may have been another possible source for the dark gray to black porphyritic rhyolite used to make Small Stemmed, Lanceolate, and triangular projectile points dating to the Late Archaic, Middle Woodland, and Late Woodland occupations of the site. The gray-green and dark brown rhyolites may have been quarried from locations in nearby Melrose and Wakefield (Donta 2002; Donta and Kelly 2002; Haynes 1886; Luedtke et al. 1998).

Whatever the exact source of the quarried stone, 97 percent of the lithic assemblage from the Saugus Iron Works Site was derived from local sources, illustrating the abundance of high-quality stone quarries that made the area such an attractive settlement option throughout the Pre-Contact Period. The lithic assemblage also contained a higher percentage of secondary flaking debris, indicating biface finishing and curation activities, compared to primary flaking debris representative of early stages of stone tool manufacture. This pattern held across stone types and suggests that tool manufacture was restricted to flaking biface blanks that were obtained locally and carried to the site as part of a mobile toolkit or were the result of re-sharpening hafted projectile points.

The archeological data were more equivocal concerning the seasonality and general function of the site. No artifacts or features typical of base camp sites (e.g., storage pits, grinding stones, axes, stone bowls, large quantities of pottery, and large hearths) were identified, nor were any food remains indicating seasonality recovered, such as wild fruits, nuts, or animal bone. Although the site is located near falls at the head of an estuary and would have been ideal for fishing, especially during anadromous fish runs, the lack of associated fish remains or tools such as net sinkers precluded a detailed discussion of that possibility. As such, the site is interpreted as part of a pattern of interior, transient camps in the Boston Basin focused on projectile point manufacture and hunting.

This interpretation, however, seems not to consider the pre-contact artifacts and features identified during the earlier archeological investigations of the site as summarized above. In particular, that work identified post molds, possible living floor features, and small and large pit features suggesting a more substantial occupation. The reported burial north of the Iron Works House provides further evidence for an interpretation of the site as a more substantial occupation than the results of the data recovery excavations would indicate.

The lack of features in Area 7 compared to those identified around the Iron Works House and museum during the Moran and JMA excavations may reflect a segregation of activities based on site-specific environmental variables that are no longer obvious because of modern disturbances to the landscape. The lack of faunal materials in the data recovery assemblage is more problematic, although that too may be a result of the segregation of site activities, because bone and shell were collected, although not analyzed, during the Moran and JMA excavations immediately to the south.

Ethnohistorical accounts and archeological data clearly demonstrate the use of falls by Native American populations extending back thousands of years. Turner's Falls along the Connecticut River in Massachusetts, for example, was significant historically for the abundance of fish that could be easily netted during seasonal runs. An early twentieth-century historian of the area wrote that as many as 5,000 fish were collected from those falls in a single day, and local historian Gary Sanderson more recently claimed that a "natural fish weir" or "Indian Dam" was located about a mile downstream from the falls themselves (Sanderson 2009). Similar historical claims have been made for falls sites along major and minor rivers throughout New England (Thompson 1904:39).

The historical productivity of falls—before the impoundment of many rivers for industrial purposes—was a continuum of their Pre-Contact Period and Contact Period productivity. Christian missionary John Eliot wrote in the seventeenth century that "[t]here is a great fishing place upon one of the falls of the Merrimack River called Pawtucket, where is a great confluence of Indians every spring" (Chalmers 1903:17). Henry Schoolcraft (1855:221) affirms Eliot's claims, noting that the Pawtucket Falls of Massachusetts "was one of the most noted fishing-places in [all of] New England" where shad and salmon were harvested. The importance of Pawtucket Falls as a fishing location is undoubtedly one of the reasons the seventeenth-century Christianized Indian settlement of Wamesit was established nearby.

Several well-known fish processing sites have been excavated at natural fall lines throughout the Northeast, although few have yielded substantial fish bone assemblages. The first and perhaps best known of these is the Neville Site at Amoskeag Falls in Manchester, New Hampshire, which was used intensively for fishing during the Middle Archaic through Contact periods. Other major fishing locations include the Smyth and Eddy sites, also located at Amoskeag Falls; Pawtucket Falls at the confluence of the Concord and Merrimack rivers; the Buswell Site along the Merrimack in Massachusetts; Bellows

Falls on the Connecticut River in Vermont; and the Riverside Archaeological District at Peskeompscut, or Turner's Falls, Massachusetts. Burnt rock or stone platforms from a number of southern New England riverine archeological sites presumably also represent places where fish were acquired and processed. The importance of reliable fish harvests at falls and fall lines along New England's major rivers and tributaries likely explains why the margins of these rivers were repeatedly settled by Native Americans throughout the Pre-Contact Period up to the time of European contact. Many locations were periodically and repeatedly occupied and may have been a nexus of Native American communication and social interactions (Barber 1980; Bunker 1992; Carlson 1988; Dincauze 1976; Nassaney 1999:228; Thomas 1980).

A closer examination and synthesis of the 2004 and 2005 findings with the assemblage collected from the Moran, JMA, and Robbins excavations is important for the potential to yield information about the use of falls at the Saugus Iron Works Site throughout the Pre-Contact Period and how that use may have varied in timing, intensity, and duration over time. As discussed above, the east terrace of the Saugus River contained the Woodland Saugus Estuary Site (19-ES-257) and the Middle to Late Archaic Small Site (19-ES-518). Given the physical proximity and environmental similarities among the three sites, they very likely were functionally related and may even have been different loci of the same site.

The Saugus Iron Works Site also has the potential to provide important comparative data about the use and distribution of Saugus jasper throughout the region. The Iron Works assemblage contains a large and morphologically diverse sample of that material, all presumably quarried from the Saugus Quarry Site immediately downstream. Petrological analysis of the archeologically collected stone, which is actually an igneous rhyolite first described in 1886 by Henry Haynes, could reveal distinct mineral and textural characteristics for comparison with other archeologically recovered specimens. Because the quarry site has been destroyed, this is likely the only way to reliably source materials from other contexts, and could provide a picture of how Native American populations interacted with one another through the medium of lithic exchange.

Finally, the pre-contact component of the Saugus Iron Works Site is significant in that it illustrates a continuity of occupation along the Saugus River spanning more than 8,000 years. The same natural conditions that made it such a desirable industrial location were the same characteristics that made it so attractive to pre-contact people, but for very different reasons. The needs of subsistence versus industry underscore the radical physical transformation of the landscape following European contact that often erased all evidence of thousands of years of Native occupation. Through the lens of archeology, those years may be carefully, if provisionally, reconstructed to re-imagine the landscape and its people before the dawn of the industrial age.

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Previous documentation on file (NPS):

____ preliminary determination of individual listing (36 CFR 67) has been requested
__X_ previously listed in the National Register
____previously determined eligible by the National Register
__X_designated a National Historic Landmark
__X_ recorded by Historic American Buildings Survey #_MA-1081__
____recorded by Historic American Engineering Record # _____
____ recorded by Historic American Landscape Survey # _____

Primary location of additional data:

____ State Historic Preservation Office
____ Other State agency
_X__ Federal agency
____ Local government
____ University
____ Other
Name of repository: _____

Historic Resources Survey Number (if assigned): _MHC No. SAU.A_____

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10. Geographical Data

Acreage of Property __8.51_____

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates
Datum if other than WGS84:_____
(enter coordinates to 6 decimal places)

A. Latitude: 42.469206 Longitude: -71.009404

B. Latitude: 42.469587 Longitude: -71.006797

C. Latitude: 42.469295 Longitude: -71.006304

D. Latitude: 42.468762 Longitude: -71.006094

E. Latitude: 42.468623 Longitude: -71.006694

F. Latitude: 42.467075 Longitude: -71.006815

G. Latitude: 42.466960 Longitude: -71.006128

H. Latitude: 42.466602 Longitude: -71.006132

I. Latitude: 42.466353 Longitude: -71.006663

J. Latitude: 42.467117 Longitude: -71.007579

K. Latitude: 42.467522 Longitude: -71.007565

L. Latitude: 42.467759 Longitude: -71.008495

M.Latitude: 42.467639 Longitude: -71.008564

N. Latitude: 42.467766 Longitude: -71.009138

O. Latitude: 42.467985 Longitude: -71.009372

P. Latitude: 42.468219 Longitude: -71.009583

Q. Latitude: 42.468701 Longitude: -71.009558

Or
UTM References
Datum (indicated on USGS map):

☐) 1927 or ☐ NAD 1983

1. Zone: Easting: Northing:

2. Zone: Easting: Northing:

3. Zone: Easting: Northing:

4. Zone: Easting : Northing:

Verbal Boundary Description (Describe the boundaries of the property.)

The National Register district boundary corresponds to the authorized boundary of Saugus Iron Works National Historic Site and encompasses 8.51 acres, as shown on the attached district map.

Boundary Justification (Explain why the boundaries were selected.)
In accordance with NPS-28: *Cultural Resource Management Guideline,* Appendix Q, the National Park Service is responsible for evaluating the entire area contained within the authorized boundaries of historical units within the National Park System. National Register boundaries may contain less but not more area than the authorized boundary. The district boundaries for the Saugus Iron Works National Historic Site Historic District conform to the authorized boundaries of Saugus Iron Works National Historic Site.

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11. Form Prepared By

name/title: _Gretchen Pineo, Architectural Historian; Kristen Heitert, Sr. Archaeologist; T. Arron Kotlensky, Industrial Archaeologist; John J. Daly, Sr. Industrial Historian; Melissa Andrade, Asst. Architectural Historian
organization: _The Public Archaeology Laboratory, Inc._____
street & number: _26 Main Street_____
city or town: Pawtucket_____ state: _Rhode Island_ zip code: _02860____
e-mail_solausen@palinc.com_____
telephone : _(401) 728-8780_____
date: __November 2016_____

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.

- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.

- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: Saugus Iron Works NHS

City or Vicinity: Saugus

County: Essex State: Massachusetts

Photographer: John J. Daly

Date Photographed: June 5, 2015

Description of Photograph(s) and number, include description of view indicating direction of camera:

Saugus Iron Works Site, looking northwest.

1 of 27. Saugus Iron Works Site, looking northwest.

2 of 27. Saugus Iron Works Site, looking northeast.

3 of 27. Saugus Iron Works Site, looking northeast.

4 of 27. Iron Works House, looking north.

5 of 27. Iron Works House, looking southwest.

6 of 27. Iron Works House hall, looking northeast.

7 of 27. Iron Works House stairhall, looking north.

8 of 27. Iron Works House hall chamber, looking north.

9 of 27. Visitor Contact Station, looking northeast.

10 of 27. Museum and Museum Annex, looking southwest.

11 of 27. Museum Annex, looking northeast.

12 of 27. Central Street Retaining Wall, looking west.

13 of 27. West Bluff Stone Wall, Central Street Retaining Wall, and Circulation System, looking southeast.

14 of 27. Blast Furnace, looking northeast.

15 of 27. Slag Pile and Warehouse, and Saugus Iron Works Nature Trail, looking east.

16 of 27. Forge and Rolling and Slitting Mill, looking northeast.

17 of 27. Forge Sluiceway and Tailrace, and Blast Furnace Retaining Wall, looking northeast.

18 of 27. Rolling and Slitting Mill, Sluiceway, and Tailrace, looking northwest.

19 of 27. Blast Furnace Sluiceway and Tailrace, looking north.

20 of 27. Tailrace Bridge, looking southeast.

21 of 27. Corduroy Road, looking northeast.

22 of 27. Well, looking north.

23 of 27. Warehouse and Wharf, looking northwest.

24 of 27. Saugus River Stone Bulkheads and Turning Basin, and Bridges over Saugus River, looking northwest.

25 of 27. West Bluff Stabilized Foundations, looking west.

26 of 27. West Bluff Stabilized Foundations, looking southwest.

27 of 27. Jenks Area Foundations, looking northeast.

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

Saugus Iron Works National Historic Site Coordinate Map

GLOSSARY OF IRON INDUSTRY TERMS [20]

Bellows: A box with flexible sides, often constructed of leather, in which expansion and contraction draws air through a side valve and expels it through a nozzle.

Blast Furnace: A tall-shaft variety of furnace operated by forced draft.

Bloom: A mass of wrought iron from a puddling furnace or bloomery.

Bloomery: A forge that makes wrought-iron blooms directly from ore, or less frequently, from cast iron. Its production was generally of poor quality, as it never was molten.

Cast Iron: Iron containing so much carbon, usually above 1.7 or 2 percent, that it is not usefully malleable at any temperature.

Charge: A given weight of metal, stone, and/or fuel used in a furnace or a kiln.

Drop Hammer: A forging hammer that drops vertically onto the work piece, usually relying on a powered cylinder to lift the hammer head and to add to the force of the downward stroke.

Flux: The basic material added to the furnace charge that unites with sand, ash, and dirt during melting to form slag.

Forge: A general term that includes furnaces or a shop with a hearth where wrought iron is produced directly from ore.

Pig Bed: Small, open sand molds, made in the floor of the foundry near the furnace, to hold the over iron and other waste metal.

Pig Iron: Cast iron that has been run into pigs directly from the blast furnace. The iron in the sand molds resembles a sow with suckling pigs.

Race: A natural or man-made waterway that conveys water to power a waterwheel or turbine.

Rolling and Slitting Mill: A foundry in which wrought-iron bars were rolled into plate iron, then passed through cutters that sheared the plate into long thin rods used primarily by nail makers.

Slag: A by-product of heating or melting of iron and steel consisting of oxides and other impurities that are generally unwanted. The process of forming slag is essential in removing impurities during iron and steel production.

Wrought Iron: A malleable iron, aggregated from particles without subsequent fusion. It contains so little carbon (generally less than 0.15 percent) that it does not harden usefully when cooled rapidly.

[20]Most definitions compiled from Douglas C. McVarish, *American Industrial Archaeology: A Field Guide*, Left Coast Press, Walnut Creek, CA.

Historic Images

Figure 1. Ca. 1899 photograph taken by local photographer George Bliss showing the Iron Works House at upper center, Mansfield House to the left, and Slag Heap in the center of the photograph. (Source: Helen Cutter Slide Collection, Saugus Public Library, Saugus, MA).

Figure 2. "241 Central Street, home of Thomas Mansfield." Iron Works House, with Central Street in the foreground (source: Helen Cutter Slide Collection, Saugus Public Library, Saugus, MA.)

Figure 3. Ca. 1921 photo of the Iron Works House taken by Wallace Nutting, following restoration (source: Historic New England).

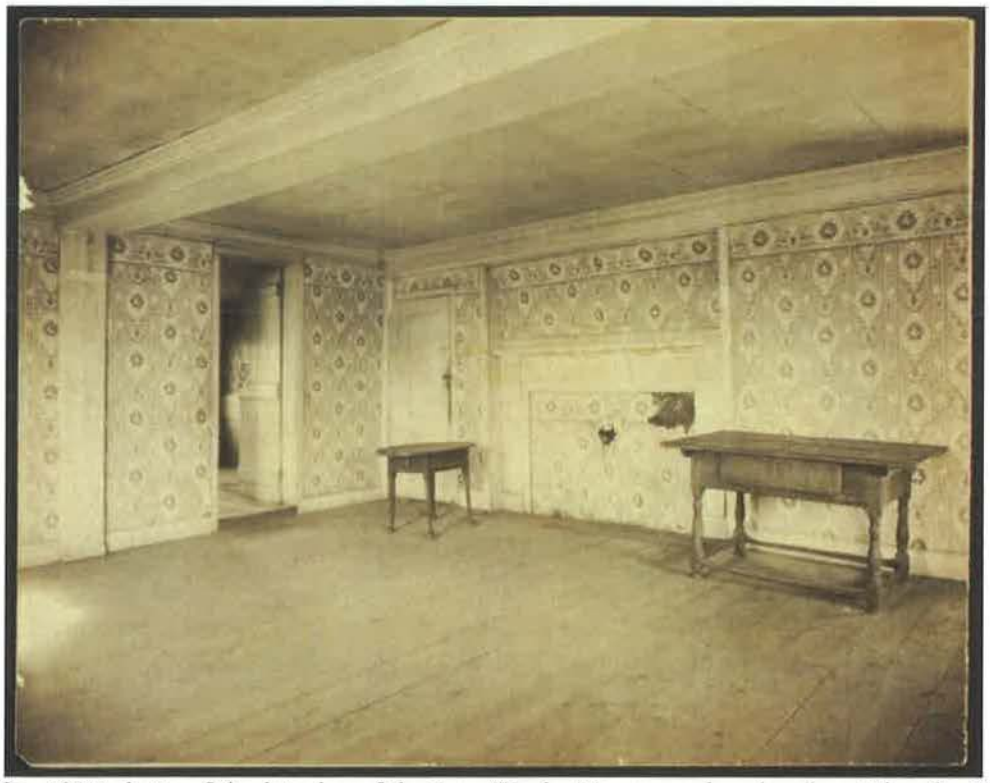
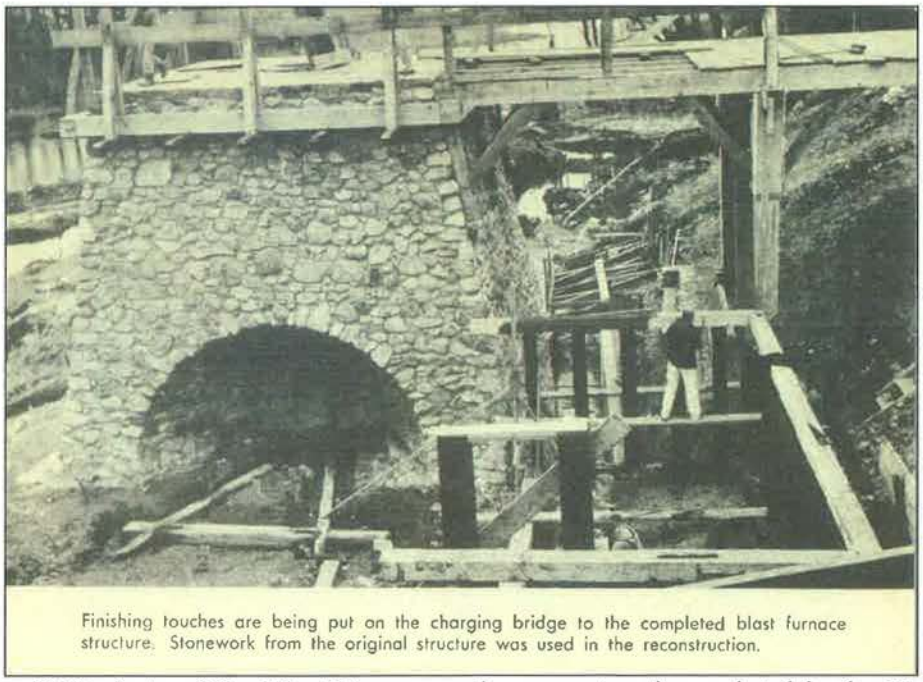


Figure 4. Ca. 1915 photo of the interior of the Iron Works House, parlor chamber, taken by Wallace Nutting prior to restoration (Source: Historic New England).

Figure 5. Ca. 1949 photo of excavation of the Blast Furnace bellows base, (source: First Iron Works Association Archives, Saugus Iron Works NHS, Saugus, MA).

Figure 6. Ca. 1951 photo of Roland Robbins excavating the Blast Furnace tailrace (source: First Iron Works Association Archives, Saugus Iron Works NHS, Saugus, MA).

Figure 7. Ca. 1951 photo of Roland Robbins excavating the Blast Furnace tailrace while children watch (source: First Iron Works Association Archives, Saugus Iron Works NHS, Saugus, MA).

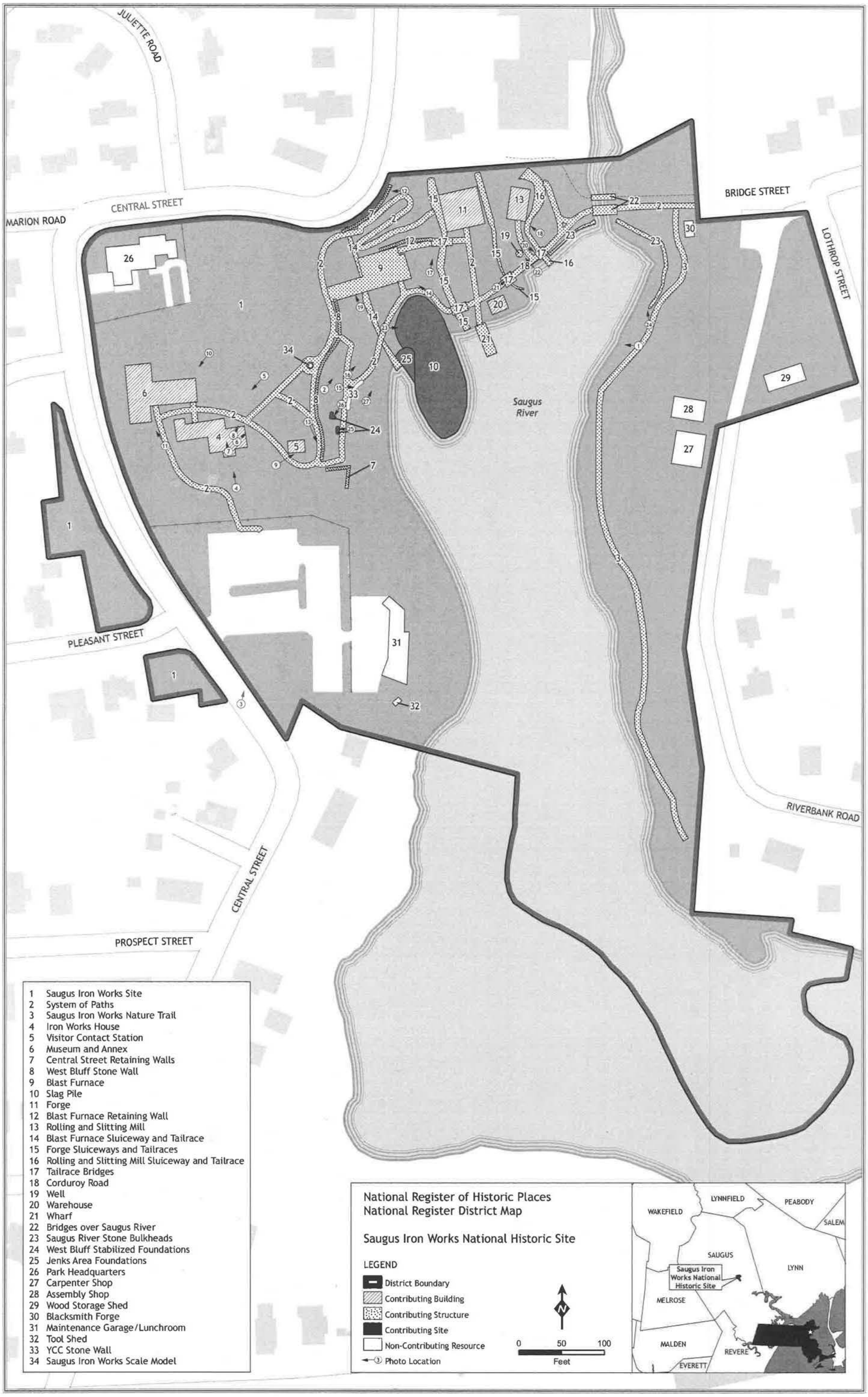


Finishing touches are being put on the charging bridge to the completed blast furnace structure. Stonework from the original structure was used in the reconstruction.

Figure 8. June 1952 photo of the Blast Furnace under reconstruction, printed in the *First Iron Works Gazette*, the FIWA newsletter (source: First Iron Works Association Archives, Saugus Iron Works NHS, Saugus, MA).

From the furnace charging bridge visitors view the waterwheel and forge building.

Figure 9. July 1953 photo of visitors looking over the Blast Furnace charging bridge toward the waterwheel and forge reconstruction, printed in the *First Iron Works Gazette*.


JULIETTE ROAD
CENTRAL STREET
MARION ROAD
BRIDGE STREET
LOTHROP STREET
PLEASANT STREET
CENTRAL STREET
PROSPECT STREET
RIVERBANK ROAD
Saugus River
1 Saugus Iron Works Site
2 System of Paths
3 Saugus Iron Works Nature Trail
4 Iron Works House
5 Visitor Contact Station
6 Museum and Annex
7 Central Street Retaining Walls
8 West Bluff Stone Wall
9 Blast Furnace
10 Slag Pile
11 Forge
12 Blast Furnace Retaining Wall
13 Rolling and Slitting Mill
14 Blast Furnace Sluiceway and Tailrace
15 Forge Sluiceways and Tailraces
16 Rolling and Slitting Mill Sluiceway and Tailrace
17 Tailrace Bridges
18 Corduroy Road
19 Well
20 Warehouse
21 Wharf
22 Bridges over Saugus River
23 Saugus River Stone Bulkheads
24 West Bluff Stabilized Foundations
25 Jenks Area Foundations
26 Park Headquarters
27 Carpenter Shop
28 Assembly Shop
29 Wood Storage Shed
30 Blacksmith Forge
31 Maintenance Garage/Lunchroom
32 Tool Shed
33 YCC Stone Wall
34 Saugus Iron Works Scale Model
National Register of Historic Places
National Register District Map
Saugus Iron Works National Historic Site
LEGEND
District Boundary
Contributing Building
Contributing Structure
Contributing Site
Non-Contributing Resource
Photo Location
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LYNNFIELD
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WAKEFIELD
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Saugus Iron Works National Historic Site
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MALDEN
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EVERETT

JULIETTE ROAD
CENTRAL STREET
MARION ROAD
BRIDGE STREET
LOTHROP STREET
PLEASANT STREET
CENTRAL STREET
PROSPECT STREET
RIVERBANK ROAD
Saugus River

1 Saugus Iron Works Site
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14 Blast Furnace Sluiceway and Tailrace
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31 Maintenance Garage/Lunchroom
32 Tool Shed
33 YCC Stone Wall
34 Saugus Iron Works Scale Model

National Register of Historic Places
National Register District Map

Saugus Iron Works National Historic Site

LEGEND
District Boundary
Contributing Building
Contributing Structure
Contributing Site
Non-Contributing Resource
③ Photo Location

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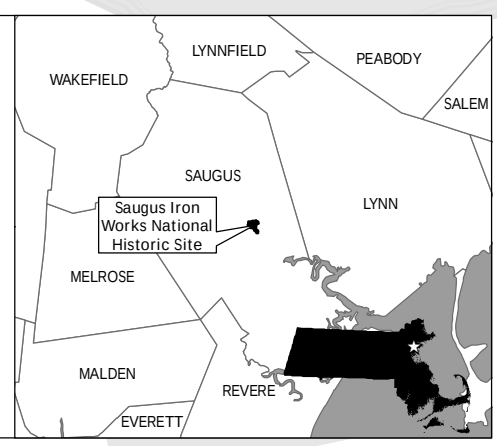

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H	42.466602	-71.006132
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O	42.467985	-71.009372
P	42.468219	-71.009583
Q	42.468701	-71.009558

Saugus Iron Works National Historic Site Coordinate Map

Saugus Iron Works National Historic Site
Essex Co., MA
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Saugus Iron Works National Historic Site
Essex Co., MA
Photo 2 of 27

Saugus Iron Works National Historic Site
Essex Co., MA
Photo 3 of 27

Saugus Iron Works National Historic Site
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Saugus Iron Works National Historic Site
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Saugus Iron Works National Historic Site
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Saugus Iron Works National Historic Site
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Saugus Iron Works National Historic Site
Essex Co., MA
Photo 27 of 27

National Register of Historic Places
Memo to File

Correspondence

The Correspondence consists of communications from (and possibly to) the nominating authority, notes from the staff of the National Register of Historic Places, and/or other material the National Register of Historic Places received associated with the property.
Correspondence may also include information from other sources, drafts of the nomination, letters of support or objection, memorandums, and ephemera which document the efforts to recognize the property.

DB 76000145

Already on NR 4-5-68 Essex

Property Saugus Iron Works National Historic Site

State Mass. Working Number 12.30.75.

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Maps 1

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Federal Register Entry ___ Re-submit ___

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United States Department of the Interior National Park Service WASO No. 7

UNITED STATES
DEPARTMENT of the INTERIOR

★ news release

Press Release No. 38321-63

NATIONAL PARK SERVICE Brklacy - 343-4214

For Release NOVEMBER 27, 1963

TOP ADVISORY BOARD BACKS EIGHT AREAS FOR INCLUSION IN NATIONAL PARK SYSTEM

Addition to the National Park System of eight spacious land and water areas--rich in scenery, recreation potential, and history--were among several recommendations submitted to Secretary of the Interior Stewart L. Udall by the Department's park advisory board.

The recommendations, stemming from the 49th meeting of the Advisory Board on National Parks, Historic Sites, Buildings and Monuments, held recently at Big Bend National Park, Texas, urged establishment of the following proposed areas now being considered by the Congress.

--Allagash National Riverway, Maine, "strongly endorsed" as a new approach to the problem of preserving an outstanding 192,000-acre canoe area;

--Allegheny Parkway, West Virginia-Virginia-Kentucky, to provide extensive opportunities for recreational travel to people living in the large population centers of the East;

--Amistad National Recreation Area, Texas, to implement the large recreation potential of the Amistad Dam and Reservoir now being constructed on the Rio Grande;

--Assateague Island National Seashore, Maryland-Virginia, "enthusiastically endorsed" to set aside a large undeveloped area to help meet the public recreation needs of one of the Nation's fastest growing regions;

--Buffalo National River, Arkansas, to reserve for public use and enjoyment many outstanding scenic and scientific features in addition to the nationally significant free-flowing river;

--Fire Island National Seashore, New York, called "top priority" since it represents an opportunity to serve the largest concentration of people in the United States;

--Guadalupe Mountains National Park, Texas, to preserve the outstanding scenic and scientific values of the North and South McKittrick Canyons and part of this famous mountain range; and

--Nez Perce Country National Historical Park, Idaho, to commemorate and interpret the history and culture of this greatly scenic northwest area.

The 11-member Advisory Board also recommended four sites be made eligible for recognition as Registered National Historic Landmarks, because of their exceptional value in commemorating and illustrating the history of the United States. These include: Saugus Iron Works, Saugus, Massachusetts; Robie House, Chicago, Illinois; Fort Richardson, Texas; and the Homestead of Stephen Tyng Mather, father of the National Park Service at Darien, Connecticut. Such landmark sites, which are not units of the National Park System, contain national significance and are recognized by the National Park Service with a certificate and bronze marker.

To implement the progress and significance of three existing units of the park system, the Board recommended that:

--A proposed 190-mile extension of the Blue Ridge Parkway near Beech Gap, North Carolina, to a point near Marietta in southwest Georgia, is both "feasible and desirable";

--Two highly scenic valleys (Cedar Grove and Tehipite) be added as proposed to Kings Canyon National Park, California; and

--Federal authorization of funds be increased to assure completion of the dramatic Arch, visitor center, and Museum of Westward Expansion at the Jefferson Expansion National Memorial in St. Louis, Missouri.

Noting that the General Accounting Office has proposed that road construction in the national parks be transferred to the Bureau of Public Roads, the Advisory Board recommended to Secretary Udall that "there be no relinquishing of any of the responsibilities and authorities now vested in and exercised by the National Park Service--including the decision to build, location, standards, funding, and construction of all roads within units of the National Park System."

The Advisory Board on National Parks, Historic Sites, Buildings and Monuments, was created by the Historic Sites Act of 1935. Its 11 nonsalaried members are appointed by the Secretary of the Interior. The Act provides that members must include "representatives competent in the fields of history, archeology, architecture, and human geography." The recommendations of the Board are carefully reviewed and considered by the Secretary and park officials in making long-range plans for improvement and development.

Harold P. Fabian, Salt Lake City, Utah, is chairman of the Advisory Board. Dr. Stanley A. Cain, Ann Arbor, Michigan, is vice chairman, and Dr. Edward B. Danson, Jr., Flagstaff, Arizona, is secretary. Other members include: Mrs. Marian S. Dryfoos, New York City; Dr. Melville B. Grosvenor, Washington, D. C.; Edward J. Meeman, Memphis, Tennessee; Sigurd F. Olsen, Ely, Minnesota; Paul L. Phillips, Albany, New York; Dr. Robert G. Sproul, Berkeley, California; Dr. Robert L. Stearns, Denver, Colorado; and Dr. Wallace E. Stegner, Los Altos Hills, California.

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UNITED STATES
DEPARTMENT of the INTERIOR

★ news release

NATIONAL PARK SERVICE — Foley - 343-4895

For Release to PM's, JANUARY 29, 1964

SECRETARY UDALL ANNOUNCES FORTY-EIGHT SITES ELIGIBLE FOR REGISTERED NATIONAL HISTORIC LANDMARK STATUS

The rise of the United States as a World Power, and the importance of Travel and Communication in the development of this Nation, are two of the themes which are commemorated in the latest list of 48 sites approved for Registered National Historic Landmark status, Secretary of the Interior Stewart L. Udall announced today. In addition to sites connected with political and military affairs after 1865, and Travel and Communication, new Landmark sites were named which illustrate architectural and archeological areas; commerce and industry; conservation of natural resources; and Westward Expansion.

Secretary Udall explained that Registered National Historic Landmarks are areas which have been found to possess exceptional value and are of national significance in commemorating and illustrating the history of the United States. Such landmark sites are not administered by the Department's National Park Service, but are recognized by the Service with a certificate and bronze plaque. The number of sites declared eligible for Registered National Historic Landmark status now totals 452.

The 48 additional sites were recommended by the Advisory Board on National Parks, Historic Sites, Buildings, and Monuments from studies prepared by the National Survey of Historic Sites and Buildings. Four of the 48 sites previously announced by the Advisory Board on November 27, 1963, were Robie House, Chicago, Illinois; Fort Richardson, Texas; Stephen Tyng Mather Homestead, Darien, Connecticut; and Saugus Iron Works, Saugus, Massachusetts.

Political and Military Landmark examples are: Pearl Harbor Naval Base, Hawaii, intimately associated with the rise of the United States as a world power;

"Fairview," home of William Jennings Bryan at Lincoln, Nebraska, commemorating one of the major leaders of the late 19th and early 20th century who had a great impact on the political history of that time; Robert M. Lafollette Home, Maple Bluff, Wisconsin, memorializing a man who believed with his heart and soul that democracy had to rest on the people, not on special interest groups or cliques; U. S. S. Olympia, Philadelphia, Pennsylvania, one of the most historic naval vessels in America; and Temple Square, Salt Lake City, Utah, which captured the essence of the Mormon achievement in building a kingdom on the Utah desert.

Travel and Communication examples include: The First Telephone Exchange, New Haven, Connecticut, the building in which the world's first telephone exchange was established, which began operations on January 28, 1878; Jarrett Manor, "Travlers Rest," Toccoa, Georgia, which served as a well-known stagecoach inn, tavern, and post office throughout the 19th century; Illinois and Michigan Canal (Locks and Towpath), Channahon, Illinois, which propelled Chicago into a position of supremacy in the Middle West; Sandy Hook Light, Sandy Hook, New Jersey, the oldest standing light tower in the United States; and Samuel F. B. Morse Home, "Locust Grove," New York, where Morse first successfully demonstrated his telegraph in 1844.

Archeological Landmarks are Angel Mounds, Indiana, a site which has produced more than 2,000,000 catalogued artifacts--the most outstanding being an effigy of a seated man which was carved from fluorspar; Pinson Mounds, Tennessee, a site of major importance, one of the few large temple mound sites with an earthworks; and Piilanihale Heiau, Hawaii, a structure attributed to Piilani, of the Maui line of great chiefs of the 16th century.

Brief descriptions are attached of the 48 sites.

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Political and Military Affairs After 1865

In the study of "Political and Military Affairs After 1865," 16 sites were listed by the Advisory Board. They are as follows:

1. Pearl Harbor Naval Base, Hawaii. Pearl Harbor was one of the keys to the development of American naval power in the Pacific, and is still today an active, major naval base. The U. S. S. Arizona Memorial, where over 1,100 men were entombed in the battleship sunk by the Japanese in their surprise attack of December 7, 1941, is a point of major visitor interest.

2. Benjamin Harrison Home, Indiana. President Harrison's house was constructed in 1874-75 and remained his home, when he was not in Washington, D. C., until his death in 1901. It is well maintained and contains many furnishings that formerly belonged to Harrison.

3. James G. Blaine Home, "Blaine House," Maine. The Blaine House was built in the early 19th century, and purchased by Blaine in 1862. Now the governor's mansion, it was restored and redecorated in 1962, and the study meticulously restored to its appearance when Blaine occupied it.

4. William Jennings Bryan Home, "Fairview," Nebraska. Bryan moved in 1887 to Lincoln, Nebraska, and soon launched his significant political career, serving in Congress, three times as Democratic candidate for President, and as Secretary of State from 1913-1915. The first floor has been restored as a historic house, containing original furnishings contributed by the family.

5. Thomas Nast Home, "Villa Fontana," New Jersey. The famous cartoonist's well-preserved home is not open to the public. He occupied it from 1873 to 1902, a handsome three-story, clapboard building with mansard roof which was built about 1860.

6. William H. Seward House, New York. The Seward House was built in 1816-17 as the home of Mrs. Seward's parents. Mr. and Mrs. Seward made it their home after their marriage in 1824, to the time of his death in 1872. It is in excellent condition, well maintained, under foundation ownership.

7. James A. Garfield Home, "Lawnfield," Ohio. Garfield purchased Lawnfield in 1876, a 152-acre farm with 1½-story house built in 1832 and outbuildings. He enlarged and remodeled it extensively, and ran his successful presidential election campaign of 1880 from this house, now restored and owned by the Lake County Historical Society.

8. Rutherford B. Hayes Home, "Spiegel Grove," Ohio. The Hayes house, built between 1859 and 1863, and later enlarged, is located on the grounds of the Hayes State Memorial. The Memorial contains the graves of the 19th president and Mrs. Hayes, and also a museum and library building preserving their papers and other possessions.

9. William Howard Taft Home, Ohio. Taft was born and spent his first 25, formative years in this house, from which he emerged to pursue his remarkable career in law and public administration. The house is still basically sound, but somewhat altered and in only fair condition.

10. U. S. S. "Olympia," Pennsylvania. This cruiser, built in 1888, is the oldest steel-hulled American naval ship afloat. Excellently restored by a patriotic association, it commemorates the triumph of May 1, 1898, when it was Commodore George Dewey's flagship in the Battle of Manila Bay.

11. U.S. Naval War College, Rhode Island. Alfred Thayer Mahan became president of the Naval War College in 1886, one year after the first students were received. Under him it developed in spite of vigorous opposition into an institution of inestimable value. The original college building, built in 1819, is now the Newport Naval Base commander's residence.

12. Temple Square, Utah. The walled Temple Square symbolizes achievement in the Utah desert, as well as Mormon religious and cultural individuality. The three historic structures in Temple Square are the Temple, built between 1853 and 1893, the Tabernacle, an architectural and engineering marvel built between 1862 and 1867, and the Assembly Hall, completed in 1882.

13. Brigham Young House, "Lion House," Utah. This two-story adobe building, plastered, with small-paned windows, green shutters, tall chimneys, and 20 steep-roofed gables, was built under Brigham Young's direction in 1856. He and his large family resided here until his death in 1877. It is now a public center and historic house museum.

14. Robert M. LaFollette Home, Wisconsin. Three acres remain in family ownership of the 60-acre farm LaFollette purchased in 1905. The house, originally built about 1860, remains in a condition generally similar to that of the time of his death in 1925.

15. George Hunt Pendleton Home, Ohio. Pendleton, the "patron saint" of the U. S. Civil Service, lived in a brick, three-story home on a splendid site overlooking Cincinnati. The structure is not in a good state of preservation.

16. John Sherman Birthplace, Ohio. Born here in 1823, younger brother of William Tecumseh Sherman who was also born here, John Sherman enjoyed a remarkable career in U. S. House and Senate, and as Secretary of the Treasury and, later, of State. The house is open to the public.

Travel and Communication

In the study of "Travel and Communication," 25 sites were listed by the Advisory Board. They are as follows:

1. The First Telephone Exchange, Connecticut. The world's first telephone exchange (commercial switchboard) began operating on January 28, 1878, in a room of the Metropolitan Building, New Haven.

2. Jarrett Manor, "Travelers Rest," Georgia. Built in 1784 as a frontier home and fort, this structure near Toccoa served as a stagecoach inn, tavern, and post office throughout the 19th century. It is an excellent example of an early inn in a rural, frontier setting.

3. Illinois and Michigan Canal (Locks and Towpath at Channahon), Illinois. This canal propelled Chicago into a position of supremacy in the Middle West. Built from 1836-1848, it linked Chicago to the Mississippi River, completing a continuous waterway from New York to the Mississippi. It has not been used commercially since 1933, but the locks have been restored and the old towpath may be followed.

4. Castleman Bridge, National Road, Maryland. This well-built stone bridge over the Little Youghiogeny River was used from 1813 to 1933. It included the largest stone arch in the United States when erected, and is still a magnificent example of the bridge-building art of the early 19th century.

5. Thomas Viaduct, Baltimore and Ohio Railroad, Maryland. This majestic solidly-built bridge, still used today, is the world's oldest multiple stone-arch railroad bridge. Completed in 1835, it was designed by Benjamin H. Latrobe, civil engineer, son of the famous architect of the same name.

6. Boston Light, Massachusetts. Little Brewster Island is the site of the first lighthouse in North America, erected in 1716 and destroyed in 1776. The present structure, built in 1783 on the same site, is the second oldest light tower in the United States, and is still in use.

7. Boston Subway, Massachusetts. Boston's subway (built 1895-98) was the first in North America and the fifth such system in the world. New York and other cities later followed Boston's example, making the subway a major means of urban transportation.

8. Eads Bridge, Missouri. James Buchanan Eads designed and built, 1867-1874, the world's first steel-truss bridge, spanning the Mississippi River at St. Louis. It was one of the major engineering achievements of its time, and opened up a new era in bridge construction.

9. Sandy Hook Light, New Jersey. This is the oldest standing light tower in the United States. It was erected in 1764 and is still in use.

10. Old Blenheim Bridge, New York. This magnificent example of the lost American art of building wooden covered bridges was erected in 1835 by Nicholas M. Powers, a leading covered-bridge builder of New England.

11. Samuel F. B. Morse Home, "Locust Grove," New York. Morse purchased Locust Grove estate in 1847 and returned to it summer after summer until his death in 1871. The original part of the house was built in 1830, but Morse added onto it a great deal, including the four-story tower on the west side.

12. Brooklyn Bridge, New York. This was the world's first great steel suspension bridge, both a thing of beauty and a technical masterpiece which opened a new era in bridge construction. It was designed and constructed, 1869-1883, by John A. and Washington A. Roebling, father and son.

13. Salem Tavern, North Carolina. Salem Tavern is a splendid example of an 18th-century "ordinary" in the South. Erected in 1784, it enjoyed a widespread reputation for hospitality and comfort.

14. S-Bridge (Old Washington Bridge), National Road, Ohio. This stone bridge, constructed in 1828, is a splendid reminder of the great National Road which was built across Ohio between 1825 and 1837. The bridge is still in excellent condition, along U. S. Highway 40 west of Old Washington.

15. Miami and Erie Canal (Deep Cut), Ohio. The "Deep Cut" of the Miami and Erie Canal, near Spencerville, is a striking remain of Ohio's great antebellum canal system, which contributed notably to Ohio's swift rise to a leading position in the nation by 1860. It was originally 6,600 feet long and 5 to 52 feet deep. It is identified today by a State roadside park and marker.

16. William Aiken House and Associated Railroad Structures, South Carolina. Aiken was first president (1828-1831) of the South Carolina Canal and Railroad Company, and builder (1830-33) of the pioneer Charleston and Hamburg Railroad, 136 miles in length. The handsome, stuccoed, brick house was built between 1807 and 1811 and is now Division Headquarters of the Southern Railway Company. Other interesting antebellum railroad buildings are located nearby.

17. Lakeboat, The Ticonderoga, Vermont. The Ticonderoga carried passengers on Lake Champlain from 1906, when it was built, until 1953. This side-paddlewheel lakeboat is the only extant and basically unchanged vessel of its kind in the United States.

18. Cape Henry Lighthouse, Virginia. This was the first lighthouse to be erected by the Federal Government, and was used as a light tower from its completion in 1792 until 1881. It is the third oldest standing structure of this type in the United States.

19. Gadsby's Tavern, Virginia. Gadsby's was an important center of Virginia life in the 18th and early 19th centuries, for both travelers and residents of the Alexandria area. It consists of two adjoinging taverns erected in 1752 and 1792.

20. Rising Sun Tavern, Virginia. This tavern was a favorite stopping and meeting place of Virginia Revolutionary War patriots--social center, post office, and stagecoach stop for Fredericksburg, traditionally built about 1760.

21. Sheridan Inn, Wyoming. This hotel opened in 1893 and rated for years as the finest hotel between Chicago and San Francisco. It was also the social center of the region.

22. Robert Fulton Birthplace, Pennsylvania. Robert Fulton was born in 1765 in this 2½-story stone structure 8 miles south of Quarryville. Since that time the building has been altered notably.

23. Toll House, National Road, Pennsylvania. This brick structure, recently restored, is a reminder of the transfer from Federal to State ownership of the National Road, lifeline of the early West, in 1831. The building was constructed in 1835 and is on U. S. 40, just west of Uniontown.

24. East Broad Top Railroad, Pennsylvania. The E. B. T. Railroad was primarily a coal-carrying line, operating over 30 miles of narrow gauge track between Mount Union and Robertsdale from 1872 to 1953. The old station at Orbinsonia is now preserved along with 3½ miles of track over which passenger trains are run for visitors.

25. San Francisco Cable Cars, California. This method of urban transportation--cars moved by gripping moving underground cables--was pioneered in 1873 in San Francisco, to which it was especially well suited because of steep hills in the downtown area. At the maximum, 8 companies operated 112 miles of track in San Francisco, and 5 other American cities had similar lines. About 10 miles are still in operation, all in San Francisco.

Indian Villages and Communities

In the study of "Indian Villages and Communities," two sites were listed by the Advisory Board. They are as follows:

1. Angel Mounds, Indiana. Deriving its name from former owners of the property, Angel Mounds is one of the largest and most impressive "Mississippian" temple mound sites, covering over 100 acres. Excavation over a long period has uncovered numerous rectangular houses, temples, a town square, a palisade augmented with projecting bastions at 120-foot intervals, and over 2,000,000 catalogued artifacts relating to the period of occupancy, about A. D. 1400-1600.

2. Pinson Mounds, Tennessee. This site includes probably more than 30 mounds, thousands of yards of earthworks and other features. It is believed to cover about 1,000 acres, and is of major importance as one of the few large temple mound sites with an earthworks. Furthermore, it was occupied during several major archeological periods, from Late Archaic to Woodland and Mississippian periods.

Westward Expansion

in the study of "Westward Expansion," subtheme: "Military and Indian Affairs" one site was listed by the Advisory Board:

1. Fort Richardson, Texas. Fort Richardson was one of the most important military posts on the southwest frontier during the period of Comanche and Kiowa depradations. It obstructed the movement of Indian raiders against the Texas frontier and down across the Rio Grande into Mexico. Fort Richardson and its troops played key roles in the Jacksboro case of 1871 and the Red River War of 1874, which brought peace to the Texas frontier. The site is owned by the State of Texas and administered by the Jack County Historical Society.

Architecture

In the study of "Architecture," one site was listed by the Advisory Board:

1. The Robie House, Illinois. Frank Lloyd Wright designed and built this residence for Frederick Carleton Robie in 1907-09. Incorporating many forms which have become identified with modern styles, the Robie house has won international acclaim as a turning point in architectural development. Now part of the University of Chicago campus, it is the object of a nation-wide fund-raising campaign for its restoration and preservation.

Conservation of Natural Resources

In the study of "Conservation of Natural Resources one site was listed by the Advisory Board:

1. Stephen Tyng Mather Homestead, Connecticut. This residence is notable as the home of the man who, more than any single individual, created the National Park System and made it the organization that now serves the country so capably. It was built by Mather's great-grandfather in 1778, and after undergoing various modifications through the years now remains substantially the same as it was when Mather died in 1930.

Commerce and Industry

In the study of "Commerce and Industry," one site was recommended by the Advisory Board:

1. Saugus Iron Works, Massachusetts. The First Iron Works Association, Inc., owns and operates this careful reconstruction of the original iron works which operated intermittently at Saugus between 1648 and 1670. Consisting of a blast furnace, casting house, forge, and rolling and slitting mill, it was an important business enterprise in American history.

Hawaii Aboriginal Culture

In the study of "Hawaii Aboriginal Culture" one site was recommended by the Advisory Board:

1. Piilanihale Heiau, Hawaii. This is the largest heiau, or temple, in the Hawaiian Islands, about 340 by 425 feet, built probably in the 16th century. Privately owned, located on the east coast of Maui, it is well preserved because of heavy vegetation but also difficult to reach for the same reason.

X X X

INT.DUP.,D.C.64-40885

PC

United States Department of the Interior

NATIONAL PARK SERVICE

NORTH ATLANTIC REGION
150 CAUSEWAY STREET
BOSTON, MA. 02114

IN REPLY REFER TO:

H-34 NAR (PH)

June 25, 1975

Memorandum

To: Assistant Director, Park Historic Preservation
Attention: Register Classified Structures

From: Acting Regional Director, North Atlantic Region

Subject: List of Classified Structures

We enclose the National Register Form for Saugus Iron Works National Historic Site. Also enclosed is a 4 x 5 photograph of each structure for the National Register Office. Next week we will send another set of photographs for the LCS. With the Register Form for Saugus, we have completed the List of Classified Structures for the North Atlantic Region, with the exception of the new authorized areas.

F. Ross Holland, Jr.

Enclosures

United States Department of the Interior

NATIONAL PARK SERVICE
WASHINGTON, D.C. 20240

IN REPLY REFER TO:
H34PC

DEC 12 1975

Memorandum

To: Director, Office of Archeology and Historic Preservation

Through: Federal Representative to the National Register
Department of the Interior

DPW 12-18

From: (Acting) Federal Representative, National Park Service

Subject: Nomination to the National Register of Historic Places

Enclosed is the nomination of "Saugus Iron Works National Historic Site," in the North Atlantic Region of the National Park Service, submitted in confirmation of its inclusion in the National Register of Historic Places.

Henry A. Judd
for Robert M. Utley

Enclosure

THE NATIONAL REGISTER OF HISTORIC PLACES
DATE REC'D DEC 24 1975
_____ INDIVIDUAL RESPONSE (ATTACHED)
_____ INFORMATIVE MATERIAL SENT
_____ TELEPHONE CALL (ATTACHED)
DATE ACTION TAKEN _____
INITIALS _____

AMERICAN REVOLUTION BICENTENNIAL 1776-1976

United States Department of the Interior

NATIONAL PARK SERVICE
Harpers Ferry Center
HARPERS FERRY, WEST VIRGINIA 25425

IN REPLY REFER TO:
H3019(1100-HF)

OCT 10 1984

Memorandum

To: Regional Director, North Atlantic Region

From: Deputy Manager, Harpers Ferry Center

Subject: Distribution of Historic Furnishings Report, Saugus Iron Works National Historic Site

We have printed and bound the Saugus Furnishings Report which was approved in 1982, and we enclose final distribution copies.

In FY 83, we funded implementation of the 17th-century rooms through the major rehab program. Funding has not been programmed to re-create the Wallace Nutting room. It would be wise to coordinate the Nutting furniture installation with other Nutting-related exhibits under way in the Division of Exhibit Production. We require a transfer of $40,000. to the Harpers Ferry Center to re-create the Nutting Room. Please let me know if you want to proceed with this work.

/s/ Ellsworth R. Swift

Enclosures 3

cc:
Assoc. Dir., Cul. Res., WASO w/c enc.
Registrar, Cul. Res., WASO w/2c enc.
Chief Historian, WASO w/c enc.
Superintendent, SAIR w/6c enc.
Manager, DSC w/c enc.
Ms. Ramey, DSC-PGT w/c enc.
Robert F. Trent, Conn. Hist. Soc. w/c enc.

AMP
7/28/11

Patty Henry/WASO/NPS
07/28/2011 11:02 AM

To Elizabeth Igleheart/Boston/NPS
cc
bcc
Subject Saugus Iron Works

JUL 29 2011
J. Paul Loether

Hello Betsy:

I now have a chance to answer the question from you and LCS concerning the Saugus Iron Works NHL.

This is one of the early NHLs that does not have a actual nomination, not even a Historic Sites Survey form which was the documentation in use during the early 1960s. What the file contains is a page description of the property and its significance. This page, we believe, was used for press releases or for general information about these early designated NHLs. Besides outlining the very strong national significance of the iron works, this page is very clear that most all of the buildings are reconstructions. It is also clear that the property has been opened to the public as a museum site for 10 years leading up to the NHL designation. There is a statment in this document that says, "As a spectacular, full-scale model of what the original 17th-century works must have been like, it has unique public interest and educational value."

In addition, in the minutes for the 49th Meeting of the Advisory Board on National Parks, Historic Sites, Buildings and Monuments (the precursor to the National Park System Advisory Board) held on November 4-6, 1963, the discussion of Saugus Iron Works states, "Mr. Kahler [Herbert E. Kahler, Chief, Division of History & Archeology, NPS] commented that it is recognized that Saugus Iron Works is a reconstruction...The demonstration of early iron making has a great deal to offer in explaining how the early iron industry operated..." So it was clear to the Advisory Board that they were considering a reconstruction and not original buildings. Also much of this discussion about the property ~~was also including~~ included whether or not it should be recommended to become a unit of the National Park System. The NHL designation was to be the first step in that process. In fact the Advisory Board stated in their motion, "...recommends the Saugus Iron Works as eligible for Registered National Historic Landmark status. It further recommends that the site be included in the National Park System provided problems involving water supply, boundary revision, and other practical considerations can be resolved."

It appears to us that the Advisory Board was accepting the Saugus Iron Works as an NHL not because it had original above-ground resources but because those reconstructions told a nationally significant story to the public. So it was its educational value that was being singled out as well as the fact that it was the actual site of this nationally significant iron works. If this property were being nominated today, we believe that much of the story would be the reconstruction and how museum/historic sites were presented and interpreted to the public. In addition, those original reconstructions are now almost 60 years old so a case could probably be made that they have now attained their own national significance. "After the passage of fifty years, a reconstruction may on its own attain national significance for what it reveals about the period in which it was built, rather than the historic period it was intended to depict. A reconstruction may then be eligible if it addresses the particular criteria for which it has now attained national significance." (National Register Bulletin on How to Prepare National Historic Landmark Nominations, page 35, discussion of NHL Criteria Exception 6)

We would interpret all of this to mean that those 1950s era reconstructed resources which were had integrity in 1963 when this NHL was designated contribute to the national significance of this NHL.

6. FUNCTION OR USE

Historic:	Defense	Sub:	Military Facility
	Education		School
Current:	Education	Sub:	School
	Recreation		Museum, Park

7. DESCRIPTION

ARCHITECTURAL CLASSIFICATION: Late 19th & 20th Century Revivals: Classical Revival
Late Victorian: Queen Anne

MATERIALS: Wood, Stone, Adobe, Stucco
Foundation: Primarily Stone
Walls: Stone, Wood Frame, Adobe, Clay Masonry, Heavy Timber
Roof: Wood Shingles, Corrugated Metal, Asphalt Shingles, Built-Up Roofing
Other:

Patty Henry/WASO/NPS
07/29/2011 02:12 PM

To Elizabeth Igleheart/Boston/NPS@NPS
cc Alexandra Lord/WASO/NPS@NPS, Paul Loether/WASO/NPS@NPS, Catherine Turton/PHILADELPHIA/NPS@NPS
bcc
Subject Saugus Iron Works

Hello Betsy:

I now have had a chance to answer the question from you and LCS concerning the reconstructed resources at Saugus Iron Works NHL.

This is one of the early NHLs that does not have a actual nomination, not even a Historic Sites Survey form which was the documentation in use during the early 1960s. What the file contains is a page description of the property and its significance. This page, we believe, was used for press releases or for general information about these early designated NHLs. Besides outlining the very strong national significance of the iron works, this page is very clear that most all of the buildings are reconstructions. It is also clear that the property has been opened to the public as a museum site for 10 years leading up to the NHL designation. There is a statment in this document that says, "As a spectacular, full-scale model of what the original 17th-century works must have been like, it has unique public interest and educational value."

In addition, in the minutes for the 49th Meeting of the Advisory Board on National Parks, Historic Sites, Buildings and Monuments (the precursor to the National Park System Advisory Board) held on November 4-6, 1963, the discussion of Saugus Iron Works states, "Mr. Kahler [Herbert E. Kahler, Chief, Division of History & Archeology, NPS] commented that it is recognized that Saugus Iron Works is a reconstruction...The demonstration of early iron making has a great deal to offer in explaining how the early iron industry operated..." So it was clear to the Advisory Board that they were considering a reconstruction and not original buildings. Also much of this discussion about the property included whether or not the iron works should be recommended to become a unit of the National Park System. The NHL designation was to be the first step in that process. In fact the Advisory Board stated in their motion, "...recommends the Saugus Iron Works as eligible for Registered National Historic Landmark status. It further recommends that the site be included in the National Park System provided problems involving water supply, boundary revision, and other practical considerations can be resolved."

It appears to us that the Advisory Board was accepting the Saugus Iron Works as an NHL not because it had original above-ground resources but because those reconstructions told a nationally significant story to the public. So it was its educational value that was being singled out as well as the fact that it was the actual site of this nationally significant iron works. If this property were being nominated today, we believe that much of the story would be the reconstruction and how museum/historic sites were presented and interpreted to the public. In addition, those original reconstructions are now almost 60 years old so a case could probably be made that they have now attained their own national significance. "After the passage of fifty years, a reconstruction may on its own attain national significance for what it reveals about the period in which it was built, rather than the historic period it was intended to depict. A reconstruction may then be eligible if it addresses the particular criteria for which it has now attained national significance." (National Register Bulletin on How to Prepare National Historic Landmark Nominations, page 35, discussion of NHL Criteria Exception 6)

We would interpret all of this to mean that those 1950s era reconstructed resources which were determined to have integrity in 1963 when this NHL was designated contribute to the national significance of this NHL.

I hope this is helpful and clarifies any issues with which you are dealing.

Let me know if you have any questions or comments.

Thanks,

Patty

Patty Henry
National Park Service
National Historic Landmarks Program-WASO
202-354-2216

Form 10-317
(Sept. 1967)

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL SURVEY OF HISTORIC SITES AND BUILDINGS

1. STATE	2. THEME(S). IF ARCHEOLOGICAL SITE, WRITE "ARCH" BEFORE THEME NO.
Massachusetts	Theme XX -- Architecture (Colonial), XVII-b

3. NAME(S) OF SITE	4. APPROX. ACREAGE
Iron Master's House	3 acres

5. EXACT LOCATION (*County, township, roads, etc. If difficult to find, sketch on Supplementary Sheet*)
237 Central Street, Saugus, Essex County.

6. NAME AND ADDRESS OF PRESENT OWNER (*Also administrator if different from owner*)
First Iron Works Association, Inc., Mr. J. S. Attwill, President, Saugus 01906.

7. IMPORTANCE AND DESCRIPTION (*Describe briefly what makes site important and what remains are extant*)

The Iron Master's House, erected in 1643, is a much restored example of a 17th century house of medieval design. The Saugus Ironworks, of which the Iron Master's House is a part, is a reconstructed example of the first successful ironworks in the colonies.

Constructed by Farmer Thomas Dexter, one of the original owners of the Saugus Ironworks, the Iron Master's House is a two-story frame clapboarded structure with steep gables and a massive central chimney. The house has casement windows (not originals) and ornamental drops suspend from the second story overhang on the front facade.

The house has a typical 17th century floor plan, with one room located on either side of the central chimney on each floor and a one-story lean-to addition situated at the rear at the northwest corner. A similar, but smaller, two-story gable-roofed frame house, erected at a later date and facing in the opposite direction (north), adjoins the west side of the Iron Master's House.

The interior of the Iron Master's house exhibits the original exposed timbers of English Oak, some of them at least two feet square, which the builder is said to have brought with him from England for the purpose of framing the house. The house was greatly altered over the years and required extensive restoration, which was conducted under the supervision of Wallace Nutting in the 1920's, to return the house to its 17th century appearance. Maintained in excellent condition, the house is open to visitors.

8. BIBLIOGRAPHICAL REFERENCES (*Give best sources; give location of manuscripts and rare works*)
Dorothy and Richard Pratt, A Guide to Early American Homes--North (New York, 1956), 22; Massachusetts: A Guide to its Places and People (American Guide Series) (Boston, 1937), 413; James G. VanDerPool, "Historical Development of Architecture in the U.S.A., 1632-1912," (N.P.S. Ms., 1966), 11;

9. REPORTS AND STUDIES (*Mention best reports and studies, as, NPS study, HABS, etc.*)

Historic American Building Survey: None.

10. PHOTOGRAPHS* ATTACHED: YES XX NO ☐ / 4234-35, 4238-39.	11. CONDITION Excellent	12. PRESENT USE (*Museum, farm, etc.*) Museum	13. DATE OF VISIT Sept. 6, 1967
14. NAME OF RECORDER (*Signature*) Charles W. Snell		15. TITLE Historian	16. DATE Dec. 1, 1967

*DRY MOUNT ON AN 8 X 10½ SHEET OF FAIRLY HEAVY PAPER. IDENTIFY BY VIEW AND NAME OF THE SITE, DATE OF PHOTOGRAPH, AND NAME OF PHOTOGRAPHER. GIVE LOCATION OF NEGATIVE. IF ATTACHED, ENCLOSE IN PROPER NEGATIVE ENVELOPES.

(IF ADDITIONAL SPACE IS NEEDED USE SUPPLEMENTARY SHEET, 10-317a, AND REFER TO ITEM NUMBER)

7516

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON, D. C.

The National Survey of Historic Sites and Buildings:

Saugus Iron Works, Massachusetts

The Saugus Iron Works (Hammersmith) of today is a reconstruction of a 17th century iron works, which operated intermittently from about 1648 to about 1670. The original works was built under the direction of Richard Leader for the English partnership, the "Company of Undertakers for the Iron Works in New England," formed by the initiative of John Winthrop, Jr. in response to the legal "encouragement" given by the Massachusetts General Court in 1641. Situated on the Saugus River in the town of Saugus, the works consisted of blast furnace, associated casting house, forge (with two "fineries" and a chafery), and a rolling and slitting mill.

Saugus was more than a blast furnace producing crude pig iron and cast ware. From its associated forge came bars of wrought iron from which could be made the tools and hardware that were needed on colonial farms and in colonial enterprises--hoes, shovels, hinges, and other items of hardware. From its associated rolling and slitting mill came rod iron that could be shaped into nails much needed in the colonies.

The scale of its overall operation (1648-1670) and the migration of its workers and technicians to other iron making projects make it an important enterprise in American history even though it eventually ended as a business failure. As a spectacular, full scale model of what the original 17th-century works must have been like, it has unique public interest and educational value.

The reconstruction, which was opened to the public in 1954, is owned and operated by the First Iron Works Association, Inc. It is located in the town of Saugus, ten miles north of Boston via U.S. Route 1.

NSHSB-RWY
12-5-63

NR Data Sheet

DATE: 1 JUNE 1976
Reviewer INITIALS: D. Look
(NR) DOE 10-15-66

NAME AS IT APPEARS IN FEDERAL REGISTER: SAUGUS IRON WORKS NATIONAL HISTORIC SITE

OTHER NAMES:

LOCATION:

STREET & NUMBER 244 CENTRAL STREET

CITY, TOWN SAUGUS CONGRESSIONAL DISTRICT

STATE MASSACHUSETTS VICINITY OF COUNTY ESSEX code 009

OWNER OF PROPERTY: (Circle) PRIVATE STATE LOCAL GOV'T MUNICIPAL COUNTY OTHER

ADMINISTRATOR(underline) (FEDERAL) (AGENCY NAME): NPS

NPS REGION: (CIRCLE) (N.ATLANTIC) MID ATLANTIC SOUTHEAST MIDWEST

SOUTHWEST ROCKY MOUNTAIN WEST PACIFIC NORTHWEST

FEATURES:

INTERIOR	EXTERIOR	ENVIRONS
_ Substantially intact-1	X Substantially intact-2	X Substantially intact-3
_ unknown - 4	_ unknown -5	_ unknown -6
_ not applicable - 7	_ not applicable - 8	_ Not applicable-9
X NO		

_ Interior, exterior, environs not intact-0

CONDITION –

_EXCELLENT	✓DETERIORATED	_UNALTERED	✓ORIGINAL SITE
_GOOD	_RUINS	✓ALTERED	_MOVED
_FAIR	_UNEXPOSED	_Reconstructed	_Unknown
	_Unexcavated	_Excavated	

ACCESS – (Yes-restricted) (Yes-unrestricted) No access Unknown

historic district? (YES) NO

WITHIN NATIONAL REGISTER HISTORIC DISTRICT? YES (NO)
IF YES, NAME:

WITHIN NATIONAL HISTORIC LANDMARK? YES (NO)
IF YES, NAME:

ADAPTIVE USE: YES (NO) **Saved?** YES (NO)

FUNCTION(S): (use vocabulary words)

then- IRON WORKS

now- EDUCATIONAL, GOVERNMENT, INDUSTRIAL, MUSEUM, PARK

SIGNIFICANCE:

_ARCHEOLOGY-PREHISTORIC		_LANDSCAPE ARCHITECTURE	_RELIGION	_entertainment
_ARCHEOLOGY-HISTORIC	_CONSERVATION	_LAW/Gov't/politics	_SCIENCE	_health
_AGRICULTURE	_ECONOMICS	_LITERATURE		_recreation
✓ARCHITECTURE	_EDUCATION	_MILITARY	_SOCIAL/HUMANITARIAN	Xsettlement
_ART	✓ENGINEERING	_MUSIC		Xsocio/cultural
_COMMERCE	_EXPLORATION	_PHILOSOPHY	_TRANSPORTATION	_urban & commun planning
_COMMUNICATIONS	✓INDUSTRY	_POLITICS/GOVERNMENT	_OTHER (SPECIFY)	
	_INVENTION			

Claims IRONMASTERS HOUSE - OLDEST NON-INDIAN HOUSE IN NPS

"first" (YES) NO **"oldest"** (YES) NO **"only"** YES NO

FIRST SUSTAINED INTEGRATED IRON WORKS

ARCHITECTURAL STYLE: — 17th century English

architect/m.builder: —

engineer: —

landscape/garden designer: —

artist/artisan: —

interior decorator: —

builder/contractor: —

ETHNIC GROUP: — PURITAN, SCOTTISH

NAMES: (label role & appropriate date)

personal JOHN WINTHROP, JR. (FOUNDER) 1648
RICHARD LEADER, (FIRST IRONMASTER)

events —

institutional —

DATES:

DATE OF CONSTRUCTION (Specific date or 1/4 of century): C. 1648

DATE(S) OF "MAJOR" ALTERATIONS: RECONSTRUCTED 1954

HISTORICALLY SIGNIFICANT DATE(S): 1648-70

SOURCE: (OF NOMINATION) PRIVATE STATE LOCAL GOV"T MUNICIPAL COUNTY

OTHER (FEDERAL AGENCY:) NPS

ACREAGE: (to nearest tenth of an acre) 8.5

COMMENTS: (include architectural information here) SITE & RECONSTRUCTION OF 17TH C. IRONWORKS ~~CONTAINING~~ including BLAST FURNACE, CASTING HOUSE, FORGE, AND ROLLING AND SLITING MILL.
IRONMASTER'S HOUSE, BUILT 1646, IS ORIGINAL, WITH SEVERAL ADDITIONS. WOOD FRAME, CLAPBOARD, OVERHANGING 2ND FLOOR.

SIGNIFICANCE: (maximum two sentences) SAUGUS IRON WORKS NATIONAL HISTORIC SITE WAS ESTABLISHED TO PRESERVE THE SITE OF AMERICA'S FIRST (1648) SUSTAINED INTEGRATED IRON WORKS (EARLIER IRONWORKS AT FALLING CREEK, VIRGINIA, WAS DESTROYED DURING AN INDIAN WAR BEFORE PRODUCTION COULD BEGIN). ALTHOUGH ABANDONED BY 1670, SAUGUS IRONWORKS PROVIDED TRAINING FOR THOSE WHO BUILT & OPERATED LATER IRONWORKS.

Unscanned Materials

The following documents from this file were not scanned:

- Trent, Robert F. (1982). *Historic Furnishings Report: Saugus Iron Works National Historic Site.* Saugus, MA: National Park Service.
- U.S. Department of the Interior. (1963). *Area Investigation Report on the Saugus Iron Works.* Saugus, MA: National Park Service.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

Requested Action: Additional Documentation

Property Name: Saugus Iron Works National Historic Site

Multiple Name:

State & County: MASSACHUSETTS, Essex

Date Received:	Date of Pending List:	Date of 16th Day:	Date of 45th Day:	Date of Weekly List:
3/8/2018	4/2/2018	4/17/2018	4/23/2018	

Reference number: AD66000047

Nominator: State

Reason For Review:

__X__ Accept _____ Return _____ Reject **4/19/2018** Date

Abstract/Summary Comments:

Recommendation/ Criteria: Accept Additional Documentation.

Reviewer: Patrick Andrus Patrick Andrus Discipline: Historian

Telephone: (202)354-2218 Date: 4/19/2018

DOCUMENTATION: see attached comments : No see attached SLR : No

If a nomination is returned to the nomination authority, the nomination is no longer under consideration by the National Park Service.

United States Department of the Interior

NATIONAL PARK SERVICE
Northeast Region
United States Custom House
200 Chestnut Street
Philadelphia, PA 19106

IN REPLY REFER TO:
A.1.2. (NER- RSS)

AUG 0 3 2017

Memorandum

To: Federal Preservation Officer (WASO)

From: Acting Associate Regional Director, Resource Stewardship and Science

Subject: National Register Documentation for Saugus Iron Works National Historic Site

We are forwarding, for your approval, updated National Register documentation for Saugus Iron Works National Historic Site (NHS), located in the town of Saugus, Essex County, Massachusetts.

Saugus Iron Works NHS was designated a National Historic Landmark (NHL) on November 27, 1963, administratively listed in the National Register of Historic Places on October 15, 1966, and authorized by an Act of Congress (PL 90-282) as a unit of the National Park Service on April 5, 1968. Saugus Iron Works NHS is also part of the Essex National Heritage Area, designated in 1996 as part of the Omnibus Parks and Public Lands Management Act (PL 104-333). The first National Register documentation for the Saugus Iron Works NHS Historic District was accepted by the Keeper of the National Register on October 20, 1976. The District boundary at that time encompassed 8.5 acres and included 10 contributing resources: the Saugus Iron Works Site, the Ironmaster's House (now the Iron Works House), the Slag Pile, the Furnace (now Blast Furnace), the Forge, the Rolling and Slitting Mill, the sluiceways and tailraces (now 3 resources––the Blast Furnace Sluiceway and Tailrace, the Forge Sluiceways and Tailraces, and the Rolling and Slitting Mill Sluiceway and Tailrace), and the Warehouse. The purpose of this National Register registration form is to update and expand on the information contained in the 1976 registration form in order to address all applicable areas, periods, and levels of significance and to provide a full accounting of contributing and non-contributing resources in accordance with current National Register standards.

This documentation was prepared by: Gretchen Pineo, Architectural Historian; Kristen Heitert, Sr. Archaeologist; T. Arron Kotlensky, Industrial Archaeologist; John J. Daly, Sr. Industrial Historian; Melissa Andrade, Asst. Architectural Historian with Public Archeology Laboratory, Inc. The document was reviewed by the regional cultural resource staff and the region's National Register coordinator Bethany Serafine. Saugus Iron Works NHS Historian Emily Murphy was also part of the review team. Superintendent Paul DePrey approved this documentation. The Massachusetts State Historic Officer reviewed and signed the documentation on June 29, 2017.

If you have any questions please contact Bethany Serafine, National Park Service, History Program, 54 Elm St., Woodstock, VT 05091. Bethany_Serafine@nps.gov, 802-457-3368 ext. 250.

United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, D.C. 20240

IN REPLY REFER TO:

H32(2280)

Memorandum

To: Keeper of the National Register of Historic Places

From: Acting Associate Director, Cultural Resources, Partnerships, and Science, and NPS Federal Preservation Officer

Subject: National Register Additional Documentation for Saugus Iron Works National Historic Site, Essex County, MA

I am forwarding the National Register Additional Documentation for Saugus Iron Works National Historic Site. The Park History Program has reviewed the nomination and found it eligible under Criteria A, B, C, and D, with Areas of Significance of Architecture, Conservation, Industry, Other: Commemoration, Archeology: Historic Non-Aboriginal, Archeology: Prehistoric.

The State Historic Preservation Office (SHPO) and chief local elected official(s) were sent the documentation on May 22, 2017. Within 45 days, the SHPO _x_ supported __ supported with comments __ did not respond. Any comments received are included with the documentation.

If you have any questions, please contact Kelly Spradley-Kurowski at 202-354-2266 or kelly_spradley-kurowski@nps.gov.