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STORAGE

HISTORIC STRUCTURES REPORT

PART II

ARCHITECTURAL DATA SECTION

ON

THE SCALE HOUSE

Salem Maritime National Historic Site

Prepared by
Walton Stowell
Architect
September 1964

for

United States Department of the Interior, National Park Service,
Eastern Office, Design and Construction
Division of Architecture

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HISTORIC STRUCTURES REPORT

PART II

ARCHITECTURAL DATA SECTION

ON

THE SCALE HOUSE

Salem Maritime National Historic Site

A P P R O V A L S H E E T

RECOMMENDED

Superintendent

Date _____

Robert G. Hall
Chief, EODC

Date 9-30-64

APPROVED

Regional Director, Northeast Region

Date 11-6-64

TABLE OF CONTENTS

	<u>Page</u>
I. GENERAL.....	1
II. EXISTING CONDITIONS- EXTERIOR.....	2
A. Foundation	
B. Walls	
C. Roof	
D. Windows, Doors and Wood Trim	
1. Windows	
2. Doors	
3. Trim	
E. Fence	
III. EXISTING CONDITIONS - INTERIOR.....	5
A. Flooring	
B. Walls	
C. Roof Structure	
IV. REHABILITATION RECOMMENDATIONS.....	6
A. General	
B. Foundation	
C. Walls	
D. Roof	
E. Windows, Doors and Wood Trim	
1. Window	
2. Doors	
3. Trim	



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Page

F. Flooring

G. Fence

H. Paint

V. COST ESTIMATE..... 11

ILLUSTRATIONS

DRAWING

I. GENERAL

Very few changes have been made to alter the original appearance of the Scale House. This small one story red brick structure, with granite foundation, has a wood floor and roof framing and is shingled with slates. A thorough cleaning of both the interior and exterior and attention to details such as door locking devices, paint color, and masonry repointing will greatly add to the total restoration effort at Salem Maritime National Historic Site.



1850
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II. EXISTING CONDITIONS - EXTERIOR

A. Foundation

The foundation is of field stone, topped with long rough cut granite blocks. This granite shows above the ground line, about 12 inches on the front (west) side and 18 inches on the back (east) side, and forms the ledge upon which the floor joists rest along the north and south sides. There is about 6-1/2" between the top of the foundation wall and the finished floor line.

B. Walls

The red brick walls, approximately one foot thick, are laid in a common bond. There is a brick modillion cornice of four courses at the north and south eaves. A brick arch and the granite door and window sills are decorative features of the front (west) elevation. Traces of red paint can be clearly seen on the exterior mortar joints.

C. Roof

The roof construction consists of wood tie beams (6" x 6") bearing on wood plates (6-1/4" x 8-1/4") with rafters (4-1/4" x 8") and purlins (3" x 4") which carry the wood sheathing and slate shingles. The roof sheathing runs parallel to the slope of the roof. There is lead flashing along the ridge, with a later addition of tin flashing where the barge boards meet at the top.

Four rows of steel wire snow guards are to be found on the north side of the roof, adjacent to the neighboring walkway.

D. Windows, Doors and Wood Trim

1. Windows

The arched opening with its wood frame and panel, has been called a window on the paint bills, however, it is doubtful that glass was ever intended for this position. Wood panel inserts and wood louvers were used in these openings as well as leaded fan lights. An example of the panel insert, with white lines painted on a black background in imitation of a leaded fan window exists at number 17-1/2 Chestnut Street, Salem, having been taken from the Carriage House originally built for number 29 Chestnut Street, Salem.

The existing frame is rugged and might well have been used as a form for the brick arch. The frame and attached panel set on the granite sill and remain in position by means of its weight. The assembly can be pushed out from the inside.

2. Doors

The doors are of 3/4" vertical tongue and groove boards (4 inches wide) nailed to a frame of 2" x 6" members. The doors are in good condition. The vertical boarding might well be the original, but the frames have been repaired. These double leaf doors are secured from the interior by a wood bar



The following table shows the results of the experiment. The data is presented in a clear and concise manner, allowing for easy comparison of the different conditions. The results are as follows:

Condition	Result 1	Result 2	Result 3
Condition A	10.5	12.3	11.8
Condition B	11.2	13.1	12.5
Condition C	12.0	14.0	13.5
Condition D	13.5	15.5	14.8
Condition E	14.2	16.2	15.5
Condition F	15.0	17.0	16.2
Condition G	16.5	18.5	17.5
Condition H	17.8	19.8	18.8
Condition I	18.5	20.5	19.5
Condition J	19.2	21.2	20.2
Condition K	20.0	22.0	21.0
Condition L	21.5	23.5	22.5
Condition M	22.8	24.8	23.8
Condition N	23.5	25.5	24.5
Condition O	24.2	26.2	25.2
Condition P	25.0	27.0	26.0
Condition Q	26.5	28.5	27.5
Condition R	27.8	29.8	28.8
Condition S	28.5	30.5	29.5
Condition T	29.2	31.2	30.2
Condition U	30.0	32.0	31.0
Condition V	31.5	33.5	32.5
Condition W	32.8	34.8	33.8
Condition X	33.5	35.5	34.5
Condition Y	34.2	36.2	35.2
Condition Z	35.0	37.0	36.0

The data shows a clear upward trend in all three results across the different conditions. The values for Result 1 range from 10.5 to 35.0, Result 2 from 12.3 to 37.0, and Result 3 from 11.8 to 36.0. This indicates that the conditions are becoming increasingly favorable or that the variables being tested are having a positive effect on the results.



4.

resting in notches provided for them in the wood jambs. A "U" shaped iron hook, attached to the bar, projects through the right door at a point 3 feet from the floor line to receive the lock (a modern padlock). This locking device is not original, as evidence shows that the left leaf was bolted to the sill and a large lock was attached to the inside of the right leaf. The spade-ended strap hinges are in excellent condition and are the originals.

3. Trim

Wood trim occurs as beaded large boards at the gable ends (bead along the bottom edge). The door jambs are wood, with a bead along the door side. Another wooden feature is the existing (much weathered) door stop at the right side of the door.

E. Fence

The restored fence which encloses three sides of the Scale House yard is in a deteriorated condition and repair is needed in several places, especially along the Orange Street side.

Handwritten notes, possibly bleed-through from the reverse side of the page. The text is faint and difficult to decipher but appears to be organized into several lines or paragraphs.

Handwritten notes on the right side of the page, continuing from the left or as separate entries. The text is also faint and illegible.

Handwritten notes at the bottom of the page, appearing as a separate section or conclusion. The text is very faint and mostly illegible.

III. EXISTING CONDITIONS - INTERIOR

A. Flooring

A minimal crawl space exists below the flooring.

The sub-floor and finish floor boards range in width from 7" to 15-1/2" and run the long dimension of the building. The 2" x 8" floor joists span the short dimension and are spaced about 21" on center. Although the finish flooring is in fair condition, its appearance has been marred by large oil stained areas.

B. Walls

All interior brick work needs repointing. (Traces of the original pointing on the north exterior wall and the south interior wall are still extant). The interior walls should be cleaned of dust and dirt before and after repointing.

C. Roof Structure

The wooden roof structural members and sheathing are in good condition with the exception of the tie beams which should be treated to guard against further powder post beetle activity.



The first part of the document discusses the importance of maintaining accurate records of all transactions. This includes not only sales and purchases but also the various expenses incurred in the course of business. It is essential to ensure that every receipt is properly filed and that the books are kept up to date.

In addition, it is important to regularly reconcile the bank statements with the cash book to ensure that there is no discrepancy between the two. This will help to identify any errors or fraud that may have occurred.

Finally, it is crucial to keep the books for a sufficient period of time, as they may be required for tax purposes or in the event of an audit.



The second part of the document deals with the various methods of accounting that can be used by a business. These include the single entry system, the double entry system, and the cost accounting system. Each of these systems has its own advantages and disadvantages, and the choice of which one to use will depend on the nature and size of the business.

The double entry system is the most widely used method of accounting, as it provides a more complete and accurate picture of the business's financial position. It involves recording every transaction in two entries, one in the debit column and one in the credit column, so that the total debits always equal the total credits.

Cost accounting is another important method of accounting, as it allows the business to determine the cost of its products or services. This information is essential for setting prices and for identifying areas where costs can be reduced.



IV. REHABILITATION RECOMMENDATIONS

A. General

All wooden structural members have been investigated for rot and insect activity. The building is in generally excellent condition structurally, but active powder post beetles were found in the roof tie beams. Fumigation is therefore necessary and preservatives should be applied to the major structural members of the floor and roof and all exterior wood work.

B. Foundation

The field stone and granite block foundation is to be repaired where necessary and repointed.

C. Walls

All interior and exterior brick work is to be raked and repointed to match the original still existing on the building. (Note traces on the north exterior wall and the south interior wall. Thin incised lines appear on the joints). Traces of red paint on the exterior mortar joints may date from the second painting (when the building seems to have been painted iron oxide red) and will be disregarded for this restoration. The original pointing on the Scale House is similar to that found on the exterior of the Custom House, and all new work should be consistent in color and texture with that found there.



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D. Roof

The tin flashing at the ridge where the barge boards meet should be removed, unless evidence that they may have been original comes to light. The lead ridge flashing was bent over at the gable ridges and folded flat against the barge boards. The tin was probably added later to cover the vertical joint of both the lead flashing and wood barge boards. Any missing or broken slates should be replaced. The wire snow guards will remain.

E. Windows, Doors and Wood Trim

1. Window

The Scale House arched gable opening contains the original frame and panel which sets on the granite sill. Investigation shows that the panel and applied trim were painted the same color as the rest of the exterior wood work and doors. This appears to be true for each time the building was painted. There is no trace of a design or date which might have been painted on the panel.

2. Doors

The size and location of a former door locking device can be seen on the inside of the right hand door. A comparison should be made with those locks found on the Bonded Warehouse (rear of Custom House). If a lock similar to those



The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.

Furthermore, it is noted that regular audits are essential to identify any discrepancies or errors early on. By conducting these checks frequently, the organization can prevent small mistakes from escalating into larger financial issues.

In addition, the document highlights the need for clear communication between all departments involved in the financial process. This includes the accounting team, management, and external auditors.

Financial Statement Review

The following table provides a summary of the key financial metrics for the quarter. It shows a steady increase in revenue, which is a positive indicator for the company's growth.

Metric	Q1 2023	Q2 2023	Q3 2023
Revenue	\$1,200,000	\$1,350,000	\$1,500,000
Expenses	\$800,000	\$850,000	\$900,000
Profit	\$400,000	\$500,000	\$600,000

The data indicates that while expenses have also increased, the overall profit margin remains healthy. This suggests that the company is effectively managing its costs while continuing to expand its market reach.



Moving forward, the company should continue to focus on optimizing its operational efficiency. This can be achieved through the implementation of new technologies and streamlining internal processes.

It is also recommended that the company explore new market opportunities to diversify its revenue streams. This could involve entering new geographic markets or developing innovative products.

Finally, maintaining strong relationships with stakeholders, including investors and suppliers, is crucial for long-term success. Regular updates and transparent reporting will help build trust and confidence in the company's financial health.



8.

found on the Bonded Warehouse proves to be the kind once used on the Scale House, one should be installed there. The key, once inserted into the lock, becomes the door pull.

The spade-ended strap hinges are original, but several modern bolts with nuts should be replaced to match the remaining original rivets. Minor repairs at the bottom of the wood doors are needed. Some of the wood members appear to be chipped, these areas should be replaced or wood filled.

The lower pintel on the right hand door has been incorrectly re-set (spike end acting as the pin), however, operation of the door has not been affected and a new pintel will not be needed.

Remains of a slide bolt are to be found on the inside of the left door, (bottom left-hand corner). There is also a hole in the granite sill to receive this bolt. The existing bolt evidence is probably not in the original position due to door damage. A second hole was drilled in the granite sill to receive the bolt in its new position.

A new bolt is to be provided and should be of a size conforming to the existing evidence.

Wooden door stops, one of which still exists, should be restored, as the doors will be opened to exhibit the interior of the building. The stop is a 2-1/2" x 2-1/2" x 6" wood block.



9.

The top and bottom are beveled 45 degrees toward the front and the 6" flat side is nailed to the brick wall. There is to be a new stop at each side of the door opening and it should be placed about 3'-4" above the floor line and 8" from the corner of the building. Although there is no evidence of a device with which to keep the doors open against the walls, they should be provided at this time if found necessary.

3. Trim

New beaded barge boards the same size as those existing are to be provided.

F. Flooring

The existing finish flooring has become oil soaked in the course of maintenance activity and must be replaced with similar pine boards of 1" (net) thickness ranging in width of 7" to 15-1/2". The sub-flooring does not need to be disturbed. The nailing pattern is to be copied and nails similar to those removed are to be used.

G. Fence

The wooden Scale House fence is to be repaired in those sections that require it. Several vertical sheathing boards are rotting near the ground line where they are nailed to the horizontal framing members.



Handwritten text, likely bleed-through from the reverse side of the page. The text is extremely faint and illegible due to the low contrast and scan quality. It appears to be organized into several paragraphs or sections, but the specific words and sentences cannot be discerned.



Marks (paint lines ?) found on the northwest corner of the Scale House should be checked as they may indicate the original position of this section of fence. All repairs should conform to the existing restoration and the entire fence should be painted to match the Scale House trim.

H. Paint

All the exterior wood work is to be painted. A study of paint layers has been made for this report. The findings, in chronological order are as follows: bare wood, medium ochre, iron oxide red, medium olive green, very dark green, and the present light ochre. Ochre was also the first color to be used on the Custom House and might have been used when the Scale House was built. (See letter on file in the Custom House from Dr. Ernest Allen Connally to Charles E. Peterson, dated March 10, 1959). Medium ochre is to be the paint color used and should match that which now exists on the Custom House. As ochre is not a stable color the ochre color should be mixed by using stable pigments.

V. COST ESTIMATE

(item plus labor involved)

1. Fumigation.....	\$ 150.00
2. Wood preservatives.....	150.00
3. Foundation work.....	25.00
4. Brickwork (interior and exterior).....	1,000.00
5. Slate Shingles.....	50.00
6. Hardware (lock, slide bolt, rivets).....	200.00
7. Door Repairs (wood).....	100.00
8. Wood door stops.....	50.00
9. Fence Repair and Painting.....	400.00
10. Scale House Painting.....	75.00
11. New Finish Flooring.....	200.00
TOTAL	<u>\$2,400.00</u>

1950

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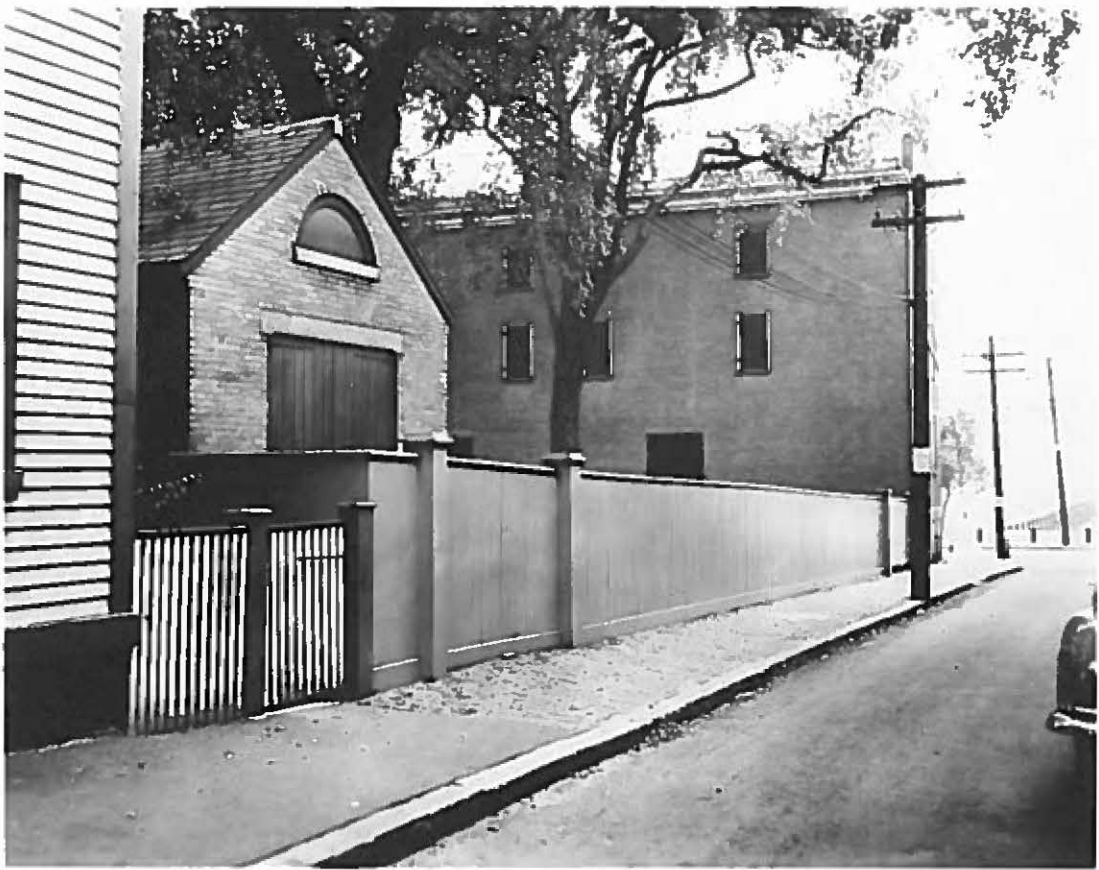
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ILLUSTRATION NO. 1

View of the west front of the Scale House which is partially obscured by the Orange Street fence. The fence is a recent restoration but very little has been done to alter the original appearance of the building.

Photo: National Park Service

EODC Neg. No. 180.5







THE UNIVERSITY OF CHICAGO

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PHYSICS 439

LECTURE 10

MAY 10, 1994

BY: [Name]

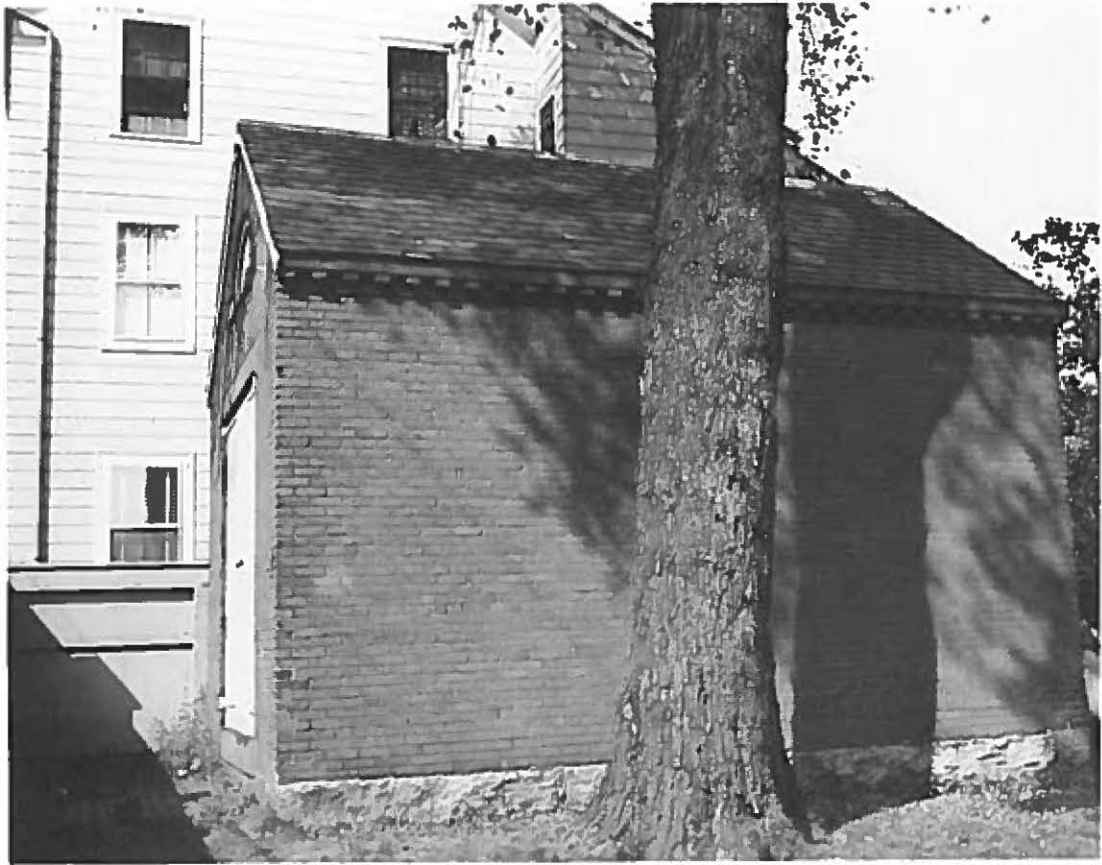
[Faint handwritten notes and diagrams follow, including a diagram of a particle in a box and some mathematical expressions.]

ILLUSTRATION NO. 2

View of south side of the Scale House, the brick modillion cornice being one of the most interesting features. The double doors and the arched gable opening can be seen on the west front. Also notice the remains of the right hand door stops which is about 3 feet above the floor line and 8 inches from the southwest corner of the building.

Photo: National Park Service

EODC Neg. No. 180.6



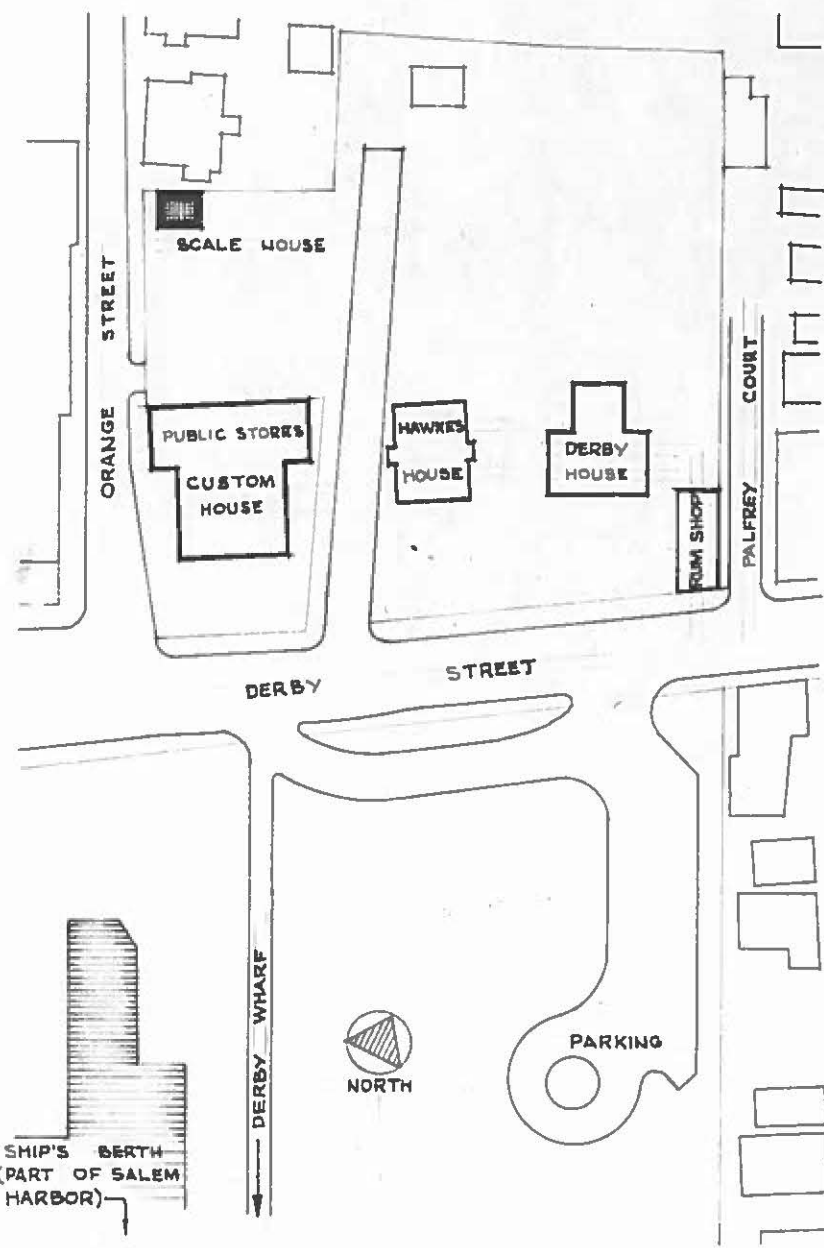
SCALE HOUSE

SALEM MARITIME NATIONAL HISTORIC SITE

SALEM, MASSACHUSETTS

ERECTED 1829: EBENEZER SLOCUM, JR., MASON
SAMUEL SIMONDS, PAINTER

THIS BUILDING HOUSED THE WEIGHING APPARATUS AT THE CUSTOM HOUSE AND PUBLIC STORES, ALSO IN H.A.B.S.



MEASURED AND DRAWN 1958 WITH FUNDS OF THE "MISSION 66" PROGRAM
NATIONAL PARK SERVICE

CHARLES E. PETERSON - SUPERVISING ARCHITECT
HISTORIC STRUCTURES

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FRED A. VEGA, JR.	RHODE ISLAND SCHOOL OF DESIGN

WITH THE COOPERATION OF HAROLD I. LESSEM
SUPERINTENDENT SALEM MARITIME NATIONAL HISTORIC SITE

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FEET METERS

JAMES F. O'GORMAN, DEL.

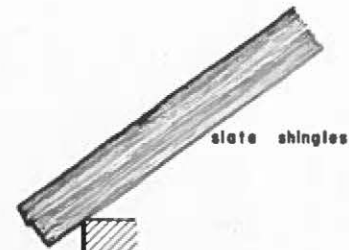
EASTERN OFFICE, PHILADELPHIA, PENNA.
UNDER DIRECTION OF UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE, BRANCH OF PLANS AND DESIGN

NAME OF STRUCTURE
SCALE HOUSE
CUSTOM HOUSE YARD, 178 DERBY STREET, SALEM, MASS.

SURVEY NO.
MASS-800

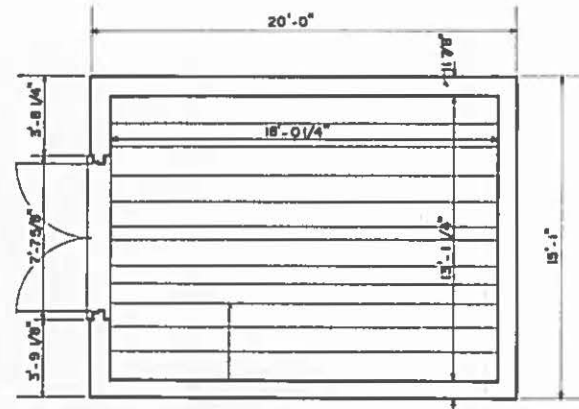
HISTORIC AMERICAN
BUILDINGS SURVEY
SHEET 1 OF 2 SHEETS

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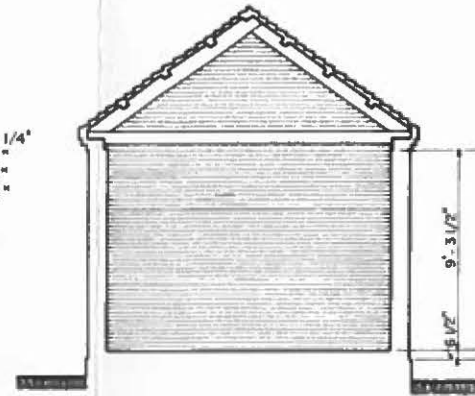
slate shingles

NOTES:
 Floor boards range in widths -
 7" - 15 1/2"
 Boards run full length of bldg.
 and are nailed to floor joists
 which are approximately 2" a.c.
 Three boards in southwest corner
 are exceptions.

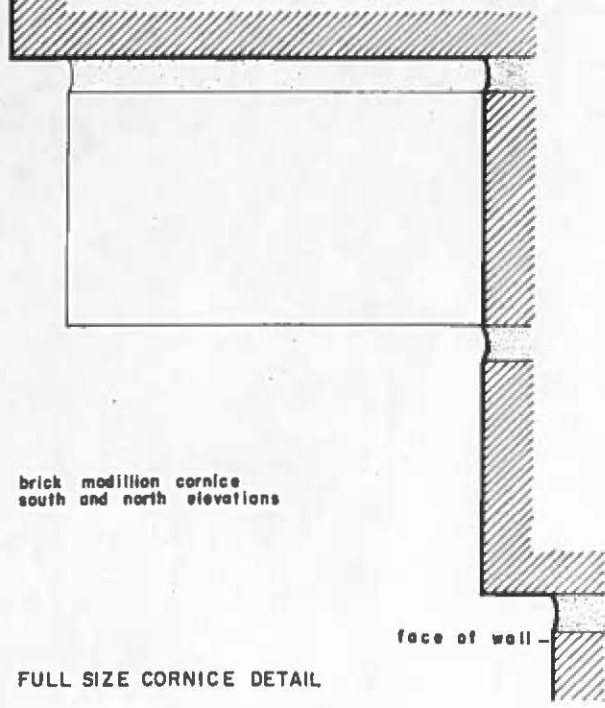


PLAN

NOTES:
 Roof Construction
 joists bear on wood sill 8 1/4" x 8 1/4"
 joists 6" x 6"
 rafters 4 1/4" x 8"
 purlins 3" x 4"
 sheathing
 slate shingles
 lead flashing at ridge

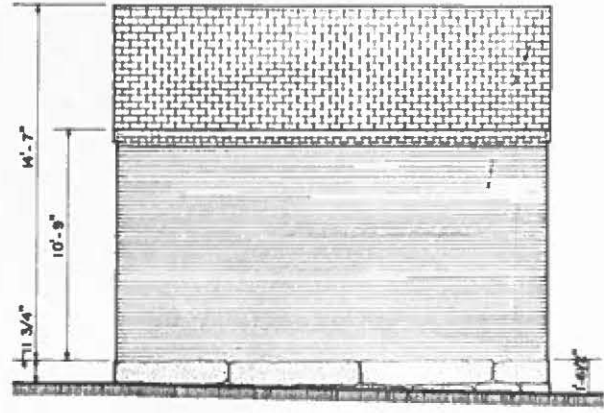


SECTION



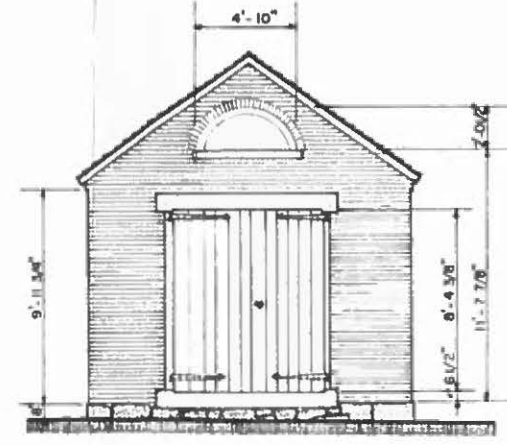
brick modillion cornice
 south and north elevations

FULL SIZE CORNICE DETAIL



SOUTH ELEVATION

GENERAL NOTES:
 Brick modillion cornice on north
 and south walls.
 Arched opening closed with one
 piece of wood and semicircular
 frame.
 Granite sills and lintel - smooth
 finish on exterior faces.
 Granite base - rough finish.
 Iron hardware.
 2" thick wood doors.
 Door barred from interior - left
 door secured by wooden bar - U
 shaped iron hook attached to bar
 projects through right door receiv-
 ing the lock.
 red brick walls common bond.



WEST ELEVATION

WALTON D. STOWELL, DEL.
 INKED BY JOHN P. SHAW

EASTERN OFFICE, PHILADELPHIA, PA.
 UNDER DIRECTION OF UNITED STATES DEPARTMENT OF THE INTERIOR
 NATIONAL PARK SERVICE, BRANCH OF PLANS AND DESIGN

SCALE NAME OF STRUCTURE HOUSE
 CUSTOM HOUSE YARD, 178 DERBY STREET, SALEM, MASSACHUSETTS

SURVEY NO.
 MASS-800

HISTORIC AMERICAN
 BUILDINGS SURVEY
 SHEET 2 OF 2 SHEETS

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