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DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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SALEM MARITIME NATIONAL HISTORIC SITE

FILE NO. 207

SPECIAL REPORT

SALEM MARITIME NATIONAL HISTORIC SITE

JULY 13 and 14, 1940

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Salem Maritime National Historic Site
July 13 and 14, 1940

Associate Engineer Bray and Assistant Engineer Sweeny

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Synopsis

Work on the area is now in progress under a State WPA project. The project includes work on the interior of the buildings, some grading in the area south of Derby Street, and chinking of the stone walls of Derby Wharf. Wall washing and painting in the Custom House has been completed. Restoration and reconstruction of the interior woodwork of the Hawkes House is in progress. Work on the interior of the Derby House includes minor structural alterations and repainting woodwork to its original colors.

Grounds, including walks, fences, grass and shrubbery, are in excellent condition, and present a very pleasing appearance, particularly in the area north of Derby Street. Exterior paint has suffered from the severe atmospheric conditions prevalent at the site, the principal effect being dulling of the colors. Fences along the streets have suffered some damage by passers-by, using chalk, wax crayon, or pencils.

Central Wharf has been completed in accord with present plans. The surface, of harbor clay, is dangerously slippery when wet. It should be covered with a thin layer of cinders, available on the site. Normal wall movement, detected shortly after filling began in 1939, has ceased. No major movement took place nor are its effects either evident or damaging.

Derby Wharf suffered superficial damage during severe spring storms early in 1940. The damage consisted of surface washing and removal of stone chinking from the walls. The effects are being corrected under the present WPA project. Evidence of a local foundation failure under a portion of the west wall of the wharf, opposite Station 11 plus 75 was noted. Some movement of the wall has occurred and is expected to continue. It is recommended that no repair work be attempted until movement has ceased and complete consolidation of the foundation is achieved, if this is possible.

General

The writers arrived at Salem on Saturday afternoon, July 13, in the course of a general inspection trip through New Jersey, eastern New York, and New England. The regular personnel was not available because of the holiday. However, arrangements for obtaining keys to the buildings had previously been made by tele-

phone, and the absence occasioned no inconvenience, particularly since both of the writers were thoroughly familiar with the area. The inspection of the wharf structures was made on Sunday morning in order to coordinate the examination with the low tide. A stop was made in Salem, en route from Beach Pond, R. I., to Salisbury Beach, Mass., on July 16, at which time the Superintendent was contacted and a complete discussion of the site, its plans, and its problems was had.

Buildings

Building exteriors were found to be in excellent condition. The Williamsburg type asbestos-cement shingle roofs presented a particularly pleasing appearance. The Customs House interior has been cleaned and repainted under the current State WPA Project, and is much improved. Restoration and reconstruction of the interior woodwork in the Hawkes House was in progress. Architectural supervision for this undertaking has been supplied by local representatives of the Historic American Buildings Survey since the resignation of Associate Architect Barnett. This work is proceeding slowly, with a small force of old and experienced carpenters, as it should. The completed work examined was quite satisfactory. Replastering of the walls is being done concurrently.

Work on the Derby House, consisting of removal of modern partitions, reconstruction of the rear stairway, and repainting of woodwork to its original colors is well under way. These operations, like those in the Hawkes House, are being carried out by a small crew of WPA workmen. The work is well done.

Grounds

Grass plots and shrubbery are in excellent condition, having benefitted from frequent rains and cool weather during the spring and early summer. Trees planted during the spring and the fall of 1939 are doing well. Walks and driveway constructed under the WPA program withstood the severe winter without damage. Fences are generally in good condition, though those along the street have suffered some defacement. Painted fences have suffered somewhat from the severe atmospheric conditions prevalent at the site, the chief effect being dulling of the colors. The integrity of the paint film has not been affected.

The area south of Derby Street has been generally improved in appearance by removing the temporary structures, construction debris, and the like.

Heating Plant

The central heating plant, completed during the early summer of 1939 under a WPA contract, was well tested during the severe winter just past. It operated in a very satisfactory manner, proving to be of ample capacity. Heating costs were considerably higher than when the older coal burning systems were in use. It has also been found impossible to secure circulation of domestic hot water to the Derby House. Installation of a small water circulator in the line was suggested to the Superintendent.

Central Wharf

Central Wharf, the smaller of two on the property, is of pile and plank bulkhead, earth fill construction. The bulkheads are tied back to anchors buried in the fill. It was completed and filled with dredged material late in 1939 as an ERA Project. Because of the saturated condition of the dredged filling material, no attempt was made at that time to grade and finish the surface, it being necessary for the material to drain and consolidate. Grading has since been done under the present State WPA project.

The finished surface, in many places, is composed of clay dredged from the harbor, and is dangerously slippery when wet. Inasmuch as this wharf is expected to receive considerable use, this condition should be corrected.

Shortly after filling and before the fill had drained and consolidated, some outward movement of the tops of the wharf walls was observed. This movement occasioned some alarm when it was first noted and a close watch was kept on it. All movement now appears to have stopped and it is believed that, with drainage and consolidation of the fill largely completed, no further movement will take place. There is no indication of recent change in the bulkhead alignment. Bulkhead, piles and tie connections are in excellent condition.

The wharf is now being used by a local group of lobstermen. The WPA Project has completed construction of small Marine Railway. Were suitable landing facilities available, it is believed that much greater use by pleasure craft in the harbor would result. This is particularly true since the number of such craft in the harbor has shown a marked increase during the past year without any corresponding increase in available facilities.

Derby Wharf

Derby Wharf was largely reconstructed in 1938, with funds provided by a PWA grant. The finishing touches, including some filling and fine grading, were done with ERA funds in 1939.

A northeast storm of unusual severity occurred early in March of this year, causing serious damage to water-front structures along the entire New England coast. Despite its protected location, Derby Wharf was subjected to the pounding of heavy seas which, according to an eye-witness account, broke completely across the wharf. Considerable surface erosion resulted, particularly just behind the walls, and a great many of the small chinking stones used in the walls themselves were displaced. The damage is being repaired under the WPA project previously mentioned.

In only one location along the 4000 feet of wharf wall was any serious condition noted. A small portion of the west wall, near station 11+75, showed definite evidence of foundation failure. This section at the junction of the inshore timber platform and the stone wall section, has settled and has bulged badly. The condition is purely local, will not affect any adjoining section of the wharf and need cause no alarm concerning the safety of the structure.

All timber bulkhead and fender piles are in position and in excellent condition.

Recommendations

Central Wharf

It is recommended that a thin surfacing of cinders, approximately 1 inch thick, be applied to the surface of the wharf fill to correct the dangerously slippery condition now obtaining in wet weather. It is also recommended that plans be prepared for a suitable landing float. Such a float might be constructed by Mass. SP-17 at Breakheart Reservation, during the coming winter, for spring launching.

Dorby Wharf

Present chinking work and storm damage repair should be continued to completion. It is recommended that, for the present, nothing be done concerning the slight wall failure near Station 11+76, but that this section be allowed to remain in its present condition until foundation consolidation is completed or until it becomes evident that no foundation stability will be attained.

Oscar S. Gray
Associate Engineer

Mass F. Sweeney
Assistant Engineer

SALIZ & BROS. HISTORICAL SITE

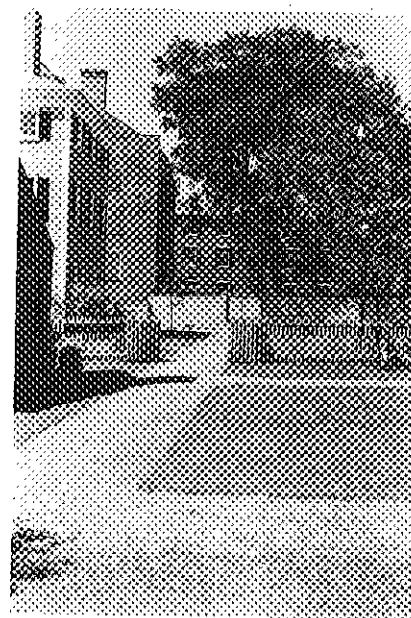
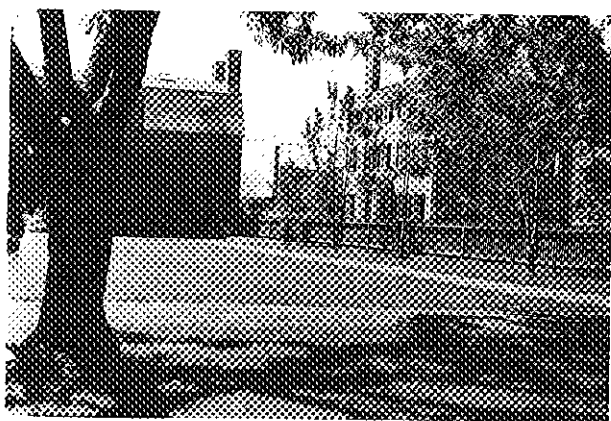
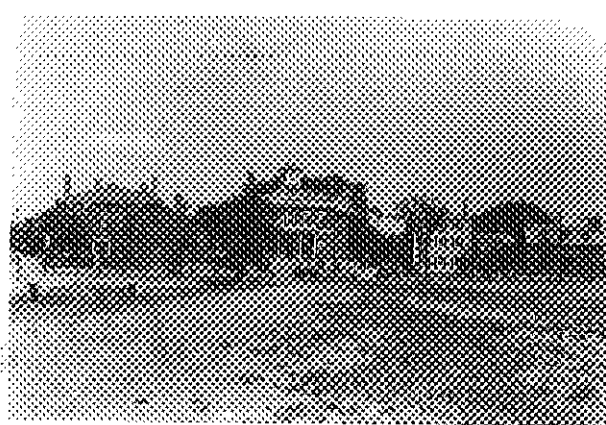
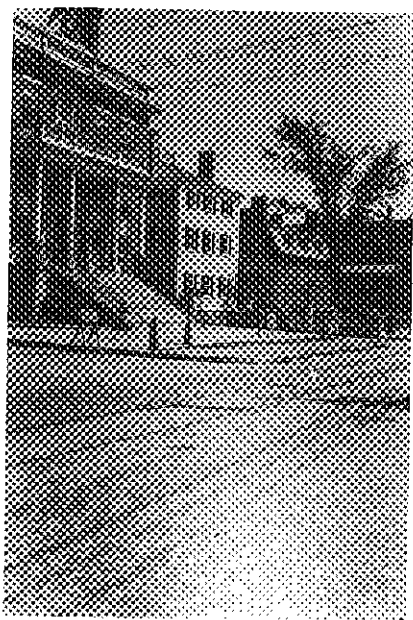
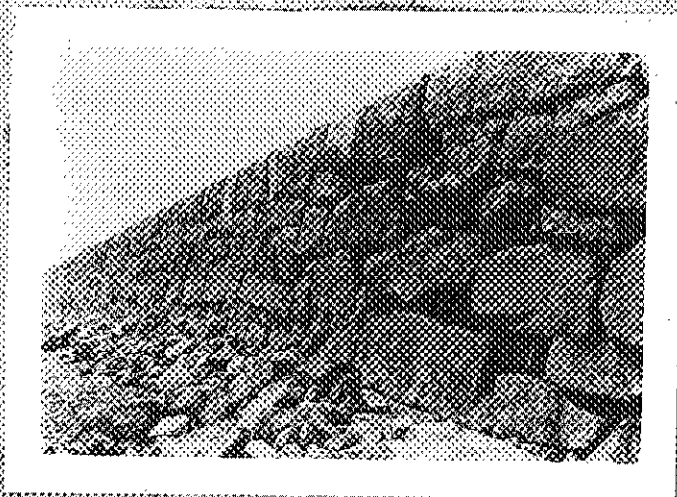


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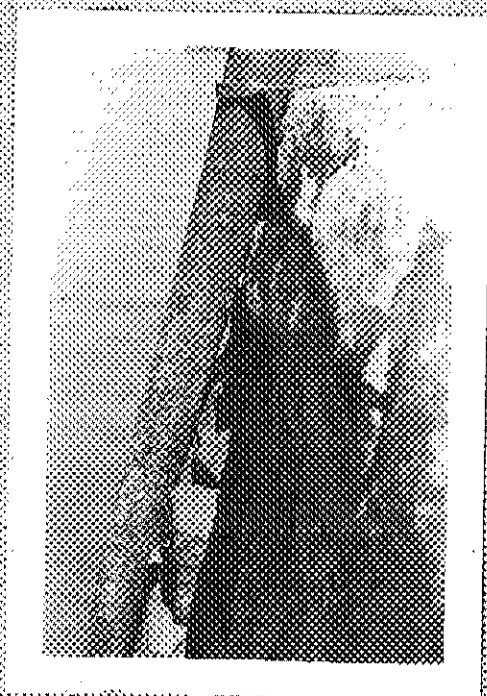


West Side

Sta. 15495



West Side
Sta. 15402



West Side
Sta. 15477