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MAR 13 1947
827 (Bullocks Point Cove, R.I.)

BULLOCKS POINT COVE

RHODE ISLAND

PRELIMINARY EXAMINATION

NEW ENGLAND DIVISION
CORPS OF ENGINEERS-WAR DEPARTMENT
BOSTON, MASS. 7 MAY 1947

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(NOT FOR PUBLIC RELEASE)

CORPS OF ENGINEERS, WAR DEPARTMENT
NEW ENGLAND DIVISION
BOSTON, MASS.

7 May 1947

Subject: Preliminary Examination of Bullocks Point Cove, Rhode Island

To: The Chief of Engineers, Washington, D. C.

SYLLABUS

The Division Engineer is of the opinion that improvement of Bullocks Point Cove is worthy of further consideration. He recommends a survey to determine the cost and justification of a suitable improvement and the extent of local cooperation to be required.

AUTHORITY

1. This report on preliminary examination of Bullocks Point Cove, Rhode Island, is submitted in compliance with Congressional directive contained in Section 7 of the River and Harbor Act approved 24 July 1946.

DESCRIPTION

2. Bullocks Point Cove, or Bullock Cove, is situated on the east shore of the Providence River in the towns of East Providence and Barrington, Rhode Island. It is about 6 miles south of Providence Harbor and 4.5 miles northwest of the entrance to Warren River.

3. The approach to the cove from the south is through Narragansett Bay and Providence River. A limiting depth of about 2 feet is available between the 35-foot Providence River ship channel and the entrance of the cove. Depths inside the cove vary from one to a maximum of 6 feet. The mean range of tide is about 4.6 feet and the spring range is about 5.7 feet. The cove is navigable for about one mile from its entrance to a railroad bridge which forms the present head of navigation. The cove is almost completely landlocked and provides natural protection from all storms. No prior reports have been submitted for the locality, and there is no existing Federal project. Local interests have made no major improvements in this waterway for the benefit of general navigation. The

locality is shown on the charts of the U. S. Coast and Geodetic Survey numbered 278 and 353 and on Plate 1 (File No. Nar. B. 216) accompanying this report.

TRIBUTARY AREA

4. The area immediately tributary to Bullock Cove comprises the Narragansett Terrace and Riverside sections of the town of East Providence and the Bay Spring and West Barrington sections of the town of Barrington. For pleasure craft usage, however, the tributary area includes the entire townships and several adjacent communities in Rhode Island and Massachusetts. In 1940, the permanent population of East Providence and Barrington was 32,165 and 6,231 respectively. The total population gain for these towns between 1930 and 1940 is reported to be 3,239. The total property valuations for the year 1946 were about $51,730,000 and $17,375,000. Barrington is primarily a residential community, although textile manufacturing is carried on in West Barrington. East Providence is the site of one large oil refinery and of several large bulk oil terminals. Other important industries include the manufacture of cotton cloth, narrow fabrics and machine tools. Commercial fishing and service to the summer trade also provide sources of income to the inhabitants of the area. Ample banking facilities are available in East Providence and in the nearby city of Providence. A branch line of the New York, New Haven and Hartford Railroad provides freight service for the area. Passenger bus service is also available. Ample improved highways connect the area with the main highway system of the State.

5. The shorefront on the northeast side of the cove is owned by the State of Rhode Island and is operated as a public park. This park, Haines Memorial Park, contains about 102 acres, and provides facilities for bathing, picnicking and sports. The annual attendance is stated to be in excess of 25,000. On the opposite side of the cove, the Crescent Park Amusement Company operates an extensive amusement park with an annual attendance reported to be about one million persons.

BRIDGES

6. Three bridges, as described below, cross the upper cove. One, the foot bridge, is now in disrepair and not used as a bridge. Its construction was authorized by a War Department permit. The center section is out and affords free passage for small boat navigation.

Miles above Mouth	Kind	CLEARANCES Horiz.	CLEARANCES Minimum Vertical, above M.L.W.	Use	Owner	Year Completed
0.75	Swing	26.7	8.6	Foot	Hope Land Co.	1906
1.0	Fixed	17.0	30.6	Abandoned	United Electric Railway Co.	----
1.1	Fixed	17.2	8.1	Railroad	N.Y., N.H. & H. RR	----

TERMINAL AND TRANSFER FACILITIES

7. There are no public wharves in the cove. A boatyard and a boat club each maintain a pier on the west shore. These piers are open to the public at the owners' convenience. Three marine railways capable of handling boats up to 25 tons are available. Two boatyards supply repair and service facilities and have storage space for over 100 boats. One yard constructs custom-designed boats. There are several private piers on the east shore. All of them were extensively damaged during tropical storms in 1938 and 1944 and have not been repaired.

8. Local interests feel that a public pier should be constructed if the proposed improvements are authorized. Ample unused frontage on the east shore, adjacent to publicly-owned land, is available for such construction. In addition, the State of Rhode Island maintains extensive parking areas convenient to the cove.

IMPROVEMENT DESIRED

9. A public hearing held at East Providence, Rhode Island, on 20 December 1946 was attended by about 110 people including State and Town officials, representatives of yacht clubs, businessmen, commercial

fishermen, and interested citizens. The Narragansett Terrace Boat Club, representing organizations and individuals interested in the improvement of Bullock Cove, presented the plan of improvement desired by local interests. It requested the following:

a. Channel 75 feet wide, 8 feet deep at mean low water from Providence River to the boatyards at the entrance to the cove, thence 6 feet deep to Haines Memorial Park;

b. Two anchorage basins, 6 feet deep, one west of the channel at the entrance of the cove, and the other just west of Haines Memorial Park at the proposed channel terminus; and

c. Protection of Bullock Point at the cove's entrance to prevent sand from drifting into and filling the cove.

These desired improvements are shown on the accompanying map, Plate 1. No objections were expressed to this proposed plan of improvement.

10. Local interests cited the need for improvement to the cove to provide a safe harbor of refuge and stated that Bullock Cove is the only economically potential site for a suitable harbor along the entire east shore of Narragansett Bay and Providence River between the mouth of the Warren River and Providence Harbor. It was stated further that all harbors in Narragansett Bay are overcrowded and that new developments accessible to populated areas are urgently needed. Proponents also stated that the proposed improvements would result in increased business for the boatyards and local merchants and permit many pleasure craft to use the cove, as well as providing a safe base for commercial fishing vessels.

11. In a formal communication the Department of Public Works of the State of Rhode Island indicated that the State is interested in the improvement and that the Department would recommend State participation providing a suitable project is developed. Officials of the Towns of East Providence and Barrington expressed the belief that some contribution from the towns could be expected. Spoil disposal areas were offered by the Crescent Park Amusement Company.

COMMERCE

12. There is no record of any recent freight movement through the cove although local interests state that local fishermen annually land a fish catch valued at $50,000. The cove is used principally by small pleasure craft in transit to the boat club pier or to the boatyards. Most of the present craft using the cove are owned by nearby residents. An occasional cruising vessel also makes use of the waterway during periods of high tide.

13. Local interests believe that the proposed improvements would result in widespread use of the cove. They consider that at least 160 additional vessels would base in the cove and that many cruising yachtsmen would seek overnight shelter in the proposed anchorage. This increased use is expected to result in the following benefits, which are both local and general:

Item	Anticipated Annual Benefit
Increased boat repair and service	$ 50,000
Increased new boat construction	70,000
Increased sale of fuel and hardware	15,000
Increased sale of food, beverages, etc.	32,000
Increased income from fishing	62,000
Increased revenue to Boat Club	2,000
Total	$231,000

VESSEL TRAFFIC

14. There is no record available to indicate the movement of pleasure and fishing craft in the cove. A local fleet of about 80 vessels, valued at $300,000 and varying in length from 16 to 38 feet and in draft from 1.5 to 3.5 feet, makes use of the waterway. Use of the cove is presently limited to vessels drawing 3.5 feet due to lack of depth. Several commercial and sport fishing boats operate from the cove making frequent trips to and from nearby fishing grounds in Narragansett Bay.

DIFFICULTIES ATTENDING NAVIGATION

15. There are no unusual difficulties attending navigation in Bullock Cove except that lack of depth in the waterway restricts use of the cove. Boat repair yards are handicapped, due to lack of depth in the entrance.

WATER POWER AND OTHER SPECIAL SUBJECTS

16. The waterway is tidal. Matters of water power or flood control are not pertinent to this report. Prospective use of the cove as a seaplane base is remote but such use would not be affected adversely by the proposed improvements. None of the work contemplated would have an adverse effect on wildlife or shellfish.

SHORE LINE CHANGES

17. The proposed improvement for the stabilization of Bullock Point by the construction of a jetty or other means would have no appreciable effect on the adjacent shoreline.

DISCUSSION

18. Bullock Cove is favorably situated with relation to population density to serve the recreational boating needs of a large number of people. Narragansett Bay is increasingly frequented by cruising craft. Harbors of refuge for these and smaller local craft are frequently needed. Bullock Cove is the only protected area on the east side of Providence River between the Warren River and Providence Harbor. It is more easily entered than Warren River which is crowded with boats in that area at the present time. Providence Harbor is a commercial harbor and does not offer suitably protected areas for pleasure boats.

19. The cove has all the natural requirements necessary for a safe small boat harbor. The entrance channel is favorably located in respect to prevailing winds during the boating season, and the anchorage area is sheltered from all storms but those of hurricane proportions. The plan of improvement proposed by local interests is adequate for the needs and will provide all the requirements for pleasure boating and the local fishing boats.

20. Local interests expect that increased business totalling $231,000 annually will accrue through improvement of the cove. While this estimate is considered reasonable, a portion of it would be of

purely local benefits which cannot reasonably be accredited to the improvement. However, it is believed that prospective benefits are sufficient to warrant Federal participation in a suitable plan of improvement.

21. The present fleet based in the cove totals 80 craft valued at $300,000. Improvement of the cove through provision of a dredged entrance channel and enlarged anchorage area would provide a protected area for a large increase in this number. Such improvement would result in a substantial additional demand for storage and repair facilities. Increased expenditure for new craft and the storage and repair to these craft in the boatyards situated in Bullock Cove would probably total at least $120,000 annually as claimed, of which new construction would total about $70,000 annually. Additional new craft basing in the cove would be constructed and repaired in other localities. It is considered that suitable improvements would stimulate the construction of 90 new craft valued at approximately $360,000 during the first 3 years subsequent to the improvements. Benefits from this construction would not be restricted to the boatyards now situated in Bullock Cove. Net benefits from this increased business are conservatively estimated to total about $19,000 annually.

22. The foregoing tangible benefits are both local and general in character. Other benefits, not easily evaluated at this time, would also accrue through an increase in fish receipts, increased tax receipts and increased value of the land adjacent to the cove. It is believed that the benefits derived from the improvement will not be sufficiently general in character to warrant improvement entirely at Federal expense, but will require a substantial cash contribution by local interests. Such contribution is reasonably assured.

CONCLUSIONS

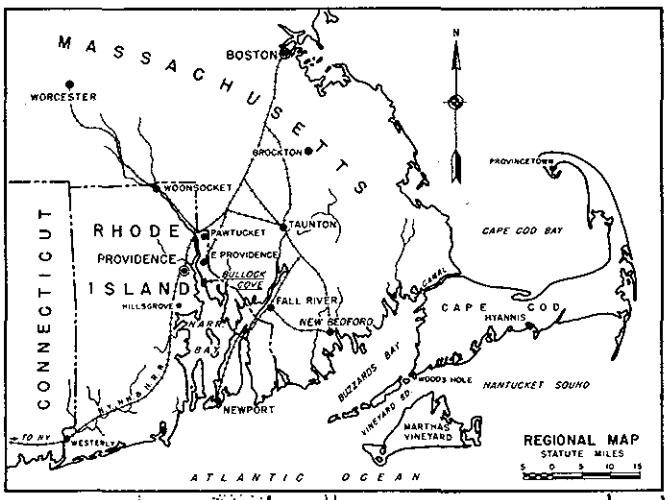
23. Existing and reasonably prospective small-boat navigation in Bullock Cove warrants further consideration of the improvements desired by local interests. Improvement of the cove will probably result in benefits in excess of annual charges.

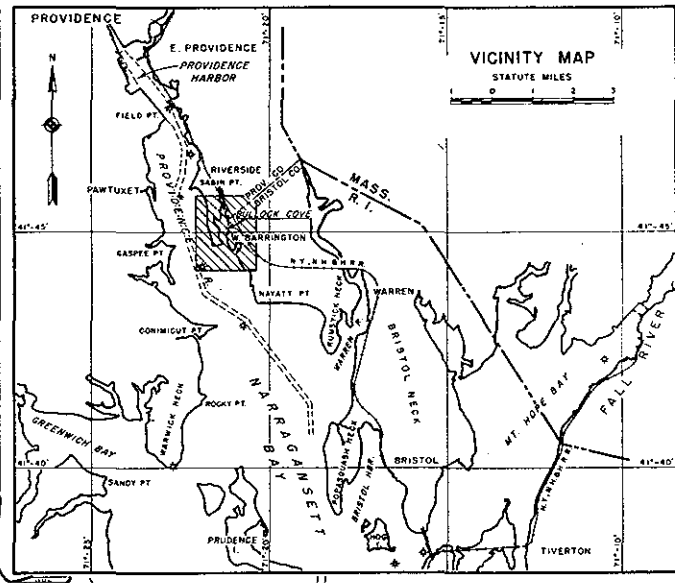
RECOMMENDATIONS

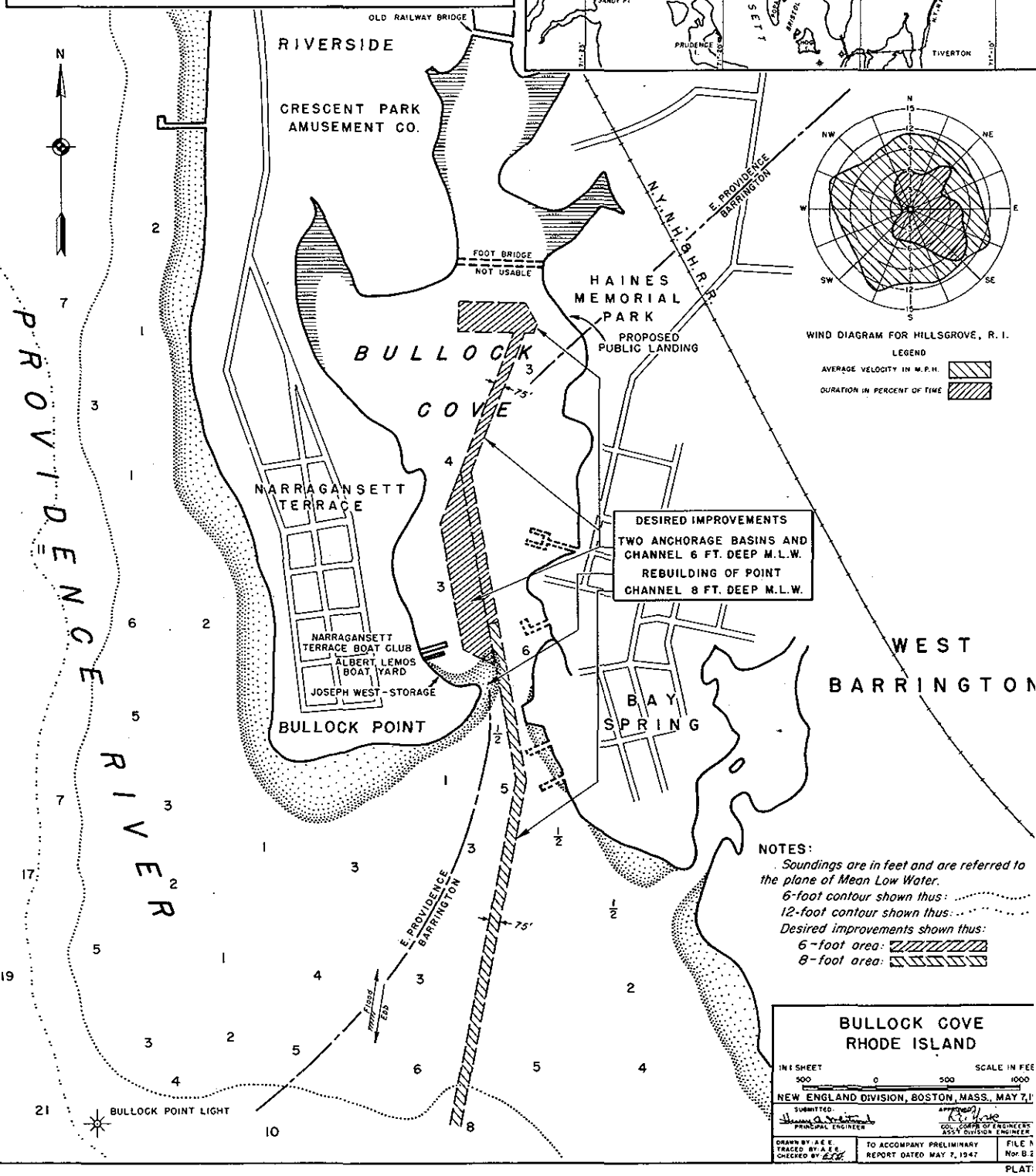
24. The Division Engineer recommends that a survey be made to determine the extent and cost of such improvement as may be justified, and the extent of local cooperation to be required.

R. G. MOSES
Brigadier General, U. S. A.
Division Engineer

1 Inclosure:
#1 - Plate 1 (File No. Nar. B. 216)


MASSACHUSETTS
BOSTON
WORCESTER
BROCKTON
PROVINCETOWN
WOONSOCKET
TAUNTON
PAWTUCKET
RHODE ISLAND
PROVIDENCE
E. PROVIDENCE
BULLOCK COVE
HILLSGROVE
FALL RIVER
NEW BEDFORD
CAPE COD BAY
CAPE COD
HYANNIS
NARRAGANSETT BAY
BUZZARDS BAY
WOODS HOLE
NANTUCKET SOUND
VINEYARD SD.
MARTHAS VINEYARD
NEWPORT
CONNECTICUT
TO N.Y.
WESTERLY
ATLANTIC OCEAN
REGIONAL MAP
STATUTE MILES


PROVIDENCE
E. PROVIDENCE
PROVIDENCE HARBOR
FIELD PT.
RIVERSIDE
SABIN PT.
PAWTUXET
BULLOCK COVE
W. BARRINGTON
GASPEE PT.
NAYATT PT.
WARREN
CONIMICUT PT.
ROCKY PT.
WARWICK NECK
NARRAGANSETT BAY
BRISTOL NECK
GREENWICH BAY
SANDY PT.
PRUDENCE I.
BRISTOL
MT. HOPE BAY
FALL RIVER
TIVERTON
MASS.
R.I.
VICINITY MAP
STATUTE MILES


OLD RAILWAY BRIDGE
RIVERSIDE
CRESCENT PARK AMUSEMENT CO.
FOOT BRIDGE NOT USABLE
HAINES MEMORIAL PARK
PROPOSED PUBLIC LANDING
BULLOCK COVE
NARRAGANSETT TERRACE
NARRAGANSETT TERRACE BOAT CLUB
ALBERT LEMOS BOAT YARD
JOSEPH WEST-STORAGE
BULLOCK POINT
BULLOCK POINT LIGHT
PROVIDENCE RIVER
N.Y.N.H.&H.R.R.
E. PROVIDENCE BARRINGTON
BAY SPRING
WEST BARRINGTON
DESIRED IMPROVEMENTS
TWO ANCHORAGE BASINS AND CHANNEL 6 FT. DEEP M.L.W.
REBUILDING OF POINT CHANNEL 8 FT. DEEP M.L.W.
WIND DIAGRAM FOR HILLSGROVE, R. I.
LEGEND
AVERAGE VELOCITY IN M.P.H.
DURATION IN PERCENT OF TIME
NOTES:
Soundings are in feet and are referred to the plane of Mean Low Water.
6-foot contour shown thus:
12-foot contour shown thus:
Desired improvements shown thus:
6-foot area:
8-foot area:
BULLOCK COVE
RHODE ISLAND
IN 1 SHEET
SCALE IN FEE
500 0 500 1000
NEW ENGLAND DIVISION, BOSTON, MASS., MAY 7, 1
SUBMITTED:
PRINCIPAL ENGINEER
APPROVED:
COL. CORPS OF ENGINEERS
ASST. DIVISION ENGINEER
DRAWN BY: A.E.E.
TRACED BY: A.E.E.
CHECKED BY: E.T.F.
TO ACCOMPANY PRELIMINARY REPORT DATED MAY 7, 1947
FILE N
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PLAT