MENEMSHA CREEK, MASS.

LETTER

FROM

THE SECRETARY OF WAR

TRANSMITTING

A LETTER FROM THE CHIEF OF ENGINEERS, UNITED STATES ARMY, DATED JUNE 13, 1939, SUBMITTING A REPORT, TOGETHER WITH ACCOMPANYING PAPERS AND AN ILLUSTRATION, ON A PRELIMINARY EXAMINATION AND SURVEY OF MENEMSHA CREEK, MARTHAS VINEYARD, MASS., AUTHORIZED BY THE RIVER AND HARBOR ACT APPROVED JUNE 20, 1938

JUNE 23, 1939.—Referred to the Committee on Rivers and Harbors and ordered to be printed with an illustration

WAR DEPARTMENT, Washington, June 22, 1939.

The Speaker of the House of Representatives.

Dear Mr. Speaker: I am transmitting herewith a report dated June 13, 1939, from the Chief of Engineers, United States Army, on preliminary examination and survey of Menemsha Creek, Marthas Vineyard, Mass., authorized by the River and Harbor Act approved June 20, 1938, together with accompanying papers and illustration. Sincerely yours,

HARRY H. WOODRING, Secretary of War.

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, June 13, 1939.

Subject: Menemsha Creek, Mass. To: The Secretary of War.

1. I submit, for transmission to Congress, my report with accompanying papers and illustration on preliminary examination and survey

158569-39

of Menemsha Creek, Marthas Vineyard, Mass., authorized by the River and Harbor Act approved June 20, 1938.

2. Menemsha Creek is a tidal inlet, three-fourths of a mile long, near the western end of Marthas Vineyard Island. It connects Menemsha Pond with Menemsha Bight, an indentation in the northern or Vineyard Sound shore of the island. A high sandspit extending northerly from the Menemsha town wharf forms a well-protected basin east of the main creek. Entrance to this basin is through a narrow channel between the end of the sandspit and the barrier beach extending east from the mouth of the creek. Widths in the creek decrease from 400 feet at the inner end to 100 feet at the entrance, with depths increasing from 2½ feet in the meandering channel south of the town wharf to 8 feet at the entrance and 6 feet in the anchorage area in the basin. No project for improvement of Menemsha Creek has been authorized by Congress. Since 1927 the Commonwealth of Massachusetts has expended \$202,000 for improvement and maintenance of the creek. This improvement consists of timber and stone entrance jetties, protection of the beach east of the entrance, and a channel 6 feet deep and 60 to 75 feet wide from Vineyard Sound to Menemsha Pond, with a basin of the same depth east of the channel inside the entrance. Local interests request deepening and widening of channels in the creek and deepening of the anchorage area. claim this will provide a safe and convenient base for fishing and recreational craft and an easily accessible harbor of refuge for the fishing fleet of 40 to 60 vessels working in the vicinity. They offer to furnish, free of cost to the United States, spoil-disposal areas and indicated that a monetary contribution would be made.

3. The waterway serves the fishing and yachting interests of the towns of Gay Head, Chilmark, and West Tisbury, with a combined population of 700. The principal occupation of the inhabitants is fishing and catering to a large number of summer vacationists. Improved highways extend to all parts of the island. Commerce of the waterway consists almost entirely of sea food, the total value of the annual catch being \$75,000. The local fishing fleet numbers 35 boats drawing from 2½ to 5 feet, and 500 transient boats visit there annually.

4. The district engineer has compared two alternate alinements and widths for the channel to Menemsha Pond. He finds that the best navigation channel will also require the least annual maintenance charge. He estimates the first cost of the improvement at \$50,000, with annual maintenance of \$2,700. In view of the large local benefit to result from further improvement, the district engineer believes that local participation in the cost should be required, but as the Commonwealth of Massachusetts has already expended a large amount on improvement of the entrance to the creek, he concludes that contribution of 25 percent of the first cost of further improvement would be reasonable. On this basis, the annual carrying charge would be \$4,388 for the United States and \$687 for local interests.

5. The division engineer concurs generally in the views and recommendations of the district engineer. He believes that as part of the project the United States should hereafter maintain the entrance jetties, provided they are first placed in first-class condition by local interests. He estimates the additional cost of maintenance for this purpose at \$300. He recommends the improvement at a first cost of \$50,000, with annual maintenance of \$3,000, subject to certain condi-

tions of local cooperation.

6. The Board of Engineers for Rivers and Harbors has fully considered the views and recommendations of the reporting officers. It concurs in the view that the improvement is economically justified. The Board recommends the improvement subject to certain conditions

of local cooperation.

7. After due consideration of these reports, I concur in the views and recommendations of the Board. The improvement will provide a safe and protected harbor for fishing and recreational craft operating in the vicinity and will encourage greater use of the harbor facilities by visiting craft of a larger type. I therefore recommend the improvement of Menemsha Creek, Marthas Vineyard, Mass., to provide an entrance channel 10 feet deep and 80 feet wide between the jetties to and including an anchorage basin 10 feet deep in the wide northern portion and 6 feet deep in the narrow southern end, and a channel 8 feet deep and 80 feet wide through Menemsha Creek to deep water in Menemsha Pond; all substantially in accordance with plan B in the report of the district engineer; at an estimated first cost of \$50,000, with annual maintenance of \$3,000; subject to the provisions that local interests furnish, free of cost to the United States, as and when required, all lands, easements, and rights-of-way and spoil-disposal areas for the initial work and for subsequent maintenance; hold and save the United States free from claims for damages resulting from the improvement; that they place the entrance jetties in a condition of repair satisfactory to the Secretary of War; and that they contribute 25 percent of the initial cost, but not to exceed \$12,500.

J. L. Schley, Major General, Chief of Engineers.

REPORT OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

[Second endorsement]

THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS, Washington, D. C., June 5, 1939.

To the Chief of Engineers, United States Army.

The Board concurs generally in the views and recommendations of the reporting officers. The improvement will provide a protected harbor for fishing and recreational craft operating in the vicinity and will encourage greater use of the harbor facilities. In view of the relatively large expenditures already made by the Commonwealth of Massachusetts in improving the waterway, future maintenance of the entrance jetties by the United States and requirement of a contribution of 25 percent of the first cost of further improvement is reason-The Board therefore recommends the improvement of Menemsha Creek, Marthas Vineyard, Mass., to provide an entrance channel 10 feet deep and 80 feet wide between the jetties to and including an anchorage basin 10 feet deep in the wide northern portion and 6 feet deep in the narrow southern end, and a channel 8 feet deep and 80 feet wide through Menemsha Creek to deep water in Menemsha Pond: all substantially in accordance with plan B in the report of the district engineer; at an estimated first cost of \$50,000, with annual maintenance of \$3,000; subject to the provisions that local interests furnish,

free of cost to the United States, as and when required, all lands, easements, and rights-of-way and spoil-disposal areas for the initial work and for subsequent maintenance; hold and save the United States free from claims for damages resulting from the improvement; that they place the entrance jetties in a condition of repair satisfactory to the Secretary of War; and that they contribute 25 percent of the initial cost, but not to exceed \$12,500.

For the Board:

Brigadier General, Corps of Engineers, Senior Member.

SURVEY OF MENEMSHA CREEK, MASS.

SYLLABUS

The facilities of Menemsha Creek and Harbor should be improved both for the fishing fleets, local and visiting, and for pleasure craft navigation. It will form a valuable haven of refuge for the waters of this region. The general benefits warrant participation in the improvement by the United States. The district engineer recommends the adoption of a project providing for a channel 10 feet deep and 80 feet wide in the entrance between the jetties at the mouth, and thence the same depth and 200 feet wide into the existing basin just inside the mouth; deepening the existing basin to 10 feet throughout the wide portion and to 6 feet in the southerly end; and a channel 8 feet deep and 80 feet wide through the Creek from the basin entrance to Menemsha Pond, at an estimated total cost of \$50,000 for new work, with \$2,700 annually for maintenance; provided that local interests contribute in cash 25 percent of the first cost, but not to exceed \$12,500, furnish spoil disposal areas, and release the United States from all claims for damage that may arise from the improvement.

WAR DEPARTMENT,
UNITED STATES ENGINEER OFFICE,
Providence, R. I., May 2, 1939.

Subject: Report on Survey of Menemsha Creek, Marthas Vineyard, Mass.

To: The Division Engineer, North Atlantic Division, New York, N. Y.

1. Authority.—The basic authority for this survey report is contained in section 8 of the River and Harbor Act approved June 20, 1938. The act designated Menemsha Creek, Marthas Vineyard, Mass., as one of the several localities for preliminary examination and survey in accordance with existing laws. It is submitted in compliance with instructions by the Chief of Engineers dated December 12, 1938, pursuant to recommendation of the Board of Engineers for Rivers and Harbors upon its review of the preliminary examination report on Menemsha Creek. The report covers a survey made to determine the advisability and cost of improvement and the local cooperation required.

2. Description.—The locality is shown on United States Coast and Geodetic Survey Chart No. 1210 and on the map (file No. Ma. 2) accompanying this report. A chain of three tidal ponds extends nearly across the narrow portion of the western end of the island of Marthas Vineyard. Menemsha Creek is a tidal inlet about three-fourths of a mile long, which connects Menemsha Pond, the largest and most northerly of the ponds, with Menemsha Bight, an indentation in the northern or Vineyard Sound shore of the island. It lies about 3 miles east of Gay Head and about 12 miles southwest of Vineyard Haven.

The main creek varies in width from about 400 feet near the inner end to about 100 feet between parallel jetties protecting the entrance. It flows in a generally north and south direction. Most of its course is through a low sandy or marshy formation. The shore lines are somewhat irregular, being deeply indented in places by arms or bays.

3. The creek is part of the boundary line between the towns of Gay Head and Chilmark. The fishing village of Menemsha in the latter town is located on a bluff on the east bank, about a quarter of a mile from the mouth. A paved road connecting with other parts of the island terminates in the village at the site of the town wharf. From this point a high and narrow sand spit extends northerly about 1,000 feet and forms the barrier between a well-protected basin to the east and the main creek past the wharf and into the pond. wharf and nearly all the structures along both sides of the sand spit and on the east side of the basin were destroyed by the storm of September 21, 1938. Entrance to the north end of the basin is afforded by a narrow channel between the end of the spit and the barrier beach extending east from the mouth of the creek. Improvements in the waterway have been made by the Commonwealth of Massachusetts from time to time since 1897, as outlined in paragraph 8. depths available are about 8 feet for a width of 70 feet in the entrance between the jetties, and for a width of about 100 feet in the entrance to the basin; 6 feet in the anchorage area within the basin; 6 feet for a width of about 50 feet in the channel from the jetties to the town wharf; and a limiting depth of about 2.5 feet in the meandering channel from the town wharf to deep water in Menemsha Pond. This pond, about a mile square, has depths of 10 to 20 feet over a considerable portion of its area. From it a shallow channel extends to Nashaquitsa Pond where depths of 6 to 8 feet are said to exist. Scallops and clams have become fairly abundant in the ponds since the creek was made a permanent waterway.

4. No bridges cross the creek or the two ponds named. The narrow waterway between Nashaquitsa Pond and the third pond, known as Stonewall Pond, is crossed by the main highway to Gay Head. The mean rise and fall of tide is about 2.7 feet at the entrance to Menemsha

Creek, and is slightly less in the ponds.

5. Tributary area.—The waterway serves the fishing and yachting interests of the towns of Gay Head, Chilmark, and West Tisbury with an aggregate population of about 700. Summer residents in the estates scattered along the shores and on the nearby hills more than double this number. Thousands of summer sojourners on the island of Marthas Vineyard visit Menemsha Village and the famous colored cliffs at Gay Head. Vineyard Haven and Oak Bluffs at the northern end of the island and Edgartown at the eastern end, distant respectively about 12, 14, and 15 miles from Menemsha, are the large centers of summer activities. They have good facilities for both commercial and pleasure boating. Well-paved roads extend to all parts of the island.

6. Prior reports.—In 1886, an unfavorable preliminary examination report was made on improvement of Menemsha Bight and Pond as a harbor of refuge. It was printed in the Annual Report of the Chief of Engineers for 1887, page 569. House of Representatives Executive Document No. 60, Fifty-second Congress, first session, comprises a preliminary examination and survey of Menemsha Bight with a view

to preventing the closing of the inlet or creek. This report recognized the desirability of a sheltered harbor in the locality, but the importance of a project consisting of jetties and shore protection was not considered sufficient to justify the initial expenditure and subsequent maintenance charges. House Document No. 60, Fifty-eighth Congress, second session, covering a report by a Board of Engineers on the examination of various localities with a view to the construction of harbors of refuge for coastwise shipping, includes consideration of Menemsha Bight and Creek. The locality was not deemed worthy of improvement for that purpose.

7. Existing project and local cooperation.—No Federal project has ever been adopted; and in the absence of such a project, no local cooper-

ation has been required.

8. Other improvements.—Since 1927 the Commonwealth of Massachusetts has expended a total of over \$202,000, including \$2,700 contributed by local interests, for improvement and maintenance of Menenisha Creek and its entrance. The work consists of parallel jetties of timber and stone at the entrance; timber and concrete walls and jetties with riprap protection on the barrier beach east of the entrance; and a channel 60 to 75 feet wide, 6 feet deep, about a mile long, from Vineyard Sound to Menemsha Pond, with a basin of the same depth located east of the channel and just inside the entrance. The entrance jetties are about 250 feet in length, 3 feet above high water, and 150 feet apart. Since the destructive hurricane of September 21, 1938, the Commonwealth has spent over \$19,000 in redredging the basin to a depth of 6 feet and repairing a wide breach in the south or town wharf end of the sand spit forming the barrier between the basin and the creek.

9. Terminal and transfer facilities.—Before the storm of September 21, 1938, there existed a town wharf at the end of the paved road on the Menemsha side of the creek and numerous private fishing and pleasure-boat landings along the sand spit and on the east side of the basin. All these structures and the adjacent buildings were entirely destroyed by the storm. The wharves were adequate for the requirements of the boats, both fishing and pleasure, using the waterway. Reconstruction of these wharves is being undertaken gradually. The town has built a small landing pier on the east side of the basin and owns an extensive frontage adjacent thereto. On the west side of Menemsha Pond there is a public landing with highway approach. Fuel and subsistence supplies are available, but no boat yards or marine railways exist on the waterway. Such facilities are located on the island at Vineyard Haven, Oak Bluffs, and Edgartown. There is ample water frontage available for construction of additional landings and other facilities when needed.

10. Improvement desired.—A public hearing was held at Vineyard Haven on August 23, 1938. It was attended by officials of the towns, the county, and the Commonwealth of Massachusetts, and by fishing, yachting, and commercial interests. The towns of Chilmark and Gay Head desired the following improvements: An entrance channel 10 feet deep between the jetties, extending from deep water in Menemsha Bight to the entrance to the basin; widening the existing entrance to the basin by 75 feet and deepening it to 10 feet; deepening the wide portion of the basin to 10 feet and the narrowing head to 6 feet; a general straightening of the present meandering channel leading into

Menemsha Pond, making it 60 feet wide and 8 feet deep from the basin entrance to deep water in the pond. Depths refer to mean low water.

11. These facilities were deemed necessary to provide a safe and convenient base for the local fishing and pleasure boats, and an easily accessible harbor of refuge for the fleet of 40 to 60 fishing vessels often working off No Mans Land and the large number of pleasure craft which cruise in this locality. The basin is frequently overcrowded by visiting boats, so that access to Menemsha Pond is required to accommodate the increasing number of both fishing and pleasure craft desiring shelter. While no definite offer of local cooperation was made other than that of furnishing of spoil areas for the deposit of dredged material, State and town contributions were reasonably well assured.

12. Commerce.—Present commerce in Menemsha Creek pertains almost entirely to the fishing industry and yachting. Occasionally small loads of fuel and building material have been brought in, but no record of the amounts are available. Fishing boats deliver most of their catch to buyers at mainland ports, the local receipts being minor amounts for consumption on the island. The value of the annual

catch by the local fleet is about \$75,000.

13. Vessel traffic.—The local fishing fleet numbers about 35 boats, varying from 20 to 40 feet in length and 2½ to 5 feet in draft. No record of their trips is available. Their estimated value is about \$30,000. Among the owners there is a trend toward the use of larger boats. Fishing vessels from outside ports as far distant as Gloucester and Bridgeport occasionally seek refuge in the creek. Pleasure boats to the number of at least 500 per season make use of the harbor. Many of these are from distant points outside of Massachusetts. A motorboat attached to the Gay Head Coast Guard Station uses the creek as a base. At times a total of 60 to 75 craft congregate there and fill both the basin and the creek up to the town wharf to capacity. A decided increase in the number of pleasure craft using the harbor has occurred in the past few years.

14. Difficulties attending navigation.—The narrow entrance from the sound and sharp turn into the basin make it difficult for the larger boats to enter and leave, particularly when the tidal current is at its maximum. Very few boats attempt to navigate in the creek between the town wharf and the pond, the channel being narrow and crooked,

with a limiting depth of only 2.5 feet over the shallowest bar.

15. Survey.—A survey of Menemsha Creek was made in March and April 1939. It included hydrography of the waterway from Menemsha Pond to the entrance, and topography along the adjacent

shores. The resulting map accompanies this report.

16. Plan of improvement.—Two plans for improvement of Menemsha Creek are indicated on the map. Both provide for deepening the entrance channel between the jetties to 10 feet; wideling the opening into the anchorage basin, located just inside the entrance, by 75 feet, and deepening it to 10 feet; deepening the basin to 10 feet throughout the wide portion and to 6 feet in the narrow southerly end; and providing a channel 8 feet deep through the creek into Menemsha Pond. They differ only in regard to the width and alinement of the lastmentioned item. Plan A contemplates dredging the channel into the pond 60 feet wide, as requested by local interests. It is on an irregular alinement following the deepest water now available. Plan B proposes a channel 80 feet wide into the pond by a nearly straight alinement. Disposal of the dredged material on shore is contemplated.

The quantities of material to be removed, based on place measurement and allowing for 1 foot overdepth, and the estimated cost of each plan are as follows:

| Under plan A (requested): Entrance channel, 10 feet deep | |
|--|---------------------|
| Total | \$38, 500 3, 000 |
| Total 142,000 Estimated cost for dredging 142,000 cubic yards of sand and gravel at about 35 cents Estimated cost for annual maintenance | |

17. Discussion.—Menemsha Creek in its present condition is used extensively by fishing boats and to a lesser degree by pleasure craft. At times the facilities are overcrowded. It is the base for a local fishing fleet of about 35 small vessels, and a harbor of refuge for fishermen from distant ports. The visiting boats are in general larger and of greater draft than the home fleet. For this reason the creek is not available to many of them. It is the nearest harbor to the important fishing grounds off No Mans Land, a small island with no harbor, lying about 6 miles south from Gay Head. Menemsha is only a 12-mile run from No Mans Land, while other harbors are distant 20 miles or more. Besides the local boats, a fleet of 30 to 60 vessels from Massachusetts, Rhode Island, and Connecticut ports is engaged in fishing off No Mans Land. A large number of these outside boats would be able to utilize the harbor afforded by Menemsha Creek if the desired improvements are made. This nearby shelter against sudden storms would add to the safety of the fleet and decrease operating expenses. It is reasonable to expect that the local fishing fleet would expand their operations.

18. Vineyard Sound and the neighboring waters of Nantucket Sound and Buzzards Bay attract hundreds of pleasure craft of all sizes from widespread points. Yacht club fleets and individual craft sail these waters in large numbers during the summer season. Menemsha is the only harbor at the west end of Vineyard Sound. Woods Hole and Vineyard Haven are 12 and 14 miles, respectively, to the eastward. Adverse currents and winds in Vineyard Sound create rough seas and greatly hinder navigation throughout its length. Cuttyhunk Harbor, located on Buzzards Bay and lying 10 miles northwest of Menemsha, is not easily accessible from the sound. In storms from the north and northeast it is almost impossible for small boats seeking shelter in Cuttyhunk to pass through Quicks Hole or Canapitsit Channel.

19. The needs of local fishermen for a permanent entrance to the creek and improved conditions inside became evident to the Commonwealth of Massachusetts in 1907. Development by the State has provided fairly adequate facilities for the local fishing and yachting craft up to the present time. Expenditures to date total over \$202,000, including about \$19,000 for restoration of works severely damaged by

the storm of September 21, 1938. There is a trend toward larger boats in the local fishing fleet. General interest in yachting is increasing. The growth of Marthas Vineyard as a summer resort creates a demand for better facilities for pleasure boating. Further improvement of Menemsha Creek is required to meet not only the local needs but also to provide additional shelter for increasing numbers of visiting boats of both classes. In view of the use now made of the creek and basin it is practically certain that the increased facilities proposed would be used to their limit during the summer season.

20. The plans of improvement shown on the accompanying map are in general accordance with the desires of local interests. The details are given in paragraph 16. Depths of 10 feet in the entrance channel and in the basin, and an 8-foot channel into the pond, are considered necessary. For the channel into the pond a width of 80 feet and a nearly straight alinement as proposed in plan B are considered advisable. Such a channel would provide safer navigation conditions than a 60-foot width, particularly in stormy and thick weather. With suitable disposal of the larger volume of dredged material on the adjacent water areas, the hydraulic conditions of the wider channel would be better than for the narrower waterway. With a 60-foot channel, shoaling along the sides would require redredging at shorter intervals in order to keep it usable, and maintenance costs, owing to this frequency factor and relatively small volumes to be removed at each time, would be somewhat greater than for the 80-foot width.

21. Local and general benefits from the proposed improvement cannot be separated or accurately evaluated. In view of the extensive use of the harbor by visiting fishing and pleasure craft in season, the general benefits are considered in excess of the local. Justification of the improvement rests upon its value to the fishing industry and to pleasure craft navigation. In view of the large expenditures already made by the Commonwealth for development and maintenance of the waterway, local cooperation to the extent of 25 percent of the cost is considered reasonable. For the improvement as proposed in plan B this would require a Federal investment of \$37,500 and a non-Federal investment of \$12,500.

The economic cost or annual carrying charges, assuming 25 percent local cooperation, are as follows:

| | Federal annual carrying charges: Interest, amortization, and depreciation, 4½ percent of \$37,500 Annual maintenance | |
|---|--|--------|
|) | Total | 4, 388 |
| | 5½ percent of \$12,500 | 687 |
| | Total | 5, 075 |

22. Water power and other special subjects.—Questions of water power, flood control, land reclamation, oyster growing, and wildlife preservation are irrelevant to the proposed work. There is no prospective use of the waterway as a seaplane base. The improvement would have no material effect upon the shore line in the vicinity.

23. Conclusions.—The proposed improvement of Menemsha Creek constituting an extension of the work already done by the Commonwealth of Massachusetts, would be of distinct value to the local fishing

industry and to the large number of vessels from distant points which assemble on the fishing grounds off No Man's Land. It would also meet the needs of both local and general yachting interests for a harbor at the eastern end of Vineyard Sound. The local and general benefits would be about equal in amounts. Considering the large expenditures made without Federal aid for the establishment of a stabilized entrance and a safe harbor inside, local cooperation to the extent of 25 percent of the cost of the improvement now desired should be required. Reasonable assurance of such cooperation has been given.

24. Recommendation.—It is recommended that a Federal project for the improvement of Menemsha Creek be authorized to provide for a channel 10 feet deep and 80 feet wide in the entrance between the jetties at the mouth, and thence the same depth and 200 feet wide into the anchorage basin just inside the mouth; deepening the existing basin to 10 feet throughout the wide portion and to 6 feet in the southerly end; and a channel 8 feet deep and 80 feet wide through the creek from the basin entrance to Menemsha Pond, substantially in accordance with Plan B as shown on the accompanying map, at an estimated cost of \$50,000 for new work, with \$2,700 annually for maintenance; provided local interests contribute in cash 25 percent of the first cost, but not to exceed \$12,500, furnish, free of cost to the United States, suitable spoil-disposal areas for new work and subsequent maintenance, as required, and release the United States from all claims for damage that may arise from the improvement. If authorized, allotment for the work should be provided in one sum.

J. S. Bragdon, Lieut. Col., Corps of Engineers, District Engineer.

[First endorsement]

Office, Division Engineer, North Atlantic Division, New York, N. Y., May 3, 1939.

To the Chief of Engineers, United States Army.

1. I concur generally in the views and recommendations of the

district engineer.

2. However, I believe that the question of maintenance of the jetties should be covered in the project. Inquiry from the district engineer shows that the State is prepared to make all repairs in the jetties which are necessary at this time, and the district engineer recommends that maintenance thereafter be provided for by the Federal Government. The estimated additional cost of maintenance for this purpose is

\$300 per year.

3. It is recommended that a Federal project for the improvement of Menemsha Creek be authorized to provide for a channel 10 feet deep and 80 feet wide in the entrance between the jetties at the mouth, and thence the same depth and 200 feet wide into the anchorage basin just inside the mouth; deepening the existing basin to 10 feet throughout the wide portion and to 6 feet in the southerly end; and a channel 8 feet deep and 80 feet wide through the creek from the basin entrance to Menemsha Pond, substantially in accordance with plan B as shown on the accompanying map, at an estimated cost of \$50,000 for new work, with \$3,000 annually for maintenance; provided local interests

contribute in cash 25 percent of the first cost, but not to exceed \$12,500, furnish, free of cost to the United States, suitable spoil-disposal areas for new work and subsequent maintenance, as required, release the United States from all claims for damage that may arise from the improvement, and place the jetties in first-class repair.

F. B. WILBY,
Colonel, Corps of Engineers,
Division Engineer.