

AMITE RIVER AND BAYOU MANCHAC, LA.

LETTER

FROM

THE SECRETARY OF WAR

TRANSMITTING

WITH A LETTER FROM THE CHIEF OF ENGINEERS, REPORTS ON  
PRELIMINARY EXAMINATION AND SURVEY OF AMITE RIVER  
AND BAYOU MANCHAC, LA.

DECEMBER 4, 1924.—Referred to the Committee on Rivers and Harbors and  
ordered to be printed, with two illustrations

WAR DEPARTMENT,  
Washington, December 2, 1924.

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

MY DEAR MR. SPEAKER: I am transmitting herewith a letter from  
the Chief of Engineers, United States Army, of the 1st instant, to-  
gether with reports dated August 2, 1923, by Col. E. J. Dent, Corps  
of Engineers, and May 23, 1924, with maps, by Col. C. McD. Town-  
send, United States Army, retired, on preliminary examination and  
survey, respectively, of Amite River and Bayou Manchac, La.,  
authorized by the river and harbor act approved September 22, 1922.

Sincerely yours,

JOHN W. WEEKS,  
*Secretary of War.*

WAR DEPARTMENT,  
OFFICE OF THE CHIEF OF ENGINEERS,  
Washington, December 1, 1924.

Subject: Preliminary examination and survey of Amite River and  
Bayou Manchac, La.

To: The Secretary of War.

1. There are submitted herewith, for transmission to Congress,  
reports dated August 2, 1923, by Col. E. J. Dent, Corps of Engineers,  
and May 23, 1924, by Col. C. McD. Townsend, United States Army,  
retired, on preliminary examination and survey, respectively, of

Amite River and Bayou Manchac, La., authorized by the river and harbor act approved September 22, 1922.

2. The Amite River drains an area of about 1,800 square miles in southwestern Mississippi and eastern Louisiana and flows into Lake Maurepas, which lies to the west of and is connected with Lake Pontchartrain. Bayou Manchac, formerly an outlet of the Mississippi, enters the Amite from the west about 36 miles above the mouth of the latter. The Federal project for the improvement of these streams provides for the removal of obstructions in the Amite from its mouth to a point 73 $\frac{3}{4}$  miles above its junction with Bayou Manchac, for the closure of inland chutes, and for snagging and dredging of Bayou Manchac to a point 11 $\frac{1}{4}$  miles above its mouth, together with the dredging of a turning basin in the bayou in the vicinity of Wards Creek. Local interests desire further improvement, though no specific channel dimensions are requested.

3. The district engineer reports that the commerce pertaining to these streams amounted to 38,000 tons in 1923, largely forest products. In earlier years it averaged 50,000 tons and in 1916 was 109,000 tons, declining to 19,500 tons in 1920. The products of the region, which is not well served by railroad, move principally by water to New Orleans. The existing channel from Lake Pontchartrain to the mouth of Bayou Manchac has a depth of about 7 feet, although in places that depth is available in a narrow channel only. Between the mouth of the bayou, which is obstructed by a sandy bar having a governing depth of about 5 feet, and the fixed railroad trestle 8 $\frac{1}{2}$  miles above there are depths in excess of 6 feet.

4. The district engineer considers that the existing depths are ample for the present and immediately prospective commerce, and that improvement is no longer required on the Amite River above the mouth of Bayou Manchac. He finds, however, that greater width is needed in the lower river, and recommends that the project be amended so as to provide for a channel 7 feet deep and 60 feet wide between Lake Maurepas and Port Vincent, about 4 miles below the mouth of Bayou Manchac, and for the removal of obstructions between that point and the Louisiana Railway & Navigation Co.'s bridge on the bayou, at an estimated cost of \$5,000, with \$1,200 annually for maintenance. The division engineer concurs.

5. These reports have been referred, as required by law, to the Board of Engineers for Rivers and Harbors, and attention is invited to its report herewith, agreeing with the district and division engineers.

6. After due consideration of the information presented, I concur in the views of the district and division engineers and the Board of Engineers for Rivers and Harbors. The existing project is of an indefinite order, which fails to provide adequately for the maintenance of a practicable channel. The present and prospective commerce justifies the provision by the United States of a channel of definite cross section in the lower part of the Amite River. The upper reaches of the river are apparently used to so limited an extent as not to warrant further expenditure of Federal funds, but the business pertaining to Bayou Manchac is believed to be sufficient to justify the continued removal of obstructions. I therefore report that the improvement of Amite River and Bayou Manchac, La., is deemed advisable to the extent of providing, in lieu of the existing project, for a channel 60 feet wide and 7 feet deep at mean low water, from

that depth in Lake Maurepas to Port Vincent, and for the removal of obstructions between that point and the bridge of the Louisiana Railway & Navigation Co. across Bayou Manchac, at a total estimated cost of \$5,000, with \$1,200 annually for maintenance.

7. Attention is invited to the statement of the Board of Engineers for Rivers and Harbors concerning Pass Manchac. As all the Amite River through commerce must move through Pass Manchac, it appears advisable that an examination of that waterway be made to ascertain the desirability of providing specified channel dimensions consistent with those in the Amite.

H. TAYLOR,

*Major General, Chief of Engineers.*

## REPORT OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

### SYLLABUS

The Board of Engineers for Rivers and Harbors concurs with the district and division engineers in recommending modification of the existing project so as to provide for a channel 7 feet deep at mean low water, and 60 feet wide from Lake Maurepas to Port Vincent, La., and for the removal of snags and overhanging trees between Port Vincent and the Louisiana Railway & Navigation Co.'s bridge over the bayou, at an estimated cost of \$5,000, with \$1,200 annually for maintenance.

(Title indented)

BOARD OF ENGINEERS FOR RIVERS AND HARBORS,  
*Washington, D. C., June 17, 1924.*

TO THE CHIEF OF ENGINEERS, UNITED STATES ARMY:

1. The following is in review of the reports on preliminary examination and survey of Amite River and Bayou Manchac, La., authorized by the river and harbor act approved September 22, 1922.

2. The Amite River rises in southwestern Mississippi and flows generally south and east for 170 miles into Lake Maurepas, which is connected with Lake Pontchartrain by Pass Manchac. Bayou Manchac is a tributary of the Amite, entering it from the west about 36 miles above its mouth. The river and bayou are under improvement by the Federal Government under a project providing for the removal of obstructions in the Amite from its mouth to a point 73½ miles above its junction with Bayou Manchac, for the concentration of the channel by the closure of island curves, and for snagging and dredging of Bayou Manchac at a point 11¼ miles above its mouth, together with the dredging of a turning basin of no specified dimensions in the bayou in the vicinity of Ward's Creek. Interested parties desire further improvement of the lower stretches of the Amite River and of the bayou, though no channel dimensions are specified in their request.

3. A channel about 7 feet deep is reported to be available from Lake Pontchartrain through Pass Manchac and Lake Maurepas. Pass Manchac is under improvement by the United States, but no channel dimensions are specified. At the mouth of the Amite in Lake Maurepas there is a narrow and irregular channel about 7 feet deep; thence there are ample depths in the river to the mouth of Bayou Manchac. The bayou has a sandy bar at its mouth having a gov-

erning depth of about 5 feet, and from that point for  $8\frac{1}{2}$  miles to the fixed trestle of the Louisiana Railway & Navigation Co., which is the head of navigation except for small boats or logs, there are depths of over 6 feet.

4. The district engineer states that the commerce of the river and bayou averaged 20,000 tons annually for the period 1920-1922, and amounted to 38,000 tons in 1923. Considerably larger tonnages have been carried in previous years. The commerce pertains almost entirely to the bayou below Hope Villa and to the river below the mouth of the bayou. It consists for the most part of forest products. The neighboring country is agricultural and is not well provided with means of transportation other than water. The district engineer recommends modification of the project to provide for a channel 7 feet deep and 60 feet wide in the river up to Port Vincent, about 4 miles below the mouth of Bayou Manchac, and for the removal of obstructions from that point to the mouth of the bayou and up the bayou to the Louisiana Railway & Navigation Co.'s bridge, at an estimated cost of \$5,000, with \$1,200 annually for maintenance. The division engineer concurs.

5. The purpose of the district engineer's recommendation is to remove from improvement the upper stretches of the river and bayou, and for the lower stretches to restate the present project so as to provide a channel of specified dimensions up to Port Vincent. The channel dimensions proposed in the lower Amite are but little in excess of those now obtaining, and can be attained at a very small expense. It will be a material advantage to the considerable commerce using this stream to have the size and location of the channel clearly defined, and susceptible of improvement and maintenance to full dimensions. Between Port Vincent and the railway bridge above Hope Villa the commerce is smaller, and will be adequately served by existing depths and by the removal of snags, overhanging trees and similar obstructions. The sections of the two streams above the limits proposed by the district engineer have practically no present or reasonably prospective commerce, and further work thereon is not justified. The board therefore concurs with the district and division engineers, and recommends that the project for the improvement of Amite River and Bayou Manchac, La., be modified so as to provide for a channel 7 feet deep at mean low water and 60 feet wide, from that depth in Lake Maurepas to Port Vincent, La., and for the removal of obstructions so as to make natural depths available in the river from Port Vincent to the mouth of Bayou Manchac, and in Bayou Manchac from its mouth to the bridge of the Louisiana Railway & Navigation Co.; at an estimated cost of \$5,000, with \$1,200 for annual maintenance. The entire amount of the estimated first cost should be made available in a single appropriation.

6. The board invites attention to the advisability of an examination and survey to ascertain whether the project for the improvement of Pass Manchac should not likewise be modified so as to provide for a channel of specified dimensions, appropriate to the dimensions now being recommended for the Amite River, all of whose commerce must move through the pass.

7. In compliance with law, the board reports that there are no questions of terminal facilities, waterpower, or other subjects so related to the project proposed that they may be coordinated there-

with to lessen the cost and compensate the Government for expenditures made in the interests of navigation.

For the board:

H. C. NEWCOMB,  
*Senior Member Present.*

PRELIMINARY EXAMINATION OF AMITE RIVER AND BAYOU  
MANCHAC, LA.

SYLLABUS.

The district engineer recommends that the project be amended to provide for a channel 7 feet deep and 30 feet wide to Port Vincent and for unguing from Port Vincent to the L. R. & N. bridge over Bayou Manchac. The District Engineer also recommends that a survey be made of the bar at the easterly end of Pass Manchac with a view to the improvement of that channel.

WAR DEPARTMENT,  
UNITED STATES ENGINEER OFFICE,  
*New Orleans, La., August 2, 1923.*

Subject: Preliminary examination of Amite River and Bayou  
Manchac, La.

To: The Chief of Engineers, United States Army  
(Through the Division Engineer).

1. *Authority of law.*—Section 12 of the river and harbor act of September 22, 1922, provided for a preliminary examination and survey of Amite River and Bayou Manchac, La.

A map,<sup>1</sup> marked "R. & S. 20/21," is sent herewith. This map was compiled from surveys and examinations made by the Engineer Department in 1870, 1879, 1882, 1888, 1908, 1910, and 1916. An examination was made and soundings taken in April, 1923, to ascertain present conditions. Distances are measured upstream from the mouth of the Amite River.

2. *Location and physical characteristics.*—The Amite River has its source in the southwestern part of Mississippi, about 27 miles above the Mississippi-Louisiana boundary. It flows west of south for 120 miles, then southeastward for 25 miles, and then eastward for 25 miles. Its total length is 170 miles. It empties into the western side of Lake Maurepas. The distance across Lake Maurepas from the Amite River to Pass Manchac is  $9\frac{1}{4}$  miles. Pass Manchac, which connects Lakes Maurepas and Pontchartrain, flows eastward, and is  $6\frac{1}{4}$  miles long. Its mouth is 22 miles northwest of New Orleans, La., and 34 miles west of the Rigolets Pass, which is the principal outlet of Lake Pontchartrain to the Gulf of Mexico. Coast and Geodetic Survey chart No. 1296 shows the waterways from the Amite River to the Rigolets.

3. In the lower 20 miles of its length the Amite River has the characteristics of an estuary, and its valley is a heavily timbered swamp with habitations at a few localities where the higher ground touches the stream. In the next 20 miles, the river flows through high land on which settlements and small farms alternate with stands of timber, principally second growth. French Settlement, with a popula-

<sup>1</sup>Not printed.

tion of about 1,000, is spread along 12 miles of the left bank. The upper 130 miles of the river is a swift-flowing stream with sand bottom and bluff banks 5 to 15 feet above low-water stage. There are several towns adjacent to the river in this section, the largest being Denham Springs, which has a population of about 1,500, and is 55 miles above the mouth. This section of the river is not used for boat navigation but some logging operations are carried on in its lower reaches.

4. The watershed area of the Amite River is about 1,800 square miles. The fluctuation of water surface near its mouth is about 0.8 foot due to tides, and 2 to 3 feet due to winds. Hurricanes may cause the water to rise 5 feet at the mouth. Irregular freshets cause rises in the upper reaches of 6 to 15 feet above low stage.

5. The principal tributaries are Bayou Manchac and the Comite River on the right bank, and Bayous Barbary and Cadyell and the left bank. The latter two are navigable for short distances above their mouths but are not under improvement. The Comite River is above the head of navigation on the Amite. Bayou Manchac was formerly an outlet of the Mississippi River, but was closed in 1828 by a dam near its head. It is about 19 miles long, flows eastward, and joins the Amite River at a point 36 miles above its mouth. The bayou receives some water from swamp drainage near its head. During high stages in the Amite River, the water flows up Bayou Manchac from the Amite to the swamps above Hope Villa. As the floods in the Amite recede, this water is returned through Bayou Manchac.

6. Hope Villa, about 7 miles above the mouth of the bayou, is the center of an agricultural district which has a population of about 1,000. The Louisiana Railway & Navigation Co. has a trestle across the bayou about 2 miles above Hope Villa. Above this trestle the bayou has been cleared out sufficiently to permit of logging operations. The logs are transferred to the railroad near the site of the trestle. This is also the transfer point for small shipments of hardwood lumber, which are barged from points on the Amite River. There is no other commerce on Bayou Manchac, although Hope Villa was formerly the terminus of considerable boat traffic. At Hope Villa the bayou is crossed by the main State highway connecting Baton Rouge with New Orleans.

7. The navigable depth in the Amite River is restricted to 7 feet by a bar across the mouth in Lake Maurepas. Boats drawing 7 feet or less can proceed upstream as far as Port Vincent (mile 22). From Port Vincent to the mouth of Bayou Manchac the available depth is about 7 feet. At the mouth of Bayou Manchac there is a bar having a depth of about 5 feet, and in Bayou Manchac there are depths of over 6 feet from its mouth to the turning basin at Wards Creek, 8 miles above.

8. Pass Manchac, which connects Lake Maurepas with Lake Pontchartrain, has a limiting depth of 7 feet because of bars at each end of the pass.

9. *Previous reports.*—December 17, 1842, a report of an examination of the Amite River contained estimates of improvements to cost \$1,000 and \$11,000. The report was not published and no appropriation was made.

February 27, 1880, a report of a survey recommended improvement of the river between its mouth and a point  $73\frac{1}{2}$  miles above Bayou Manchac by removing obstructions and closing island chutes, at an estimated cost of \$23,760. This report was printed as House Document No. 54, Forty-sixth Congress, second session, and also in annual report of the Chief of Engineers for 1880, page 1185. It is the basis of the existing project; \$8,000 was then appropriated and was expended for removal of obstructions in the first 17 miles above Bayou Manchac.

June 27, 1882, an examination report recommended removal of obstructions at estimated costs of \$731.25 for Bayou Manchac and \$2,718.75 for the lower Amite River. This report was printed as Senate Executive Document No. 42, Forty-seventh Congress, first session, and also in Annual Report of the Chief of Engineers for 1882, page 1414. Appropriation was not made.

December 24, 1888, a preliminary examination of Bayou Manchac, with view to opening a waterway from the Mississippi River to Mississippi Sound through the connecting lakes and passes, contained an estimate of \$3,000,000 and was reported unfavorably. The report was printed in Annual Report of the Chief of Engineers for 1889, page 1513.

March 20, 1889, a preliminary examination report was unfavorable regarding the upper Amite River. It contained an estimate of \$5,000 for removing obstructions from the river between Bayou Manchac and a point 5 miles farther upstream, and recommended that the river higher up was unworthy of improvement. No appropriation was made.

December 27, 1910, a preliminary examination of the Amite River up to Liberty, Miss., was reported unfavorably. This report was printed as House Document No. 267, Sixty-third Congress, first session.

January 22, 1916, a reexamination report was made on the Amite River and Bayou Manchac. It was printed as House Document No. 1111, Sixty-fourth Congress, first session. A definite statement of the existing project was recommended, but no action was taken on this recommendation.

10. *Previous projects.*—None.

11. *Existing project.*—This provides for the removal of obstructions in the Amite River from its mouth to  $73\frac{1}{2}$  miles above the mouth of Bayou Manchac, a total distance of 110 miles, and for the concentration of the channel by closure of island chutes. It provides for the removal of snags and shoals in Bayou Manchac from its mouth to  $11\frac{1}{2}$  miles above, and for dredging a turning basin at or near Wards Creek, no depth or width being specified.

12. In 1881-1883 the Amite River was partially cleared of obstructions from Bayou Manchac to a point 17 miles above. In 1884 snags were removed from the 5 miles of river immediately below Bayou Manchac, and this work was repeated in 1885 and 1887. In 1889 a large number of obstructions were removed from Bayou Manchac and the Amite River. In 1891-1893 snags were removed from the bayou and the river down to Port Vincent. In 1895 a turning basin was dredged in Bayou Manchac at Wards Creek, and obstructions were removed from the bayou and river down to  $6\frac{1}{2}$  miles above its mouth. In 1900 sand bars at the mouths of Amite River and Bayou

Manchac were dredged, the bayou was dredged near Hope Villa, and snags were removed from the bayou and from 6 miles of the river above Bayou Manchac. In 1906 bars at the mouths of the river and the bayou were dredged. In 1910-1913 snags were removed from the bayou and the river from its mouth to 3 miles above Bayou Manchac. In 1915-16 the bar at the mouth of Bayou Manchac was dredged and snags were removed from the bayou and the river down to Port Vincent. In 1918 the bar at the mouth of Bayou Manchac was dredged and obstructions were removed from the bayou and river. In 1922 the bar at the mouth of Bayou Manchac was dredged, Bayou Coliyell was dredged near its mouth, and snags were removed from the Amite River. To the end of the fiscal year 1922 the total expenditures on the Amite River and its tributaries were \$74,092.30, of which \$24,900.82 was for new work and \$49,191.54 was for maintenance.

13. *Detailed description.*—For about one-half mile off the mouth of the Amite River the bottom of Lake Maurepas is largely composed of shell. The channel through the bar is about 100 feet wide and has a depth of 7 feet at mean low water. This channel is crooked and there are many snags adjacent to it.

*Mile 0 to mile 1.*—The average width is 200 feet and the central depth is 22 to 29 feet at mean low water. At mile 1 the right bank has worn down so that there is a shallow connection to Lake Maurepas near the lighthouse. There is a tendency for the river to scour through and form a new mouth at this point. A cut-off about 1,000 feet in length would join the river above the lighthouse with the channel through the bar.

*Mile 1 to mile 1 $\frac{1}{4}$ .*—The average width is 225 feet and the central depth is 20 to 40 feet. At mile 1 $\frac{1}{4}$  there is a small bayou and an old tramroad on the right bank. Carthage landing, on the left bank at mile 3 $\frac{1}{2}$ , is the first high ground. Cho settlement is on high ground on the left bank at mile 6 $\frac{1}{2}$ . The first high ground on the right bank is at mile 8 $\frac{1}{4}$ . Maurepas settlement is on high ground on the right bank at mile 10. Tiger Bluff Landing is on the right bank at mile 11.

*Mile 12 $\frac{1}{2}$  to mile 16.*—The average width is 150 feet and the central depth is 18 to 40 feet. Bayou Barbary, in the left bank at mile 12 $\frac{1}{2}$ , is 50 feet wide and 9 feet deep. Bayou Jack is a small bayou in the right bank at mile 12 $\frac{3}{4}$ . Union Landing is on the left bank at mile 13 $\frac{1}{4}$ . There are very sharp bends in this section. At mile 15 $\frac{1}{4}$  the Lyon Cypress Lumber Co. has a swing truss railroad bridge with clearances of 58 feet horizontal and 12 feet vertical at mean low water.

*Mile 16 to mile 19 $\frac{1}{2}$ .*—The average width is 150 feet and the central depth is 18 to 40 feet. Whitehall settlement is on high ground on the right bank at mile 16. The confluence with Old River is in the right bank at mile 16 $\frac{1}{2}$ , and that with Bayou King George is in the left bank at mile 17 $\frac{1}{2}$ . Head of Island Landing is on the right bank at mile 19.

*Mile 19 $\frac{1}{4}$  to mile 23 $\frac{1}{2}$ .*—The average width is 150 feet and the central depth is 14 to 35 feet. The head of Old River is in the right bank at mile 19 $\frac{1}{4}$ . Bakers Landing is on the right bank at mile 19 $\frac{3}{4}$ . Head of Island post office is on the right bank at mile 20 $\frac{1}{4}$ . Bayou Pierru is in the right bank at mile 23. The head of Bayou King

George, now entirely closed, is in the left bank at mile 23 $\frac{1}{4}$ . French Settlement Landing is on the left bank at mile 23 $\frac{1}{4}$ . Blacks Bayou and Solassi's sawmill are on the right bank at mile 25 $\frac{1}{4}$ . Fultons Landing is on the left bank at mile 29.

*Mile 29 $\frac{1}{4}$  to mile 32 $\frac{1}{4}$ .*—The average width is 200 feet and the central depth is 15 to 28 feet. Bayou Colyell, in the left bank at mile 29 $\frac{1}{4}$ , is 60 feet wide and 12 feet deep, and is navigable for 1 $\frac{1}{2}$  miles above its mouth. Port Vincent is on the left bank at mile 32.

*Mile 32 $\frac{1}{4}$  to mile 35 $\frac{1}{4}$ .*—The average width is 150 feet and the central depth is 7 to 28 feet. Grays Creek is in the left bank at mile 32 $\frac{1}{4}$ , and the river makes a 100-degree bend at this junction. At Causeys landing, on the right bank at mile 34 $\frac{1}{4}$ , there is a very sharp bend and a wide flat. Lyons Landing is on the right bank at mile 35. Murphy's sawmill is on the left bank at mile 35 $\frac{1}{4}$ . Old Galvez Town is on the right bank at mile 35 $\frac{1}{4}$ .

*Mile 35 $\frac{1}{4}$  to mile 41.*—The average width is 125 feet and the central depth is 5 to 20 feet. Bayou Manchac is in the right bank at mile 35 $\frac{1}{4}$ . Bader's old sawmill is on the right bank at mile 36. Hoochiehoochie clubhouse is on the right bank at mile 39 $\frac{1}{4}$ . There are numerous snags and sand bars above mile 41.

*Bayou Manchac, mile 35 $\frac{1}{4}$  to mile 43 $\frac{1}{4}$ .*—The average width is 100 feet and the central depth is 5 to 15 feet. At the mouth of the bayou a sand bar extends about 700 feet along the left bank and makes out nearly across the channel. Above the mouth of Bayou Manchac the Amite River has the characteristics of a hill stream moving large volumes of sand along its bottom. The bar at the mouth of Bayou Manchac has been dredged on several occasions, but re-forms with the next sizeable freshet. There is no feasible means for removing this difficulty. There is an old sawmill on the right bank at mile 40 $\frac{1}{4}$ . Hope Villa settlement is on both banks at miles 42 to 42 $\frac{3}{4}$ . At this point the main highway from Baton Rouge to New Orleans crosses the bayou on a swing truss highway bridge having clearances of 55 feet horizontal and 15 feet vertical at mean low water. Wards Creek is in the left bank at mile 43 $\frac{1}{4}$ , and at this point the bayou has been widened for a turning basin.

*Mile 43 $\frac{1}{4}$  to mile 47.*—The average width is 80 feet and the central depth is 5 to 12 feet at mean low water. At mile 44 $\frac{1}{4}$  the fixed trestle of the Louisiana Railway & Navigation Co. has clearances of 15 feet horizontal and 20 feet vertical at mean low water. On the right bank at mile 44 $\frac{1}{4}$  a spur track of the Louisiana Railway & Navigation Co. is to be rebuilt for transferring logs and lumber. Many logs are floated down to this point from the upper reaches. There is an old highway bridge, fixed trestle type, at mile 44 $\frac{1}{4}$ . Several small bayous join Bayou Manchac between miles 45 and 46. Mile 47, the head of former improvement, is about 7 miles from the Mississippi River.

14. *Commerce.*—Farm and forest products are the principal commodities. Near the mouth of the river there are extensive cypress swamps from which logs, crossties, and shingles are shipped. From the hardwood forests adjacent to the river up to and above the head of navigation, logs are moved to the local sawmills and railroad connections or towed to more distant mills. Pulpwood is now towed in barges from the lower reaches of the river. From the highlands,

yams and other produce are shipped. There are indications of a revival of cotton growing.

15. At present there is one steam packet, of 60 tons net, which makes weekly trips between New Orleans and Port Vincent, 32 miles above the mouth of the Amite River. This boat handles full cargoes, and occasionally extends her trips into Bayou Colvell. Another boat of the same size makes occasional trips up the Amite River to deliver general merchandise and return with a cargo of lumber. Several schooners make frequent trips to the lower part of the river for cordwood, shingles, moss, etc.

16. Hope Villa, near the head of navigation on Bayou Manchac, is the center of a well-settled farming community. Prior to the advent of the Louisiana Railway & Navigation Co. this section was wholly dependent on water transportation, but practically all traffic is now handled by rail or highway. The only commerce on the bayou at present is the movement of logs and lumber destined for rail shipment. The lumber is barged upstream from Galvez town just below the mouth of Bayou Manchac.

17. In connection with the present activity in highway construction, arrangements are being perfected for dredging shell from the bottom of Lake Maurepas and delivering same at convenient points along the Amite River.

18. The commerce moved by way of the Amite River formerly averaged about 50,000 tons per year. In 1916 it increased to 109,117 tons, and it then decreased to 19,424 tons in 1920, 20,989 tons in 1921, and 20,103 tons in 1922. Lumber, logs, staves, pulp wood, and cordwood comprise 91 per cent of the present traffic.

19. Boats which bring in food, supplies, and general merchandise ordinarily take out full loads of local products. The movement is independent of seasonal changes and special imports, but the freshets are utilized for floating logs out of the upper river, the smaller tributaries, and the swamps.

20. The territory served by this river system is very largely dependent on it for freight transportation. Denham Springs, at which point the Baton Rouge, Hammond & Eastern Railroad crosses the river, is well above the head of navigation; and the crossing of Bayou Manchac by the Louisiana Railway & Navigation Co. Railroad is at the head of navigation on that tributary. The Lyon Cypress Lumber Co. operates a logging railroad from Garyville, on the Mississippi River, crossing the Amite River at Whitehall, but this road is not a competitor of river transportation. There are no parallel water routes, and this section of the country is at present deficient in highways suitable for trucking or hauling.

21. *Public hearing.*—A public hearing was held in the district engineer office, New Orleans, La., on June 9, 1923. Messrs J. S. Hebert and M. O. Le Bourgeois stated the importance that improvement of the stream would be to local interests. No dimensions of channel desired were given. Mr. E. L. Erickson, representing the Louisiana Highway Commission, expressed the opinion that the bridge at Hope Villa should be the head of navigation in order to avoid interference with traffic on the important highway crossing the bayou at that point.

22. *Terminal facilities.*—The terminal facilities are adequate for present needs and can be economically expanded as required. Boats

can discharge directly on the banks at all landings, and there are private warehouses at Clio, Maurepas, Union, Whitehall, Head of Island, French Settlement, Port Vincent, and Hope Villa. All loading and unloading is done by hand.

23. *Possible water power, flood prevention, land reclamation, etc.*—No water power developments require consideration. Straightening and widening certain portions of the Amite River would facilitate the drainage of adjoining lands that are now subject to overflow during lowwater freshets.

24. *Local and general benefits.*—Benefits accruing from any improvement of the waterway would be mainly local, but products originating along Amite River and Bayou Manchac would find their way into the New Orleans market and thence into the general business of the country. This river and its tributaries do not form a part of any important waterway system except as a feeder thereof.

25. *Local cooperation.*—No local cooperation appears to be practicable.

26. *Summary and conclusions.*—Vessels engaged in traffic on the Amite River and Bayou Manchac must also traverse Pass Manchac which connects Lake Pontchartrain with Lake Maurepas. Throughout the investigation it was evident that the channel through the bar of Pass Manchac was the most serious impediment to navigation below Port Vincent.

There is no practicable means for maintaining a reliable channel through the bar at the mouth of Bayou Manchac and traffic between Bayou Manchac and points on the Amite River will necessarily be limited to shallow draft boats, and barges, and to timber towing.

From Port Vincent (mile 27) to New Orleans the existing channel is reasonably adequate except for the channel at the Lake Pontchartrain end of Pass Manchac. This channel should be radically improved as it is used by numerous boats engaged in traffic between New Orleans and Lake Maurepas and tributary streams.

The Amite River to the mouth of Bayou Manchac and Bayou Manchac to the Louisiana Railway & Navigation bridge should be kept free of snags in order to make the natural depths available. In addition to this a channel 50 feet wide and 7 feet deep at low water should be maintained as far as Port Vincent, even though occasional shoals should require removal by dredging.

27. *Recommendations.*—It is recommended that the project for the Amite River and Bayou Manchac be amended to provide for the maintenance of a channel 50 feet wide and 7 feet deep from Port Vincent to the 7-foot depth in Lake Maurepas and for snagging from the Louisiana Railway & Navigation bridge over Bayou Manchac to Port Vincent on the Amite River, with a view to making natural depths available.

It is further recommended that a survey of the bar at the Lake Pontchartrain end of Pass Manchac be ordered with a view to the adoption of a suitable project for this channel.

E. J. DEWE,  
District Engineer.

[First Indorsement]

OFFICE DIVISION ENGINEER, GULF DIVISION,  
New Orleans, La., August 6, 1923.

To the CHIEF OF ENGINEERS, UNITED STATES ARMY.

1. In view of the facts set forth in this report, the improvement is believed desirable, provided it can be obtained at reasonable cost.

2. In order to ascertain the cost, it is recommended that a survey be made.

G. M. HOFFMAN,  
Division Engineer.

[Third Indorsement]

BOARD OF ENGINEERS FOR RIVERS AND HARBORS,  
Washington, D. C., October 23, 1923.

To the CHIEF OF ENGINEERS, UNITED STATES ARMY.

1. For the reasons stated herein, the board recommends a survey of Amite River and Bayou Manchac to determine the extent and advisability of the improvement. It does not however consider that a survey of Pass Manchac can be made under the act of September 22, 1922.

2. The recommendation of the district engineer apparently implies the abandonment of that part of the present project covering snagging and clearing on Bayou Manchac from the Louisiana Railway & Navigation Co.'s bridge to mile 11  $\frac{1}{4}$ , and on the Amite River above the mouth of Bayou Manchac. As a basis for recommending such abandonment a somewhat more detailed discussion is desirable of the lack of utility of these sections, and should be incorporated in the report of survey.

For the board:

H. TAYLOR,  
Senior Member of the Board.

## SURVEY OF AMITE RIVER AND BAYOU MANCHAC, LA.

## SYLLABUS

The district engineer recommends the further maintenance of this waterway and a revision of the project so as to eliminate unused portions of the Amite River and Bayou Manchac. The estimated annual maintenance is \$1,200.

WAR DEPARTMENT,  
UNITED STATES ENGINEER OFFICE,  
New Orleans, La., May 23, 1924.

Subject: Survey of Amite River and Bayou Manchac, La.

To: The Chief of Engineers, United States Army  
(Through the Division Engineer).1. *Authority of law.*—Section 12 of the river and harbor act of September 22, 1922, contained an item which provided for a preliminary examination and survey of Amite River and Bayou Manchac, La.2. *Examination and surveys.*—The preliminary examination report was submitted on August 2, 1923. A survey was authorized by

department letter<sup>1</sup> dated November 8, 1923. The lower 2 miles of the Amite River and the bar at its mouth were surveyed during November, 1923, and February, 1924. An examination was made of the Amite River from its mouth to Bayou Manchac, and of Bayou Manchac from its mouth to mile 44 $\frac{1}{2}$  during February, 1924. Two maps, R. & S. 20/22 and 20/22a, are submitted herewith.

3. *Amite River from the mouth of Bayou Manchac to Liberty, Miss., and Bayou Manchac from the Louisiana Railway & Navigation Co.'s bridge to the head of the project.*—The existing project provides for the removal of obstructions in the Amite River, from the mouth of Bayou Manchac upstream for a distance of 73 $\frac{1}{2}$  miles to the vicinity of Liberty, Miss. This portion of the stream is only used to a very limited extent in its lower reaches for the rafting of timber. The existing project provides for the improvement of Bayou Manchac for 11 $\frac{1}{4}$  miles above its junction with the Amite River. The Louisiana Railway & Navigation Co. has built a fixed span bridge 3 $\frac{1}{2}$  miles above the junction of the two streams, and the portion of the bayou above this bridge is only used for the rafting of timber.

4. *Commerce.*—During the calendar year 1923 there was a commerce of 38,000 tons. The increase over the past years, the commerce having recently averaged about 20,000 tons per year, was in materials for local highway construction and in pulp wood. There are indications of a revival of cotton growing, which formerly was a leading industry in the territory served by this waterway.

5. *Snags and overhanging trees.*—The examination of the waterway from the mouth of the Amite River to the Louisiana Railway & Navigation Co.'s bridge across Bayou Manchac showed snags and overhanging trees throughout its length. The removal of these obstructions is contemplated at an estimated cost of \$5,000.

6. *Bar channel.*—The detailed survey of the bar at the mouth of the Amite River shows a narrow 7-foot channel. This channel can accommodate boats of approximately the same dimensions as those that can use Pass Manchac under existing conditions. It connects deep water in Lake Maurepas with depths of 8 feet or more in the Amite River to Port Vincent at mile 32.

7. *Maintenance.*—It is estimated that the annual maintenance of the Amite River and Bayou Manchac would cost as follows:

Removing snags and overhanging trees every three years.....	\$3,000
Average cost per year.....	1,000
Supervision and contingents.....	200
<b>Total.....</b>	<b>1,200</b>

8. *Recommendations.*—The waterway is considered worthy of continued maintenance. It is suggested that the project be restated as follows: Improving Amite River and Bayou Manchac, La., by dredging and removing obstructions to provide a continuous channel 7 feet deep below mean Gulf level and 60 feet wide on the bottom, from Lake Maurepas to Port Vincent, La., and by removing obstructions so as to make natural depths available from Port Vincent to the Louisiana Railway & Navigation Co.'s bridge at an estimated cost of \$5,000 and an annual maintenance of \$1,200.

9. Should the improvement be authorized under a revised project, it is recommended that the estimated cost of \$5,000 be provided in a single appropriation, as the work can be most economically executed in a single working season.

C. McD. TOWNSEND,  
*District Engineer.*

(First Indorsement)

OFFICE OF DIVISION ENGINEER, GULF DIVISION,  
*New Orleans, La., May 29, 1924.*

To the CHIEF OF ENGINEERS, UNITED STATES ARMY.

1. Concurring in the views and recommendations of the district engineer.

G. M. HOFFMAN,  
*Division Engineer.*

○