

LOUISIANA-TEXAS (LA-TEX) INTRACOASTAL WATERWAY
(Gulf Intracoastal Waterway)
Port Isabel ^{v/c}
Cameron County
Texas

HAER No. TX-24

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PHOTOGRAPH AND DESCRIPTIVE DATA
WRITTEN HISTORICAL NARRATIVE

HISTORIC AMERICAN ENGINEERING RECORD
Rocky Mountain Regional Office
National Park Service
P.O. Box 25287
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HISTORIC AMERICAN ENGINEERING RECORD
LOUISIANA-TEXAS (LA-TEX) INTRACOASTAL WATERWAY
(Gulf Intracoastal Waterway)
NEW ORLEANS, LOUISIANA TO PORT ISABEL, TEXAS

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(Note: The former Louisiana-Texas (La-Tex) Intracoastal Waterway extends between Port Isabel, Texas and New Orleans, Louisiana, and is part of the current Gulf Intracoastal Waterway. However, for shelving purposes at the Library of Congress, Port Isabel, Cameron County, Texas, was selected as the official location. Also see HABS No. TX-3404)

IDENTIFICATION INFORMATION

Location:

Extending along the Gulf Coast from Port Isabel, Cameron County, Texas to New Orleans, Plaquemine Parish, Louisiana. At New Orleans the waterway terminates west of the Mississippi River and then is connected to the river by two extension channels, the Harvey Cut-Off and the Alternate Channel. At Port Isabel, Texas, the waterway terminates in the lower Laguna Madre with additional channels, the Cut-Off Channel and the Brownsville Ship Channel, extending navigation to the Port of Brownsville (Figure 1).

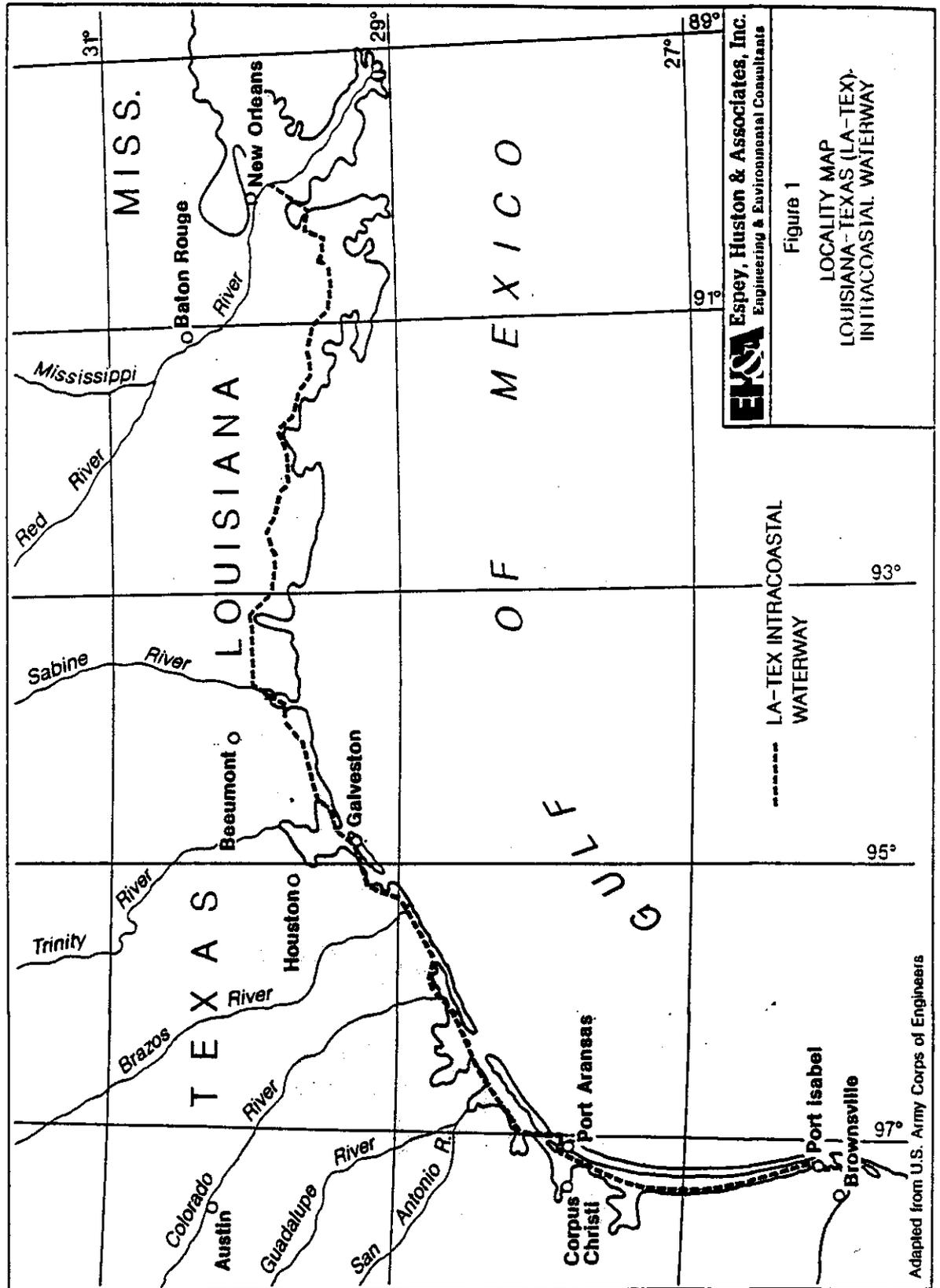
Historic and Current Use Data:

The Louisiana-Texas (La-Tex) Intracoastal Waterway was designed and constructed for use as an inland waterway for all types of navigation. The waterway was constructed in multiple segments, beginning east of Galveston Bay and concluding in the Laguna Madre. Since completion of the first major segment between Galveston Bay and the Brazos River, portions of the waterway have been used continually for navigation of civilian, commercial and military vessels requiring a passageway sheltered from the navigational hazards of the open gulf. Since completion of the entire waterway in 1949, the navigable channel has been progressively widened and deepened along its entire length to facilitate passage of larger, modern vessels. The La-Tex Intracoastal Waterway currently is part of the greater Gulf Intracoastal Waterway that extends from Florida to Texas.

Significance Statement:

Originally envisioned by the United States Congress and the U. S. Army Corps of Engineers in the early nineteenth century as a component of a nationwide system of navigable inland waterways, the La-Tex Intracoastal Waterway ultimately required more than seven decades of planning and development efforts to achieve completion. Beginning with congressional authorization in 1873 and finally constructed in 1949, the La-Tex Intracoastal Waterway has since provided reliable and safe navigation for all types of commercial, civilian and military vessels from the Mississippi River near New Orleans to Port Isabel, Texas near the Rio Grande. Today

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the former La-Tex Intracoastal Waterway, now a part of the greater Gulf Intracoastal Waterway, continues to be a vital component of the Gulf Coast regional economy and is being recognized as one of the Corps of Engineers' and the nation's remarkable engineering feats of the twentieth century.

HISTORICAL INFORMATION

The development of the La-Tex Intracoastal Waterway between New Orleans, Louisiana and Brownsville, Texas came about as an integral aspect of the U. S. Army Corps of Engineers' (COE) long-standing mission to develop a nationwide system of navigable inland waterways. Those goals extend back in time to the COE's very beginnings in the realm of civil works. In 1826, the foundation for a national inland navigation channel had been laid when the COE was directed to determine a likely trans-Florida route between the Atlantic and the Gulf of Mexico. After examining the difficulties of such a project, the COE viewed an alternative route between Florida and Louisiana as more feasible¹.

Although the COE planned a route in 1829 that largely predicted the eventual route of the modern Gulf Intracoastal Waterway, plans were first envisioned for the La-Tex Intracoastal Waterway Project with Congress' 1873 authorization of \$20,000 for a canal route survey between Donaldsonville, Louisiana (on the Mississippi River) and the Rio Grande River in Texas. Acting under orders from Captain (later Major) Charles W. Howell, Chief Engineer for the New Orleans District, Assistant Engineer James S. Polhemus made the first survey of the route - a distance of fifty miles between East Galveston Bay and Sabine Lake in extreme eastern Texas - between January and April 1873. Howell's directive to Polhemus and the two other lead engineers for the Mississippi River to the Rio Grande survey was "to utilize the navigable bayous, lakes, bays, and sounds or lagoons, near the coast, and make the cuts connecting them along the shortest lines available" (Alperin 1977: 153).

The engineers in charge of the two segments of the survey east of the Sabine River were J.A. Hayward, whose area was from the Mississippi westward, and H.C. Ripley, whose survey area extended from the Sabine River eastward. Polhemus and his crew surveyed the remainder of the Texas coastline from Galveston Bay to the Rio Grande (243 miles) between November 1873 and August 1874, while Hayward and Ripley surveyed the eastern portions of the route. The survey teams pushed through extensive swamp lands and wide and shallow bays. Several stretches encountered along the Texas segment had been altered earlier for commercial traffic.

¹ Most of the information provided in this historic context has been derived and adapted from Lynn M. Alperin's detailed historical studies of the Galveston District COE and its continuing responsibility for navigable waterways in the state. For a much greater level of detail about this and other accomplishments of the Galveston District COE, the reader is referred to *Custodians of the Coast: History of the United States Army Engineers at Galveston* (Alperin 1977) and *History of the Gulf Intracoastal Waterway* (Alperin 1983).

Howell's report of the survey, dated 1875, included the first plan for an inland navigation waterway beginning near the Mississippi and terminating at the Rio Grande. The total route stretched over 725 miles (Alperin 1983). Over the next 30 years, the only improvements actually made to inland navigation were conducted along an isolated stretch of coastline several hundred miles west of the Mississippi.

The first segment of the canal improved by the federal government was located in West Galveston Bay, Texas where an existing channel, dredged by the State of Texas across obstructing reefs in 1859, was deteriorating drastically due to damage caused by several intense tropical storms. In 1892 Congress authorized a dredging project to enlarge and straighten the existing channel which would terminate at Christmas Point in Oyster Bay. In January, 1893, dredging operations completed the improvements to a depth of 3-3 1/2 feet and width of 100-200 feet (Alperin 1983). The COE's subsequent purchase of the Galveston and Brazos Navigation Company's nearby canal in 1902 facilitated development of a continuous federally-sponsored channel between West Galveston Bay and the Brazos River (Alperin 1983).

While various small canal projects were completed in Texas during the late nineteenth century, the Howell's 1875 survey report was shelved for thirty years until 1905 when Major (later Lieutenant General) Edgar Jadwin reviewed Howell's prior report and recommendations. Amid growing public interest and economic support for a nationwide system of inland waterways, Jadwin adopted much of Howell's earlier plan and went on to propose two additional surveys west and south of Galveston Bay - one from Aransas Pass through Turtle Cove to Corpus Christi, and a second, from Aransas Pass to and up the Guadalupe River. Jadwin's assessments of potential commerce reflected the COE's concerns regarding regional industrial growth, particularly with regard to the evolving petroleum industry in Texas and Louisiana. Jadwin's 1905-1906 recommendations resulted, by 1909, in construction of channels measuring 5-x-40 feet extending from Corpus Christi to Aransas Pass, from Aransas Pass to Pass Cavallo, and from the Brazos River to Galveston Bay.

In 1908 the COE re-examined Jadwin's report and in their conclusion, Lieutenant Colonel (later Major General) Lansing H. Beach, Gulf Division Engineer, made recommendations favoring development of the unimproved segment between the Brazos River and Matagorda Bay. Two years later (1910), Congress authorized the improvement of this segment, consequently paving the way for an uninterrupted channel from Galveston to Corpus Christi. Additional legislation authorized a tributary channel to reach up the Guadalupe River into Victoria (Alperin 1983).

Jadwin had further advised in 1905 that the southwestern segment from Corpus Christi to Port Isabel be reconsidered at a future date (Alperin 1977). Although the Rivers and Harbors Act of 1909 provided for further surveys of a continuous navigation canal from Boston to the Rio Grande, as of 1924 the Federal Government had no comprehensive plan to complete the proposed waterway. Federal inaction prompted the Intrastate Inland Waterway League, composed of Texas industrialists, to prepare for a strike. The League feared that inaction was stifling the potential for further economic development in the state (Alperin 1983).

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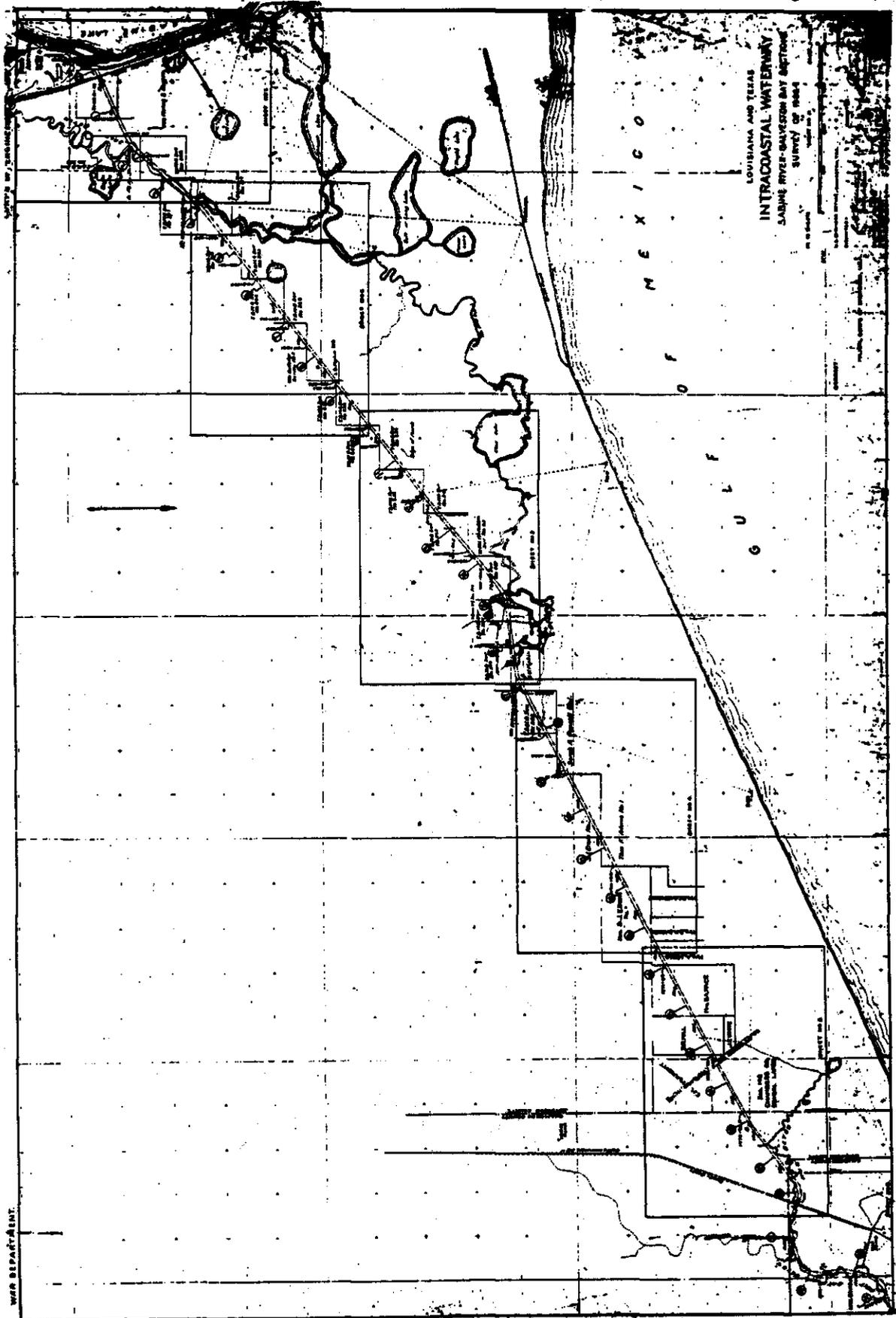
The Intrastate Inland Waterway League had been organized in 1905 by Clarence S.E. Holland, a banker and president of the Business Men's Association of Victoria, Texas. A south Texas newspaperman, Roy Miller, spearheaded the league's new program which promoted the intracoastal canal's success through government lobbying and obtaining the necessary rights-of-way. Its goals were aimed at constructing a consolidated system of navigable inland waters extending from the Great Lakes, through the Mississippi Valley, and along the Louisiana and Texas coastlines. Eventually, the league grew into the Intracoastal Waterway League of Louisiana and Texas, renamed the Intracoastal Canal Association of Louisiana and Texas, and finally developed into the Gulf Intracoastal Canal Association (Alperin 1977).

Through the efforts of Miller, the league obtained a modest amount of success in selling the intracoastal waterway to local interests and Congress by focusing on the growth of industrial development along the Gulf coastline. In 1923 members of the league (now renamed the Intracoastal Canal Association of Louisiana and Texas) retained Major General George W. Goethals to study the commercial potential of a continuous canal through Louisiana and Texas. Goethals report, submitted on 27 November 1923, estimated that a combined Texas-Louisiana intracoastal canal would carry between five and seven million tons annually (Alperin 1983). He also estimated that these figures would increase to more than 12 million tons with the maintenance and completion of the eastern and Atlantic segments (Alperin 1983).

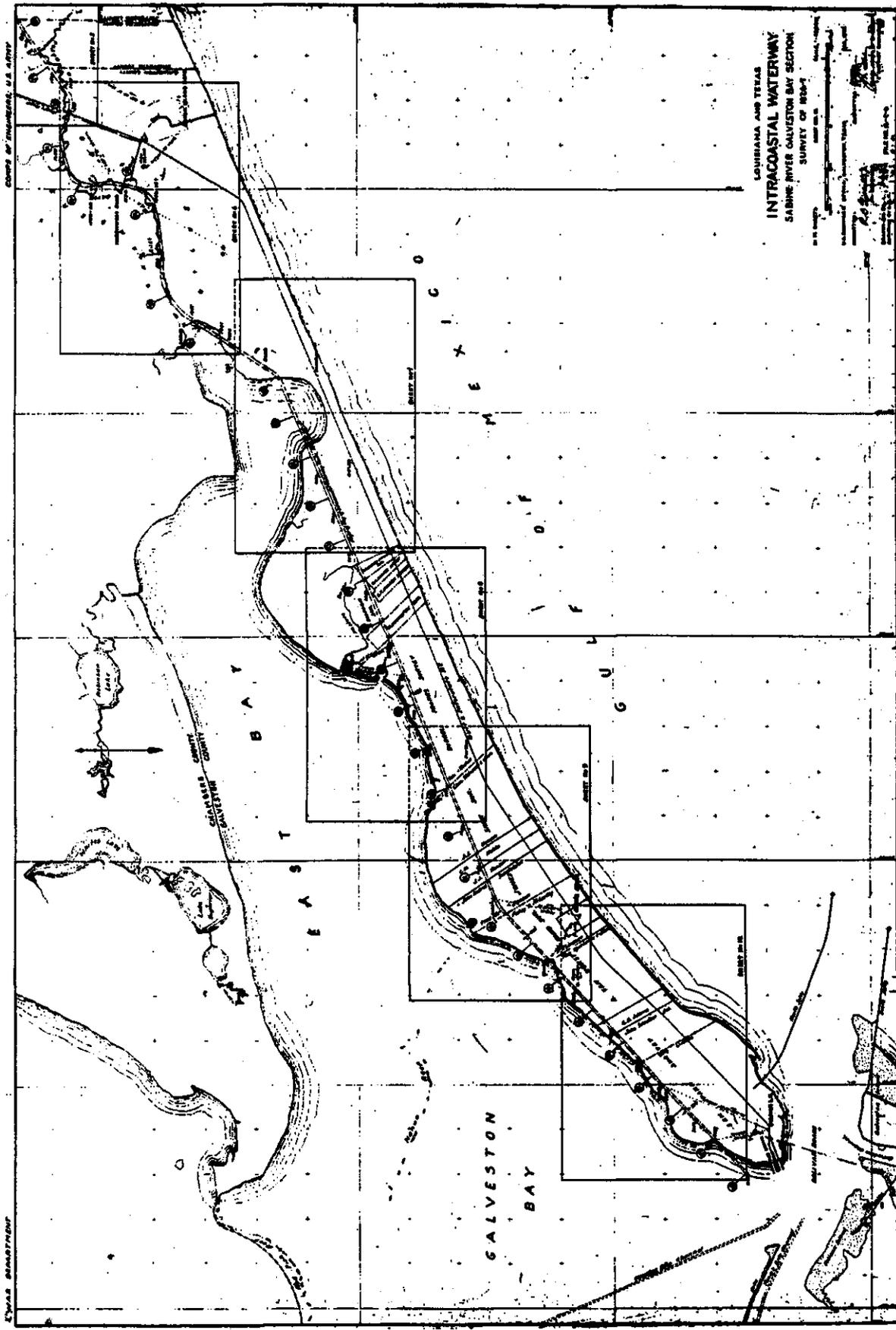
On 3 March 1923, the Rivers and Harbors Act authorized the re-examination and survey of the intracoastal waterway from the Mississippi River, at or near New Orleans, Louisiana, to Corpus Christi, Texas. In June, Gulf Division Engineer George M. Hoffman departed from the conventional wisdom to dredge through existing open bays, and recommended dredging a landlocked channel, running along and inside the existing shoreline. Hoffman defended his proposal stating that although a landlocked route would require more extensive excavation, it would ultimately be less costly to maintain than routes exposed to extreme weather and high energy shoreline processes (i.e., currents, tidal deposition, etc.). His recommendations eventually led to the completion of a 9-foot channel which terminated at Corpus Christi in 1942 (Alperin 1977).

The 1925 Rivers and Harbors Act authorized preliminary examination and survey for an intracoastal canal running east of New Orleans to the Apalachicola River in Florida, and from New Orleans to Corpus Christi. The COE determined that the initial intracoastal canal project, connecting the waterway from New Orleans to Corpus Christi, would cost an estimated \$16 million. The Sabine River to Galveston Bay segment of the La-Tex Intracoastal Waterway (figures 2 through 7), itself a component of the New Orleans to Corpus Christi portion of the La-Tex Intracoastal Waterway, was authorized to be 9 feet deep and 100 feet wide - thus keeping with the dimensions used by the COE for other major navigational channels along the Mississippi

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