

BEFORE THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

WAR DEPARTMENT

In the matter of appeal of THE CITY OF
SAN DIEGO in the STATE OF CALIFORNIA,
from the unfavorable report of the BOARD
OF ENGINEERS FOR RIVERS AND HARBORS,
dated December 16, 1940, on Flood Control
improvements on the San Diego River, in
San Diego County, State of California.

5021-18

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FILED JAN 17 1941
FRED W. SICK, City Clerk

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APPEAL BRIEF

for

APPELLANT
-----oOo-----

The City of San Diego

By

Walter W. Cooper
City Manager

Dated: January 14, 1941
San Diego, California

Filed

JAN 21 1941

COPY

Walter W. Cooper
City Manager

THE CITY OF SAN DIEGO

San Diego, California

January 14, 1941

The Board of Engineers for Rivers and Harbors
No. 2 New York Avenue N. W.
Washington, D. C.

Ref. 5021/18

Gentlemen:

Transmitted herewith is the brief of City of San Diego, California, respectfully requesting reconsideration by your honorable board of the survey report on flood control San Diego River, California, dated April 10, 1940, prepared by Edwin C. Kelton, Lt. Col. Corps of Engineers, United States Engineer Office, Los Angeles, California.

Your advice dated December 16, 1940, inviting submission of statements and arguments bearing upon the necessity for the improvement states that your honorable board is not convinced of the advisability of the United States undertaking the improvement recommended by the Division Engineer.

This brief is respectfully submitted for the purpose of showing to your honorable board the changed and changing conditions within the area to be protected by the proposed improvement which, in the opinion of City of San Diego, warrant reconsideration of the said report by your board, and the conclusion by your board that such improvement is advisable and essential.

As pointed out in the brief submitted herewith there has been, and is, a continuing extensive development within the area to be protected. The property subject to damage by flood is almost all government owned or financed and is employed in essential National Defense activities. The disruption of industry, trade and commerce which would follow flood conditions is of more than citywide importance as it would affect vital lines of communication between governmental defense activities located in San Diego and major points of contact and supply lying to the north.

Your honorable board is respectfully requested to reconsider your decision of December 16, 1940, and upon such reconsideration make a finding that the improvements recommended by the Division Engineer are advisable and essential, and that they should therefore be undertaken immediately.

If further hearing in this matter is required it is respectfully requested that your honorable board set the same for hearing at an early date in the City of San Diego in order that the City may introduce competent evidence in support of the brief filed herewith. Such evidence will be directed particularly to changing or changed conditions within the area to be protected. Such evidence, it is respectfully submitted, will furnish convincing proof of the necessity for the proposed improvement in the protection of the property of the United States Government and for the avoidance of disruption of National Defense activities.

Respectfully submitted

Walter W. Cooper

Walter W. Cooper
City Manager

WVC/L

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EXPLANATION OF EXHIBITS

- Exhibit "A" - - - - - Aerial Photograph of Flood Territory
- Unit 1: - - - - - New Consolidated Aircraft Corp. Parts Plant
- Unit 2: - - - - - United States Navy Housing Project
- Unit 3: - - - - - United States Marine Corp Base
- Unit 4: - - - - - Speer's Field
- Unit 5: - - - - - Ryan's School of Aeronautics, Auxiliary Flying Field
- Unit 6: - - - - - Consolidated Aircraft Corp., Manufacturing and Assembly Plant
- Unit 7: - - - - - United States Naval Training Station
- Unit 8: - - - - - Ryan Aeronautical Company
- Unit 9: - - - - - Solar Aircraft Company
- Unit 10:- - - - - U. S. Coast Guard Station

Explanation of Exhibits (Cont.)

Exhibit "B"	- - - - -	Morena Boulevard Bridge During 1927 Flood
Exhibit "C-1"	- - - - -	Destruction Concrete Bridge, Old Town, 1916 Flood
" "C-2"	- - - - -	Santa Fe Railroad Bridge, 1916 Flood
" "C-3"	- - - - -	Government Dike the day After the 1916 Flood
" "C-4"	- - - - -	La Jolla Track, 1916 Flood
" "C-5"	- - - - -	Concrete Bridge, Old Town, 1916 Flood
Exhibit "D"	- - - - -	Photostatic Copy of Coast Survey Map Showing Old Bed of San Diego River - 1825-1876

BEFORE THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

In the matter of appeal of THE CITY OF
SAN DIEGO in the STATE OF CALIFORNIA,
from the unfavorable report of the BOARD
OF ENGINEERS for RIVERS AND HARBORS,
datéd December 16, 1940, on Flood Control
improvements on the San Diego River, in
San Diego County, State of California

5C21-18

Comes now the Appellant above named, and in support of its appeal from an unfavorable report submitted by the Board of Engineers for Rivers and Harbors dated December 16, 1940, concerning the flood waters of the San Diego River and its watershed, respectfully petition your Honorable Board to reconsider and modify its decision in said report dated December 16, 1940; and/or, if desired, your Honorable Board delegate a representative to visit San Diego, California, and confer with Appellant, and if necessary hold a further hearing, in the matter, at San Diego, California, to afford said Appellant the opportunity of offering in evidence probative proof of the new and changed conditions, herein alleged, in support of the extreme necessity for Flood Control improvements on San Diego River, in the County of San Diego, State of California.

In support thereof, Appellant respectfully submits herewith the following pertinent matter.

I. SYLLABUS

Appellant respectfully urges that, pursuant to acts of Congress (Public No. 570, 74th Congress), approved May 6, 1936, etc., and (Public No. 738, 74th Congress), approved June 22, 1936, as amended, your Honorable Board approve, authorize, and cause to be constructed, Flood Control improvements on the San Diego River, in the County of San Diego, State of California, as follows:

(1) A leveed river channel 3.3 miles in length and not less than 800 feet wide, with a minimum capacity of 100,000 c.f.s., extending from about 2000 feet upstream from Morena Boulevard, to existing Mission Boulevard bridge near the ocean, and continue this channel by two stone jetties extending approximately 1500 feet into the ocean; and (2) construct new bridges at Mission Boulevard and Ingraham Streets, extend the Pacific Boulevard, Santa Fe Railroad, and Morena Boulevard bridges; and (3) relocate utilities and side-drainage if necessary; and (4) dredge a separate navigation entrance and tidal channel through from the ocean to the Ingraham Causeway bridge in Mission Bay, to 10 feet below mean lower low water, and protect the Bay entrance channel by construction of a third stone jetty approximately 1500 feet long.

Appellant to furnish assurances satisfactory to the Secretary of War that they will provide such local cooperation as may be required, and will improve, to the fullest extent practicable, the Mission Bay area at a rate of progress that will result in the proper development of the Mission Bay area within a reasonable period of time.

Appellant respectfully hold, that the said Flood Control improvements on the San Diego River, in the County of San Diego, State of California, recommended herein, are vital to, and necessary for, the safe protection and progress of the Federal Government's Rearmament Program in this important National Defense Area.

NOW THEREFORE, Appellant respectfully submits the following factual data, together with reasonable and logical argument, in support thereof.

II. SAN DIEGO RIVER FLOOD BASIN

A. AREA: The Flood Control project involved in the instant matter, deals with the drainage area of the San Diego River, located in San Diego County, California, which embraces a territory of approximately 435 square miles. The said river rises on the table-land in the Cuyamaca Mountains in the vicinity of Santa Ysabel, flowing southwesterly from its headwaters for a distance of some 52 miles, entering the ocean through Mission Bay in the City of San Diego.

The natural drainage territory of the San Diego River is subdivided as follows: Approximately 207 square miles of mountain area, about 223 miles of terrace and valley area, and at least 5 square miles of coastal area. The elevation through the drainage basin ranges from 20 feet to 1200 feet along the valleys and adjacent upland territories, rising to 6500 feet in the mountain areas. From the upper headwaters to Lakeside, the average fall per miles in the river channel is in the neighborhood of 125 feet; from Lakeside to the down-stream end of Mission Gorge the fall per mile is 25 feet, and from that point to Mission Bay the fall is approximately 8 feet per mile, leveling off at the mouth where it enters Mission Bay.

The great danger from flood ravage in this drainage area lies in the fact that approximately 435 square miles of drainage territory, involving a watershed ranging from an elevation of 6500 feet to sea-level accumulates its maximum intensity near the mouth of the San Diego River where it passes through the sea-ward exit from Mission Valley. The volume of a peak discharge at this point is only partially controlled by a government dike constructed during 1876, which was strengthened in 1917 and again in 1933. Subsequent to these improvements the lowland area lying between the southerly shore line of Mission Bay and the northerly shore line of San Diego Bay, has and is still undergoing vast improvements. In this vital area are now located Military, Naval and National Defense Units of inestimable value, all of which are directly exposed to a potential flood diaster.

B. FLOOD HISTORY: In 1825, a flood of great intensity changed the course of the San Diego River from its former natural outlet into Mission Bay, and cut across the lowlands, between Mission Bay and San Diego Bay, creating a new outlet into San Diego Bay. The flood channel thus created, resulted in the deposit of sufficient silt to reduce the depth of the San Diego Bay to such an extent that on March 3, 1875, Congress authorized the construction of a dike and the diversion of the river outlet back to its former outlet into Mission Bay.

There is attached here a photostatic copy of a Coast Survey Map dated 1859 (Exhibit "D"), which clearly shows the old bed of the San Diego River as it existed from 1825 to 1876. This Exhibit indicates the important area between the existing government dike and San Diego Bay which is now exposed to serious flood damage.

The flood of 1862 was likewise of great intensity, innundating the

bifurcated delta-cone below the mouth of the river, discharging flood waters into both Mission and San Diego Bays. Uncontradicted testimony of many old inhabitants of Old Town, San Diego, confirms the fact that the height of the flood waters at the mouth of Mission Valley reached, and left water marks, 10 feet above the ground level on the trunk of the Old Palm Tree which was planted there in 1769. This high water indication would place the flood peak level at this point to more than 20 feet above mean sea-level.

The magnitude of the flood during the season of 1883-4 reached a volume which was one-third greater than the measured flood of 1916. Under present conditions, a flood of this intensity would inundate the entire delta-plane from the lower end of Mission Valley, in the vicinity of the Old San Diego Presidio, to the mouth of Mission Bay and to Dutch Flats in San Diego Bay, which embraces an area representing a virtual bottle-neck to north and south transportation, and Military, Naval and National Defense Units.

Appellant emphasizes the importance of the three floods hereinbefore cited, because they were all of greater intensity than the flood of 1916 and would in the event of a re-occurrence, present a major disaster to the National Defense Program in this vitally important Military, and Naval center.

The current century saw two destructive floods in the San Diego River Basin. The most destructive flood during this period occurred in 1916 when the United States Geological Survey estimated the crest flow at 75,000 c.f.s., which was of less intensity than the great floods of the nineteenth century.

The flood of 1927 developed, according to the United States Geological Survey, an estimated crest flow of 40,000 c.f.s. and was, therefore, considerably less in volume than either the flood of 1916 or the three great floods which occurred during the nineteenth century.

A fairly accurate idea of the intensity of the 1927 flood is manifested by Exhibit "B", which shows the situation at the Morena Boulevard bridge, near the mouth of the San Diego River, where it flows towards Mission Bay. This Exhibit offers conclusive evidence of the flood situation at this point, with a crest flow of 40,000 c.f.s.

Exhibits "C-1, C-2, C-3, C-4, and C-5" show the result of the 1916 flood some time after the crest flow had been reached. Exhibit "C-1" shows clearly the destruction of the concrete bridge at Old Town which spanned the mouth of the San Diego River approximately 20 feet upstream from the Morena Boulevard bridge appearing in Exhibit "B".

It is ^{not} difficult to visualize the ravages of the 1916 flood which attained an estimated crest flow of 75,000 c.f.s.; nor is it difficult to visualize what the situation actually was during the three major floods of the nineteenth century, all of which were alleged to have been of greater intensity than the flood of 1916.

Appellant respectfully avers, that there is insufficient historical data upon which to base well-founded calculations and/or predictions of century flood cycles. There is, however, ample evidence upon which to found a reasonably safe conclusion that a flood control improvement project, based upon a minimum calculation of safety of 100,000 c.f.s. at the Santa Fe Railroad bridge near Old Town, presents a reasonable element of safety to the area now in danger.

C. EXISTING FLOOD CONTROL: Aside from the incidental value of Guyamaca and El Capitan water conservation reservoirs, comparatively little permanent flood control improvements have been accomplished in the San Diego River Flood Basin. Virtually the only actual flood control improvements on the San Diego River consist of a low wire-and-rock mattress bank protection north of Santee which was built on the left bank of the river by the County of San Diego, California, to prevent the stream from eroding the lands of the County Farm, and the government dike in the Mission Bay area, which was completed in 1876 at a cost of \$80,000 and subsequently raised in 1917 and last strengthened in 1933. While these improvements confined somewhat the subsequent floods, they did not lessen their volume nor disastrous effects.

To assume that the existing government dike will protect the important highway transportation arteries, and the industrial and Federal units, located in and adjacent to the vital bottle-neck area here in issue, is to jeopardize the security and progress of important National Defense Activities, in the face of historical flood records which clearly indicate the hazard involved.

D. POTENTIAL FLOOD PEAK: It is a matter of record that the approximate mean annual rainfall in the San Diego River Basin, and tributary territory thereto, ranges from approximately 10 inches on the coastal plane to approximately 40 inches in the mountainous territory; and that more than 70% of the seasonal rainfall occurs during the four months December to March, inclusive.

The flood of 1916 was the most destructive flood of the current century and is the largest flood for which specific detailed records are

available. The United States Geological Survey estimated the crest flow of the 1916 flood at their gaging station near San Diego, to be 75,000 c.f.s. It is important to note, however, that according to the best information available, the flood of 1916 was of less intensity than were any of the three great floods of the nineteenth century.

Appellant here again refers to photographic Exhibit "B", showing the actual flood condition at the Morena Boulevard bridge during the 1927 flood, which attained a crest flow of only 40,000 c.f.s. Exhibit "C-1" shows the former concrete bridge at Old Town some time after the crest flow of the 1916 flood. This bridge was located approximately 20 feet upstream from the Morena Boulevard bridge appearing in Exhibit "B". This comparison with the three major floods of the nineteenth century, is obvious and needs no further elaboration.

Reliable sources estimate the peak discharge of the design flood for San Diego River, at the Santa Fe Railroad bridge near the mouth of the river, based upon the existing reservoirs at Cuyamaca and El Capitan, to be 98,300 c.f.s. Assuming that this calculation is reasonably conclusive, Appellant feels that flood control improvements in the Mission Bay area, based upon a minimum calculation of safety of 100,000 c.f.s. at the said Santa Fe Railroad bridge near Old Town, is absolutely necessary at this time to insure a reasonable element of safety to the important Military, Naval and Commercial area now in danger.

III. THE IMPORTANCE OF FLOOD CONTROL TO NATIONAL DEFENSE

A. AREA OF POTENTIAL FLOOD DANGER: The flood danger area here involved (Exhibit "A") embraces more than 2500 acres of lowland, extending eastward

from a point upstream in the lower end of Mission Valley, just east of Morena Boulevard bridge, westward through the Mission Bay delta territory and extends from the southerly shore of Mission Bay southward to include all of the lowland territory south of the government dike to the northerly shore of San Diego Bay.

It is through this important area, lying between the government dike and San Diego Bay, that during the flood of 1825 the San Diego River cut a new channel which course it held until 1876 (Exhibit "D"). This area embraces more than 700 acres, and is now an important bottle-neck to north and south transportation, and Military, Naval and Commercial National Defense Activities in the San Diego territory. The inundation of this area would be catastrophic.

The estimated direct damage caused by the flood of 1916 amounted to more than \$500,000. This damage occurred practically twenty-five years ago when there was little or no improvements of any kind in the flood area referred to herein. Comparatively, the potential flood damage in the San Diego River Flood Basin, under existing conditions, would undoubtedly mount into the millions.

In addition to the possible flood danger in the area herein described, Appellant respectfully submits, that the preservation of the potential natural resources of navigation in Mission Bay should be encouraged and supported. Such natural navigable resources are, under the prevailing inadequate flood control improvements, being constantly dissipated and this dissipation can only be checked by flood control improvements such as are herein recommended.

B. MILITARY, NAVAL AND INDUSTRIAL PROGRESS: Based upon the government census for 1940, San Diego has a population of 203,241, which represents an in-

crease of 37.4% over 1930, and places San Diego as the forty-third United States city in size. Since April 1, 1940, it is estimated that approximately 30,000 additional people have taken up residence in this city.

It is conservatively estimated that by Fall of this year, the City of San Diego must absorb and house 45,000 people in addition to approximately 16,000 military and naval personnel who will be added to the community and housed in barracks at local army and navy establishments.

The disastrous effect of a major flood condition in the important flood area herein referred to, may be readily appreciated in the following tabulated survey of Military, Naval and commercial National Defense Activities located in the flood danger zone that are directly or indirectly dependent upon the flood control improvements herein recommended.

The Federal Government Defense Plan Corporation are now constructing a New Parts Plant (Exhibit A-Unit 1) for the Consolidated Aircraft Corporation of San Diego, involving an expenditure of approximately \$15,000,000, covering an area of 60.5 acres, located between Barnett and Rosecrans Avenues and Pacific Boulevard and the Santa Fe tracks, plus additional acreage, now under negotiation, in the area on the west side of Pacific Boulevard opposite the new plant, involving more than 50 acres, for employee parking purposes. This plant will be in operation early this summer and will manufacture airplane parts for the Consolidated Aircraft Corporation's parent plant at San Diego. The location of this new plant is in the flood area and its isolation and/or damage by flood would seriously disrupt the operation of the main manufacturing and assembly plant hereinafter described.

A United States Navy Housing Project calling for the construction of 1200 family housing units at a total cost of \$3,800,000 is under way. Six hundred of these housing units are being built at a location which was, in part, the former bed of the San Diego River (1825-1876), see Exhibit "D", on Barnett Avenue opposite the United States Marine Corp Base (Exhibit A-Unit 2). The remaining six hundred housing units are being built in the vicinity of the United States Destroyer Base in the South San Diego Bay territory.

Speer's Flying Service, located at Speer's Field, bordering Barnett Avenue and Mission Bay Causeway (Exhibit A-Unit 4) are training currently 100 C. A. A. flying students in connection with the government training program. The flying field serving

this Defense Unit is in the flood danger zone through which the San Diego River flowed from 1825 to 1876 (Exhibit "D").

The United States Marine Corp Base (Exhibit A-Unit 3) lies in the flood zone and occupies a portion of the former bed of the San Diego River (1825-1876), see Exhibit "D". The United States Marine Corp Base operating in conjunction with Camp Elliott and the Marine Rifle Range in San Diego, maintains a training personnel of 15,000 officers and men.

The Ryan School of Aeronautics has in continuous training, 125 United States Army Corp Cadets. While this school is located on and uses Lindbergh Field, facilities of Lindbergh Field are taxed to such an extent that this school uses an auxiliary flying field located between Ingraham Street and the present channel of the San Diego River in the southern section of the Mission Bay lowlands (Exhibit A-Unit 5). This field faces flood submersion.

In addition to the foregoing tabulation, there are vast Military, Naval and commercial National Defense Activities which would be seriously affected by the inundation of the said flood area. They are briefly summarized as follows:

The parent plant of the Consolidated Aircraft Corp. (Exhibit A-Unit 6), is located on Lindbergh Field, facing Pacific Boulevard. The value of this plant and its machinery, represents approximately \$12,500,000. The plant's inventory of materials approximate \$40,000,000, of which about \$10,000,000 represents government property in the nature of engines, instruments, etc. The existing plant employs 14,000 men with an Annual payroll of \$30,000,000 and has a back-log of National Defense and Foreign orders totaling \$317,000,000. The completion of the New Parts Plant (Exhibit A-Unit 1) this summer will add at least 16,000 men to their payroll. An interruption in the production activity of the New Parts Plant when completed, due to a flood disaster, would throw out of gear the production operation of this entire aircraft unit.

The Torrey Pines Replacement Center, involving 500 acres lying between U. S. Highway 101 and the ocean shore in the Torrey Pines section north of La Jolla, is now being constructed at a cost to the Federal Government of approximately \$2,500,000. When completed this Replacement Center will be equipped to handle 7500 trainees and 1200 regular army men. A major flood in the bottleneck area hereinbefore described, would isolate this National Defense Unit from San Diego insofar as affects land communications.

At Fort Rosecrans, Point Loma, California, there are 1800 army personnel at the present time. This number will be increased to

approximately 3,000 within a few months. New barracks and buildings have just been constructed at a cost to the Federal Government of about \$1,000,000 and it is estimated that coast-defense ordinances valued at approximately \$7,000,000 is to be installed in the near future. A major flood condition in the aforesaid bottle-neck area would disrupt land communications between Fort Rosecrans and the major portion of San Diego.

The United States Naval Training Station (Exhibit A-Unit 7), located at Barnett and Lytton Streets and San Diego Bay, is equipped to handle at least 6000 officers and trainees for our naval forces. This important Naval Training Station is said to be the largest of its kind in the United States. Major flood conditions in the aforesaid bottle-neck area would disrupt land communications between this training station and a major portion of San Diego, severing such communications with the Eleventh Naval District Supply Depot, and other important National Defense Units in this area.

The United States Government is preparing to construct 3000 Defense Housing Units under the supervision of the United States Treasury Department on the Camp Kearny Mesa at the intersection of the Sixth Street Extension and Highway 395. The total cost of this project will be approximately \$12,000,000 when completed. Virtually all of the housing units will be utilized by families whose members are connected with National Defense Activities in San Diego. A major flood in the bottle-neck area cited would virtually isolate these people from their active work in such National Defense Units.

The Ryan Aeronautical Company (Exhibit A-Unit 8), located on Lindbergh Field, has an investment of approximately \$1,000,000 in buildings and equipment. Their present back-log is \$12,000,000, comprising, in the main, orders for training planes. A major flood in the bottle-neck area cited herein, would isolate their employees who reside in San Diego north of the so-called flood zone.

The Solar Aircraft Company (Exhibit A-Unit 9), located adjacent to Lindbergh Field, represents a plant and equipment investment of approximately \$500,000. This Company has a back-log of orders for aircraft equipment totaling \$2,000,000. Their situation would be identical with that of the Ryan Aeronautical Company in the event of a major flood in the so-called bottle-neck area.

In addition to the National Defense Units herein tabulated, it should be noted that the Rohr Aircraft Corp., Weaver Aircraft Co., Heron Manufacturing Co., Monarch Tool & Manufacturing Co. and the Langley Instrument Co., are located in San Diego to the south of the so-called bottle-neck flood area, herein cited; and are actively engaged in the production of accessories, etc., for the National Defense Armament Program.

Aside from the specific Military, Naval and commercial National Defense Activities mentioned, sight should not be lost of the fact that upon completion of present contracts, the United States Government's investments in Navy and Army shore establishments at San Diego, California, will represent an outlay of approximately \$73,000,000.

In considering herein, the potential damage to real-property and/or interference with normal business operations, resulting from flood ravage, in the danger zone referred to, Appellant respectfully submit that fully 95% of the danger to real-property and/or normal business operations, would be sustained by the Federal Government and; that the Federal Government's real-property investment and its normal business operations in the said danger zone are directly concerned with rearmament and defense; therefore, potential flood damage to real-property and/or interference with normal business operations affecting local business interests and the community, would manifestly be infinitesimal, compared with the risks faced by the Federal Government.

The Santa Fe Railroad bridge spans the mouth of the San Diego River west of the Morena Boulevard bridge and is directly in the path of a peak flood force. The destruction of this important railroad bridge would sever the only rail connection between San Diego and the north. The interruption of this rail communication, with the attendant loss of highway communications, which would necessarily follow, would strike a serious blow to the Government's National Defense Activities in this zone.

The effect of a major flood disaster in the bottle-neck area referred to, is beyond estimation. That such a situation would seriously disrupt the National Defense Program in this territory, cannot, however, be denied.

C. SABOTAGE: Appellant, reluctantly, raises the issue of sabotage in connection with the government's National Defense Activities in the San Diego area. That such acts could occur, however, should neither be denied or ignored. The possibility of such sinister action is neither fantastic nor remote. The situation presented in the instant matter offers a fruitful field for the cunning of enemy agents. The following hypothesis is, therefore, worthy of careful consideration.

El Capitan Reservoir is fed from a drainage area of 190 square miles, has a capacity of 116,000 acre-feet and consists of an earth and rock fill dam, 217 feet high. This dam has and will continue to spill.

Cuyamaca Reservoir lying above El Capitan is an 1887 product, consisting of an earth fill dam 40 feet high and has a capacity of 11,600 acre-feet. It is not unusual for this dam to spill.

The occurrence of torrential precipitation at a time when both El Capitan and Cuyamaca are spilling, would afford an ideal opportunity for sabotage at either El Capitan Reservoir or Cuyamaca Reservoir, or both. Certainly the destruction of Cuyamaca dam by time-bombing, would not be an impossible feat. Much more difficult and more ingenious destructive acts were conceived and executed during the previous World War.

Appellant respectfully submits this point on its face value. Granting that such a destructive act might never occur, it is not, under certain conditions, an impossibility. Obviously, if such an act were accomplished during a State of War, its effect upon National Defense Activities in this zone would be most serious.

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IV. IMPROVEMENTS NECESSARY TO NATIONAL DEFENSE

Appellant respectfully recommend and urge that the following flood control improvements be undertaken by the United States Government for the protection of Military, Naval and National Defense operations in the San Diego territory:

- (a) Construct 3.3 miles of leveed river channel not less than 800 feet wide with a minimum capacity of 100,000 c.f.s., extending from about 2000 feet upstream from Morena Boulevard, to existing Mission Boulevard bridge near the ocean, and continue this channel by two stone jetties extending approximately 1500 feet into the ocean.
- (b) Construct new bridges at Mission Boulevard and Ingraham Streets, extend the Pacific Boulevard, Santa Fe Railroad, and Morena Boulevard bridges.
- (c) Relocate utilities and side-drainage if necessary.
- (d) Dredge a separate navigation entrance and tidal channel through from the ocean to the Ingraham Street Causeway bridge in Mission Bay, to 10 feet below mean lower low water, and protect the Bay entrance channel by construction of a third stone jetty approximately 1500 feet long.

Appellant agrees to furnish assurances satisfactory to the Secretary of War, that they will provide such local cooperation as may be required, and will improve, to the fullest extent practicable, the Mission Bay Area at a rate of progress that will result in the proper development of the Mission Bay area within a reasonable period of time.

V. CONCLUSION

Appellant respectfully submit, that the flood control improvements recommended herein, are definitely essential to, and necessary for, the safety, protection and progress of the Federal Government Rearmament Program in this important National Defense Zone. This point is sharply stressed, as the effect of a major flood on real-property and/or to the normal business operations of local interests and the community, would be

infinitesimal in comparison with the risks faced by the Federal Government.

NOW THEREFORE, Appellant respectfully prays:

I.

That the War Department, Board of Engineers for Rivers and Harbors, reconsider and modify its unfavorable decision made the 16th. day of December, 1940.

"on Flood Control improvements on the San Diego River in the County of San Diego, State of California," and/or

II.

That before denial of this appeal, your Honorable Board will delegate a representative to visit San Diego, California, and confer with Appellant, and if necessary, hold a further hearing, in the matter, at San Diego, California, to afford said Appellant the opportunity of offering in evidence, probative proof of the new and changed conditions, herein alleged, in support of the extreme necessity for flood control improvements on the San Diego River, in the County of San Diego, State of California.

Respectfully submitted on this 14th day of January, 1941.

THE CITY OF SAN DIEGO

By _____

Walter W. Cooper
City Manager

C.A.H.



CONCRETE BRIDGE OLD TOWN July 29, 1916



SANTA FE RY BRIDGE
OLD TOWN. JAN 28. 16



San Diego River at Old Town. Jan 28-1916



LA Jolla Track. OLD TOWN. JAN. 28. 1916. 2107



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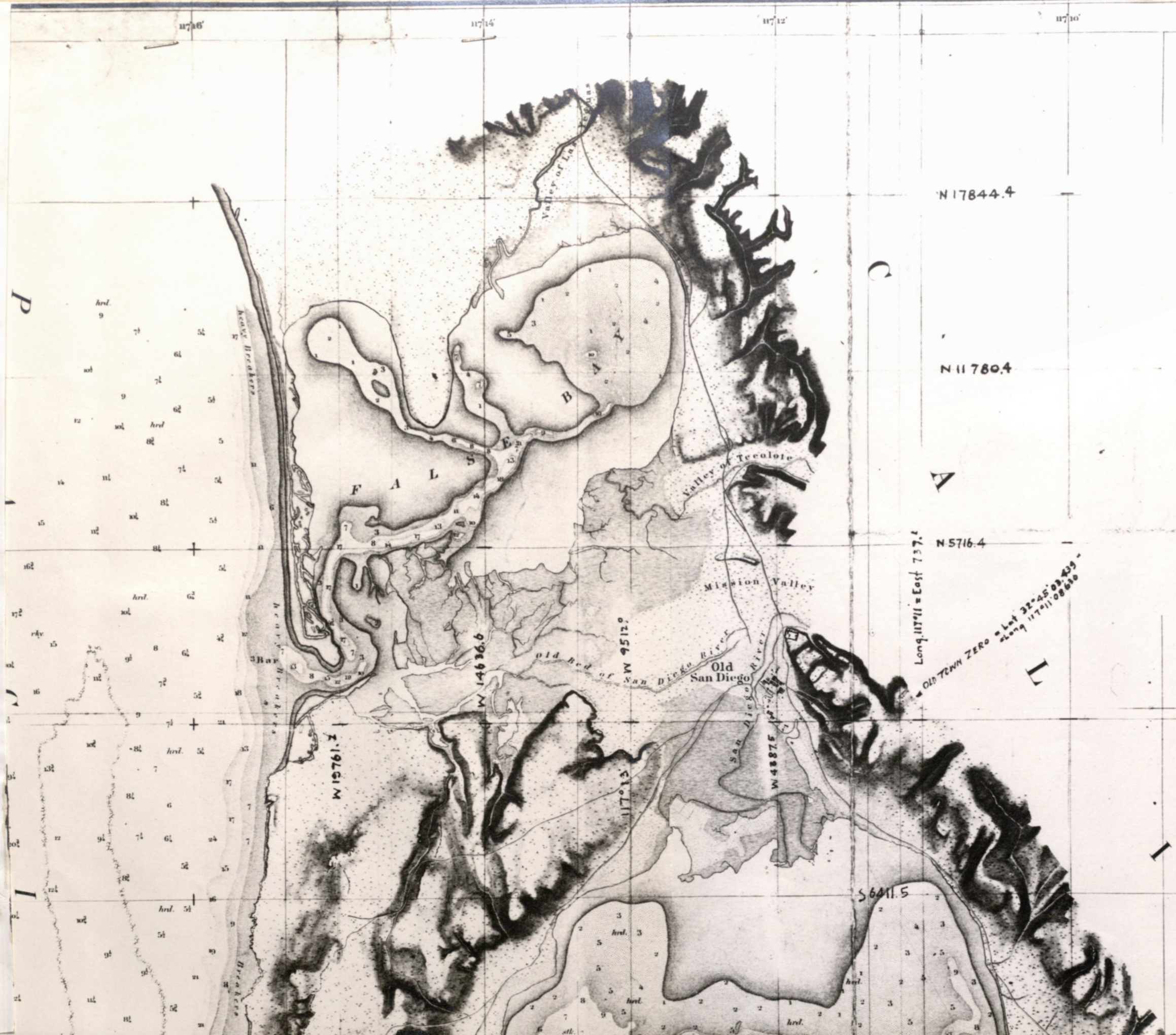
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CONCRETE BRIDGE - OLD TOWN JAN. 28 - 1916





SAN DIEGO BAY

CALIFORNIA

*San Diego Bay, California - Coast Survey at center
 of the State of California - Triangulation of 1859*

under the direction of A.D.BACHE Superintendent of the
SURVEY OF THE COAST OF THE UNITED STATES

Triangulation by R.D.CUTTS Asst.

Topography by A.M.HARRISON Sub-Assistant

Hydrography by the Party

under the command of Comdr. JAMES ALDEN U.S.N. Asst.

Scale 40,000

1859

Aids to Navigation corrected to 1887



Verified
M.R. Palmer Capt. Topl. Engrs.
 Asst. C.S. In charge of Office.

32° 45' = S. 347.6

N 17844.4

N 11780.4

N 5716.4

S 6411.5