Appl by SaiB to N.O. to dreige to -10.5 NGVD depth, relocate existing levee and floodwall, and install floodwall and fill to add two 1,000 cfs pumps to increase capacity to 10,400 cfs near Metairie

LAME -DD

C/Ops Div

C/Engr Liv

/29 Aug 34 Ms. Tinto/du/2646

- 1. Reference is made to your latter of 29 Aug 33, to the applicant in which you forwarded Engineering Division's consents for resolution. Reference is also made to a letter of 1 Aug 84, from Burk and Associates to this office forwarding plans and specifications for our review.
- 2. We are forwarding the above-referenced letter to you for coordination and official reply to the applicant.
- 3. The plans and specifications submitted by the applicant have been reviewed by this office and withheld for future reference. Comments a, b, and c, made after our preliminary review in July 1983 have been resolved and we have no objection to construction of the work for which the permit is being requested.
- 4. It should be recognized that the construction involved in this application has not been reviewed for creditability under the Lake Pontchartrain, Louisiana and Vicinity Burricane Protection Project, High Level Plan.
- 5. Copies of your response to Burk's letter should be provided to the New Orleans Sewerage and water Board and the Orleans Leves District.

l Incl

FREDERIC M. CHATRY Chief, Engineering Livision

GUGGENHEIMER

LMNED-DD

CF: w/o incl

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JUDLIN LMNED-D

## **DISPOSITION FORM**

For use of this form, see AR 340-15; the proponent agency is TAGO.

SUBJECT Appl by S&WB to N.O. to dredge to -10.5 NGVD depth, relocate existing levee and floodwall, and install floodwall and fill to add two 1,000 cfs pumps to increase capacity to 10,400 cfs near Metairie

TO C/Ops Div FROM C/Engr Div

DATE 22 Aug 84 Ms. Tinto/cmr/2646 CMT 1

1. Reference is made to your letter of 29 Aug 83, to the applicant in which you forwarded Engineering Division's comments for resolution. Reference is also made to a letter of 1 Aug 84, from Burk and Associates (incl 1) to this office forwarding plans and specifications for our review.

- 2. We are forwarding the above-referenced letter to you for coordination and official reply to the applicant.
- 3. The plans and specifications submitted by the applicant have been reviewed by this office and withheld for future reference. Comments a, b, and c, made after our preliminary review in July 1983 have been resolved, and we have no structure of the formula of t
- 4. At present the west bank levee is the only Federal item on the 17th Street Canal which would be impacted by the proposed work. We have, therefore, reviewed the work relative to its potential impact on the west bank levee and have no adverse comments to offer in this regard.
- 5. If the applicant wishes to construct the subject work in compliance with the Lake Pontchartrain Hurricane Protection Project criteria, the following comments would have to be resolved:
- a. No tip elevations were given for the PZ-27 steel sheet pixing cut-off under the flood-wall between the existing discharge pump "G" and the type "C" I wall. An analysis should also be presented for our review to verify the adequacy of the seepage cut-off provided.
- b. The plans and specifications for a previous permit review of a pile supported flood-wall adjacent to the proposed work called for a pile test. These pile test results should be furnished to us for review since the previous floodwall has already been completed.
- c. No details are shown for the tie-in of the existing steel sheet piling under pump "G" to the new steel sheet piling under pump "I".
- d. Details should be provided of the tie-in between the new type "C" I-wall and the existing west bank levee.
- e. Seepage cut-off should be provided under the railroad swing gate monolith in the form of steel sheet piling. Design computations should be presented to verify that this cut-off is adequate under flood conditions.
- f. No design computations were provided for the type "C" I-wall to verify that under flood conditions the PZ-22 steel sheet piling is adequate and that deflections under load are minimal. This analysis should be presented for our review.
- g. Our pre/iminary stability analysis shows a possible deficiency of the east levee under low water conditions, with the possibility of failure toward the canal. Computations for the stability analysis of the east levee should be furnished to us for review.

LMNED-DD

22 Aug 84

SUBJECT: Appl by S&WB to N.O. to dredge to -10.5 NGVD depth, relocate existing levee and floodwall, and install floodwall and fill to add two 1,000 cfs pumps to increase capacity to 10,400 cfs near Metairie

- h. No design computations or reinforcement details of the floodwall stem crossing the horizontal discharge culverts were presented. These computations/and details, as well as details of the tie-in connection of the new wall to the existing concrete wall, should be presented for our review.
- i. No details have been presented for monolith joints in the type "C" I-wall. A monolith joint should be provided at a sheet pile interlock, with 3-bulb waterstop, approximately every 30 feet. A transition slip joint should be provided at a sheet pile interlock where the soil supported I-wall ties into the floodwall over the pile supported discharge culverts. This will allow for differential settlement between the culverts and the type "C" wall. (See inclosure 2).
- j. Design computations for the steel portion of the railroad swing gate should be presented for our review. It is recommended that/the support tie rods should extend from the hinge column to the top of the gate as shown on inclosure 3. This helps distribute the gate weight more evenly to the hinges and prevent sagging of the gate.
- k. No design computations were presented for the concrete portions of the railroad swing gate monolith. The details for the gate monolith are incomplete, sections showing reinforcement in the base slab, columns and wall stems should be presented. A transition slip joint should be provided at a sheet pile interlock at/each end of the monolith to provide for differential settlement between the type "C" wall and the pile supported gate monolith.
- 1. Piles supporting the railroad swing gate should not be timber piles because the tops of the piles are above the ground water elevation. Prestressed concrete piles are recommended under gate monoliths. These piles are usually arranged with the floodside piles battered toward the flood side to take tension loads and the protected side piles battered toward the protected side to take compression loads under flood conditions. Vertical piles are usually provided under the gate opening to take train loads that occur when the gate is opened.
  - m. In the specifications, page 2.5, delete last sentence of paragraph 4.6.1.
- n. In the specifications, page 2-14, paragraph 12.5, jumbers should be welded 3" below the bottom of the concrete cap, not 3" below the top of the piles.
- 6. Design computations mentioned above and three copies of the final P&S should be provided to this office to assure that all of the inclosed comments are satisfied. We would be happy to meet with the applicant if there are any questions about these comments. For information contact Mr. Jorge Romero (2645) or Ms. Lynn Broussard (2646) of this office.

3 Incl

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FREDERIC M. CHATRY Chief, Engineering Division

CF: w/o incls LMNED-F

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construction in worked in the explication Lose Portlanton, in a via the 1high 5. Opin of your respons to Burki letter shall be provided the January, water Board and the Orlean have District  PRESIDENT WILLIAM R. BURK, III, PE EXECUTIVE VICE PRESIDENTS THOMAS L.JACKSON, PE, LS

GEORGE C. KLEINPETER, JR., PE VICE PRESIDENTS

JAMES W. ARMBRUSTER JEAN H.BURK

CHAIRMAN OF THE BOARD WILLIAM R. BURK, JR., PE, LS

## BURK AND ASSOCIATES, INC.

ENGINEERS, PLANNERS, ENVIRONMENTAL SCIENTISTS

4176 CANAL STREET

NEW ORLEANS, LOUISIANA 70119-5994

(504) 486-5901

P. O.BOX 19087- NEW ORLEANS, LA.70179

August 1, 1984

**ASSOCIATES** 

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Mr. Frederic M. Chatry, Chief Engineering Division Department of the Army New Orleans District, Corps of Engineers P. O. Box 60267 New Orleans, LA 70160

> LMNOD-SP(17th Street Canal)3 Drainage Pumping Station No.6 Sewerage and Water Board of New Orleans

B&A Job No. 8133-2

Dear Mr. Chatry:

The subject permit dated August 29, 1983 has a requirement that final plans and specifications be forwarded to you prior to com-The plans, specifications, and related soil borings mencing work. The Sewerage and Water Board plans to take bids on are enclosed. this project in the near future. Please forward your comments and/ or approval at your earliest convenience.

Yours truly,

BURK AND ASSOCIATES, INC. Engineers, Planners and Environmental Scientists

Jens J. Nielsen

Associate

JJN/pw

Mr. C.J. Nettles, Chief Opertions Division

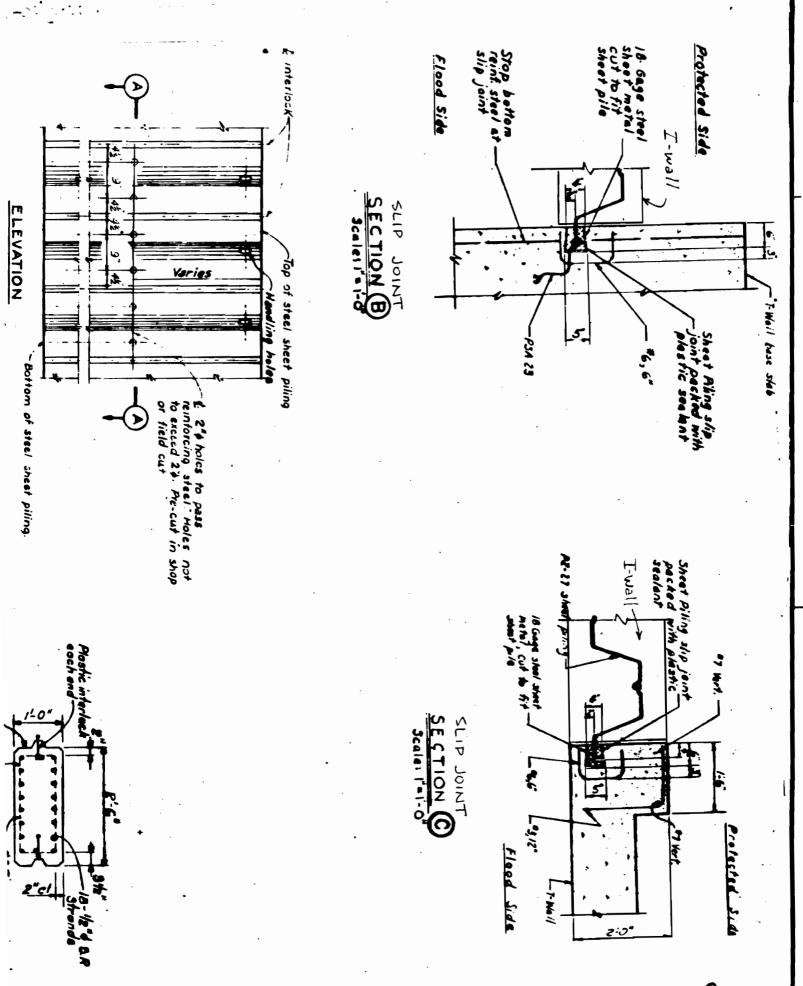
Corps of Engineers

Mr. G.J. Sullivan, General Superintendent

S&WB of New Orleans

Mr. Larry Bodet, S&WB of New Orleans

Vilser



INCLOSURE 2

