PARTNERS

7 E' FELSBURG

W B. CONWAY

H. H. SNYDER

C. F. COMSTOCK

J. J. SCHERRER

J M KULICK!

MODJESKI AND MASTERS

CONSULTING ENGINEERS

Founded 1893

1055 ST. CHARLES AVE. NEW ORLEANS, LA 70130 TELEPHONE 504 - 524-4344

October 6, 1986

ASSOCIATES H. E. ECKHOFF

40007065

T. Y. SOONG

J. E PRICKETT B. P. STRAIN. JR

D. F. SORGENFREI

B. T. MARTIN, JR.

.1 I MCKENNEY

G. A. MURRAY

D. H. LEROY

R. A LITTLE P C PIERCE

L. V BORDEN

E. W. ROHRBAUGH

CONSULTANT

T. R. KEALEY

SENIOR ASSOCIATES

A PROFESSIONAL CORPORATION

R W CHRISTIE

C. T. FORTRAN

J. R. BOWDEN

H. E. WALDNER

Mr. Fred Chatry Department of the Army, New Orleans District Corps of Engineers P. O. Box 60267 70160-0267 New Orleans, LA

High Level Flood Protection 17th Street Canal

Dear Mr. Chatry:

As per our meeting of September 29, 1986 you will find herewith two copies of a seepage analysis at Pump Station 6 performed by Eustis Engineering. I trust it will meet your approval.

The other three items discussed in our meeting are being addressed as follows:

- Regarding the Hammond Highway Bridge, the Orleans Levee Board is preparing a letter to LA.DOTD requesting action on their part. You should be receiving a copy of that letter soon.
- We have scheduled a meeting with the Sewerage and Water Board this week to get their official approval of the sliding gates at the high point of the discharge tubes. We will request that they notify you in writing of their decision.
- Calculations for the east floodgate will be provided to your office by Burke & Associates.

If we can be of any additional assistance in this matter, please call.

MODJESKI AND MASTERS

Mr. Fred Chatry New Orleans -2-

October 6, 1986

Very truly yours,

MODJESKI AND MASTERS

Engineers

BTMjr:bw Enclosure

cc: Mr. Ed Bailey

Mr. John Holtgreve

Barney T. Martin, Jr

EUSTIS ENGINEERING

GEOTECHNICAL ENGINEERS
3011 28th Street • Metarrie, Louisiana 70002 • 504-834-0157

6 October 1986

Modjeski and Masters Consulting Engineers John Hancock Building Room 510 1055 St. Charles Avenue New Orleans, Louisiana 70113

Attention Mr. Barney Martin

Gentlemen:

Recommended Sheetpile Cutoff Beneath New Sliding Gate at Pump Station No. 6 Jefferson Parish, Louisiana

In accordance with a request from Mr. Barney Martin, computations were made to determine the recommended penetration for a sheet-pile cutoff wall beneath a proposed sliding gate structure to be located on the discharge side of Pump Station No. 6 in Jefferson Parish, Louisiana. It is understood that two alternate locations are being considered for the proposed sliding gate. Alternate 1 is at the high point of the discharge tube and Alternate 2 is at the end of the discharge tube. The subsoil stratification used for the analysis was based on the results of Boring 5 which are contained in Eustis Engineering's report entitled "Geotechnical Investigation, Sewerage and Water Board of New Orleans, Proposed additions to Drainage Pump Station No. 6, New Orleans, Louisiana," dated 1 December 1986.

The computations were based on the furnished cross-section shown on Enclosure 1 and a maximum differential hydrostatic head of 23 feet resulting from a high water level at el 35 C.D. in the discharge basin and a low water level at el 12 C.D. in the intake basin. Based on a sheetpile cutoff wall penetration of at least 10 feet below the base of the structure (at either location), the "weighted" length of the flow path is at least 70 feet and Lane's "weighted Creep Ratio (LWCR) is 3.04 which is acceptable for the clay stratum beneath the gate structure and pump station. Therefore, a minimum 10-ft long sheetpile cutoff wall should be adequate to prevent "roofing" at the Alternate 1 and 2 locations.

If we can be of further assistance, please contact us.

Yours very truly,

EUSTIS ENGINEERING

Lloyd A. Held, Jr.

L. J. Napolitano:bh

Enclosure 1