

19 April 89

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MEMORANDUM FOR C/Des Svcs Br

SUBJECT: Lake Pontchartrain LA & Vic. 17th St. Outfall Canal
Parallel Flood Protection Phase 1b - Hammond Highway OLB Project
No. 2043-0207

1. We have reviewed the proposed parallel protection plan for the 17th St. Canal from Hammond Highway to Southern Railway Bridge hand carried to us by Mr. Vann Stutts of your office. We have the following comments:

a. The soil shear strength design line for Sta. 554+00 to Sta. 635+00 should be 500 psf from EL 0.0 to EL. -2.0 NGVD (Eustis Soils Report dated 2 Nov 81).

b. A landside stability analysis for Reach 1 and 2 showing wedges and calculations at EL -20.5 NGVD should be submitted.

c. A landside stability analysis for Reach 3 showing wedges and calculations at EL -10.5 and EL -20.5 NGVD should be submitted. Calculations should also be furnished for an active wedge location of X = 110 and a passive wedge location of X = 140.5 at EL - 32.0 NGVD.

d. The landside stability analysis for Reach 3 is controlled by the ground surface elevations at Sta. 604+00, a vacant lot with no fence. The lower ground elevations of the vacant lot in comparison to the adjoining backyards of residences is easily seen. Six inches of fill from the levee toe to a distance of 30 ft from the levee toe will allow a more economical levee section, comparable to the section previously submitted, (Oct 88).

e. The RB calculations for Reaches 4, 5 and 8 canalside stability, should be based on a piezometric headline of EL -2.4 NGVD in the sand.

f. The I-Wall stability calculations should have submerged weights for the floodside soil profiles for the high water design case.

g. The canalside stability analysis for Reaches 5, 6, 7 and 8 are labelled "Rapid Draw-Down Case". The label is a misnomer since the piezometric headline in the sand is independent of the canal water elevation as demonstrated by the test section findings (Eustis Engr. Report, dated 12 Jan 1984).

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Reference our letter of 31 Jan 84 in response to our review of the Eustis Engr. Report. Our letter noted the hydrostatic head in the sand under the levee at EL -2.4 NGVD and that the hydrostatic head should be considered in future stability analyses.

2. P.O.C. is Mr. Frank Vojkovich, ext. 1034.

RODNEY P. PICCIOLA
Chief, Foundations and Materials Branch