DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

CECW-EP-W

16 September 1993

MEMORANDUM FOR COMMANDER LOWER MISSISSIPPI VALLEY DIVISION,
ATTN: CELMV-ED-TS

SUBJECT: Lake Pontchartrain, Louisiana, and Vicinity, High Level Plan Design Memorandum No. 22 - General Design, Orleans Parish Lakefront Remaining Work

1. Reference memorandum CELMN-ED-SP, 21 May 1993, and 1st endorsement, CELMV-ED-TS, thereon, subject as above.

2. The enclosure provides comments for information and use in future engineering documents. No further action with this office is necessary.

Encl

PAUL D. BARBER, P.E.
Chief, Engineering Division
Directorate of Civil Works

INFORMATION COMMENTS

SUBJECT: Lake Pontchartrain, Louisiana, and Vicinity, High Level Plan Design Memorandum No. 22 - General Design, Orleans Parish Lakefront Remaining Work

1. Page 15, paragraph 15a. A value of 2-feet is assigned for "freeboard" in subparagraphs a, e, and f. The report should indicate that a determination of the wave runup accompanying the hurricane generated a surge elevation of 11.5 feet in the area of these structures and required a 13.5-foot structure elevation. It is noted that Corps policy will require future levee heights be established by risk analysis.

2. Page 16, paragraph 15c. This section should discuss the development of the design discharge and the sizing of the sluice gates. It is not clear why the structure near the lake requires two, 36-inch culverts while the structure at the sector gates requires an additional 24-inch culvert.

3. Plate 14. Plan at elevation 16.0 should show the operating deck layout including the gate operating devices and railing.

4. Plate 17. Area of riprap around the sluice gate structure should be shown.

5. Plate 20. It is noted that the sluice gate structure operating platform is 5-feet below the adjacent top of levee. Waves hitting the vertical wall of the structure will make its operation hazardous at lake stages somewhat lower than the design elevation. At the design elevation, "green water" will be overtopping the structure. During preparation of the plans and specifications, consideration should be given to raising the structure platform or requiring the gate be set prior to (and left in position during) lake stages which make its operation dangerous. In this case, the protected side stop-log slot should be secured with a cover plate.

6. Plate 23. The plans and sections should clarify the relationship of the sluice-gate structure and the sector gate control room and the working compatibility of the two features.

7. CELMV comment k, page 6, 1st Endorsement. From the description provided on page 15, paragraph 15b, it appears that the sluice gates could be closed during non-pumping periods which would support the position that no trash racks would be needed. Other considerations would have to be made such as increased head-loss to the pumps and means to clean the racks, should they be included. In view of the above, MSC should reconsider the need for a trash rack.

S: 30 Sept 1993

22 Sept 1993

CELMV-ED-TS

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Lake Pontchartrain, Louisiana, and Vicinity, High Level Plan Design Memorandum No. 22 - General Design, Orleans Lakefront Remaining Work

1. Please review the enclosed CECW-EP-W memorandum (w/encl) and furnish your comments to the undersigned, by 30 Sept 1993.

2. If you have significant comments please furnish them to the undersigned (JOHNSONF) by electronic mail, as well as by the official signed hard copy. Your cooperation in this matter is appreciated.

FRANK N. JOHNSON

Encl
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Mr. Walton/bab/5833

CELMV-PD-F 1st End 1 Oct 93

FOR CELMV-ED-TS

No comment.

JAMES R. HANCHEY
Director of Planning

Encl
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