

8 Feb 95

17TH ST. OUTFALL CANAL  
HISTORY OF SURVEYS USED FOR CONSTRUCTING FLOODWALLS  
AND CANAL DREDGING

MAR-APR 1987 Walker & Avery performed surveys for the NOS&WB using PBM "Disk T-193" with Elev. 9.741 NGVD to establish TBM "USCE Monument 14", El. 8.77 NGVD

(NOTE: The elevation of the PBM used by Walker & Avery cannot be verified by NOD's Survey Section. No such elevation exists in the historical data for this PBM)

TBM "USCE Monument 14", El. 8.77, was used to design and construct the floodwalls on both sides of the canal as well as for the canal dredging.

JAN 1995 Surveys for the Hammond Hwy Gates were performed by NOD using TBM "Pump Station 1", El. -0.02 NGVD and establishing TBM "USCE Monument 14", at El. 8.32. (The elevation of TBM "USCE Monument 14" established by NOD is 0.45 ft. lower than the elevation established by Walker & Avery).

The elevation of TBM "Pump Station 1" was established during previous NOD surveys using PBM "ALCO 1931", El. 7.375 NGVD (1964 epoch).

The elevation of TBM "USCE Monument 14" was double checked by running a level from PBM "North Gate 2", located on the New Basin Canal Pump Station, El. 11.48 NGVD (1964 Epoch). TBM "USCE Monument 14" was found to be at El. 8.29 NGVD (-0.03 ft. lower than the original NOD surveys of Jan 95).

From these data, it appears that the floodwalls on both sides of the canal were constructed approx. 5.5 inches lower than the elevations indicated on the P&S for these walls.

The I-walls were supposed to have been constructed with 6 inches of allowable settlement. Instead, the walls were constructed with only approx. 0.5 inch overbuild.

Also, the Veterans Hwy Bridges were designed using surveys performed by Walker & Avery, using PBM "Disk T-193" with Elev. 9.741 NGVD. The design elevations for the bridges should be checked for adequacy.