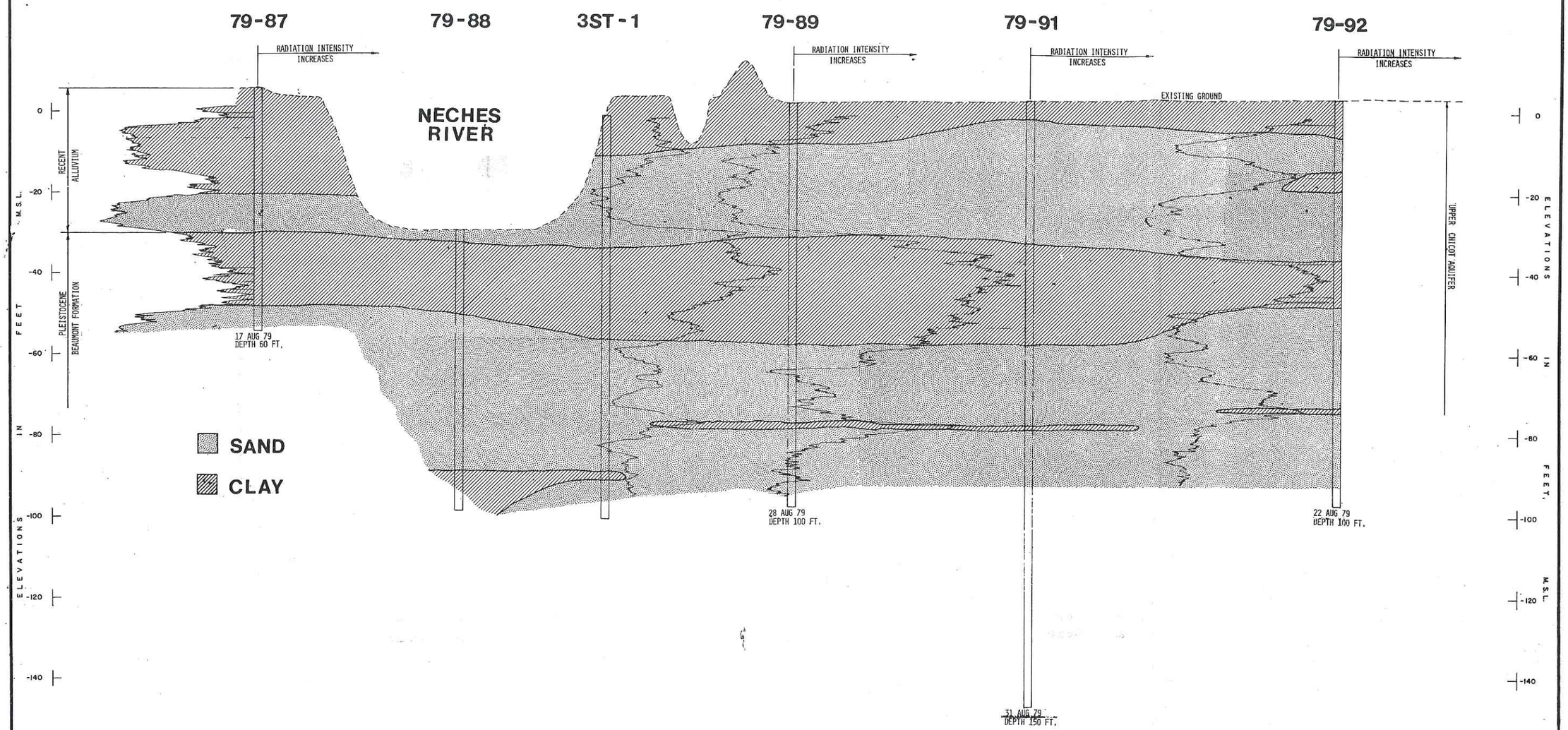


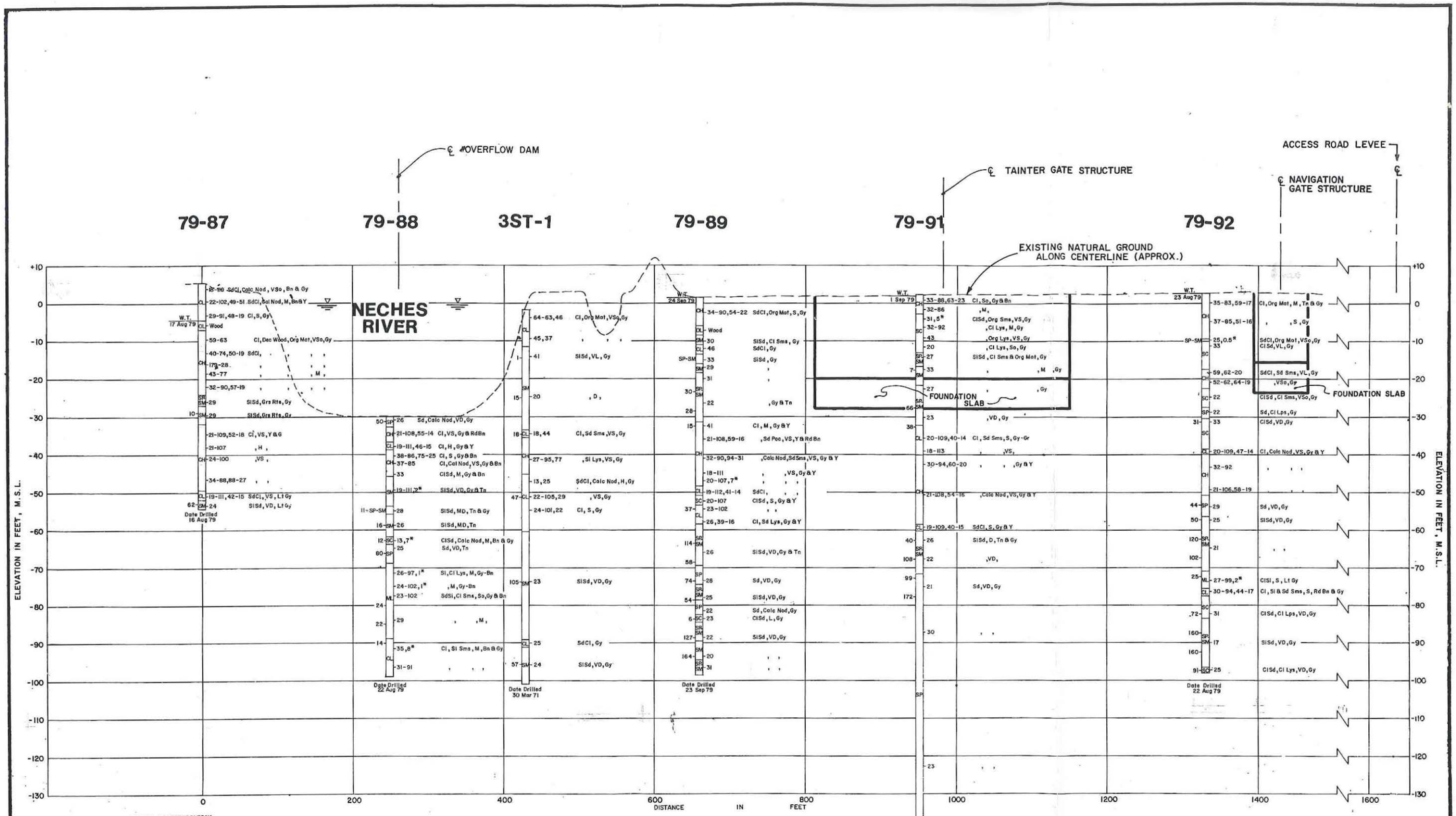
GAMMA RAY LOG SURVEY

NECHES RIVER AND TRIBUTARIES, TEXAS

NECHES RIVER
SALTWATER BARRIER

GAMMA RAY LOG SURVEY

U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS JULY 1981



VISUAL CLASSIFICATION

Bn	Brown	Nod	Nodules
Calc	Calcareous	Org	Organic
Cl	Clay or Clayey	Poc	Pocket or Pockets
D	Dense	Rd	Red or Reddish
Dec	Decayed	Rts	Roots
Gr	Green or Greenish	S	Stiff
Grs	Grass	Sd	Sand or Sandy
Gy	Gray or Grayish	Si	Silt or Silty
H	Hard	Sms	Seam or Seams
L	Loose	So	Soft
Lpa	Lumps	Tn	Tan
Lt	Light		
Lys	Layer or Layers	V	Very
M	Medium	W.T.	Water Table
Mat	Material		
Meas	Measured	Y	Yellow or Yellowish

NOTES:

1. SOILS HAVE BEEN CLASSIFIED IN ACCORDANCE WITH MILITARY STANDARDS 619B UNIFIED SOIL CLASSIFICATIONS SYSTEM FOR ROADS, AIRFIELDS, EMBANKMENTS AND FOUNDATIONS. CONSISTENCY OF SOILS SUCH AS SOFT, MEDIUM, HARD, LOOSE, DENSE, ETC., ARE RELATIVE TERMS BASED ON ESTIMATED UNDISTURBED SHEAR STRENGTH OF THE MATERIAL AS DETERMINED BY VISUAL CLASSIFICATION, POCKET PENETROMETER TESTS AND PENETRATION RESISTANCE DURING SAMPLING.
2. FIGURES TO THE RIGHT OF BORING LOGS ARE WATER CONTENTS IN PERCENT OF THE DRY WEIGHT, DRY DENSITY, LIQUID LIMIT, PLASTIC LIMIT, AND BAR LINEAR SHRINKAGE. (MC-UDW), (LL-PL), (B.L.S.)*
3. FIGURES TO THE LEFT OF THE BORING LOGS ARE BLOW COUNT PER FOOT OBTAINED FROM STANDARD PENETRATION TEST.

LOGS OF BORINGS

SCALE AS SHOWN

LABORATORY CLASSIFICATION

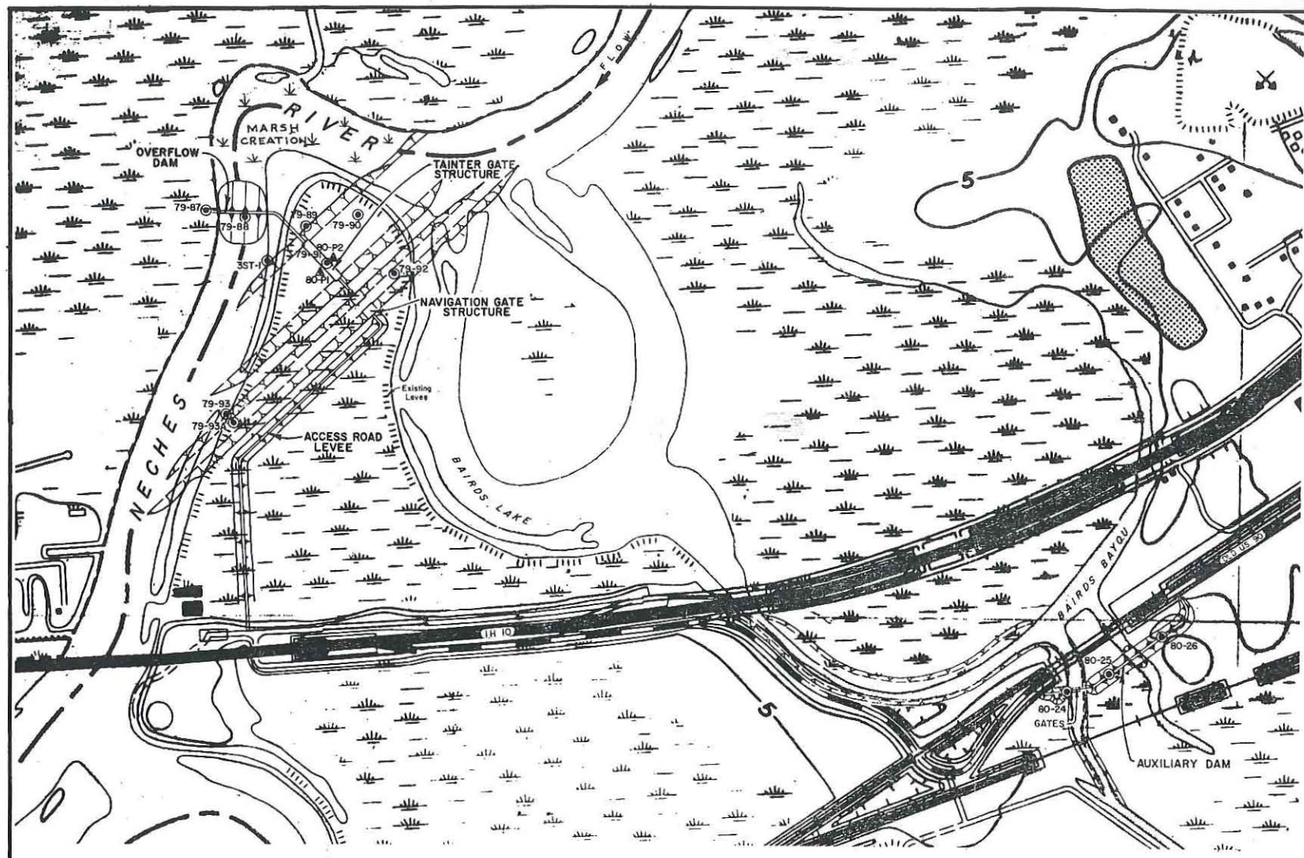
OL	Decayed Wood
SP	Poorly-Graded Sands or Gravelly Sands, Little or no Fines
SM	Silty Sands, Sand-Silt Mixtures
SC	Clayey Sands, Sand-Silt Mixtures
ML	Inorganic Silts and Very Fine Sands with Slight Plasticity
CL	Inorganic Clays of Low to Medium Plasticity, Lean Clays
CH	Inorganic Clays of High Plasticity, Fat Clays

NECHES RIVER AND TRIBUTARIES, TEXAS

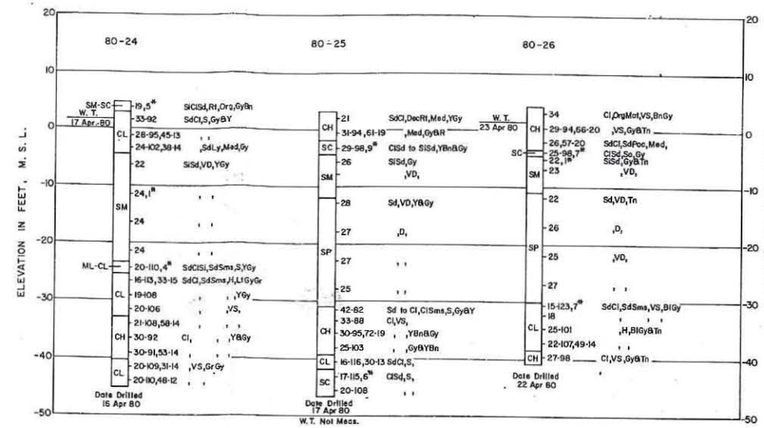
NECHES RIVER
SALTWATER BARRIER

LOGS OF BORINGS

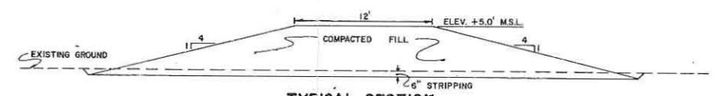
U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS JULY 1981



PLAN
SCALE OF FEET
400 0 400 800

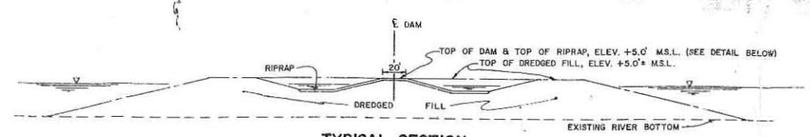


LOGS OF BORINGS
AUXILIARY DAM
SCALE OF FEET
VERT — AS SHOWN
HORIZ — NONE

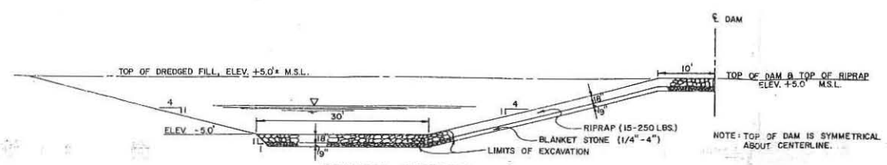


TYPICAL SECTION
AUXILIARY DAM
N.T.S.

TYPICAL SECTION
NAVIGATION CHANNEL AND ACCESS ROAD LEVEE
N.T.S.

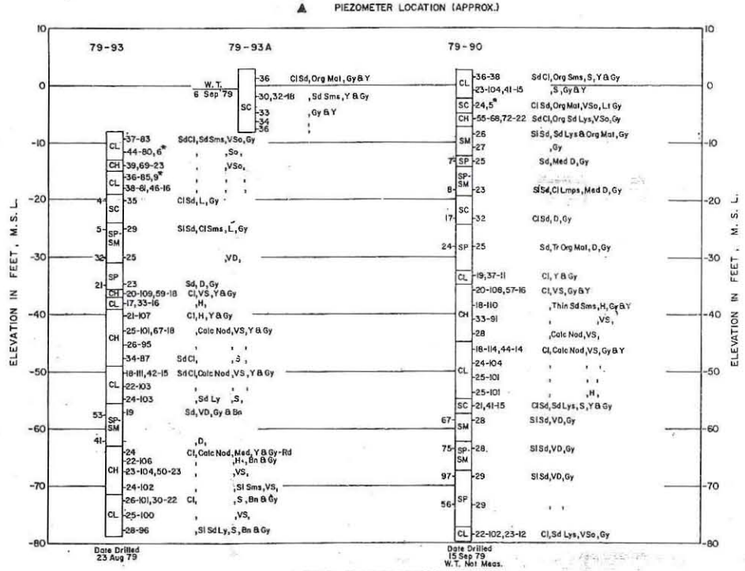


TYPICAL SECTION
OVERFLOW DAM
N.T.S.



TYPICAL SECTION
TOP OF OVERFLOW DAM
N.T.S.

◉ BORING LOCATION
▲ PIEZOMETER LOCATION (APPROX.)



LOGS OF BORINGS
SCALE OF FEET
VERT — AS SHOWN
HORIZ — NONE

NOTE: SEE EXHIBIT FOR SOILS CLASSIFICATION AND LEGEND.

NECHES RIVER AND TRIBUTARIES, TEXAS
NECHES RIVER
SALTWATER BARRIER
BORING LAYOUT
AND
TYPICAL SECTIONS
U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS JULY 1981