TC202
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no.2
suppl.8
1968

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U. S. ARMY, CORPS OF ENGINEERS

LAKE PONTCHARTRAIN, LA. AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

New Orleans - 83
Spanish Fort - 41

DESIGN MEMORANDUM NO. 2 - GENERAL
SUPPLEMENT NO. 8
INNER HARBOR NAVIGATION CANAL REMAINING LEVEES

1E, 2E, 3E, 4E, 6ET, 7EU, 8E, 8ET, 9E, 9EA, 10EA, 11E, 12ET, 12EA, 14E, 15E, 17E, 1W, 2WTA, 3W, 4W, 5WT 8W, 9W, 10W, 10WT 12W, 12WT, 14W, 15WT, 1LB, 2LB, 3LB, 4LB, 5LB, 16W, 17W, 18WT, 19WT, 20WT, 21W, 22W, 23W, 24WT, 25W, 27WU, 28W, 29WT, 30W, 33WT, G1, G2, G3.

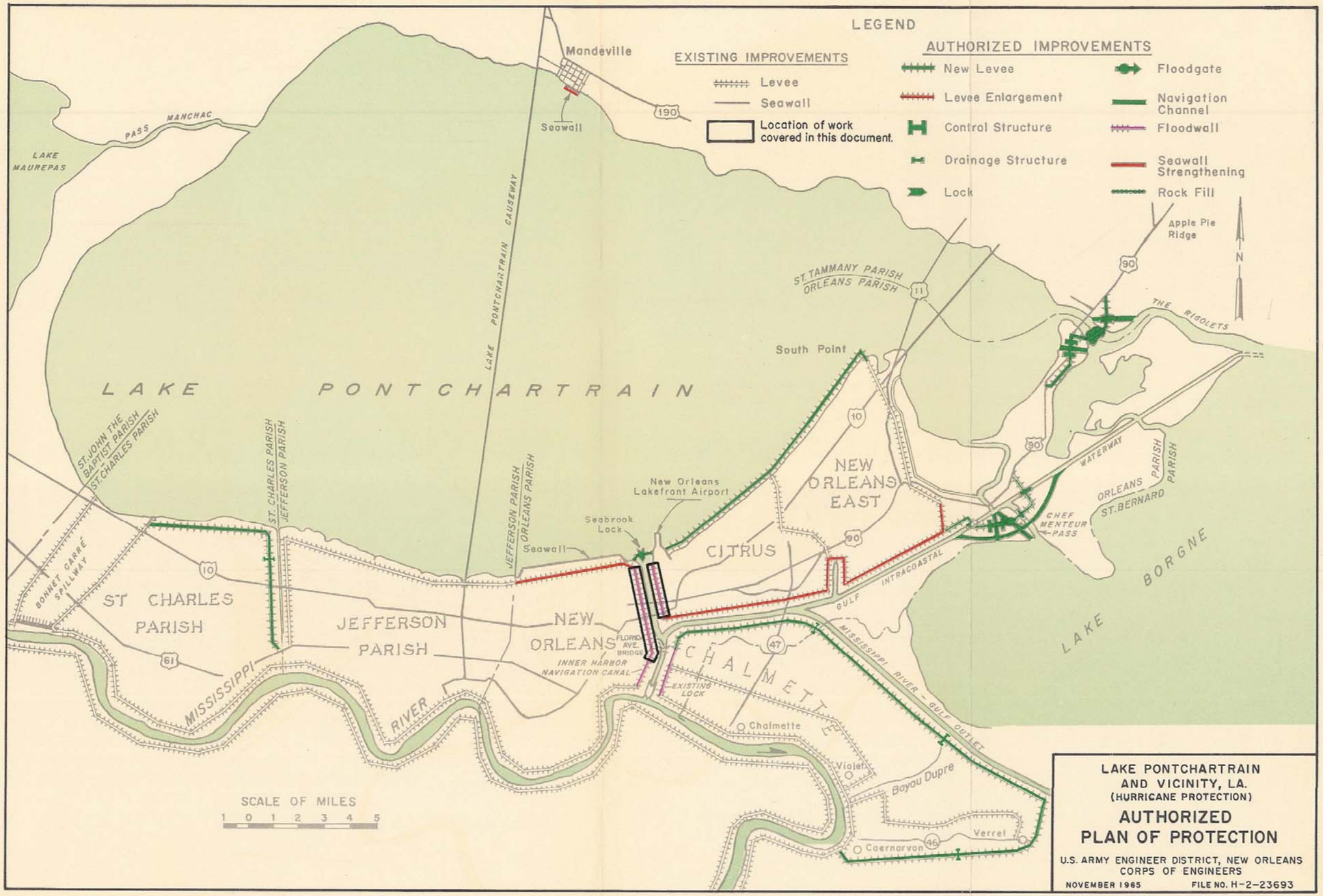
RESEARCH CENTER LIBRARY
US ARMY ENGINEER WATERWAYS EXPERIMENT STATION
VICKSBURG, MISSISSIPPI

New Orleans & Chef Menteur & St Bernard IHC - 18EC, 19EC, etc 1E, 1W, 2WTA, etc.

Prepared in the Office of the District Engineer
New Orleans District, Corps of Engineers
New Orleans, Louisiana

February 1968

INCL 2



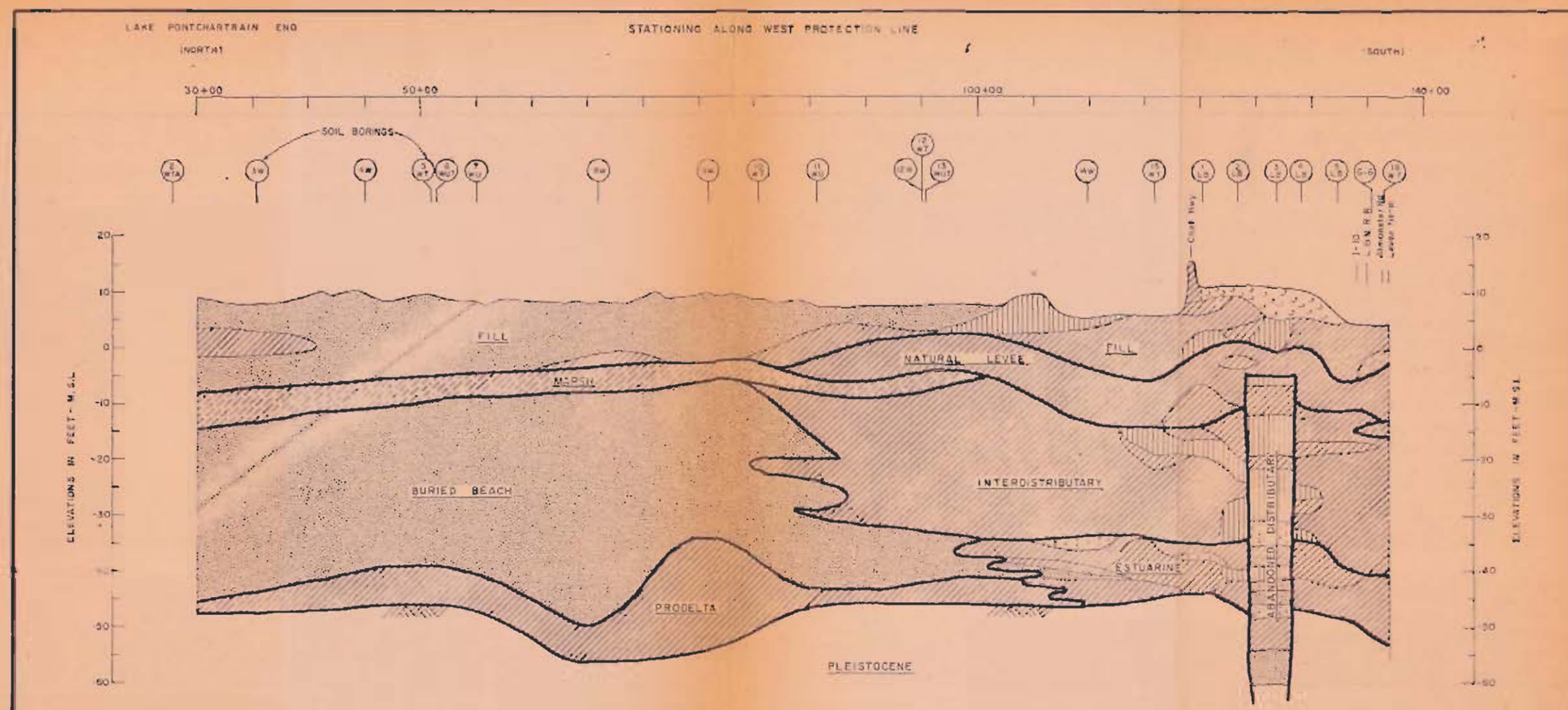
LAKE PONTCHARTRAIN
AND VICINITY, LA.
(HURRICANE PROTECTION)

AUTHORIZED
PLAN OF PROTECTION

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

NOVEMBER 1965 FILE NO. H-2-23693

REV. MAY 1967



LEGEND

CH - Fat clay	NATURAL LEVEE - soft to stiff clays with lenses and layers of silt
CHO - Fat clay with organic matter and peat	MARSH - very soft clays with organic matter and peat
CL - Lean clay	ABANDONED DISTRIBUTARY - silts, silty sands with clay layers
ML - Silt	INTERDISTRIBUTARY - very soft to soft clays with lenses and layers of silt and sand
SM - Silty sand	BURIED BEACH - sand with shell and shell fragments
SP - Fine sand	PRODELTA - medium to stiff clays
SI - Shells	ESTUARINE - sand, clay and silt with shell and shell fragments
Pleistocene Horizon	

LAKE PONTCHARTRAIN, LA. AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
DESIGN MEMORANDUM NO. 2 - GENERAL DESIGN
SUPPLEMENT NO. 6
IHNC REMAINING LEVEES

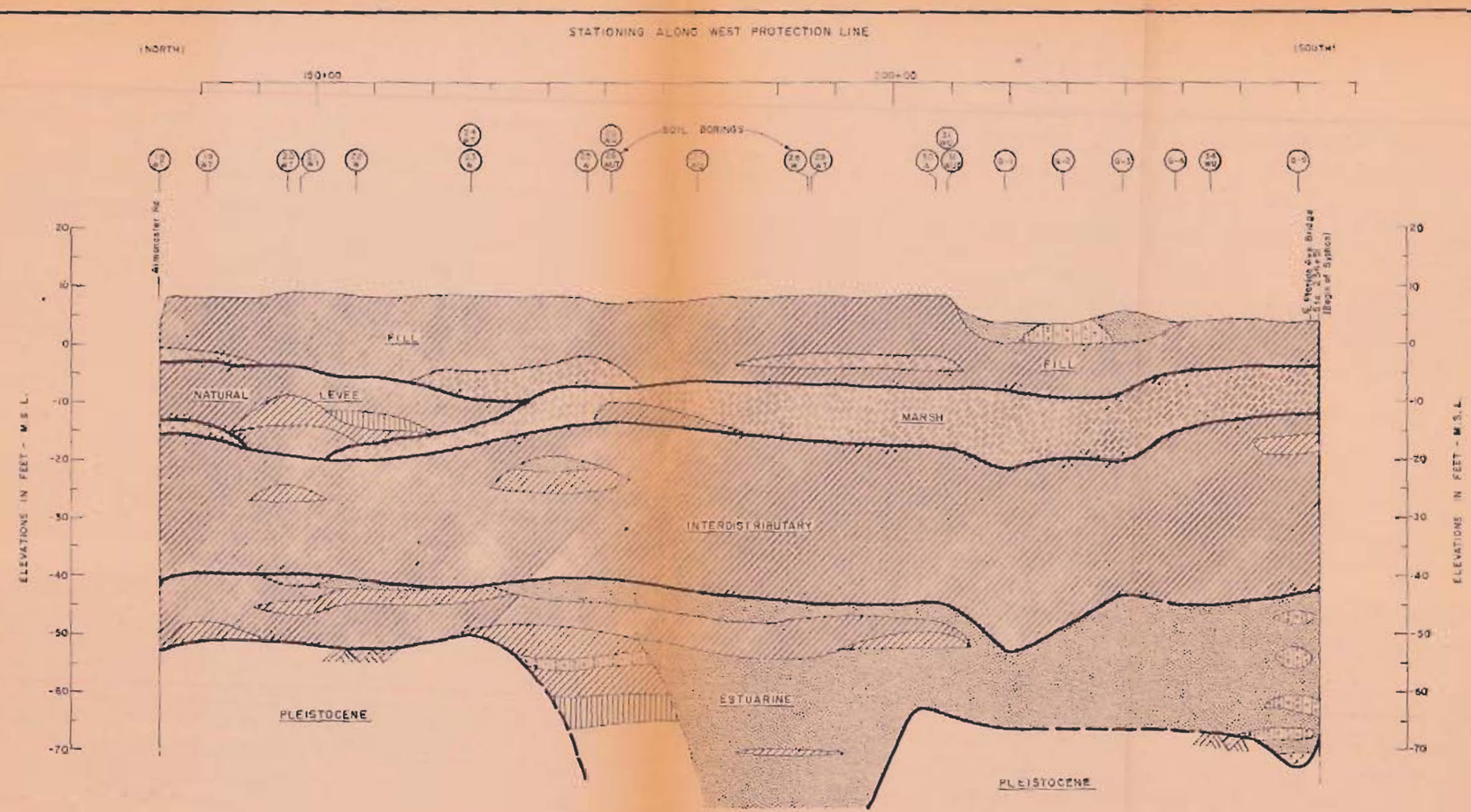
GENERALIZED SOIL AND GEOLOGIC PROFILE

WEST LEVEE-LAKE PONTCHARTRAIN TO ALMONASTER AVE.

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

FEBRUARY 1968 FILE NO. H-2-24111

PLATE III - 1



LEGEND

- CH - Fat clay
- CHO - Fat clay with organic matter and peat
- CL - Lean clay
- ML - Silt
- SM - Silty sand
- SP - Fine sand
- SI - Shell
- Pleistocene Horizon

NATURAL LEVEE - soft to stiff clays with lenses and layers of silt

MARSH - very soft clays with organic matter and peat

INTERDISTRIBUTARY - very soft to soft clays with lenses and layers of silt and sand

ESTUARINE - sand, clay and silt with shell and shell fragments

LAKE PONTCHARTRAIN, LA. AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
DESIGN MEMORANDUM NO. 2 - GENERAL DESIGN
SUPPLEMENT NO. 8
IHNC REMAINING LEVEES

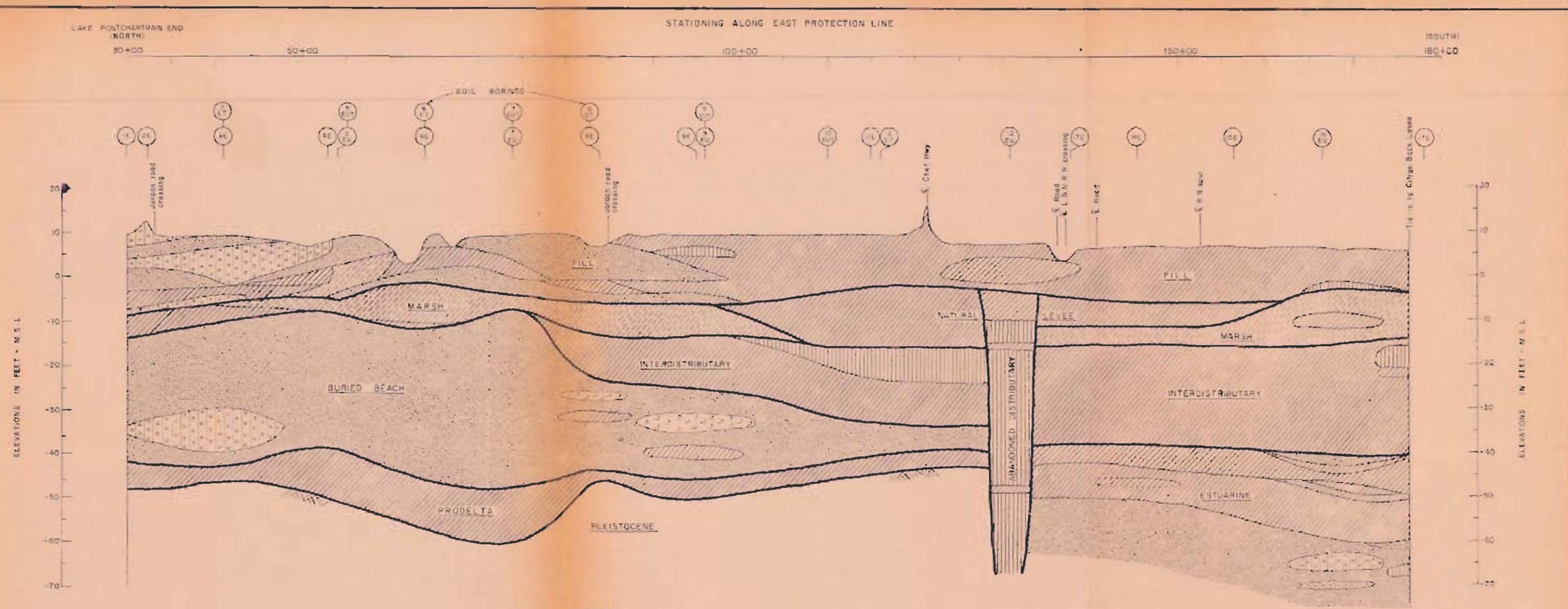
GENERALIZED SOIL AND GEOLOGIC PROFILE
WEST LEVEE - ALMONASTER AVE. TO FLORIDA AVE.

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

FEBRUARY 1968

FILE NO. H-2-24111

PLATE III-2

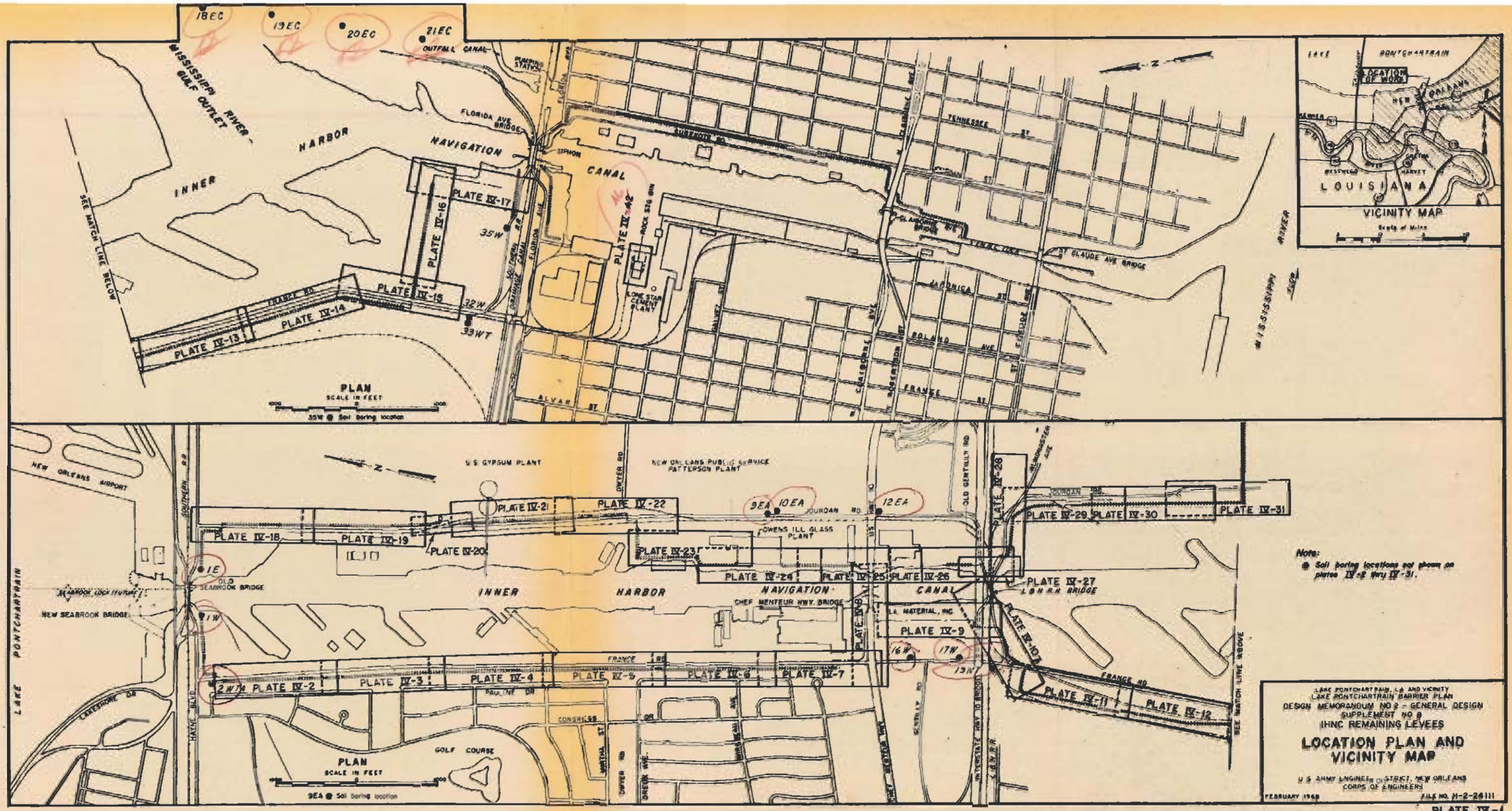


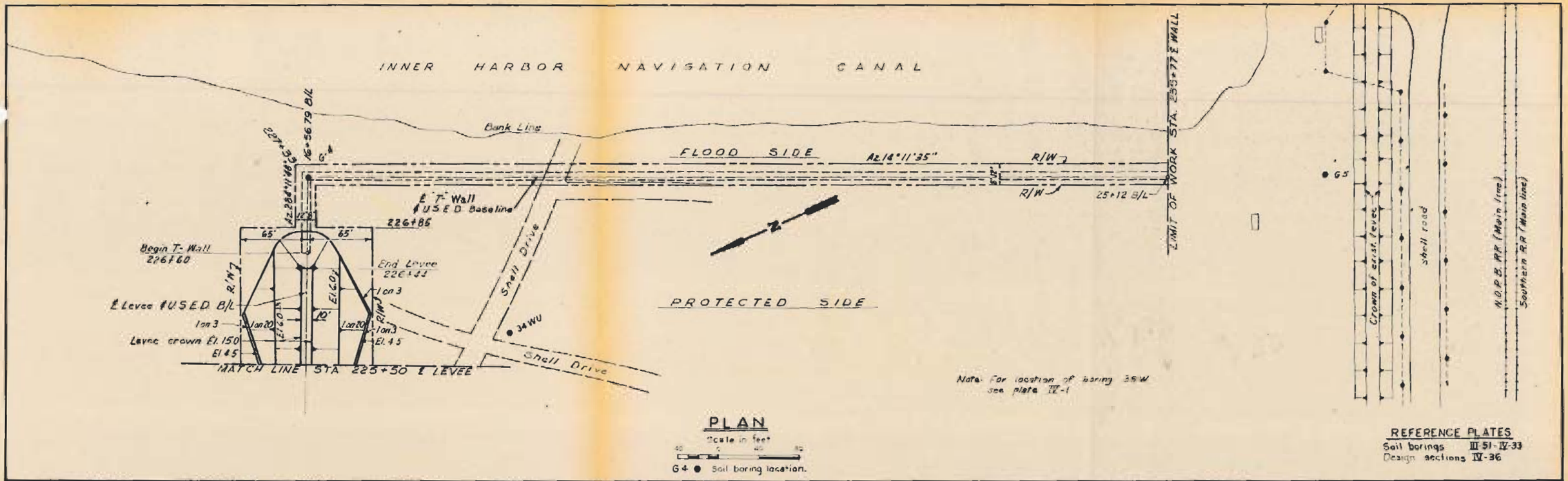
LEGEND

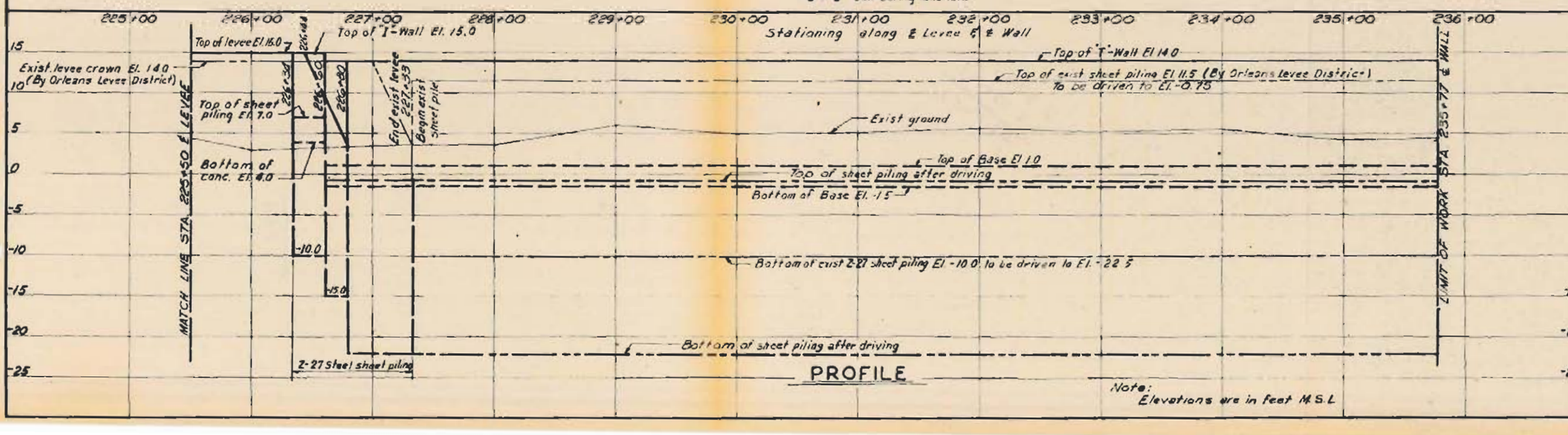
CH - Fat clay	NATURAL LEVEE - soft to stiff clays with lenses and layers of silt
CHO - Fat clay with organic matter and peat	MARSH - very soft clays with organic matter and peat
CL - Lean clay	ABANDONED DISTRIBUTARY - silts, silty sands with clay layers
ML - Silt	INTERDISTRIBUTARY - very soft to soft clays with lenses and layers of silt and sand
SM - Silty sand	BURIED BEACH - sand with shell and shell fragments
SP - Fine sand	PRODELTA - medium to stiff clays
SI - Shells	ESTUARINE - sand, clay and silt with shell and shell fragments
Pleistocene Horizon	

LAKE PONTCHARTRAIN, LA. AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
DESIGN MEMORANDUM NO 2 - GENERAL DESIGN
SUPPLEMENT NO. 8
IHNC REMAINING LEVEES
GENERALIZED SOIL
AND GEOLOGIC PROFILE
EAST LEVEE-LAKE PONTCHARTRAIN TO
CITRUS BACK LEVEE
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
FEBRUARY 1968
FILE NO. H-2-24111

PLATE III-3


LOCATION PLAN AND VICINITY MAP
LAKE PONTCHARTRAIN, LA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
DESIGN MEMORANDUM NO 2 - GENERAL DESIGN
SUPPLEMENT NO 9
IHNC REMAINING LEVEES
U S ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
FEBRUARY 1968
FILE NO. H-2-24111
PLATE IV-1
Note:
● Soil boring locations not shown on plates IV-2 thru IV-31.
VICINITY MAP
LOUISIANA
LAKE PONTCHARTRAIN
LOCATION OF WORK
NEW ORLEANS
MISSISSIPPI RIVER
PLAN
SCALE IN FEET
35W ● Soil boring location
9EA ● Soil boring location
MISSISSIPPI RIVER - GULF OUTLET
INNER HARBOR NAVIGATION CANAL
FLORIDA AVE BRIDGE
ST CLAUDE AVE BRIDGE
NEW ORLEANS AIRPORT
U.S. GYPSUM PLANT
NEW ORLEANS PUBLIC SERVICE PATTERSON PLANT
OWENS ILL GLASS PLANT
OLD SEABROOK BRIDGE
NEW SEABROOK BRIDGE
SEABROOK LOCK (FUTURE)
CHEF MENTEUR HWY. BRIDGE
L.N.R.R. BRIDGE
GOLF COURSE
SEE MATCH LINE BELOW
PLATE IV-2
PLATE IV-3
PLATE IV-4
PLATE IV-5
PLATE IV-6
PLATE IV-7
PLATE IV-9
PLATE IV-10
PLATE IV-11
PLATE IV-12
PLATE IV-13
PLATE IV-14
PLATE IV-15
PLATE IV-16
PLATE IV-17
PLATE IV-18
PLATE IV-19
PLATE IV-20
PLATE IV-21
PLATE IV-22
PLATE IV-23
PLATE IV-24
PLATE IV-25
PLATE IV-26
PLATE IV-27
PLATE IV-28
PLATE IV-29
PLATE IV-30
PLATE IV-31





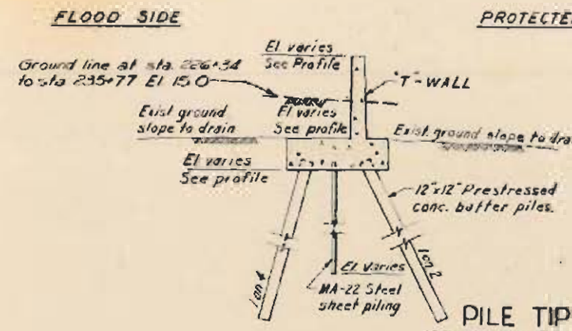
LAKE PONTCHARTRAIN, LA. AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
DESIGN MEMORANDUM NO 2 - GENERAL DESIGN
SUPPLEMENT NO. 8
IHNC REMAINING LEVEES

PLAN AND PROFILE
WEST LEVEE
STA. 225+50 TO STA. 235+77

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

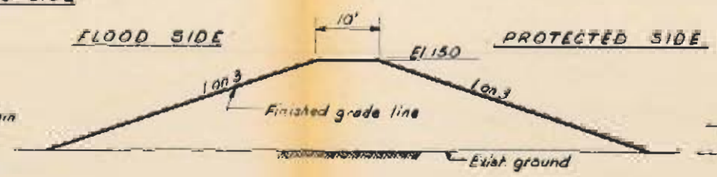
FEBRUARY 1948 FILE NO. H-2-24111

PLATE IV-17



	PILE TIP ELEV. TENSION	COMPRESSION
STA. 136+10 TO STA. 136+27	-40	-56
STA. 143+76 TO STA. 144+01	-40	-56
STA. 210+10 TO STA. 211+17	-45	-53
STA. 226+34 TO STA. 235+77	-56	-61

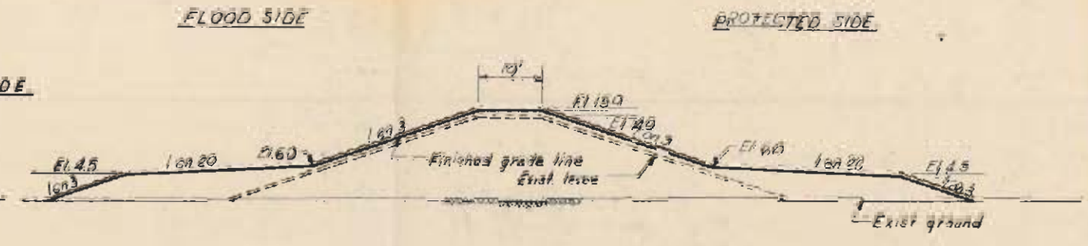
Scale: 1"=10'



STA. 145+76 TO STA. 147+97

(Exist. levee constructed by Orleans Levee District for interim hurricane protection)

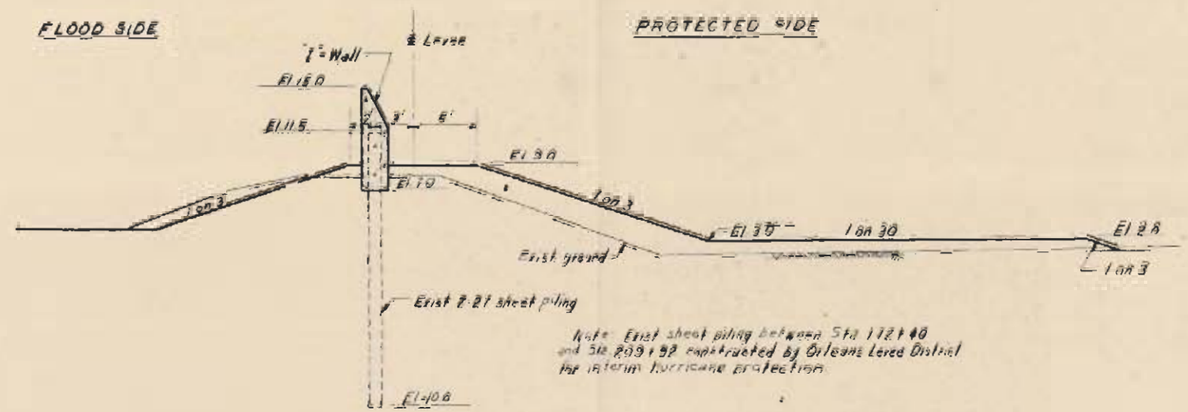
Scale: 1"=20'



STA. 211+81 TO STA. 226+44

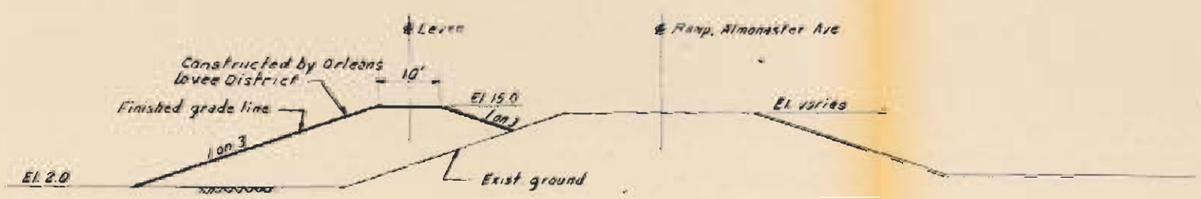
(Exist. levee constructed by Orleans Levee District for interim hurricane protection)

Scale: 1"=20'



STA. 172+40 TO STA. 209+92

Scale: 1"=10'



STA. 137+72 TO STA. 141+30

Scale: 1"=20'

REFERENCE PLATE

Typical wall sections IV-38

LAKE PONTCHARTRAIN, LA. AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
DESIGN MEMORANDUM NO 2 - GENERAL DESIGN
SUPPLEMENT NO 8
IHNC REMAINING LEVEES

DESIGN SECTIONS

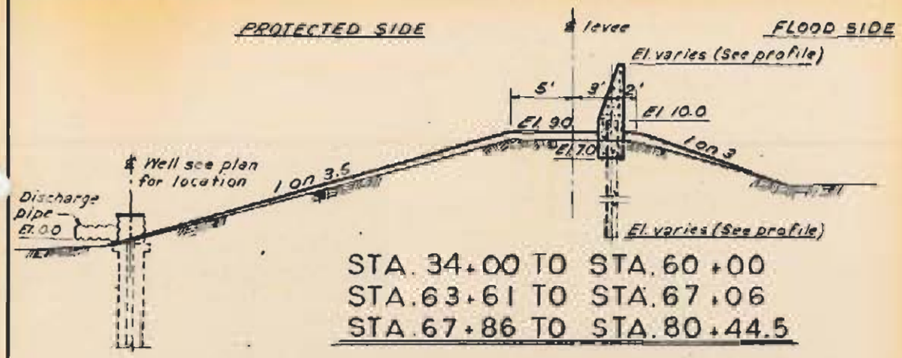
WEST LEVEE

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

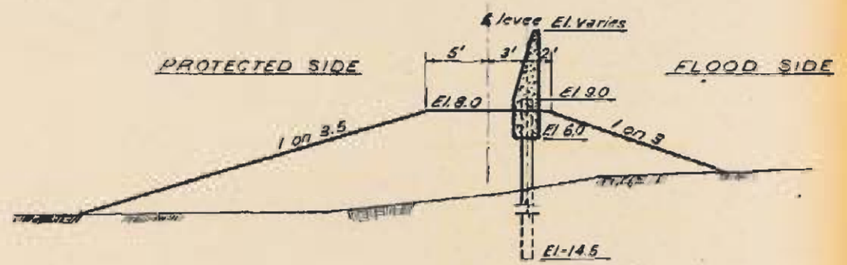
FEBRUARY 1966

FILE NO. H-2-24111

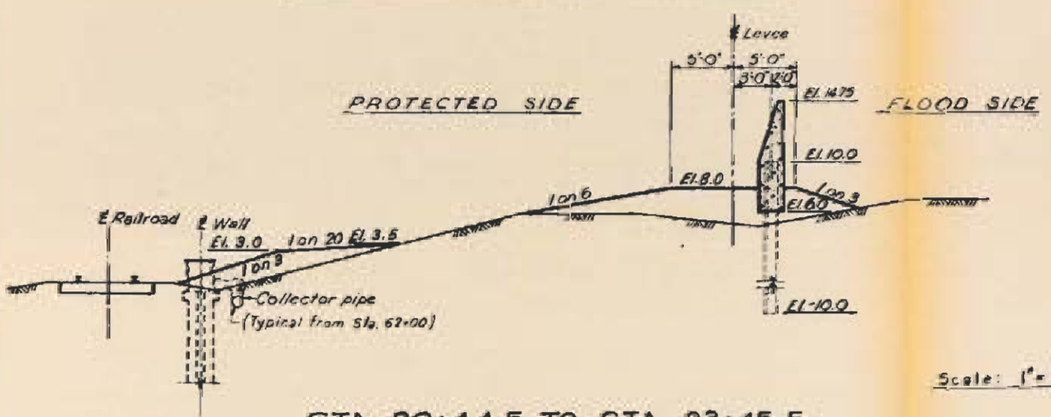
PLATE IV-36



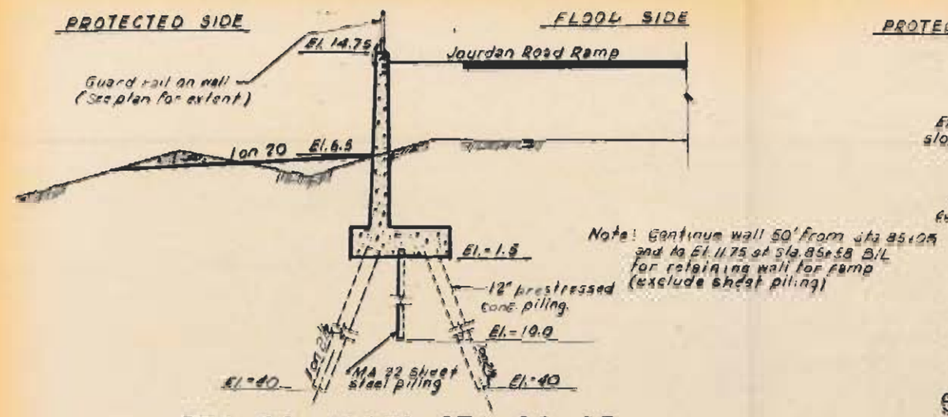
STA. 34+00 TO STA. 60+00
STA. 63+61 TO STA. 67+06
STA. 67+86 TO STA. 80+44.5



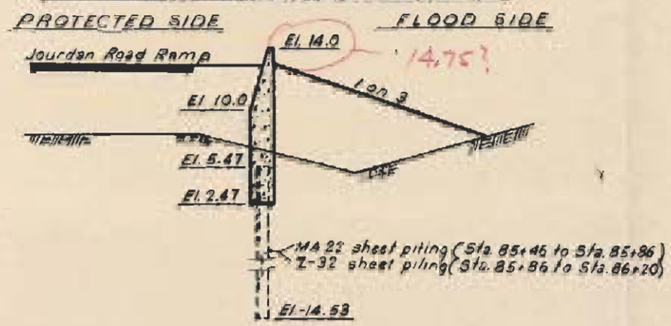
STA. 60+10 TO STA. 60+60



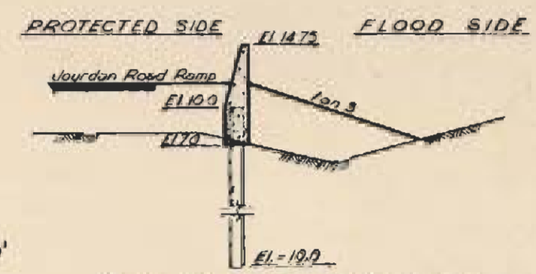
STA. 80+44.5 TO STA. 83+45.5



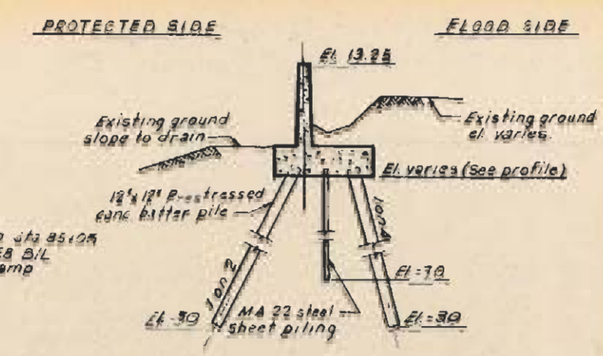
STA. 83+45.5 TO STA. 85+05



STA. 85+46 TO STA. 86+20



STA. 86+20 TO STA. 86+66



STA. 60+60 TO STA. 61+38
STA. 61+88 TO STA. 63+47
STA. 63+61 C.S.

GATE MONOLITHS

STA. 61+38 TO STA. 61+88
STA. 67+06 TO STA. 67+86
STA. 86+66 TO STA. 87+41
STA. 93+75.5 TO STA. 94+14
STA. 136+43 TO STA. 137+19
STA. 138+29 TO STA. 139+05
STA. 147+47 TO STA. 147+90
STA. 154+57 TO STA. 155+02
STA. 162+86 TO STA. 163+32
STA. 169+87 TO STA. 170+33

RAMP CROSSINGS

STA. 85+05 TO STA. 85+46

Scale: 1" = 10'

REFERENCE PLATE
Typical wall sections IV-39

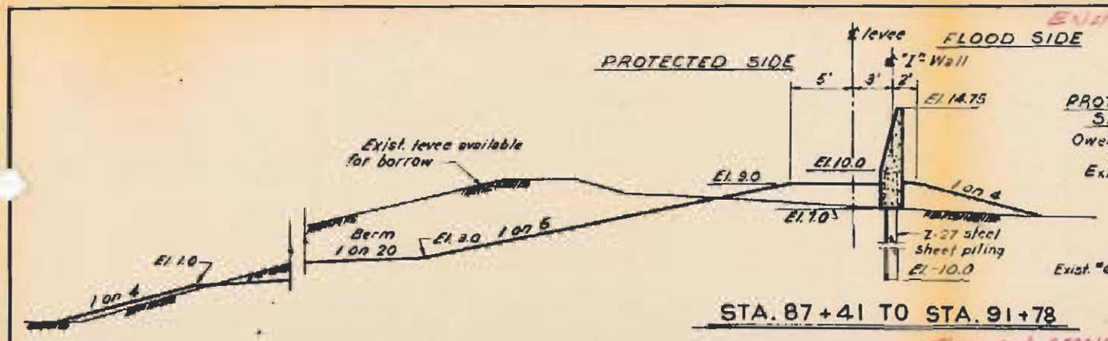
LAKE PONTCHARTRAIN, LA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
DESIGN MEMORANDUM NO 2 - GENERAL DESIGN
SUPPLEMENT NO 8
IHNC REMAINING LEVEES

DESIGN SECTIONS
EAST LEVEE

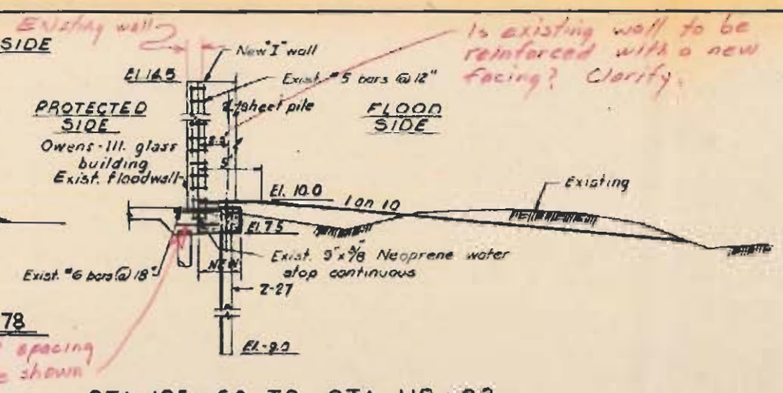
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

FEBRUARY 1968
FILE NO. H-2-24111

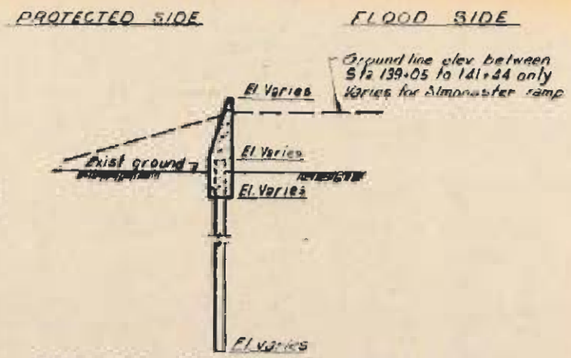
PLATE IV-37



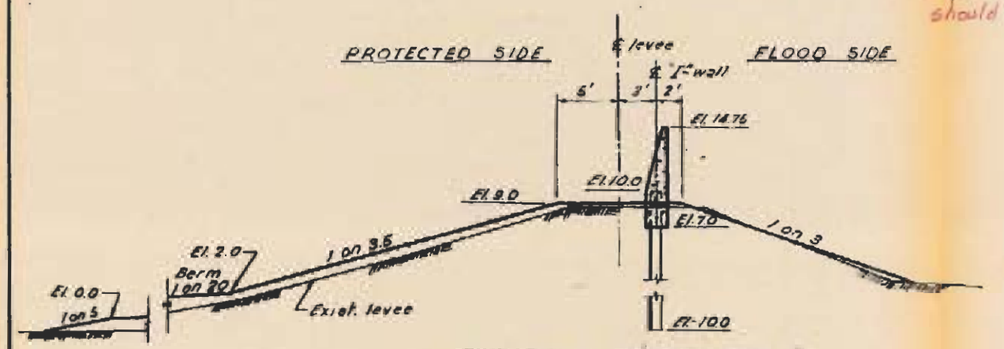
STA. 87+41 TO STA. 91+78



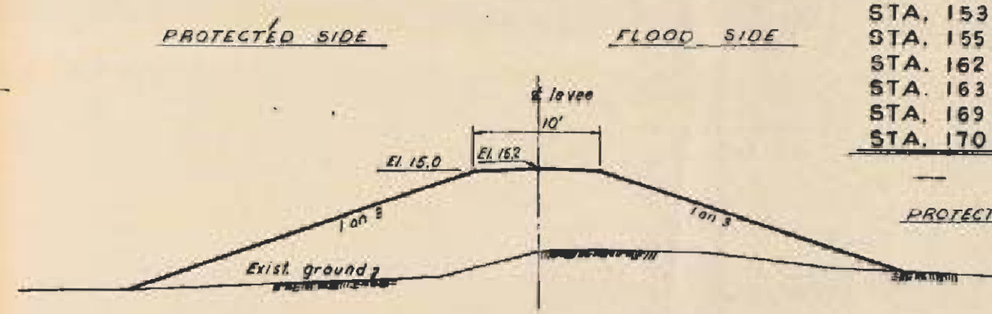
STA. 105+60 TO STA. 112+03



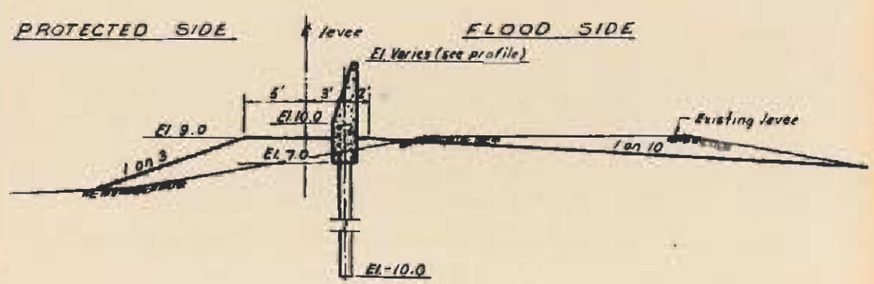
STA. 123+05 TO STA. 130+91
STA. 135+97 TO STA. 136+43
STA. 137+19 TO STA. 138+29
STA. 139+05 TO STA. 141+44
STA. 147+04 TO STA. 147+47
STA. 147+90 TO STA. 148+60
STA. 153+27 TO STA. 154+57
STA. 155+02 TO STA. 155+73
STA. 162+52 TO STA. 162+86
STA. 163+32 TO STA. 163+71
STA. 169+49 TO STA. 169+87
STA. 170+33 TO STA. 170+73



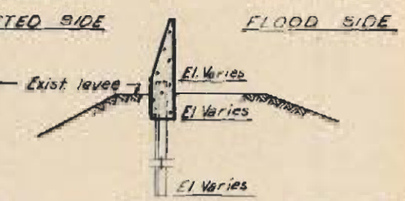
STA. 94+14 TO STA. 94+19
STA. 94+71 TO STA. 97+43
STA. 97+73 TO STA. 100+86



STA. 130+81 TO STA. 136+07
STA. 141+75 TO STA. 147+14
STA. 148+50 TO STA. 153+37
STA. 155+63 TO STA. 162+62
STA. 163+61 TO STA. 169+59
STA. 170+53 TO STA. 179+47



STA. 105+28 TO STA. 105+60
STA. 112+03 TO STA. 112+37



STA. 91+78 TO STA. 93+75.5
STA. 100+86 TO STA. 105+28
STA. 112+37 TO STA. 121+63
STA. 121+63 TO STA. 122+41

Scale: 1/2" = 5'

TYPICAL LEVEE SECTION

REFERENCE PLATE
Typical wall sections IV-39

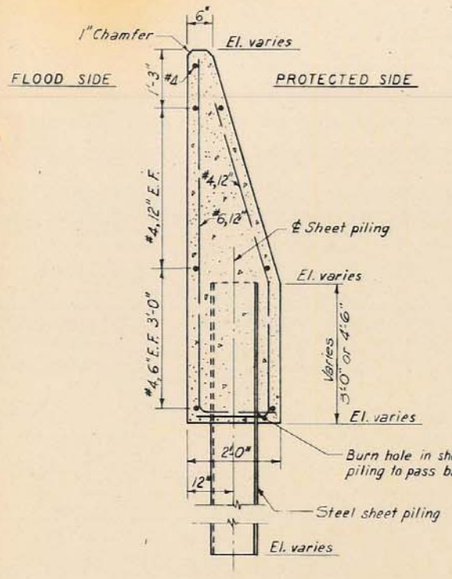
LAKE PONTCHARTRAIN, LA. AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
DESIGN MEMORANDUM NO 2 – GENERAL DESIGN
SUPPLEMENT NO. 8
IHNC REMAINING LEVEES

DESIGN SECTIONS
EAST LEVEE

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

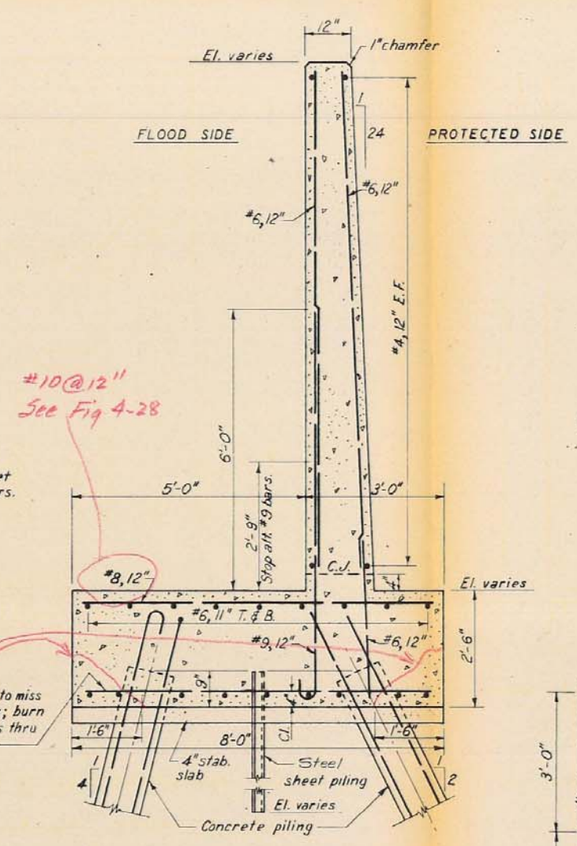
FEBRUARY 1968 FILE NO. H-2-24111

PLATE IV-38



TYPICAL I-WALL SECTION

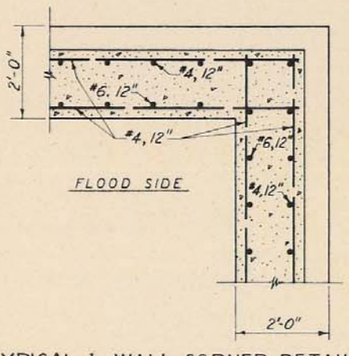
Scale: 3/8" = 1'-0"



Bending moment in piles will tend to crack concrete. No 6 @ 12" considered too light

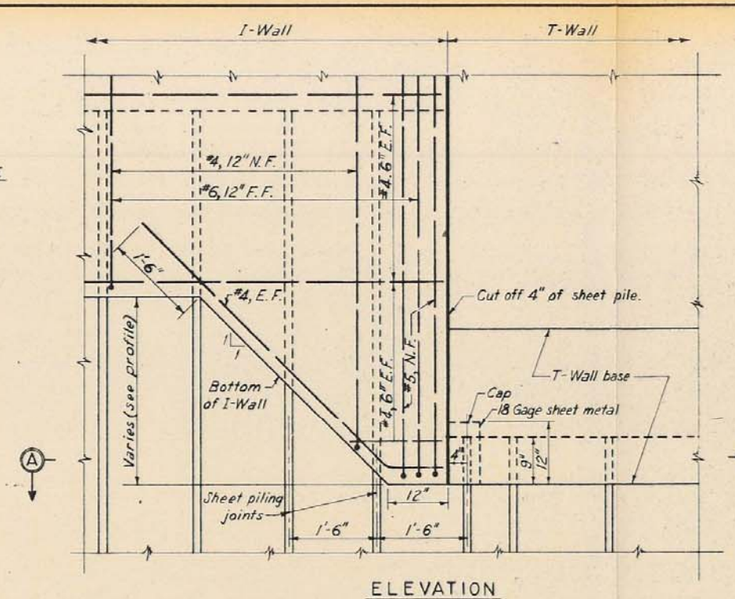
TYPICAL T-WALL SECTION

Scale: 3/8" = 1'-0"



TYPICAL I-WALL CORNER DETAIL

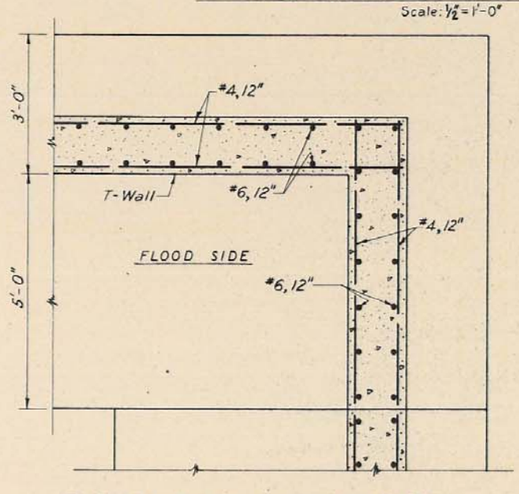
Scale: 3/8" = 1'-0"



ELEVATION

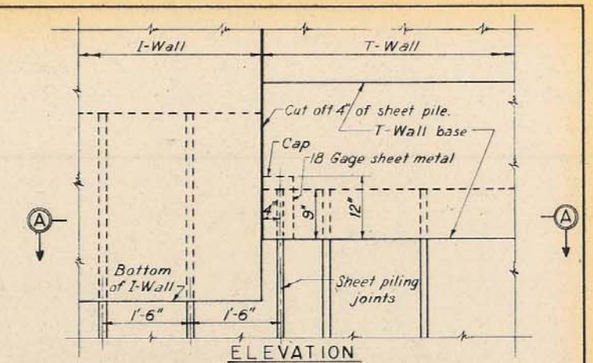
TYPICAL DETAIL FOR I-WALL TO T-WALL WHERE I-WALL BASE IS HIGHER THAN BOTTOM OF T-WALL BASE

Scale: 1/2" = 1'-0"



TYPICAL T-WALL CORNER DETAIL

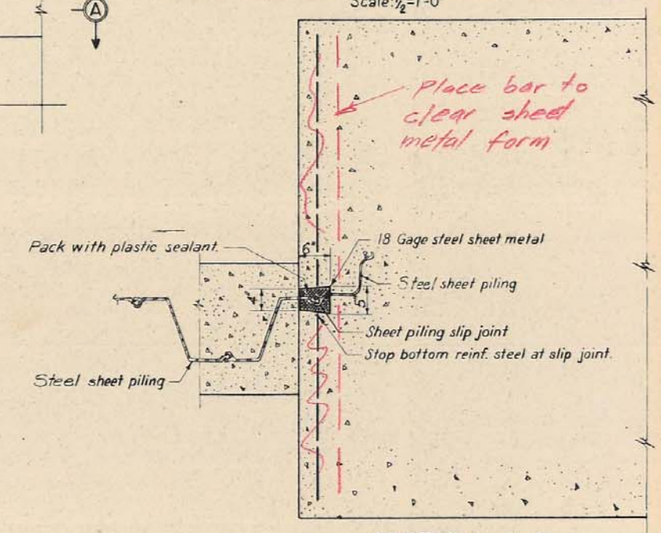
Scale: 3/8" = 1'-0"



ELEVATION

TYPICAL DETAIL FOR I-WALL TO T-WALL WHERE T-WALL BASE IS HIGHER THAN BOTTOM OF I-WALL BASE

Scale: 1/2" = 1'-0"



SECTION A-A

Scale: 1/2" = 1'-0"

REFERENCE PLATE

Seal and waterstop detail IV - 40

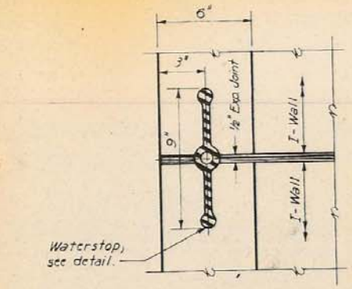
LAKE PONTCHARTRAIN, LA. AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
DESIGN MEMORANDUM NO 2 - GENERAL DESIGN
SUPPLEMENT NO. 8
IHNC REMAINING LEVEES

TYPICAL WALL SECTIONS

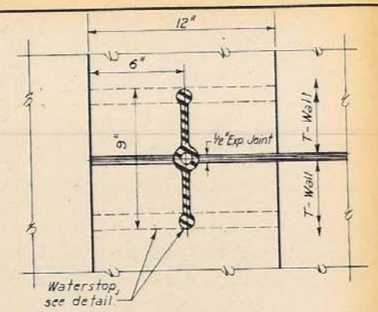
WEST AND EAST LEVEE

U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

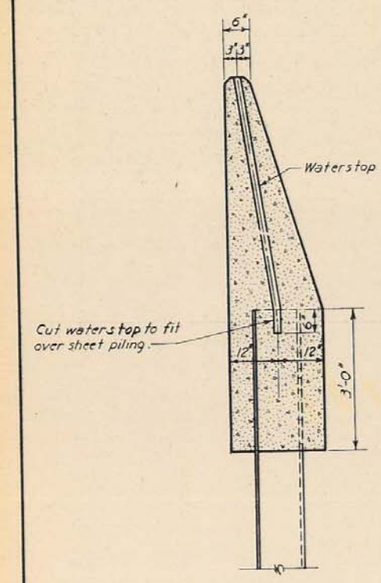
FEBRUARY 1968 FILE NO. H-2-24111



PLAN
Scale: 1 1/2" = 1'-0"

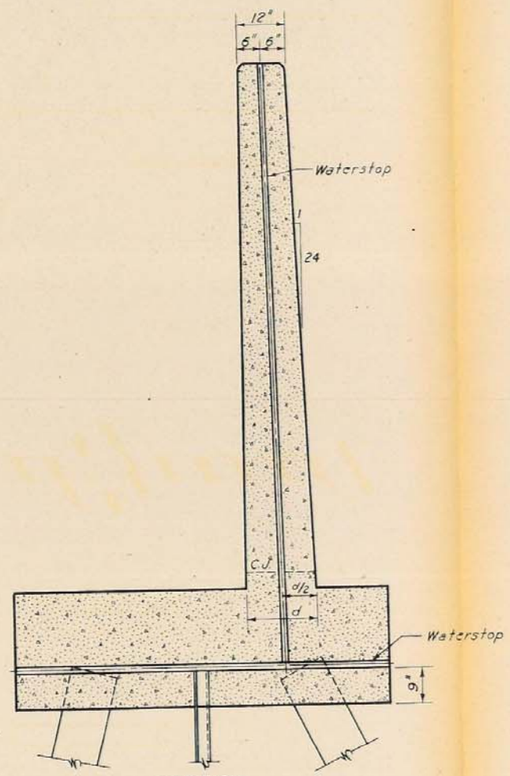


PLAN
Scale: 1 1/2" = 1'-0"



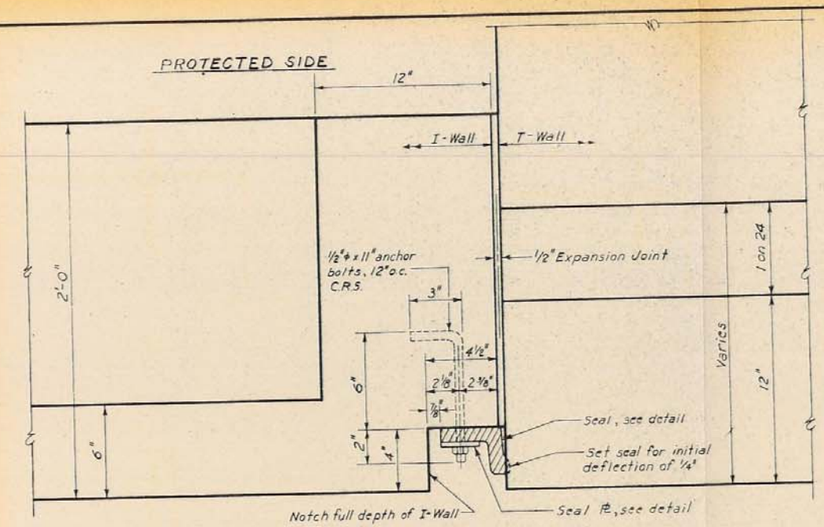
SECTION

TYPICAL I-WALL JOINT
Scale: 3/8" = 1'-0"

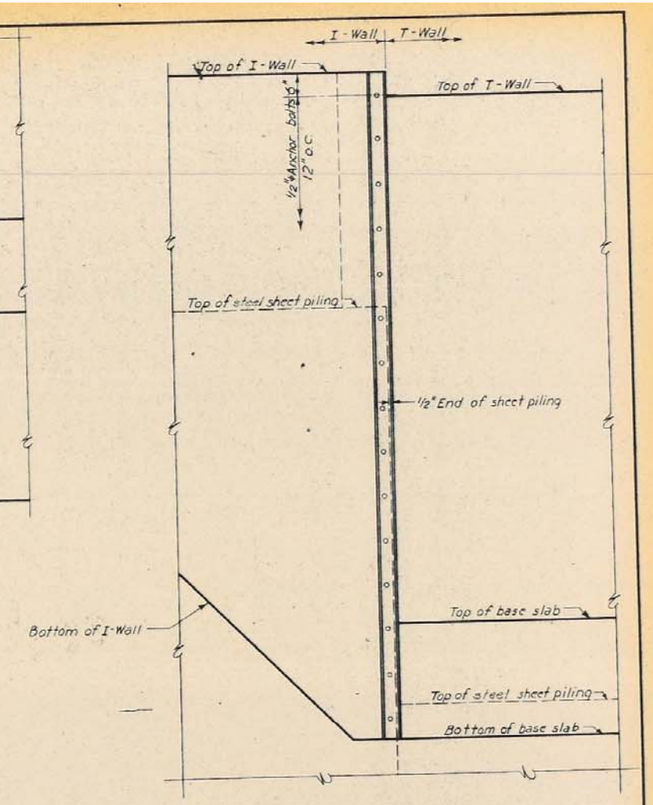


SECTION

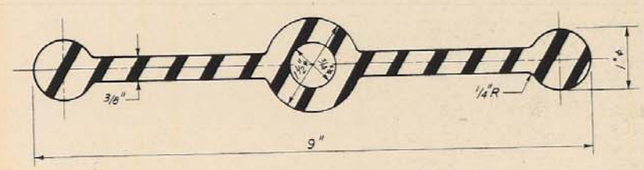
TYPICAL T-WALL JOINT
Scale: 3/8" = 1'-0"



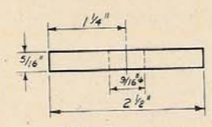
PLAN
Scale: 1 1/2" = 1'-0"



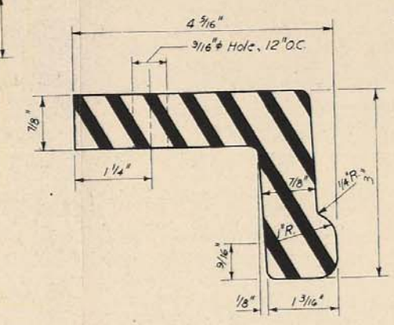
FLOOD SIDE ELEVATION
Scale: 3/8" = 1'-0"



WATERSTOP
Scale: Half Size



SEAL PLATE
Scale: Half Size



SEAL DETAIL
Scale: Half Size

LAKE PONTCHARTRAIN, L.A. AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
DESIGN MEMORANDUM NO 2 - GENERAL DESIGN
SUPPLEMENT NO. 8
IHNC REMAINING LEVEES

TYPICAL WALL SECTIONS
WEST AND EAST LEVEE

U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS,

FEBRUARY 1968 — FILE NO. H-2-24111

PLATE IV-40