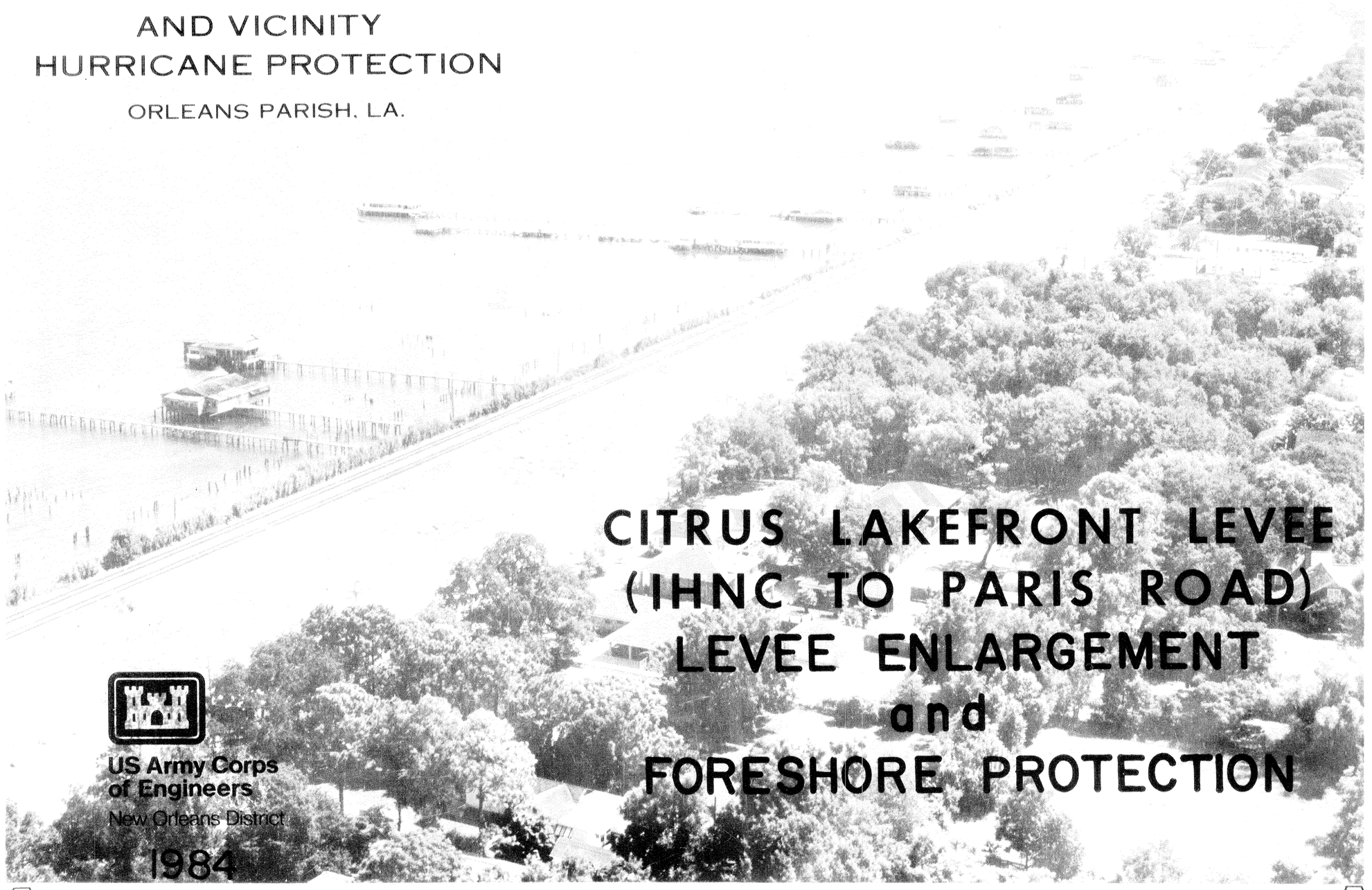
PLANS FOR

LAKE PONTCHARTRAIN, LA.
AND VICINITY
HURRICANE PROTECTION

ORLEANS PARISH, LA.



CITRUS LAKEFRONT LEVEE
(IHNC TO PARIS ROAD)
LEVEE ENLARGEMENT
and
FORESHORE PROTECTION

US Army Corps
of Engineers
New Orleans District

1984

STICK FILE

H-8-29696

TABULATION OF BENCH MARK

BENCH MARK 204 LA. GEODETIC SURVEY DISK EL. 6.158 N.G.V.D.

DESCRIPTION: At New Orleans, about 1.15 miles northeast along Haynes Blvd. from the crossing of Downman Road, set on the shoulder of the Southern Railway which parallels Haynes Blvd. 44 feet northeast of the extended center line of Drum Street, 125 feet northwest of the centerline of Haynes Blvd. 10 feet southeast of the southeast rail of the southeast track 20 feet northeast of semaphore No. 1892, 7 1/2 feet northeast of the east corner of a concrete battery box, about 2 feet below the track and set in the top of a concrete post about 18 inches underground.

BENCH MARK: S-3 EL. 7.346 N.G.V.D.

DESCRIPTION: Marker is a standard disc on 1" black pipe, with cap countersunk 0.4'. Marker is located at approximate levee station 330+14, west of projected intersection of Paris Road and railroad tracks, 150 feet north of C/L of Hayne Blvd.

PROJECT LOCATION

GULF OF MEXICO

VICINITY MAP

SCALE 1:506,880

10 0 10 20 30 40 50 Miles

LOCATION OF WORK

LAKE BORGNE

LOCATION MAP

SCALE OF MILES

2 0 2 4 6 8 10 Miles

INDEX TO DRAWINGS

DWG	TITLE	DWG	TITLE
1	LOCATION MAP, VICINITY MAP, AND INDEX	9	MISCELLANEOUS DETAILS (OFFSET, RECESS)
2	PLAN AND PROFILE B/L STA. 27+28.53 TO B/L STA 130+07	10	MISCELLANEOUS DETAILS
3	PLAN AND PROFILE B/L STA. 130+07 TO B/L STA. 267+80	11	SPECIAL WORK AREA STA.149+00 B/L TO STA.162+00 B/L
4	PLAN AND PROFILE B/L STA. 267+80 TO B/L STA. 331+50	12	HOWZE BEACH BORROW & SOIL BORING LOGS
5	TYPICAL FLOTATION CHANNEL	13	LEVEE AND FORESHORE DIKE SOIL BORING LOGS
6	LEVEE DESIGN SECTIONS	14	SOIL BORING LEGEND
7	FORESHORE DIKE DESIGN SECTIONS	15	HYDROGRAPHS
8	TYPICAL DRAIN PIPE AND POLE INSTALLATION		

CITRUS LAKEFRONT LEVEE

LEVEE ENLARGEMENT AND FORESHORE PROTECTION

B/L STA. 27+28.53 TO B/L STA. 331+50

NOTE: *DRAWINGS IN THIS FOLIO HAVE BEEN REDUCED ONE HALF THE ORIGINAL SCALE*

REVISION	DATE	DESCRIPTION	BY

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

SUBMITTED: CHIEF, DESIGN BRANCH
APPROVED: CHIEF, ENGINEERING DIVISION
APPROVED: COLONEL, C.E. DISTRICT ENGINEER

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN
CITRUS LAKEFRONT LEVEE
LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA
LOCATION MAP, VICINITY MAP AND INDEX

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO
T.W.W	T.W.W	R.P.L.	DEC 1984	AS SHOWN	H-8-29696

SUBMITTED: SPONSOR
SPEC NO: DACW29-85-B-0015
DWG 1 OF 15

SAFETY IS A PART OF YOUR CONTRACT

LAKE PONTCHARTRAIN

NEW ORLEANS LAKEFRONT AIRPORT

FUTURE WORK BY OTHERS
SOUTH SHORE HARBOR MARINA
(TO BE CONSTRUCTED BY ORLEANS LEVEE DISTRICT)

63+96.28 B/L

LIMIT OF FORESHORE DIKE WORK
STA. 74+00 B/L (St. Charles Pump Station)

REACH A | REACH B

Sta. 113+00 B/L

MOBILIZATION SITE 1
(VICINITY OF STA. 113 + 00)

MATCH LINE STA. 130+07 B/L

(Existing) FLOODWALL & GATES

ELEV. BRIDGE RAMP

Seawall

℄ IMPROVED LEVEE
(See Note 1.)

FORESHORE DIKE
(See Typical Detail, Dwg 7)

DRAINAGE PIPE C/L STA. 75+00
DRAINAGE PIPE C/L STA. 80+00
DRAINAGE PIPE C/L STA. 86+00
DRAINAGE PIPE C/L STA. 92+00
DRAINAGE PIPE C/L STA. 98+00
DRAINAGE PIPE C/L STA. 104+00
DRAINAGE PIPE C/L STA. 110+00
DRAINAGE PIPE C/L STA. 116+00
DRAINAGE PIPE C/L STA. 122+00
DRAINAGE PIPE C/L STA. 128+00

FLOODWALL

CUT-OFF WALL SEE DWG 6

℄ LEVEE

HAYNE BLVD.

EXIST. FLOODWALL
STA. 0+00 W/L
Existing Floodwall Hayne Blvd. to Dywer Rd.

INNER HARBOR NAVIGATION CANAL

JORDAN RD.

DOWNMAN ROAD

ORLEANS PARISH, LA.

LIMIT OF LEVEE WORK
STA. 27+28.53 B/L

12-ULC | 14-ULC | 6-ULC

PLAN
SCALE
500 0 500 1000 1500
Polyconic Projection — 1927 North American Datum

WALL LINE STATIONING | LEVEE B/L STATIONING

LIMIT OF FULL LEVEE

0+00 | 30+00 | 40+00 | 50+00 | 60+00 | 70+00 | 80+00 | 90+00 | 100+00 | 110+00 | 120+00 | 130+00 | 140+00

STA. 3+80.29 W/L ℄ Gate 1 | ℄ Gate 2, STA. 5+23.38 W/L | ℄ Gate 2A, STA. 6+08.19 W/L | ℄ Gate 3, STA. 7+30.70 W/L | STA. 7+65.38 W/L

STA. 33+41.43 W/L = STA. 27+28.53 B/L

Levee ℄ Extends Perpendicularly Toward Levee B/L

DESIGN GRADE El. 15.5

1V on 3H

TOP OF I-WALL

Existing

SEE DWG. 9, For Levee End Detail

El. 10.5 ±

Existing Utilities Are To Remain in use during Construction of Levee Relocation is to be done after Levee is completed (See Utility Chart Below)

STA. 64+00 | STA. 63+50 SEE DWG 6 | STA. 73+60 | STA. 74+60

DESIGN CHANGE

No Work Area

TOP OF LEVEE

DESIGN GRADE El. 15.0

℄ St. Charles Pumping Station | ℄ Existing Levee Crown

SHEET PILE CUT-OFF
See Detail Dwg 6

108+00 | 120+00

Top El. 12.5

Sheetpile PZ-22

El. -5.0

Existing Steel Sheet Pile Cut-Off Wall

FORESHORE DIKE B/L STATIONING

LIMIT OF FORESHORE DIKE
STA. 74+00 B/L

STA. 77+00 Full Section

EXIST. FLOODWALL

NEW ORLEANS LAKEFRONT AIRPORT

FUTURE WORK BY ORLEANS LEVEE DISTRICT

TOP OF FORESHORE DIKE El. 14.0

(COVER STONE)

(DESIGN GRADE) El. 10.0

(UNDERLAYER STONE)

(DESIGN GRADE) El. 8.3

(CORE MATERIAL)

Existing ℄ St. Charles Pumping Station

Existing Airport Seawall STA. 64+00

1V on 3H | 1V on 4H

(Existing) Sheetpile With Concrete Cap

℄ Natural Ground (Lake Bottom)

MATCH LINE STA. 130+07 B/L

ELEVATION IN FEET—N.G.V.D.

21 | 16 | 11 | 6 | 1

PROFILE
SCALE: HORIZONTAL 1" = 500'
VERTICAL 1" = 5'

BORING LEGEND
◉ UNDISTURBED BORING

LOCATION OF UTILITIES

STA. 33+00	4" Dia.	GAS MAIN
STA. 33+40	4-5" Dia.	ELEC. 4-Conduits with Concrete Casing
STA. 43+29	1.5 "Dia.	ELEC. Meter
STA. 44+44	2-1.5" Dia.	ELEC. Meter 37A & 37B
STA. 45+76	1.5" Dia.	ELEC. Meter 39A
STA. 46+95	2-1.5" Dia.	ELEC. Meter 40A & 40B
STA. 47+92	1.5" Dia	ELEC. Meter 40C
STA. 54+65	4-5" Dia.	ELEC. 4-Conduits with Concrete Casing
STA. 55+00	2" Dia.	GAS MAIN
STA. 62+15	8" Dia.	WATER LINE
STA. 63+00	8" Dia.	SEWER LINE

NOTES:

1. See plate 6 for Levee Design Section.
2. For detail boring logs see plates 11 thru 12
3. See plate 6 for Sheet Pile Cut-Off alinement. Sta. 108+00 B/L to Sta. 120+00 B/L.

REVISION	DATE	DESCRIPTION	BY
1	2-7-85	REVISED THE FORESHORE DIKE PROFILE, Amend. 4	T.W.

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

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN

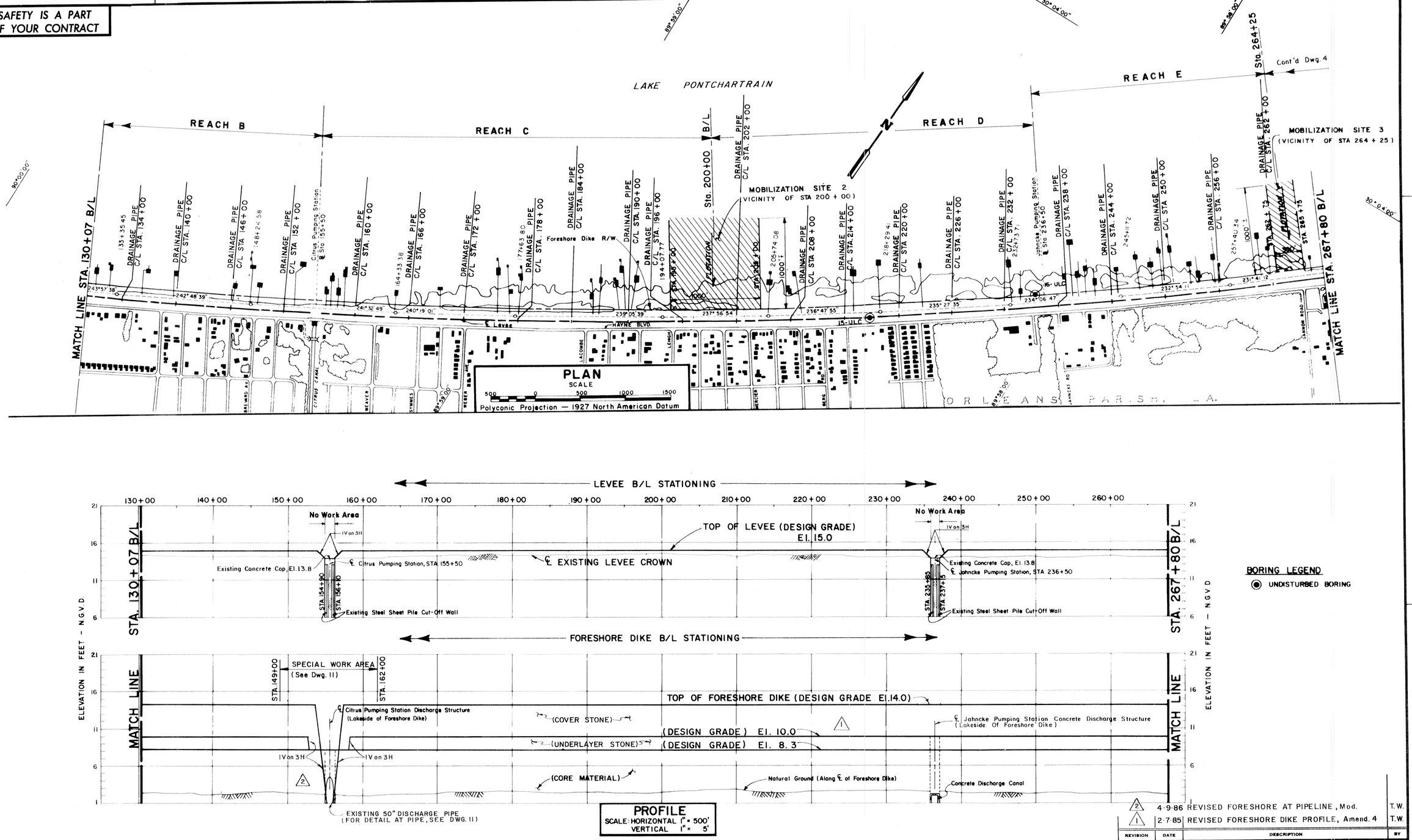
CITRUS LAKEFRONT LEVEE
LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

PLAN AND PROFILE
B/L STA. 27+28.53 TO B/L STA. 130+07

DESIGNED:	DRAWN:	CHECKED:	DATE:	SCALE:	FILE NO:
T.W.W.	L.A.H.	R.P.L.	DEC 1984	AS SHOWN	H-8-29696

SUBMITTED: Ronald P. Lee
SPEC. NO.: DACW29-85-B-0015
DWG 2 OF 15

SAFETY IS A PART OF YOUR CONTRACT



PROFILE
SCALE: HORIZONTAL 1" = 500'
VERTICAL 1" = 5'

BORING LEGEND
◉ UNDISTURBED BORING

REVISION	DATE	DESCRIPTION	BY
2	4-9-86	REVISED FORESHORE AT PIPELINE, Mod.	T.W.
1	2-7-85	REVISED FORESHORE DIKE PROFILE, Amend. 4	T.W.

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

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN

CITRUS LAKEFRONT LEVEE
LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

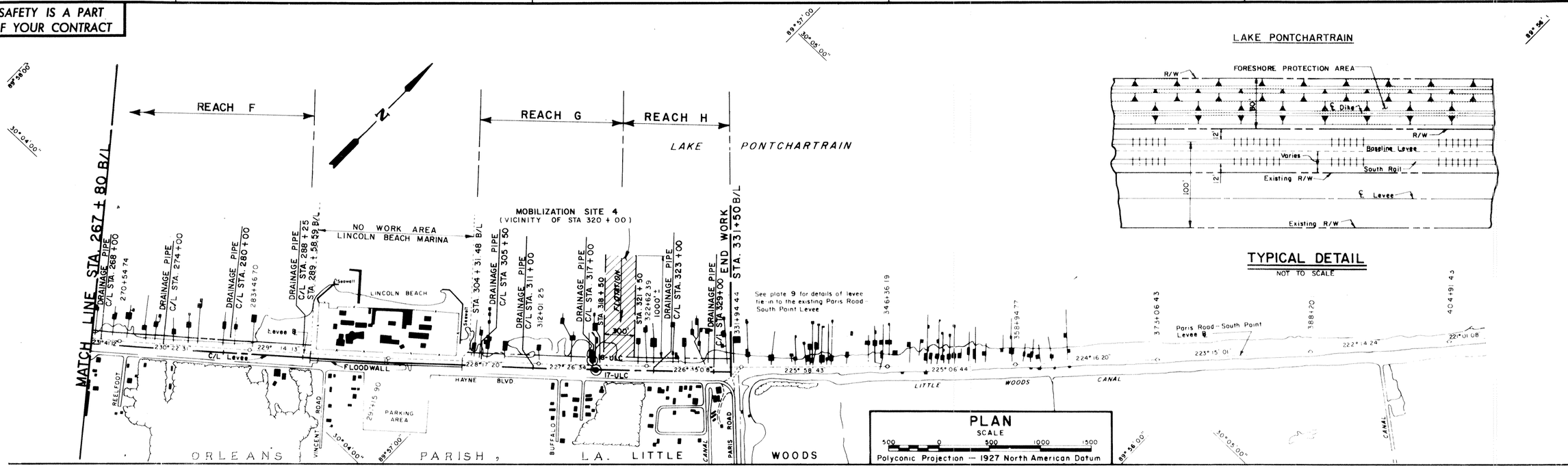
PLAN AND PROFILE
B/L STA. 130+07 TO B/L STA. 267+80

DESIGNED:	DRAWN:	CHECKED:	DATE:	SCALE:	FILE NO.:
T.W.W.	L.A.H.	R.P.L.	DEC 1984	AS SHOWN	H-8-29696

SUBMITTED: Ronald V. Lee, Engineer
SPEC NO.: DACW29-85-B-0015
DWG 3 OF 15

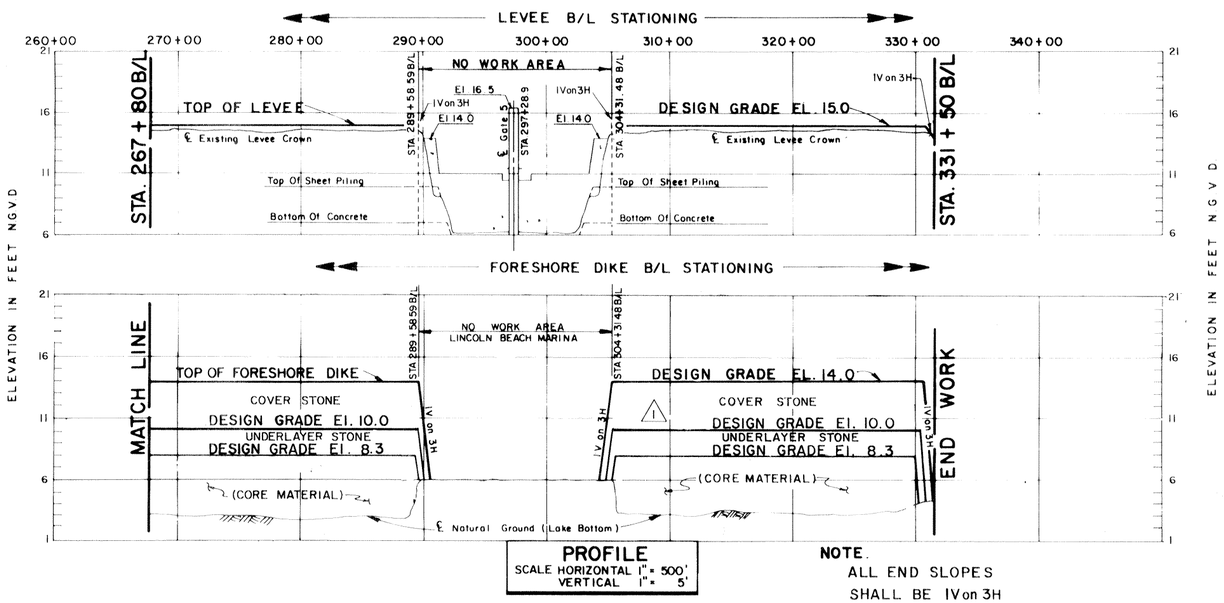
VALUE ENGINEERING INCENTIVE CLAUSES — "YOUR KEY TO HIGHER PROFITS"

SAFETY IS A PART OF YOUR CONTRACT



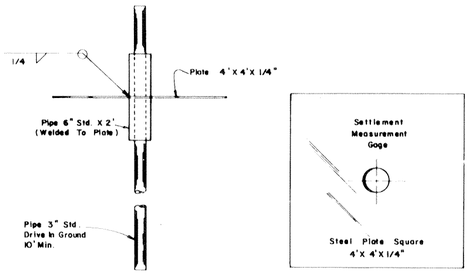
TYPICAL DETAIL
NOT TO SCALE

BORING LEGEND
◉ UNDISTURBED BORING



PROFILE
SCALE HORIZONTAL 1" = 500'
VERTICAL 1" = 5'

NOTE.
ALL END SLOPES SHALL BE 1V on 3H



SETTLEMENT MEASUREMENT GAGES

Should the Contractor desire payment for placing additional fill due to foundation settlement during construction, he shall furnish and install settlement gages at locations shown on the design section and as specified in the contract specifications. The settlement measurement range for each settlement gage shall be for a distance of 150 feet in each direction from each settlement gage measured along the centerline of the Foreshore Dike, except where settlement gages are placed at less than 300 foot intervals, in which case, the settlement measurement range shall be to a point 1/2 the distance between settlement gages. Riser pipes are permitted on settlement plates.

REVISION	DATE	DESCRIPTION	BY
1	2-7-85	REVISED FORESHORE DIKE PROFILE, Amend. 4	T.W.

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

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN

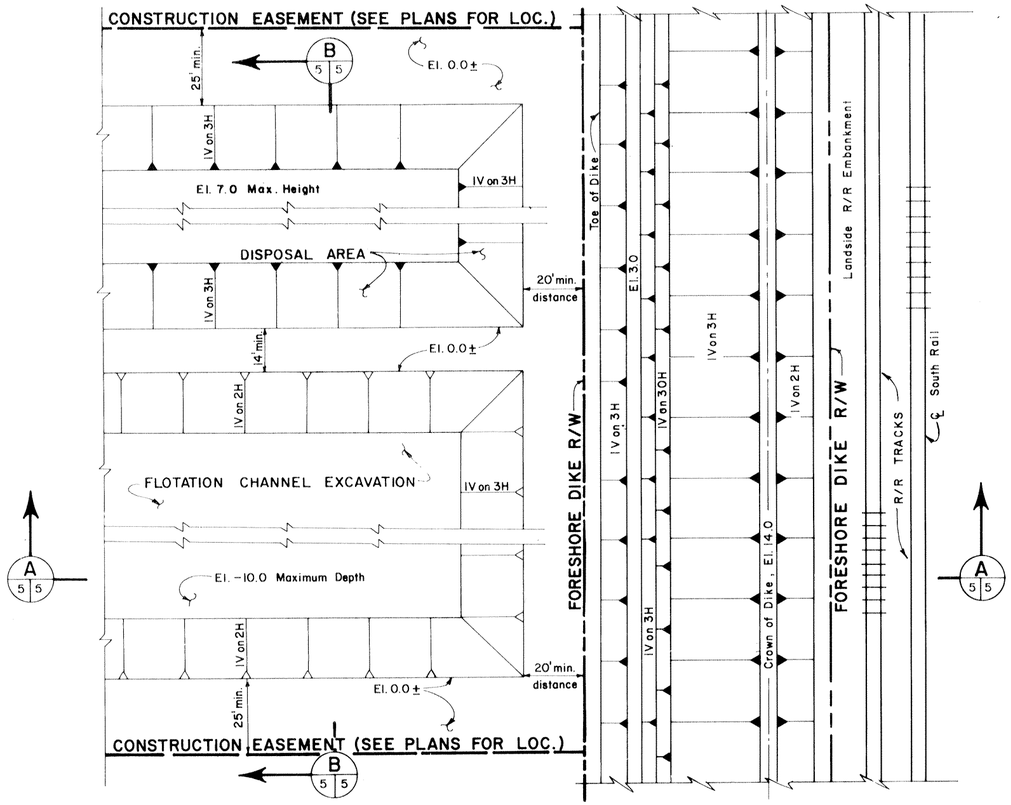
CITRUS LAKEFRONT LEVEE
LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

PLAN AND PROFILE
B/L STA. 267+80 TO B/L STA. 331+50

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
T.W.W.	L.A.H.	R.P.L.	DEC. 1984	AS SHOWN	H-8-29696

SUBMITTED: Ronald P. Lee
SPEC NO. DACW29-85-B-0015
DWG 4 OF 15

SAFETY IS A PART OF YOUR CONTRACT



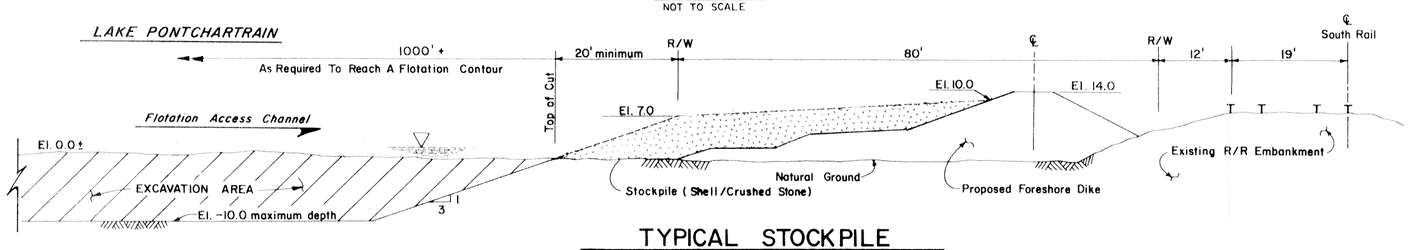
TYPICAL FLOTATION CHANNEL PLAN

NOT TO SCALE

VICINITY OF MOBILIZATION SITES				
	STATION	MAXIMUM PERMISSIBLE DIMENSIONS		
		TOTAL WIDTH	(C)	(DA)
1	113 + 00	500'	218'	218'
2	200 + 00	1000'	468'	468'
3	264 + 25	300'	118'	118'
4	320 + 00	300'	118'	118'

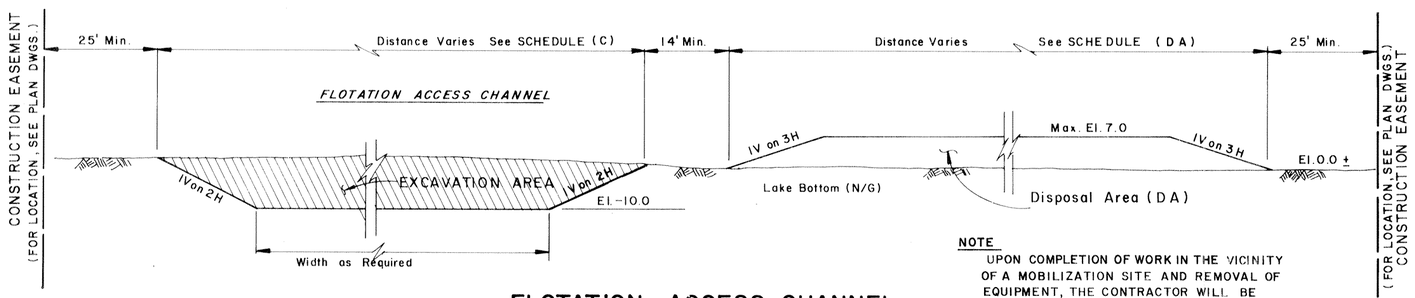
NOTE:

1. For General Notes, See Dwg 2.
2. A / 3 4 — "A" Section Identification Letter. "3" Number Of Drawing On Which Section Is Taken. "4" Number Of Drawing On Which Section Is Drawn.
3. All Sections On This Drawing Are Not To Scale.
4. A Minimum Of 20 Feet Must Be Maintained Between The Toe Of The Foreshore Design And The Top Of Cut For The Flotation Channel.



TYPICAL STOCKPILE SECTION A 5 5

NOT TO SCALE



FLOTATION ACCESS CHANNEL SECTION B 5 5

NOT TO SCALE

NOTE

UPON COMPLETION OF WORK IN THE VICINITY OF A MOBILIZATION SITE AND REMOVAL OF EQUIPMENT, THE CONTRACTOR WILL BE REQUIRED TO BACKFILL THE FLOTATION ACCESS CHANNEL WITH AVAILABLE MATERIAL.

VALUE ENGINEERING INCENTIVE CLAUSE "YOUR KEY TO HIGHER PROFITS"

REVISION	DATE	DESCRIPTION	BY

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

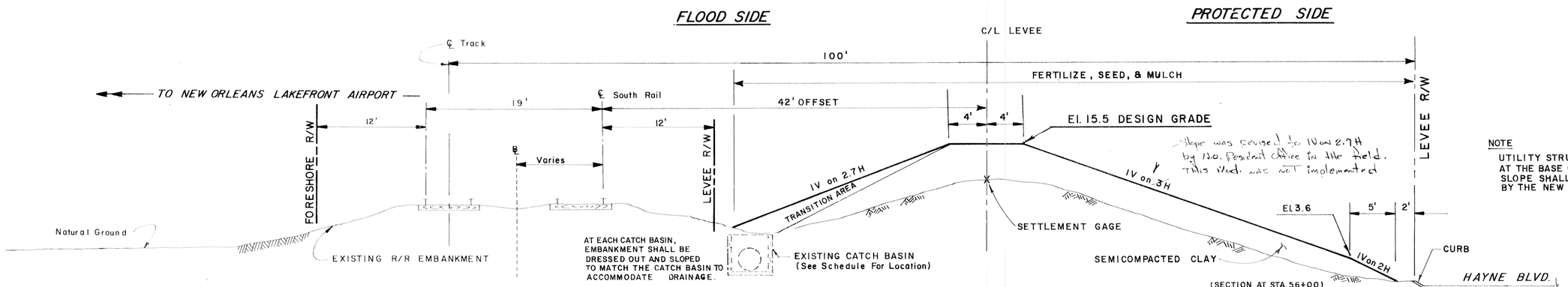
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN
CITRUS LAKEFRONT LEVEE
LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

TYPICAL FLOTATION CHANNEL

DESIGNED:	DRAWN:	CHECKED:	DATE:	SCALE:	FILE NO.:
T.W.W.	L.A.H.	R.P.L.	DEC. 1984	AS SHOWN	H-8-29696

SUBMITTED: Ronald P. Lee ENGINEER
SPEC NO.: DACW29-85-B-0015
DWG 5 OF 15

SAFETY IS A PART OF YOUR CONTRACT

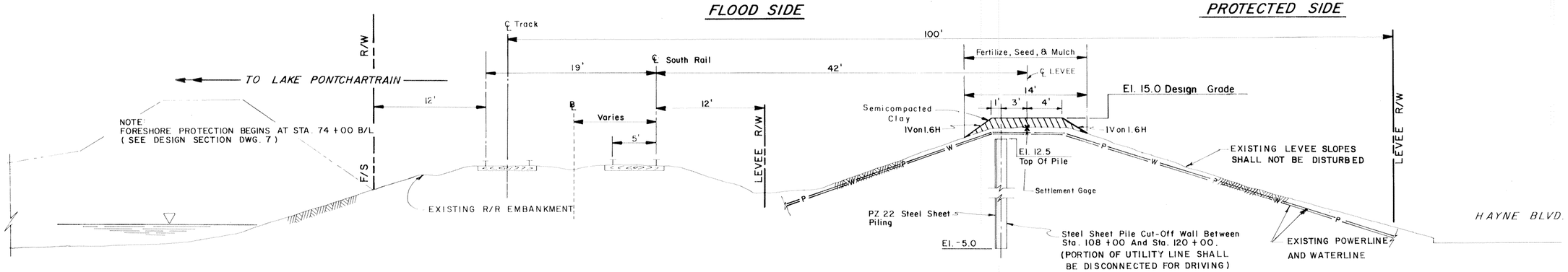


CATCH BASIN SCHEDULE	
STA. 31+00	55+53
37+00	64+50
43+00	
49+00	

1 TYPICAL DESIGN SECTION

APPROX. STA. 27+28.53 B/L TO APPROX. STA. 63+50 B/L

(TRANSITION BETWEEN STAS. 63+50 TO 64+00)



TYPICAL DESIGN SECTION

APPROX. STA. 64+00 B/L TO APPROX. STA. 331+45 B/L

(NO WORK AREA BETWEEN THE FOLLOWING)

STA. 73+60 B/L AND STA. 74+80 B/L
STA. 154+90 B/L AND STA. 156+10 B/L
STA. 235+85 B/L AND STA. 237+15 B/L
STA. 289+58.59 B/L AND STA. 304+31 B/L

REVISION	DATE	DESCRIPTION	BY
1	5-30-86	REVISED "TYPICAL DESIGN SECTION", MOD.	T.W.W.

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

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN

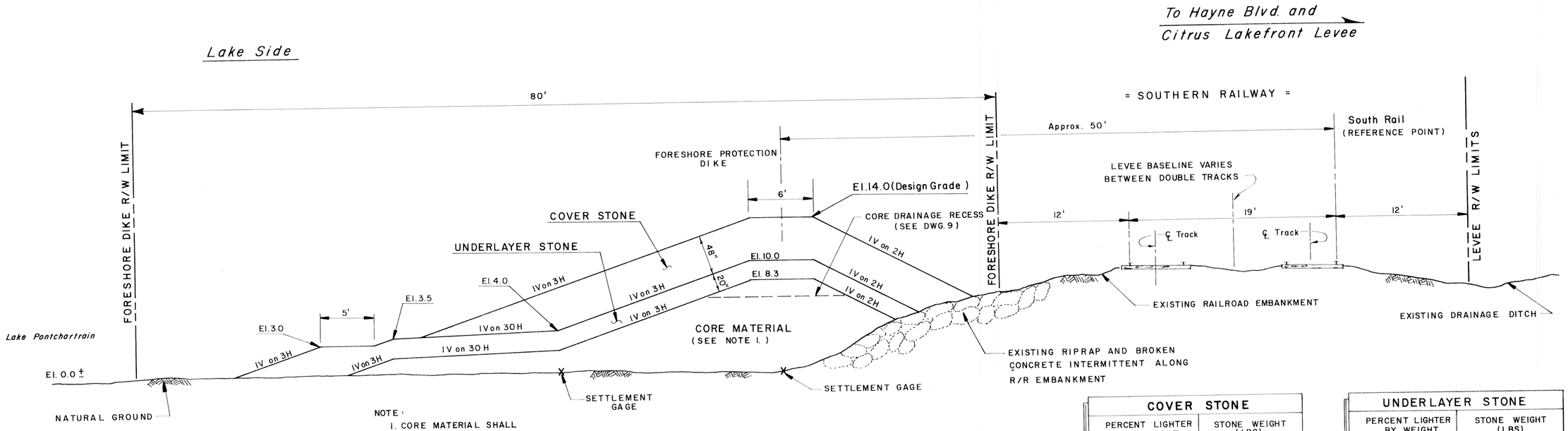
CITRUS LAKEFRONT LEVEE
LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

LEVEE DESIGN SECTIONS

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO
T.W.W.	L.A.H.	R.P.L.	DEC 1984	AS SHOWN	H-8-29696

SUBMITTED: Arnold W. Lee, ENGINEER
SPEC NO. DACW29-85-B-0015
DWG 6 OF 15

SAFETY IS A PART OF YOUR CONTRACT



NOTE:
1. CORE MATERIAL SHALL CONSIST OF EITHER SHELL, CRUSHED STONE, or GRAVEL.

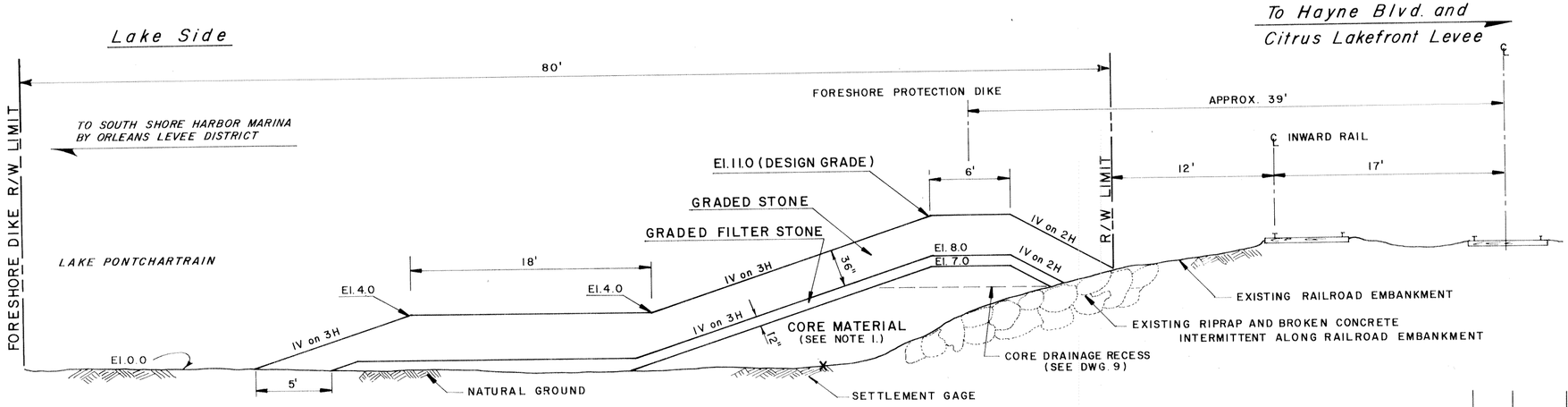
⚠1 TYPICAL DESIGN SECTION

APPROX. STA. 77+25 B/L TO APPROX. STA. 289+58 B/L
APPROX. STA. 304+31 B/L TO APPROX. STA. 331+16 B/L

NOT TO SCALE

COVER STONE	
PERCENT LIGHTER BY WEIGHT	STONE WEIGHT (LBS)
100	5000 – 2000
50	2200 – 1000
15	1100 – 300

UNDERLAYER STONE	
PERCENT LIGHTER BY WEIGHT	STONE WEIGHT (LBS)
100	400 – 160
50	160 – 80
15	80 – 30



MODIFIED DESIGN SECTION

APPROX. STA. 74+00 B/L TO APPROX. STA. 77+00 B/L
NOT TO SCALE
(TRANSITION BETWEEN STA. 77+00 & 77+25 B/L)

GRADED STONE	
PERCENT LIGHTER BY WEIGHT	STONE WEIGHT (LBS)
100	1000 – 400
50	430 – 200
15	210 – 60

GRADED FILTER STONE	
PERCENT LIGHTER BY WEIGHT	STONE WEIGHT (LBS)
100	50 – 20
50	20 – 10
15	10 – 5

VALUE ENGINEERING INCENTIVE CLAUSE "YOUR KEY TO HIGHER PROFITS"

REVISION	DATE	DESCRIPTION	BY
⚠1	2-7-85	REVISED TYPICAL DESIGN SECTION, Amend. 4	T.W

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

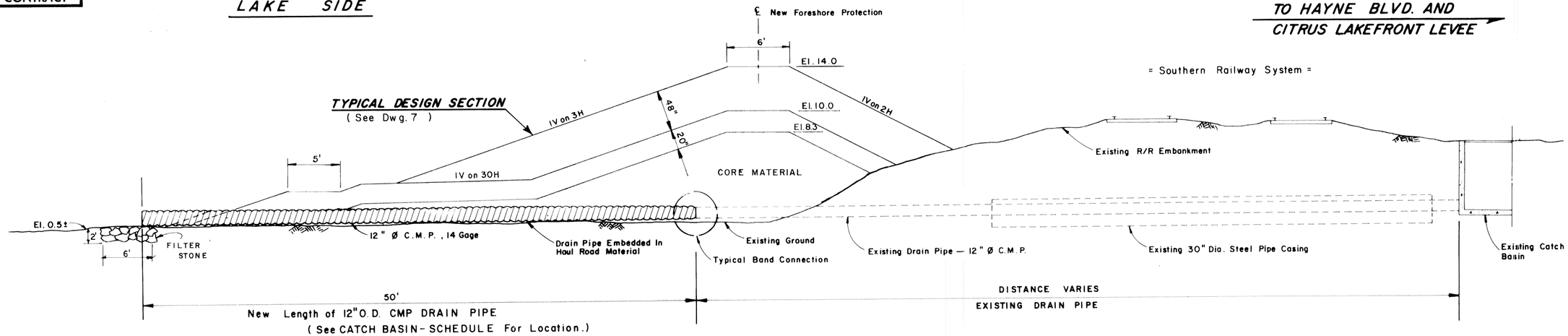
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN
CITRUS LAKEFRONT LEVEE
LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

FORESHORE DIKE DESIGN SECTIONS

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
T.W.W.	T.W.W.	R.P.L.	DEC 1984	AS SHOWN	H-8-29696

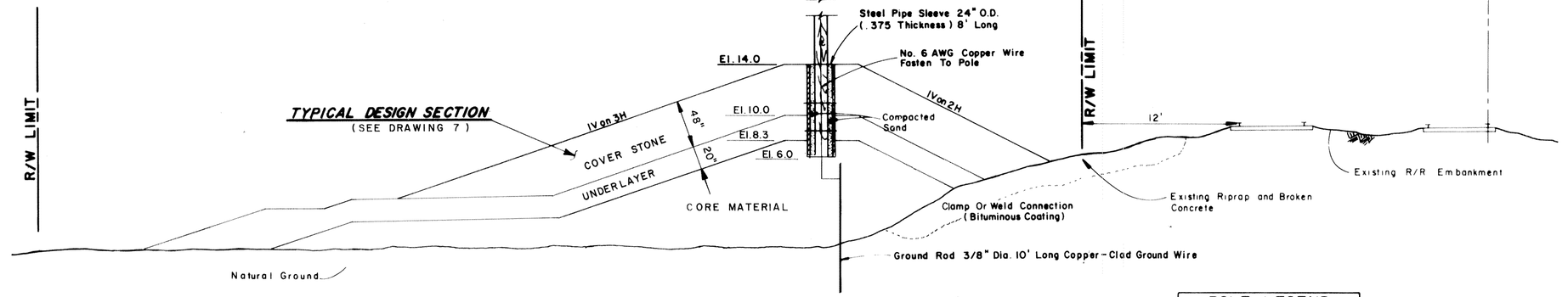
SUBMITTED: ENGINEER
SPEC. NO.: DACW29 - 85-B-0015
DWG. 7 OF 15

SAFETY IS A PART OF YOUR CONTRACT



TYPICAL SECTION AT DRAIN PIPE

NOT TO SCALE



TYPICAL POLE INSTALLATION-DETAIL

NOT TO SCALE

CATCH BASIN SCHEDULE APPROX. B/L STATIONS	
75 + 00	196 + 00
80 + 00	202 + 00
86 + 00	208 + 00
92 + 00	214 + 00
98 + 00	220 + 00
104 + 00	226 + 00
110 + 00	232 + 00
116 + 00	238 + 00
122 + 00	244 + 00
128 + 00	250 + 00
134 + 00	256 + 00
140 + 00	262 + 00
146 + 00	268 + 00
152 + 00	274 + 00
160 + 00	280 + 00
166 + 00	288 + 25
172 + 00	305 + 50
178 + 00	311 + 00
184 + 00	317 + 00
190 + 00	323 + 00
	329 + 00

POLE INSTALLATION SCHEDULE				
GR 77 + 30	GR 127 + 30	173 + 30	223 + 30	273 + 30
79 + 30	129 + 30	175 + 30	225 + 30	275 + 30
81 + 30	131 + 30	GR 177 + 30	GR 227 + 30	GR 277 + 30
83 + 30	133 + 30	179 + 30	229 + 30	279 + 30
85 + 30	135 + 30	181 + 30	231 + 30	281 + 30
GR 87 + 30	136 + 70	183 + 30	233 + 30	283 + 30
89 + 30	GR 138 + 12 *	185 + 30	235 + 30	285 + 30
91 + 30	139 + 30	GR 187 + 30	GR 237 + 30	287 + 30 *
93 + 30	141 + 30	189 + 30	239 + 30	GR 289 + 26.59
95 + 30	143 + 30	191 + 30	241 + 30	GR 304 + 40
GR 97 + 30	145 + 30	193 + 30	243 + 30	306 + 40
99 + 30	GR 147 + 30	195 + 30	245 + 30	308 + 40
101 + 30	149 + 30	GR 197 + 50	GR 247 + 30	310 + 20
103 + 30	151 + 30	199 + 70 *	249 + 30	312 + 10
105 + 30	153 + 30	201 + 30	251 + 30	313 + 60
GR 107 + 30	154 + 60	203 + 30	253 + 30	GR 315 + 30
109 + 30	156 + 00	205 + 30	255 + 30	317 + 30
111 + 30	GR 157 + 30	GR 207 + 30	GR 257 + 30	319 + 10
113 + 30	159 + 30	209 + 30	259 + 30	320 + 80
115 + 30	161 + 30	211 + 30	261 + 30	322 + 60
GR 117 + 30	163 + 30	213 + 30	263 + 30	324 + 00
119 + 30	165 + 30	215 + 30	265 + 30	GR 325 + 50 ●
121 + 30	GR 167 + 30	GR 217 + 30	GR 267 + 30	GR 327 + 00 ●
123 + 30	169 + 30	219 + 30	269 + 30	GR 328 + 50 ●
125 + 30	171 + 30	221 + 30	271 + 30	GR 330 + 00 ●

POLE LEGEND	
*	CABLE CROSSING POLES
GR	GROUND ROD & WIRE
●	45' CLASS 3 POLES

NOTES

1 TELEPHONE POLE – Removal of approximately 169 poles and the installation of approximately 125 as indicated on Pole Installation Schedule

2 TREATMENT – All poles shall be Southern Pine Treated with Pentachlorophenol in Petroleum

3 CLASS & SIZE – Req'd 4 each, Class 3, 45 ft length
Req'd 121 each, Class 5, 35 ft length

4 PIPE SLEEVES – Required 125 each Steel Pipe Sleeve, 24" OD (.375 Thickness) 8 ft long. Steel Pipe Sleeves shall be centered on pole and set 1.7 ft. into the core material. Void between the pole and the inside wall of pipe shall be filled with compacted sand

5 GROUND ROD & WIRE – Required 28 each Ground Rod 3/8" dia Copper-Clad,, 10' long shall be placed at the bottom of the pipe sleeve and electrically connected either by clamping (Requiring Bituminous Coating) or welding to a number 6 AWG Copper wire which shall be fastened to the pole and extending to a height of 6" above the top of pole. Location of poles with ground rod and wire is indicated by the symbol "GR" on the Pole Installation Schedule

6 IDENTIFICATION – Contractor shall request from pole supplier that all poles meet SCB specifications and that each pole be branded 10' from the butt, with the following information.

Example

TYPE POLE & TREATMENT
SIZE & CLASS
YEAR
MANUFACTURE

South Central Bell's suggested source of inspected type pole is COLFAX CREOSOTEING COMPANY PINEVILLE, LA or equal.

7 CABLE CROSSING – Contractor shall contact South Central Bell representative shown below before installation of any cable crossing pole designated by asterisk on pole installation schedule

RONALD R RIEGER, ENGR
SOUTH CENTRAL BELL
4101 PAUGER ST
NEW ORLEANS, LA 70122
PHONE (504) 245-5420

REVISION	DATE	DESCRIPTION	BY
1	2-7-85	REVISED DESIGN SECTION, Amend. 4	T.W.

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

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN
CITRUS LAKEFRONT LEVEE
LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

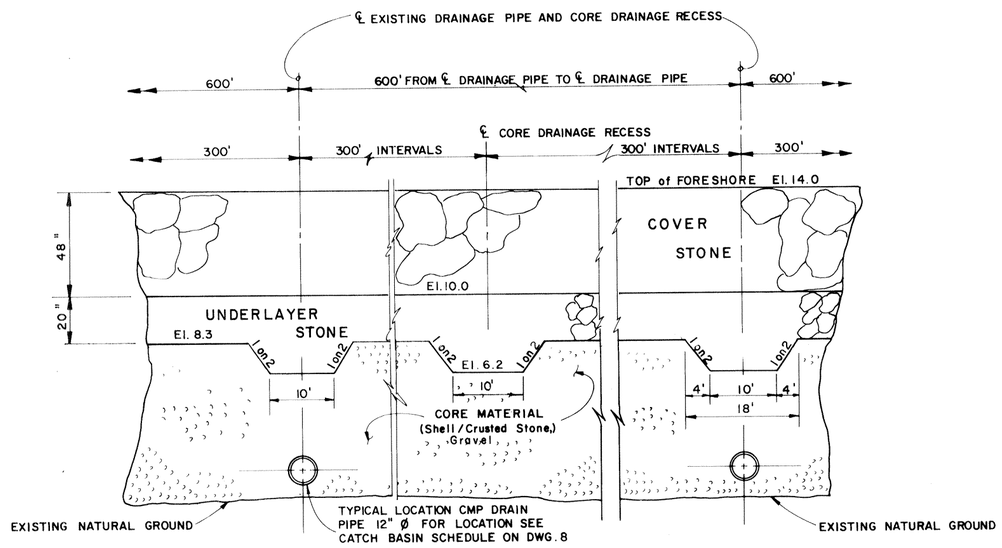
TYPICAL DRAIN PIPE AND POLE INSTALLATION

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO
T.W.W.	L.A.H.	R.P.L.	DEC. 1984	AS SHOWN	H-8-29696

SUBMITTED Ronald R Lee
SPEC NO DACW29-85-B-0015 DWG 8 OF 15

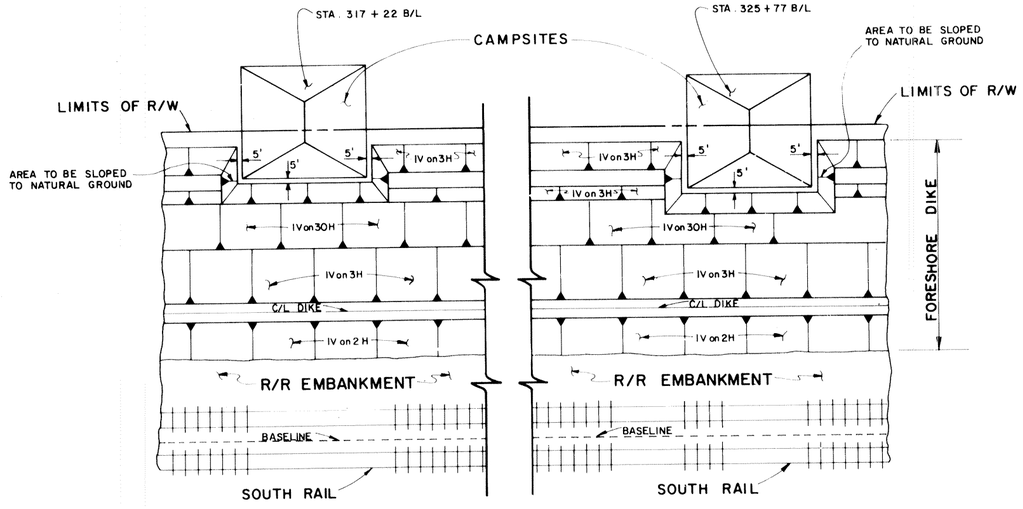
SAFETY IS A PART OF YOUR CONTRACT

NOTE:
The Contractor shall adjust the Foreshore Dike Toe, as necessary, where campsites are located within the Foreshore Design Section. No work will be allowed beneath the campsites, and the Contractor will be required to maintain a clearance of 5 feet from the camps support pilings. Extreme care shall be exercised when working in the vicinity of these campsites, so as not to damage the camps and their supporting pilings and bracing.



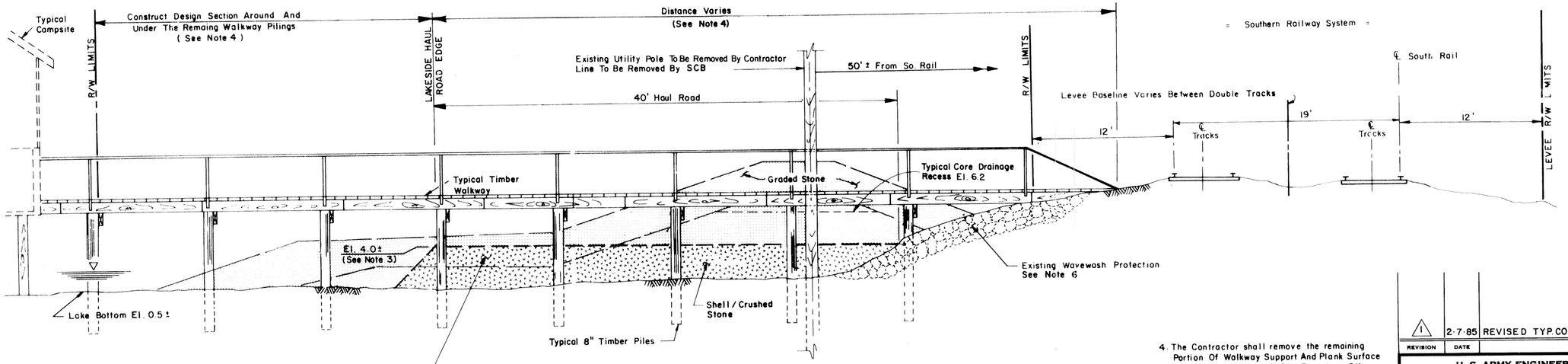
NOTE: AT EACH EXISTING DRAINAGE PIPE THE CORE MATERIAL SHALL BE SHAPED TO THE CONFIGURATION SHOWN ABOVE. EACH CORE RECESS WILL BE LOCATED AT 300' INTERVALS, STARTING AT BASE-LINE STA. 75+00 AND EXTENDING TO STA. 329+00.

PROFILE ALONG ℄ OF FORESHORE DIKE
⚠1 TYPICAL CORE DRAINAGE RECESS
NOT TO SCALE



TYPICAL AT CAMPSITES THAT ARE LOCATED WITHIN THE FORESHORE DIKE DESIGN SECTION

FORESHORE DIKE OFFSET DETAIL
NOT TO SCALE



TYPICAL HAUL ROAD LOCATION
NOT TO SCALE

1. Outside Of Haul Road Limits Timber Piles Are To Remain In Place For Walkway Reassembly By Owners.
2. Height Of Haul Road May Be Adjusted As Necessary For Access Along The Shoreline.
3. Timber Pilings And Walkway In This Area Shall Be Removed Only As Necessary To Accommodate Haul Road At The Option Of The Contractor. During Clearing And Haul Road Construction Operations, The Contractor Shall Remove Completely That Portion Of Each Walkway (Piles, Supports And Plank Surface) That Will Be Necessary For The Construction Of The Haul Road. At The Option Of The Contractor The Piles Within This Area May Be Pulled Or Cut Off At The Ground Surface Or Within 12" Of The Water Surface.
4. The Contractor shall remove the remaining Portion Of Walkway Support And Plank Surface During Construction Of The Foreshore Dike. The Contractor Shall Conduct His Operations So As Not To Damage The Walkway Pilings In This Area. If The Contractor Damages Any Pilings In This Area, He Will Be Required To Replace Them At His Expense.
5. Settlement gage locations are approximate. Location and/or additional settlement gages to be agreed upon infield between Contractor and Contracting Officer
6. The original ground line prior to the placement of Core will be the top of existing wave wash protection and the lake bottom.

VALUE INCENTIVE CLAUSES "YOUR KEY TO HIGHER PROFITS" VALUE ENGINEERING

REVISION	DATE	DESCRIPTION	BY
1	2-7-85	REVISED TYP. CORE DRAINAGE RECESS, Amend. 4	T.W.

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

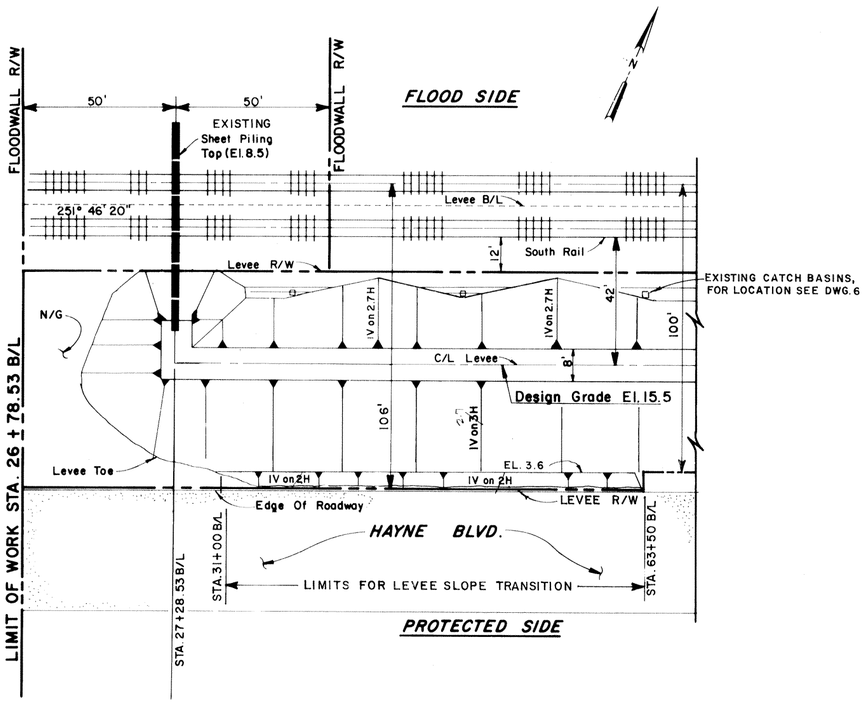
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

MISCELLANEOUS DETAILS

DESIGNED:	DRAWN:	CHECKED:	DATE:	SCALE:	FILE NO.:
T.W.W.	L.A.H.	R.P.L.	DEC 1984	AS SHOWN	H-8-29696

SUBMITTED: Ronald P. Lee, Engineer
SPEC NO.: DACW29-85-B-0015
DWG. 9 OF 15

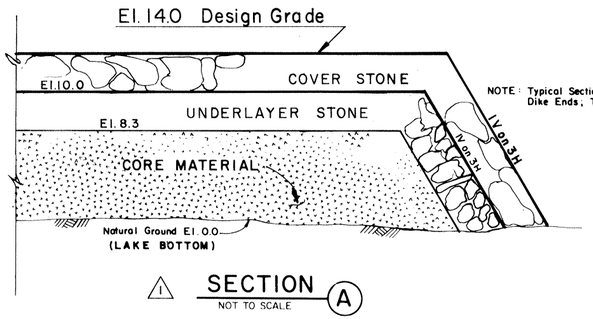
SAFETY IS A PART OF YOUR CONTRACT



⚠2 DETAIL OF PROTECTION LEVEE

VICINITY OF B/L STA. 27 + 28.53

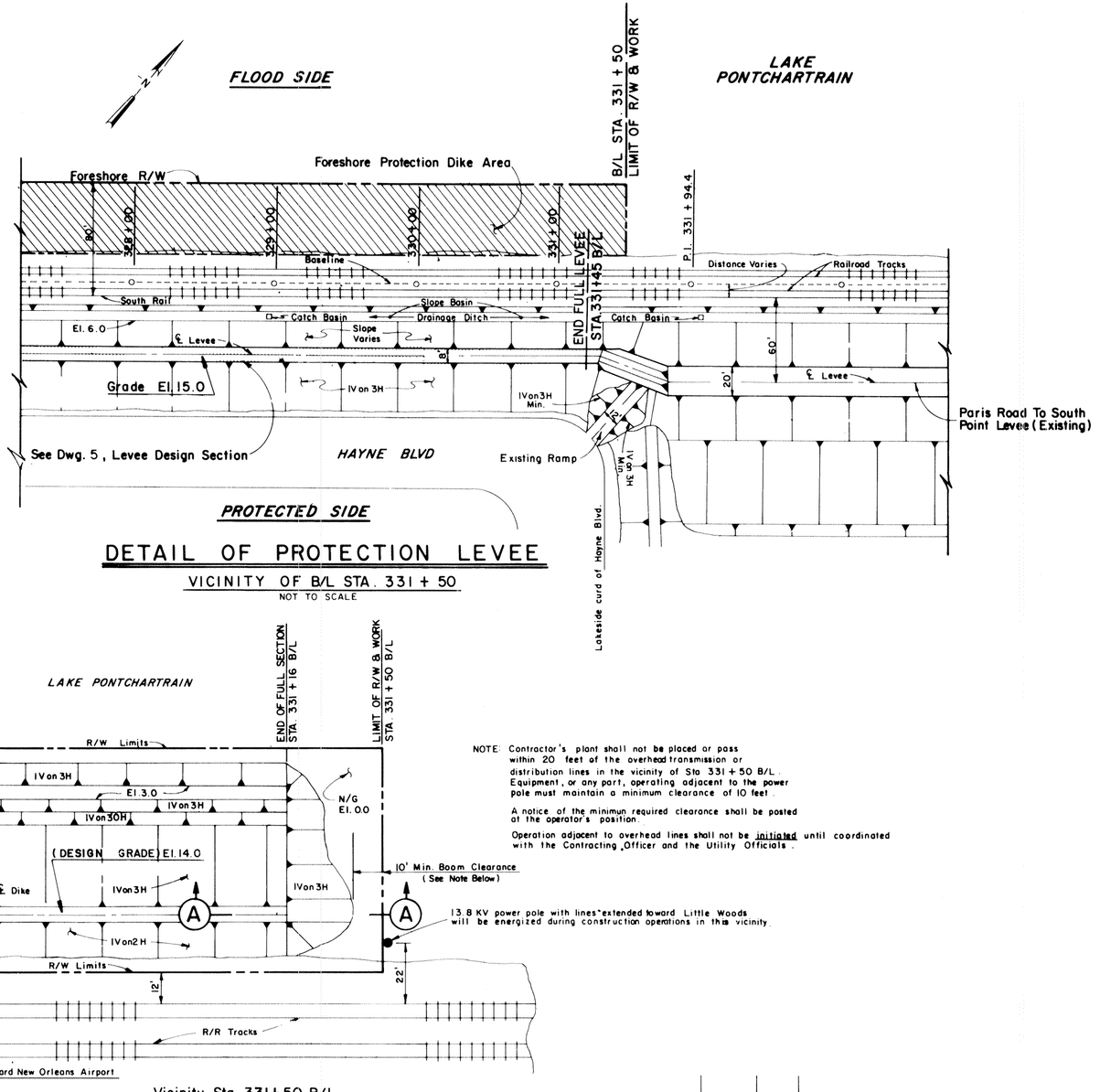
NOT TO SCALE



NOTE: Typical Section For All Foreshore Protection Dike Ends, Transition To Natural Ground.

⚠1 SECTION (A)

NOT TO SCALE



DETAIL OF PROTECTION LEVEE

VICINITY OF B/L STA. 331 + 50

NOT TO SCALE

NOTE: Contractor's plant shall not be placed or pass within 20 feet of the overhead transmission or distribution lines in the vicinity of Sta 331 + 50 B/L. Equipment, or any part, operating adjacent to the power pole must maintain a minimum clearance of 10 feet.

A notice of the minimum required clearance shall be posted at the operator's position.

Operation adjacent to overhead lines shall not be initiated until coordinated with the Contracting Officer and the Utility Officials.

Vicinity Sta. 331+50 B/L

DETAIL OF FORESHORE DIKE END

NOT TO SCALE

REVISION	DATE	DESCRIPTION	BY
⚠2	5-30-86	REVISED LEVEE SLOPES, Mod.	T.W.
⚠1	2-7-85	REVISED SECTION (A), Amend. 4	T.W.

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

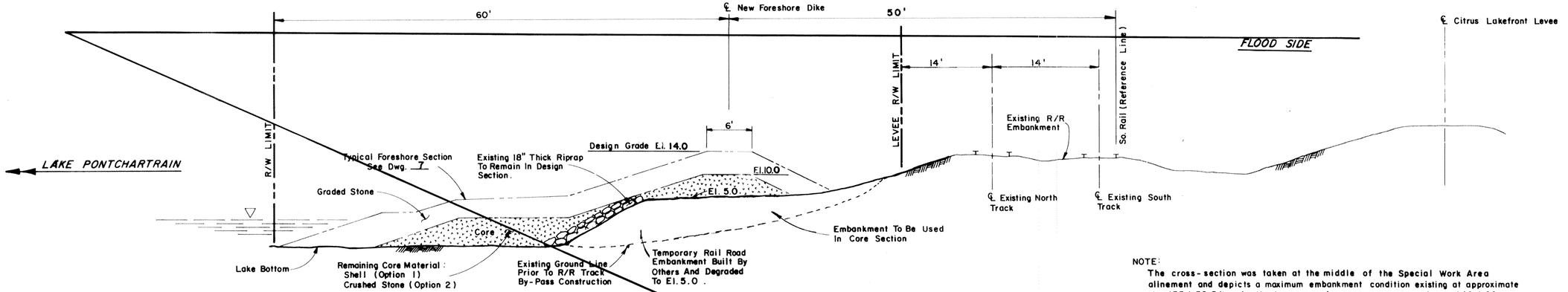
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN

CITRUS LAKEFRONT LEVEE
LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

MISCELLANEOUS DETAILS

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
T.W.W.	L.A.H.	R.P.L.	DEC 1984	AS SHOWN	H-8-29696

SUBMITTED: Ronald P. Lee, CHIEF, ENGINEERING DIVISION
SPEC NO. DACW29-85-B-0015
DWG 10 OF 15



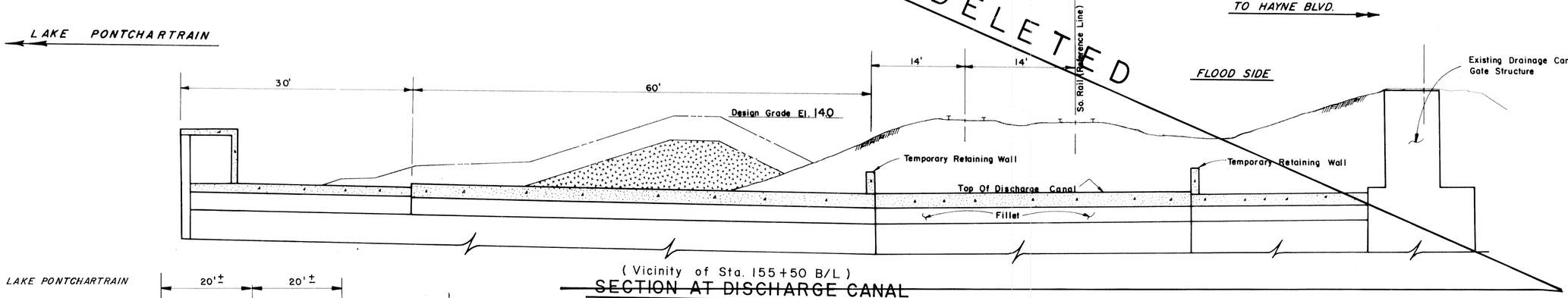
NOTE:
The cross-section was taken at the middle of the Special Work Area alinement and depicts a maximum embankment condition existing at approximate sta. 155 + 50 B/L. As the temporary by-pass curves toward sta. 149 + 00 and sta. 162 + 00, the embankment material to be utilized in the core section decreases to the original railroad embankment.

Existing Double Track By-Pass Embankment Area
Between Approx. Sta. 149 + 00 B/L And Sta 162 + 00 B/L

⚠ SPECIAL WORK AREA

NOT TO SCALE

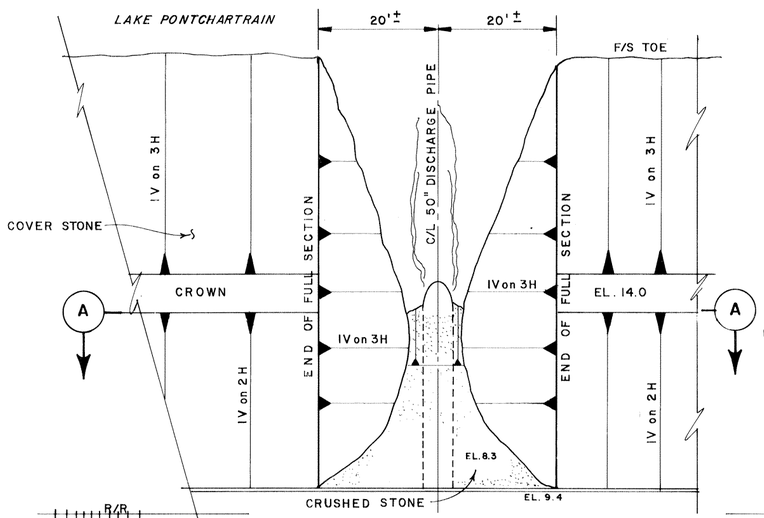
DELETED



(Vicinity of Sta. 155+50 B/L)

SECTION AT DISCHARGE CANAL

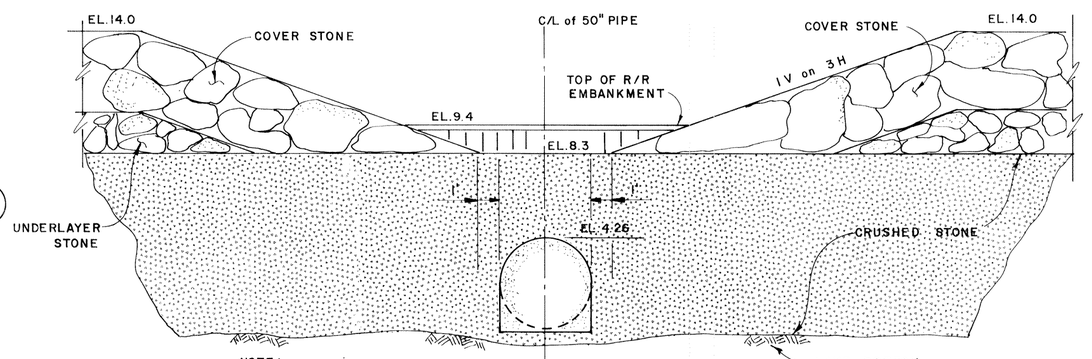
NOT TO SCALE



COVER AT CITRUS PUMP STATION DISCHARGE

(2) (VICINITY OF STA. 155+50 B/L)

N.T.S.



NOTE:
PILE BENTS ACROSS PIPE NOT SHOWN

(2) SECTION (A)

N.T.S.

REVISION	DATE	DESCRIPTION	BY
(2)	4-9-86	DELETED "SPECIAL WORK AREA" and "SECTION AT DISCHARGE CANAL". ADDED "COVER AT CITRUS PUMP STATION DISCHARGE", Mod.	T.W.
(1)	2-7-85	REVISED "SPECIAL WORK AREA", Amend. 4	T.W.

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN

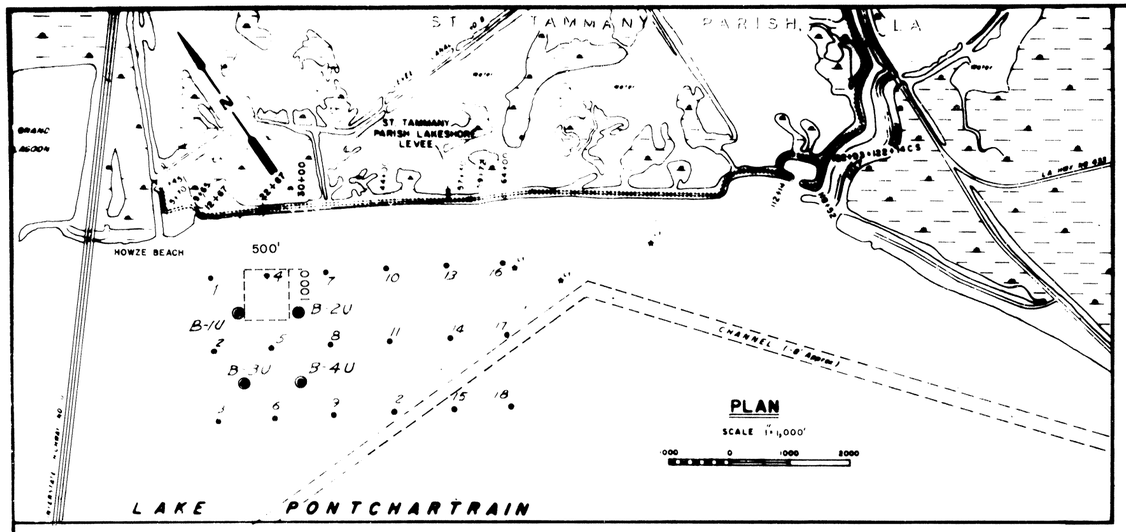
CITRUS LAKEFRONT LEVEE
LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

SPECIAL WORK AREA
Sta 149 + 00 B/L TO Sta 162 + 00 B/L

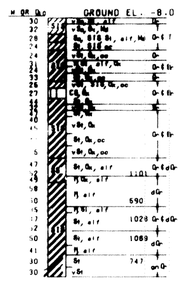
DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
TWW	LAH	RPL	DEC 1984	AS SHOWN	H-8-29696

SUBMITTED: Ronald W. Lee
SPEC. NO. DACW29-85-B-0015
DWG. 11 OF 15

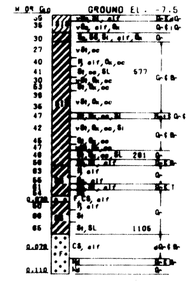
DIETGEN CORP.



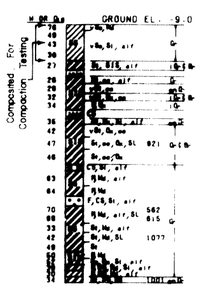
BOR. B-1U
STA. 17+67
1625 FT. FROM B/L
7 MAR 68



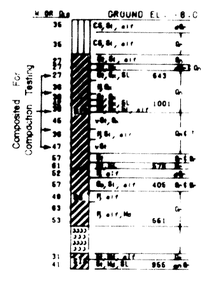
BOR. B-2U
STA. 17+67
1625 FT. FROM B/L
1 MAR 68

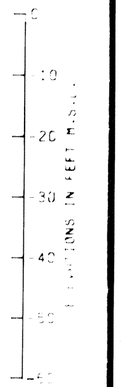


BOR. B-4U
STA. 37+67
2875 FT. FROM B/L
6 MAR 68



BOR. B-3U
STA. 17+67
2875 FT. FROM B/L
14 APR 68





VALUE ENGINEERING INCENTIVE CLAUSE — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract

BORING NO. 1 — STA. 12+67-2250 FT. RT. OF B/LSTA. 12+67-3500 FT. RT. OF B/LSTA. — WATER SURFACE = 0.4 M.S.L. — 11-09-67

BORING NO. 2 — STA. 12+67-1000 FT. RT. OF B/LSTA. 22+67-1000 FT. RT. OF B/LSTA. — WATER SURFACE = 0.4 M.S.L. — 11-09-67

BORING NO. 3 — STA. 22+67-2250 FT. RT. OF B/LSTA. 22+67-3500 FT. RT. OF B/LSTA. — WATER SURFACE = 0.4 M.S.L. — 11-14-67

BORING NO. 4 — STA. 32+67-1000 FT. RT. OF B/LSTA. 32+67-2250 FT. RT. OF B/LSTA. — WATER SURFACE = 0.4 M.S.L. — 11-14-67

BORING NO. 5 — STA. 32+67-3500 FT. RT. OF B/LSTA. — WATER SURFACE = 0.4 M.S.L. — 11-14-67

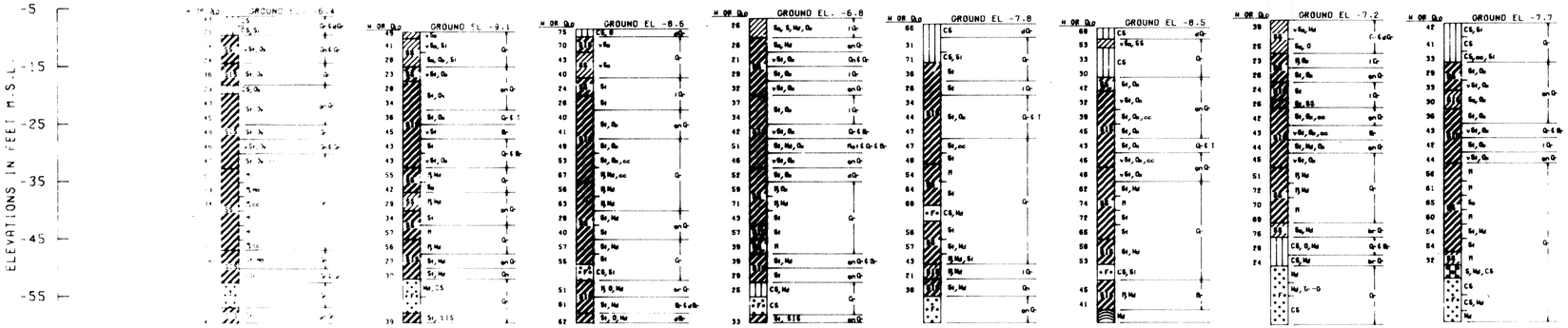
BORING NO. 6 — STA. 42+67-1000 FT. RT. OF B/LSTA. — WATER SURFACE = 0.1 M.S.L. — 11-15-67

BORING NO. 7 — STA. 42+67-2250 FT. RT. OF B/LSTA. — WATER SURFACE = 0.5 M.S.L. — 11-15-67

BORING NO. 8 — STA. 32+67-2250 FT. RT. OF B/LSTA. 32+67-3500 FT. RT. OF B/LSTA. — WATER SURFACE = 0.1 M.S.L. — 11-15-67

BORING NO. 9 — STA. 42+67-1000 FT. RT. OF B/L — WATER SURFACE = 0.5 M.S.L. — 11-16-67

BORING NO. 10



BORING NO. 11 — STA. 42+67-3500 FT. RT. OF B/LSTA. — WATER SURFACE = 0.6 M.S.L. — 11-17-67

BORING NO. 12 — STA. 52+67-1000 FT. RT. OF B/LSTA. — WATER SURFACE = 0.7 M.S.L. — 11-21-67

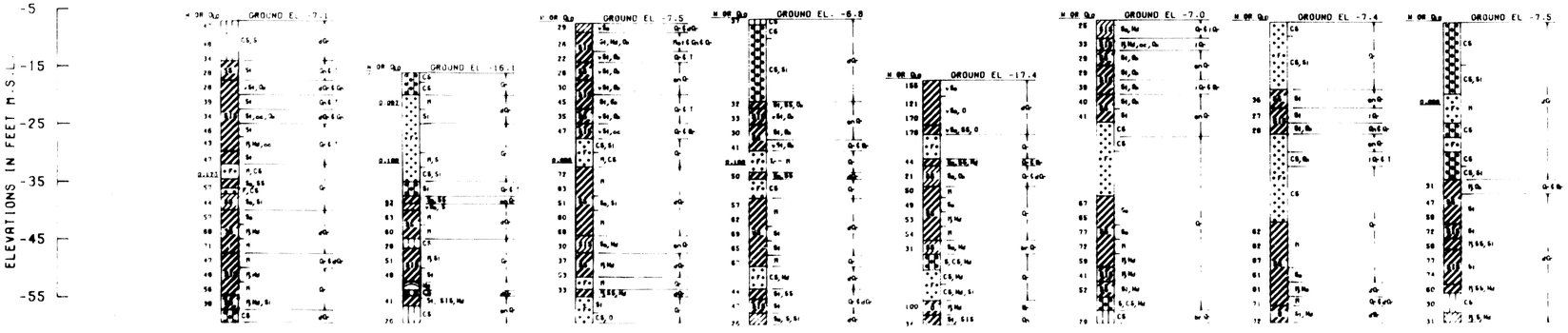
BORING NO. 13 — STA. 52+67-2250 FT. RT. OF B/LSTA. — WATER SURFACE = 0.4 M.S.L. — 11-20-67

BORING NO. 14 — STA. 52+67-3500 FT. RT. OF B/LSTA. — WATER SURFACE = 0.4 M.S.L. — 11-20-67

BORING NO. 15 — STA. 62+67-1000 FT. RT. OF B/LSTA. — WATER SURFACE = 0.7 M.S.L. — 11-22-67

BORING NO. 16 — STA. 62+67-2250 FT. RT. OF B/LSTA. — WATER SURFACE = 0.7 M.S.L. — 11-21-67

BORING NO. 17 — STA. 62+67-3500 FT. RT. OF B/L — WATER SURFACE = 0.7 M.S.L. — 11-21-67



NOTES:

FOR GENERAL NOTES, SEE DWG. NO.

WATER CONTENTS SHOWN ARE BASED ON WEIGHT OF OVEN DRY SOILS.

STRATUM CHANGES ARE ASSUMED TO OCCUR AT AN ELEVATION HALFWAY.

GENERAL TYPE SOIL SAMPLES TAKEN WITH A 17/8 I.D. CORE SAMPLER. UNDISTURBED SAMPLES WERE TAKEN WITH A 5 INCH DIAMETER STEEL TUBE PISTON TYPE SAMPLER.

LEGEND

● GENERAL TYPE BORING

◉ UNDISTURBED BORING

REVISION	DATE	DESCRIPTION	BY

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

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN

CITRUS LAKEFRONT LEVEE

LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

HOWZE BEACH BORROW AND SOIL BORING LOGS

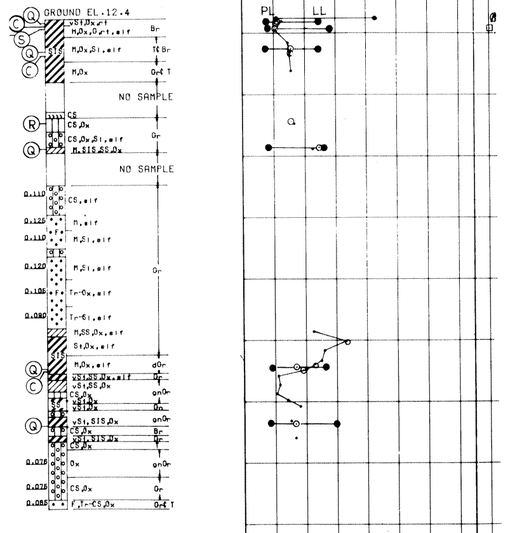
DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
T.W.W.	L.H.	R.P.L.	DEC 1984	AS SHOWN	H-8-29696

SUBMITTED — Ronald P. Lee — SPEC NO. DACW 29-85-B-0015 — DWG. 12 of 15

SAFETY IS A PART OF YOUR CONTRACT

BOR. 12-ULC

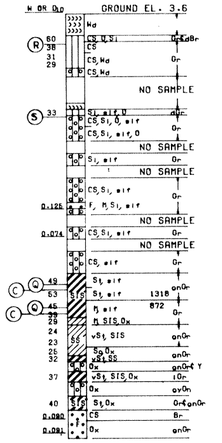
STA. 43+00
ON LEV. C/L
21-22 SEP. 82
GROUND EL. 12.4

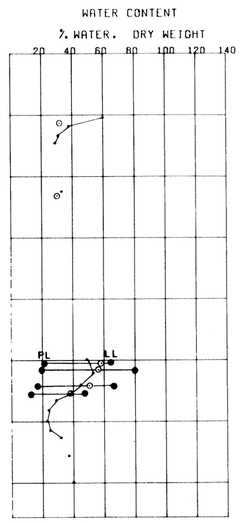


BOR. 14-ULC

STA. 91+59

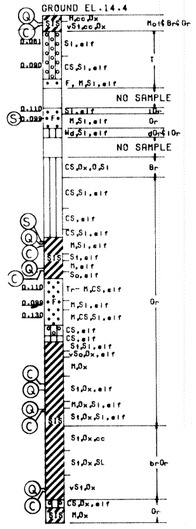
65 FT. LAKESIDE B/L
8-9 NOV. 1982

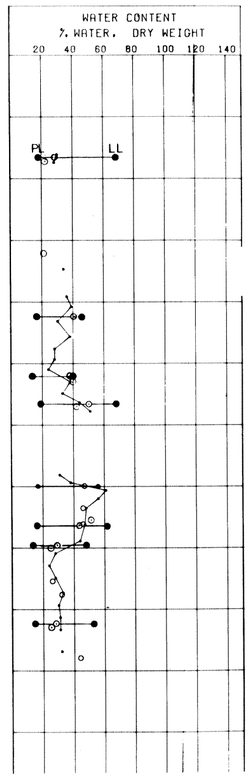




BOR. 13-ULC

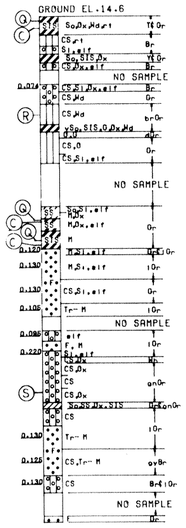
STA. 115+00
ON LEVEE C/L
22 SEP. 82 - 25 OCT. 82
GROUND EL. 14.4

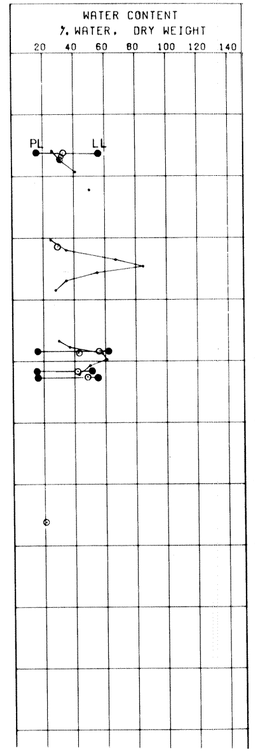




BOR. 15-ULC

STA. 217+00
ON LEV. C/L
26-27 OCT. 82
GROUND EL. 14.6



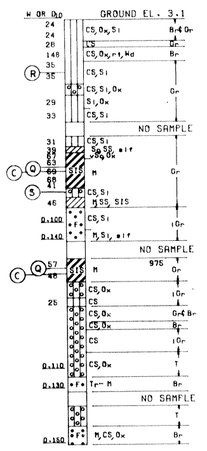


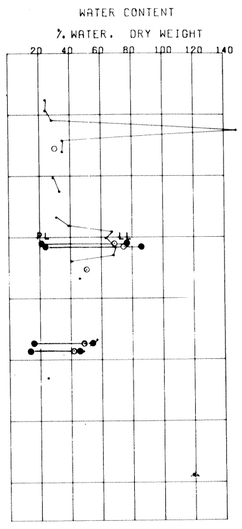
ELEVATION IN FEET N.G.V.D.

20 10 0 -10 -20 -30 -40 -50 -60 -70

BOR. 16-ULC

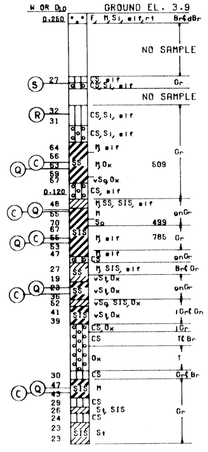
STA. 235+73
74 FT. LAKESIDE OF B/L
2-4 NOV. 82

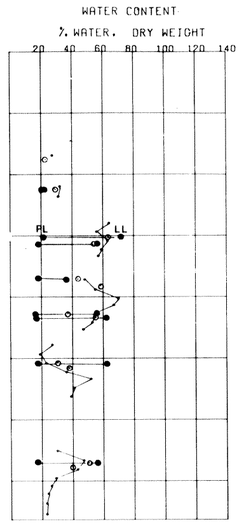




BOR. 18-ULC

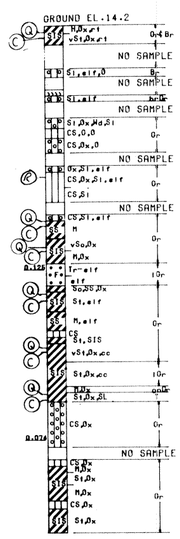
STA. 318+45
60 FT. LAKESIDE B/L
1-4 NOV. 82

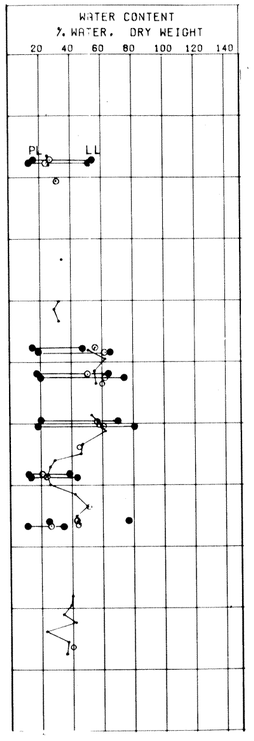




BOR. 17-ULC

STA. 319+00
ON C/L LEV.
26-27 OCT. 82
GROUND EL. 14.2





ELEVATION IN FEET N.G.V.D.

20 10 0 -10 -20 -30 -40 -50 -60

VALUE ENGINEERING INCENTIVE CLAUSE — "YOUR KEY TO HIGHER PROFITS"

REVISION	DATE	DESCRIPTION	BY

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

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN

CITRUS LAKEFRONT LEVEE

LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

LEVEE AND FORESHORE DIKE SOIL BORING LOGS

DESIGNED:	DRAWN:	CHECKED:	DATE:	SCALE:	FILE NO.:
T.W.W.	L.A.H.	R.P.L.	DEC 1984	AS SHOWN	H-8-29696

SUBMITTED: _____ SPEC NO.: DACW29-85-B-0015 DWG 13 OF 15

UNIFIED SOIL CLASSIFICATION

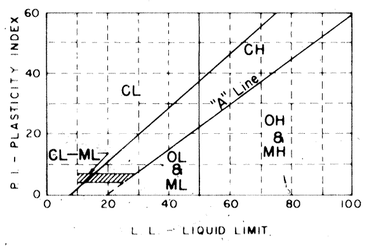
MAJOR DIVISION		TYPE	LETTER SYMBOL	SYMBOL	TYPICAL NAMES
COARSE-GRAINED SOILS More than half of material is larger than No 200 sieve size.	GRAVELS More than half of coarse fraction is larger than No 4 sieve size.	CLEAN GRAVEL (Little or No Fines)	GW		GRAVEL, Well Graded, gravel-sand mixtures, little or no fines
			GP		GRAVEL, Poorly Graded, gravel-sand mixtures, little or no fines
		GRAVEL WITH FINES (Appreciable Amount of Fines)	GM		SILTY GRAVEL, gravel-sand-silt mixtures
			GC		CLAYEY GRAVEL, gravel-sand-clay mixtures
	SANDS More than half of coarse fraction is smaller than No 4 sieve size.	CLEAN SAND (Little or No Fines)	SW		SAND, Well-Graded, gravelly sands
			SP		SAND, Poorly-Graded, gravelly sands
		SANDS WITH FINES (Appreciable Amount of Fines)	SM		SILTY SAND, sand-silt mixtures
			SC		CLAYEY SAND, sand-clay mixtures
FINE-GRAINED SOILS More than half the material is smaller than No. 200 sieve size.		SILTS AND CLAYS (Liquid Limit <50)	ML		SILT & very fine sand, silty or clayey fine sand or clayey silt with slight plasticity
			CL		LEAN CLAY; Sandy Clay; Silty Clay; of low to medium plasticity
			OL		ORGANIC SILTS and organic silty clays of low plasticity
		SILTS AND CLAYS (Liquid Limit >50)	MH		SILT, fine sandy or silty soil with high plasticity
			CH		FAT CLAY, inorganic clay of high plasticity
			OH		ORGANIC CLAYS of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			Pt		PEAT, and other highly organic soil
WOOD			Wd		WOOD
SHELLS			Sl		SHELLS
NO SAMPLE					

NOTE: Soils possessing characteristics of two groups are designated by combinations of group symbols

DESCRIPTIVE SYMBOLS

COLOR	
COLOR	SYMBOL
TAN	T
YELLOW	Y
RED	R
BLACK	BK
GRAY	Gr
LIGHT GRAY	lGr
DARK GRAY	dGr
BROWN	Br
LIGHT BROWN	lBr
DARK BROWN	dBr
BROWNISH-GRAY	br Gr
GRAYISH-BROWN	gy Br
GREENISH-GRAY	gn Gr
GRAYISH-GREEN	gy Gn
GREEN	Gn
BLUE	Bl
BLUE-GREEN	Bl Gn
WHITE	Wh
MOTTLED	Mot

CONSISTENCY FOR COHESIVE SOILS		
CONSISTENCY	COHESION IN LBS./SQ. FT. FROM UNCONFINED COMPRESSION TEST	SYMBOL
VERY SOFT	< 250	vSo
SOFT	250 - 500	So
MEDIUM	500 - 1000	M
STIFF	1000 - 2000	St
VERY STIFF	2000 - 4000	vSt
HARD	> 4000	H



PLASTICITY CHART
For classification of fine-grained soils

MODIFICATIONS	
MODIFICATION	SYMBOL
Traces	Tr-
Fine	F
Medium	M
Coarse	C
Concretions	cc
Rootlets	rt
Lignite fragments	lg
Shale fragments	sh
Sandstone fragments	sds
Shell fragments	slf
Organic matter	O
Clay strata or lenses	CS
Silt strata or lenses	SIS
Sand strata or lenses	SS
Sandy	S
Gravelly	G
Boulders	B
Slickensides	SL
Wood	Wd
Oxidized	Ox

NOTES:

FIGURES TO LEFT OF BORING UNDER COLUMN "W OR D_{10}"

Are natural water contents in percent dry weight

When underlined denotes D_{10} size in mm*

FIGURES TO LEFT OF BORING UNDER COLUMNS "LL" AND "PL"

Are liquid and plastic limits, respectively

SYMBOLS TO LEFT OF BORING

▽ Ground-water surface and date observed

Ⓒ Denotes location of consolidation test**

Ⓢ Denotes location of consolidated-drained direct shear test**

Ⓡ Denotes location of consolidated-undrained trioxial compression test**

Ⓠ Denotes location of unconsolidated-undrained triaxial compression test**

Ⓣ Denotes location of sample subjected to consolidation test and each of the above three types of shear tests**

FW Denotes free water encountered in boring or sample

FIGURES TO RIGHT OF BORING

Are values of cohesion in lbs./sq. ft. from unconfined compression tests

In parenthesis are driving resistances in blows per foot determined with a standard split spoon sampler ($1\frac{3}{8}$" I.D., 2" O.D.) and a 140 lb. driving hammer with a 30" drop

Where underlined with a solid line denotes laboratory permeability in centimeters per second of undisturbed sample

Where underlined with a dashed line denotes laboratory permeability in centimeters per second of sample remoulded to the estimated natural void ratio

*The D_{10} size of a soil is the grain diameter in millimeters of which 10% of the soil is finer, and 90% coarser than D_{10}

**Results of these tests are available for inspection in the U.S. Army Engineer District Office, if these symbols appear beside the boring logs on the drawings

TYPICAL NOTES:

While the borings are representative of subsurface conditions at their respective locations and for their respective vertical reaches, local variations characteristic of the subsurface materials of the region are anticipated and, if encountered, such variations will not be considered as differing materially within the purview of clause 4 of the contract.

Ground-water elevations shown on the boring logs represents ground-water surfaces encountered in such borings on the dates shown. Absence of water surface data on certain borings indicates that no ground water data are available from the boring but does not necessarily mean that ground water will not be encountered at the locations or within the vertical reaches of such borings.

Consistency of cohesive soils shown on the boring logs is based on driller's log and visual examination and is approximate, except within those vertical reaches of the borings where shear strengths from unconfined compression tests are shown.

REVISION	DATE	DESCRIPTION	BY

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

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONICHARTRAIN HIGH LEVEL PLAN

CITRUS LAKEFRONT LEVEE

LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

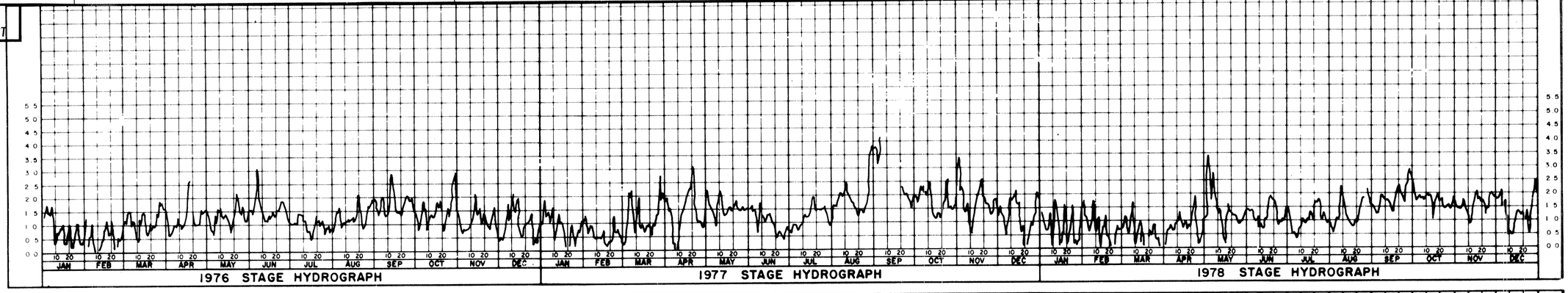
SOIL BORING LEGEND

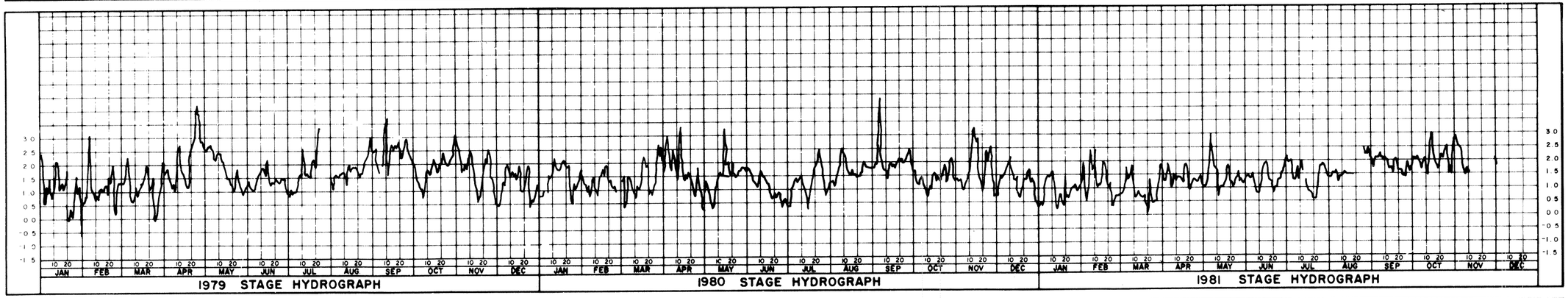
DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO
T.W.W.	L.A.H.	R.P.L.	DEC 1984	AS SHOWN	H-8-29696

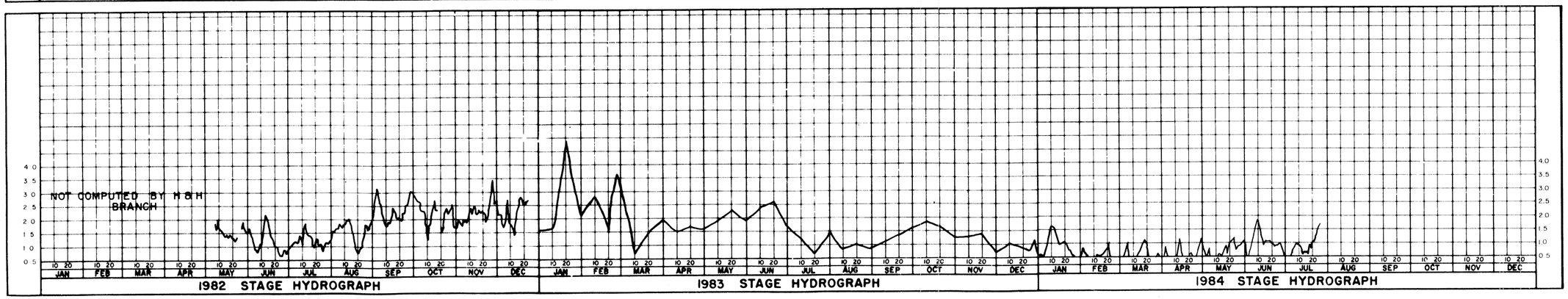
SUBMITTED Kendall P. Lee — SPEC NO DACW29-85-B-0015 — DWG 14 OF 15

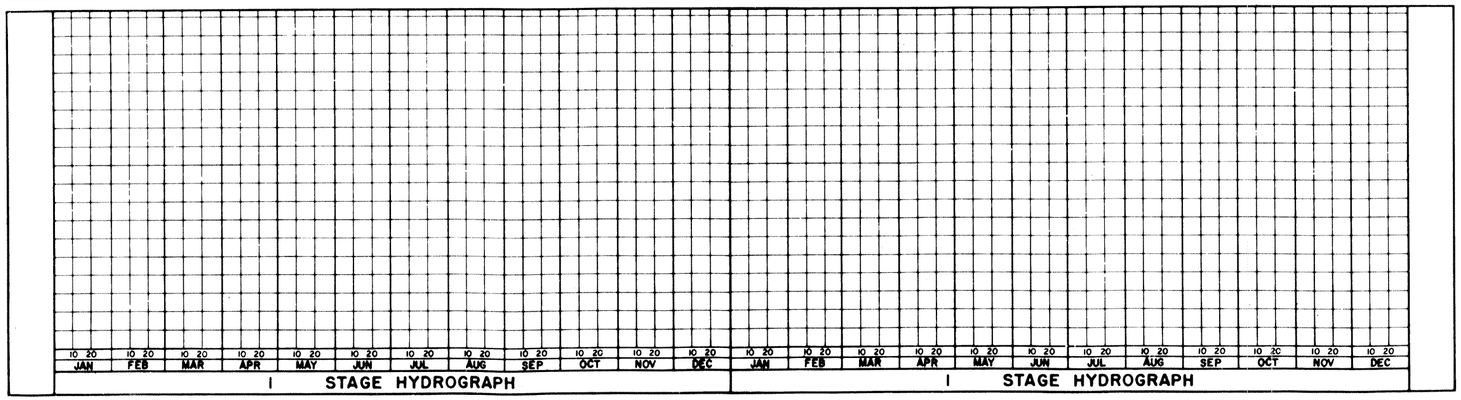
SAFETY IS A PART OF YOUR CONTRACT

GAGE READINGS IN FEET









NOTE: GAGE LOCATED IN THE VICINITY OF SEABROOK BRIDGE, NEW ORLEANS

REVISION	DATE	DESCRIPTION	BY

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

LAKE PONTCHARTRAIN LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN HIGH LEVEL PLAN

CITRUS LAKEFRONT LEVEE
LEVEE AND FORESHORE PROTECTION
ORLEANS PARISH, LOUISIANA

HYDROGRAPHS

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
T.W.W.	L.A.H.	R.P.L.	DEC 1984	AS SHOWN	H-8-29696

SUBMITTED: Ronald W. Lee, ENGINEER
SPEC. NO.: DACW29-85-B-0015
DWG 15 OF 15

TABULATION OF BENCH MARKS

BENCH MARK: 204; LA. Geodetic Survey disk El. 6.158 N.G.V.D

DESCRIPTION: At New Orleans, about 1.15 miles northeast along Hayne Boulevard from the crossing of Downman Road, set on the shoulder of the Southern Railway which parallels Hayne Boulevard, 44 feet northeast of the extended center line of Drum Street, 125 feet northwest of the center line of Hayne Boulevard, 10 feet southeast of the southeast rail of the southeast track, 20± feet northeast of semaphore No. 1892, 7½ feet northeast of the east corner of a concrete battery box, about 2 feet below the track and set in the top of a concrete post about 18 inches underground.

BENCH MARK: S-1 El. 8.323 N.G.V.D.

DESCRIPTION: Marker is a standard Corps tablet on a 1" black pipe. The cap is countersunk 0.4' and is located approximately 30' west of a path to a lakeside cottage, 11' north of C/L of lakeside railroad tracks. Witness post set at levee station 205+42, 18' lakeside offset.

BENCH MARK: S-2 El. 8.173 N.G.V.D

DESCRIPTION: Marker is standard Corps disc on 1" black pipe, with cap countersunk 0.4'. Marker is located at approximate levee station 270+20, and is 142' north of the C/L of Hayne Blvd., between Reelfoot Street and Gannon Road.

BENCH MARK: S-3 El. 8.078 N.G.V.D.

DESCRIPTION: Marker is a standard disc on 1" black pipe, with cap countersunk 0.4'. Marker is located at approximate levee station 330+14, west of projected intersection of Paris Road and railroad tracks, 150' north of C/L of Hayne Blvd.

NOTE: DRAWING REDUCED TO ONE HALF SCALE

VICINITY MAP

SCALE IN MILES 5 0 5 10

LOCATION MAP

SCALE: 1"=1,000'

0 1,000 2,000 3,000

INDEX TO DRAWINGS

DWG.	DESCRIPTION
1	LOCATION MAP, VICINITY MAP AND INDEX TO DRAWINGS
2	PLAN AND PROFILE — ℄ STA. 27+78.53 TO ℄ STA. 67+00
3	PLAN AND PROFILE — ℄ STA. 67+00 TO ℄ STA. 121+00
4	PLAN AND PROFILE — ℄ STA. 121+00 TO ℄ STA. 176+00
5	PLAN AND PROFILE — ℄ STA. 176+00 TO ℄ STA. 231+00
6	PLAN AND PROFILE — ℄ STA. 231+00 TO ℄ STA. 285+00
7	PLAN AND PROFILE — ℄ STA. 285+00 TO ℄ STA. 332+00
8	DESIGN SECTIONS
9	DETAILS OF PROTECTION LEVEE
10	RAILROAD TRACK GUARD MAT
11	TIMBER RAILROAD CROSSING
12	LEVEE DRAINAGE DETAILS
13	LEVEE DRAINAGE DETAILS
14	SLUICE GATE STRUCTURE — PLANS, ELEVATIONS AND SECTIONS
15	SLUICE GATE STRUCTURE DETAILS
16	SPECIAL DRAINAGE DETAILS
17	SOIL BORINGS LOGS HOWZE BEACH BORROW
18	SOIL BORINGS
19	SOIL BORINGS
20	SOIL BORINGS
21	SOIL BORINGS AND RETAINING WALLS
22	SOIL BORING LEGEND

REVISION	DATE	DESCRIPTION	BY
1	11-5-80	Changed title description on dwg. 21 ; Mod #2	JAS

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

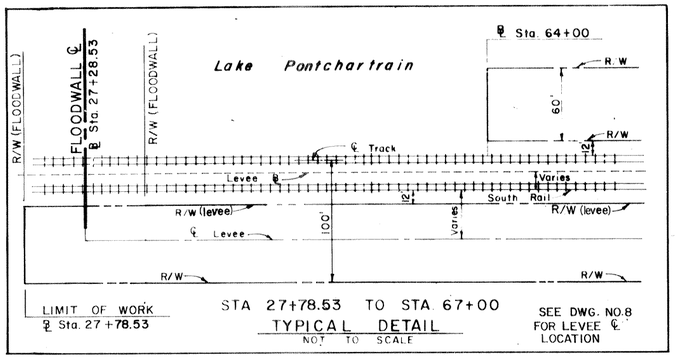
SUBMITTED: CHIEF, DESIGN BRANCH
APPROVED: CHIEF, ENGINEERING DIVISION
APPROVED: COLONEL, C.E. DISTRICT ENGINEER

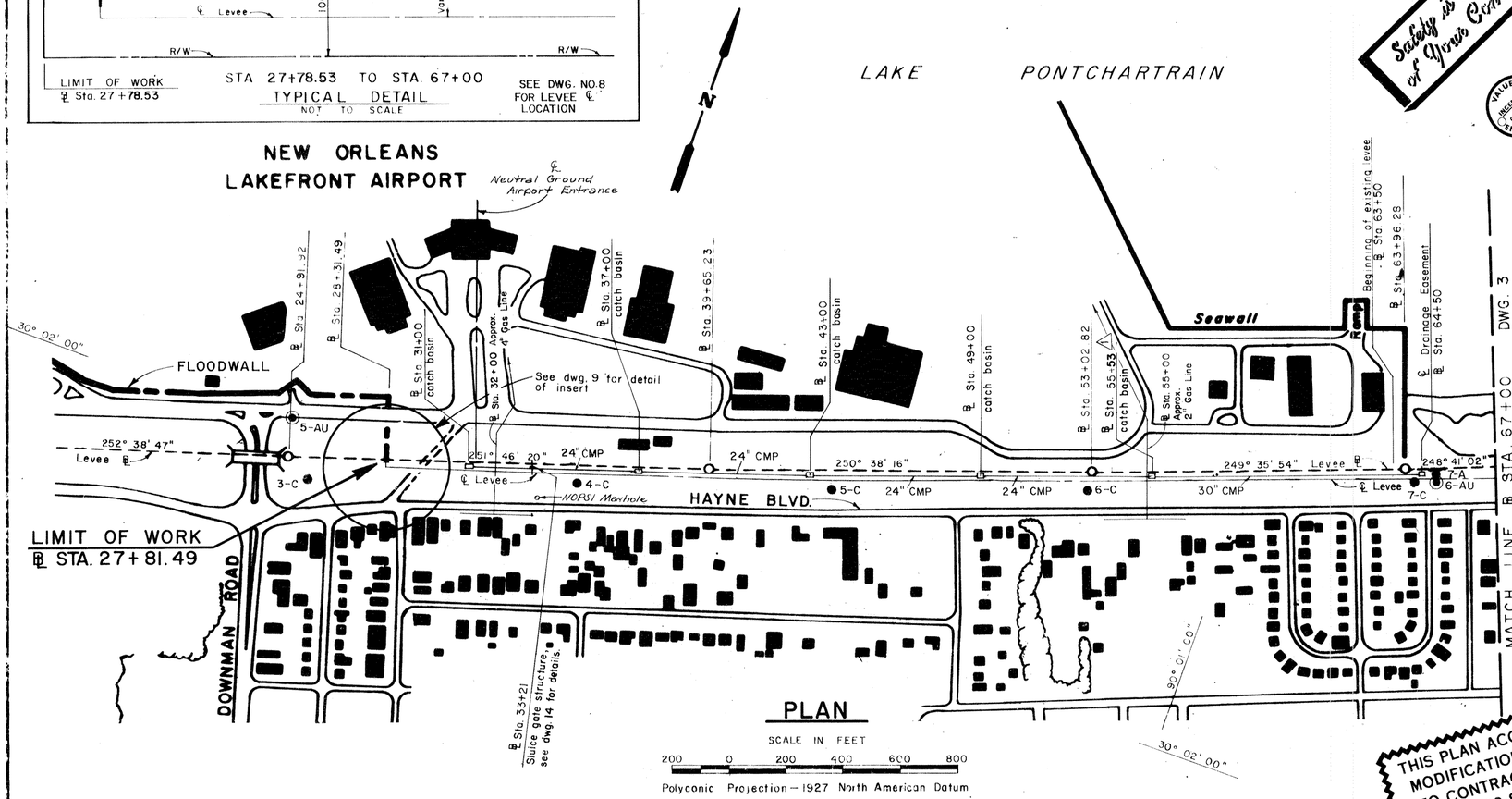
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA

LOCATION MAP, VICINITY MAP, AND INDEX TO DRAWINGS

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
D.D.S.	C.C.P.	R.P.L.	AUG 1979	AS BROWN	H-8-28076

SUBMITTED: CHIEF, DESIGN BRANCH — SPEC. NO. DACW29-79-B-0254 — DWG. 1 OF 22





Safety is a Part of Your Contract

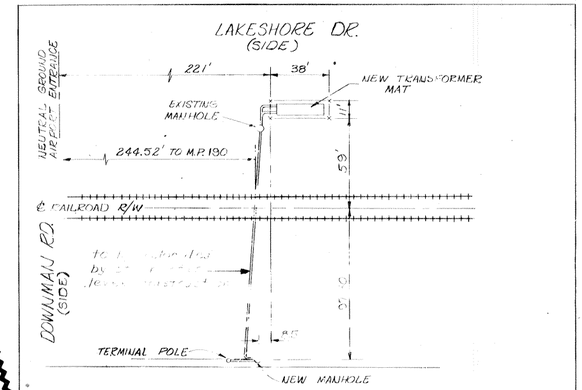
VALUE INCENTIVE CLAUSES ENGINEERING "YOUR KEY TO HIGHER PROFITS"

GENERAL NOTES

1. All azimuths are true south azimuths turned in clockwise direction from 0° (Due South).
2. Unless otherwise noted, all elevations are expressed in feet and refer to National Geodetic Vertical Datum of 1929.
3. See dwg. 1 for the description and location of bench marks.
4. Planimetry from Feb. 1966 aerial photographs.
5. The utility lines shown on dwgs. 3,4,5,6, and 7, consist of small diameter water and electric lines that cross the existing levee to provide services to the lakeside camps. They are to be relocated by others in accordance with paragraph 17 of the specifications.
6. The handhold and meter pestles illustrated on dwg.3 are to be flagged in the field and protected throughout the contract by the contractor.

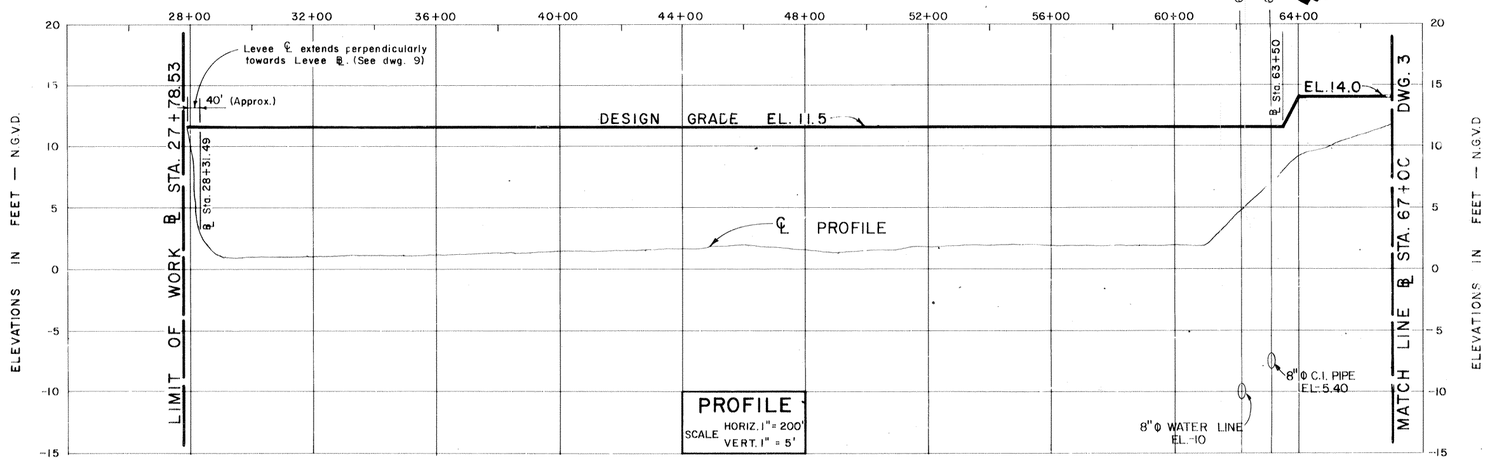
LEGEND

◉ Indicates undisturbed boring.
● Indicates general type boring.



NORSI MANHOLE LOCATION
Sta. 33+00 and Sta. 54+00

THIS PLAN ACCOMPANIES MODIFICATION P00001 TO CONTRACT NUMBER DACW29-80-C-0035



NOTE: DRAWING REDUCED TO ONE HALF SCALE

REVISION	DATE	DESCRIPTION	BY
⚠	15 Feb 80	Catch basin location changed from sta. 55+00 to 55+53. Mod. #1	

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

CITRUS LAKEFRONT LEVEE IHNC TO PARIS ROAD

ORLEANS PARISH, LOUISIANA

PLAN AND PROFILE STA. 27+28.53 TO STA. 67+00

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

SUBMITTED _____ ENGINEER

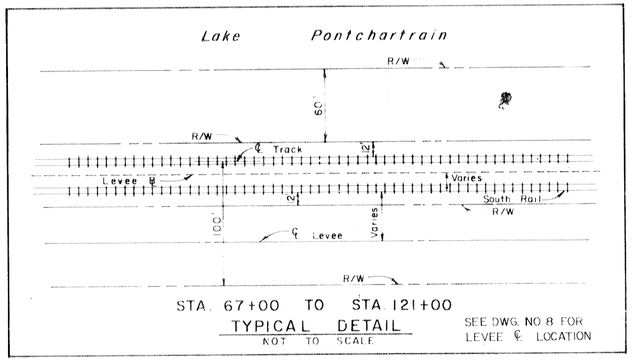
SPEC. NO. DACW29-79-B-0254 DWG. 2 OF 22

LAKE PONTCHARTRAIN

THIS PLAN ACCOMPANIES MODIFICATION P00002 TO CONTRACT NUMBER DACW29-80-C-0035

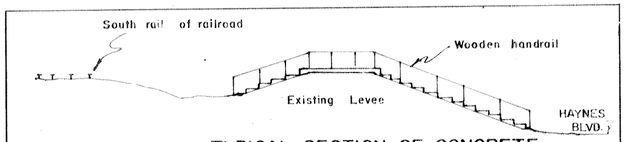
90° 10' 00"

90° 00' 00"



STA. 67+00 TO STA 121+00
TYPICAL DETAIL
NOT TO SCALE

SEE DWG. NO 8 FOR LEVEE ℄ LOCATION



TYPICAL SECTION OF CONCRETE WALKWAY OVER LEVEE

NOT TO SCALE

NOTE:
The walkways over levee shall be removed and disposed of by the contractor.

Legend

Electrical and Water Lines
Utility Meters
Concrete Walkway

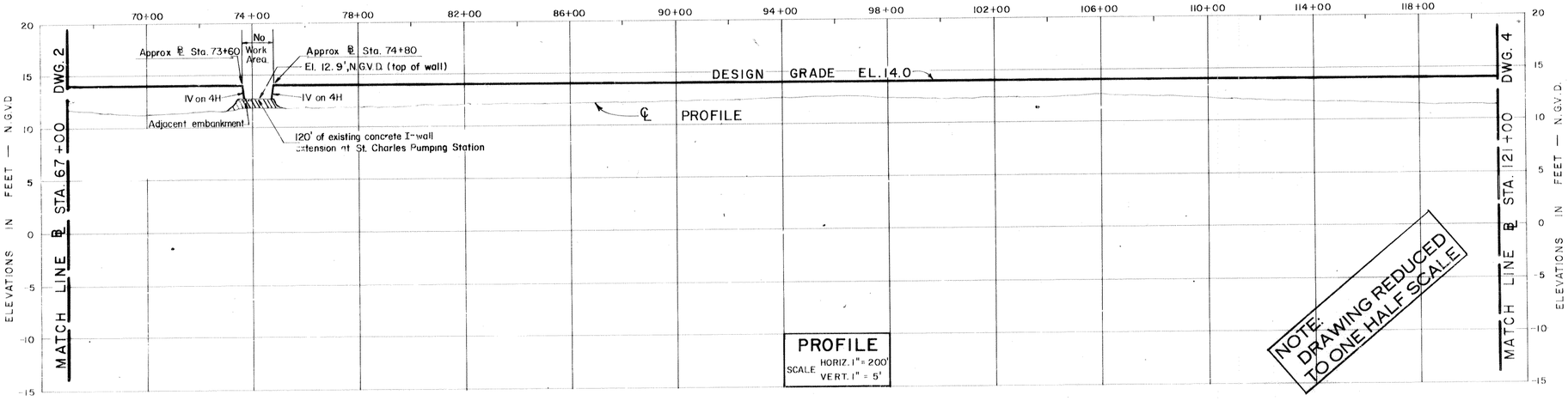
PLAN

SCALE IN FEET

200 0 200 400 600 800

Polyconic Projection — 1927 North American Datum

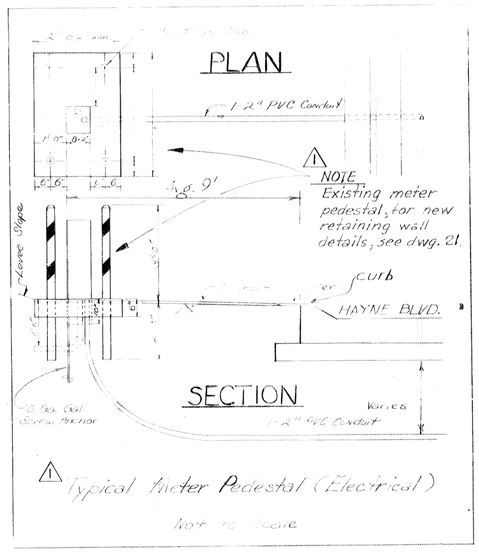
Notes:
1. For general notes and boring legend see dwg. 2.



PROFILE
SCALE HORIZ. 1" = 200'
VERT. 1" = 5'

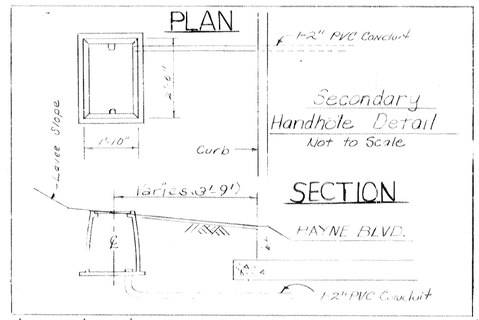
NOTE: DRAWING REDUCED TO ONE HALF SCALE

Safety is a Part of Your Contract



⚠ Typical Meter Pedestal (Electrical)

Not to Scale



⚠ REVISION	DATE	DESCRIPTION	BY
	11-5-80	Added Note to Typical Meter Pedestal layout; Mod. #2	J.A.R.

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA

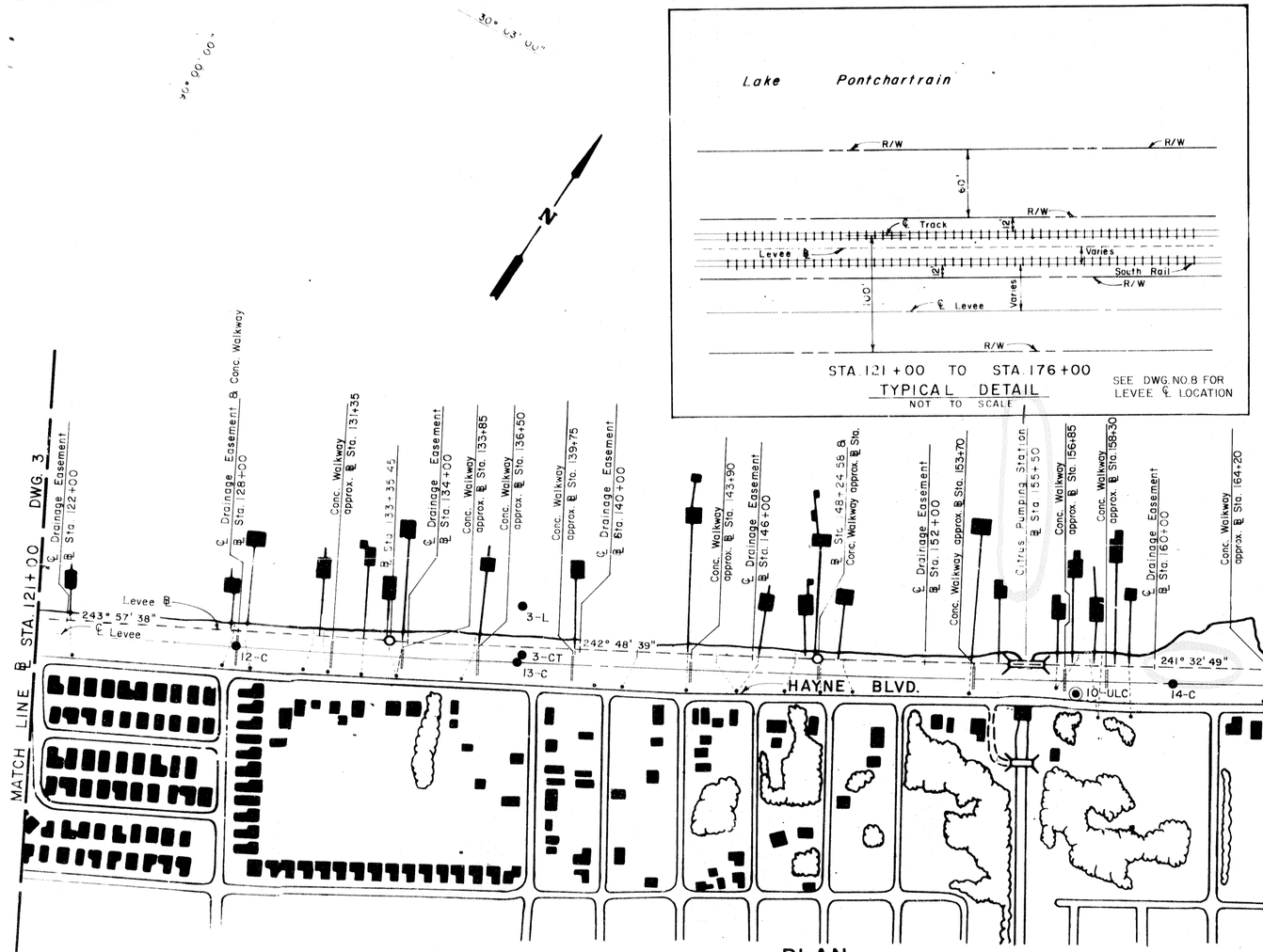
PLAN AND PROFILE
STA. 67+00 TO STA. 121+00

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

SUBMITTED ..... ENGINEER

SPEC. NO DACW29-79-B-0254

DWG. 3 OF 22

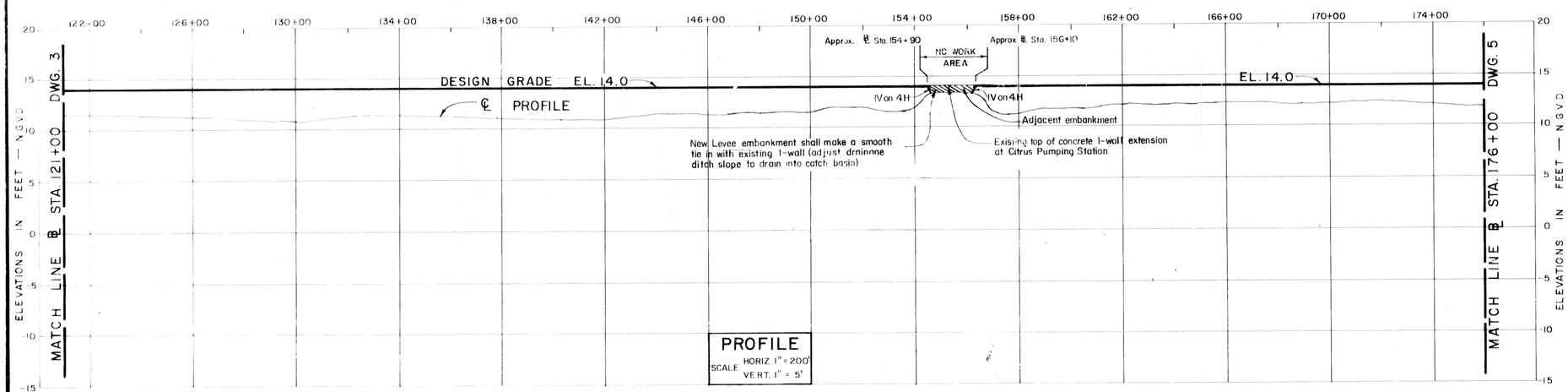


PLAN

SCALE IN FEET

200 0 200 400 600 800

Polyconic Projection — 1927 North American Datum



PROFILE

SCALE HORIZ. 1" = 200'
VERT. 1" = 5'

NOTE

1. For general notes see dwg. 2

LEGEND

- Electric and Water Lines
- Utility Meters
- Concrete Walkway

NOTE: DRAWING REDUCED TO ONE HALF SCALE

REVISION	DATE	DESCRIPTION	BY

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD

ORLEANS PARISH, LOUISIANA

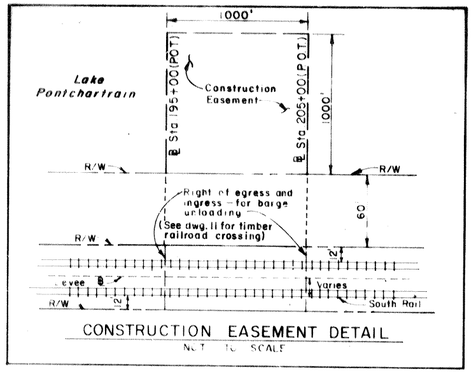
PLAN AND PROFILE
STA. 121+00 TO STA. 176+00

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

SUBMITTED _____ ENGINEER

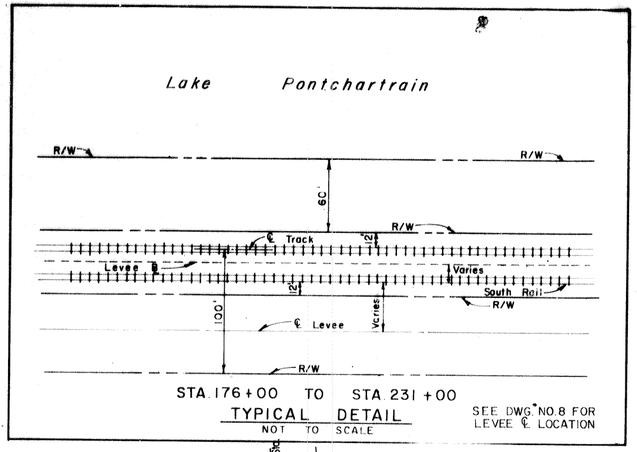
SPEC NO DACW29-79-B-0254

DWG 4 OF 22



CONSTRUCTION EASEMENT DETAIL

NOT TO SCALE

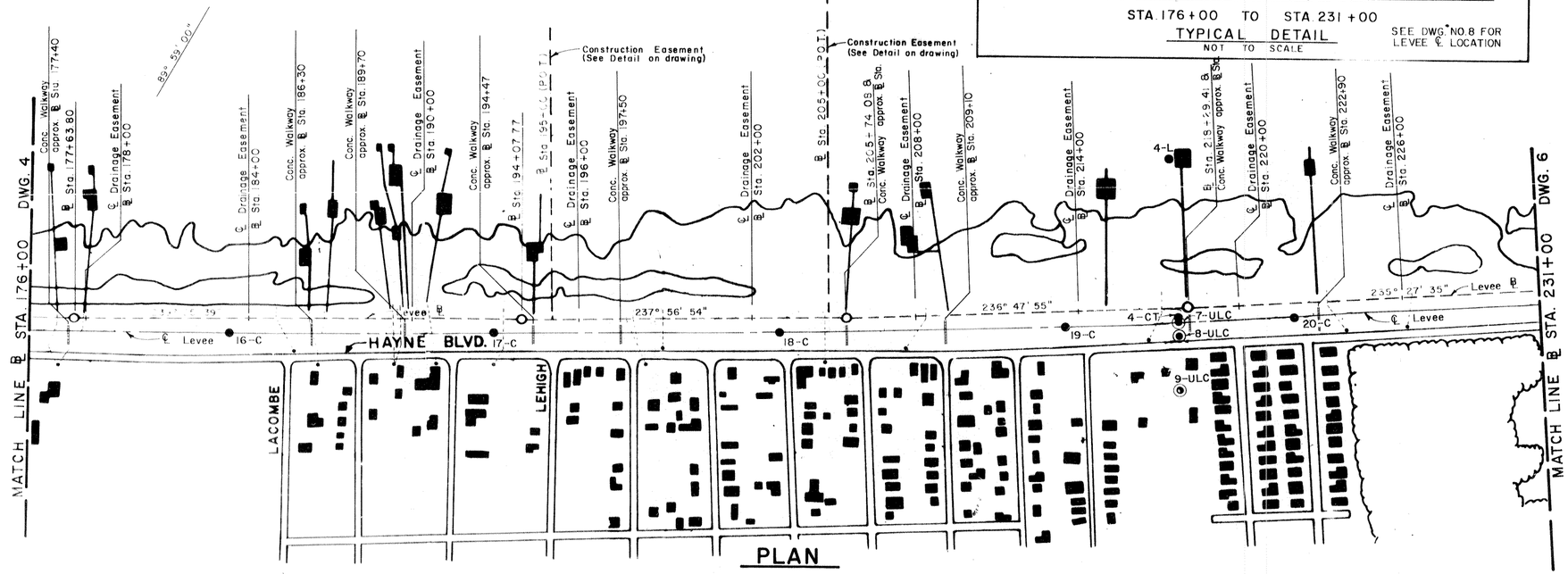


STA. 176+00 TO STA. 231+00

TYPICAL DETAIL

NOT TO SCALE

SEE DWG. NO. 8 FOR LEVEE ℄ LOCATION

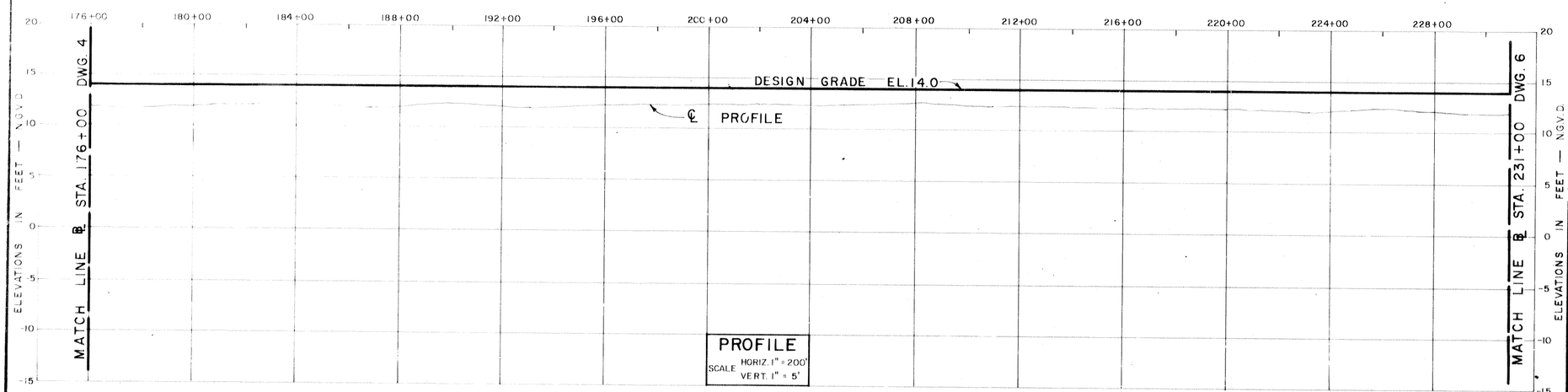


PLAN

SCALE IN FEET

200 0 200 400 600 800

Polyconic Projection — 1927 North American Datum



PROFILE

SCALE HORIZ. 1" = 200'
VERT. 1" = 5'

NOTE

1. For general notes see dwg. 2

Safety is a Part of Your Contract

VALUE INCENTIVE CLAUSE — YOUR KEY TO HIGHER PROFITS — ENGINEERING

LEGEND

Electric and Water Lines

Utility Meters

Concrete Walkway

NOTE: DRAWING REDUCED TO ONE HALF SCALE

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NEW ORLEANS, LA.

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

CITRUS LAKEFRONT LEVEE IHNC TO PARIS ROAD

ORLEANS PARISH, LOUISIANA

PLAN AND PROFILE STA. 176+00 TO STA. 231+00

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

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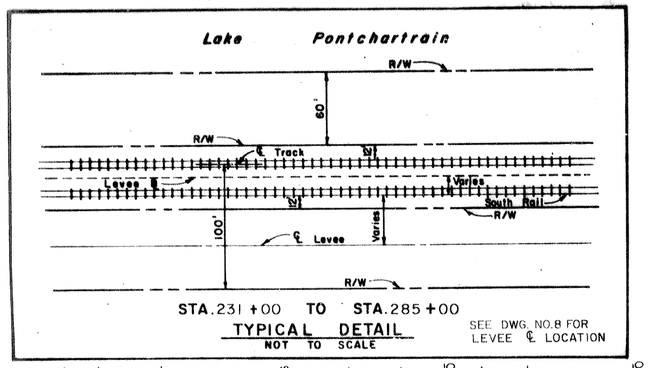
SPEC. NO. DACW29-79-B-0254 AMD. 5 22

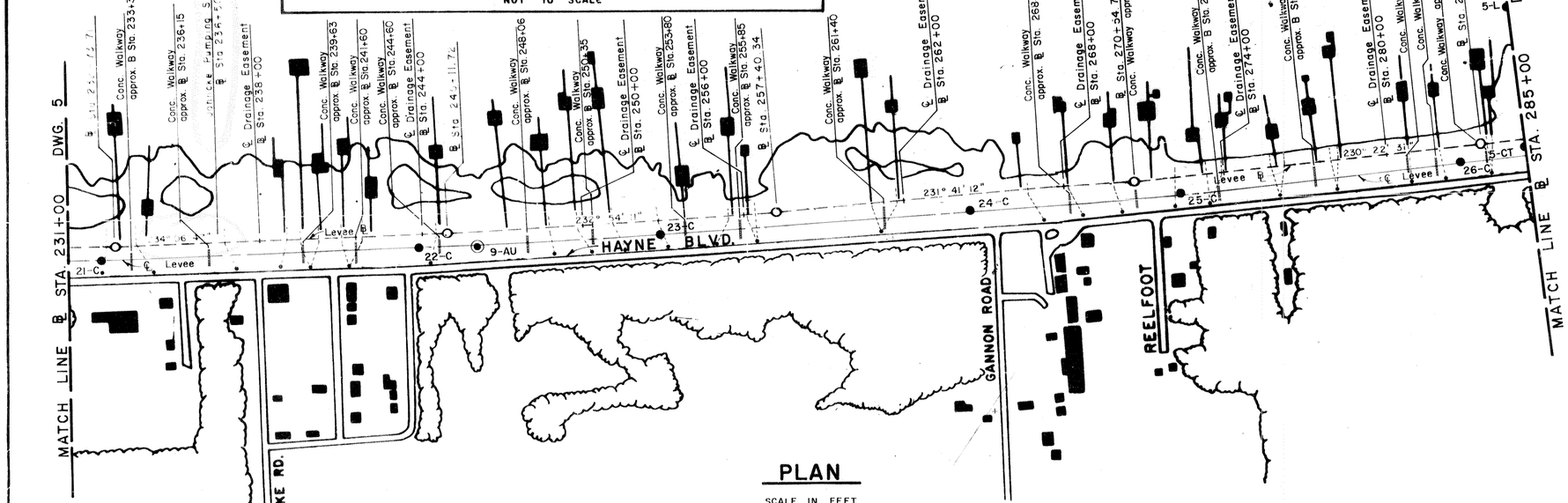


STA. 231 + 00 TO STA. 285 + 00

TYPICAL DETAIL

NOT TO SCALE

SEE DWG. NO. 8 FOR LEVEE ℄ LOCATION



PLAN

SCALE IN FEET

200 0 200 400 600 800

Polyconic Projection—1927 North American Datum

NOTE

1. For general notes see dwg. 2

Safety is a Part of Your Contract

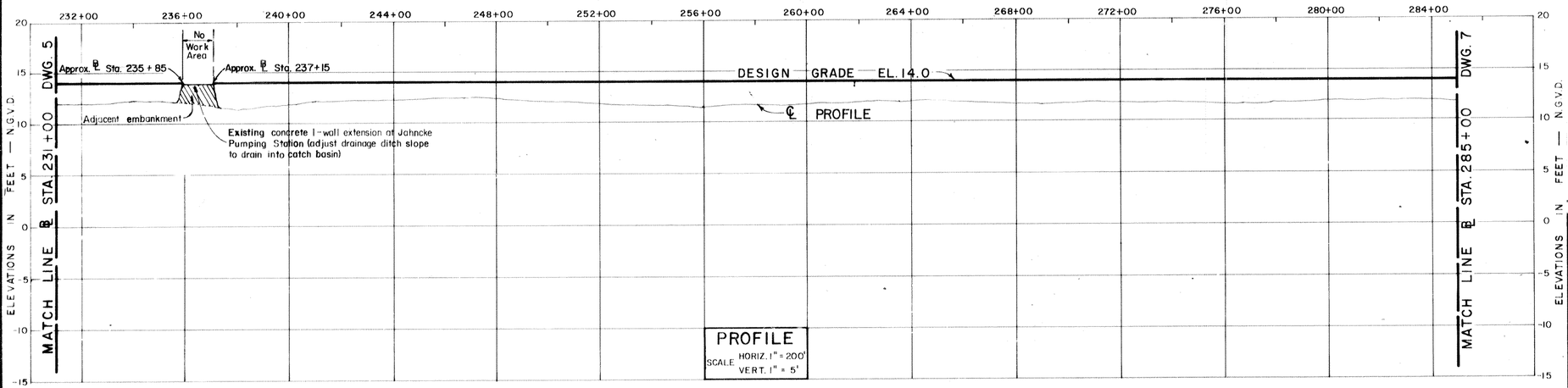
VALUE INCREASES YOUR KEY TO HIGHER PROFITS ENGINEERING

LEGEND

Electric and Water Lines

Utility Meters

Concrete Walkway



PROFILE

SCALE HORIZ. 1" = 200'
VERT. 1" = 5'

NOTE: DRAWING REDUCED TO ONE HALF SCALE

REVISION	DATE	DESCRIPTION	BY

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LAKE PONTCHARTRAIN BARRIER PLAN

CITRUS LAKEFRONT LEVEE IHNC TO PARIS ROAD

ORLEANS PARISH, LOUISIANA

PLAN AND PROFILE STA. 231+00 TO STA. 285+00

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
D. D. S.	C. C. P.	R. P. L.	AUG. 1979	AS SHOWN	H-8-28076

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SPEC. NO. DACW29-79-B-0254 DWG. 6 OF 22

LAKE PONTCHARTRAIN

N

drainage ditch tie-in bottom EL. 6.2 NGVD

drainage ditch tie-in bottom EL. 6.1 NGVD

NO WORK AREA

LINCOLN BEACH MARINA

Seawall

LINCOLN BEACH

Seawall

℄ Sta. 288+68.59

℄ Sta. 305+21.48

℄ Drainage Easement ℄ Sta. 305+50

Conc. Walkway approx. ℄ Sta. 306+20

Conc. Walkway approx. ℄ Sta. 308+40

℄ Drainage Easement ℄ Sta. 311+00

℄ Sta. 312+01.25

Conc. Walkway approx. ℄ Sta. 313+51

℄ Drainage Easement ℄ Sta. 317+00

Conc. Walkway approx. ℄ Sta. 317+75

Conc. Walkway approx. ℄ Sta. 322+42

℄ Sta. 322+62.39

℄ Drainage Easement ℄ Sta. 323+00

Conc. Walkway approx. ℄ Sta. 326+20

Conc. Walkway approx. ℄ Sta. 328+60

℄ Drainage Easement ℄ Sta. 329+00

℄ Sta. 331+94.44

℄ Sta. 332+00 (P.O.T.)

LIMIT OF LEVEE ENLARGEMENT ℄ STA. 332+00

See dwg. 9 for detail of insert

DWG. 6

5-L

5-CT

℄ Levee

27-C

11-ULC

28-C

29-C

30-C

31-C

10-AU

℄ Levee

℄ Levee

℄ Levee

229° 14' 13"

228° 17' 20"

227° 26' 34"

226° 45' 08"

225° 58' 43"

30° 04' 00"

85° 57' 00"

HAYNE BLVD.

FLOODWALL

FLOODWALL

℄ Sta. 297+59

PARKING AREA

MATCH LINE ℄ STA. 285+00

VINCENT ROAD

CANAL

PARIS ROAD

LITTLE WOODS

Paris Road To South Point Levee (Existing)

PLAN

SCALE IN FEET

200 0 200 400 600 800

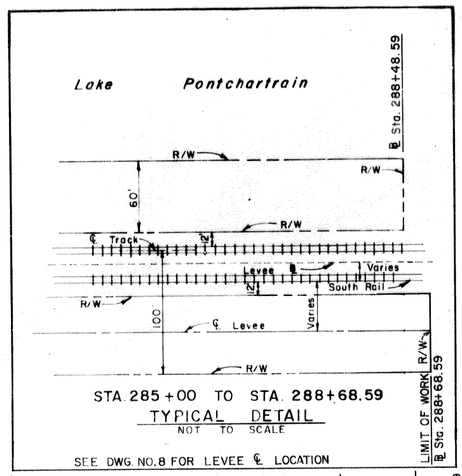
Polyconic Projection — 1927 North American Datum

LEGEND

Electric and Water Lines

Utility Meters

Concrete Walkway

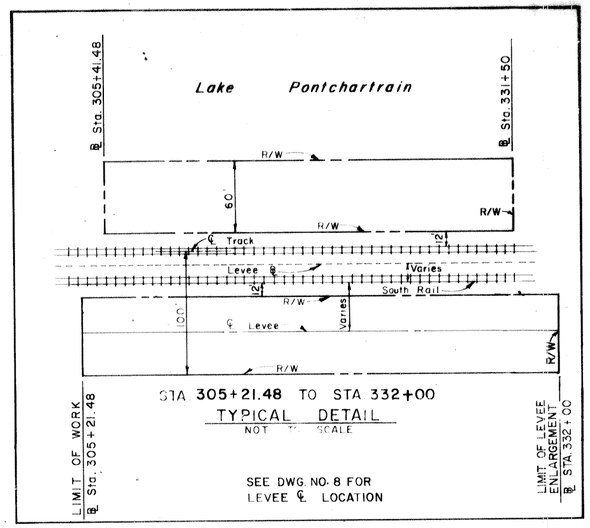


STA. 285+00 TO STA. 288+68.59

TYPICAL DETAIL

NOT TO SCALE

SEE DWG. NO. 8 FOR LEVEE ℄ LOCATION



STA 305+21.48 TO STA 332+00

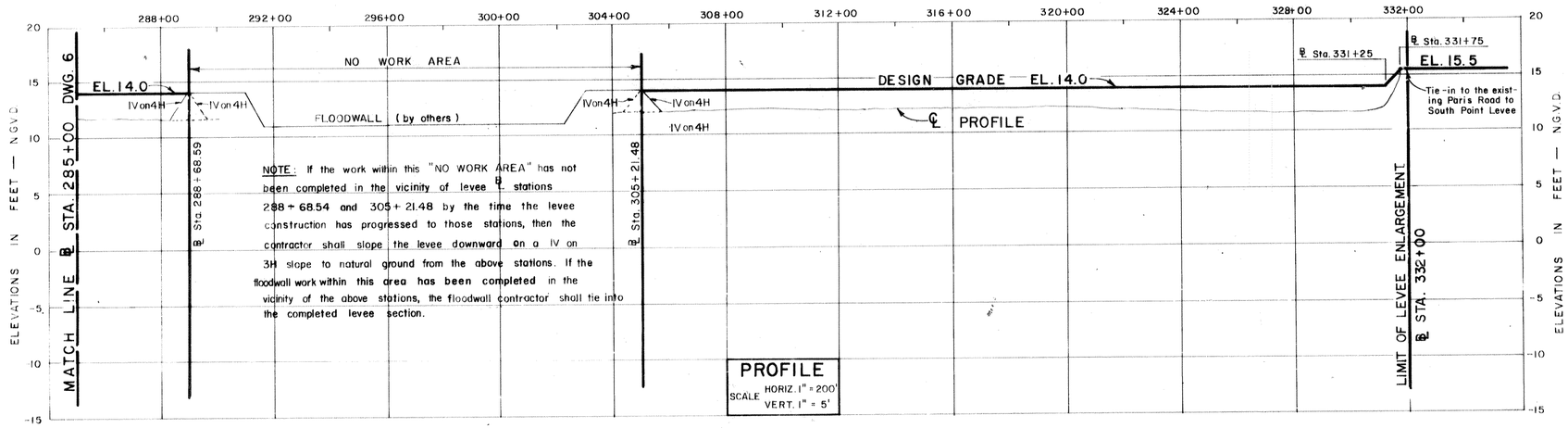
TYPICAL DETAIL

NOT TO SCALE

SEE DWG. NO. 8 FOR LEVEE ℄ LOCATION

NOTE

1. For general notes see dwg. 2



NOTE: If the work within this "NO WORK AREA" has not been completed in the vicinity of levee ℄ stations 288+68.54 and 305+21.48 by the time the levee construction has progressed to those stations, then the contractor shall slope the levee downward on a 1V on 3H slope to natural ground from the above stations. If the floodwall work within this area has been completed in the vicinity of the above stations, the floodwall contractor shall tie into the completed levee section.

PROFILE

SCALE HORIZ. 1" = 200'
VERT. 1" = 50'

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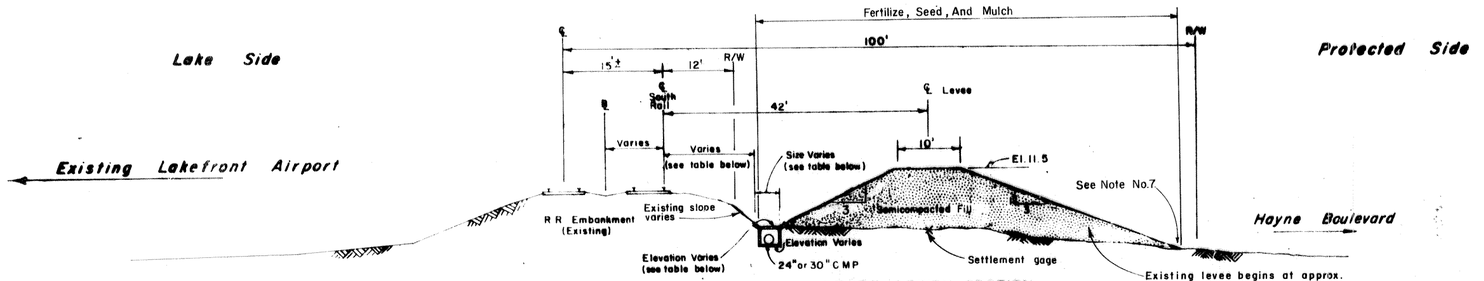
ORLEANS PARISH, LOUISIANA

PLAN AND PROFILE STA. 285+00 TO STA. 332+00

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

SUBMITTED

SPEC. NO. DACW29-79-B-0254 DWG. 7 OF 22



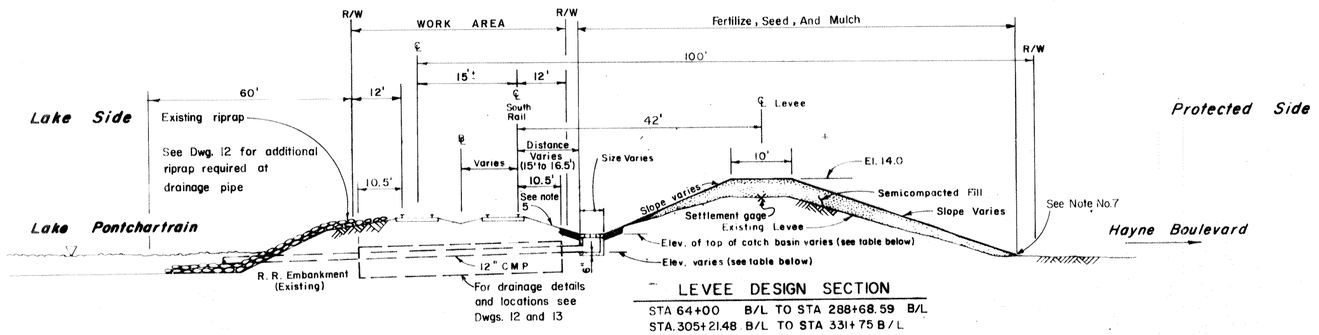
LEVEE DESIGN SECTION

STA. 28+31.49 B/L TO STA 63+50 B/L

LEVEE BASELINE STATION	LEVEE FLOODSIDE SLOPE
28+31 TO 39+00 40+00 TO 53+00 54+00 TO 61+00 61+00 TO 63+50	IV on 3H

CATCH BASIN STATION	ELEV. OF TOP OF CATCH BASIN (FEET N.G.V.D)	SOUTH RAIL TO EDGE OF CATCH BASIN-FEET	WIDTH OF CATCH BASIN FT.
31+00	6.0	18.0	5
37+00	6.0	18.5	5
43+00	5.0	13.0	3.5
49+00	5.0	15.5	5
55+00	5.0	16.5	5
64+00	6.0	17.0	5

NOTE: The catch basin at Sta. 64+00 will have a 30" CMP drilled through the railroad discharging into the lake.



LEVEE DESIGN SECTION

STA 64+00 B/L TO STA 288+68.59 B/L
STA. 305+21.48 B/L TO STA 331+75 B/L

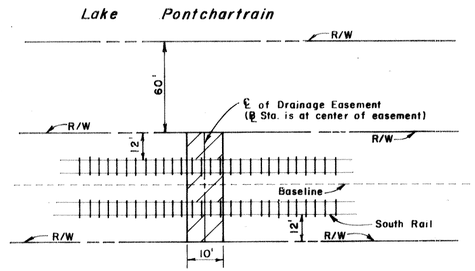
LEVEE BASELINE STATION	MAXIMUM & MINIMUM VALUES OF LEVEE FLOODSIDE SLOPES	EL. OF TOP OF CATCH BASINS WITHIN LEVEE REACHES (FEET N.G.V.D.)	EL. OF BOTTOM OF CATCH BASINS WITHIN LEVEE REACHES (FEET N.G.V.D.)	MAXIMUM & MININUM VALUES OF LEVEE PROTECTED SIDE SLOPES
64+00 TO 73+00 149+00 TO 154+83 156+13 TO 235+40 255+50 TO 282+50	2.3 - 2.6 2.6 - 2.8 2.5 - 2.9 2.5 - 2.9	6.0	2.5	2.7 - 2.8 2.7 - 3.0 2.7 - 3.0 2.8 - 3.0
75+00 TO 108+50 237+60 TO 254+50 283+50 TO 288+68.59 305+21.48 TO 331+50	2.3 - 3.0 2.5 - 2.9 2.7 - 2.8 2.6 - 2.8	6.0	2.5	2.7 - 3.0 2.8 - 3.0 2.8 - 2.9 2.7 - 3.0
109+50 TO 149+00	2.5 - 2.7	5.0	2.0	2.3 - 2.8

SETTLEMENT GAGE SPECIFICATIONS

Should the contractor desire payment for placing additional fill due to foundation settlement during construction he shall furnish and install settlement gages at the locations shown on the design section in conformance with the provisions of Section 3 of the specifications.

The settlement measurement range for each settlement gage shall be for a distance of 150 feet in each direction from each settlement gage measured along the centerline of the levee, except where settlement gages are placed at less than 300 feet intervals, in which case, the settlement measurement range shall be to a point ½ the distance between settlement gages.

1/4" ☐ eelplate 2'x 2'



TYPICAL DRAINAGE EASEMENT

NOT TO SCALE

A 10' wide drainage easement is required at the following baseline stations:

APPROX. ℄ STATIONS	
64+50	196+00
69+00	202+00
75+00	208+00
80+00	214+00
86+00	220+00
92+00	226+00
98+00	232+00
104+00	238+00
110+00	244+00
116+00	250+00
122+00	256+00
128+00	262+00
134+00	268+00
140+00	274+00
146+00	280+00
152+00	288+25
160+00	305+50
166+00	311+00
172+00	317+00
178+00	323+00
184+00	329+00
190+00	

NOTES:

1. All stationing is levee baseline stationing
2. Elevations are expressed in feet, N.G.V.D.
3. Sections not drawn to scale.
4. For general notes see dwg. 2
5. In the levee reaches where the drainage ditch must be cut, the drainage ditch back slope shall be a IV on 2H.
6. Levee section shall make a smooth transition from station 63+50 at elevation 11.5 to station 64+00 at elevation 14.0.
7. The toe of levee on protected side not to extend beyond levee R/W or edge of curb of Hayne Blvd, whichever one is nearest the levee centerline.

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ORLEANS PARISH, LOUISIANA

DESIGN SECTIONS

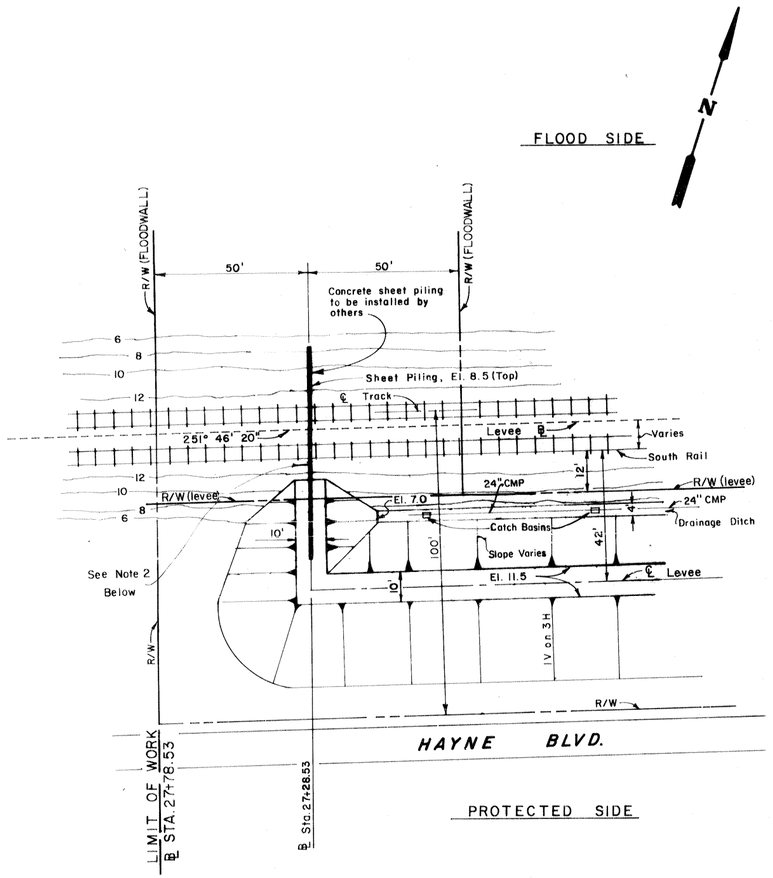
DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

SUBMITTED: Chief, Engineering Division
SPEC. NO. DACW29-79-B-0254
SHEET 8 OF 22

VALUE ENGINEERING INCENTIVES CLAUSES — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract

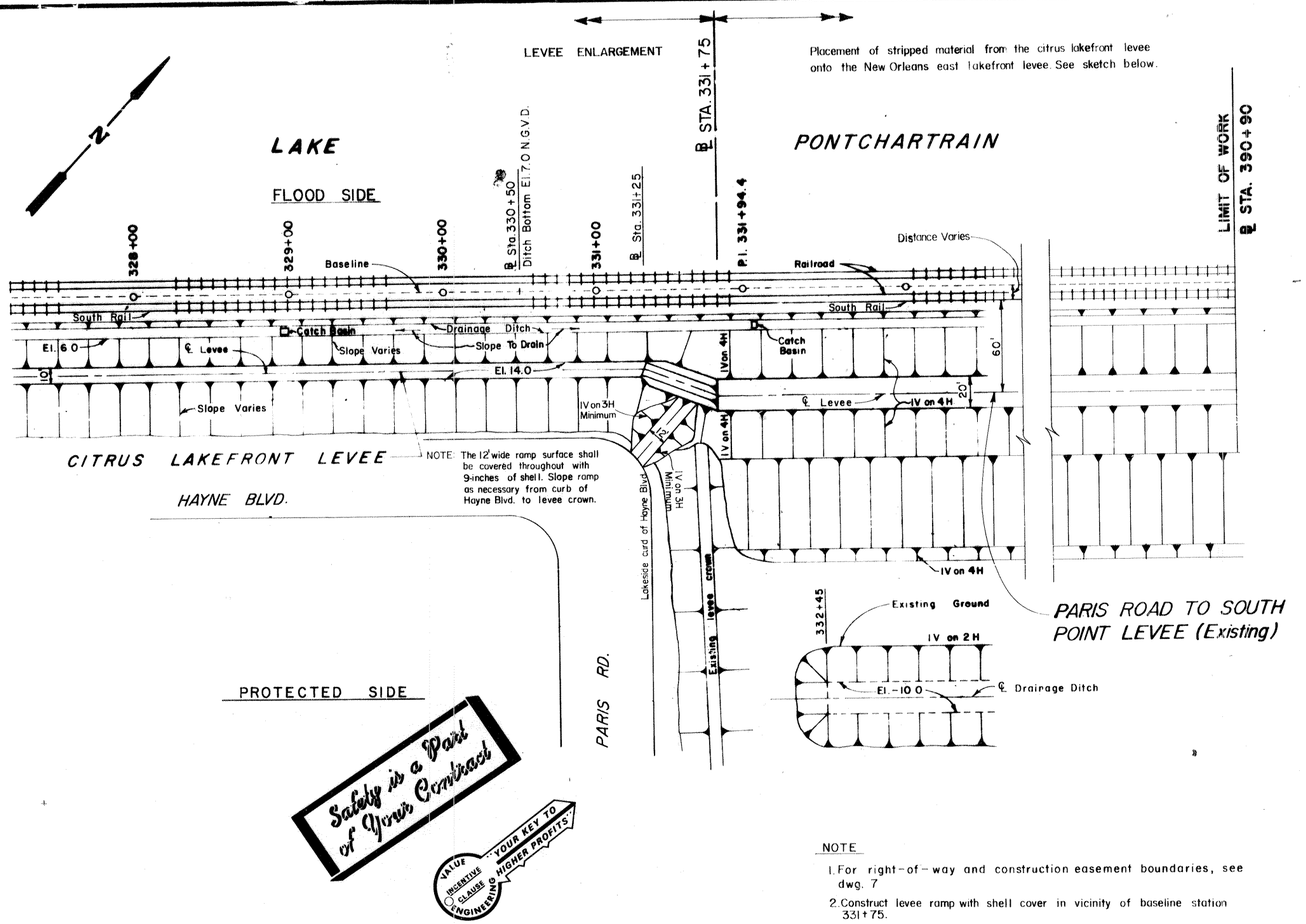
NOTE: DRAWING REDUCED TO ONE HALF SCALE



DETAIL OF PROTECTION LEVEE

VICINITY OF ℄ STA. 27+28.53

NOT TO SCALE



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VALUE ENGINEERING INCENTIVE CLAUSE — YOUR KEY TO HIGHER PROFITS

NOTE

1. For right-of-way and construction easement boundaries, see dwg. 7
2. Construct levee ramp with shell cover in vicinity of baseline station 331+75.

DETAIL OF PROTECTION LEVEE

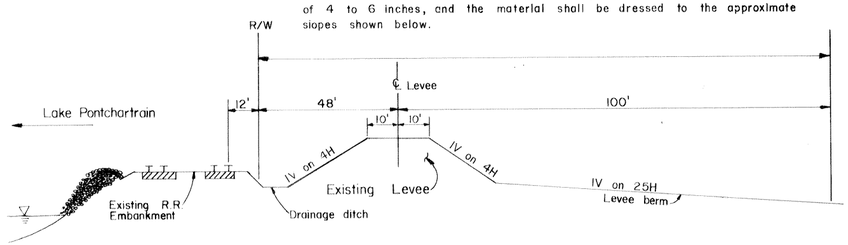
VICINITY OF ℄ STA. 331+50

NOT TO SCALE

FLOOD SIDE

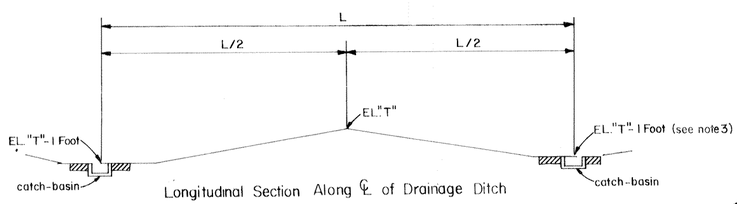
PROTECTED SIDE

Surface area available for placement of stripped material from the Citrus Lakefront Levee. The material shall be placed uniformerly over the levee section to a depth of 4 to 6 inches, and the material shall be dressed to the approximate slopes shown below.



NEW ORLEANS EAST LAKEFRONT LEVEE ℄ STA.331+75 to ℄ STA.390+90

NOT TO SCALE



Longitudinal Section Along ℄ of Drainage Ditch

NEW ORLEANS EAST LAKEFRONT LEVEE ℄ STA.331+75 to ℄ STA.390+90

NOT TO SCALE

NOTE: DRAWING REDUCED TO ONE HALF SCALE

NOTE:

1. For general notes see dwg. no. 2.
2. The levee contractor shall coordinate his earthwork construction with the contractor driving the concrete sheet pile.
3. The El. of drainage ditch at the catch basins will be 1 foot lower than the El. of the midpoint of ditch, that is located between any two catch basins.

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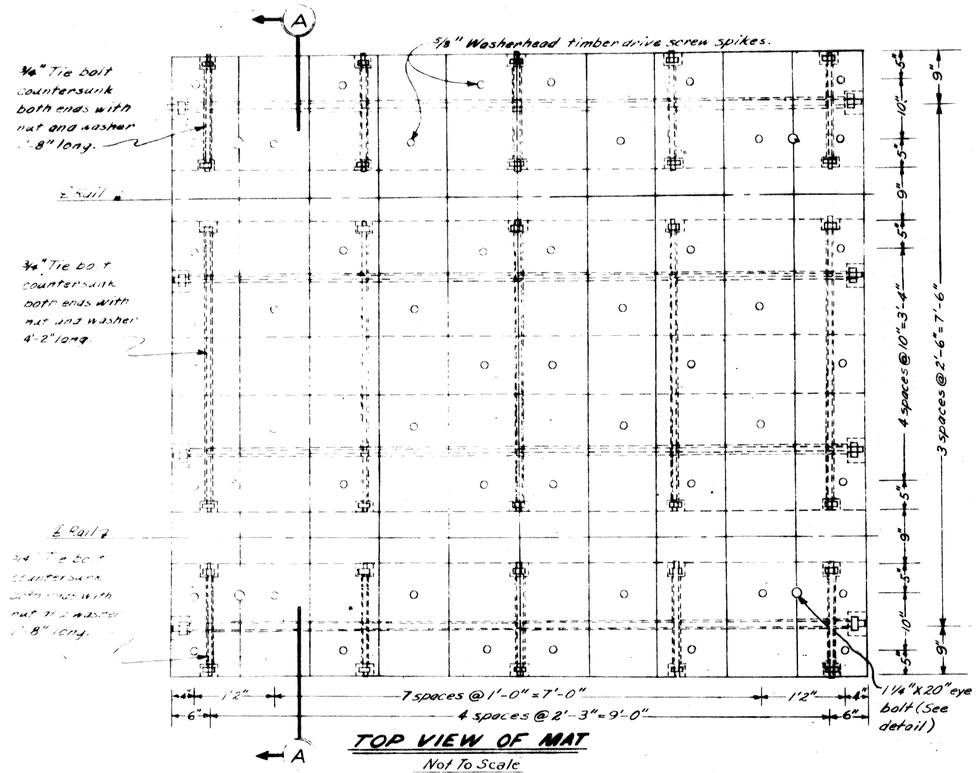
CITRUS LAKEFRONT LEVEE IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA

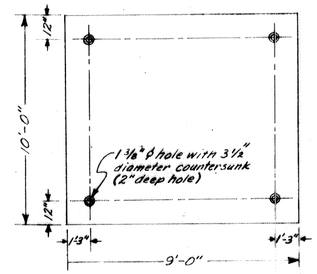
DETAILS OF PROTECTION LEVEE

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076
SUBMITTED			SPEC. NO		DRWG 9 OF 22
			DACW29-79-B-0254		



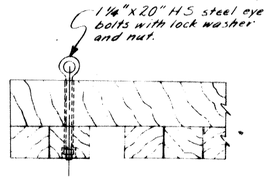
TOP VIEW OF MAT

Not To Scale



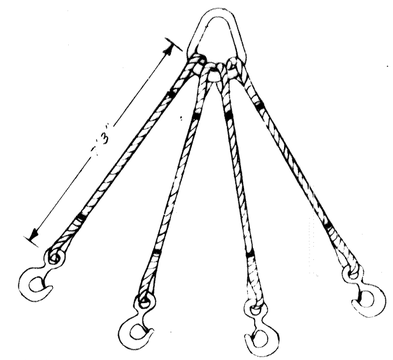
PLAN OF EYE-BOLT LOCATION

Not To Scale



ELEVATION

Not To Scale



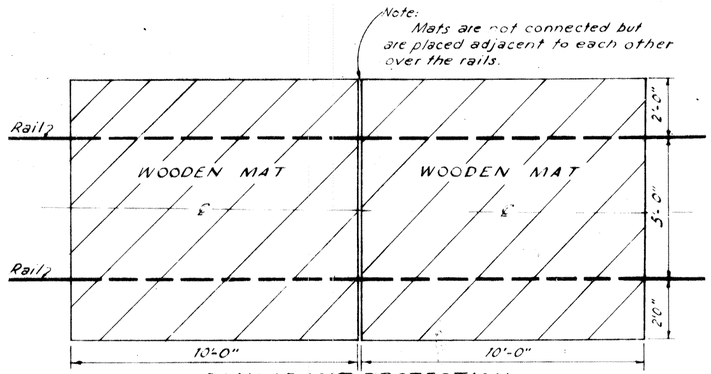
Note:
It is recommended that the operating angle between leg and the vertical be kept below 60 degrees.

4 LEG SLING

Not To Scale

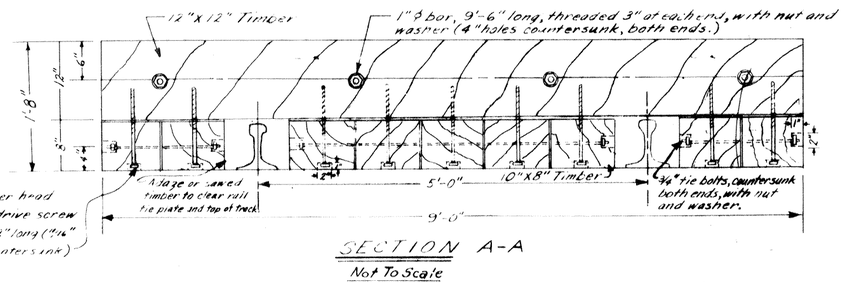
DATA FOR SLING

Diameter (in)	1/2
Cable Construction	7x7x7
Lope L (in)	4x8
Thimble Heavy T" (in)	1/2-9/16
Hook Eye Hoist "H" No.	25
Shackle Screw Pin Anchor SPA Size	1/2
Slip Thru Thimble St. No.	3
Armored Loop Al No.	8
Str'd. Side Link SSL Size	13/8



PLAN OF MAT PROTECTION

Not To Scale



SECTION A-A

Not To Scale

NOTES

1. Wooden mats are to be constructed of oak timber, and a minimum of 2 mats per track (2 rails) will be required.

2. Track guard mats are to be placed over rails whenever any rock or broken concrete is aerially transported from the landside to the lakeside of railroad tracks during construction. Mats shall be placed in such a manner so that rails are not exposed to falling rock whenever machine bucket is swung over the tracks.

3. Actual timber dimensions may be rough size or dressed size, except the 8" nominal dimension must be not less than 7 7/8" actual size.

NOTE: DRAWING REDUCED TO ONE HALF SCALE

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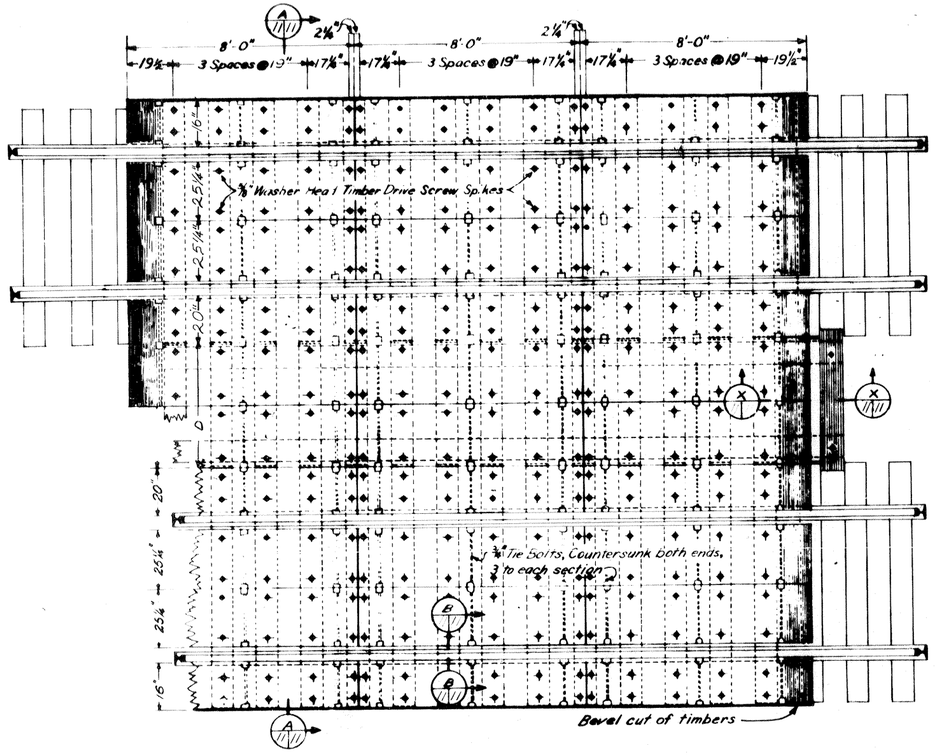
CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA

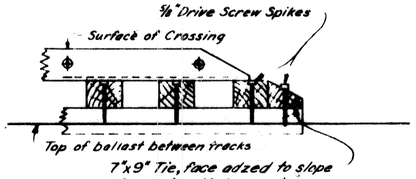
RAILROAD TRACK GUARD MAT

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
D. D. S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

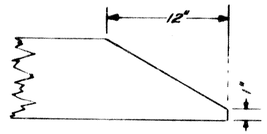
SUBMITTED: Manuel M. Lee
SPEC. NO. DACW29-79-B-0254
SHEET 10 OF 22



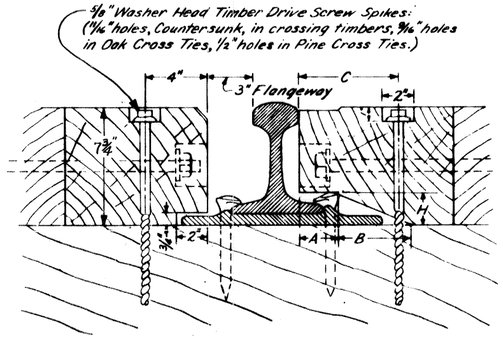
PLAN — TIMBER CROSSING



SECTION X

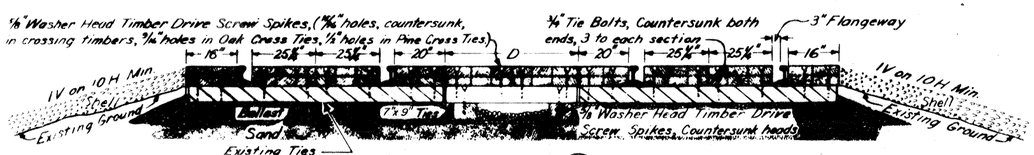


BEVEL CUT OF TIMBERS AT END OF CROSSING



SECTION B

Weight of Rail, Lbs. per yd.	132
Thickness of Timbers "T"	7¾"
Dimension A, Section B	2½"
Dimension B, Section B	4½"
Dimension C, Section B	6⅝"
Dimension H, Section B	2"
Length of Spike Required	12"



SECTION A

TIMBER MAT FOR RIGHT ANGLE CROSSING OVER EXISTING DOUBLE TRACKS

NOTES:

1. Timber to be gum, pine or oak sized on one face only, shaped and bored. Countersunk spike holes to be sealed with mastic after spikes are driven.
2. Timber mat and adjacent shell slopes to be constructed across existing ties and tracks, in the vicinity of levee baseline station 200+00.
3. Crossing to be constructed at right angle to existing tracks.
4. Width of crossing is 24 feet, out to beveled end timbers.
5. In the Section A and Plan View, the dimension D and the distance between track centers shall be determined in the field at the location of crossing.
6. Grade crossing to conform with either 100 lb/yd. rail or 132 lb/yd. rail, depending on existing rail.
7. All drawings on this sheet are drawn "not to scale".

REVISION	DATE	DESCRIPTION	BY

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

CITRUS LAKEFRONT LEVEE IHNC TO PARIS ROAD

ORLEANS PARISH, LOUISIANA

TIMBER RAILROAD CROSSING

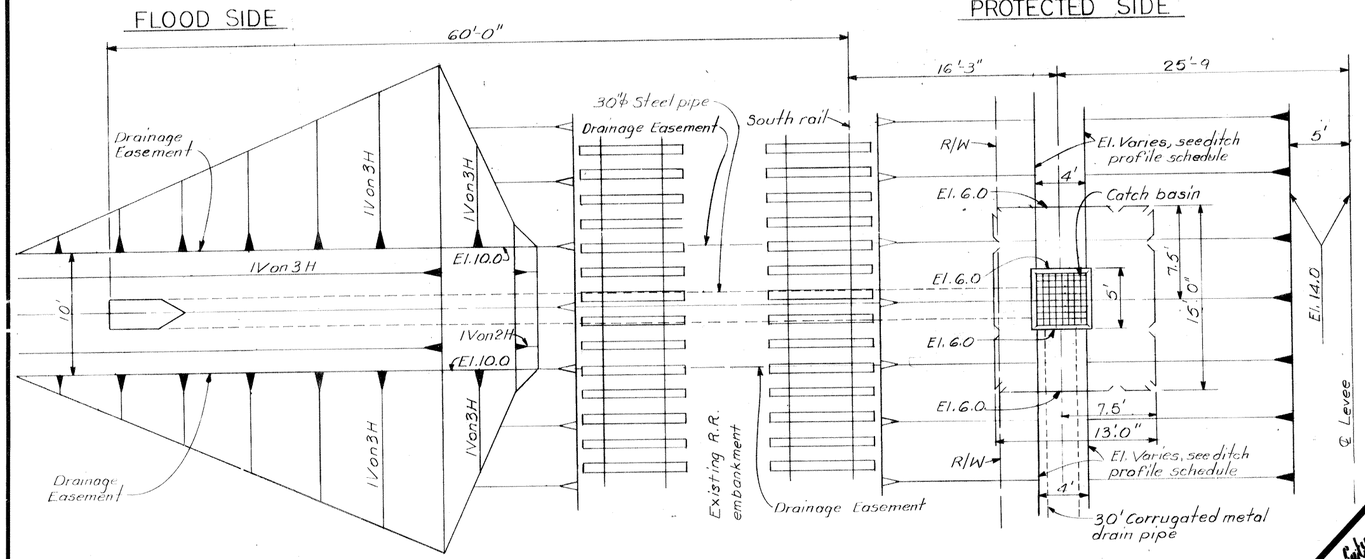
DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

SUBMITTED ..... SPEC NO. DACW29-79-B-0254 DWG. 11 OF 22

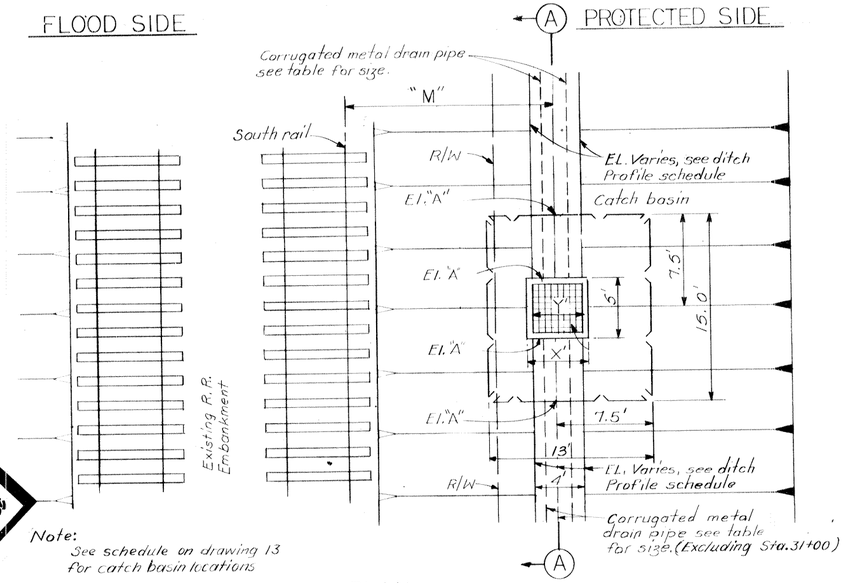
VALUE ENGINEERING CLAUSE INCENTIVE — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract

NOTE: DRAWING REDUCED TO ONE HALF SCALE



PLAN AT STA. 64+50
SCALE: 1"=5'

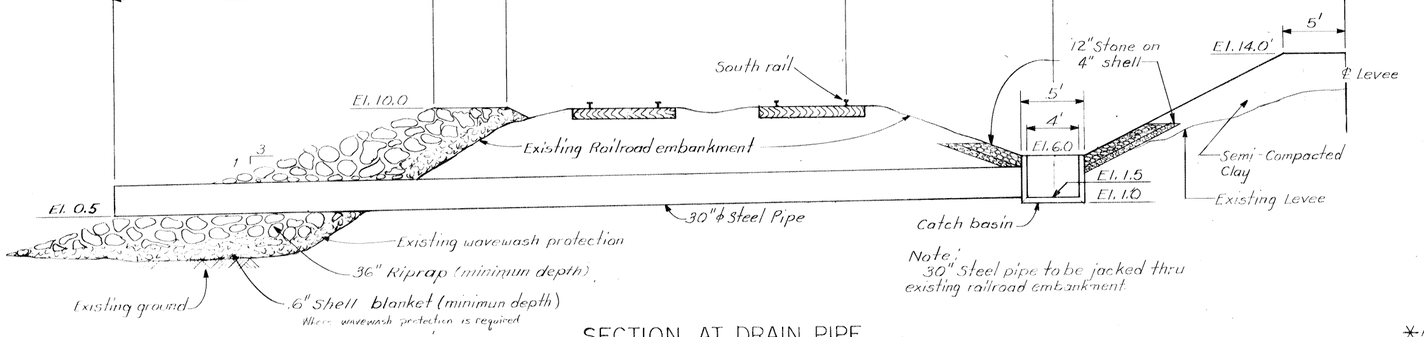


Note:
See schedule on drawing 13 For catch basin locations

PLAN
SCALE 1"=5'

Safety is a Part of Your Contract

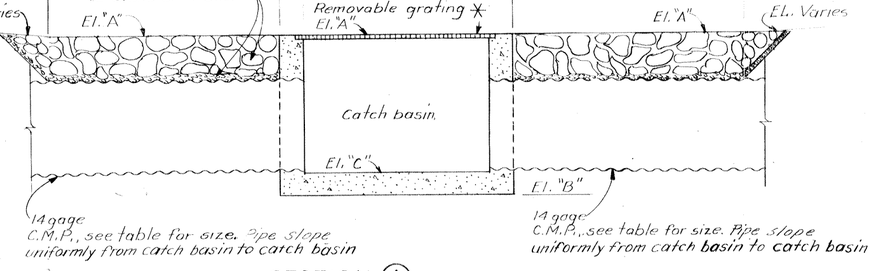
VALUE ENGINEERING INCENTIVE CLAUSE "YOUR KEY TO HIGHER PROFITS"



Note:
30" steel pipe to be jacked thru existing railroad embankment

SECTION AT DRAIN PIPE
STA. 64+50
SCALE: 1"=5'

⚠ Sta. 55+53 Electrical Conduit (to be relocated by others). New 30"ϕ steel pipe to be jacked thru railroad embankment at sta. 55+33 for electrical conduit relocation. Pipe length approximately 55', exact length to be determined in field. Elev. at top of pipe = +2.5. After placement is completed, close both ends of pipe by tack welding plate.



SECTION (A)
SCALE: 3/4"=1'-0"

✳ Padlock and locking bars not shown, see detail 2 | 12 | 16

Note: Catch basin details similar to Catch basins shown on Dwg. 14.

THIS PLAN ACCOMPANIES MODIFICATION P00001 TO CONTRACT NUMBER DACW29-80-C-0035

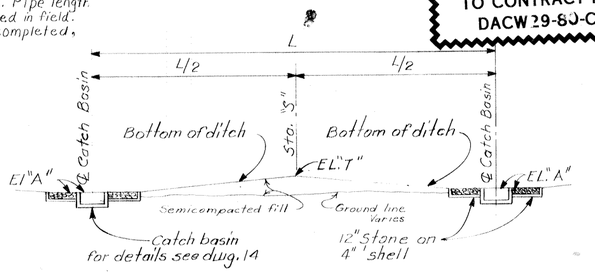
For General Notes, See Dwg. 15

NOTE: DRAWING REDUCED TO ONE HALF SCALE

SIZE OF DRAIN PIPE		
FROM STA.	TO STA.	SIZE
31+00	37+00	24"
37+00	43+00	24"
43+00	49+00	24"
49+00	55+00	24"
55+00	64+50	30"

LOCATION AND SIZE OF CATCH BASINS						
STATION B/L	"M"	X	Y	EL."A"	EL."B"	EL."C"
31+00	21'6"	5'	4'	6.0	3.0	3.5
37+00	21'6"	5'	4'	6.0	2.5	3.0
43+00	16'0"	5'	4'	5.0	2.0	2.5
49+00	20'9"	5'	4'	5.0	1.7	2.2
⚠ 55+53	20'3"	5'	4'	5.0	1.4	1.9
64+50	AS SHOWN					

DITCH PROFILE SCHEDULE							
STATION "S"	EL."T"	STATION "S"	EL."T"	STATION "S"	EL."T"	STATION "S"	EL."T"
34+00	7.0	107+00	7.0	181+00	7.0	247+00	7.0
40+00	7.0	113+00	6.0	187+00	7.0	253+00	7.0
46+00	6.0	119+00	6.0	193+00	7.0	259+00	7.0
52+00	6.0	125+00	6.0	199+00	7.0	265+00	7.0
59+50	7.0	131+00	6.0	205+00	7.0	271+00	7.0
66+75	7.0	137+00	6.0	211+00	7.0	277+00	7.0
72+00	7.0	143+00	6.0	217+00	7.0	284+00	7.0
77+00	7.0	149+00	7.0	223+00	7.0	308+00	7.0
83+00	7.0			229+00	7.0	314+00	7.0
89+00	7.0	157+00	7.0	235+00	7.0	320+00	7.0
95+00	7.0	163+00	7.0	241+00	7.0	326+00	7.0
101+00	7.0	169+00	7.0			330+50	7.0
		175+00	7.0				



SECTION ALONG ℄ DITCH

REVISION	DATE	DESCRIPTION	BY
⚠	15Feb80	Addition of 30" ϕ steel pipe and new location for catch basin. Mod. # 1	

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

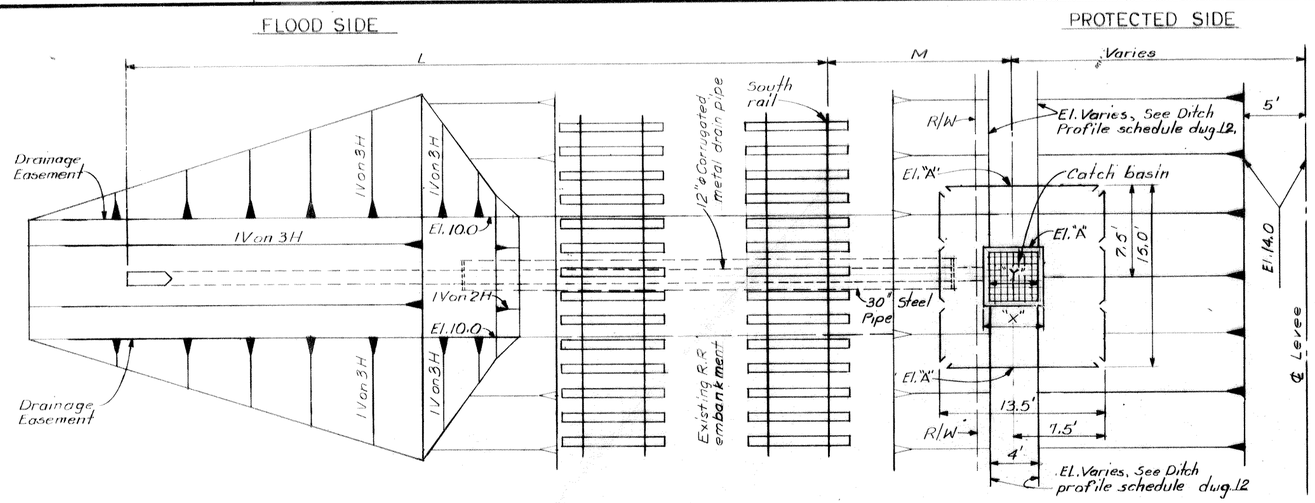
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

CITRUS LAKEFRONT LEVEE IHNC TO PARIS ROAD

ORLEANS PARISH, LOUISIANA

LEVEE DRAINAGE DETAILS

DESIGNED:	DRAWN:	CHECKED:	DATE:	SCALE:	FILE NO.
L.L.W.	J.J.H.	L.L.W.	AUG. 1979	AS SHOWN	H-8-28076
SUBMITTED:			SPEC. NO.		DWG. 12 OF 22
ENGINEER			DACW29-79-B-0254		

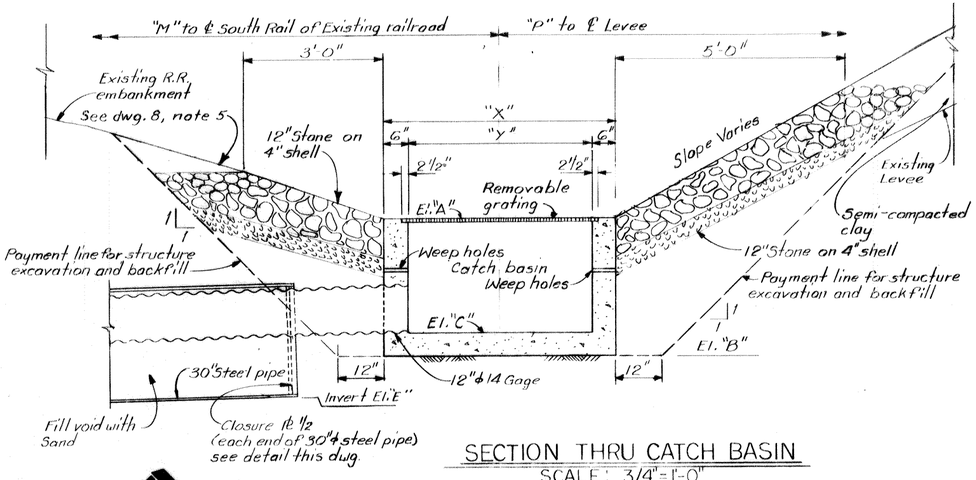


PLAN

TYPICAL AT 600' INTERVALS

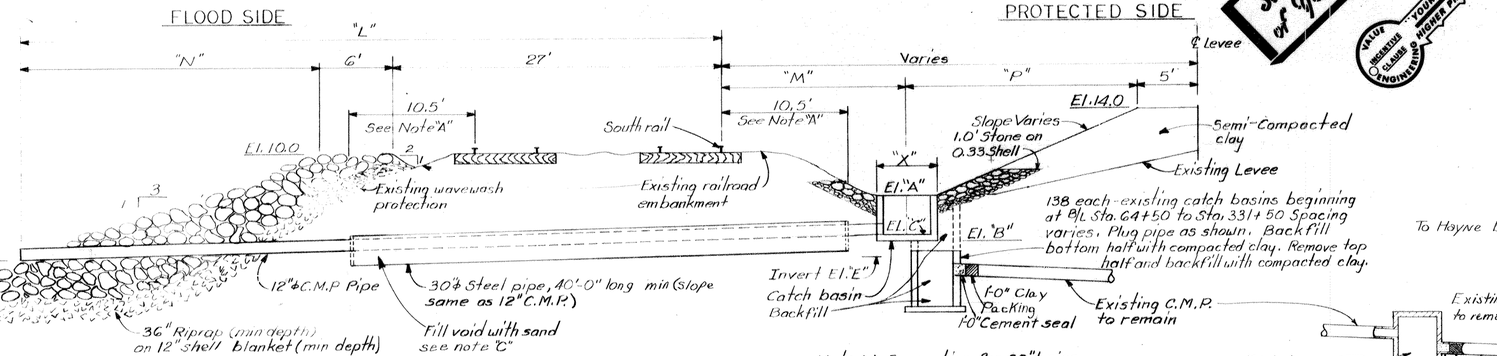
BEGINNING AT STA. 69+00

SCALE: 1"=5'



SECTION THRU CATCH BASIN

SCALE: 3/4"=1'-0"



138 each existing catch basins beginning at ℄ Sta. 64+50 to Sta. 331+50 Spacing varies. Plug pipe as shown. Backfill bottom half with compacted clay. Remove top half and backfill with compacted clay.

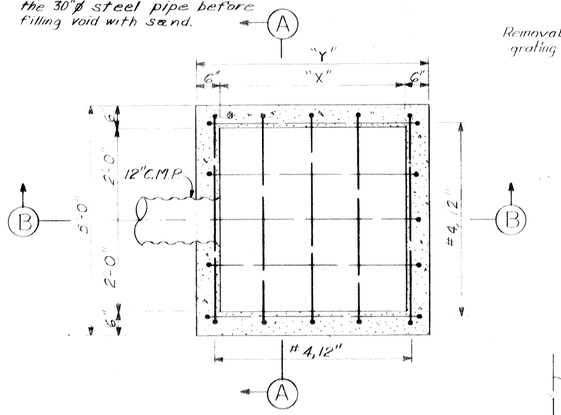
Notes:

A. Excavation for 30"ϕ pipe installation shall not be closer than 10'-6" from nearest rail
B. 30" steel pipe to be jacked thru existing railroad embankment
C. Contractor shall provide interim support for the 12"ϕ CMP inside the 30"ϕ steel pipe before filling void with sand.

Note A: Excavation for 30"ϕ pipe installation shall not be closer than 10'-6" from nearest rail.

SECTION AT DRAIN PIPE

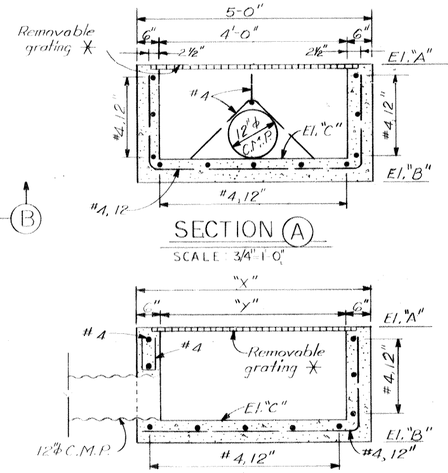
SCALE: 1"=5'



CATCH BASIN

PLAN AT EL. "C"

SCALE 3/4"=1'-0"



SECTION (A)

SCALE 3/4"=1'-0"

SECTION (B)

SCALE: 3/4"=1'-0"

TYPICAL DETAIL AT EACH END

OF 30"ϕ STEEL PIPE

SCALE: 3/4"=1'-0"

✱ Removable Grating Borden type W/B with 1½ x ⅜" bearing bars or equal. Padlock and locking bars not shown, see detail (2 / B 16)

For General notes, see dwg. 15

CATCH BASIN SCHEDULE

STA. (BL) ✱ AT C/L CATCH BASIN	ELEVATIONS "A"	"B"	"C"	"D"	"E"	DIMENSIONS "L"	"M"	"N"	"P"	"X"	"Y"
69+00	6.0	2.5	3.0	2.0	1.8	57'-0"	16'-0"	24'-0"	18'-9"	3'-6"	2'-6"
75+00	6.0	2.5	3.0	2.0	1.8	57'-0"	16'-3"	24'-0"	18'-9"	5'-0"	4'-0"
80+00	6.0	2.5	3.0	2.0	1.8	57'-0"	16'-9"	24'-0"	20'-3"	5'-0"	4'-0"
86+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-6"	24'-0"	20'-3"	3'-6"	2'-6"
92+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-0"	24'-0"	20'-3"	3'-6"	2'-6"
98+00	6.0	2.5	3.0	2.0	1.8	57'-0"	16'-0"	24'-0"	20'-3"	5'-0"	4'-0"
104+00	6.0	2.5	3.0	2.0	1.8	57'-0"	17'-3"	24'-0"	20'-3"	5'-0"	4'-0"
110+00	5.0	2.0	2.5	1.5	1.3	56'-6"	15'-9"	25'-6"	21'-3"	5'-0"	4'-0"
116+00	5.0	2.0	2.5	1.5	1.3	56'-6"	15'-0"	25'-6"	21'-3"	3'-6"	2'-6"
122+00	5.0	2.0	2.5	1.5	1.3	56'-6"	15'-0"	25'-6"	21'-3"	3'-6"	2'-6"
128+00	5.0	2.0	2.5	1.5	1.3	56'-6"	15'-6"	25'-6"	21'-3"	3'-6"	2'-6"
134+00	5.0	2.0	2.5	1.5	1.3	56'-6"	14'-0"	25'-6"	21'-3"	3'-6"	2'-6"
140+00	5.0	2.0	2.5	1.5	1.3	56'-6"	16'-3"	25'-6"	21'-3"	5'-0"	4'-0"
146+00	5.0	2.0	2.5	1.5	1.3	56'-6"	16'-9"	25'-6"	21'-3"	5'-0"	4'-0"
152+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-6"	24'-0"	18'-9"	3'-6"	2'-6"
160+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-0"	24'-0"	18'-9"	3'-6"	2'-6"
166+00	6.0	2.5	3.0	2.0	1.8	57'-0"	14'-9"	24'-0"	18'-9"	5'-0"	4'-0"
172+00	6.0	2.5	3.0	2.0	1.8	57'-0"	14'-6"	24'-0"	18'-9"	3'-6"	2'-6"
178+80	6.0	2.5	3.0	2.0	1.8	57'-0"	16'-6"	24'-0"	18'-9"	3'-6"	2'-6"
184+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-0"	24'-0"	18'-9"	3'-6"	2'-6"
190+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-3"	24'-0"	18'-9"	5'-0"	4'-0"
196+00	6.0	2.5	3.0	2.0	1.8	57'-0"	14'-6"	24'-0"	18'-9"	3'-6"	2'-6"
202+00	6.0	2.5	3.0	2.0	1.8	57'-0"	16'-9"	24'-0"	18'-9"	5'-0"	4'-0"
208+00	6.0	2.5	3.0	2.0	1.8	57'-0"	16'-3"	24'-0"	18'-9"	5'-0"	4'-0"
214+00	6.0	2.5	3.0	2.0	1.8	57'-0"	16'-9"	24'-0"	18'-9"	5'-0"	4'-0"
220+00	6.0	2.5	3.0	2.0	1.8	57'-0"	16'-9"	24'-0"	18'-9"	5'-0"	4'-0"
226+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-9"	24'-0"	18'-9"	5'-0"	4'-0"
232+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-9"	24'-0"	18'-9"	5'-0"	4'-0"
238+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-6"	24'-0"	20'-3"	3'-6"	2'-6"
244+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-3"	24'-0"	20'-3"	5'-0"	4'-0"
250+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-9"	24'-0"	20'-3"	5'-0"	4'-0"
256+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-0"	24'-0"	18'-9"	3'-6"	2'-6"
262+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-6"	24'-0"	18'-9"	3'-6"	2'-6"
268+00	6.0	2.5	3.0	2.0	1.8	57'-0"	14'-9"	24'-0"	18'-9"	5'-0"	4'-0"
274+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-3"	24'-0"	18'-9"	5'-0"	4'-0"
280+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-0"	24'-0"	18'-9"	3'-6"	2'-6"
288+25	6.0	2.5	3.0	2.0	1.8	57'-0"	14'-3"	24'-0"	20'-3"	5'-0"	4'-0"
305+50	6.0	2.5	3.0	2.0	1.8	57'-0"	14'-0"	24'-0"	20'-3"	3'-6"	2'-6"
311+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-6"	24'-0"	20'-3"	3'-6"	2'-6"
317+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-0"	24'-0"	20'-3"	3'-6"	2'-6"
323+00	6.0	2.5	3.0	2.0	1.8	57'-0"	17'-6"	24'-0"	20'-3"	3'-6"	2'-6"
329+00	6.0	2.5	3.0	2.0	1.8	57'-0"	15'-0"	24'-0"	20'-3"	3'-6"	2'-6"

✱ Baseline stations are approximate. Catch basins may be moved a maximum of 10 feet east or west so as not to interfere with existing camp site walkways.

NOTE: DRAWING REDUCED TO ONE HALF SCALE

REVISION	DATE	DESCRIPTION	BY

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

CITRUS LAKEFRONT LEVEE IHNC TO PARIS ROAD

ORLEANS PARISH, LOUISIANA

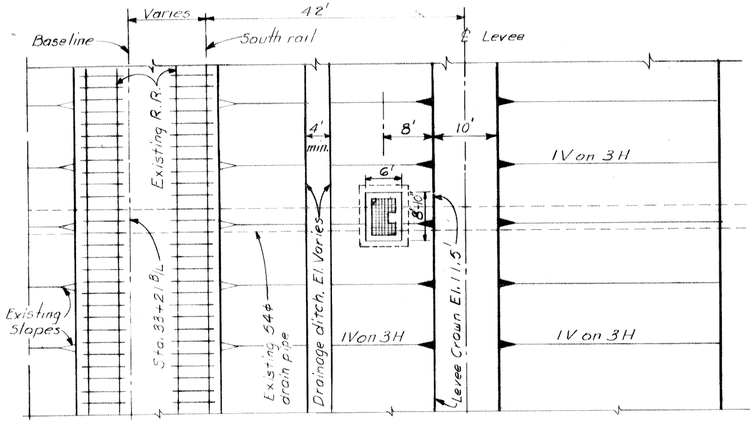
LEVEE DRAINAGE DETAILS

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
L.L.W.	J.J.H.	L.L.W.	AUG. 1979	AS SHOWN	H-8-28076

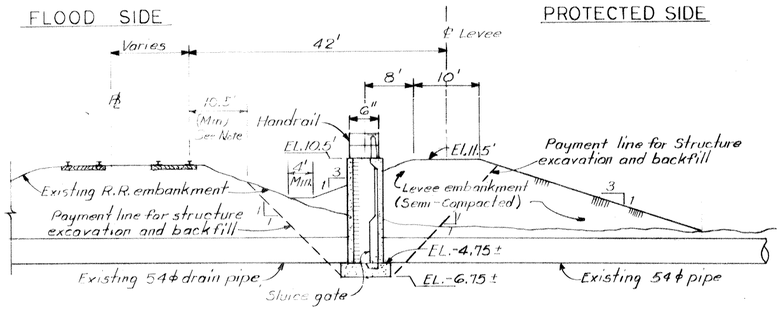
SUBMITTED: Randall P. Duet, Engineer

SPEC. NO. DACW29-79-B-0254

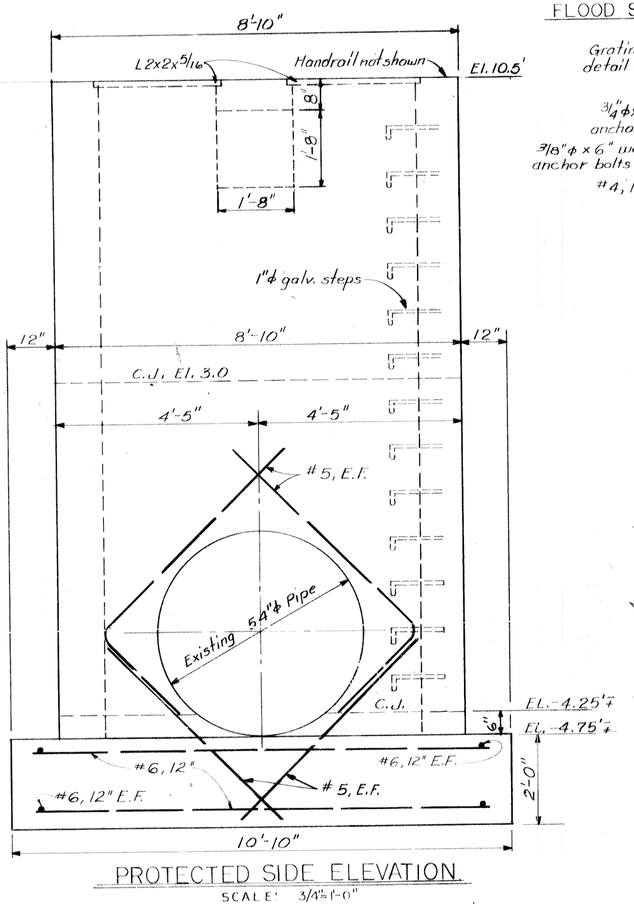
DWG. 13 OF 22



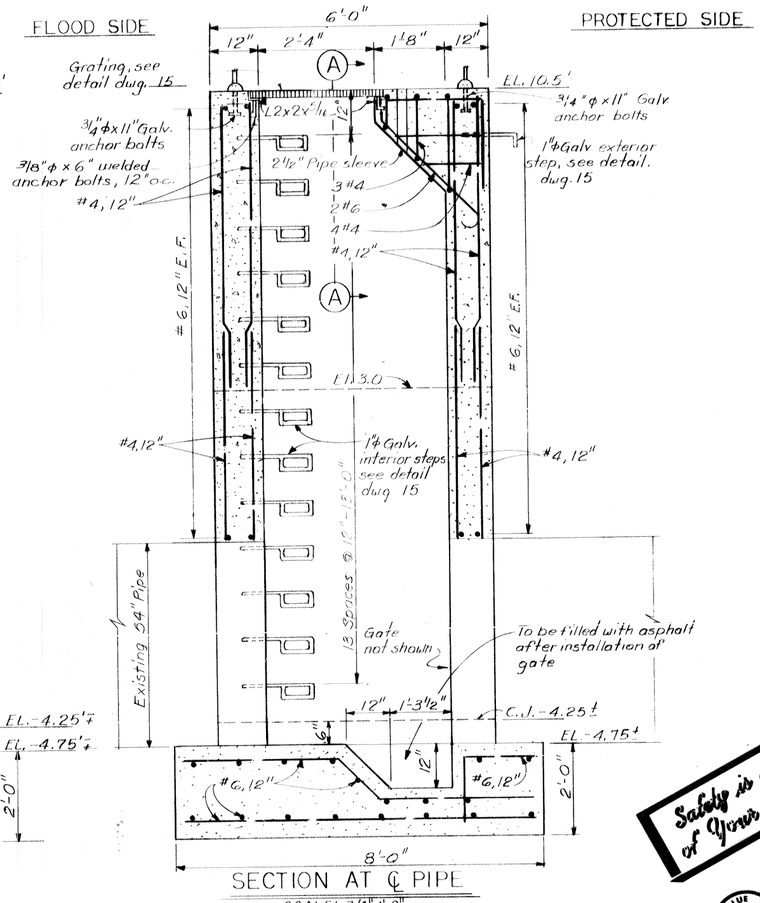
PLAN
SCALE: 1"=10'



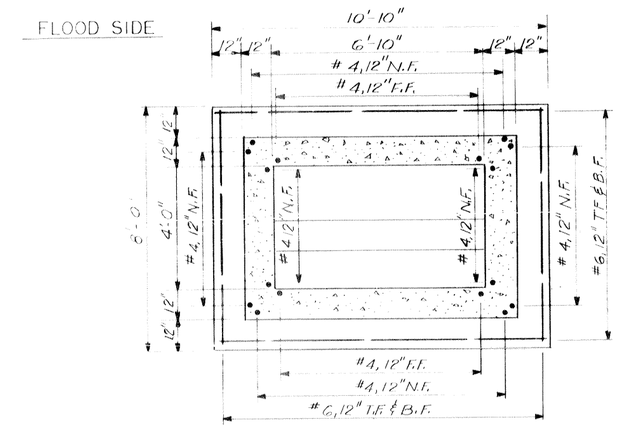
SECTION AT STA. 33+21 B/L
SCALE: 1"=10'



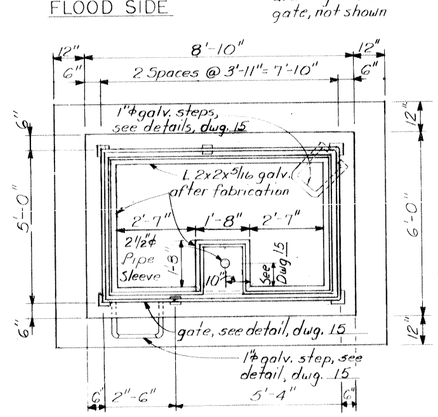
PROTECTED SIDE ELEVATION
SCALE: 3/4"=1'-0"



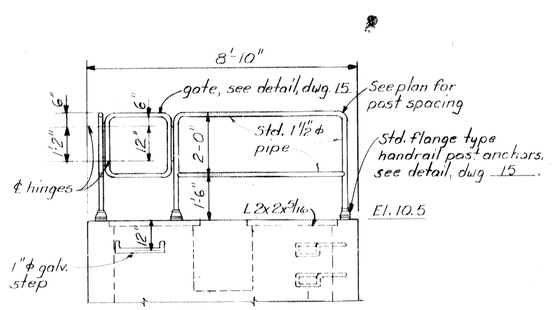
SECTION AT ℄ PIPE
SCALE: 3/4"=1'-0"



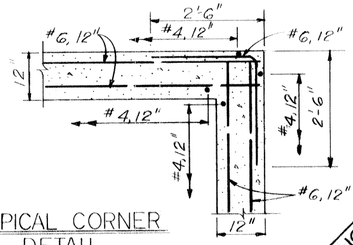
PLAN AT EL. -4.74
SCALE: 1/2"=1'-0"



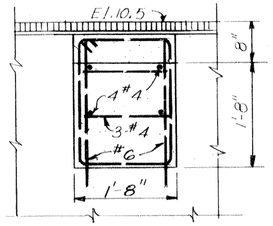
PLAN
SCALE: 1/2"=1'-0"



HANDRAIL ELEVATION
SCALE: 1/2"=1'-0"



TYPICAL CORNER DETAIL
SCALE: 3/4"=1'-0"



SECTION A-A
SCALE: 3/4"=1'-0"

For General Notes see dwg. 15

Safety is a Part of Your Contract

VALUE ENGINEERING INCENTIVE CLAUSE — YOUR KEY TO HIGHER PROFITS

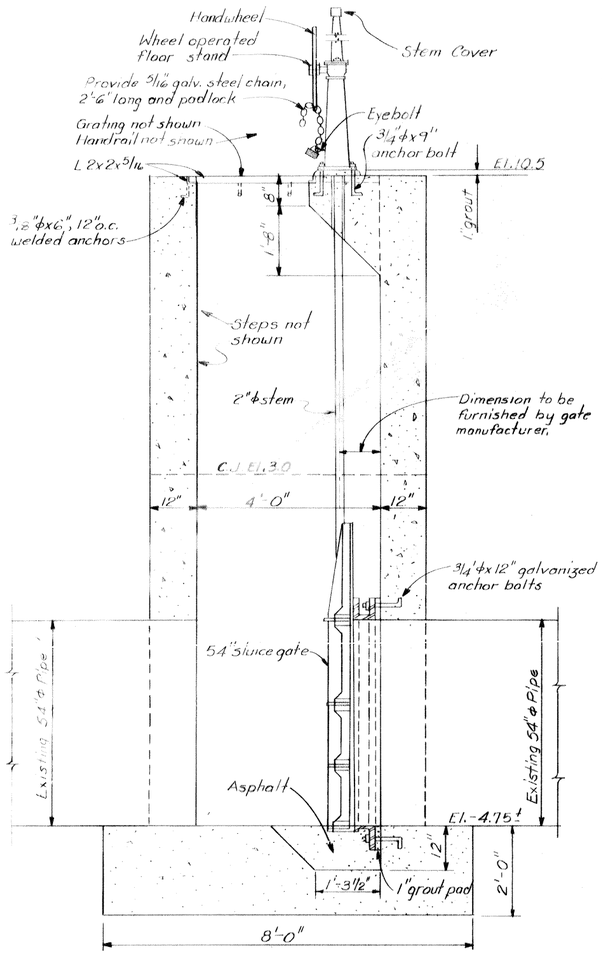
NOTE: DRAWING REDUCED TO ONE HALF SCALE

REVISION	DATE	DESCRIPTION	BY

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA
SLUICE GATE STRUCTURE
PLANS ELEVATIONS AND SECTIONS

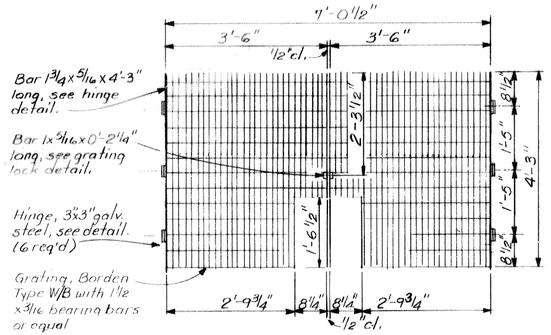
DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO
L.L.W.	J.J.H.	L.L.W.	AUG. 1979	AS SHOWN	H-8-28076
SUBMITTED			SPEC. NO	DWG	OF
ENGINEER			DACW29 79-B-0254	14	22



SLUICE GATE DETAIL
SCALE: 3/4"=1'-0"

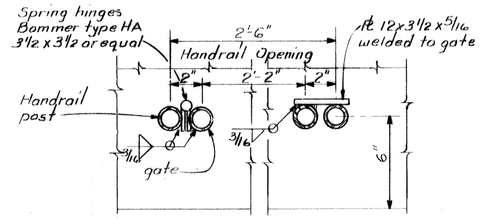
Note:
Grating and appurtenances to be galv. after fabrication

Note:
Concrete, angles, handrails not shown.



GRATING DETAIL
SCALE: 3/4"=1'-0"

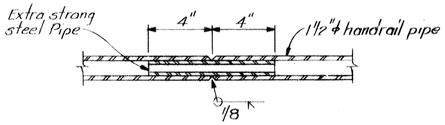
FLOOD SIDE



PROTECTED SIDE

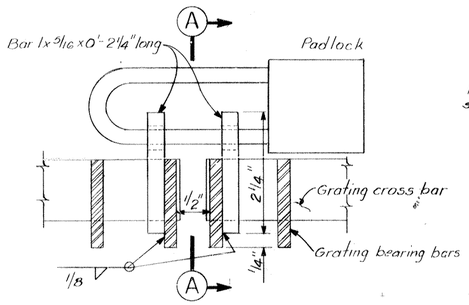
Note
Gate and appurtenances to be galv. after fabrications

GATE DETAIL
SCALE: 3"=1'-0"

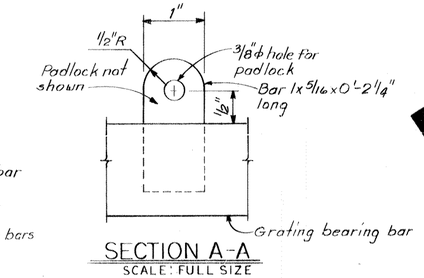


TYPICAL HANDRAIL SPLICE DETAIL
SCALE 3"=1'-0"

Note:
Make splice 6" from edge of handrail post



GRATING LOCK DETAIL
SCALE: FULL SIZE



SECTION A-A
SCALE: FULL SIZE

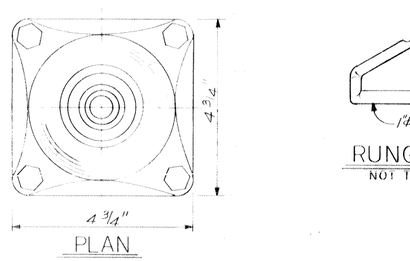
GENERAL NOTES:

1. Elevations are expressed in feet and refer to N.G.V.D.
2. All concrete finishes shall be as required in the specifications.
3. All exposed joints, edges, external corners and vertical expansion joints shall be chamfered 3/4 inches and dummy chamfers and false pints shall be used to provide a neat and uniform appearance.
4. All primary reinforcing shall have a minimum cover of 2 1/2 inches. The cover of secondary reinforcing may be reduced from th above by the size of the bar.
5. Reinforcing bar designation numbers conform to the current numbering System of the concrete Reinforcing Steel Institute.
6. All reinforcing splices shall be lapped according to the following table:

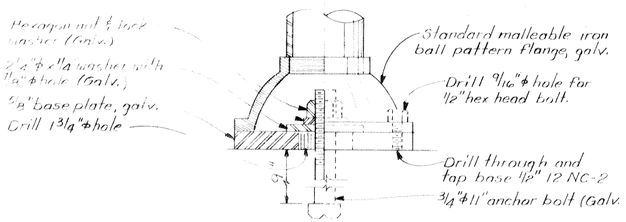
BAR SIZE NO.	MINIMUM LAP LENGTH - INCHES	
	TOP BARS	OTHER BARS
3	12	12
4	14	14
5	18	18
6	24	22
7	33	25
8	43	30

7. All reinforcing embedment lengths shall be as shown in the following table:

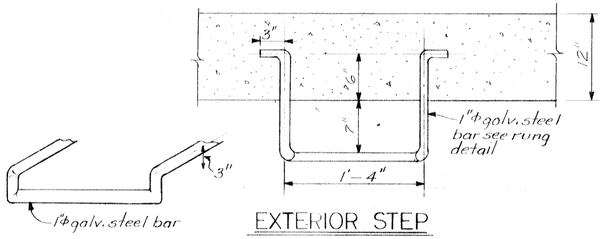
BAR SIZE NO.	MIN. EMBEDMENT LENGTH - INCHES	
	TOP BARS	OTHER BARS
3	6	6
4	7	6
5	11	7
6	15	11
7	21	15
8	27	17



PLAN

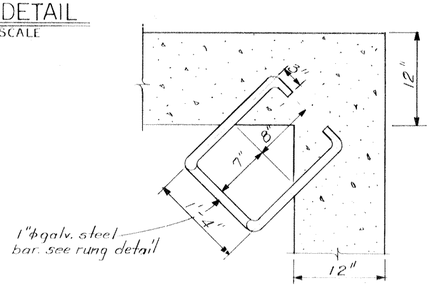


HALF SECTION AND ELEVATION
STANDARD HANDRAIL POST ANCHOR DETAIL
NOT TO SCALE

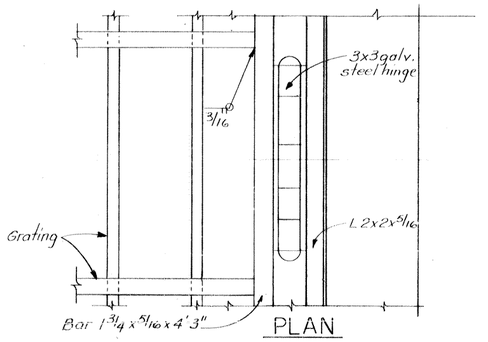


RUNG DETAIL
NOT TO SCALE

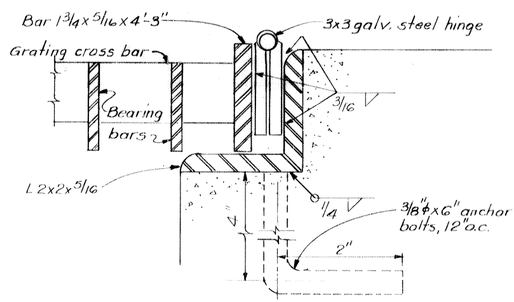
EXTERIOR STEP



INTERIOR STEPS.
TYPICAL STEP DETAILS
SCALE: 1 1/2"=1'-0"



PLAN



ELEVATION
HINGE DETAIL
SCALE: FULL SIZE

NOTE: DRAWING REDUCED TO ONE HALF SCALE.

REVISION	DATE	DESCRIPTION	BY

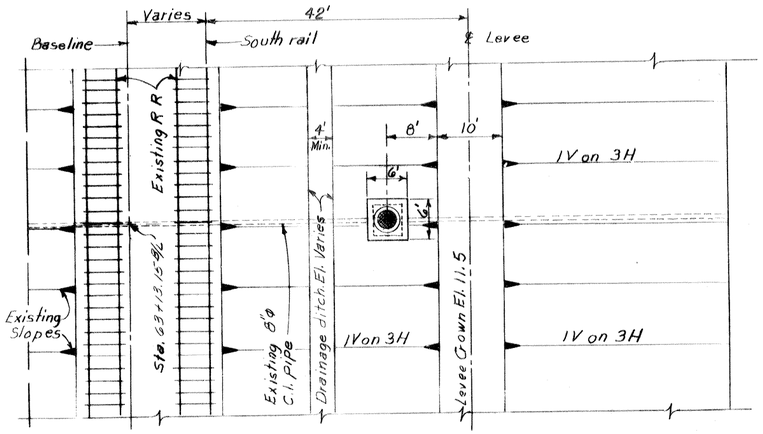
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LA.

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

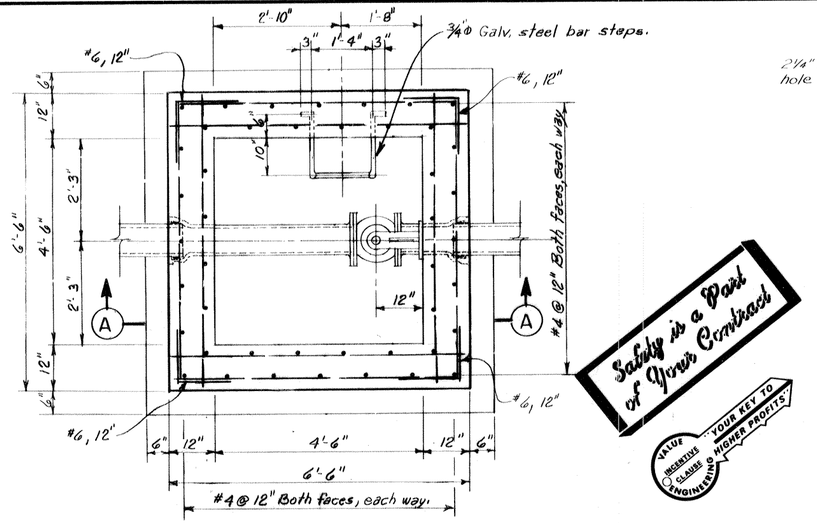
CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA
SLUICE GATE STRUCTURE
DETAILS

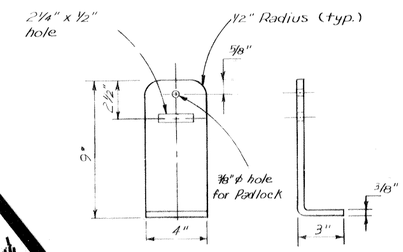
DESIGNED:	DRAWN:	CHECKED:	DATE:	SCALE:	FILE NO.
L.L.W.	J.J.H.	L.L.W.	AUG. 1979	AS SHOWN	H-8-28076

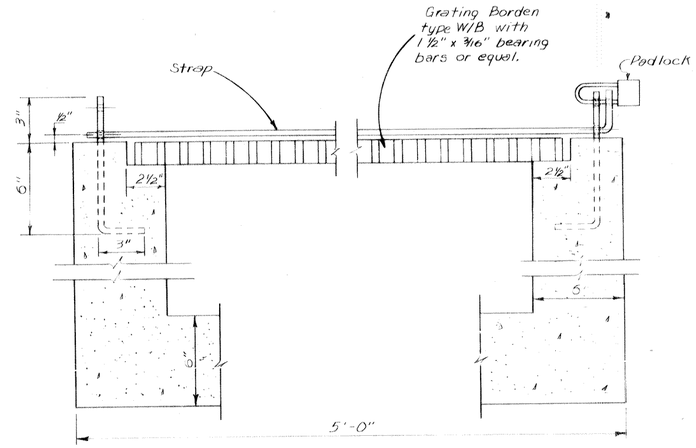
SUBMITTED: Chief, Engineering Div. | SPEC. NO. DACW29-79-B-0254 | DWG. 15 OF 22

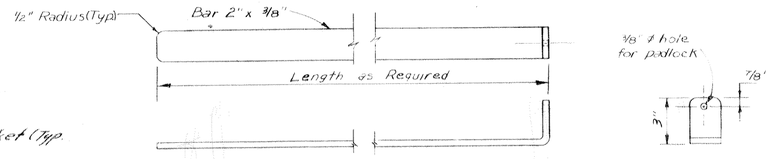


PLAN
SCALE: 1"=10'





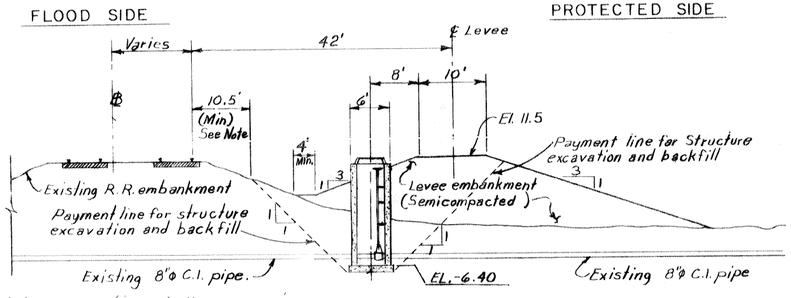




STRAP

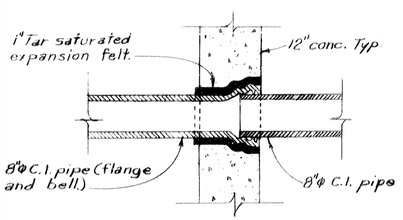
DETAIL — (2 / 13|16)
SCALE 3" = 1'-0"

FOR GENERAL NOTES, SEE DWG 15.

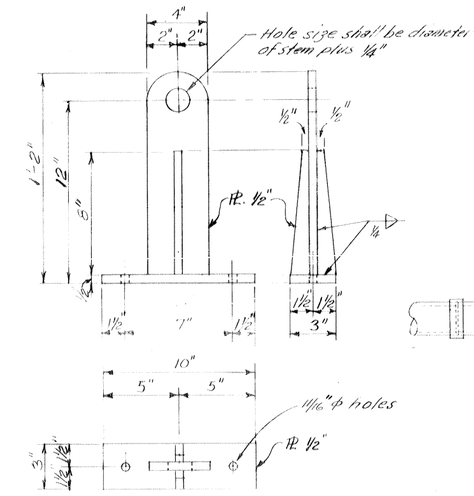


Note: Excavation shall not be closer than 10'-6" from nearest rail

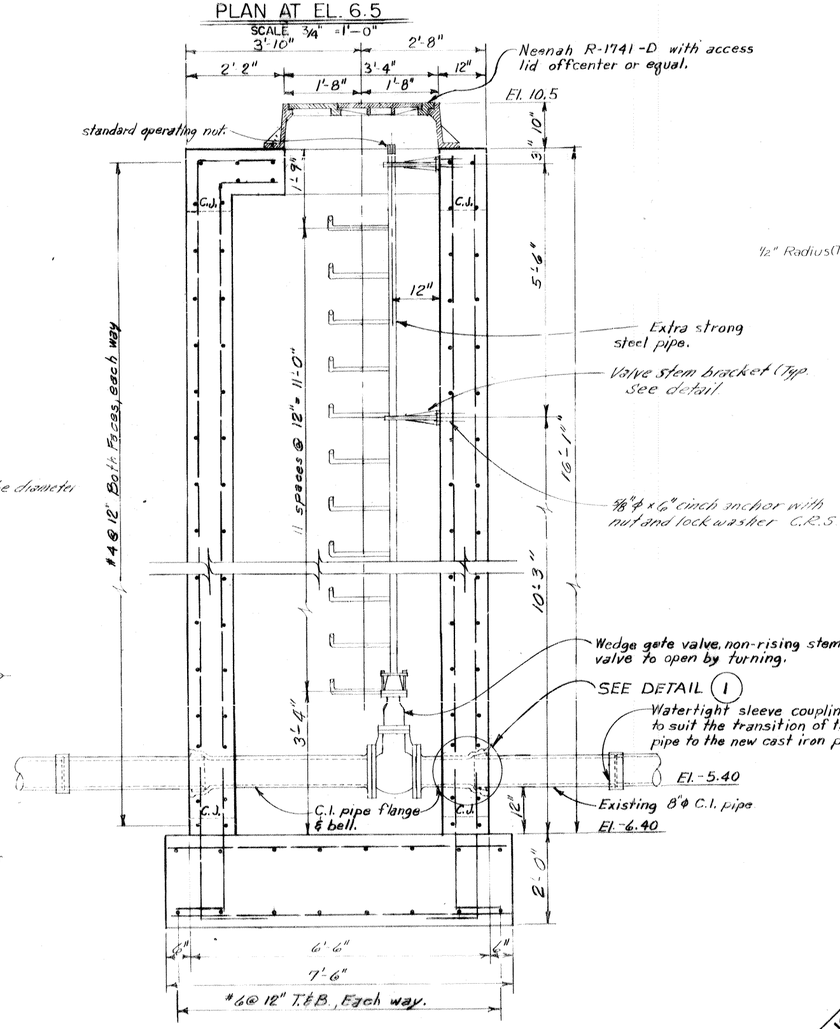
SECTION AT STA. 63+13.15 ℄
SCALE: 1"=10'



DETAIL — (1)
SCALE: 1" = 1'-0"



VALVE STEM BRACKET
SCALE: 3" = 1'-0"



SECTION (A) VALVE MANHOLE
SCALE: 3/8" = 1'-0

NOTE: DRAWING REDUCED TO ONE HALF SCALE

REVISION	DATE	DESCRIPTION	BY

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

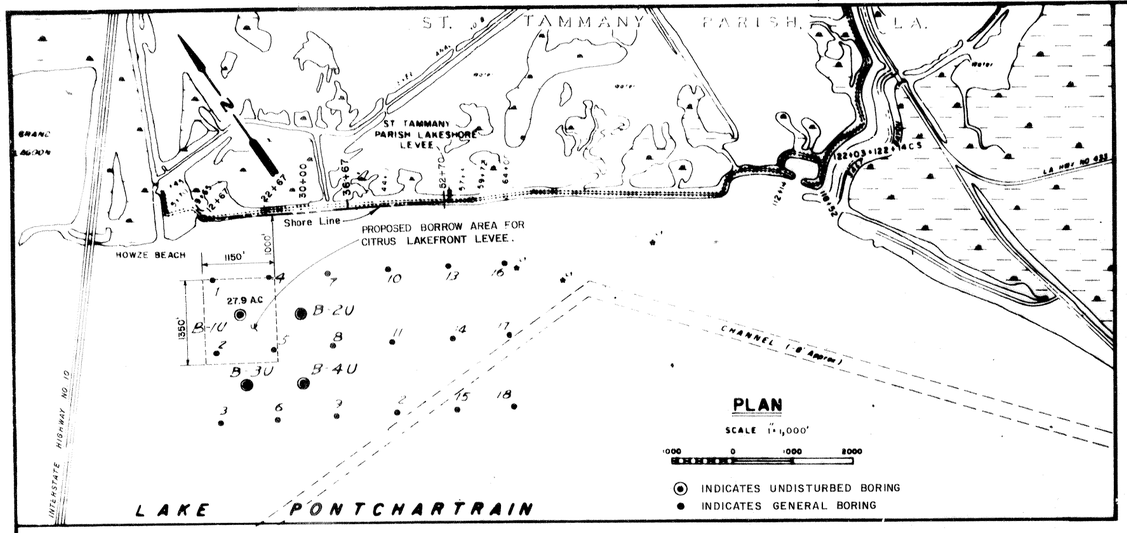
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA

SPECIAL DRAINAGE DETAILS PLANS ELEVATIONS AND SECTIONS

DESIGNED	D' WN.	CHECKED	DATE	SCALE	FILE NO
T.S.T.	D.J.B.	T.S.T.	AUG. 1954	AS SHOWN	H-8-28076

SUBMITTED: _____ ENGINEER

SPEC NO DACW29-79-B-0254 DWG. 16 OF 22



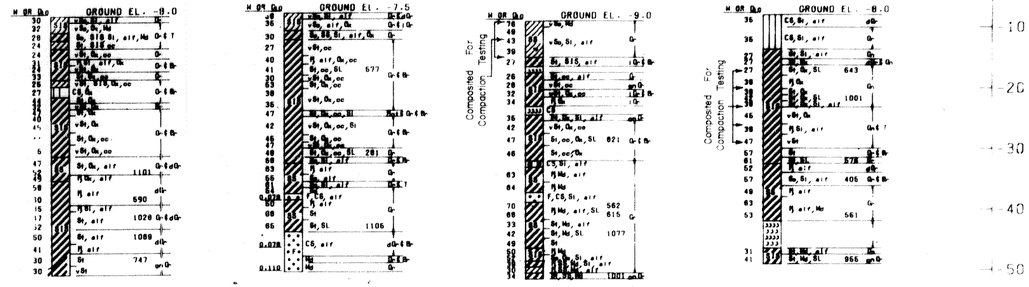
BOR. B-1U
STA. 17+67
1625 FT. FROM B/L
7 MAR 68

BOR. B-2U
STA. 17+67
1625 FT. FROM B/L
1 MAR 68

BOR. B-4U
STA. 37+67
2075 FT. FROM B/L
6 MAR 68

BOR. B-3U
STA. 17+67
2075 FT. FROM B/L
14 APR 68

ELEVATIONS IN FEET N.G.V.D. 0 -10 -20 -30 -40 -50 -60



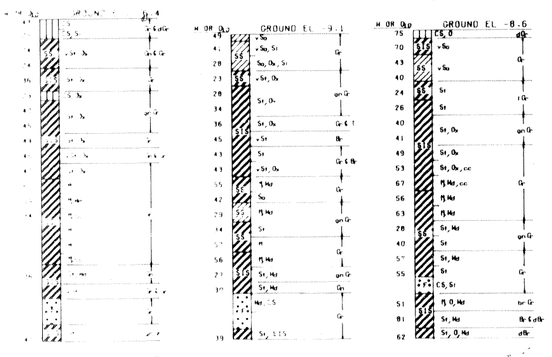
BORING NO. 1 | BORING NO. 2 | BORING NO. 3 | BORING NO. 4 | BORING NO. 5 | BORING NO. 6 | BORING NO. 7 | BORING NO. 8 | BORING NO. 9 | BORING NO. 10

STA. 12+67-2250 FT. RT. OF B/LSTA. | STA. 12+67-3500 FT. RT. OF B/LSTA. | STA. 22+67-1000 FT. RT. OF B/LSTA. | STA. 22+67-2250 FT. RT. OF B/LSTA. | STA. 22+67-3500 FT. RT. OF B/LSTA. | STA. 32+67-1000 FT. RT. OF B/LSTA. | STA. 32+67-2250 FT. RT. OF B/LSTA. | STA. 32+67-3500 FT. RT. OF B/LSTA. | STA. 42+67-1000 FT. RT. OF B/L

WATER SURFACE = 0.4 N.G.V.D. | WATER SURFACE = 0.4 N.G.V.D. | WATER SURFACE = 0.4 N.G.V.D. | WATER SURFACE = 0.4 N.G.V.D. | WATER SURFACE = 0.4 N.G.V.D. | WATER SURFACE = 0.1 N.G.V.D. | WATER SURFACE = 0.5 N.G.V.D. | WATER SURFACE = 0.1 N.G.V.D. | WATER SURFACE = 0.5 N.G.V.D.

11-09-67 | 11-09-67 | 11-14-67 | 11-14-67 | 11-14-67 | 11-15-67 | 11-15-67 | 11-15-67 | 11-16-67

ELEVATIONS IN FEET N.G.V.D. -5 -15 -25 -35 -45 -55 -65



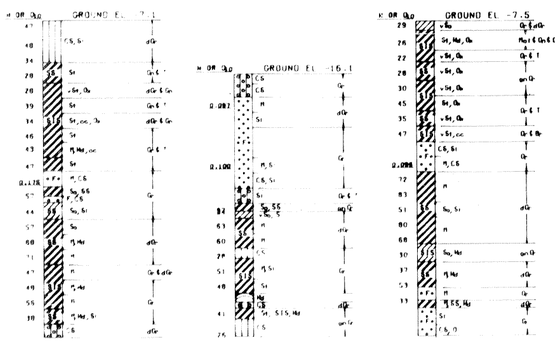
BORING NO. 11 | BORING NO. 12 | BORING NO. 13 | BORING NO. 14 | BORING NO. 15 | BORING NO. 16 | BORING NO. 17 | BORING NO. 18

STA. 42+67-3500 FT. RT. OF B/LSTA. | STA. 52+67-1000 FT. RT. OF B/LSTA. | STA. 52+67-2250 FT. RT. OF B/LSTA. | STA. 52+67-3500 FT. RT. OF B/LSTA. | STA. 62+67-1000 FT. RT. OF B/LSTA. | STA. 62+67-2250 FT. RT. OF B/LSTA. | STA. 62+67-3500 FT. RT. OF B/L

WATER SURFACE = 0.6 N.G.V.D. | WATER SURFACE = 0.7 N.G.V.D. | WATER SURFACE = 0.4 N.G.V.D. | WATER SURFACE = 0.4 N.G.V.D. | WATER SURFACE = 0.7 N.G.V.D. | WATER SURFACE = 0.7 N.G.V.D. | WATER SURFACE = 0.7 N.G.V.D.

11-17-67 | 11-21-67 | 11-20-67 | 11-20-67 | 11-22-67 | 11-21-67 | 11-21-67

ELEVATIONS IN FEET N.G.V.D. -5 -15 -25 -35 -45 -55



NOTES:

WATER CONTENTS SHOWN ARE BASED ON WEIGHT OF OVEN DRY SOILS.

GENERAL TYPE SOIL SAMPLES TAKEN WITH A 1 7/8" I.D. CORE SAMPLER.

FOR GENERAL NOTES, SEE DWG NO.2

MATERIAL IS AVAILABLE IN NORTH SHORE BORROW AREA TO ELEVATION -20.0 FEET. — EXCAVATE BORROW SLOPES TO IV on 3H.

LEGEND

- GENERAL TYPE BORING
- UNDISTURBED BORING

VALUE ENGINEERING CLAUSE — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract

NOTE: DRAWING REDUCED TO ONE HALF SCALE

REVISION	DATE	DESCRIPTION	BY

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA

SOIL BORING LOGS-HOWZE BEACH BORROW

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

SUBMITTED — ENGINEER | SPEC NO DACW29-79-B-0254 | DWG 17 of 22

BOR. 3-C
STA. 25+57
72 FT LANDSIDE B/L
9 MAY 1969

BOR. 4-C
STA. 34+96
62 FT. LANDSIDE B/L
8 MAY 69

BOR. 5-C
STA. 43+57
67 FT. LANDSIDE B/L
8 MAY 69

BOR. 6-C
STA. 52+94
62 FT. LANDSIDE B/L
7 MAY 69

BOR. 7-C
STA. 64+25
45 FT. LANDSIDE B/L
1 MAY 1969

BOR. 7-A
STA. 65+00
15 FT. LANDSIDE B/L
29 OCT 1970

BOR. 8-C
STA. 73+21
45 FT LANDSIDE B/L
1 MAY 1969

BOR. 1-CT
STA. 83+60
30 FT. LANDSIDE B/L
16 DEC 69

BOR. 1-L
STA. 84+60
140 FT. LAKESIDE OF B/L
23 SEPT 71

BOR. 9-C
STA. 93+87
53 FT. LANDSIDE B/L
2 MAY 1969

BOR. 10-C
STA. 103+84
53 FT. LANDSIDE B/L
2 MAY 1969

BOR. 2-CT
STA. 115+45
30 FT LANDSIDE B/L
16 DEC. 1969

BOR. 2-L
STA. 115+65
140 FT. LAKESIDE OF B/L
22 SEPT 71

BOR. 8-A
STA. 115+65
91 FT. LANDSIDE B/L
3 NOV 1970

BOR. 11-C
STA. 117+98
52 FT. LANDSIDE B/L
5 MAY 69

BOR. 12-C
STA. 127+98
55 FT LANDSIDE B/L
6 MAY 69

BOR. 13-C
STA. 137+82
55 FT. LANDSIDE B/L
6 MAY 69

BOR. 3-CT
STA. 138+00
30 FT. LANDSIDE B/L
16 DEC 1969

BOR. 3-L
STA. 138+00
140 FT. LAKESIDE B/L
12 DEC 69

BOR. 14-C
STA. 150+70
53 FT LANDSIDE OF B/L
12 MAY 69

BOR. 15-C
STA. 170+84
53 FT LANDSIDE OF B/L
12 MAY 69

BOR. 16-C
STA. 183+26
55 FT LANDSIDE OF B/L
14 MAY 69

BOR. 17-C
STA. 192+97
53 FT LANDSIDE OF B/L
14 MAY 69

BOR. 18-C
STA. 203+00
54 FT LANDSIDE OF B/L
15 MAY 69

ELEVATIONS IN FEET — N.G.V.D.

Safety is a Part of Your Contract

VALUE ENGINEERING INCENTIVE CLAUSE — YOUR KEY TO HIGHER PROFITS

GENERAL TYPE BORINGS

NOTE:
1. For general notes, see Dwg. No. 2
2. Water contents are based on weight of oven dry soils
3. General type soil samples taken with a 1 7/8" I.D. core sampler

NOTE: DRAWING REDUCED TO ONE HALF SCALE

REVISION	DATE	DESCRIPTION	BY

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

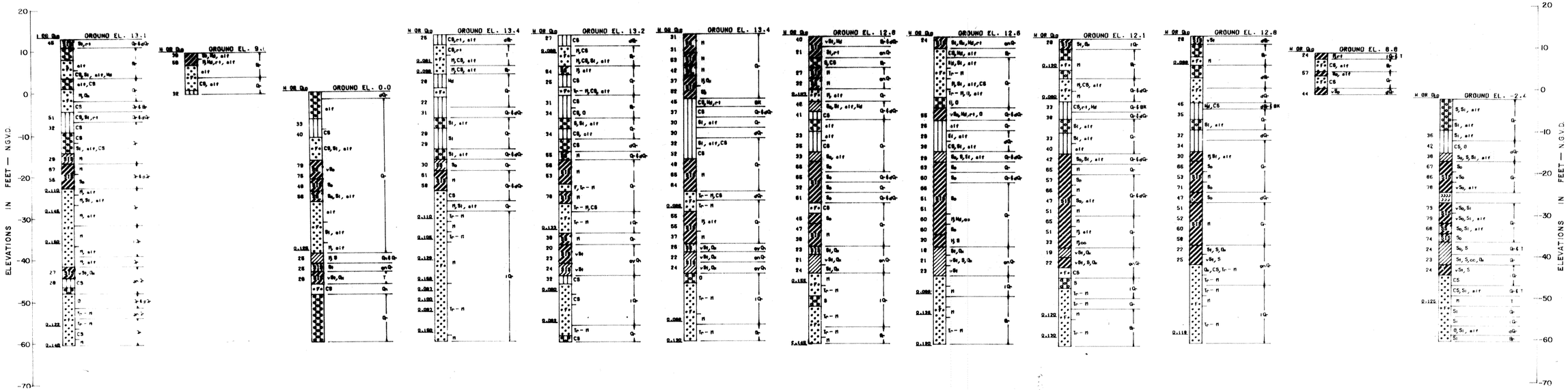
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

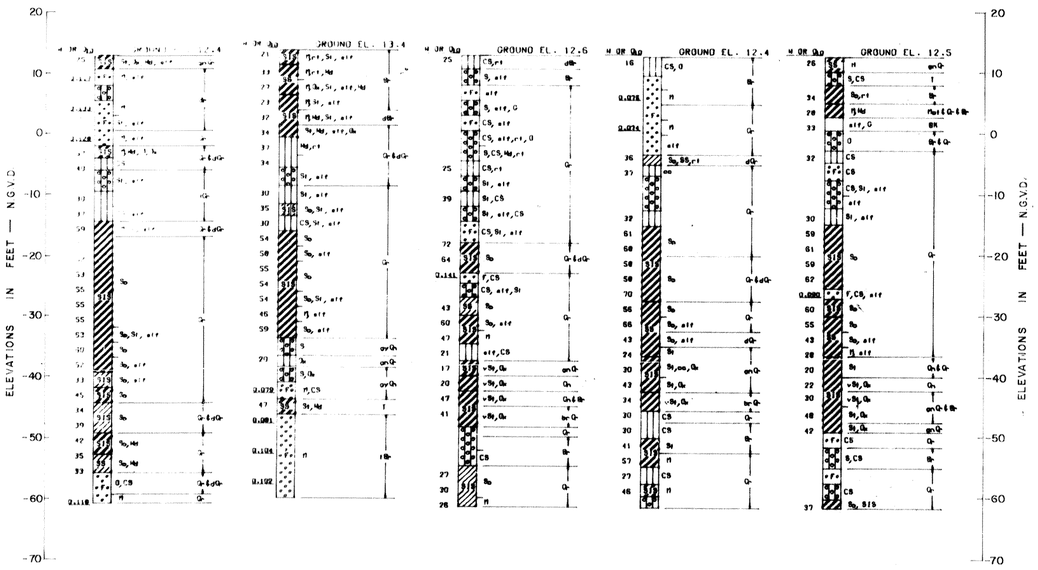
CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA

SOIL BORINGS

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

SUBMITTED
SPEC. NO. DACW29-79-B-0254
DWG. 18 OF 22





GENERAL TYPE BORINGS

NOTE

1. For general notes, see dwg. 2.
2. Water contents shown are based on weight of oven dry soils.
3. General type soil samples taken with a 1 7/8" I.D. core sample.

VALUE INCENTIVE CLAUSE — YOUR KEY TO ENGINEERING & HIGHER PROFITS

Safety is a Part of Your Contract

NOTE: DRAWING REDUCED TO ONE HALF SCALE

REVISION	DATE	DESCRIPTION	BY

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA

SOIL BORINGS

DESIGNED:	DRAWN:	CHECKED:	DATE:	SCALE:	FILE NO.
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

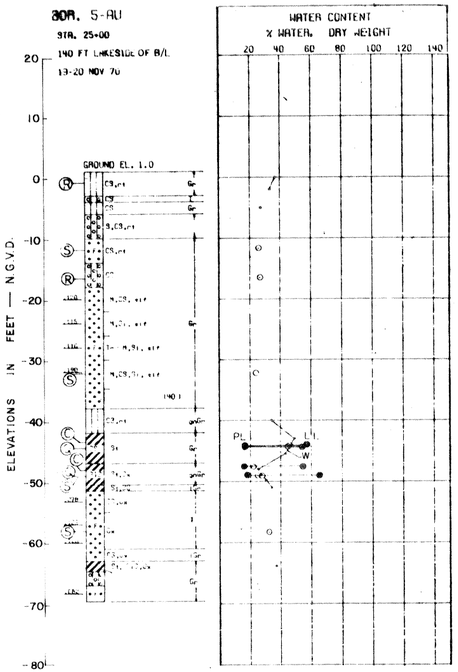
DESCRIPTION: | ENGR. NO. DACW29-79-B-0254 | SHEET 19 OF 22

BOR. 5-AU

STA. 25+00

140 FT. LAKESIDE OF B/L

13-20 NOV 70

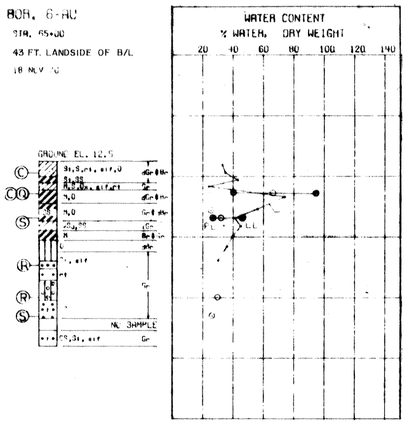


BOR. 6-AU

STA. 65+00

43 FT. LANDSIDE OF B/L

18 NOV 70

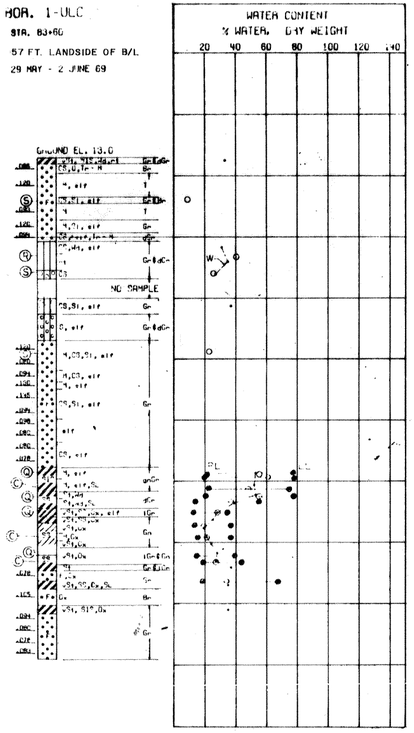


BOR. 1-ULC

STA. 83+60

57 FT. LANDSIDE OF B/L

29 MAY - 2 JUNE 69

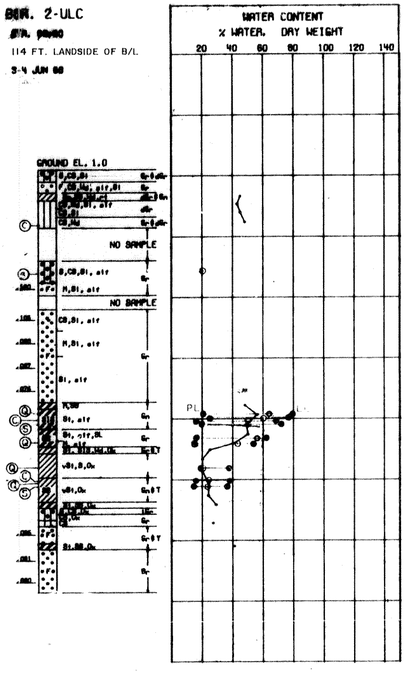


BOR. 2-ULC

STA. 99+80

114 FT. LANDSIDE OF B/L

3-4 JUN 69

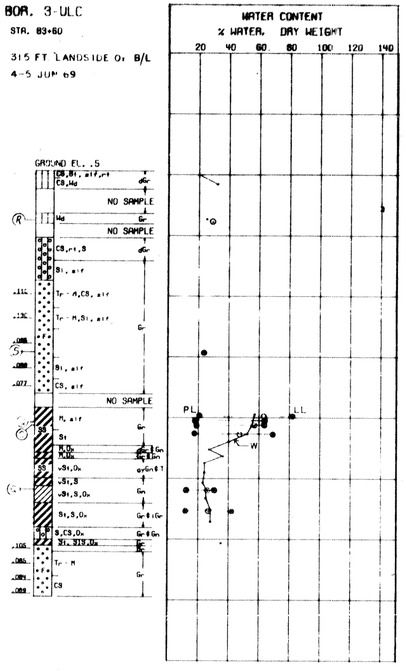


BOR. 3-ULC

STA. 83+60

315 FT. LANDSIDE OF B/L

4-5 JUN 69

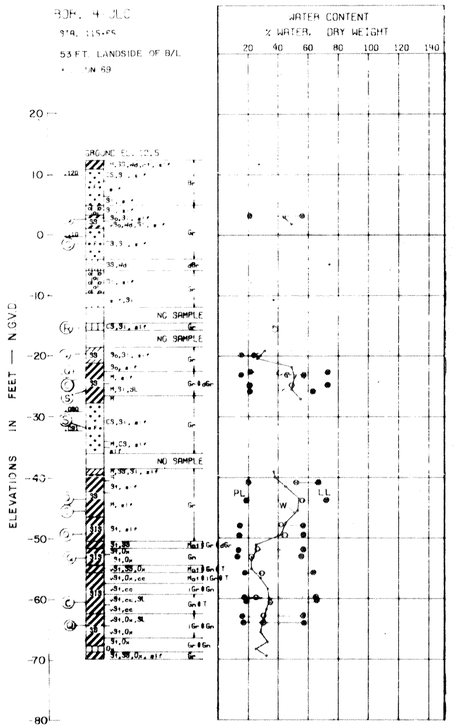


BOR. 4-ULC

STA. 115+65

53 FT. LANDSIDE OF B/L

JUN 69

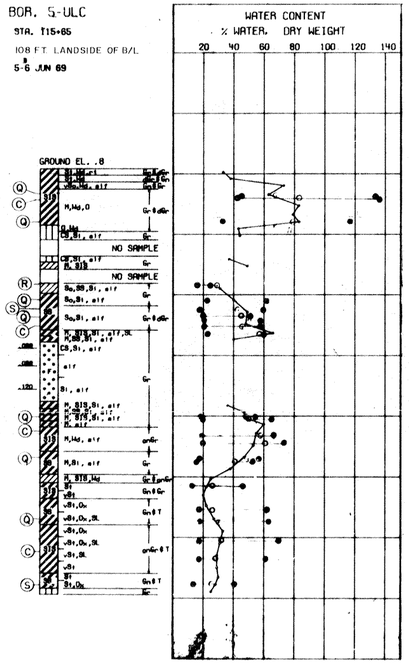


BOR. 5-ULC

STA. 115+65

108 FT. LANDSIDE OF B/L

5-6 JUN 69

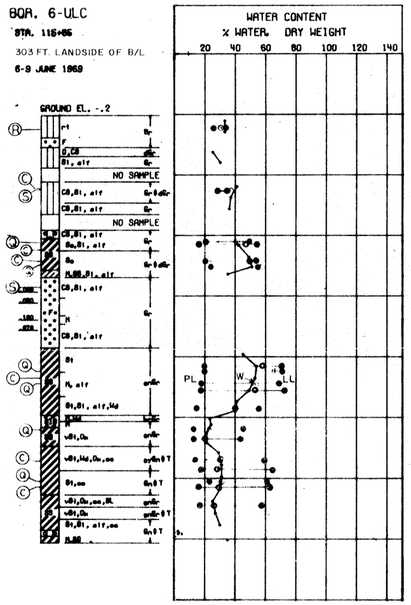


BOR. 6-ULC

STA. 115+65

303 FT. LANDSIDE OF B/L

6-9 JUNE 1969

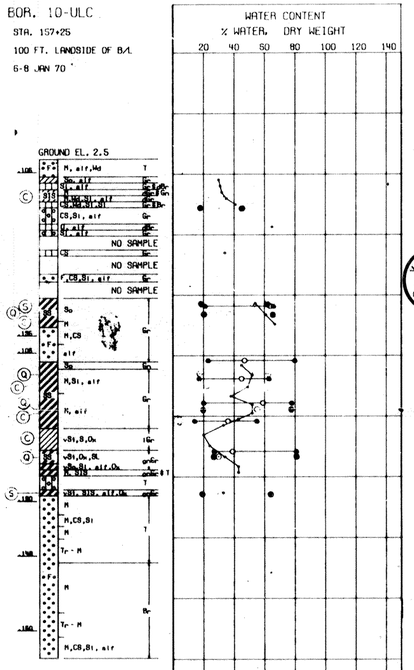


BOR. 10-ULC

STA. 157+25

100 FT. LANDSIDE OF B/L

6-8 JAN 70



NOTE

1. For general notes, see dwg. 2.
2. Water contents shown are based on weight of oven dry soils.
3. Undisturbed samples taken with a 5" diameter steel tube piston type sampler.

VALUE ENGINEERING CLAUSE — YOUR KEY TO HIGHER PROFITS

Safety is a Part of Your Contract

NOTE: DRAWING REDUCED TO ONE HALF SCALE

REVISION	DATE	DESCRIPTION	BY

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN

CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA

SOIL BORINGS

UNDISTURBED TYPE BORINGS

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO
D.D.S.	C.C.P.	R.P.L.	AUG 1979	AS SHOWN	H-8-28076

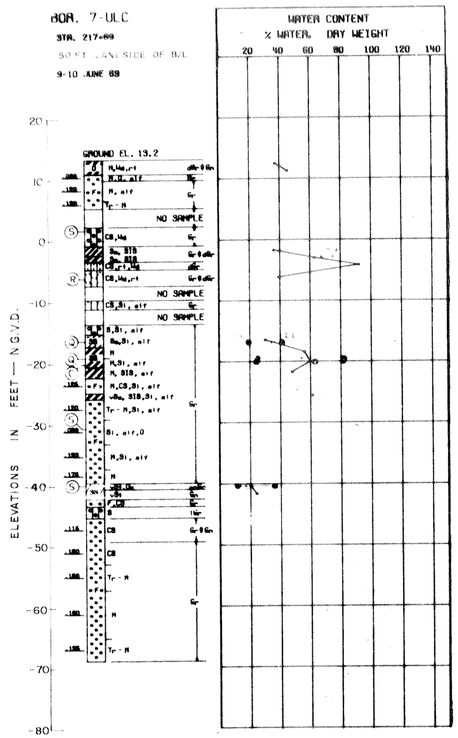
SUBMITTED _____ ENGINEER

SPEC NO DACW29-79-B-0254

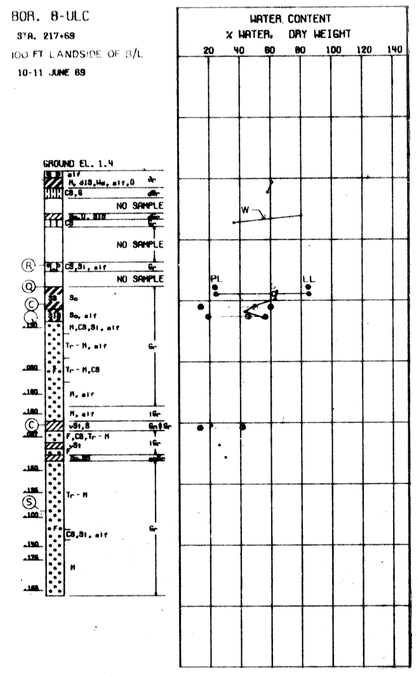
DWG 20 OF 22

UNDISTURBED TYPE BORINGS

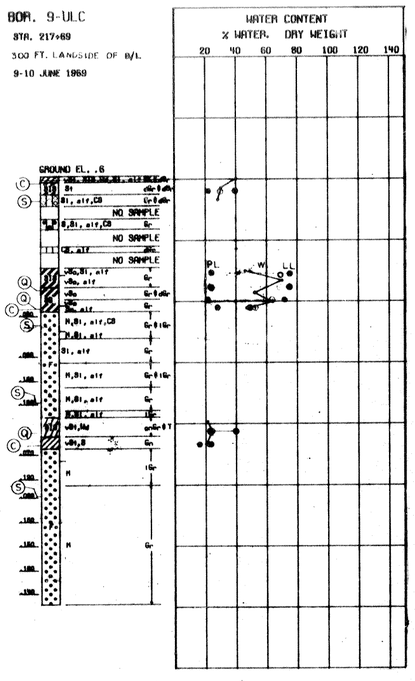
BOR. 7-ULC
STA. 217+69
50 FT. LANDSIDE OF B/L
9-10 JUNE 69



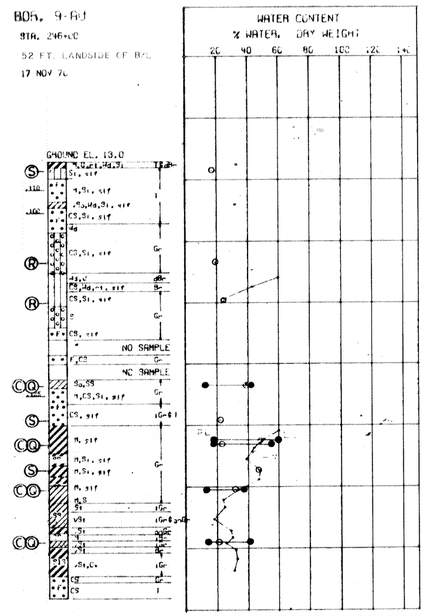
BOR. 8-ULC
STA. 217+69
100 FT. LANDSIDE OF B/L
10-11 JUNE 69



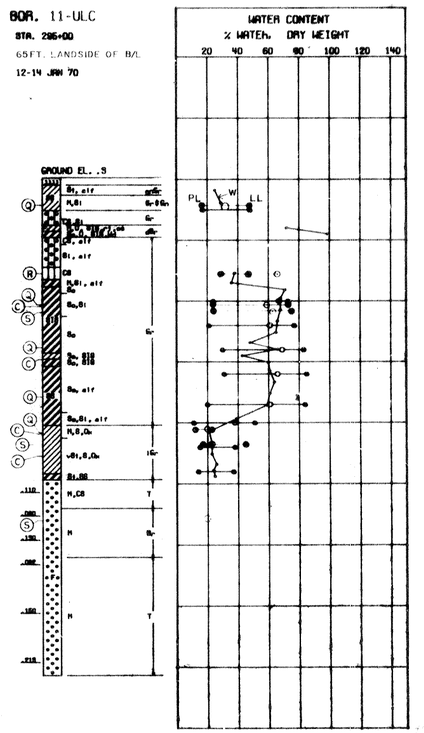
BOR. 9-ULC
STA. 217+69
300 FT. LANDSIDE OF B/L
9-10 JUNE 1969



BOR. 9-RU
STA. 246+00
52 FT. LANDSIDE OF B/L
17 NOV 70

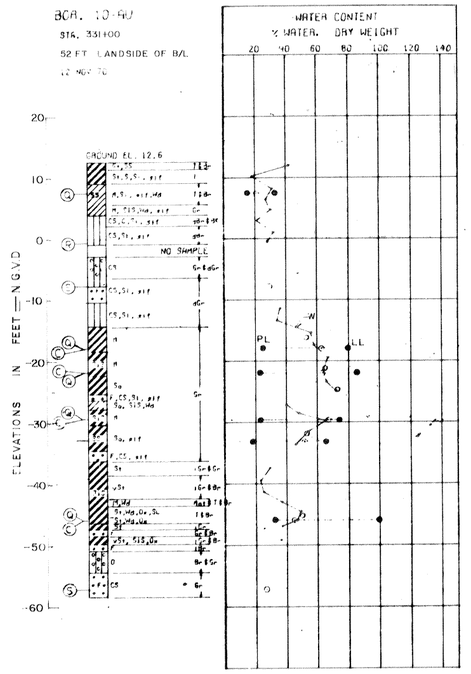


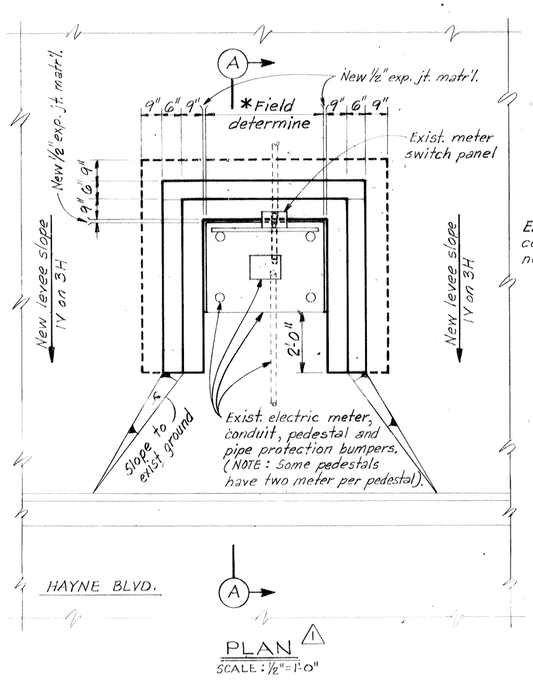
BOR. 11-ULC
STA. 295+00
65 FT. LANDSIDE OF B/L
12-14 JAN 70



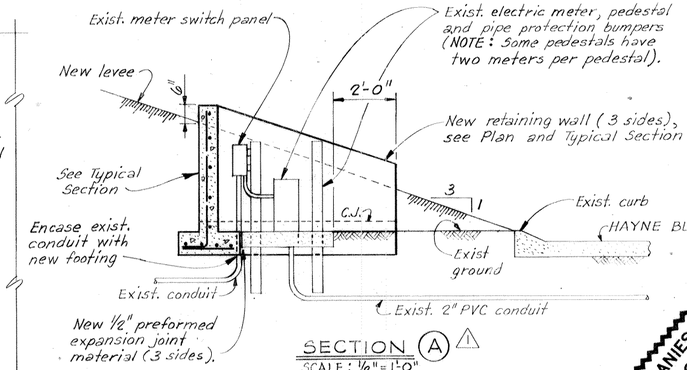
NOTE :
1. The number and locations of meter pedestals requiring retaining walls shall be as determined by the Contracting Officer.
2. The Contractor shall remove meter pedestals at locations where electric meters are disconnected, the number and locations shall be as determined by the Contracting Officer. All materials removed shall become the property of the Contractor and shall be removed from the job site.
3. The Contractor shall backfill to provide a continuous levee slope. Compaction of levee fill shall be as per contract specifications. ⚠

BOR. 10-RU
STA. 331+00
52 FT. LANDSIDE OF B/L
12 NOV 70

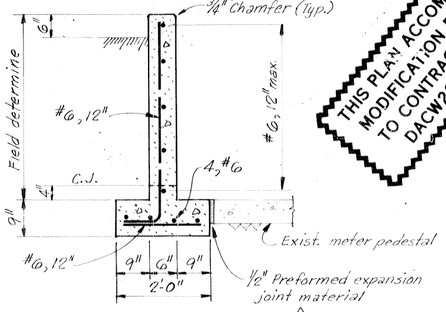




PLAN ⚠
SCALE : ½"=1'-0"



SECTION (A) ⚠
SCALE : ½"=1'-0"



TYPICAL SECTION ⚠
SCALE : ¾"=1'-0"

TYPICAL METER PEDESTAL RETAINING WALLS ⚠

THIS PLAN ACCOMPANIES MODIFICATION P00002 TO CONTRACT NUMBER DACW29-80-C-0035

NOTE
1. For general notes, see dwg. 2.
2. Water contents shown are based on weight of oven dry soils.
3. Undisturbed samples taken with a 5" diameter steel tube piston type sampler.

VALUE INCENTIVE CLAUSE — YOUR KEY TO HIGHER PROFITS — ENGINEERING

Safety is a Part of Your Contract

NOTE: DRAWING REDUCED TO ONE HALF SCALE

REVISION	DATE	DESCRIPTION	BY
⚠1	11-5-80	Added retaining wall details & changed dwg. title ; Mod. #2	J.A.R.

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

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA
SOIL BORINGS
AND RETAINING WALLS ⚠

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
D.D.S.	C.C.P.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

SUBMITTED Ronald P. Lee
SPEC. NO. DACW29-79-B-0254
SHEET 21 OF 22

UNIFIED SOIL CLASSIFICATION

MAJOR DIVISION		TYPE	LETTER SYMBOL	SYMBOL	TYPICAL NAMES
COARSE-GRAINED SOILS More than half of material is larger than No. 200 sieve size	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size.	CLEAN GRAVEL (Little or No Fines)	GW		GRAVEL, Well Graded, gravel-sand mixtures, little or no fines
			GP		GRAVEL, Poorly Graded, gravel-sand mixtures, little or no fines
		GRAVEL WITH FINES (Appreciable Amount of Fines)	GM		SILTY GRAVEL, gravel-sand-silt mixtures
			GC		CLAYEY GRAVEL, gravel-sand-clay mixtures
	SANDS More than half of coarse fraction is smaller than No. 4 sieve size.	CLEAN SAND (Little or No Fines)	SW		SAND, Well-Graded, gravelly sands
			SP		SAND, Poorly-Graded, gravelly sands
		SANDS WITH FINES (Appreciable Amount of Fines)	SM		SILTY SAND, sand-silt mixtures
			SC		CLAYEY SAND, sand-clay mixtures
FINE-GRAINED SOILS More than half the material is smaller than No. 200 sieve size		SILTS AND CLAYS (Liquid Limit <50)	ML		SILT & very fine sand, silty or clayey fine sand or clayey silt with slight plasticity
			CL		LEAN CLAY; Sandy Clay; Silty Clay; of low to medium plasticity
			OL		ORGANIC SILTS and organic silty clays of low plasticity
		SILTS AND CLAYS (Liquid Limit >50)	MH		SILT, fine sandy or silty soil with high plasticity
			CH		FAT CLAY, inorganic clay of high plasticity
			OH		ORGANIC CLAYS of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			Pt		PEAT, and other highly organic soil
WOOD			Wd		WOOD
SHELLS			Sl		SHELLS
NO SAMPLE					

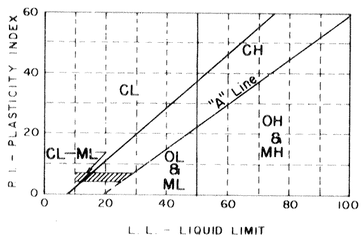
NOTE: Soils possessing characteristics of two groups are designated by combinations of group symbols

DESCRIPTIVE SYMBOLS

COLOR	SYMBOL
TAN	T
YELLOW	Y
RED	R
BLACK	BK
GRAY	Gr
LIGHT GRAY	lGr
DARK GRAY	dGr
BROWN	Br
LIGHT BROWN	lBr
DARK BROWN	dBr
BROWNISH-GRAY	br Gr
GRAYISH-BROWN	gy Br
GREENISH-GRAY	gn Gr
GRAYISH-GREEN	gy Gn
GREEN	Gn
BLUE	Bl
BLUE-GREEN	Bl Gn
WHITE	Wh
MOTTLED	Mot

CONSISTENCY FOR COHESIVE SOILS

CONSISTENCY	COHESION IN LBS./SQ. FT. FROM UNCONFINED COMPRESSION TEST	SYMBOL
VERY SOFT	< 250	vSo
SOFT	250 - 500	So
MEDIUM	500 - 1000	M
STIFF	1000 - 2000	St
VERY STIFF	2000 - 4000	vSt
HARD	> 4000	H



PLASTICITY CHART
For classification of fine-grained soils

MODIFICATION	SYMBOL
Traces	Tr-
Fine	F
Medium	M
Coarse	C
Concretions	cc
Rootlets	rt
Lignite fragments	lg
Shale fragments	sh
Sandstone fragments	sds
Shell fragments	slf
Organic matter	O
Clay strata or lenses	CS
Silt strata or lenses	SIS
Sand strata or lenses	SS
Sandy	S
Gravelly	G
Boulders	B
Slickensides	SL
Wood	Wd
Oxidized	Ox

NOTES:

FIGURES TO LEFT OF BORING UNDER COLUMN "W OR D_{10}"

Are natural water contents in percent dry weight

When underlined denotes D_{10} size in mm*

FIGURES TO LEFT OF BORING UNDER COLUMNS "LL" AND "PL"

Are liquid and plastic limits, respectively

SYMBOLS TO LEFT OF BORING

▽ Ground-water surface and date observed

Ⓒ Denotes location of consolidation test**

Ⓢ Denotes location of consolidated-drained direct shear test**

Ⓡ Denotes location of consolidated-undrained triaxial compression test**

Ⓠ Denotes location of unconsolidated-undrained triaxial compression test**

Ⓣ Denotes location of sample subjected to consolidation test and each of the above three types of shear tests**

FW Denotes free water encountered in boring or sample

FIGURES TO RIGHT OF BORING

Are values of cohesion in lbs./sq. ft. from unconfined compression tests

In parenthesis are driving resistances in blows per foot determined with a standard split spoon sampler ($1\frac{3}{8}$" I.D., 2" O.D.) and a 140 lb. driving hammer with a 30" drop

Where underlined with a solid line denotes laboratory permeability in centimeters per second of undisturbed sample

Where underlined with a dashed line denotes laboratory permeability in centimeters per second of sample remoulded to the estimated natural void ratio

*The D_{10} size of a soil is the grain diameter in millimeters of which 10% of the soil is finer, and 90% coarser than D_{10}

**Results of these tests are available for inspection in the U.S. Army Engineer District Office, if these symbols appear beside the boring logs on the drawings

TYPICAL NOTES:

1. While the borings are representative of subsurface conditions at their respective locations and for their respective vertical reaches, local variations characteristic of the subsurface materials of the region are anticipated and, if encountered, such variations will not be considered as differing materially within the purview of clause 4 of the contract.

2. Ground-water elevations shown on the boring logs represents ground-water surfaces encountered on the dates shown. Absence of water surface data on certain borings implies that no ground-water data is available, but does not necessarily mean that ground water will not be encountered at the locations or within the vertical reaches of these borings.

3. Consistency of cohesive soils shown on the boring logs is based on driller's log and visual examination and is approximate, except within those vertical reaches of the borings where shear strengths from unconfined compression tests are shown.

4. General type borings are made with a 1-7/8" I.D. core barrel sampler in cohesive material and with a 1-3/8" I.D. 2" O.D. splitspoon sampler in granular material.

5. Undisturbed borings are made with a 5" diameter steel tube piston type sample in cohesive material and either a 5" diameter steel tube piston type sampler or 1-3/8" I.D. 2" O.D. splitspoon sampler in granular material.

REVISION	DATE	DESCRIPTION	BY

U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
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LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
CITRUS LAKEFRONT LEVEE
IHNC TO PARIS ROAD
ORLEANS PARISH, LOUISIANA

SOIL BORING LEGEND

DESIGNED	DRAWN	CHECKED	DATE	SCALE	FILE NO.
D.D.S.	E.M.M.	R.P.L.	AUG. 1979	AS SHOWN	H-8-28076

SUBMITTED ... ENGINEER | SPEC NO. DACW29-79-B-0254 | DWG 22 OF 22