ADC

SUBSOIL INVESTIGATION

335 ACRES

IN

J.S. DUFFOSAT CLAIM

8TH WARD

ST. TAMMANY PARISH, LOUISIANA

April 13, 1973

ADC

J.S. DUFFOSAT CLAIN
ST. TAMMANY PARISH, LOUISIANA

### TABLE OF

### TABLE OF CONTENTS

SOILS REPORT	
PLOT PLANEnclosure 1	
BORING LOGSEnclosures 2-	

April 13, 1923

ADC

J.S. DUFFOSAT CLAIM ST. TAMMANY PARISH, LOUISIANA

The soil from natural ground elevation to -5 feet at boring ADC-1 is predominately a soft gray fat clay with layers of sand and shells and from ground elevation to -7 feet to -10 feet at borings ADC-2 to ADC-6 is predominately a gray and white sand with traces of clay. The soil from -5 feet at boring ADC-1 to -10 feet is a very soft and highly. compressible gray fat clay and peat and from -10 feet to -15 feet is a medium stiff gray and tan sandy clay. From an average depth of -8 feet to -15 feet at boring ADC-2, -20 feet at boring ADC-3, -15 feet at boring ADC-4, -15 feet at boring ADC-5, and -15 feet at boring ADC-6, is a highly compressible black peat and black and brown peat and clay. Below this stratum begins the Pleistocene formation. This stratum down to -25 feet is predominately a medium stiff gray and tan clay. Below this stratum to the depth of the borings is a medium to dense gray and yellow sand.

### FOUNDATION ANALYSIS

Surface foundations exerting a net pressure of 900 pounds per square foot in the vicinity of borings ADC-2 through ADC-5 and 350 pounds per square foot in the vicinity of boring ADC-1 will develop a factor of safety of 3 against a shear failure in the soil with settlement less than 0.5 inches at borings ADC-2 through ADC-6 and less than 1.5 inches at boring ADC-1.

Because of the presence of highly compressible peat between -7 feet and -20 feet, it is recommended that only pile foundations be considered for relatively heavy structures. Therefore, piles driven to depths as tabulated below will develop a factor of safety of 2 against a shear failure in the soil with negligible long term settlement.

PILING	TIP ELEVATION (Ground Elev.=0)	DESIGN LOAD
≸9 Pole	-30 feet (or refusal)	. 4 tons
#5 Pole	-30 feet (or refusal)	6 tons
Class B	-30 feet (or refusal)	: 12 tons

Page 2

ADC

J.S. DUFFOSAT CLAIM
ST. TAMMANY PARISH, LOUISIANA

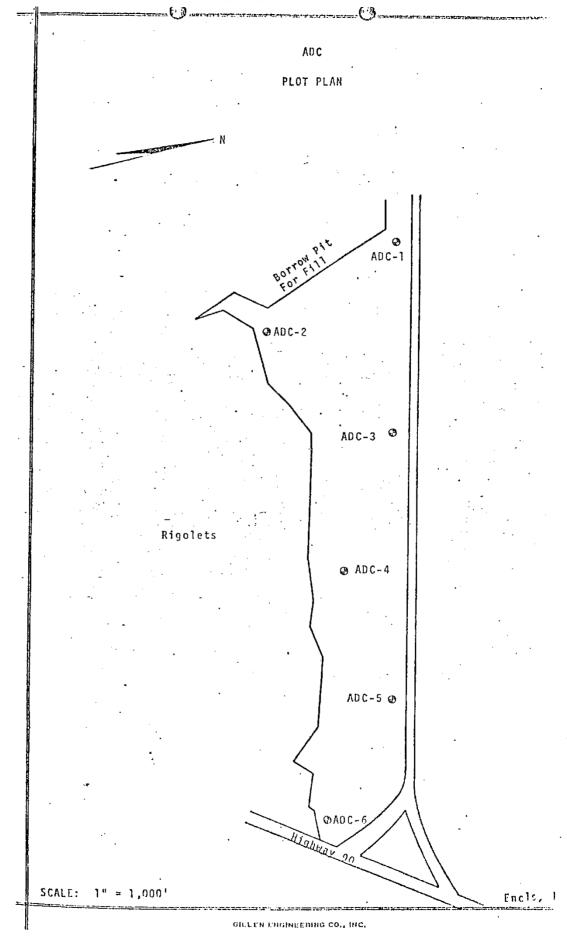
All timber piles should be treated with an effective preservative so as to prevent decay of the pile on the zone-above the water table.

Respectfully submitted,

GILLEN ENGINEERING CO., INC.

GERARD J. GILLEN, JR.
REG. NO. 7043
REGISTERED
PROFESSIONAL ENGINEER
IN
ENGINEER

Gerard J Gillen, Jr., Presiden



	Pric	סחמם.	ј. т_\$I	S. U	(RIFIVA) VOLI	ΛΤ ( <u>L_P</u> Δ[	CLAIN NISH.	LA.		80	 NIRC	G NO. <u>ADC-1</u> DATE 3/.
	ברכת. ם,	אואד טוועם	CIAL	z S	ATTERE LIME	ICRG Cet	Z	,			ž	
	DEPTH GROUND EL	COHESIGN	FRICTION	CONSOLIDATION	רוםתום	PLASTIC	CNGONFINED COMPRESSION TEST - PSF	WET DENSITY PCF	MOISTURE CONTENT	פסאואפ רספ	* STANDARD PENETRATION	Generalized Strata
							452	107	34			SOFT GRAY CLAY WITH LAYED OF SAND & SHELLS
-	- 5 -						]     		46 142			SOFT GRAY CLAY & BLACK PEAT
	10 -		-	•					89			SOFT GRAY CLAY W/LAYERS T BLACK PEAT
		• • .		•			1544	132	22			HEDTUM GRAY & TAN SANDY CLAY
	- 15 -				-				24	9.2		GRAY & TAN CLAYEY SAND
-	- 20 -	-		-			-1					
	· · ·		,	•					25			
	- 25 - 	٠.		•		- <sup>-</sup>			23			
	- 30 -					·  -	: -		30			MEDIUM GRAY & YELLOW SAVO
	- 35 -	- -							26		23	MEDIUM GRAF A TELEUM SAID
-										• • •		
	- 40 -			,			<u> </u>   .		21	400	31	
-		-	•									
						:						
					-		1		]		-	
							 				·	-
	14 AV Y	\[ \]		_A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		DIE + O. H.	*****	7 '	MIM(I)	A IITIW	PROBLEM HERWITS WITH A TILL DWITH  TENDER OF HEAM OLD THE LIBERT OF THE

	PRO	าายตา	J. r <u>ST</u>	S. (	HINT OF	7A <sup>2</sup>	CLAIN RISH.	<u>ــــــ</u>	<u>.</u>	==== ∃t	ORINU ORINU	No. ADC-2 DATE 1/1
	ND ELEV. D'	TRIAX DUIG N D		CONSOLIDATION	ATTERE LIMI		UNDONFINED COMPRESSION TEST - PSF	WET DENSITY PCF	MOISTURE	פכאיועפ רספ	STANDARD	Generalized Strata
	GROUND	COHESION	FRICTION	נפעוו	רומתוס	PLASTIC	DOND FROD TRS31	WET	21	BOB	# 1734	BROWN CLAYEY SAND WITH SHELLS
	- 5-								32 42			GRAY CLAY WITH LAYERS OF
-	- 10-	-	-				493	85	134			SAND SOFT GRAY CLAY & BROWN PEAT
	- 15- - 20-				  -  -  -				29			GRAY SANDY CLAY WITH LAYERS OF PEAT STIFF GRAY & TAN CLAY
	- 25						2353	122		/		VERY DENSE GRAY & WHITE SAND
-	- 30			-					20		72	
=	- 35		-									
	- 40								2	6	76	
							-			-		
					<u> </u> 				64 LF	441+11	15 WILLS	DUNNING BEILD FOR FORT OFTER TRANDE IN ORDER FOR FORT OFTER TANDE IN ORDER FOR FORT OFTER F.:
==:	F FIST	vy IIII.	2 FIRE TREE		r: tiller	11111 1 3 1	11 (11 7 P4)	GILLE	N ENG	INFERI	N'- CO.,	-

	PRI	ושטעני	J.S r_SJ_	5. 0 I <i>F</i>		7, 10, 10,9	LAIN RISH.	بده ا		U	1	5 NO. ADC-3 DATE 4/7/
	GROUND ELEV. O'	TRIAX DUIG TRIAX T	FRICTION NOT	CONSOLIDATION	ATTERI LIMI O	PLASTIC	UNCONFINEO COMPRESSION TEST - PSF	WET DENSITY PCF	MAISTURE CONTENT	BORING LOG	STANDARD PENETRATION	GENERALIZED STRATA
	- 5 -						444		22 23 29 172		*	GRAY AND WHITE SAND WITH TRACES OF CLAY  BROWN CLAY AND BLACK PEAT WITH TRACES OF SAND
	- 20						1714	1 10;	2 4:	1		BROWN CLAY AND BLACK PEAT WITH LAYERS OF CLAY  MEDIUM GRAY & TAN CLAY
-	30								2		96	SAND
•	- 40						-			3	100	
<u> </u>			Cir E visit									MINITARIE DE BLOWIS PEU FUUT DETEN- LA GERMINARD BRIJE BIRIDIE BANDER LU UNIVERS HAMMER, WITH A JU!' DRON

GILLEN ENGINEERING CO., INC.

:	, PRC	pueron	J.	S. (	N T O		CLAIN RISH,	LΛ.			— <b>СЭ</b> ІМІЯС	10. ADC-4 DATE 4/17
	DEPTH GROUND ELEV. C'	COHESION PSF	אר ביום אר אר מיום אר	CONSCLIDATION	ATTURI LIMI O D D D D	PLASTIC UT	CONCONTINED COMPRESSION TEST - PSF	WET DENSITY P C F	MOISTURE	BORING LOG	STANDARD PENETRATION	GENERALIZED STRATA
	- 5 10	5 a	E FI				274	108	24 28 22 20 250 31 41	•	108	INTARRE IN BUDWE PER HOLLOCIERA- A DIAMBRE IN BUDWE
<del></del>	- 111	VY THE	2 12-1 13-1	MAISIN	r. 1163111	ings, t	MIDST VID		N ENG		ING CO.	,

-	·		J.	5 .	- <b>()</b> -		CLAIN	eline vives vien.		PATURE	an G	and the state of t
	े हें सर	JUCC.	r <u>_ ST</u>	<u>T</u>	<u>VÄHTVII</u>	. PĄ	CLAIN RISH,	<u>LA.</u>		Eli	TRIN	G NO. <u>ADC-5</u> DATE 4/7:
	`a 	TRIAX UUU	IAL CK	Z	ATTERI	DERG TS	z				z	i
	DEATH GROUND ELEV.	COHESION PSF	FRICTION	CONSCIONTION	LIGUIO	PLASTIC	UNGONFINED COMPRESSION TEST - PSF	WET DENSITY PCF	MOISTURE	BORING LOG	GTANDARD PENETRATION	Generalized Strata
	- 5-		•		·				21 26 32	•••	•	GRAY SAND WITH TRACES OF CLAY
	- 10-		-				24.2	89	33 240		•	BLACK PEAT WITH LAYERS OF CLAY
	- 15- - 20-						1212	125	24			MEDIUM TO VERY STIFF GRAY & TAN CLAY
	- 25		•				4967	126	31			VERY DENSE GRAY SAND .
	30-	-	, ,						22	•••	82	
	35								22	•••	67	
	40		•									
									٠			
		<u>^</u>	ندا		1801 10		and varia	11 Xest.	, T	MINIED	A HHW	DINATURE IN DEGMA DECH EDOT DETEN- BLANDAND BUTT HUNDEL DAMBER THE STATE OF THE STATE OF T

					0						O	1				
	PRC	յու Ե	т <u></u>	.S. T.	DUTF FAMMA	NY P	CLÀI ARISH	CLAIM RISH, LA. BURING NO. ADC-6 DATE 1/								
	ELEV. O'	TRIAX	CIAL	Z	ATTER LIMI	neka I	Z	>			Z D					
	DEPTH SROUND EL	COHESION PSF	FRICTION	CONSCIONTION	רום הוס	PLASTIC	UNGONFINED COMPRESSION TEST - PSF	WET DENSITY PCF	MOISTURE	פטאנאט רספ	* STANDARD PENETRATION	GENERALIZED STRATA				
	_ 5 -		•				•		27 26	• • •		GRAY & WHITE SAND WITH TRACES OF CLAY				
	10 -		•				1285	78	30 137			BROWN CLAY & BPOWN PEAT WITH LAYERS OF CLAY BROWN CLAY WITH LAYERS OF				
	- 15 -				-	_	1576	134	89  21			MEDIUM TO STIFF GRAY & TAN CLAY				
	- 20 -	-						-	. 32							
	25 -								22	// 	53	VERY DENSE GRAY SAND				
	- 30 -				_					•••	-					
	35 -	-	•			•		-	22	•••	69					
			.= .					-	•							
-			-			,					-					
-		-				·		•								
		]		2. P	11.017 1 14.0			EAL,	].	MINED	WELL A D	NNEC HI ILLOON PER FOOT DELER STANDARD DOST SPORTE JAMBER HIVING DAMEL, WITH A JOS DUGIS F. F.				