

PROB (CONTD)

1712 (NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

DRILLING REPORT

COUNTY-	HARRIS	STRUCTURE-	GRAND PARKWAY AT MASON CREEK
HIGHWAY NO.-	SH 99	HOLE NO.-	1
CONTROL-	3510-05-001	STATION-	1672 + 72.24
PROJECT NO.-		OFFSET-	117.71 LT
DATE-	08/17/88	CODED BY-	SFY
GRD. ELEV.-	135.3	GRD. WATER ELEV.-	135.3
DISTRICT-	12		

D E F P T T . H	PEN 1ST 6IN	PEN 2ND 6IN	S A M N P O L . E	TAT LAT- ULT PSI	WET DEN PCF	MOI %	LL %	PI %	DESCRIPTION OF MATERIAL AND REMARKS
0			1			10			FILL:CLAY W/SAND,BROWN,GRAY
1			1						
2			1						
3			2			8			SAND,GRAY
4			2						
5	15	19							
6			3			11			CLAY,BRN,GR,VERY STIFF W/SD. SEAM
7			3						
8			4	0-	46	139	11	49	
9			5	0-	52	135	12		
10	10	10							
11			6			22			
12			7	0-	34	129	24	69	
13			8			24			
14			9	0-	27	132	20		
15	6	5							
16			10			24			CLAY,SANDY,BROWN,GRAY,SOFT
17			11	0-	7	130	23	39	
18			12			17	42		
19			13			16			SAND,BROWN,GRAY
20	11	13							
21			14			23	29		SAND,CLAYEY,SILTY,BROWN
22			15			28	52		CLAY,BROWN
23			16			28	87		
24			17	0-	28	124	31		-VERY STIFF
25	8	8							
26			18			34			CLAY,BROWN,STIFF
27			19	0-	21	117	37	78	
28			20	0-	16	115	37		
29			21	0-	24	117	38		
30	6	9							
31			22			24			CLAY,BROWN,VERY SOFT
32			22						
33			23	0-	2	121	37		
34			24			18			CLAY,SILTY,BROWN
35	3	4							

36			25	0-	5	116	35	36
37			26	0-	6	118	33	
38			27	0-	7	115	35	
39			28	0-	11	121	31	
40	6	9						
41			29					35
42			29					
43			30	0-	25	128	25	64
44			31	0-	31	130	15	
45	14	17						
46			32	0-	38	134	18	
47			33	0-	28	130	21	38
48			34	0-	34	130	21	
49			35	0-	45	128	22	
50	10	14						
51			36	0-	27	137	16	
52			37	0-	40	137	18	
53			38	0-	40	135	15	
54			39	0-	37	135	17	
55	14	21						
56			40					17
57			40					
58			40					
59			40					
60	50/6.00	50/5.00						
61								
62								
63								
64								
65	30	53						
66								
67								
68								
69								
70	50/1.25	50/1.00						
71								
72								
73								
74								
75	50/3.00	50/2.00						

-SOFT

-VERY SOFT

-FIRM

CLAY, BROWN

-STIFF

-VERY STIFF W/SOME CALCS.

CLAY, SANDY, BROWN, VERY STIFF

-GARY, BROWN

SAND, NO RECOVERY, DENSE

SAND, DRILLED-OUT, DENSE

SAND, DRILLED-OUT, VERY DENSE

DRILLER- MIKE BAHM

LOGGER- R. CURSON
TITLE-

PROB (CONTD)

1712 (NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS

HOLE NUMBER 1

STRAT NUM.	ELEVATION -FEET-		STRAT THICK NESS FEET	CEN- TROID DEPTH FEET	UNIF. SOIL CLASS	PEN TEST BLOWS/ FOOT	SOIL WET TEST CONST	COHES LBS/ SQFT	WET DENS LBS/ CUFT	INT. FRIC ANG.	VARIANCE TAT -----			
	FROM	TO									PEAK	AVG	RATIO	
1	135	130	5.0	2.5	OTHE									
2	130	121	9.0	9.5	CH	27.0	50	3180	134	0.0	5.0	3.3	3.8	
3	121	117	4.0	16.0	CL	11.0	60	1231	131	0.0				
4	117	115	2.0	19.0	OTHE									
5	115	114	1.0	20.5	SC	24.0	70							
6	114	105	9.0	25.5	CH	16.0	50	1611	118	0.0	3.3	2.0	4.5	
7	105	102	3.0	31.5	CH	15.0	50							
8	102	95	7.0	36.5	CL	7.0	60	397	118	0.0	2.9	1.3	4.9	
9	95	90	5.0	42.5	CH	15.0	50	2034	129	0.0				
10	90	76	14.0	52.0	CL	30.0	60	2600	133	0.0	4.5	2.4	5.2	
11	76	68	8.0	63.0	OTHE	96.0	80							
12	68	60	8.0	71.0	OTHE	533.3	80							

PROB (CONTD)

1712

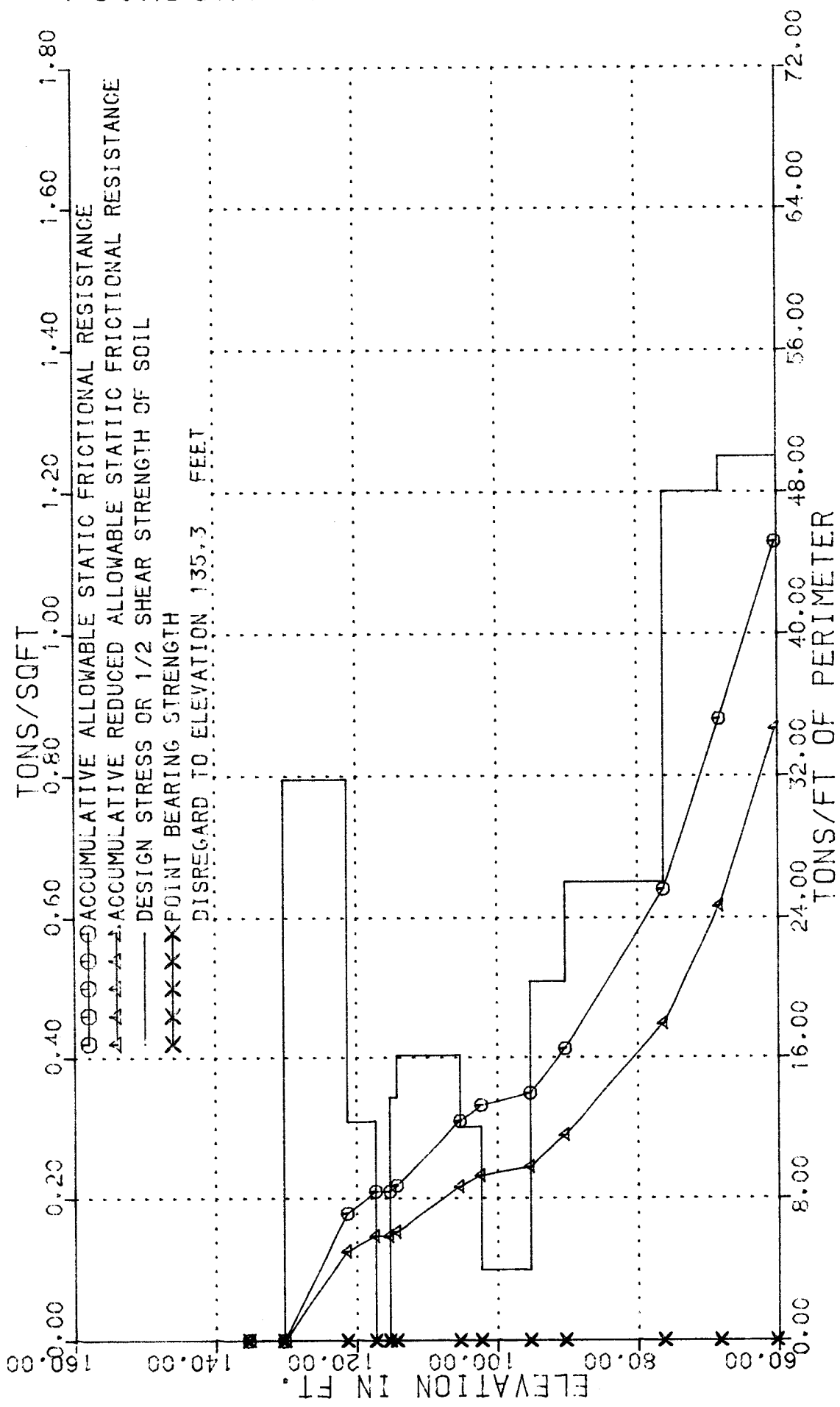
(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS
DISREGARD TO ELEVATION IS 135.3 FEET

HOLE NUMBER 1

STRATA NUMBER	ELEVATION -FEET-		DESIGN STRESS OF SOIL TONS/SQFT PER STRAT	ALLOWABLE STATIC FRICTIONAL RESISTANCE (DS) TONS PER FT OF PERIMETER PER ACCUM-		REDUCED ALLOWABLE STATIC FRICTIONAL RESISTANCE ----- PER ACCUM-			BEAR FACTOR NC	POINT BEARING SNC TONS/SQFT	TAT TO PEN RAT
	FROM	TO		PER STRATUM	ULATIVE	SR	STRATUM	ULATIVE			
1	135.3	130.3	0.00	0.00	0.00	0.7	0.00	0.00	4.29	0.00	0.0
2	130.3	121.3	0.80	7.16	7.16	0.7	5.01	5.01	2.57	0.00	1.5
3	121.3	117.3	0.31	1.23	8.39	0.7	0.86	5.87	3.62	0.00	1.7
4	117.3	115.3	0.00	0.00	8.39	0.7	0.00	5.87	4.29	0.00	0.0
5	115.3	114.3	0.34	0.34	8.73	0.7	0.24	6.11	4.29	0.00	0.0
6	114.3	105.3	0.40	3.63	12.35	0.7	2.54	8.65	2.57	0.00	1.3
7	105.3	102.3	0.30	0.90	13.25	0.7	0.63	9.28	2.57	0.00	0.0
8	102.3	95.3	0.10	0.70	13.95	0.7	0.49	9.77	3.62	0.00	0.9
9	95.3	90.3	0.51	2.54	16.49	0.7	1.78	11.55	2.57	0.00	1.7
10	90.3	76.3	0.65	9.10	25.59	0.7	6.37	17.92	3.62	0.00	1.3
11	76.3	68.3	1.20	9.60	35.20	0.7	6.72	24.64	4.29	0.00	0.0
12	68.3	60.3	1.25	10.00	45.20	1.0	10.00	34.64	4.29	0.00	0.0

FOUNDING MATERIAL PROPERTIES



COUNTY	HARRIS	THD DIST	12
HIGHWAY NO	SH 99	DATE	08/17/88
CONTROL	3510-05-001	BY	SFY
IPE			
STRUCTURE GRAND PARKWAY AT MASON CREEK			
HOLE NO	1		
STATION	1672 + 72.24		
LOCATION	117.71 LT		

DRILLING LOG

COUNTY HARRIS STRUCTURE GRAND PARKWAY AT MASON CREEK THD DIST 12
 HIGHWAY NO SH 99 HOLE NO 1 DATE 08/17/86
 CONTROL 3510-05-001 STATION 1672 + 72.24 GRD. ELEV. 135.3
 TPE LOCATION 117.71 LT GRD. WATER ELEV. 135.3

ELEV FT.	LOG	THD PEN. TEST NO. OF BLOWS		DESCRIPTION OF MATERIAL	METHOD OF CORING
		1ST 6"	2ND 6"		
135.3	0			SAND, BROWN, GRAY	0
130.3		15 (6.0")	19 (6.0")	CLAY, BROWN, VERY STIFF W/SAND SEAMS	
10		10 (6.0")	13 (6.0")		10
121.3		6 (6.0")	5 (6.0")	CLAY, SANDY, BROWN, GRAY, FIRM	
117.3				SAND, BROWN, GRAY	20
115.3	20	11 (6.0")	13 (6.0")	SAND, CLAYEY, SILTY, BROWN	
114.3				CLAY, BROWN, STIFF	
		9 (6.0")	8 (6.0")		
105.3	30	6 (6.0")	9 (6.0")	CLAY, BROWN, VERY SOFT	30
102.3				CLAY, SILTY, BROWN, SOFT	
		3 (6.0")	4 (6.0")		
95.3	40	6 (6.0")	9 (6.0")	CLAY, BROWN, VERY STIFF	40
90.5				CLAY, SANDY, BROWN, VERY STIFF	
50		13 (6.0")	17 (6.0")		50
		14 (6.0")	21 (6.0")		
76.3	60	50 (6.0")	50 (5.0")	SAND, DRILLED OUT, DENSE	60
		30 (6.0")	53 (6.0")		
68.3	70	50 (1.2")	50 (1.0")	SAND, DRILLED OUT, VERY DENSE	70
		50 (3.0")	50 (2.0")		
*REMARKS:					

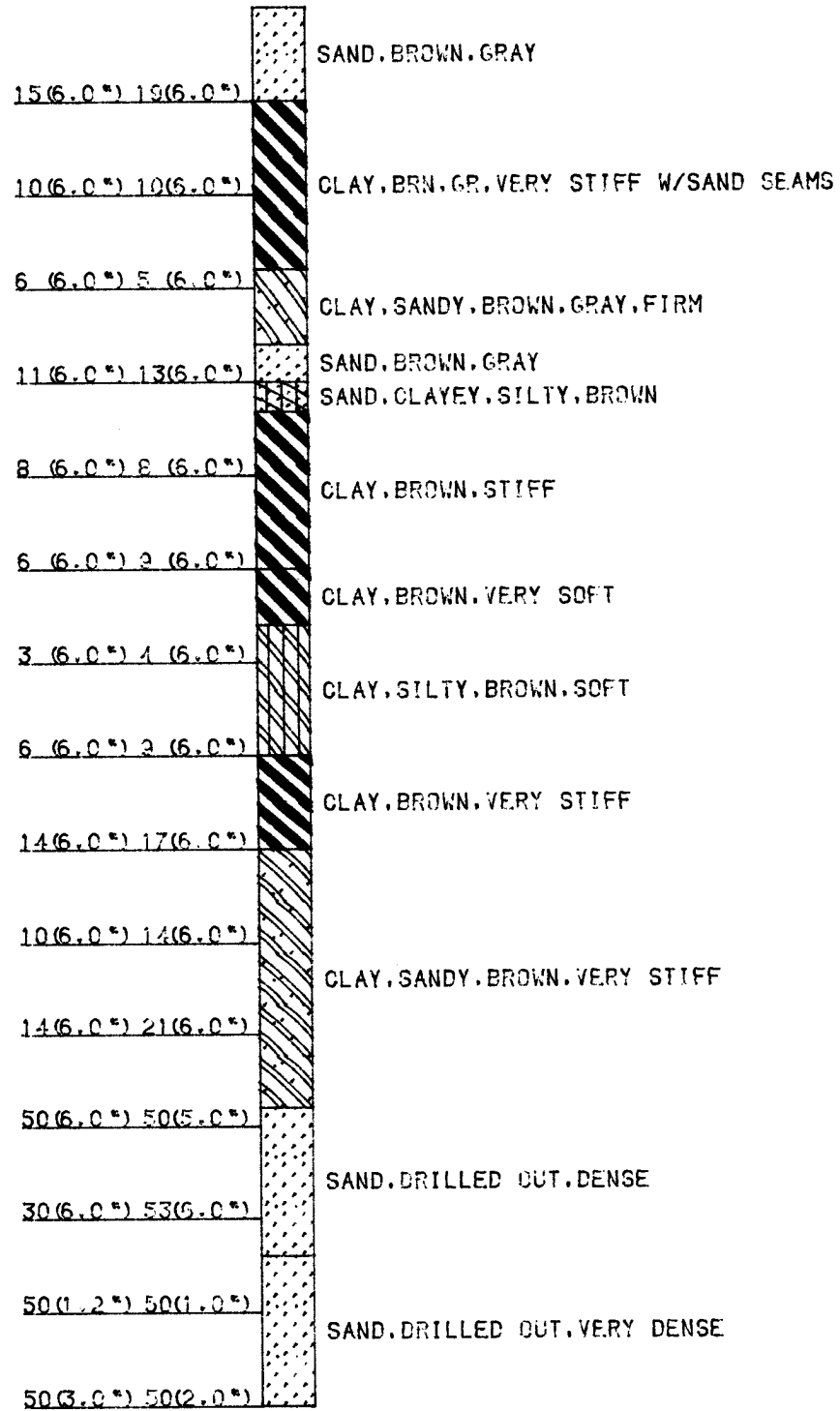
DRILLER MIKE BAHM

LOGGER R. CURSON

TITLE

TEST HOLE NO. 1

GROUND ELEV. 135.3



36			20	0-	7	116	32	34	CLAY,SILTY,BROWN,SOFT
37			21	0-	11	119	32		-FIRM
38			22	0-	128	26			CLAY,BROWN,()IFF W/VERY SL. SILT
39			23				24	53	
40	16	20							
41			24				28		CLAY,BRN,VERY STIFF W/SM.CLAY STONE
42			25				26	61	
43			26	0-	51	127	24		
44			27	0-	52	132	24		
45	17	19							
46			28	0-	50	137	16		-W/SM. SAND LAYERS
47			29	0-	38	137	17		
48			30						
49			31				20		-W/SM. CALCS.
50	13	25							
51			32				16		CLAY,SILTY,BRN,GR,VERY STIFF W/CALC
52			33	0-	50	139	16	40	
53			34				15		
54			35	0-	46	138	16		
55	24	29							
56			36	0-	47	133	20	49	CLAY,BROWN,VERY STIFF
57			37	0-	50	132	20		
58			38	0-	50	131	28		-W/SM. CALCS.
59			39				23		
60	22	26							
61			40				19	57	
62			41				22		
63			42	0-	51	132	22		
64			43				12		-W/SM. CLAY STONE
65	20	27							
66			44				25		CLAY,SILTY,BRW,GR.W/CALC+CLAY STONE
67			44						
68			45	0-	19	131	16	45	-STIFF
69			46				13		
70	50/2.50	50/2.00							
71									SAND,BROWN,DENSE
72									
73			47				16		
74			48				15	26	W/SM. CALCS.+CLAY STONE
75	50/3.75	50/6.00							

DRILLER- MIKE BAHM

LOGGER- R. CURSON
TITLE-

PROB (CONTD)

1712

(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS

HOLE NUMBER 2

STRAT NUM.	ELEVATION -FEET-		STRAT THICK NESS FEET	CEN- TROID DEPTH FEET	UNIF. SOIL CLASS	PEN TEST BLOWS/ FOOT	SOIL WET COHES TEST CONST	WET DENS LBS/ SQFT	INT. FRIC LBS/ CUFT	ANG.	VARIANCE TAT -----			
	FROM	TO									PEAK	AVG	RATIO	
1	134	129	5.0	2.5	OTHE									
2	129	124	5.0	7.5	CL	43.0	60	2786	143	0.0				
3	124	119	5.0	12.5	CH	16.0	50	2048	129	0.0				
4	119	114	5.0	17.5	OTHE	39.0	80							
5	114	106	8.0	24.0	CH	15.5	50	1860	128	0.0	4.0	2.7	3.4	
6	106	102	4.0	30.0	SC	24.0	70							
7	102	99	3.0	33.5	OTHE									
8	99	97	2.0	36.0	CL	14.0	60	490	116	0.0				
9	97	84	13.0	43.5	CH	36.0	50	2616	130	0.0	12.5	7.6	3.8	
10	84	79	5.0	52.5	CL	38.0	60	3463	138	0.0				
11	79	69	10.0	60.0	CH	50.5	50	3564	132	0.0	1.3	0.6	4.2	
12	69	65	4.0	67.0	CL	47.0	60	1404	131	0.0				
13	65	59	6.0	72.0	OTHE	266.7	80							

PROB (CONTD)

1712

(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS
 DISREGARD TO ELEVATION IS 134.0 FEET

HOLE NUMBER 2

STRATA NUMBER	ELEVATION -FEET-		DESIGN STRESS OF SOIL TONS/SQFT PER STRAT	ALLOWABLE STATIC FRICTIONAL RESISTANCE (DS) TONS PER FT OF PERIMETER PER ACCUM-		REDUCED ALLOWABLE STATIC FRICTIONAL RESISTANCE ----- PER ACCUM-			BEAR FACTOR NC	POINT BEARING SNC TONS/SQFT	TAT TO PEN RAT
	FROM	TO		PER	ACCUM-	SR	PER	ACCUM-			
1	134.0	129.0	0.00	0.00	0.00	0.7	0.00	0.00	4.29	0.00	0.0
2	129.0	124.0	0.70	3.48	3.48	0.7	2.44	2.44	3.62	0.00	1.0
3	124.0	119.0	0.51	2.56	6.04	0.7	1.79	4.23	2.57	0.00	1.6
4	119.0	114.0	0.49	2.44	8.48	0.7	1.71	5.94	4.29	0.00	0.0
5	114.0	106.0	0.47	3.72	12.20	0.7	2.60	8.54	2.57	0.00	1.5
6	106.0	102.0	0.34	1.37	13.57	0.7	0.96	9.50	4.29	0.00	0.0
7	102.0	99.0	0.00	0.00	13.57	0.7	0.00	9.50	4.29	0.00	0.0
8	99.0	97.0	0.12	0.24	13.82	0.7	0.17	9.67	3.62	0.00	0.5
9	97.0	84.0	0.65	8.50	22.32	0.7	5.95	15.62	2.57	0.00	0.9
10	84.0	79.0	0.87	4.33	26.65	0.7	3.03	18.66	3.62	0.00	1.4
11	79.0	69.0	0.89	8.91	35.56	0.7	6.24	24.89	2.57	0.00	0.9
12	69.0	65.0	0.35	1.40	36.97	0.7	0.98	25.88	3.62	0.00	0.4
13	65.0	59.0	1.25	7.50	44.47	1.0	7.50	33.38	4.29	0.00	0.0

DRILLING LOG

COUNTY HARRIS
 HIGHWAY NO SH 99
 CONTROL 3510-05-001
 IPE

STRUCTURE GRAND PARKWAY AT MASON CREEK
 HOLE NO 2
 STATION 1670 + 64.07
 LOCATION 40.46 LT

THD DIST 12
 DATE 08/17/88
 GRD. ELEV. 134.0
 GRD. WATER ELEV. 134.0

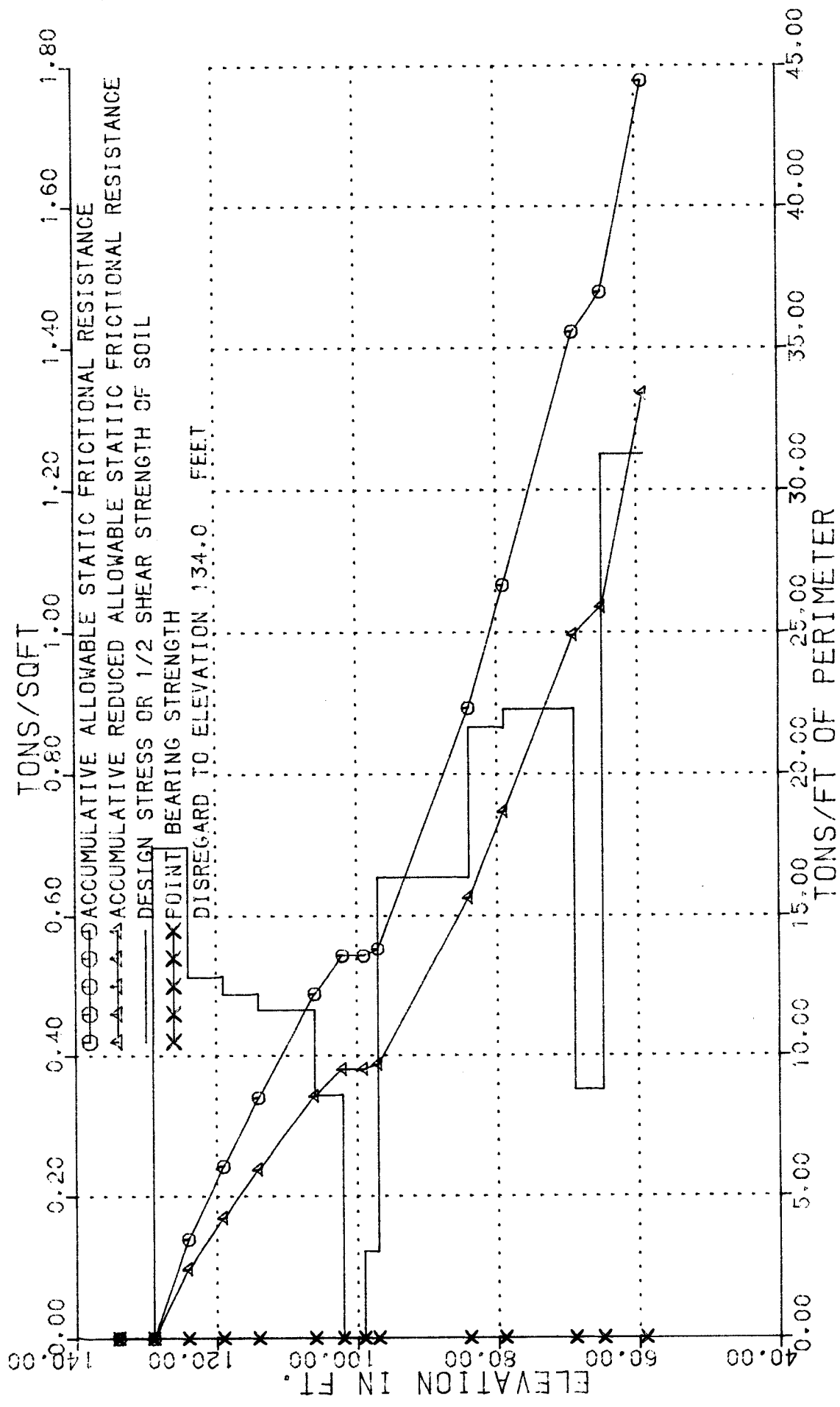
ELEV FT.	LOG	THD PEN. TEST NO. OF BLOWS		DESCRIPTION OF MATERIAL	METHOD OF CORING
		1ST 6"	2ND 6"		
134.0	0			SAND, NO RECOVERY	0
129.0		22 (6.0")	21 (6.0")	CLAY, SANDY, GR. TAN, BRN, VEPY STIFF	
124.0	10	8 (6.0")	8 (6.0")	CLAY, BRN, GR, VERY STIFF	10
119.0		20 (6.0")	19 (6.0")	SAND, BROWN	
114.0	20	10 (6.0")	7 (6.0")	CLAY, BROWN, GRAY, STIFF	20
		6 (6.0")	8 (6.0")		
106.0	30	13 (6.0")	11 (6.0")	SAND, CLAYEY, BROWN	30
102.0				SAND, BROWN	
99.0		8 (6.0")	6 (6.0")	CLAY, SILTY, BROWN, FIRM	
97.0	40	16 (6.0")	20 (6.0")	CLAY, BROWN, VERY STIFF W/SAND LAYERS	40
		17 (6.0")	13 (6.0")		
84.0	50	13 (6.0")	25 (6.0")	CLAY, SILTY, GRAY, BROWN, VERY STIFF	50
79.0		24 (6.0")	23 (6.0")	CLAY, BROWN, VERY STIFF W/SM. CALCS.	
	60	22 (6.0")	26 (6.0")		60
69.0		20 (6.0")	27 (6.0")	CLAY, SILTY, BRN, GR, STIFF W/CALC+CLS.	
65.0	70	50 (2.5")	50 (2.0")	SAND, BROWN, DENSE	70
		50 (3.7")	50 (6.0")		
*REMARKS:					

DRILLER MIKE BAHM

LOGGER R. CURSON

TITLE

FOUNDING MATERIAL PROPERTIES



COUNTY	HARRIS	THD DIST	12
HIGHWAY NO	SH 99	DATE	08/17/88
CONTROL	3510-05-001	BY	SFY
LOCATION	1670 + 84.07		
	40.46 LT		
	STRUCTURE GRAND PARKWAY AT MASON CREEK		
	HOLE NO 2		

TEST HOLE NO. 2

GROUND ELEV. 134.0

