TABLE NO. 1

SUMMARY OF LABORATORY TEST DATA

SAMPLE IDENTIFICATION					CLASSIFICATION PROPERTIES								PHYSICAL PROPERTIES													
										UNIFIED SOIL CLASSIFICATION SYSTEM			STRENGTH						CONSOLIDATION						
BORING NUMBER	SAMPLE NUMBER	ELEVATION, FT.	STRATUM DESIGNATION	ORGANIC CONTENT, %	AVERAGE NATURAL WATER CONTENT, W_n, %	LIQUID LIMIT, W_L, %	PLASTICITY INDEX, I_p, %	NATURAL WATER CONTENT OF LIMIT SAMPLE, W_n, %	SPECIFIC GRAVITY OF SOILIDS, G_s	GROUP SYMBOL	% SAND (< #4 > #200 SIEVE)	% FINES (< #200 SIEVE)	TYPE OF TEST	COMPRESSIVE STRENGTH ($\sigma_1 - \sigma_3$), TSF	CONFINING PRESSURE σ_3, TSF	STRAIN AT FAILURE, %	NATURAL WATER CONTENT, W_n, %	WATER CONTENT AT END OF TEST, W_f, %	NATURAL WATER CONTENT, W_n, %	INITIAL VOID RATIO, e_o	EXISTING OVERBURDEN STRESS, P_o, TSF	ESTIMATED PRECONSOLIDATION STRESS, P_c, TSF	COMPRESSION INDEX, C_c	SWELLING INDEX, C_s	VOID RATIO AT START OF SWELL, e_f
B-1	2HA	3.7	F							SM	68.8	18.0														
	3HA	1.7	F							SP	*93.9	4.0														
	5D	-2.3	S							SP-SM	*86.9	10.0														
	7D	-9.3	S							SP	83.7	2.6														
	9D	-19.3	S							SP	97.0	1.9														
	11D	-29.3	S							SP	*92.2	3.5														
B-2P	2HA	4.2	F							SP	73.1	1.7														
	3HA	2.2	F							SP-SM			DS				10.7	20.0								
	5D	-1.8	S							SP	88.7	4.4														
	6D	-3.8	O	37.4		337	144	273.6		OH																
	8D	-7.8	S							SP-SM	90.9	7.7														
	9D	-9.8	S							SP	89.8	3.8														
	10D	-11.8	S							SP-SM	92.3	6.8														
	11D	-13.8	S							SM			DS				28.5	29.2								
	13D	-17.8	S							SP	95.3	4.7														
	16D	-23.8	S							SP	97.0	2.6														
	20D	-31.8	S							SP-SM	94.9	5.0														
B-3U	2HA	3.0	F							SP	*76.9	1.0														
	3HA	1.0	F							OH			DS				43.8	41.0								
	4D	-1.0	F							SP	86.5	2.4														
	5D	-3.0	F							SP	91.0	2.8														
	6D	-5.0	O	27.4		143	61	133.4		OH																
	7U	-7.0	O		186	291	82	251.6	2.21	PT			UU	0.86	0.50	7.8	169.9	169.0	241.1	5.466	0.5	0.9	3.72	0.64	2.462
	9D	-11.0	S							SW-SM	83.7	10.1														
B-4A	1HA	2.8	F							SM	57.6	16.0														
	3D	-1.2	F							SP	93.7	1.3														
	6D	-5.7	O	19.0		106	17	217.7		PT																
	7D	-10.2	S							SP	81.5	2.8														
	9D	-20.2	S							SP	90.8	2.7														
	10D	-25.2	S							SP-SM			DS				20.1	19.6								
	11D	-30.2	S							SP	96.2	3.8														

STRATA DESIGNATIONS

F - Fill

O - Organic Silty Clay and Peat

S - Sand

NOTES

1. All tests summarized were performed in the laboratory of Mueser Rutledge Consulting Engineers.
2. The sample elevation is the average of the sampling interval.
3. Ground surface elevations at borings are:

BORING NO.	BORING ELEVATION	BORING NO.	BORING ELEVATION	BORING NO.	BORING ELEVATION
B-1	+6.7	B-6U	+6.8	B-12	+8.2
B-2P	+7.2	B-7UP	+5.4	B-12A	+8.1
B-3U	+6.0	B-8U	+5.8	B-13P	+8.8
B-4A	+5.8	B-9	+7.4	B-14	+9.9
B-5	+6.6	B-10	+6.2	B-15	+4.9
B-5A	+6.5	B-11	+7.9	B-16	+5.4
				B-17	+3.6

4. "Average natural water content" is a weighted average of all material tested.
5. Strength tests performed were: UU - Unconsolidated Undrained Triaxial Compression
   DS - Direct Shear
6. Triaxial strength tests were performed on specimens 2.8 inches in diameter with height to diameter ratio of approximately 2.
7. Confining pressure for UU compression tests is equivalent to 80 percent of estimated vertical effective overburden stress.
8. UU Strength tests were performed at a rate of strain of approximately 1% per minute.
9. Direct Shear Test results are summarized on Plates Nos. D-1 and D-2.
10. Compression Index, Cc = slope of the virgin compression portion of the e-log p curve.
11. Swelling Index, Cs = slope of the rebound portion of the e-log p curve.
12. Most probable preconsolidation stress, Pc is determined by the Casagrande method of construction.
13. Minimmum preconsolidation stress, P_{mc}, is the pressure ordinate at the intersection of the extension of the virgin compression portion of the e-log p curve with the initial void ratio.
14. * Oversize particles, visually larger than 3/8", were removed from gradation specimen. Description and Group Symbol apply to entire sample.

MRCE Form LT-1

TABLE NO. 1

SUMMARY OF LABORATORY TEST DATA

SAMPLE IDENTIFICATION					CLASSIFICATION PROPERTIES								PHYSICAL PROPERTIES												
										UNIFIED SOIL CLASSIFICATION SYSTEM			STRENGTH						CONSOLIDATION						
BORING NUMBER	SAMPLE NUMBER	ELEVATION, FT.	STRATUM DESIGNATION	ORGANIC CONTENT, %	AVERAGE NATURAL WATER CONTENT, W_n, %	LIQUID LIMIT, W_L, %	PLASTICITY INDEX, I_P, %	NATURAL WATER CONTENT OF LIMIT SAMPLE, W_n, %	SPECIFIC GRAVITY OF SOILIDS, G_s	GROUP SYMBOL	% SAND (< #4 > #200 SIEVE)	% FINES (< #200 SIEVE)	TYPE OF TEST	COMPRESSIVE STRENGTH ($\sigma_1 - \sigma_3$), TSF	CONFINING PRESSURE σ_3, TSF	STRAIN AT FAILURE, %	NATURAL WATER CONTENT, W_n, %	WATER CONTENT AT END OF TEST, W_f, %	NATURAL WATER CONTENT, W_n, %	INITIAL VOID RATIO, e_o	EXISTING OVERBURDEN STRESS, P_o, TSF	ESTIMATED PRECONSOLIDATION STRESS, P_c, TSF	COMPRESSION INDEX, C_c	SWELLING INDEX, C_s	VOID RATIO AT START OF SWELL, e_f
B-5	1HA	5.6	F							SP-SM	89.5	9.4													
B-5A	1D	-0.5	F							SP	*67.4	4.9													
	2D	-2.5	F							SP-SM			DS				17.2	24.3							
	3D BOT	-5.0	O			44	4	38.4		OL		60.3													
	5D TOP	-8.0	O							SM	80.4	19.6													
	6D BOT	-11.0	O			63	36	53.0		OH-CH		90.7													
	8D	-14.2	S							SP	82.0	3.9													
	11D	-20.5	S							SP	96.8	2.3													
	12D	-22.5	S							SP-SM	*94.0	5.5													
	13D	-24.5	S							SM	81	18.7													
	14D	-26.5	S							SP-SM			DS				22.8	27.4							
	19D	-36.2	S							SP-SM	90.6	6.2													
B-6U	2HA	3.8	F							SM	*74.9	17.0													
	4D	-0.2	F							SW-SM	70.1	9.5													
	5D	-2.2	O			125	61	86.4		OH	26.6	73.4													
	6U	-4.2	O	3.5	58	68	26	53.1	2.70	OH	7.3	92.7	UU	0.69	0.48	6.1	55.2	55.0	55.3	1.518	0.5	1.1	0.634	0.094	0.991
	7D	-6.2	O			55	24	49.5		OH	13.8	86.2													
	8D	-9.2	O			95	44	77.5		OH		95.3													
	9D	-14.2	S							SP-SM	85.6	6.3													
	11D	-24.2	S							SM	70.7	29.3													
	13D	-34.1	S							SP-SM	92.9	6.2													
B-7UP	2HA	2.4	F							SP	*92.0	4.2													
	4D	-1.6	F							SP-SM		5.4													
	5D BOT	-4.1	O			101	50	77.5		OH	8.8	90.3													
	6D	-5.6	O			51	12	46.9		OH	15	82.6													
	7U	-7.6	O	3.8	46	56	29	50.2	2.61	OH-CH	9.0	91.0	UU	0.48	0.49	9.8	46.1	46.0	47.9	1.220	0.5	1.0	0.398	0.058	0.692
	9D	-11.6	O			91	33	77.8		OH															
	11D	-15.6	O	14.5		158	57	105.9		OH															
	13D	-19.6	S							SP-SM	*69.7	5.0													
	17D	-27.6	S							SP-SM	91.3	8.7													
B-8U	1HA	4.8	F							SM	63.2	17.1													
	4D	-1.2	O							SM	*65.3	18.5													
	6D	-5.2	O			96	54	65.4		OH	8.9	91.1													
	7U	-7.2	O	2.9	51	49	20	38.4	2.67	OH	4.8	95.2	UU	0.56	0.44	9.3	48.2	49.2	47.0	1.239	0.5	1.0	0.362	0.068	0.754
	9U TOP	-11.7	O		67	67	31	63.6		OH	*7.0	90.2													
	9U BOT	-12.7	O		240	285	154	188.0		PT															
	11D	-16.2	S							SP	63.8	3.0													
	14D	-30.2	S							SP-SM	91.7	5.6													
	16D	-40.1	S							SP-SM	*91.3	5.4													
B-9	2HA	4.4	F							SP	*85.9	2.5													
	4D	0.4	F							SM	*51.2	45.7													
	5D TOP	-1.1	F							SP	*93.1	4.4													
	5D BOT	-2.1	O			75	25	68.3		OH	12.9	87.1													
	6D	-3.6	O							SP	92.7	4.1													
	8D	-7.6	S							SP-SM	87.7	11.4													
	9D	-9.6	S							SP-SM	90.8	7.5													
	10D	-11.6	S							SP	94.6	4.5													
	14D	-19.6	S							SP-SM	92.4	7.6													
	18D	-27.6	S							SM	84.2	15.8													
	22D	-35.6	S							SP-SM	89.8	10.2													
B-10	1HA	5.2	F							SM	*71.8	24.8													
	5D	-2.8	O			180	77	219.9		OH	40.3	59.7													
	6D BOT	-5.3	S							SM	72.6	18.2													
	7D	-6.8	S							SM	88.7	16.2													
	8D	-8.8	S							SP	95.5	3.3													
	9D	-10.8	S							SP	92.7	4.6													
	13D	-18.8	S							SP	97.8	2.2													
	16D	-24.8	S							SP	98.0	2.0													
	20D	-32.7	S							SP	98.1	1.9													
B-11	1HA	6.9	F							SM	*76.8	14.0													
	2HA	4.9	F							SP-SM	*80.2	10.6													
	4D	0.9	F							SM	*81.5	12.8													
	6D	-3.1	O			201	73	145.9		OH&PT	58.7	40.4													
	7D BOT	-5.6	O							SM	78.2	21.4													
	8D TOP	-7.6	O							SM	74.1	25.0													
	8D BOT	-8.6	S							SP-SM	73.8	6.2													

MUESER RUTLEDGE CONSULTING ENGINEERS

225 WEST 34th STREET, NEW YORK, N.Y. 10122

BAY PARK STP - PERIMETER FLOOD PROTECTION

BAY PARK NEW YORK

TABLE NO. 1

SUMMARY OF LABORATORY TEST DATA

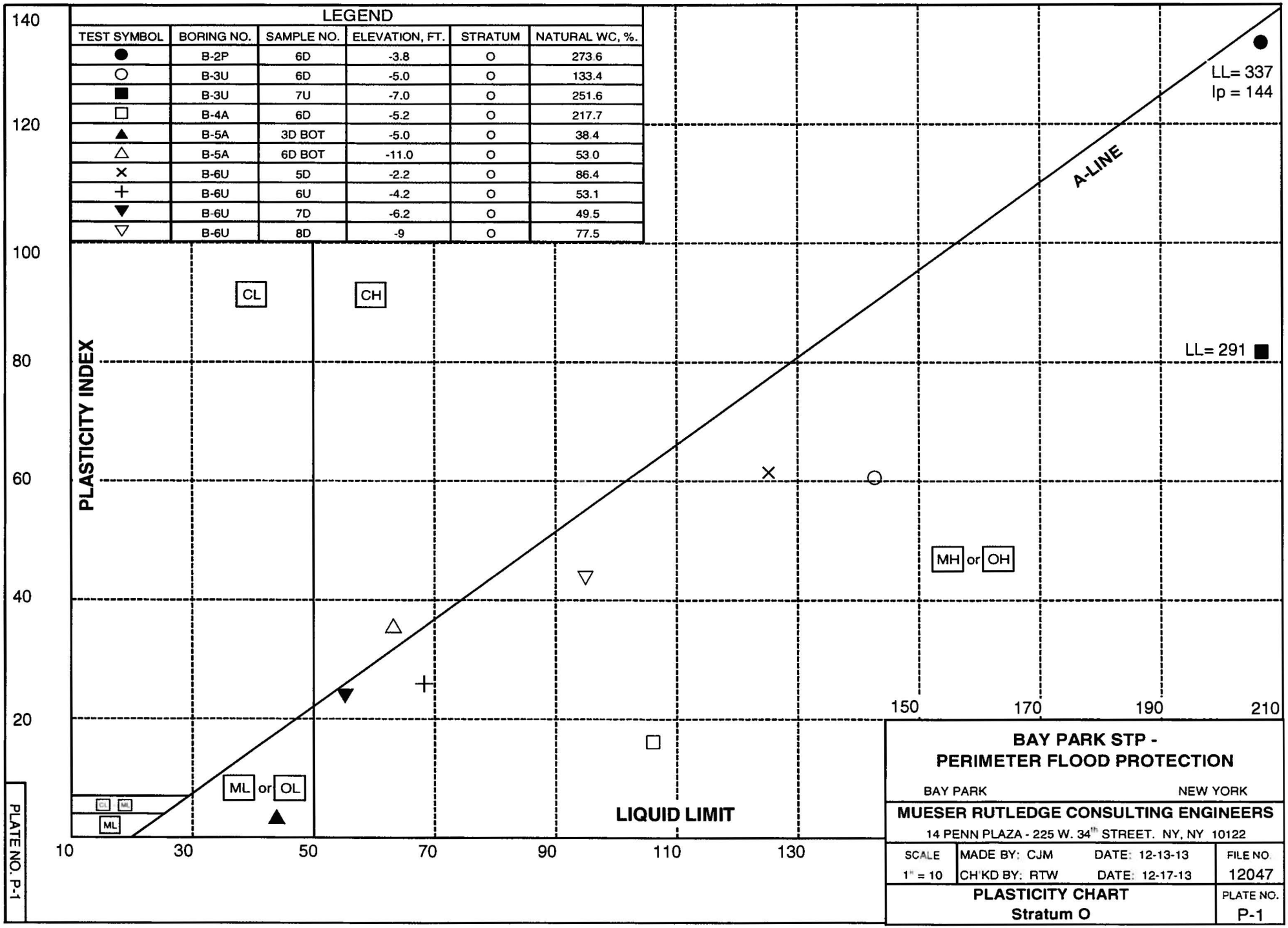
SAMPLE IDENTIFICATION					CLASSIFICATION PROPERTIES								PHYSICAL PROPERTIES												
										UNIFIED SOIL CLASSIFICATION SYSTEM			STRENGTH						CONSOLIDATION						
BORING NUMBER	SAMPLE NUMBER	ELEVATION, FT.	STRATUM DESIGNATION	ORGANIC CONTENT, %	AVERAGE NATURAL WATER CONTENT, W_n, %	LIQUID LIMIT, W_L, %	PLASTICITY INDEX, I_P, %	NATURAL WATER CONTENT OF LIMIT SAMPLE, W_n, %	SPECIFIC GRAVITY OF SOILIDS, G_s	GROUP SYMBOL	% SAND (< #4 > #200 SIEVE)	% FINES (< #200 SIEVE)	TYPE OF TEST	COMPRESSIVE STRENGTH ($\sigma_1 - \sigma_3$), TSF	CONFINING PRESSURE σ_3, TSF	STRAIN AT FAILURE, %	NATURAL WATER CONTENT, W_n, %	WATER CONTENT AT END OF TEST, W_f, %	NATURAL WATER CONTENT, W_n, %	INITIAL VOID RATIO, e_o	EXISTING OVERBURDEN STRESS, P_o, TSF	ESTIMATED PRECONSOLIDATION STRESS, P_c, TSF	COMPRESSION INDEX, C_c	SWELLING INDEX, C_s	VOID RATIO AT START OF SWELL, e_f
B-11	9D	-13.1	S							SM	63.5	36.5													
	10D	-18.1	S							SP	97.0	3.0													
	11D	-23.1	S							SP	97.9	1.5													
	12D	-28.1	S							SP	89.8	2.0													
B-12	2HA	5.2	F							SP-SM	*78.8	10.4													
B-12A	2D	1.1	F							SP	95.0	3.2													
	3D	-0.9	F							SP	90.4	3.9													
	5D	-4.9	S							SM	*72.6	22.3													
	6D	-6.9	S							SP-SM	78.4	11.5													
	7D	-8.9	S							SP	94.2	2.7													
	8D	-10.9	S							SP	*95.3	2.7													
	9D	-12.9	S							SP	96.5	3.5													
	13D	-20.9	S							SP	95.8	3.0													
	15D	-24.9	S							SP-SM	93.2	6.8													
	17D	-28.9	S							SP	91.0	3.1													
B-13P	1HA	7.8	F							SM	*74.6	22.0													
	2HA	5.8	F							SP-SM	*89.1	7.1													
	4D	1.8	F							SP-SM	*71.9	6.7													
	6D	-2.2	S							SP-SM	*90.0	5.4													
	7D	-7.2	S							SP	87.2	4.8													
	9D	-17.2	S							SP-SM	92.5	7.5													
	12D	-32.1	S							SP	95.1	2.6													
B-14	1HA	8.9	F							SM	*82.7	12.3													
	3HA	4.9	F							SP	62.1	3.7													
	6D	-1.1	S							SM	71.3	14.2													
	7D	-3.1	S							SM	84.2	14.1													
	8D	-5.1	S							SP-SM	95.0	5.0													
	10D	-9.1	S							SP	95.7	1.7													
	14D	-17.1	S							SP	96.7	3.3													
	15D	-19.1	S							SP	95.7	4.3													
	18D BOT	-25.6	S							SM	76.9	22.8													
B-15	1HA	3.9	F							SP	*84.4	3.6													
	2HA	1.9	F							SP	*81.7	0.7													
	3HA	-0.1	F							SM			DS				25.0	29.2							
	4D	-2.1	F							SM	*79.9	19.0													
	5D	-4.1	S							SP	96.2	3.0													
	6D	-6.1	S							SP	98.4	1.6													
	7D	-11.1	S							SP	96.6	3.4													
	9D	-21.1	S							SP-SM			DS				18.1	19.0							
	10D TOP	-25.6	S							SM	83.8	16.2													
	10D BOT	-26.6	S							SM	86.0	13.9													
B-16	2HA	2.4	F							SW-SM	63.1	11.5													
	4D	-1.6	S							SP-SM	84.8	5.7													
	5D	-3.6	S							SP	87.1	3.6													
	6D	-5.6	S							SP	*97.9	1.6													
	7D	-7.6	S							SP	94.7	4.3													
	8D	-9.6	S							SM	84.0	15.2													
	9D	-11.6	S							SP	97.9	2.1													
	10D	-13.6	S							SP	95.7	4.3													
	11D	-15.6	S							SP-SM			DS				22.2	23.9							
	14D	-21.6	S							SP	94.4	3.5													
	21D	-35.6	S							SP-SM			DS				12.4	15.7							
	23D	-39.5	S							SP	68.4	4.8													
B-17	1HA	2.6	F							SM	*65.1	25.7													
	3HA	-1.4	F							SP	86.2	3.9													
	6D	-7.4	S							SP	90.3	1.1													
	7D	-12.4	S							SP	97.6	2.4													
	8D	-17.4	S							SP	96.4	3.6													
	9D TOP	-21.9	S							SP-SM	*83.3	10.4													
	9D BOT	-22.9	S							SM	52.8	47.0													
	12D	-37.3	S							SP-SM	92.7	5.2													

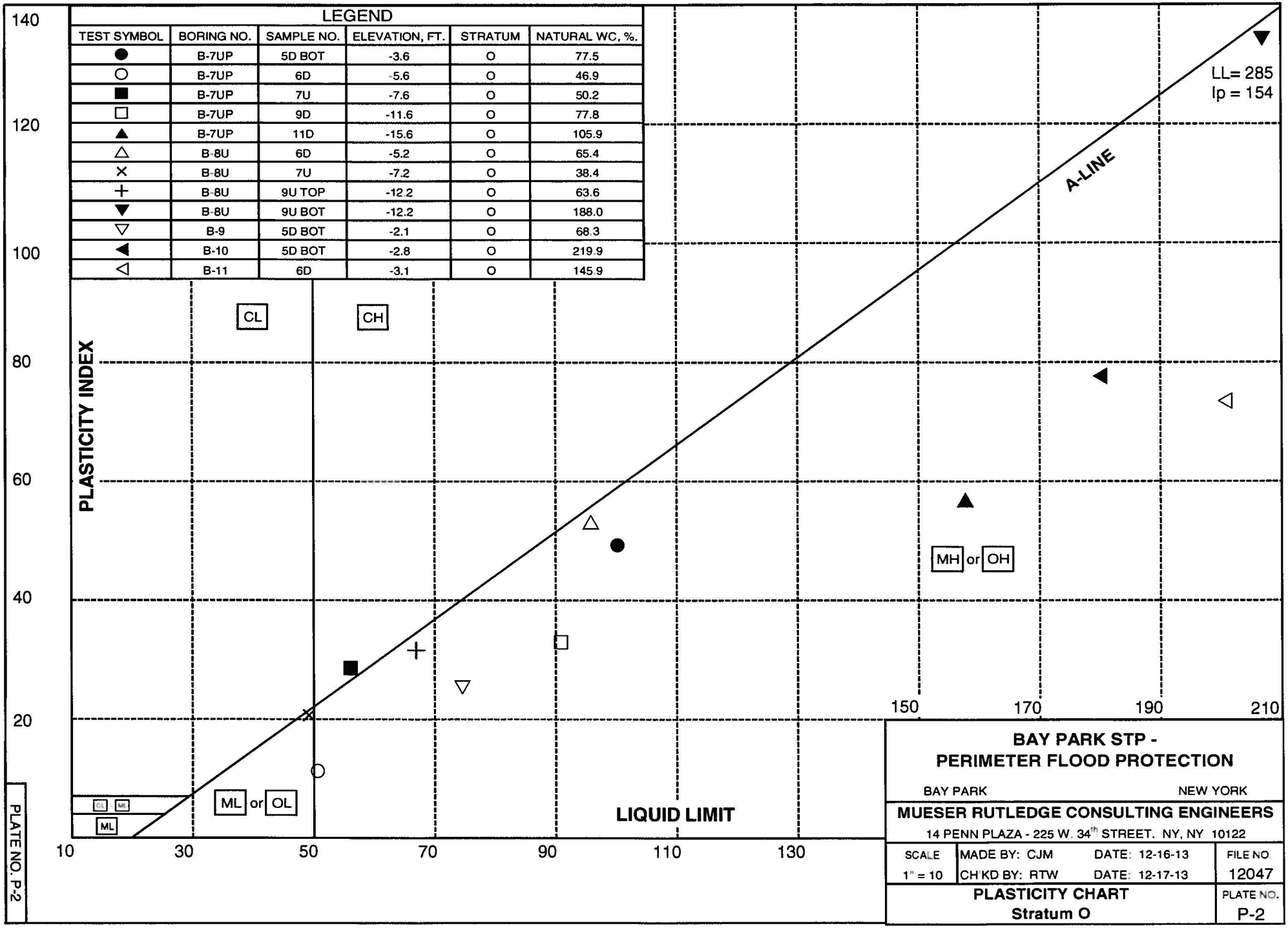
MUESER RUTLEDGE CONSULTING ENGINEERS

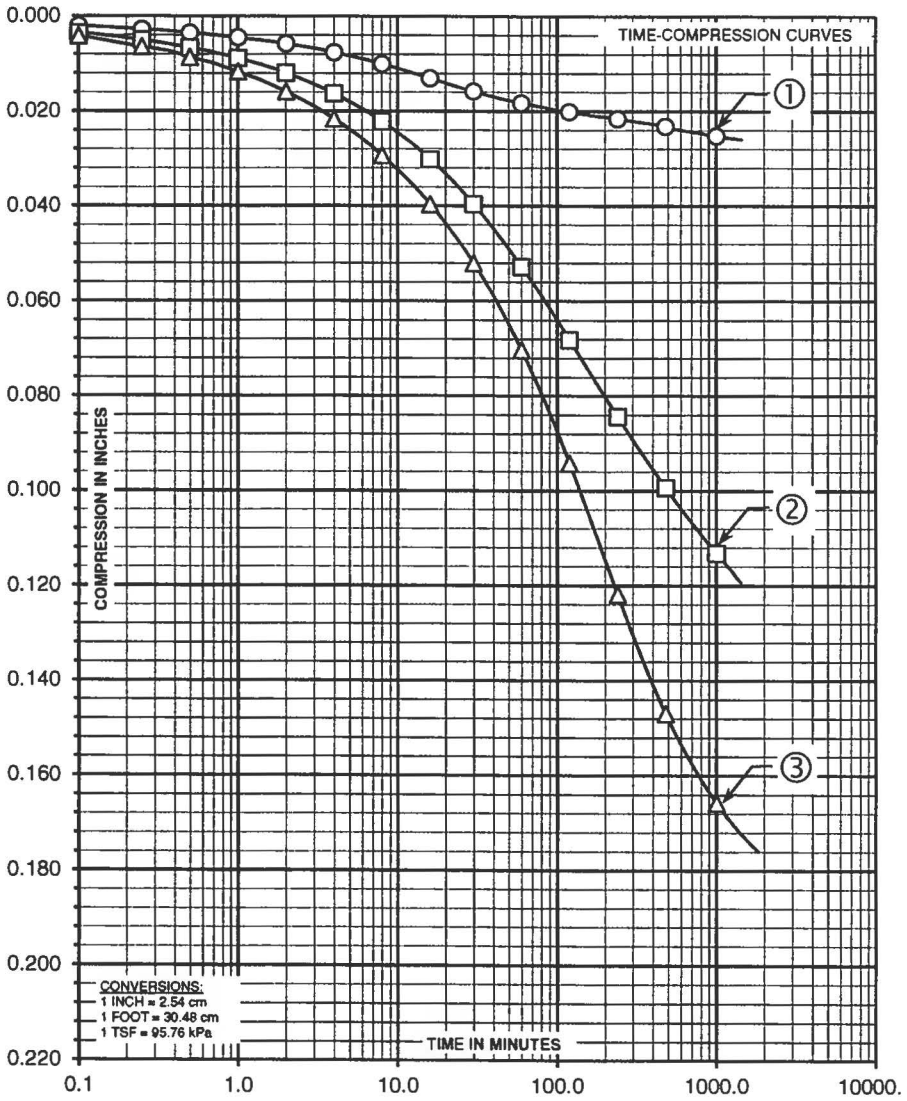
225 WEST 34th STREET, NEW YORK, N.Y. 10122

BAY PARK STP - PERIMETER FLOOD PROTECTION

BAY PARK NEW YORK


LEGEND
TEST SYMBOL | BORING NO. | SAMPLE NO. | ELEVATION, FT. | STRATUM | NATURAL WC, %.
● | B-2P | 6D | -3.8 | O | 273.6
○ | B-3U | 6D | -5.0 | O | 133.4
■ | B-3U | 7U | -7.0 | O | 251.6
□ | B-4A | 6D | -5.2 | O | 217.7
▲ | B-5A | 3D BOT | -5.0 | O | 38.4
△ | B-5A | 6D BOT | -11.0 | O | 53.0
× | B-6U | 5D | -2.2 | O | 86.4
+ | B-6U | 6U | -4.2 | O | 53.1
▼ | B-6U | 7D | -6.2 | O | 49.5
▽ | B-6U | 8D | -9 | O | 77.5
LL= 337
Ip = 144
LL= 291 ■
A-LINE
CL
CH
MH or OH
ML or OL
ML
PLASTICITY INDEX
LIQUID LIMIT
140
120
100
80
60
40
20
10
30
50
70
90
110
130
150
170
190
210
PLATE NO. P-1
BAY PARK STP -
PERIMETER FLOOD PROTECTION
BAY PARK
NEW YORK
MUESER RUTLEDGE CONSULTING ENGINEERS
14 PENN PLAZA - 225 W. 34th STREET. NY, NY 10122
SCALE
1" = 10
MADE BY: CJM
DATE: 12-13-13
CH'KD BY: RTW
DATE: 12-17-13
FILE NO.
12047
PLASTICITY CHART
Stratum O
PLATE NO.
P-1


LEGEND
TEST SYMBOL | BORING NO. | SAMPLE NO. | ELEVATION, FT. | STRATUM | NATURAL WC, %.
● | B-7UP | 5D BOT | -3.6 | O | 77.5
○ | B-7UP | 6D | -5.6 | O | 46.9
■ | B-7UP | 7U | -7.6 | O | 50.2
□ | B-7UP | 9D | -11.6 | O | 77.8
▲ | B-7UP | 11D | -15.6 | O | 105.9
△ | B-8U | 6D | -5.2 | O | 65.4
× | B-8U | 7U | -7.2 | O | 38.4
+ | B-8U | 9U TOP | -12.2 | O | 63.6
▼ | B-8U | 9U BOT | -12.2 | O | 188.0
▽ | B-9 | 5D BOT | -2.1 | O | 68.3
◀ | B-10 | 5D BOT | -2.8 | O | 219.9
◁ | B-11 | 6D | -3.1 | O | 145.9
LL= 285
Ip = 154
A-LINE
CL
CH
MH or OH
ML or OL
ML
PLASTICITY INDEX
LIQUID LIMIT
140
120
100
80
60
40
20
10
30
50
70
90
110
130
150
170
190
210
PLATE NO. P-2
BAY PARK STP -
PERIMETER FLOOD PROTECTION
BAY PARK
NEW YORK
MUESER RUTLEDGE CONSULTING ENGINEERS
14 PENN PLAZA - 225 W. 34th STREET. NY, NY 10122
SCALE
1" = 10
MADE BY: CJM
DATE: 12-16-13
CH'KD BY: RTW
DATE: 12-17-13
FILE NO.
12047
PLASTICITY CHART
Stratum O
PLATE NO.
P-2



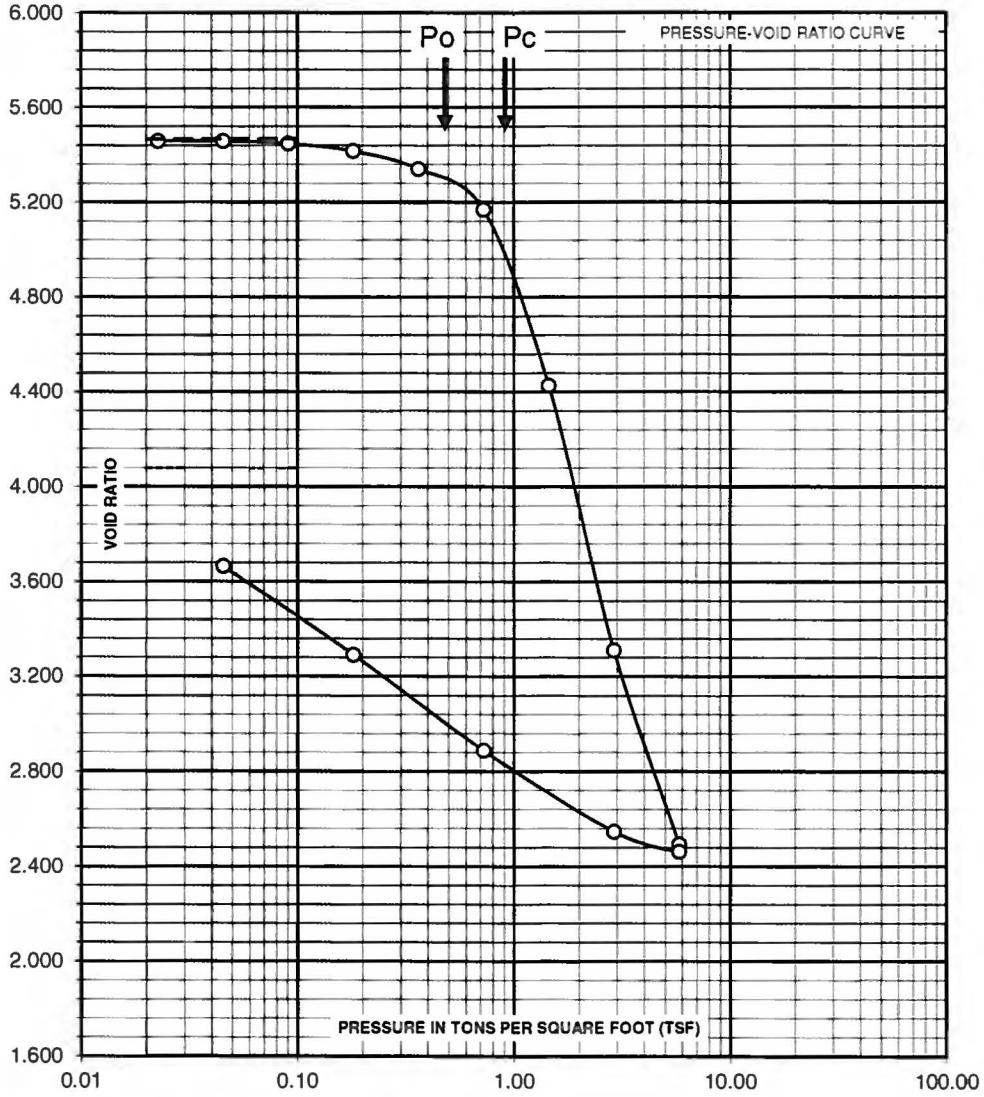


PLATE NO. C-1

CURVE NO.	INCREMENT FROM (TSF)	INCREMENT TO (TSF)
○	0 36	0 72
□	0 72	1.45
△	1 45	2.90

SPECIMEN DESCRIPTION: GRAY BROWN PEAT, TRACE ORGANIC SILTY CLAY

STRATUM O

PROPERTIES OF PLASTICITY LIMIT SPECIMEN

UNIFIED SOILS CLASSIFICATION - PT
LIQUID LIMIT, w_L = 291
PLASTIC LIMIT, w_P = 209
PLASTICITY INDEX, I_P = 82
NATURAL WATER CONT., W_n,% = 251.6
LIQUIDITY INDEX, $(w-w_P)/I_P$ = 0.52
SPECIFIC GRAVITY, G_s = 2.21

PROPERTIES OF CONSOLIDATION SPECIMEN

ELEVATION OF SPECIMEN = -7.6
DEPTH OF SPECIMEN (FT) = 13.6
DIAMETER OF SPECIMEN (IN) = 2.50
INITIAL THICKNESS OF SPECIMEN (IN) = 0.998
INITIAL WATER CONTENT, % = 241.1
FINAL WATER CONTENT, % = 178.9
INITIAL DEGREE OF SATURATION, % = 97.4
FINAL DEGREE OF SATURATION, % = 96 9

— — — — INITIAL VOID RATIO e_o = 5 466
---------- FINAL VOID RATIO, e_f = 4.078
ESTIMATED PRECONSOLIDATION STRESS (TSF), P_c = 0.91
EXISTING OVERBURDEN STRESS (TSF), P_o = 0.48
COMPRESSION INDEX, C_c = 3.720

SWELLING INDEX, C_s = 0.640, REBOUND FROM e = 2.462

BAY PARK STP - PERIMETER FLOOD PROTECTION

BAY PARK NEW YORK

MUESER RUTLEDGE CONSULTING ENGINEERS

225 WEST 34TH STREET, NEW YORK, N.Y. 10122

MADE BY. CJM DATE: 11-21-13 FILE NO. 12047

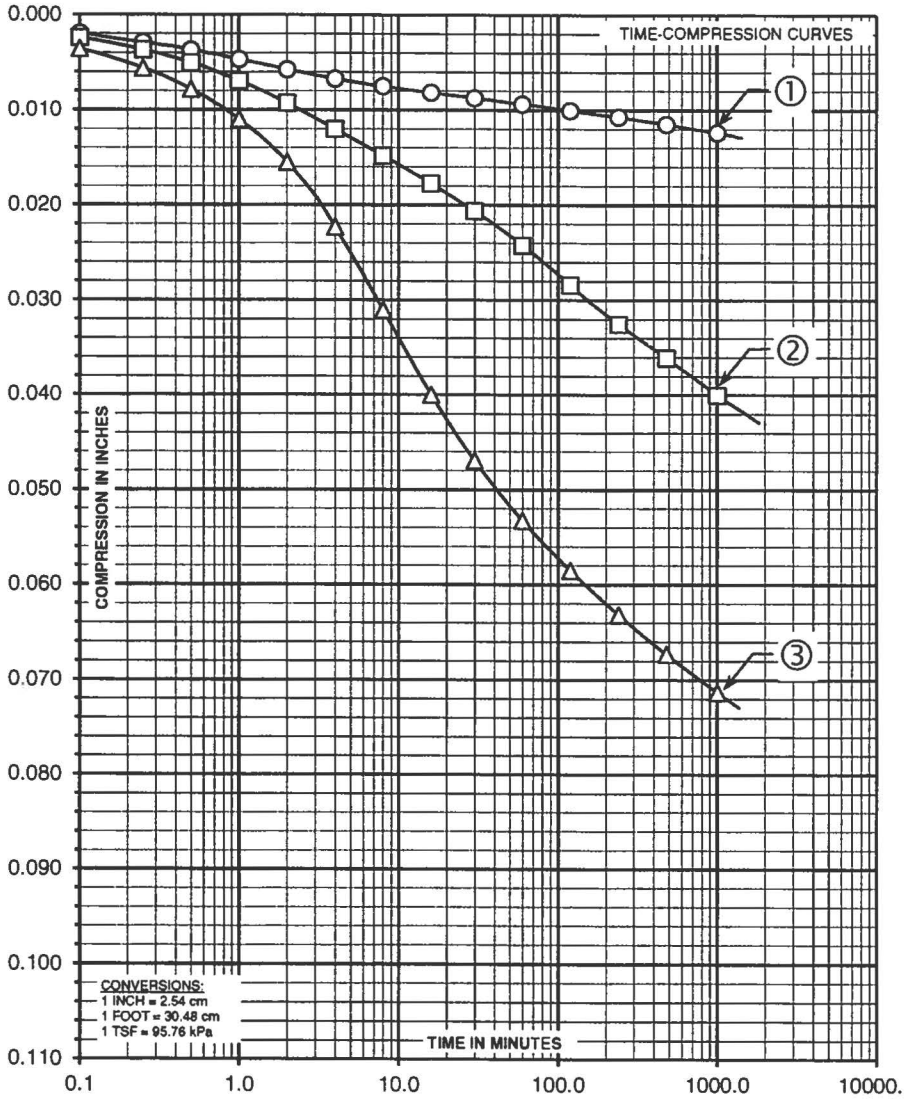
CHKD BY. RTW DATE: 11-21-13

CONSOLIDATION TEST

BORING NO B-3U SAMPLE NO. 7U

PLATE NO. C-1

MRCE Form CONSOL-1



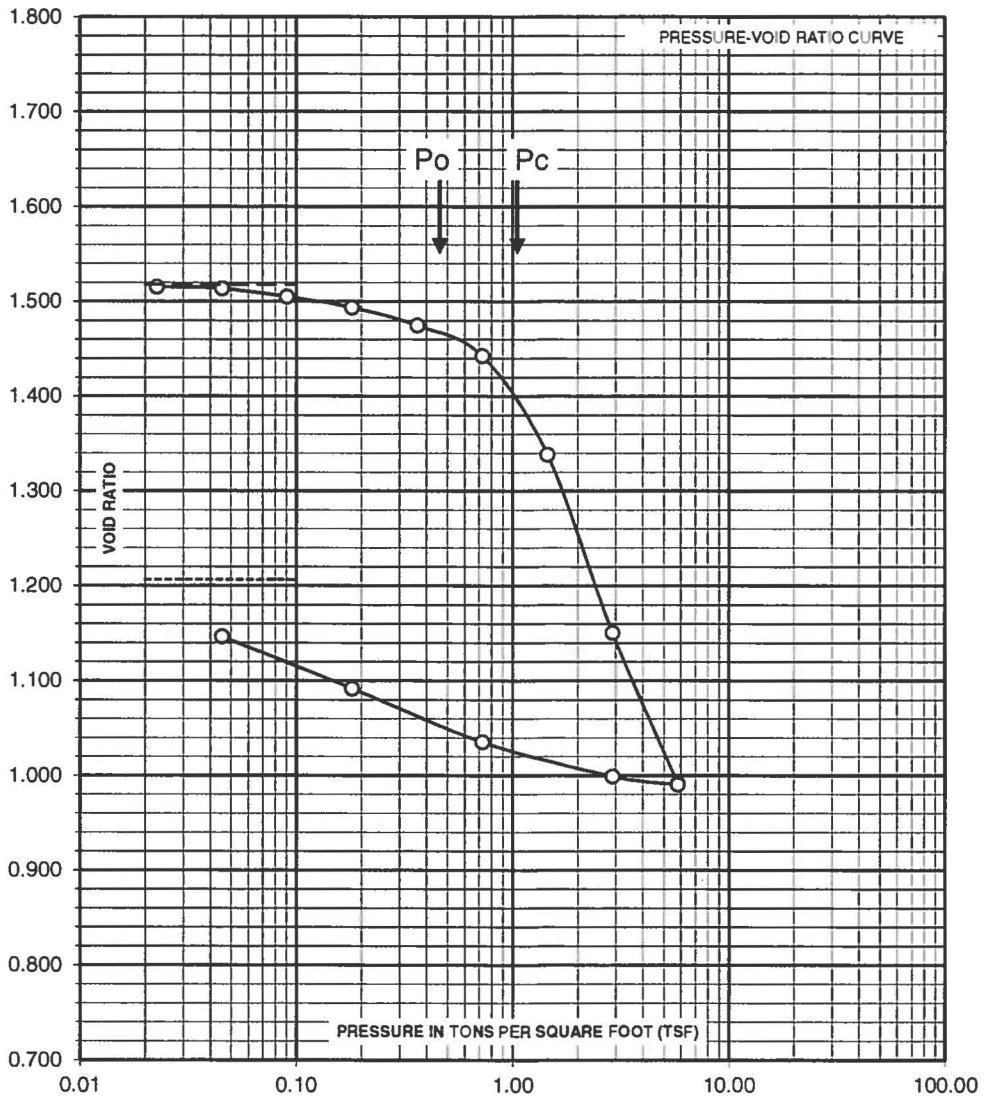


PLATE NO. C-2

CURVE NO.	INCREMENT FROM (TSF)	INCREMENT TO (TSF)
○	0.36	0.72
□	0.72	1.45
△	1.45	2.90

SPECIMEN DESCRIPTION: MEDIUM GRAY ORGANIC SILTY CLAY, TRACE SHELLS

STRATUM O

PROPERTIES OF PLASTICITY LIMIT SPECIMEN

UNIFIED SOILS CLASSIFICATION - OH
LIQUID LIMIT, w_L = 68
PLASTIC LIMIT, w_P = 43
PLASTICITY INDEX, I_P = 26
NATURAL WATER CONT., W_n,% = 53.1
LIQUIDITY INDEX, $(w-w_P)/I_P$ = 0.41
SPECIFIC GRAVITY, G_s = 2.70

PROPERTIES OF CONSOLIDATION SPECIMEN

ELEVATION OF SPECIMEN = -4.7
DEPTH OF SPECIMEN (FT) = 11.5
DIAMETER OF SPECIMEN (IN) = 2.50
INITIAL THICKNESS OF SPECIMEN (IN) = 0.998
INITIAL WATER CONTENT, % = 55.3
FINAL WATER CONTENT, % = 44.0
INITIAL DEGREE OF SATURATION, % = 98.2
FINAL DEGREE OF SATURATION, % = 98.4

INITIAL VOID RATIO, e_o = 1.518
FINAL VOID RATIO, e_f = 1.206
ESTIMATED PRECONSOLIDATION STRESS (TSF), P_c = 1.05
EXISTING OVERBURDEN STRESS (TSF), P_o = 0.46
COMPRESSION INDEX, C_c = 0.634

SWELLING INDEX, C_s = 0.094, REBOUND FROM e = 0.991

BAY PARK STP - PERIMETER FLOOD PROTECTION

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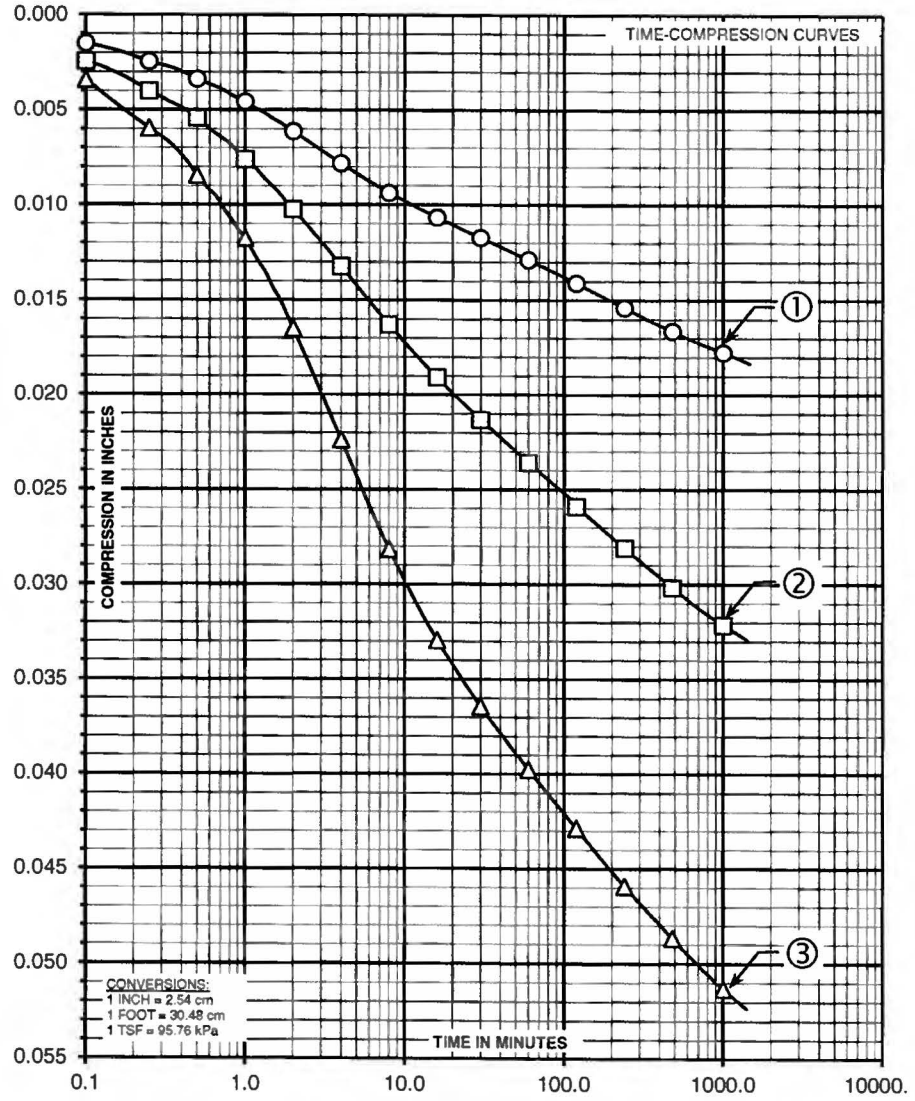
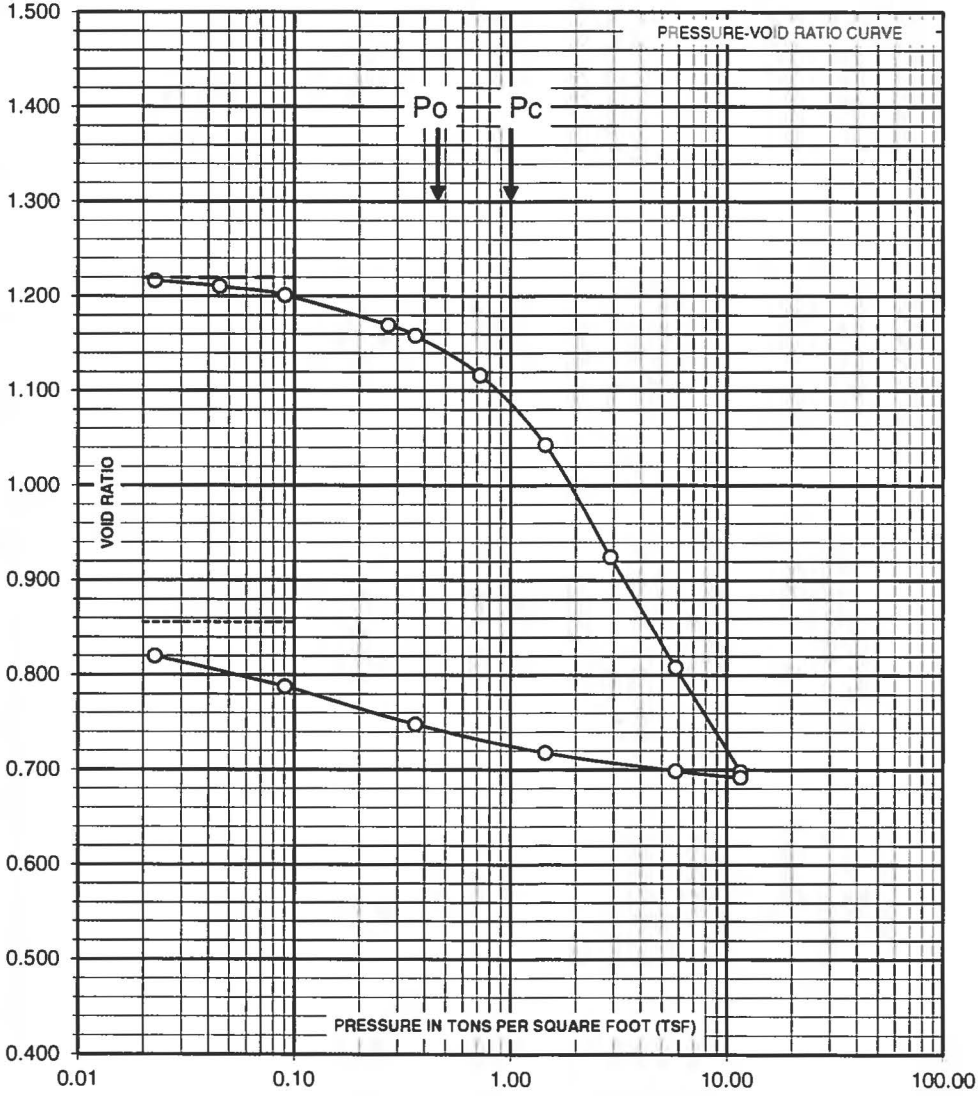
CONSOLIDATION TEST

BORING NO. B-6U SAMPLE NO. 6U

PLATE NO C-2

MRCE Form CONSOL-1





CURVE NO.	INCREMENT FROM (TSF)	INCREMENT TO (TSF)
○	0.36	0 72
□	0.72	1.45
△	1.45	2.90

PLATE NO. C-3

SPECIMEN DESCRIPTION: MEDIUM GRAY ORGANIC SILTY CLAY, TRACE SHELLS

STRATUM O

PROPERTIES OF PLASTICITY LIMIT SPECIMEN

UNIFIED SOILS CLASSIFICATION - OH-CH
LIQUID LIMIT, w_L = 56
PLASTIC LIMIT, w_P = 28
PLASTICITY INDEX, I_P = 29
NATURAL WATER CONT., W_n% = 50.2
LIQUIDITY INDEX, $(w-w_P)/I_P$ = 0.78
SPECIFIC GRAVITY, G_s = 2.61

PROPERTIES OF CONSOLIDATION SPECIMEN

ELEVATION OF SPECIMEN = -7.6
DEPTH OF SPECIMEN (FT) = 13.0
DIAMETER OF SPECIMEN (IN) = 2.50
INITIAL THICKNESS OF SPECIMEN (IN) = 0.992
INITIAL WATER CONTENT, % = 47.9
FINAL WATER CONTENT, % = 34.3
INITIAL DEGREE OF SATURATION, % = 102.3
FINAL DEGREE OF SATURATION % = 104.4

INITIAL VOID RATIO, e_0 = 1 220
FINAL VOID RATIO, e_f = 0.856
ESTIMATED PRECONSOLIDATION STRESS (TSF), P_c = 1.00
EXISTING OVERBURDEN STRESS (TSF), P_o = 0.46
COMPRESSION INDEX, C_c = 0.398

SWELLING INDEX, C_s = 0.058, REBOUND FROM e = 0 692

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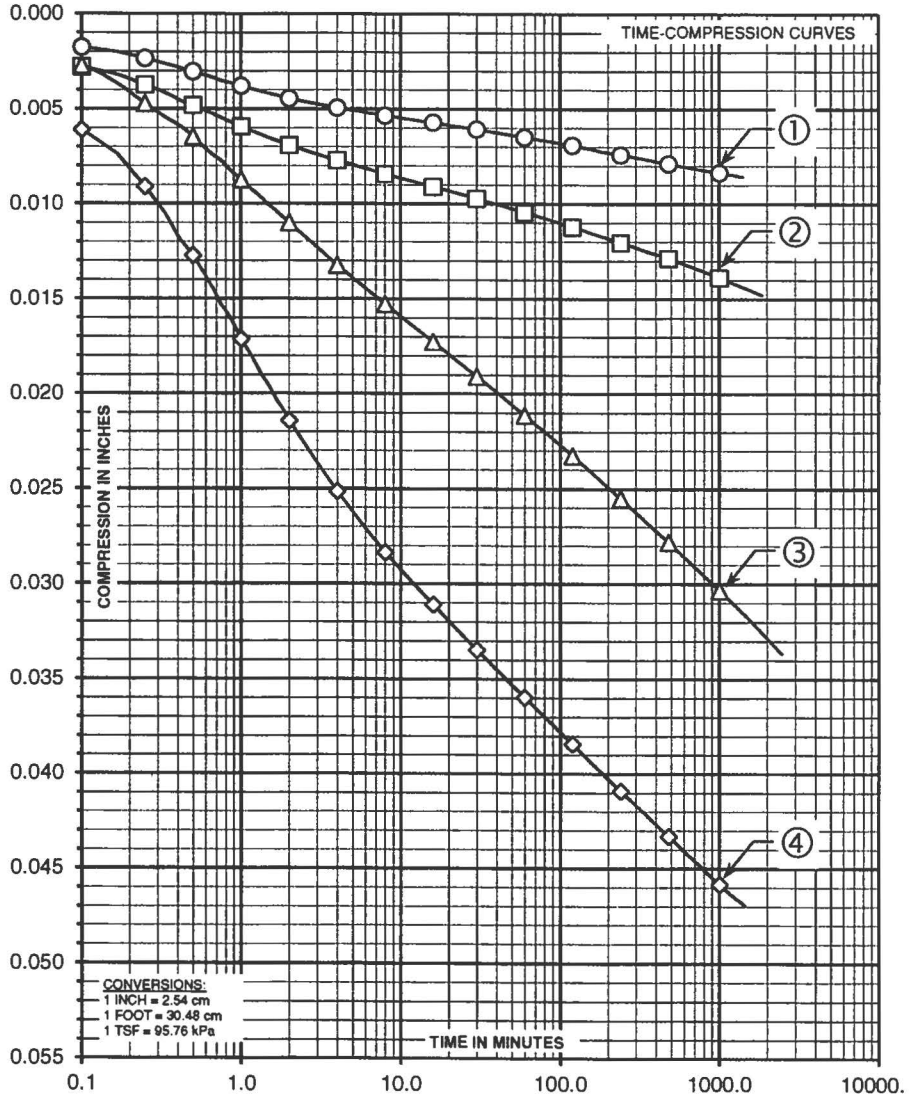
CONSOLIDATION TEST
BORING NO B-7UP SAMPLE NO. 7U

PLATE NO. C-3

MRCE Form CONSOL-1



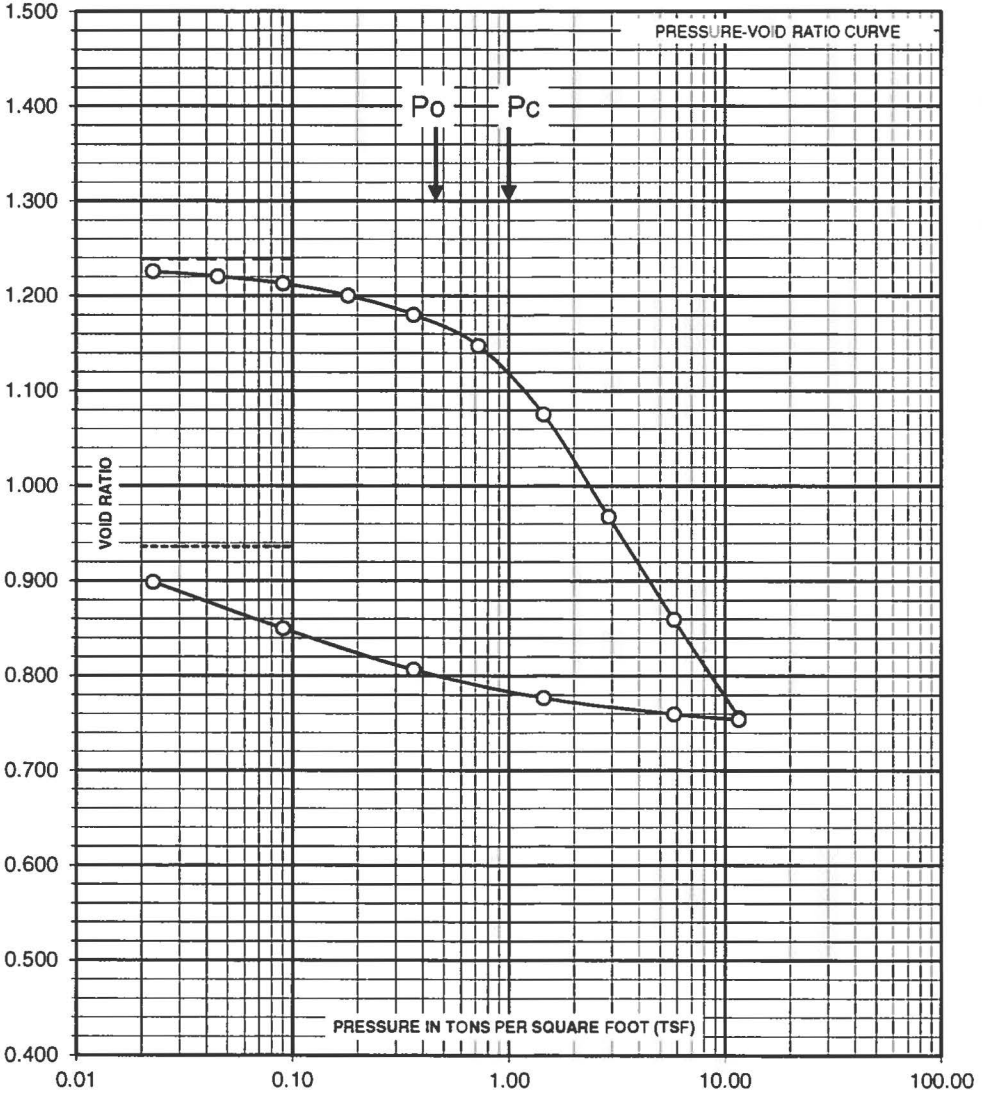


PLATE NO. C-4

CURVE NO.	INCREMENT FROM (TSF)	INCREMENT TO (TSF)
○	0.18	0.36
□	0.36	0.72
△	0.72	1.45
◇	2.90	5.79

SPECIMEN DESCRIPTION: MEDIUM GRAY ORGANIC SILTY CLAY, TRACE SHELLS — STRATUM O

PROPERTIES OF PLASTICITY LIMIT SPECIMEN

UNIFIED SOILS CLASSIFICATION - OL
LIQUID LIMIT, w_L = 49
PLASTIC LIMIT, w_P = 29
PLASTICITY INDEX, I_P = 20
NATURAL WATER CONT., W_n% = 38.4
LIQUIDITY INDEX, $(w-w_P)/I_P$ = 0.46
SPECIFIC GRAVITY, G_s = 2.67

PROPERTIES OF CONSOLIDATION SPECIMEN

ELEVATION OF SPECIMEN = -7.3
DEPTH OF SPECIMEN (FT) = 13.1
DIAMETER OF SPECIMEN (IN) = 2.51
INITIAL THICKNESS OF SPECIMEN (IN) = 0.990
INITIAL WATER CONTENT, % = 47.0
FINAL WATER CONTENT, % = 35.4
INITIAL DEGREE OF SATURATION, % = 101.1
FINAL DEGREE OF SATURATION, % = 100.9

— — — — INITIAL VOID RATIO, e_o = 1.239
---------- FINAL VOID RATIO, e_f = 0.936
ESTIMATED PRECONSOLIDATION STRESS (TSF), P_c = 1.00
EXISTING OVERBURDEN STRESS (TSF), P_o = 0.46
COMPRESSION INDEX, C_c = 0.362

SWELLING INDEX, C_s = 0.068, REBOUND FROM e = 0.754

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BAY PARK NEW YORK

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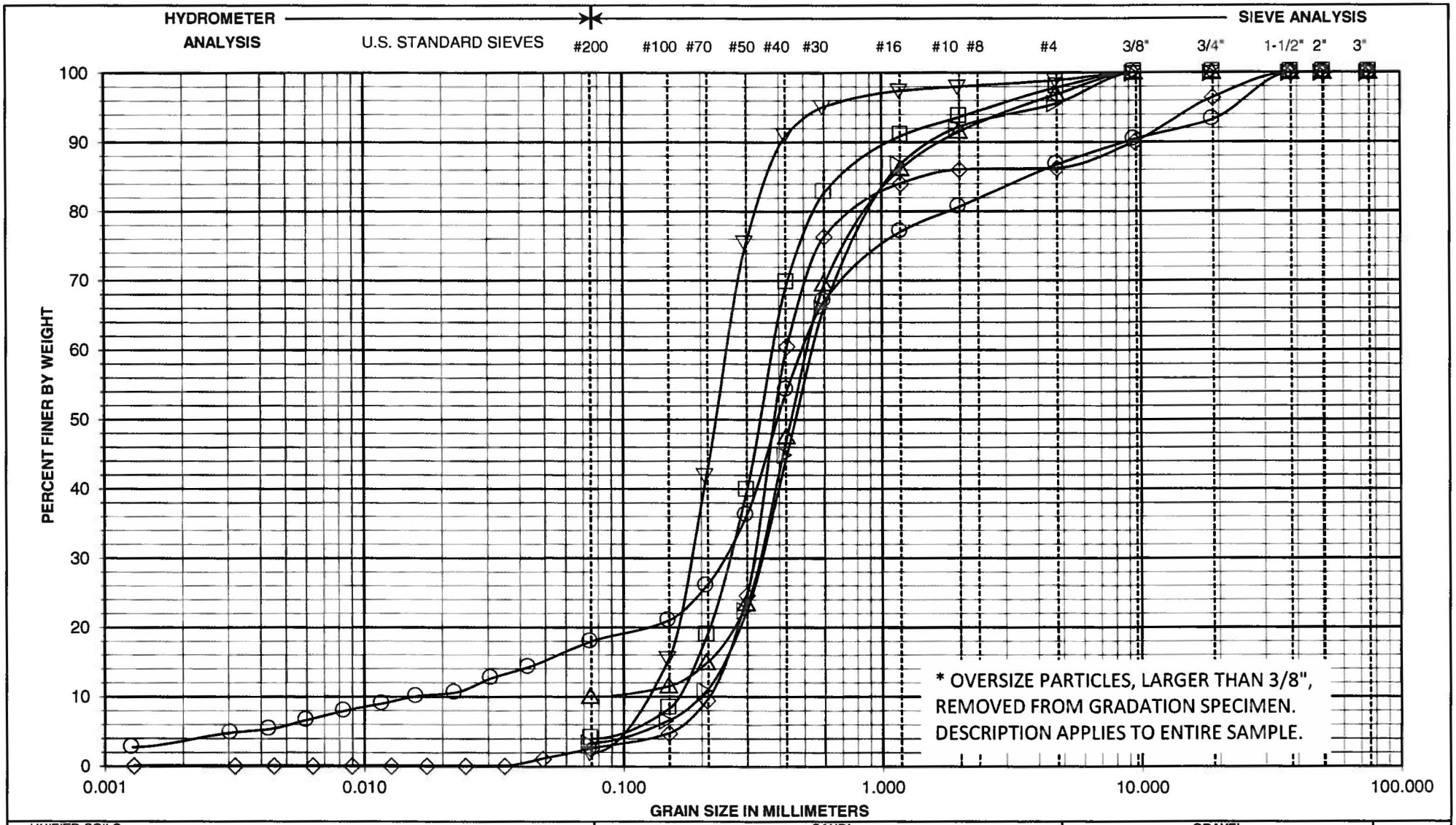
CONSOLIDATION TEST
BORING NO. B-8U SAMPLE NO. 7U
PLATE NO. C-4

MRCE Form CONSOL-1



UNIFIED SOILS CLASSIFICATION	CLAY OR SILT	SAND			GRAVEL		COBBLES
		FINE	MEDIUM	COARSE	FINE	COARSE	

SYMBOL	BORING	SAMPLE	STRATUM	* - % OVERSIZED	DESCRIPTION OF SAMPLE
○	B-1	2HA	F		Brown fine to coarse sand, some silt, gravel (SM)
□	B-1	3HA	F	15.9	Tan brown fine to medium sand, some gravel, trace coarse sand, silt (SP)
△	B-1	5D	S	2.3	Brown medium to fine sand, trace silt, coarse sand, gravel (SP-SM)
◇	B-1	7D	S		Tan brown fine to medium sand, some gravel, trace silt (SP)
▽	B-1	9D	S		Tan brown fine to medium sand, trace silt, gravel, coarse sand (SP)
▷	B-1	11D	S	6.6	Tan and orange brown medium to fine sand, trace gravel, silt, coarse sand (SP)

PLATE NO. G-1

BAY PARK STP

BAY PARK NEW YORK

MUESER RUTLEDGE CONSULTING ENGINEERS

225 WEST 34TH STREET, NEW YORK, N.Y. 10122

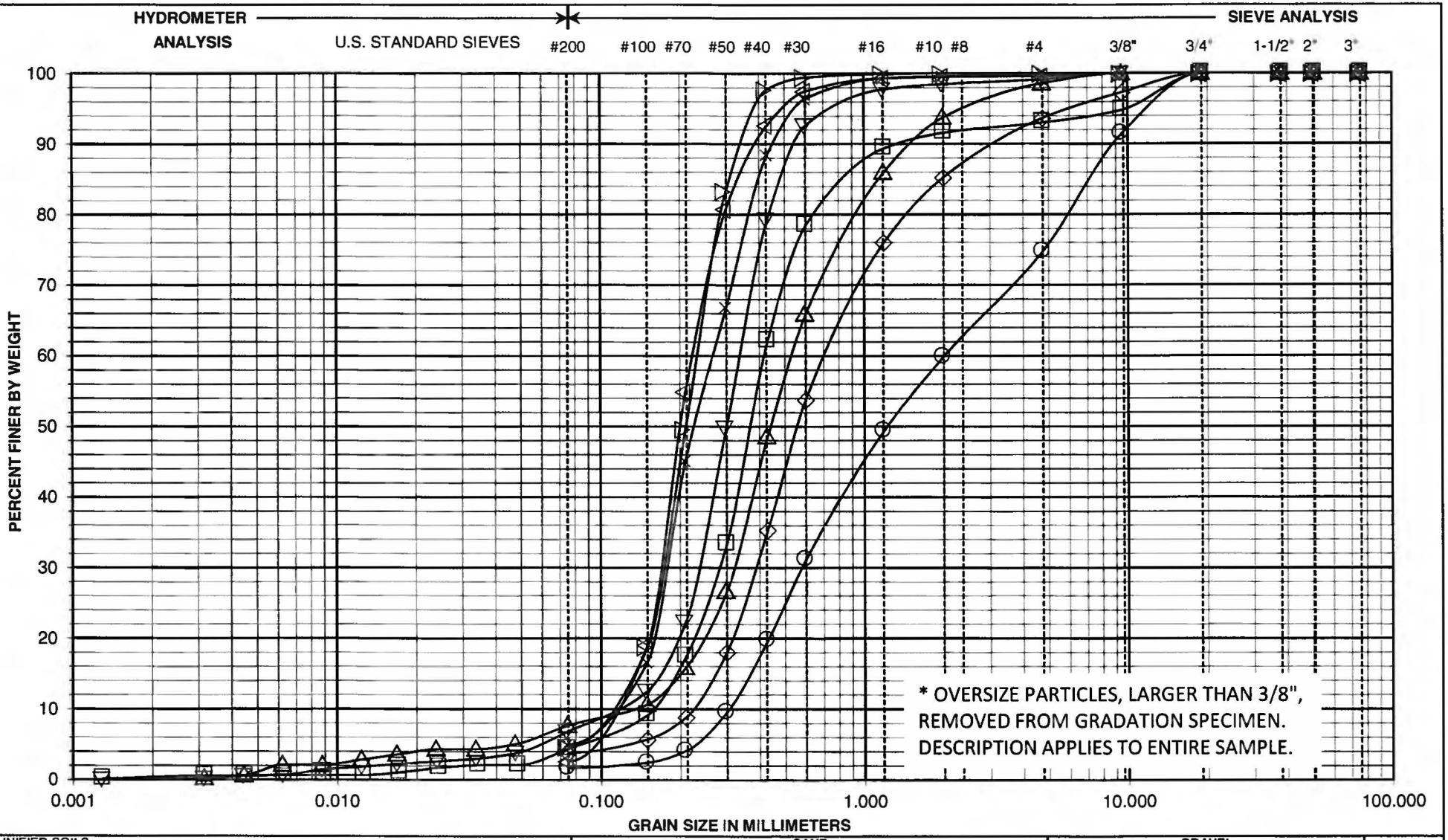
MADE BY. CJM DATE: 12-16-13 FILE NO. **12047**

CH'KD BY: RTW DATE: 12-19-13

GRADATION CURVES

BORING NO. B-1

PLATE NO. G-1



UNIFIED SOILS CLASSIFICATION	CLAY OR SILT	SAND			GRAVEL		COBBLES
		FINE	MEDIUM	COARSE	FINE	COARSE	

SYMBOL	BORING	SAMPLE	STRATUM	* - % OVERSIZED	DESCRIPTION OF SAMPLE
○	B-2P	2HA	F		Tan and light brown fine to coarse sand, some gravel, trace silt (SP)
□	B-2P	5D	S		Brown fine to medium sand, trace gravel, silt, coarse sand (SP)
△	B-2P	8D	S		Green brown medium to fine sand, trace silt, coarse sand, gravel, peat (SP-SM)
◇	B-2P	9D	S		Green brown fine to coarse sand, trace gravel, silt (SP)
▽	B-2P	10D	S		Green brown fine to medium sand, trace silt, gravel, coarse sand (SP-SM)
▷	B-2P	13D	S		Orange brown fine sand, trace silt, medium sand (SP)
◁	B-2P	16D	S		Light brown fine to medium sand, trace silt (SP)
×	B-2P	20D	S		Tan fine to medium sand, trace silt (SP-SM)

PLATE NO. G-2

BAY PARK STP

BAY PARK NEW YORK

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225 WEST 34TH STREET, NEW YORK, N.Y. 10122

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CH'KD BY: RTW DATE: 12-19-13

FILE NO. **12047**

GRADATION CURVES

BORING NO. B-2P

PLATE NO G-2