ENGINEERING REPORT

for

CONTRACT NUMBER DACW-33-83-D-0006
WORK ORDER NUMBER 0009

SUBSURFACE INVESTIGATION

SCITUATE HARBOR
SCITUATE, MASSACHUSETTS

May 22, 1984

Prepared for:

U.S. Army Corps of Engineers
New England Division
424 Trapelo Road
Waltham, Massachusetts 02254

EGA

EGA
EASTERN GEOTECHNICAL ASSOCIATES • BRIGGS
164 Washington Street, Norwell, MA 02061 ▷ Telephone (617) 773-1744

May 22, 1984

Mr. Joe B. Fryar, P.E.
Chief - Engineering Division
New England Division
U.S. Army Corps of Engineers
424 Trapelo Road
Waltham, Massachusetts 02254

RE: Contract DACW-33-83-C-0006
Work Order No. 0009

Dear Mr. Fryar:

In accordance with Work Order No. 0009, dated 11 April 1984, we enclose one copy of our Engineering Report for the subsurface investigation performed at Scituate Harbor, Scituate, Massachusetts for proposed anchorages. Two additional copies have been delivered under separate cover to your Geotechnical Engineering Branch.

If you have any questions or comments, please do not hesitate to call.

Very truly yours,

David S. Campbell, P.E.
President

DSC/rb
Attachments

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1.0 GENERAL

1.1 Authorization

The work reported herein was performed under Contract DACW 33-81-D-0006, Work Order Number 0009, dated 11 April 1984. The authority for this project was derived from Section 107, Small Boat Navigation Project.

1.2 Project Site

The site is located in Scituate Harbor, Scituate, Massachusetts. The project site is shown on the Site Location Plan, Figure 1.

1.3 Purpose

The purpose of this work was to determine the subsurface conditions for the proposed anchorages in Scituate Harbor, Scituate, Massachusetts.

1.4 Scope of the Investigation

Inspection and exploration instructions, which were provided by the Army Corps of Engineers, New England Division, are included in Appendix A. The subsurface investigation program employed continuous drive sample borings and machine probes.

Work under this delivery order consisted of locating four drive sample borings and twenty-nine machine probes by means of survey at locations as shown on Figure 2. Elevations were to be estimated from daily tide curves using mean low water (MLW) as the datum.

The drive sample borings were performed in accordance with paragraph "7" page C-11 of the specifications using a solid-barrel sampler with sampling intervals of 5 ft. The borings were taken to the specified depth of 15 ft or refusal. Where refusal was encountered, rock was to be cored a minimum of three feet, when breakthrough occurs within the three feet, then one 5 foot drive shall be performed. The field logs for the test borings are included as Appendix D. The machine probes were performed in accordance with paragraph "8c. (3)" page C-14 of the specifications using "AW" size drill rods. Probes P-1 thru P-18 were driven to the specified depth of -10 ft MLW or refusal and probes P-19 thru P-29 were driven to -15 ft MLW or refusal. The field logs for the probes are included as Appendix E.

2.0 QUALITY CONTROL

2.1 Equipment

The following equipment and tools were used to perform the work:

a. Drilling Platform: A 16 by 12 ft wooden raft was used as the drilling platform. The raft was moved by a 16 ft Boston Whaler, powered by a one hundred horsepower Johnson outboard motor.

b. Core Drill: The core drill used was a modern hydraulically driven rotary head unit manufactured by Acker Drill Company.

c. Drive Hammer: The drive hammer used to advance the solid-barrel sampler and drill rods for probes weighed approximately 300 pounds.

d. Casing and Rods: NW (3-0 in. I.D.) flush joint casing was used to keep the borehole open. AW-size drill rods were used in washing out the borehole and driving the solid-barrel sampler and AW drill rods for probes.

e. Samplers: The equipment employed to obtain soil samples was a solid-barrel sampler 5.0 ft in length with an inside diameter of 1-7/8 in. Rock cores were obtained by a swivel head, double tube, 2-3/16 in. I.D. core barrel using an impregnated diamond bit.

2.2 Records

NED Forms 121, 58 and 58A were used to record pertinent drilling and sampling operations. The boring and probe logs include the following information:

(1) Name of project.

(2) Site location designation.

(3) Ground elevation at location of exploration.

(4) Date exploration performed.

(5) Method of penetration.

(6) Depth of penetration.

(7) Density of material encountered, determined by sound and performance of probing operation.

(8) Name of driller and Field Inspector.

(9) Blows/foot or blows/six inches of penetration.

The test boring logs contained the following information:

(1) Hole number, hole designation and elevation of top of hole.

(2) Make and manufacturer's model designation of equipment.

(3) Type of drilling and sampling operation by depth.

(4) Dates and time by depth when drilling and sampling operations were performed.

(5) Depths at which samples or cores were recovered or attempts made to sample including top and bottom depths of each sampling interval. Classification or description including geologic and common usage designation such as till, fluvial deposits, etc. by depths of materials sampled or penetrated including a description of moisture conditions, color and conditions of compactness or stiffness of soils materials encountered. Record of penetration resistance such as drive hammer blows given in blows per foot or six inches of penetration depth for driving sample spoons.

(6) Depths at which drill water is lost and regained.

(7) Depth to bottom of hole.

(8) Percentage of sample of core recovered per run.

2.3 Procedures

a. Boreholes were advanced by sampling in which a 1-7/8 inch I.D. by 5.0 foot solid-barrel sampler was advanced from the ground surface or below the bottom of the casing into undisturbed soil by the impact of a hammer weighing approximately 300 pounds, falling 18 inches. Refusal was defined as 100 blows with no penetration or bouncing refusal.

b. The sample spoon shoes were kept reasonably sharp at all times. Dull, bent, or otherwise damaged samplers were not used. Following sampling, the casing was advanced and cleaned out using an appropriately sized side discharging chopping bit or roller rock bit.

c. Samples were classified in the field immediately following the taking of the sample. Classification was in accordance with ASTM D-2487 and D-2488. Representative samples were taken from each soil sampling run and placed in 16 oz. glass jars with hermetically sealed lids. Jars were labeled with sample number, sampling interval, boring number, date, location, and soil description. A chain of custody log was maintained documenting custody of the samples between the field and transportation and delivery to the laboratory at NED.

d. The machine probes were made by advancing an open-end AW drill rod from the mudline to the specified depth or refusal by the impact of a 300 pound hammer falling freely through an 18 inch drop, recording the blows per foot of penetration. Refusal is defined as 100 blows with no penetration or bouncing refusal.

e. The location of each test boring and probe was established by turning an angle from control points on shore and using stadia readings for measuring the distance. Control points on shore were provided by the Corps of Engineers, NED, and were tied into the Lambert Grid Coordinate System. Survey data is included in Appendix G.

3.0 QUALITY CONTROL CERTIFICATION

I hereby certify that the above-mentioned records, equipment, and procedures were used to perform the subsurface exploration described herein. I also certify that the work was performed in a professional manner and meets the requirements set forth in the work order.

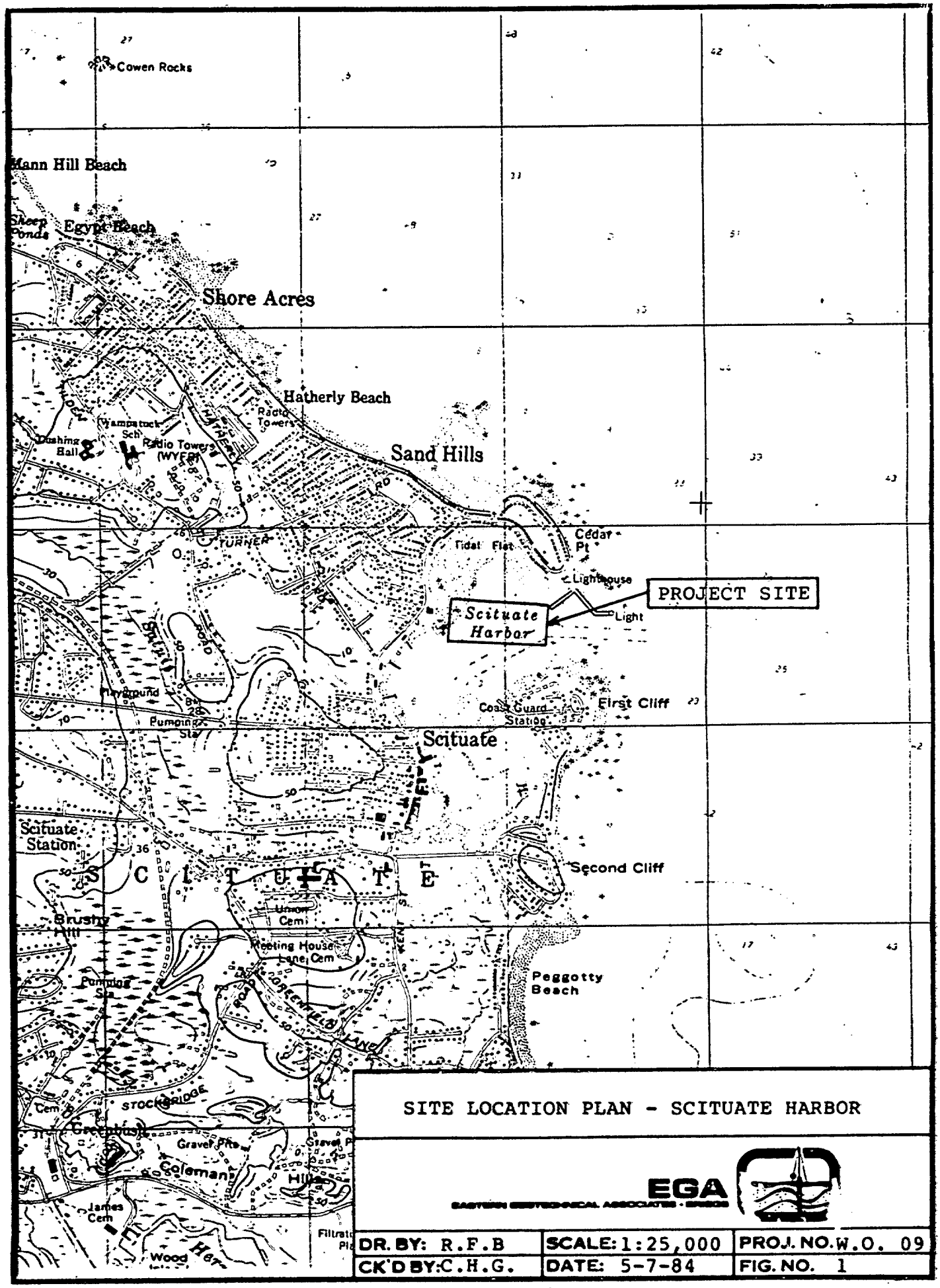
CERTIFIED 22 May 1984

David S. Campbell

TABLE 1

SUMMARY OF ACTIVITIES

DATE	ACTIVITY
20 April	Friday: Mobilized drilling equipment to Scituate Harbor, Scituate Massachusetts. Unloaded and assembled raft and launched using a crane provided by Young's Boat Yard. Surveyors checked control points Walsh, Gate, Pool, and Light provided Corps of Engineers, NED. Control point Yatch was not found, but was relocated using offsets provided. A concrete deck was to be poured over control point Walsh today, offsets were taken so point could be reestablished for future use.
21 April	Saturday: Launched Boston Whaler and set buoys for boring B-2 and probes P-14 thru P-18.
23 April	Monday: Started and completed Probe FP-84-1 and boring FD-84-1 to 11.5 ft, at which depth a boulder was encountered and required coring.
24 April	Tuesday: Unable to work due to rain.
25 April	Wednesday: Surveyors set buoys for probes P-19 thru P-29 and boring B-3. Completed borings FD-84-1 and FD-84-2 and probes FP-84-2 thru FP-84-5.
26 April	Thursday: Completed probes FP-84-6 thru FP-84-13.
27 April	Friday: Completed boring FD-84-3 and probes FP-84-14 thru FP-84-19.
28 April	Saturday: Set buoys for probes P-1 thru P-12 and boring B-1. Survey field work completed.
30 April	Monday: Completed probes FP-84-20 thru FP-84-25.
1 May	Tuesday: Completed boring FD-84-4 and probes FP-84-26 thru FP-84-29. The subsurface investigation program was completed today.
2 May	Tuesday: Drilling equipment, boat and raft were demobilized.



SITE LOCATION PLAN - SCITUATE HARBOR

EGA
EASTERN GEOTECHNICAL ASSOCIATES

DR. BY: R.F.B	SCALE: 1:25,000	PROJ. NO. W.O. 09
CK'D BY: C.H.G.	DATE: 5-7-84	FIG. NO. 1

TOPAZ A&E SUPPLY, INC. 1642

APPENDIX A

INSPECTION AND EXPLORATION INSTRUCTIONS

ATTACHMENT NO. 1

GEB REQUISITION NO. 84-39 - DACW 33-83-D-0006

DELIVERY ORDER NO. 0009

INSPECTION AND EXPLORATION INSTRUCTIONS

PROJECT: Section 107, Small Boat Navigation Project

SITE: Scituate Harbor, Scituate, MA

PURPOSE: The subsurface investigations are to determine the foundation conditions for the proposed anchorages in Scituate Harbor, Scituate, MA

1. SCOPE OF INVESTIGATION

a. Locate four continuous 300# cased drive sample borings and twenty-nine 300# machine probes by survey at locations shown on Attachment 2. Elevations will be estimated based on daily tide curves or tide gage. Mean low water (MLW) will be the datum used on all boring logs and throughout the engineering report.

b. Eighteen machine probes (P-1 thru P-18) shall be driven to an elevation of up to -10 MLW or refusal in accordance with paragraph 8c. (3) page C-14 of the specifications and shall be performed using "A" size rods.

c. Eleven machine probes (P-19 thru P-29) shall be driven to an elevation of up to -14 MLW or refusal in accordance with paragraph 8c. (3) page C-14 of the specifications and shall be performed using "A" size roads.

d. The four continuous (B-1 thru B-4) drive sample borings shall be driven to a depth of 15 ft. The sampling work shall be in accordance with paragraph 7, page C-11 of the specifications. Water content jar samples shall be taken in all fine grain soil which exhibits any plasticity. Where refusal is encountered, 3 feet of rock core will be drilled terminating the work at this location unless breakthrough occurs within the 3 feet then one 5 foot drive shall be performed.

e. A geotechnical inspector shall act as field inspector while performing the borings and probes. The inspector shall provide telephone reports to Mr. Blair, Corps of Engineers, at 617-647-8396 at least every two working days and upon completion of each boring.

f. All samples shall be delivered to the Corps of Engineers Headquarters in Waltham, Massachusetts by the field inspector. Sample delivery shall be coordinated with the Director, NED Materials and Water Quality Laboratory at 617-647-8367/8392.

2. SITE CONDITIONS

The proposed exploration program is in Scituate Harbor, Scituate, MA. All of proposed explorations are within the tidal range. It is anticipated that water depths at the exploration site range from 0 to 20 ft.

3. RIGHTS OF ENTRY

The Contractor is responsible for securing any rights of entry, approvals, permits, etc. necessary for the performance of the work.

4. COORDINATION

Mr. James Blair, Corps of Engineers, 617-647-8396, shall be contacted five days prior to start of work and at least every two working days or at the completion of each boring whichever is more frequent by the geotechnical inspector to report on how work is progressing and what types of materials are being encountered.

5. EXPLORATION NUMBERS

The machine probes designated P-1 through P-29 and located on Attachment 2 shall be numbered FP-84-1 through FP-84-29 in order of their completion. The drive sampling borings designated B-1 through B-4 and located on Attachment 2 shall be numbered FD-84-1 through FD-84-4 in order of their completion. The new numbers shall be indicated on the exploration logs and shown on a plan of explorations.

6. GOVERNMENT REVIEW

The Government will review the draft submittal as well as the completed work. Subsequent to such review, the Contractor shall accomplish any corrections which may be directed as the result of the Government review.

7. COMPLETION SCHEDULE

Services under this delivery order shall start within 15 calendar days after receipt of delivery order. Duration of field work is estimated to be eight work days. The geotechnical report shall be submitted in draft format for review by the Government, post-marked no later than seven calendar days after completion of the field work. Government review will take approximately ten calendar days from receipt of draft report. The final geotechnical report shall be submitted post-marked no later than seven calendar days after receipt of draft report including the action taken on possible Government comments.

U.S.A. Engineer Division
Corps of Engineers
New England

SURVEY STATION DATA

Waterway: Scituate Hbr. Mass

Station: A Gate (1938)

OK July 1980 J.P.C

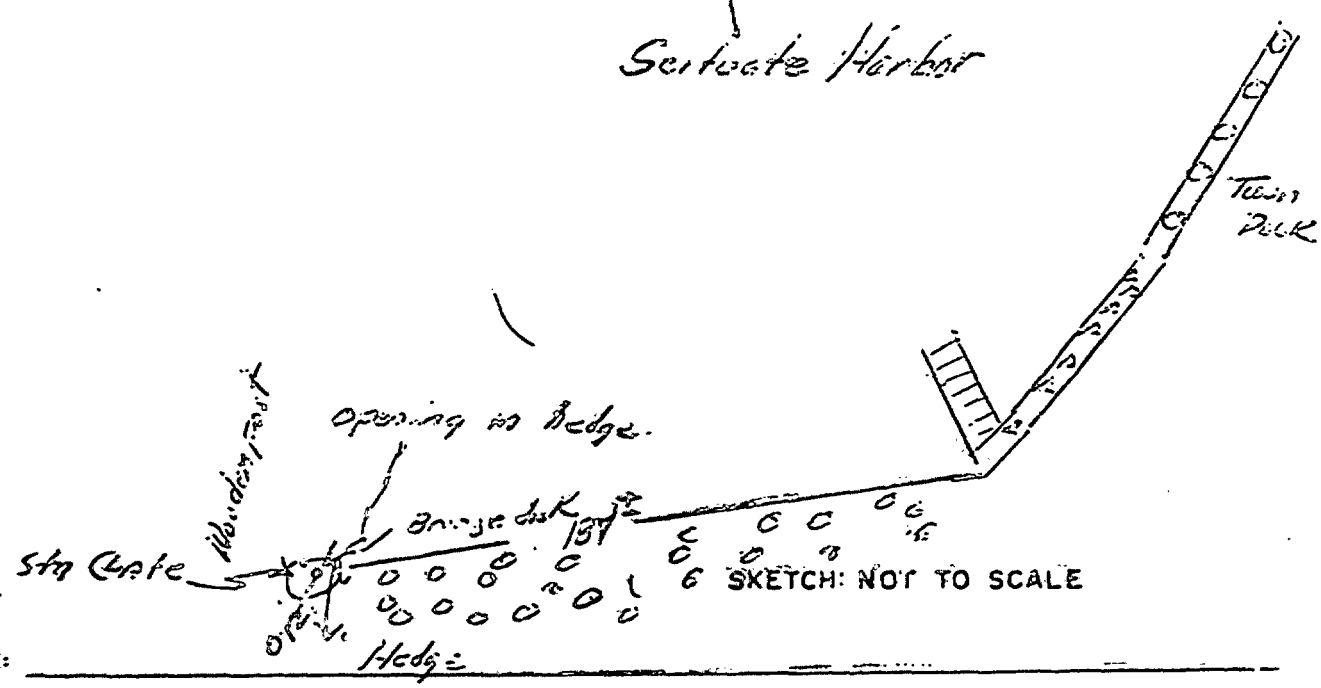
	N or S	E or W
Coordinates:		

Origin _____

REFERENCE ANGLES

00°00'00" on	ANGLE	TO	00°00'00" on	ANGLE	TO

REFERENCES:
FIELD BOOK NO. _____



SKETCH: NOT TO SCALE

REMARKS: A bronze disk in a granite block 22' east of a wooden gate in a hedge. This on the N.E. of the harbor behind the Rebecca & Abigail Bates house.

NED 2024 JUN 69 539

ATTACHMENT #3

U.S.A. Engineer Division
Corps of Engineers
New England

SURVEY STATION DATA

Waterway: SCITUATE HARBOR, MASS

Station: △ "POOL" (1964)

	N or S	E or W
Coordinates:	[redacted]	[redacted]

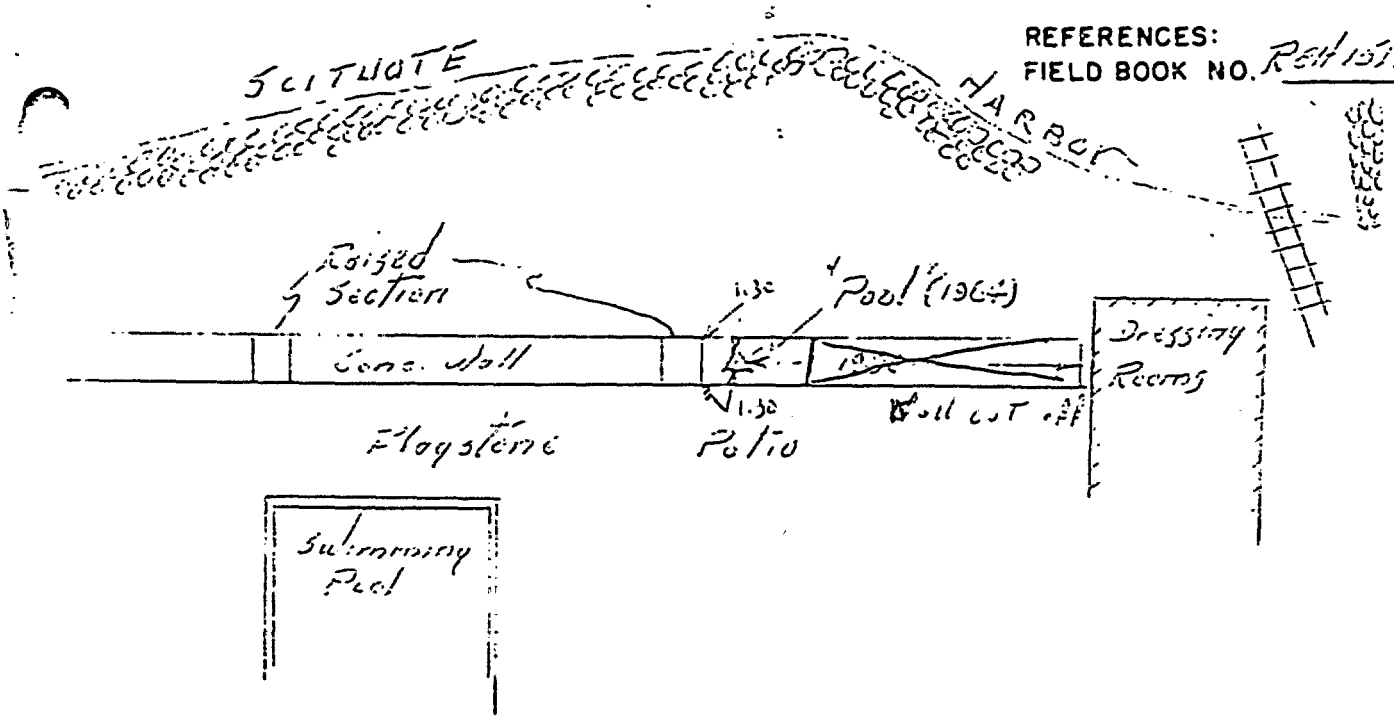
Origin

OK 7/80 J.P.C.

REFERENCE ANGLES

00°00'00" on	ANGLE	TO	00°00'00" on	ANGLE	TO

REFERENCES:
FIELD BOOK NO. RGH 1517 Pg 116



SKETCH: NOT TO SCALE

REMARKS: △ "POOL" (1964) is a shallow 3/8" drill hole in concrete wall forming boundary of swimming pool patio at Scituate Harbor Yacht Club.

NED FORM JUN 55 539

Replacing Δ Bates
MA-0001167

S.A. Engineer Division
orps of Engineers
ew England

SURVEY STATION DATA

Waterway: Scituate Harb. Scituate Mass.

Station: Δ "Light" (1969)

O.K. 1971 J.F.

N or S	E or W
[redacted]	[redacted]

Coordinates:

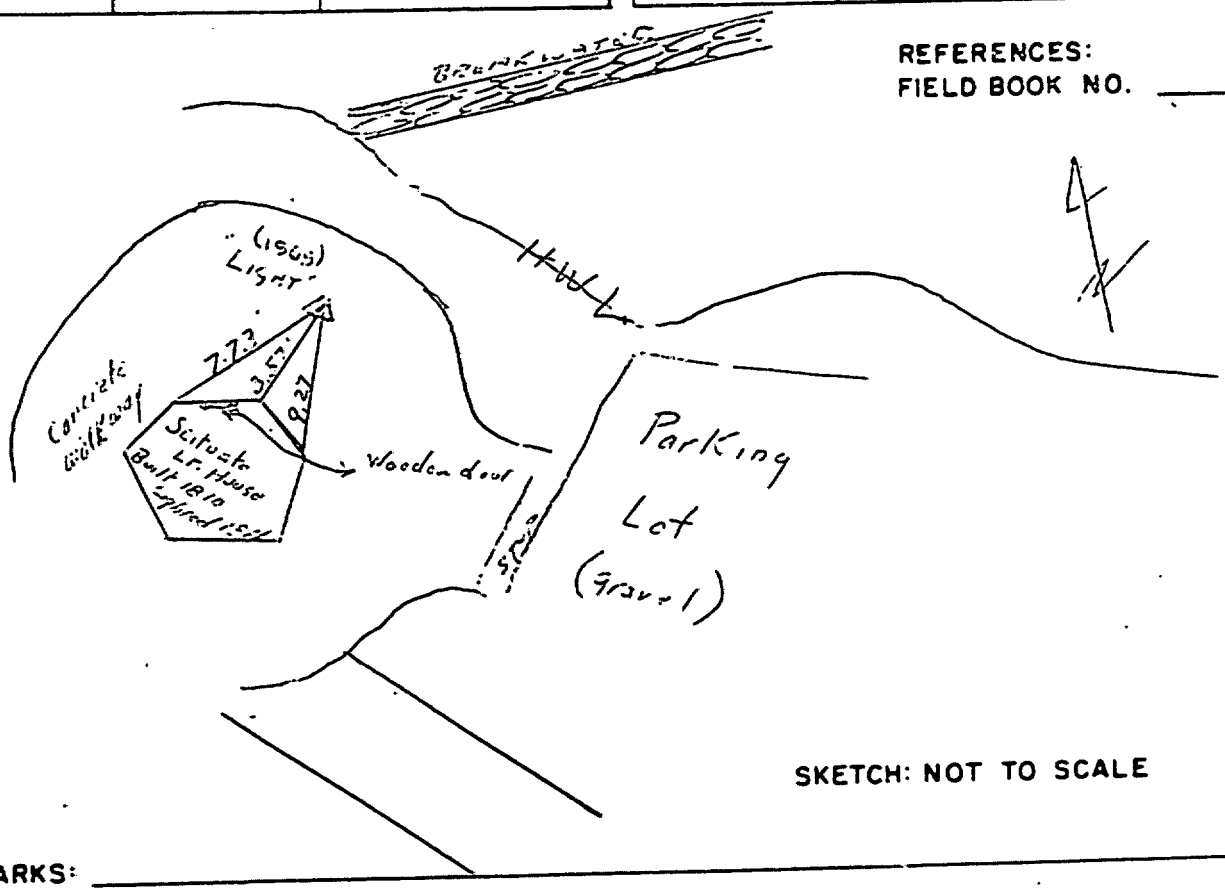
Origin

REFERENCE ANGLES

00°00'00" on	ANGLE	TO

00°00'00" on	ANGLE	TO

REFERENCES:
FIELD BOOK NO.



SKETCH: NOT TO SCALE

REMARKS:

A Light is a 5/8" drill hole in concrete walk around the base of Light house

NED FORM JUN 55 539

M)-000/170 12

U.S.A Engineer Division
Corps of Engineers
New England

SURVEY STATION DATA

Waterway: SCituate Harbor

Station: △ Welch (1971)

	N or S	E or W
Coordinates:		

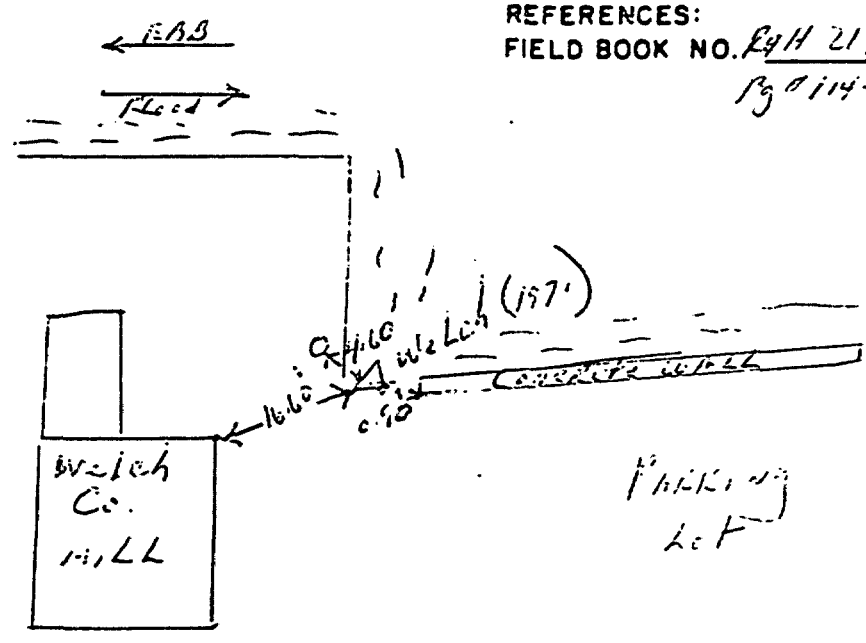
OK 7/80 J.P.C.

Origin

REFERENCE ANGLES

00°00'00" on	ANGLE	TO	00°00'00" on	ANGLE	TO
△ Marsh	12-37-00	△ Pool			
" "	57-13-30	Cedar St. Lt.			
" "	71-28-45	Route Bcn.			
" "	88-37-00	Concrete Cupola Weather Vane.			

REFERENCES:
FIELD BOOK NO. RgH 2198
Pg # 114-115



SKETCH: NOT TO SCALE

REMARKS: △ Welch (1971) is 3/4" iron pin in cut △ set in top of North end of concrete retaining wall on property of Welch Lumber Co.

NED FORM JUN 55 539

APPENDIX B

SAFETY REPORTS

EASTERN GEOTECHNICAL ASSOCIATES

WEEKLY SAFETY MEETING

TO: Safety Office, NED

FROM: Field Engineer

Date held 4-20-84

THRU: Project Engineer

Time 0700

Weekly safety meeting was held this date for the following personnel:
Contract No. DACW 33-83-D-0006 Personnel present: C. Reil
Work Order No. 009 C. Coolen
Conducted By: John Crowther G. Chiasson
B. Smith

1. Subjects discussed (Note, delete, or add):

X Individual Protective Equipment -
Prevention of Falls -
Safe Lifting Techniques -
X Emergency Communications -
Fire Prevention -
Sanitation, First Aid -
Tripping Hazards - trash, hose, nails in lumber -
Staging, Ladders, Concrete Forms -
Hand Tools -
Portable Power Tools -
Woodworking Machinery -
X Equipment Maintenance (Zero defects) -
Hoisting Equipment -
Ropes, Hooks, Chains and Slings -
Electrical Grounding, Temporary Wiring -
Lockouts for safe clearance procedures -
Electrical, pressure, moving parts -
Welding -
Excavations -
Loose Rock and Steep Slopes -
Explosives -
X Water Safety -
Other -

Prepared by: John Crowther
Field Engineer

2. Exposure:

No previous exposure, start of new work order.

Signature: Ronald F. Bukoski
Project Engineer

3. Forwarded: NED, Waltham, MA

EASTERN GEOTECHNICAL ASSOCIATES

WEEKLY SAFETY MEETING

TO: Safety Office, NED

FROM: Field Engineer

Date held 4-23-84

THRU: Project Engineer

Time 0700

Weekly safety meeting was held this date for the following personnel:
Contract No. DACW 33-83-D-0006
Work Order No. 009
Conducted By: John Crowther

Personnel present: C. Reil
C. Coolen
G. Chiasson
B. Smith

1. Subjects discussed (Note, delete, or add):

X Individual Protective Equipment -
Prevention of Falls -
Safe Lifting Techniques -
Emergency Communications -
X Fire Prevention -
Sanitation, First Aid -
Tripping Hazards - trash, hose, nails in lumber -
Staging, Ladders, Concrete Forms -
Hand Tools -
Portable Power Tools -
Woodworking Machinery -
Equipment Maintenance (Zero defects) -
X Hoisting Equipment -
X Ropes, Hooks, Chains and Slings -
Electrical Grounding, Temporary Wiring -
Lockouts for safe clearance procedures -
Electrical, pressure, moving parts -
Welding -
Excavations -
Loose Rock and Steep Slopes -
Explosives -
X Water Safety -
Other -

Prepared by: John Crowther
Field Engineer

2. Exposure:

For April 20 and 21, 1984, covering five men, 2 drillers and 2 surveyors and 1 inspector for a total exposure of 72 manhours.

Signature: [illegible]
Project Engineer

3. Forwarded: NED, Waltham, MA

EASTERN GEOTECHNICAL ASSOCIATES

WEEKLY SAFETY MEETING

TO: Safety Office, NED

FROM: Field Engineer Date held 4-30-84

THRU: Project Engineer Time 0700

Weekly safety meeting was held this date for the following personnel:
Contract No. DACW 33-83-D-0006 Personnel present: C. Reil
Work Order No. 009 C. Coolen
Conducted By: Ronald Bukoski G. Chiasson
B. Smith

1. Subjects discussed (Note, delete, or add):

Individual Protective Equipment -
Prevention of Falls -
Safe Lifting Techniques -
Emergency Communications -
Fire Prevention -
Sanitation, First Aid -
X Tripping Hazards - trash, hose, nails in lumber -
Staging, Ladders, Concrete Forms -
Hand Tools -
Portable Power Tools -
Woodworking Machinery -
Equipment Maintenance (Zero defects) -
Hoisting Equipment -
Ropes, Hooks, Chains and Slings -
Electrical Grounding, Temporary Wiring -
Lockouts for safe clearance procedures -
Electrical, pressure, moving parts -
Welding -
Excavations -
Loose Rock and Steep Slopes -
Explosives -
X Water Safety -
Other -

Prepared by: Ronald Bukoski
Field Engineer

2. Exposure:

For April 23 thru 29, 1984, covering five men, for a total exposure of 108 manhours.

Signature: Ronald F. Bukoski
Project Engineer

3. Forwarded: NED, Waltham, MA

EASTERN GEOTECHNICAL ASSOCIATES

WEEKLY SAFETY MEETING

TO: Safety Office, NED

FROM: Field Engineer

Date held 5-3-84

THRU: Project Engineer

Time_____

Weekly safety meeting was held this date for the following personnel:
Contract No. DACW 33-83-D-0006 Personnel present:_____
Work Order No. 009
Conducted By:_____

1. Subjects discussed (Note, delete, or add):

Individual Protective Equipment -
Prevention of Falls -
Safe Lifting Techniques -
Emergency Communications -
Fire Prevention -
Sanitation, First Aid -
Tripping Hazards - trash, hose, nails in lumber -
Staging, Ladders, Concrete Forms -
Hand Tools -
Portable Power Tools -
Woodworking Machinery -
Equipment Maintenance (Zero defects) -
Hoisting Equipment -
Ropes, Hooks, Chains and Slings -
Electrical Grounding, Temporary Wiring -
Lockouts for safe clearance procedures -
Electrical, pressure, moving parts -
Welding -
Excavations -
Loose Rock and Steep Slopes -
Explosives -
Water Safety -
Other -

Prepared by: Ronald Bukoski
Field Engineer

2. Exposure:

For April 30, May 1 and 2, 1984, covering three men, for a total exposure of 64 manhours.

Signature: Ronald F. Bukoski
Project Engineer

3. Forwarded: NED, Waltham, MA

APPENDIX C

CHAIN OF CUSTODY LOG

EASTERN GEOTECHNICAL ASSOCIATES

Chain of Custody Log

Project: Subsurface Investigation: Determine foundation conditions for the proposed anchorages in Scituate Harbor, Scituate, Massachusetts.

Items:

Tubes	None
Bottles	None
Jar Samples	24
Core Boxes	No core boxes, 11.5" Boulder core
Sampling Logs	FD-84-1 thru FD-84-4

Date & Time Received	Date & Time Transfered	Comments	Custodian
as sampled		FD-84-1 FD-84-2	[illegible]
as sampled	5-2-84/1100 hrs.	FD-84-3 FD-84-4	[illegible]
5-2-84/1100 hrs.	5-2-84/[illegible]		[illegible]
[illegible]			[illegible]

APPENDIX D

FIELD LOGS OF TEST BORINGS

CORPS OF ENGINEERS, U. S. ARMY
NEW ENGLAND DIVISION
FOUNDATION AND MATERIALS BRANCH

FIELD LOG OF TEST BORING

PROJECT NO. W.O. #0009

Site SCITUATE HARBOR SCITUATE MA

Page 1 of 5 Pages

Hole No. FD-84-1 Diam. (Casing) 5" ID

Boring Started 4-23-84

LAMBERT Co-ordinates: N 436,068.59 E 811,366.83

Boring Completed 4-25-84

Drilled by EASTERN GEOTECHNICAL ASSOC.

Report Submitted

Purpose of Exploration PROPOSED ANCHORAGES

Elevation Top of Hole -6.9 MLW ~~M.S.L.~~

Casing Left in Place 0.0 Feet

Total Overburden Drilled 18.0 Feet

Elevation Top of Rock — M.S.L.

Elevation Bottom of Hole -24.9 MLW ~~M.S.L.~~

Total Rock Drilled 1.0 Feet (BOULDER)

Total Depth of Hole 18.0 Feet

Core Recovered 0.96 %

Core Recovered 0.96 Ft.: NX Diam. 2 3/16 in.

Soil Samples 1 7/8 in. Diam. 1 No.

Soil Samples ____ in. Diam. ____ No.

Water Table Depth TIDAL

Depth From	Depth To	Method of Drilling and Type of Bit Used
0.0	18.0	SAMPLED WITH 5FT. x 1 7/8" SPOON
		SAMPLED AND FOLLOWED WITH
		300 lb HAMMER WASHED
		CASING
11.5	12.5	CORE BOULDER w/ NX BIT

INDEX

Ground Water TIDAL	Page 5
Boring Location Sketch	Page FIG 2
Overburden Record	Page 2
Rock Drilling	Page 3
	Page
	Page
	Page

Prepared by J. Crowther
Field Data

Lab. Data

Submitted by

NED FORM DEC 63 121

REPLACES EDITION OF JUN 51 WHICH MAY BE USED UNTIL EXHAUSTED

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST BORING

Site Scituate Harbor Scituate, MA Page 2 of 5 Pages

Boring No. FD-84 Desig. B-4 Diam. (Casing) 3" I.D.

LAMBERT Co-ordinates: N 436,068.59 E 811,366.83

Elevation Top of Boring -6.9 MLW. ~~M.S.L.~~
Total Overburden Drilled 18.0 Feet
Elevation Top of Rock — M.S.L.
Total Rock Drilled 1.0 FT. (BOULDER) Feet
Elevation Bottom of Boring -24.9 MLW ~~M.S.L.~~
Total Depth of Boring 18.0 Feet
Core Recovered 0.96 % No. Boxes
Core Recovered 0.96 Ft : NX. Diam. 2 7/16 In.
Soil Samples 17/8 In. Diam. 7 No.
Soil Samples In. Diam. No.

Hammer Wt. 300 lb Boring Started 4-23-84
Hammer Drop 18"
Boring Completed 4-23-84
Casing Left —
Subsurface Water Data — Page
Obs. Well —
Drilled By EASTERN GEOTECHNICAL ASSOC.
Mfg. Des. Drill ACKER
Inspected By: J. Crowther
Classification By: J. Crowther
Classification By:

DEPTH: Casing Blows	DEPTH: 1" = 1.0	CORE/SAMPLE: NO.	SIZE	DEPTH RANGE	BLOWS PER FT / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
300 lb HAMMER PER FOOT				0.0 to		1.5 FT SINK IN w/WEIGHT OF HAMMER	SILT & PEAT slightly plastic silt, 5-15% f. sand, trace peat, dark brown (ML-PT)
	1.0						
25 FT. SINK IN		1	17/8"			SAMPLED WITH 5 FT. x 17/8" I.D. SPOON FROM 0.0 TO 5.0 FT. WITH 300 lb HAMMER	1.5
					1		SILTY SAND coarse to fine mostly f. sand, 5-10% gravel, 10-20% non-plastic fines, gray and brown (SM)
	2.0				6		
6					9		
	3.0						
10					10	DROVE 3" I.D. CASING FROM 0.0 TO 5.0 FT. WITH 300 lb HAMMER AND WASHED OUT	
	4.0				10		
32		1A			18		
	5.0			5.0	19	20" REC.	

GENERAL REMARKS: WATER DEPTH AT 5.0 FT AT 1230 hrs ON 4-23-84

Site: Scituate Harbor Scituate MA	Boring No. FD-84-1 B-4	Page 3 of 5

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8	2	1 7/8"	5.0 TO 10.0'	6	SAMPLED WITH 5 FT. x 1 7/8" ID. SPOON FROM 5.0 to 10.0 FT. WITH 300 lb HAMMER	SILTY SAND coarse to fine mostly fine, 5-15% gravel, 10-20% n.p. fines, 20-30% slightly plastic silty-clayey layers, brown (SM)
41	2R			9		
96				12		
68				20		
47				14		
21				23		
15				25	DROVE 3" ID CASING FROM 5.0 to 10.0 FT. WITH 300 lb HAMMER AND WASHED OUT.	
				24		
				21		
				18	18" REC	
	3	1 7/8"	10.0 TO 11.5	20	SAMPLED WITH 5 FT. x 1 7/8" ID. SPOON FROM 10.0 TO 11.5 FT. WITH 300 lb HAMMER.	
				22	DROVE 3" ID CASING FROM 10.0 TO 11.5 FT WITH 300 lb HAMMER AND WASHED OUT	
				25	6" REC. BOUNCING REFUSAL AT 11.5 FT.	11.5
					CORED 1 FT. GRANITE BOULDER with NX SIZE DIAMOND BIT 11.5 TO 12.5 FT.	GRANITE BOULDER REC 11.5"± DRILLING 13 MIN 12.5
	4	1 7/8"	13.0 TO	10	SAMPLED WITH 5 FT. x 1 7/8" I.D. SPOON FROM 13.0 TO 15.0 FT WITH 300 lb HAMMER.	SAND, medium to fine, mostly fine, 5-10% n.p. fines, brown (SP-SM)

Depth scale: 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0

Site: Scituate Harbor Scituate MA	Boring No. FD-84-1	Page 4 of 5

DEPTH (1.0')	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. 6" / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
				10		
14.0				10		
				6		
15.0				7		
				11		16.0
16.0				17		SILTY SAND medium to fine mostly fine, 10-15% non plastic fines, gray (SM)
				22		
17.0				32		
	4A	1 7/8"	18.0	40		18.0
18.0					END OF BORING AT 18.0 FT	

Site: SCITUATE HARBOR
Boring No: FD-84-1

TIDAL OBSERVATIONS (MLW)

DATE	TIME	DEPTH-BOT. OF CASING	DEPTH-BOT. OF BORING	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-23-84	1230 hrs	11.5	18.0	8.0 ft.	1.1 ft	-6.9 ft TOP OF BORING (MLW)

Note: Depths are in feet below original ground

BORING LOCATION SKETCH

See Boring Location Plan

CORPS OF ENGINEERS, U. S. ARMY
NEW ENGLAND DIVISION
FOUNDATION AND MATERIALS BRANCH

FIELD LOG OF TEST BORING

PROJECT NO. W.O. #0089

Site SCITUATE HARBOR SCITUATE MA — Page 1 of 5 Pages

Hole No. FD-84-2 Diam. (Casing) 3" ID — Boring Started 4-25-84

Co-ordinates: LAMBERT N 436,640.66 E 811,345.85 — Boring Completed 4-25-84

Drilled by EASTERN GEOTECHNICAL — Report Submitted

Purpose of Exploration PROPOSED ANCHORAGES

Elevation Top of Hole -6.25 ~~M.S.L.~~ MLW — Casing Left in Place 0.0 Feet

Total Overburden Drilled 15.0 Feet

Elevation Top of Rock — M.S.L.

Elevation Bottom of Hole -21.25 ~~M.S.L.~~ MLW

Total Rock Drilled — Feet

Total Depth of Hole 15.0 Feet

Core Recovered — %

Core Recovered — Ft.: — Diam. — In.

Soil Samples 1 7/8" In. Diam. 6 No.

Soil Samples ____ In. Diam. ____ No. — Water Table Depth TIDAL

Depth From	Depth To	Method of Drilling and Type of Bit Used
0.0	15.0	SAMPLED WITH 5 FT. x 1 7/8" SPOON
		SAMPLED AND CASED WITH 200lb
		HAMMER, WASHED CASING.

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Prepared by J. Crowther — Field Data — Lab. Data

Submitted by

NED FORM DEC 63 121 — REPLACES EDITION OF JUN 51 WHICH MAY BE USED UNTIL EXHAUSTED

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST BORING

Site Scituate Harbor Scituate MA. Page 2 of 5 Pages

Boring No. FD-84-2 Desig. B-3 Diam. (Casing) 3" I.D.

LAMBERT Co-ordinates: N 436,640.66 E 811,345.95

Elevation Top of Boring -6.25 ~~M.S.L.~~ MLW
Total Overburden Drilled 15.0 Feet
Elevation Top of Rock — M.S.L.
Total Rock Drilled — Feet
Elevation Bottom of Boring -21.25 ~~M.S.L.~~ MLW
Total Depth of Boring 15.0 Feet
Core Recovered — % No. Boxes —
Core Recovered — Ft : — Diam. — In.
Soil Samples 1 7/8 In. Diam. 6 No.
Soil Samples ____ In. Diam. ____ No.

Hammer Wt. 300 lb
Hammer Drop 18"
Casing Left —
Subsurface Water Data: — Page ____
Obs. Well —
Drilled By EASTERN GEOTECHNICAL
Mfg. Des. Drill ACKER
Inspected By: J. Crowther
Classification By: J. Crowther
Classification By: ____

Boring Started 4-25-84
Boring Completed 4-25-84

DEPTH: Casing Blows	DEPTH: 1" = 1.0	CORE/SAMPLE: NO.	SIZE	DEPTH RANGE	BLOWS PER 6" / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
300 lb HAMMER per FOOT				0.0 TO		2.75 FT. SINK IN w/ WEIGHT OF HAMMER	
	1.0						SILT slightly plastic 5-10% fine sand, some organics, decay odor grey-brown (ML)
4 ft. SINK IN		1	1 7/8"			SAMPLED WITH 5 FT. x 1 7/8" ID SPOON FROM 0.0 TO 5.0 FT. WITH 300 lb. HAMMER	
	2.0	1R	1 7/8"				
					3		
	3.0				3	DROVE 3" ID. CASING FROM 0.0 TO 5.0 FT. WITH 300 lb HAMMER AND WASHED OUT	
					4		
	4.0						GRADES TO SILTY SAND
					10		
4							
	5.0			5.0	11		

4.0

GENERAL REMARKS: WATER DEPTH 7.75 FT. AT 1300 HRS ON 4-25-84

Site: SCITUATE HARBOR SCITUATE MA	Boring No. FD-84-2	Page 3 of 5

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
10	6.0	2R		5.0 TO	16	SAMPLED WITH 5 FT. x 1 7/8" ID SPOON FROM 5.0 TO 10.0 FT. WITH 300 lb HAMMER	SILTY SAND slightly plastic, fine sand, 15-25% fines, some organics, grey brown and black (SM)
					15		
19	7.0	2			16		
					14		7.0 ±
26	8.0	2A			13		SILTY SAND, fine sand 10-15% nonplastic fines grey (SM)
					14		
32	9.0				15		
					14	DROVE 3" ID. CASING FROM 5.0 TO 10.0 FT. WITH 300 lb. HAMMER AND WASHED OUT	
45	10.0			10.0 TO 10.0	14		9.5 ±
					12		SAND, fine, less than 5% nonplastic fines, grey (SP)
	11.0	3			6	SAMPLED WITH 5 FT. x 1 7/8" ID. SPOON FROM 10.0 TO 15.0 FT WITH 300 lb. HAMMER.	
					6		
					6		
	12.0				7		
					7		
	13.0				8		
					9		

Site: SCITUATE HARBOR SCITUATE MA	Boring No. FD-84-2	Page 4 of 5

DEPTH (r=1.0')	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
				9		
14.0				10		
				10		
15.0			15.0			15.0 FT
					END OF BORING AT 15.0 FT.	

15.0

Site: Scituate Harbor Scituate MA
Boring No: FD-84-2

TIDAL OBSERVATIONS (MLW)

DATE	TIME	DEPTH-BOT. OF CASING	DEPTH-BOT. OF BORING	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-25-84	8:00 hrs	10.0	15.0	7.75 ft.	1.5	-6.25 ft TOP OF BORING (MLW)

Note: Depths are in feet below original ground

BORING LOCATION SKETCH

See Boring Location Plan

CORPS OF ENGINEERS, U. S. ARMY
NEW ENGLAND DIVISION
FOUNDATION AND MATERIALS BRANCH

FIELD LOG OF TEST BORING

PROJECT NO. W.O. # 0009

Site SCITUATE HARBOR — Page 1 of 5 Pages

Hole No. FD-84-3 Diam. (Casing) 3-0" — Boring Started 4-27-84

Co-ordinates: LAMBERT N 437,449.70 E 810,291.86 — Boring Completed 4-27-84

Drilled by C. TREIL — Report Submitted

Purpose of Exploration PROPOSED ANCHORAGES

Elevation Top of Hole +1.0 M.L.W. ~~M.S.L.~~ — Casing Left in Place 0.0 Feet

Total Overburden Drilled 15.0 Feet

Elevation Top of Rock NONE ENCOUNTERED M.S.L.

Elevation Bottom of Hole -14.0 M.L.W. ~~M.S.L.~~

Total Rock Drilled 0.0 Feet

Total Depth of Hole 15.0 Feet

Core Recovered N/A %

Core Recovered — Ft.: — Diam. — In.

Soil Samples 1-7/8 In. Diam. 5 No.

Soil Samples — In. Diam. — No. — Water Table Depth TIDAL

Depth From	Depth To	Method of Drilling and Type of Bit Used
0.0	15.0	WASH BORING - SAMPLING WITH
		1-7/8" I.D. x 5.0' SOLID BARREL
		SAMPLER DRIVEN BY 300 lb
		HAMMER FALLING 18".
		HOLE CASED WITH 3-0" CASING
		TO 10.0'

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Prepared by RONALD BUKOSKI
Field Data — Lab. Data

Submitted by

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U. S. ARMY
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NEW ENGLAND DIVISION

FIELD LOG OF TEST BORING

Site SCITUATE HARBOR — Page 2 of 5 Pages

Boring No. FD-84-3 Desig. B-2 Diam. (Cosing) 3-0"

Co-ordinates (LAMBERT) N 437,449.70 E 810,291.86

Elevation Top of Boring +1.0 ~~M.S.L.~~ M.L.W.
Total Overburden Drilled 15.0 Feet
Elevation Top of Rock NONE ENCOUNTERED M.S.L.
Total Rock Drilled 0.0 Feet
Elevation Bottom of Boring -14.0 ~~M.S.L.~~ M.L.W.
Total Depth of Boring 15.0 Feet
Core Recovered N/A % No. Boxes —
Core Recovered — Ft : — Diam. — In.
Soil Samples 1-7/8 In. Diam. 5 No.
Soil Samples — In. Diam. — No.

Hammer Wt. 300 lbs
Hammer Drop 18"
Casing Left NONE
Subsurface Water Data — Page —
Obs. Well —
Drilled By C. REIL
Mfg. Des. Drill ACKER
Inspected By: R. TRAKOSKI
Classification By: R. TRAKOSKI
Classification By:

Boring Started 4-27-84
Boring Completed 4-27-84

1.0
5.5' TIDE
4.5' H_2O
+1.0 M.L.W.

DEPTH: Blows on Casing	DEPTH: 1" = 1.0'	CORE/SAMPLE: NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
3		1	1-7/8"	0.0 to 0.75'	WT. OF RODS & SAMPLER — 4	DROVE 1-7/8" I.D. x 5.0' SOLID BARREL SAMPLER FROM HARBOR BOTTOM TO 5.0' AND TOOK SAMPLE. RECOVERED 20"	SOFT MARINE/HARBOR SEDIMENTS: SANDY ORGANIC SILT, low plasticity, 15-35% medium to fine sand, 5' shell fragments 10-20% coarse gravel, black, (OL). APPROXIMATE CHANGE 0.75'
4	1.0			0.75 TO 5.0'	4	DROVE 3-0" CASING FROM HARBOR BOTTOM TO 5.0' AND WASHED OUT USING SIDE DISCHARGING CHOPPING BIT.	SILTY SAND, mostly fine sand, 10-20% shell fragments, 15-30% low plasticity fines, gray, (SM).
7	2.0	1A	1-7/8"		23		
6	3.0				7		
6	4.0				3		
	5.0						

GENERAL REMARKS:

Site: SCITUATE HARBOR	Boring No. FD-84-3 (B-2)	Page 3 of 5

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1145hrs.	r = 1.0'						
16					9	DROVE 1-7/8" I.D. x 5.0' SOLID BARREL SAMPLER FROM 5.0 TO 10.0' AND TOOK SAMPLE.	
	6.0						SILTY SAND, coarse to fine sand, 10-20% low plasticity fines, 5-15% fine gravel, gray (SM).
9		2 1 JAR	1-7/8"	5.0 TO 10.0'	7	RECOVERED 10" - 4" coarse to medium gravel which would not wash out of casing, 6" SILTY SAND	
	7.0						
8					8	DROVE 3-0" CASING FROM 5.0 TO 10.0' AND WASHED OUT USING SIDE DISCHARGING CHOPPING BIT.	
	8.0						
10					8		
	9.0						
7					6		
	10.0						
					26	DROVE 1-7/8" I.D x 5.0' SOLID BARREL SAMPLER FROM 10.0 TO 15.0' AND TOOK SAMPLE.	SILTY SAND, coarse to fine sand, 10-20% nonplastic to low plasticity fines, 10-20% fine angular gravel, gray, (SM).
	11.0						
		3 2 JARS	1-7/8"	10.0 TO 15.0'	26	RECOVERED 21"	
	12.0						
					31		
	13.0						
					28		

Site: SCITUATE HARBOR	Boring No. FD-84-3	Page 4 of 5

	DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
	1" = 1.0'						
	14.0				24		SILTY SAND, Coarse to Fine sand, 10-20% nonplastic Fines, 10-20% Fine angular gravel, gray, (SM).
1230	15.0					BOTTOM OF BORING 15.0'	

Site: SCITUATE HARBOR
Boring No: FD-84-3

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT. OF CASING	DEPTH-BOT. OF BORING	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-27-84	1100	10.0	15.0	4.5	5.5	BOTTOM +1.0' M.L.W.

Note: Depths are in feet below original ground.

BORING LOCATION SKETCH

SEE BORING LOCATION PLAN, FIGURE NO. 2.

CORPS OF ENGINEERS, U. S. ARMY
NEW ENGLAND DIVISION
FOUNDATION AND MATERIALS BRANCH

FIELD LOG OF TEST BORING

PROJECT NO. W.O. #0009

Site SCITUATE HARBOR — Page 1 of ___ Pages

Hole No. FD-84-4 Diam. (Casing) 3-0" — Boring Started 5-1-84

Co-ordinates: LAMBERT N 439,990.85 E 810,331.00 — Boring Completed 5-1-84

Drilled by C. REIL — Report Submitted ___

Purpose of Exploration PROPOSED ANCHORAGES

Elevation Top of Hole +0.9 M.L.W. ~~M.S.L.~~ — Casing Left in Place 0.0 Feet

Total Overburden Drilled 15.0 Feet

Elevation Top of Rock NONE ENCOUNTERED M.S.L.

Elevation Bottom of Hole -14.1 M.L.W. ~~M.S.L.~~

Total Rock Drilled 0.0 Feet

Total Depth of Hole 15.0 Feet

Core Recovered N/A %

Core Recovered — Ft.; — Diam. — in.

Soil Samples 1-3/8 in. Diam. 6 No.

Soil Samples — in. Diam. — No. — Water Table Depth TIDAL

Depth From	Depth To	Method of Drilling and Type of Bit Used
0.0	15.0	WASH BORING - SAMPLING WITH
		1-3/8" I.D. x 5.0' SOLID BARREL
		SAMPLER DRIVEN BY 300 lb
		HAMMER FALLING 18" - HOLE
		CASED WITH 3-0" CASING TO 10.0'

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Prepared by RONALD F. BULCOSKI
Field Data — Lab. Data

Submitted by ___

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U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST BORING

Site SCITUATE HARBOR — Page 2 of 5 Pages

Boring No. FD-84-4 Desig. B-1 Diam. (Casing) 3-0"

Co-ordinates (LAMBERT) N 439,990.85 E 810,331.00

Elevation Top of Boring +0.9 ~~M.S.L.~~ M.L.W. — Hammer Wt. 300 lbs — Boring Started 5-1-84

Total Overburden Drilled 15.0 Feet — Hammer Drop 18" — Boring Completed 5-1-84

Elevation Top of Rock NONE ENCOUNTERED M.S.L. — Casing Left 0.0

Total Rock Drilled 0.0 Feet — Subsurface Water Data _____ Page _____

Elevation Bottom of Boring -14.1 M.S.L. — Obs. Well N/A

Total Depth of Boring 15.0 Feet — Drilled By C. REIL

Core Recovered N/A % No. Boxes 0 — Mfg. Des. Drill ACKER

Core Recovered N/A Ft: — Diam. — In. — Inspected By: R. BUKOSKI

Soil Samples 1-7/8 In. Diam. 6 No. — Classification By: R. BUKOSKI

Soil Samples _____ In. Diam. ____ No. — Classification By: _____

0905
4.0' TIDE
3.1' H2O
+0.9' M.L.W.

DEPTH (Blows on Casing / 1" = 1.0')	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
WT. OF CASING & HAMMER	S-1 1 JAR	1-7/8"	0.0 TO 1.0'	WT OF RODS & HAMMER / 1	DROVE 1-7/8" I.D. x 5.0' SOLID BARREL SAMPLER FROM 0.5 TO 5.0' WITH 300 lb HAMMER FALLING 18" AND TOOK SAMPLE. RECOVERED 23" S-1: 6" HARBOR SEDIMENTS S-1A: 13" PEAT S-1B: 4" SILTY SAND & GRAVEL	HARBOR BOTTOM: SANDY S-1: HARBOR SEDIMENTS: SILTY SAND, Fine medium to Fine sand, 15-30% Fines and organic Fines, 10-20% Shell Fragments, gray, (SO).
1.0						1.0'
1	S-1A 1 JAR	1-7/8"	1.0 TO 3.0'	2 / 3		S-1A: ORGANIC SILT & PEAT, low plasticity Fines and Fiberous material, Strong organic odor, dark brown to black, (OL & Pt).
2.0						
2						
3.0						3.0
4	S-1B 1 JAR	1-7/8"	3.0 TO 5.0'	3 / 5	DROVE 3-0" CASING FROM HARBOR BOTTOM WITH 300 lb HAMMER FALLING 18". WASHED OUT CASING USING SIDE DISCHARGING CHOPPING BIT.	S-1B: SILTY SAND & GRAVEL, medium to Fine sand, 30-40% low to moderately Plastic Fines, medium to fine subangular gravel, gray, (SM & GM).
4.0						
5						

GENERAL REMARKS:

Site: SCITUATE HARBOR	Boring No. FD-84-4	Page 3 of 5

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
9				2	DROVE 1-7/8" I.D. x 5.0' SOLID BARREL SAMPLER FROM 5.0 TO 10.0' AND TOOK SAMPLE.	
5.0					RECOVERED 20"	
20	S-2	1-7/8"	5.0 TO 10.0'	16	DROVE 3-0" CASING FROM 5.0 TO 10.0'	GLACIAL TILL: SILT, low plasticity fines, several 1/8" seams of fine subangular gravel, mottled gray and brown, (ML).
7.0	2 JARS No. 2 "R"				WASHED OUT CASING USING ROLLER ROCK BIT.	
38				31		
8.0						
43				26		
9.0						
29				17		
1015 10.0						
				9	DROVE 1-7/8" I.D. x 5.0' SOLID BARREL SAMPLER FROM 10.0 TO 15.0' AND TOOK SAMPLE.	GLACIAL TILL: GRAVELLY SILT, low to moderately plastic fines, 30-40% coarse to fine subangular gravel, 2, 1/4" seams coarse to medium sand, mottled brown and gray, (ML).
11.0						
	S-3 1 JAR	1-7/8"	10.0 TO 15.0'	45	RECOVERED 16" FRACTURED ROCK FRAGMENT IN TIP OF SAMPLER.	
13.0				78		
13.0				67		

Site: SCituate HARBOR	Boring No. FD-84-4 (B-1)	Page 4 of 5

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
1.0'						
17.0				37		
10YR 15.0					BOTTOM OF BORING 15.0'	

Site: SCITUATE HARBOR
Boring No: FD-83-4

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT. OF CASING	DEPTH-BOT. OF BORING	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
5-1-84	0900	10.0'	15.0'	3.1	4.0	Bottom El 0.9' M.L.W.

Note: Depths are in feet below original ground.

BORING LOCATION SKETCH

SEE BORING LOCATION PLAN, FIGURE NO. 2.

APPENDIX E

FIELD LOGS OF PROBES

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 2 Pages

Probe FP-84-1 Desig. P-20 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 436,245.28 E 811,357.54

Elevation Top -7.4 ~~M.S.L.~~ MLW
Total Overburden Drilled 9.0 Feet
Elevation Top of Rock – M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -16.4 ~~M.S.L.~~ MLW
Total Depth 9.0 Feet
Core Recovered N/A %
Core Recovered N/A Ft: ___ Diam. ___ In.
Soil Samples N/A In. Diam. ___ No.
Soil Samples N/A In. Diam. ___ No.

Hammer Wt. 300 lb
Hammer Drop 10"
Casing Left –
Subsurface Water Data – Page –
Obs. Well
Drilled By EASTERN GEOTECHNICAL ASSOC
Mfg. Dea. Drill ACKER
Inspected By: J. Crouter
Classification By:
Classification By:

Started 4-23-84
Completed 4-23-84

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1"=2.0					3.5 ft. SINK IN WITH WEIGHT OF HAMMER	
1.0						
2.0						
3.0					DROVE "AW" ROD PROBE FROM 0.0 TO 9.0 FT. WITH 300 lb HAMMER	SAND + SILT (IN RODS) fine sand (SM-ML)
4.0				3		
				3		
5.0						
				3		
6.0						
				4		CLAYEY SILT (IN TIP) slightly to moderatly plastic, 10-20% clay, 5-10% very fine sand, grey (ML)
7.0						
				5		
8.0						
				6		
9.0					END OF PROBE AT 9.0 FT	9.0

GENERAL REMARKS: WATER 8.0 ft. DEEP AT 1145 hrs ON 4-23-84

Probe No. FP-84-1

Site: Scituate Harbor Scituate MA

Probe No. FP-84-1

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-23-84	1145hrs	–	9.0	8.0 ft.	0.6 ft.	TOP OF PROBE EL. -7.4 ft MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe location Plan

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 7 Pages

Probe FP-84-2 Desig. P-19 Diam. (Casing) —

LAMBERT Co-ordinates: N 436,435.50 E 811,347.96

Elevation Top -9.5 ~~M.S.L.~~ MLW

Total Overburden Drilled 9.0 Feet

Elevation Top of Rock — M.S.L.

Total Rock Drilled N/A Feet

Elevation Bottom -18.5 ~~M.S.L.~~ MLW

Total Depth 9.0 Feet

Core Recovered N/A % No. Boxes

Core Recovered N/A Ft: Diam. In.

Soil Samples N/A In. Diam. No.

Soil Samples N/A In. Diam. No.

Hammer Wt. 300 lb

Hammer Drop 18"

Casing Left —

Subsurface Water Data — Page —

Obs. Well —

Drilled By EASTERN GEOTECHNICAL ASSOC.

Mfg. Des. Drill ACKER

Inspected By: J. Crowther

Classification By: J. Crowther

Classification By:

Started 4-25-84

Completed 4-25-84

DEPTH 1"=2.0'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
					1.0 FT. SINKIN W/WEIGHT OF HAMMER.	
1.0				5		
2.0				6	DRIVE "AW" ROD PROBE FROM 0.0 TO 8.5 FT. WITH 300 lb HAMMER	
3.0				3		
4.0				3		
5.0				8		
6.0				7		
7.0				10		
8.0				15		SILTY SAND (IN TIP) fine sand, 10-15% n.p. fines, 91% (SM)
9.0					END OF PROBE AT 9.0 FT.	9.0

GENERAL REMARKS: WATER 12 Ft DEEP AT 1130 hrs. ON 4-25-84

Probe No. FP-84-2

Site: Scituate Harbor Scit. MA

Probe No. FP-84-2

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-25-84	1130hrs	-	9.0	12.0 ft.	2.5	TOP OF PROBE EL. -9.5 M.L.W.

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

U. S. ARMY
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NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 2 Pages

Probe FP-84-3 Desig. P-22 Diam. (Casing) —

Co-ordinates (LAMBERT): N 436,446.20 E 811,148.81

Elevation Top -8.15 ~~M.S.L.~~ MLW Hammer Wt. 300 lb Started 4-25-84

Total Overburden Drilled 8.0 Feet Hammer Drop 18" Completed 4-25-84

Elevation Top of Rock — M.S.L. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data — Page

Elevation Bottom -16.15 ~~M.S.L.~~ MLW Obs. Well

Total Depth 8.0 Feet Drilled By EASTERN GEOTECHNICAL ASSOC.

Core Recovered N/A % No. Boxes Mfg. Des. Drill ACKER

Core Recovered N/A Ft: Diam. In. Inspected By: J. Crouther

Soil Samples N/A In. Diam. No. Classification By: J. Crouther

Soil Samples N/A In. Diam. No. Classification By:

DEPTH 1"=2.0'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
					4.0 FT SINK IN w/ WEIGHT OF HAMMER	
1.0						
2.0						
3.0					DROVE "AW" ROD PROBE FROM 0.0 TO 8.0 FT. WITH 300 lb HAMMER	SILT + SANDY SILT (IN RODS), trace shells grey (ML)
4.0						
5.0				2		
				1		
6.0						
				3		SILTY SAND, fine sand, 10-15% n.p. fines, grey. (SM) (IN TIP)
7.0				8		
8.0					END OF PROBE AT 8.0 FT	8.0

GENERAL REMARKS: WATER 9.75 ft. AT 1435 hrs ON 4-25-84

Probe No. FP-84-3

Site: Scituate Harbor Scituate MA

Probe No. FP-84-3

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-25-84	1435hr	–	8.0	9.75 ft.	1.6 ft.	TOP OF PROBE EL. -8.15

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

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FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 2 Pages

Probe FP-84-4 Desig. P-23 Diam. (Casing) —

LAMBERT Co-ordinates: N 436, 239. 72 E 811, 164. 49

Elevation Top -7.75 ~~M.S.L.~~ MLW
Total Overburden Drilled 8.0 Feet
Elevation Top of Rock — M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -15.75 ~~M.S.L.~~ MLW
Total Depth 8.0 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft : Diam. In.
Soil Samples N/A In. Diam. No.
Soil Samples N/A In. Diam. No.

Hammer Wt. 300 lb
Hammer Drop 18"
Casing Left —
Subsurface Water Data — Page
Obs. Well
Drilled By EASTERN GEOTECHNICAL ASSOC.
Mfg. Des. Drill ACKER
Inspected By: J. Crawter
Classification By: J. Crawter
Classification By:

Started 4-25-84
Completed 4-25-84

DEPTH 1"=2.0'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.0, 2.0, 3.0					35 FT. SINK IN W/ WEIGHT OF HAMMER	
4.0				1	DROVE "AW" ROD PROBE FROM 0.0 TO 8.0 FT WITH 300 lb. HAMMER	SILT + SANDY SILT (IN RODS) trace shells grey (ML)
5.0				2		
6.0				3		
7.0				9		SILTY SAND, fine sand, 10-15% n.p. fines, grey (SM) (IN TIP)
8.0				12		
					END OF PROBE AT 8.0 FT	

GENERAL REMARKS: WATER 9.75 ft. DEEP AT 1459 hrs ON 4-25-84

Probe No. FP-84-4

Site: Scituate Harbor Scituate MA

Probe No. FP-84-4

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-25-84	1459hrs		8.0	9.75 ft.	2.0 ft	TOP OF PROBE EL. 7.75

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

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FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 2 Pages

Probe FP-84-5 Desig. P-24 Diam. (Casing) —

Co-ordinates: LAMBERT N 436,058.32 E 814,165.31

Elevation Top -8.1 MLW ~~M.S.L.~~ Hammer Wt. 300 lb Started 4-25-84

Total Overburden Drilled 8.0 Feet Hammer Drop 18" Completed 4-25-84

Elevation Top of Rock — M.S.L. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data — Page

Elevation Bottom -16.1 MLW ~~M.S.L.~~ Obs. Well —

Total Depth 8.0 Feet Drilled By EASTERN GEOTECHNICAL ASSOC

Core Recovered N/A % No. Bags Mfg. Dea. Drill ACKER

Core Recovered N/A Ft: Diam. In. Inspected By: J. Crawthorn

Soil Samples N/A In. Diam. No. Classification By: J. Crawthorn

Soil Samples N/A In. Diam. No. Classification By:

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1" = 2.0					4.0 FT SINK IN WITH WEIGHT OF HAMMER	
1.0						
2.0						
3.0					DROVE "AW" ROD PROBE FROM 0.0 TO 8.0 FT. WITH 300 lb. HAMMER	
4.0				4		
5.0				4		
6.0				11		
7.0				17		CLAYEY SILT (IN TIP) 10-15% fine sand, gray (ML)
8.0					END OF PROBE AT 8.0 FT	8.0

GENERAL REMARKS: WATER 10.5 FT. DEEP AT 1520 hrs ON 4-25-84

Probe No. FP-84-5

Site: Schuyler Harbor

Probe No. FP-84-5

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-25-84	1520hrs	—	8.0	10.5 ft	2.4 ft.	TOP OF PROBE EL. -8.1

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

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FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 3 Pages

Probe FP84-6 Desig. P-21 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 436,638.66 E 811,142.17

Elevation Top -3.75 ~~M.S.L.~~ MLW Hammer Wt. 300 lb Started 4-26-84

Total Overburden Drilled 13.0 Feet Hammer Drop 18" Completed 4-26-84

Elevation Top of Rock — M.S.L. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data — Page

Elevation Bottom -16.75 ~~M.S.L.~~ MLW Obs. Well —

Total Depth 13.0 Feet Drilled By EASTERN GEOTECHNICAL ASSOC

Core Recovered N/A % No. Boxes Mfg. Dea. Drill ACKER

Core Recovered N/A Ft: Diam. In. Inspected By: J. Crowther

Soil Samples N/A In. Diam. No. Classification By: J. Crowther

Soil Samples N/A In. Diam. No. Classification By:

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1"=2'						
					6.0 FT. SINK IN WITH WEIGHT OF HAMMER	
1.0						
2.0						
3.0						
4.0					DROVE "AW" ROD PROBE FROM 0.0 TO 13.0 FT. WITH 300 lb. HAMMER	
5.0						
6.0				10		
7.0				5		SAND + SILT (IN RODS) fine sand, dark brown (SM - ML)
8.0				5		
9.0				10		
10.0						

GENERAL REMARKS: WATER 11.75 ft. DEEP AT 0810 hrs ON 4-26-84

Probe No. FP-84-6

Site: Scituate Harbor Scituate MA	Probe No. FP-84-C	Page 2 of 3

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.0						
11.0				16		
12.0				8		SAND (INTIP), fine sand, 5-10% non-fines, gray, (SP-SM)
13.0				10		
					END OF PROBE AT 13.0 FT	

Probe No. FP-84-6

Site: Scituate Harbor, Scituate MA

Probe No. FP-89-6

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-26-89	0810hrs	-	13.0	11.75 ft.	8.0	TOP OF PROBE EL -3.75

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

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FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 3 Pages

Probe FP-84-7 Desig. P-25 Diam. (Casing) —

Co-ordinates: LAMBERT N 436,617.25 E 810,942.48

Elevation Top -2.0 ~~M.S.L.~~ M.L.W. Hammer Wt. 300 lbs. Started 4-26-84

Total Overburden Drilled 14.0 Feet Hammer Drop 18" Completed 4-26-84

Elevation Top of Rock NONE ENCOUNTERED M.S.L. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data — Page

Elevation Bottom -16.0 ~~M.S.L.~~ M.L.W. Obs. Well —

Total Depth 14.0 Feet Drilled By EASTERN GEOTECHNICAL ASSOC.

Core Recovered N/A % No. Boxes Mfg. Des. Drill ACKER

Core Recovered N/A Ft: Diam. In. Inspected By: J. Crowther

Soil Samples N/A In. Diam. No. Classification By: J. Crowther

Soil Samples N/A In. Diam. No. Classification By:

DEPTH 1" = 2.0	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
				2	6 inch SINK IN WITH WEIGHT OF HAMMER.	
1.0				5		
2.0				8		
3.0				8	DROVE "AW" ROD PROBE FROM 0.0 TO 14.0 FT WITH 300 lb HAMMER.	
4.0				11		
5.0				8		
6.0				4		
7.0				3		
8.0				3		SAND + SILT (IN RODS) fine sand, grey (SM-ML)
9.0				9		
10.0						

GENERAL REMARKS: WATER 9.5 ft. DEEP AT 0845hrs ON 4-26-84

Probe No. FP-84-7

Site: Scituate Harbor, Scituate MA	Probe No. FP-84-7	Page 2 of 3

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.0						
11.0				7		
				7		
12.0						SANDY SILT (INTIP) moderately plastic, 10-20% fine sand, grey (ML)
				14		
13.0						
				18		
14.0					END OF PROBE AT 14.0 FT	

Site: Scituate Harbor Scituate Mass

Probe No. FP-84-7

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-26-84	0845hrs	—	14.0	9.5	7.5	TOP OF PROBE EL. 2.0

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

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FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 3 Pages

Probe FP-84-8 Desig. P-27 Diam. (Casing) —

LAMBERT Co-ordinates: N 435,802.77 E 810,867.68

Elevation Top 13 ~~M.S.L.~~ MLW
Total Overburden Drilled 15.0 Feet
Elevation Top of Rock — M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -16.7 ~~M.S.L.~~ MLW
Total Depth 15.0 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft: Diam. In.
Soil Samples N/A In. Diam. No.
Soil Samples N/A In. Diam. No.

Hammer Wt. 300lbs
Hammer Drop 18"
Casing Left —
Subsurface Water Data — Page
Obs. Well —
Drilled By EASTERN GEOTECHNICAL ASSOC
Mfg. Des. Drill ACKER
Inspected By: J. Crowther
Classification By: J Crowther
Classification By:

Started 4-26-84
Completed 4-26-84

DEPTH 1"=2.0'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
				1	6 inch SINK IN WITH WEIGHT OF HAMMER	
10				2		
20				6		
30				10	DROVE "AW" ROD PROBE FROM 0.0 TO 15.0 FT. WITH 300lb HAMMER	
40				9		
50				10		SAND + SILT (IN RODS) Fine sand, grey (SM - ML)
60				9		
70				8		
80				6		
90				13		
100						

GENERAL REMARKS: WATER 5.5 Ft. DEEP AT 0920 hrs ON 4-26-84

Probe No. FP-84-8

Site: Scituate Harbor Scituate MA	Probe No. FP-84-8	Page 2 of 3

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
20						
				7		
110						
				8		
120						
				5		
130						
				4		
140						
				10		
150						
				15		
160						SAND (INTIP) Fine sand, 5-10% n.p. fines, gray (SP-SM)
				16		
170						
				12		
180					END OF PROBE AT 180 FT.	

Probe No. FP-84-8

Site: Scituate Harbor Scituate MA

Probe No. FP-84-8

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-26-84	0920hrs		15.0	5.5 ft.	6.8 ft.	TOP OF PROBE EL. 1.3

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

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FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 2 Pages

Probe FP84-9 Desig. P-18 Diam. (Casing) —

LAMBERT Co-ordinates: N 437,546.79 E 810,260.50

Elevation Top -1.25 ~~M.S.L.~~ MLW
Total Overburden Drilled 10.0 Feet
Elevation Top of Rock — M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -11.25 ~~M.S.L.~~ MLW
Total Depth 10.0 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft: Diam. in.
Soil Samples N/A in. Diam. No.
Soil Samples N/A in. Diam. No.

Hammer Wt 300 lbs
Hammer Drop 18"
Casing Left —
Subsurface Water Data — Page —
Obs. Well —
Drilled By EASTERN GEOTECHNICAL ASSOC
Mfg. Des. Drill ACKER
Inspected By: J. Crouther
Classification By: J. Crouther
Classification By:

Started 4-26-84
Completed 4-26-84

DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
					1.0 ft. SINK IN WITH WEIGHT OF HAMMER	COBBLES at surface
1.0						
				7		
2.0						
				1		
3.0						
				0	Note: WEIGHT OF HAMMER	SILT + SANDS (IN RODS) (ML-SM)
4.0						
				0		
5.0					DROVE "AW" ROD PROBE FROM 0.0 TO 10.0 FT. WITH 300 lb HAMMER	
				6		
6.0						
				9		
7.0						
				2		
8.0						
				3		SILTY SAND (IN THP) fine sand, 10-15% non plastic fines, gray, (ML)
9.0						
10.0				23	END OF PROBE AT 10.0 FT.	

GENERAL REMARKS: WATER 6.75 FT. DEEP AT 1008 hrs ON 4-26-84

Probe No. FP84-9

Site: Scituate Harbor Scituate MA

Probe No. FP-84-9

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4.26.84	1008hrs	—	10.0	6.75 ft.	5.5 ft.	TOP OF PROBE EL. 1.25

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

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NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 3 Pages

Probe FP-84-10 Desig. P-17 Diam. (Casing) —

Co-ordinates: LAMBERT N 437,667.10 E 810,353.78

Elevation Top 0.2 ~~M.S.L.~~ MLW
Total Overburden Drilled 13.0 Feet
Elevation Top of Rock — M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -12.8 ~~M.S.L.~~ MLW
Total Depth 13.0 Feet
Core Recovered N/A %
Core Recovered N/A Ft: ___ Diam. ___ In.
Soil Samples N/A In. Diam. ___ No.
Soil Samples N/A In. Diam. ___ No.

Hammer Wt. 300 lb
Hammer Drop 18"
Casing Left —
Subsurface Water Data — Page —
Obs. Well —
Drilled By EASTERN GEOTECHNICAL ASSOC.
Mfg. Des. Drill ACKER
Inspected By: J. Crowther
Classification By: J. Crowther
Classification By:

Started 4-26-84
Completed 4-26-84

DEPTH 1"=2.0'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
					1.0 ft. SINK IN WITH WEIGHT OF HAMMER	COBBLES at surface
1.0				4		
2.0				2	DROVE "AW" ROD PROBE FROM 0.0 TO 13.0 FT. WITH 300 lb HAMMER	
3.0				3		
4.0				3		
5.0				2		
6.0				0		
7.0				5		
8.0				8		
9.0				9		
10.0						

GENERAL REMARKS: WATER 4.5 FT. DEEP AT 1035 hrs ON 4-26-84

Probe No. FP-84-10

Site: Scituate Harbor Scituate MA	Probe No. FP-84-10	Page 2 of 3

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
10.0				13		
11.0				2		NOTHING IN TIP
12.0				2		PROBABLE SANDS
13.0					END OF PROBE AT 13.0 FT.	

13.0

Site: Scituate Harbor Scituate MA

Probe No. FP-84 -10

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-26-81	1035hrs	—	13.0	4.5	4.7	TOP OF PROBE EL 0.2 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

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FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 2 Pages

Probe FP-84-11 Desig. P-29 Diam. (Casing) —

Co-ordinates: LAMBERT N 436,026.69 E 810,498.08

Elevation Top -6.7 ~~M.S.L.~~ MLW Hammer Wt. 300 lbs Started 4-26-84

Total Overburden Drilled 8.0 Feet Hammer Drop 18" Completed 4-26-84

Elevation Top of Rock — M.S.L. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data — Page

Elevation Bottom -14.7 ~~M.S.L.~~ MLW Obs. Well —

Total Depth 8.0 Feet Drilled By EASTERN GEOTECHNICAL ASSOC.

Core Recovered N/A % No. Boxes Mfg. Des. Drill ACKER

Core Recovered N/A Ft: Diam. In. Inspected By: J. Crowther

Soil Samples N/A In. Diam. No. Classification By: J. Crowther

Soil Samples N/A In. Diam. No. Classification By:

DEPTH 1"=2.0	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
					4.0 ft. SINK IN WITH WEIGHT OF HAMMER	
1.0						PEAT (IN RODS) near top, fiberous. (Pt)
2.0						
3.0					DROVE "AW" ROD PROBE FROM 0.0 TO 8.0 FT WITH 300 lb. HAMMER.	
4.0				5		SILT & SAND (IN RODS) fine sand, (ML-SM)
5.0				2		
6.0				12		SILTY SAND (IN TIP) fine sand, < 5% gravel, 10-15% non plastic fines, grey (SM)
7.0				6		
8.0					END OF PROBE AT 8.0 FT.	

GENERAL REMARKS: WATER 9.0 FT. DEEP AT 1210 hrs. ON 4-26-84

Probe No. FP-84-11

Site: Scituate Harbor Scituate MA

Probe No. FP-84-11

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-26-84	1210hrs	—	8.0	9.0	2.3	TOP OF PROBE EL. 6.7

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 1 Pages

Probe FP-84-12 Desig. P-28 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 436,042.60 E 810,762.37

Elevation Top -8.2 ~~M.S.L.~~ MLW
Total Overburden Drilled 8.0 Feet
Elevation Top of Rock — M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -16.2 ~~M.S.L.~~ MLW
Total Depth 8.0 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft: Diam. In.
Soil Samples N/A In. Diam. No.
Soil Samples N/A In. Diam. No.

Hammer Wt. 300 lbs
Hammer Drop 18"
Casing Left —
Subsurface Water Data Page
Obs. Well —
Drilled By EASTERN GEOTECHNICAL ASSOC.
Mfg. Dea. Drill ACKER
Inspected By: J. Crowther
Classification By: J. Crowther
Classification By:

Started 4-26-84
Completed 4-26-84

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1"=2.0					4.5 SINK IN WITH WEIGHT HAMMER	
1.0						PEAT (IN RODS) near top, fibrous (Pt)
2.0						
3.0					DROVE "AW" ROD PROBE FROM 0.0 TO 8.0 FT. WITH 300 lb HAMMER.	
4.0						SILT & SAND (IN RODS) fine sand, (ML-SM)
5.0				4		
				4		
6.0						SILT SAND (IN TIP) fine sand, <5% gravel, 10-15% non plastic fines gray (SM)
				15		
7.0						
				10		
8.0					END OF PROBE AT 8.0 FT.	

8.0

GENERAL REMARKS: WATER. 10.0 FT. DEEP AT 1235 hrs ON 4-26-84

Probe No. FP-84-17

Site: Scituate Harbor Scituate MA

Probe No. FP-84-12

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-26-89	1735hr	—	8.0	10.0 ft.	1.8 ft.	TOP OF PROBE EL. -8.2 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Scituate Harbor Scituate MA Page 1 of 2 Pages

Probe FP-84-13 Desig. P-26 Diam. (Casing) —

LAMBERT Co-ordinates: N 436,051.14 E 810,963.33

Elevation Top -8.7 ~~M.S.L.~~ MLW
Total Overburden Drilled 7.0 Feet
Elevation Top of Rock — M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -15.7 ~~M.S.L.~~ MLW
Total Depth 7.0 Feet
Core Recovered N/A %
Core Recovered N/A Ft: ___ Diam. ___ In.
Soil Samples N/A In. Diam. ___ No.
Soil Samples N/A In. Diam. ___ No.

Hammer Wt. 300 lbs
Hammer Drop 18"
Casing Left —
Subsurface Water Data ___ Page ___
Obs. Well —
Drilled By EASTERN GEOTECHNICAL ASSOC.
Mfg. Dev. Drill ACKER
Inspected By: J. Crawford
Classification By: J. Crawford
Classification By: ___

Started 4-26-84
Completed 4-26-84

No. Boxes ___

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1" 2.0					3.5 ft. SINK IN WITH WEIGHT OF HAMMER.	
1.0						
2.0						
3.0					DROVE "AW" ROD PROBE FROM 0.0 TO 7.0 FT. WITH 300lb HAMMER	SILT + SAND, (IN RODS) Fine sand, (ML-SM)
4.0				1		
				3		
5.0						
				2		SILTY SAND (IN TIP) Fine sand, 10-15% non-plastic fines grey (SM)
6.0				1		
7.0					END OF PROBE AT 7.0 FT.	

GENERAL REMARKS: WATER 10.0 FT DEEP AT 1305 hrs ON 4-26-84

Probe No. FP-84-13

Site: Scituate Harbor Scituate MA

Probe No. FP-84-13

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-26-84	1305	—	7.0	10.0 ft.	1.3 ft.	TOP OF PROBE EL. -8.7 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

See Probe Location Plan

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 3 Pages

Probe FP-84-14 Desig. P-7 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 439,709.63 E 811,943.72

Elevation Top +0.5 ~~M.S.L.~~ M.L.W. Hammer Wt. 300 lbs. Started 4-27-84

Total Overburden Drilled 12.0 Feet Hammer Drop 18" Completed 4-27-84

Elevation Top of Rock ABOVE ENCOUNTERED M.S.L. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data — Page —

Elevation Bottom -11.5 ~~M.S.L.~~ M.L.W. Obs. Well N/A

Total Depth 12.0' Feet Drilled By C. REIL

Core Recovered N/A % No. Bores Mfg. Dea. Drill ACKER

Core Recovered N/A Ft: Diam. In. Inspected By: R. BUKOSKI

Soil Samples N/A In. Diam. No. Classification By: R. BUKOSKI

Soil Samples N/A In. Diam. No. Classification By:

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1'=2.0'				5	DROVE OPEN-END DRILL ROD FROM HARBOR BOTTOM TO 11.0' WITH 300 lb HAMMER FALLING 18-0"	
1.0				6		
2.0				6		
3.0				9		
4.0				11		
5.0				12		
6.0				11		
7.0				14		
8.0				9		
9.0				10	RECOVERED 8" IN TIP OF ROD	SILTY SAND, mostly fine sand, 10-20% nonplastic fines, gray, (SM).

GENERAL REMARKS:

0745
7.3' H_2O
0800
9.8' TIDE

Probe No. FP-84-14

Site: SCITUATE HARBOR	Probe No. FP-84-14 P-7	Page 2 of 3

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
1" = 2.0'						
				9		SILTY SAND, mostly fine sand, 10-20% nonplastic fines, gray (SM).
11.0				12	RECOVERED 8" IN TIP OF OPEN-END DRILL ROD	
12.0					BOTTOM OF PROBE 12.0'	

Site: SCITUATE HARBOR

Probe No. FP-84-14

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-27-84	0745			7.3'	7.8	HARBOR BOTTOM +0.5 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 3 Pages

Probe FP-84-15 Desig. P-A3 Diam. (Casing) N/A

Co-ordinates: LAMBERT N 437,721.17 E 810,760.20

Elevation Top +2.3 ~~M.S.L.~~ M.L.W. — Hammer Wt. 300 lbs. — Started 4-27-84

Total Overburden Drilled 13.0 Feet — Hammer Drop 18" — Completed 4-27-84

Elevation Top of Rock NONE ENCOUNTERED M.S.L. — Casing Left N/A

Total Rock Drilled N/A Feet — Subsurface Water Data — Page —

Elevation Bottom -10.7 ~~M.S.L.~~ M.L.W. — Obs. Well N/A

Total Depth 13.0 Feet — Drilled By C. REIL

Core Recovered N/A % — No. Boxes — Mfg. Dea. Drill ACKER

Core Recovered N/A Ft: — Diam. — In. — Inspected By: R. BURGSKI

Soil Samples N/A In. Diam. — No. — Classification By: R. BURGSKI

Soil Samples N/A In. Diam. — No. — Classification By:

0845
5.9 H2O
8.2 TIDE
+2.3 M.L.W

DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
				4	DROVE OPEN-END "AW" DRILL ROD FROM HARBOR BOTTOM TO 13.0' WITH 300 lb HAMMER FALLING 18"	
1.0				10		
2.0				9		
3.0				9		
4.0				6		
5.0				2		
6.0				3		
7.0				9		
8.0				12		
9.0				17		

GENERAL REMARKS: 10-25 MPH WIND ≈ 1' CHOP

Probe No. FP-84-15

Site: SCituate HARBOR	Probe No. FP-84-15 (P-13)	Page 2 of 3

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
1" = 2'						
				28		
11.0						
				25		
12.0					RECOVERED 2" IN TIP OF OPEN-END DRILL ROD.	SILTY SAND, MOSTLY FINE sand, 10-20% nonplastic fines, gray, (SM).
				20		
0930 13.0					BOTTOM OF PROBE 13.0'	

Site: SCITUATE HARBOR

Probe No. FP-84-15

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-27-84	0845			5.9'	8.2	HARBOR BOTTOM +2.3 M.L.W.

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 3 Pages

Probe FP-84-16 Desig. P-14 Diam. (Casing) N/A

LAMBERT
Co-ordinates: N 437,572.50 E 810,520.64

Elevation Top +2.9 ~~M.S.L.~~ M.L.W.
Total Overburden Drilled 13.0 Feet
Elevation Top of Rock NONE ENCOUNTERED M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -10.1 ~~M.S.L.~~ M.L.W.
Total Depth 13.0 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft: Diam. In.
Soil Samples N/A In. Diam. No.
Soil Samples N/A In. Diam. No.

Hammer Wt. 300 lbs.
Hammer Drop 18"
Casing Left N/A
Subsurface Water Data — Page —
Obs. Well —
Drilled By C. REIL
Mfg. Des. Drill ACKER
Inspected By: R. BUKOSKI
Classification By: R. BUKOSKI
Classification By:

Started 4-27-84
Completed 4-27-84

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1" = 2.0'				WT. OF RODS		
0920 7.9 TIDE 5.0 H2O +2.9' M.L.W.				6	DROVE "AW" DRILL RODS FROM 0.5 TO 13.0' USING 300 lb HAMMER FALLING 18"	
1.0				4		
2.0				1		
3.0				2		
4.0				7		
5.0				6		
6.0				7		
7.0				9		
8.0				9		
9.0				6		

GENERAL REMARKS:

Probe No. FP-84-16

Site: SCITUATE HARBOR	Probe No. FP-84-16	Page 2 of 3

	DEPTH (Ft.)	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
					9		
	11.0				5		
	12.0				2	RECOVERED 6" IN TIP OF OPEN-END DRILL RODS	SILTY SAND, coarse to fine sand, 10-20% nonplastic fines 10-20% medium to fine gravel, gray, (SM)
0940	13.0					BOTTOM OF PAGE 13.0'	

Site: SCITUATE HARBOR

Probe No. FP-84-16

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-27-84	0920			5.0'	7.9'	HARBOR BOTTOM +2.9' MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 3 Pages

Probe FP-84-17 Desig. P-15 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 737,506.49 E 810,393.76

Elevation Top +4.0 ~~M.S.L.~~ M.L.W. — Hammer Wt. 300 lbs — Started 4-27-84

Total Overburden Drilled 15.0 Feet — Hammer Drop 18" — Completed 4-27-84

Elevation Top of Rock NONE ENCOUNTERED M.S.L. — Casing Left N/A

Total Rock Drilled N/A Feet — Subsurface Water Data — Page —

Elevation Bottom -11.0 ~~M.S.L.~~ M.L.W. — Obs. Well N/A

Total Depth 15.0 Feet — Drilled By C. REIL

Core Recovered N/A % — No. Bores — Mfg. Des. Drill ACKER

Core Recovered N/A Ft: — Diam. — In. — Inspected By: R. BUKOSKI

Soil Samples N/A In. Diam. — No. — Classification By: R. BUKOSKI

Soil Samples N/A In. Diam. — No. — Classification By:

1000 lbs.
7.2 HCl
3.2 H_2O
4.0 m.L

DEPTH 1" = 2.0'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.0				4	DROVE "AW" DRILL RODS FROM HARBOR BOTTOM TO 15.0' USING 300 lb HAMMER FALLING 18"	COBBLE COVERED BOTTOM CORRODE TO 10" ±
2.0				6		
3.0				5		
4.0				4		
5.0				2		
6.0				1		
7.0				3		
8.0				1		
9.0				1		
				1		

GENERAL REMARKS:

Probe No. FP-84-17

Site: SCITUATE HARBOR	Probe No. FP-84-17 P-15	Page 2 of 3

DEPTH	CORE/SAMPLE			BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
r=2.0'	NQ	SIZE	DEPTH RANGE			
				3		
11.0						
				3		
12.0						
				3		
13.0						
				8	RECOVERED 6" IN TIP OF OPEN-END DRILL ROD	SILTY SAND, coarse to fine sand, 15-25% low plasticity fines, 10-20% medium to fine gravel and shell fragments, gray, (SM).
14.0						
				11		
15.0					BOTTOM OF PROBE 15.0'	

Site: SCITUATE HARBOR

Probe No. FP-84-17

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
7-17-84	1000			3.2'	7.2'	HARBOR BOTTOM +4.0 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCituate HARBOR — Page 1 of 3 Pages

Probe FP-84-18 Desig. P-16 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 437,724.78 E 810,481.41

Elevation Top +1.5 ~~M.S.L.~~ M.L.W.
Total Overburden Drilled 12.0 Feet
Elevation Top of Rock NONE ENCOUNTERED M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -10.5 ~~M.S.L.~~ M.L.W.
Total Depth 12.0 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft: Diam. In.
Soil Samples N/A In. Diam. No.
Soil Samples N/A In. Diam. No.

Hammer Wt. 300 lbs
Hammer Drop 18"
Casing Left N/A
Subsurface Water Data — Page —
Obs. Well —
Drilled By C. REIL
Mfg. Des. Drill ACKER
Inspected By: R. BUKOSKI
Classification By: R. BUKOSKI
Classification By:

Started 4-27-84
Completed 4-27-84

1030 hrs.
6.5 ~~[illegible]~~
5.0 R.O
-1.5 R.W
1045 hrs.

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1"=2.0						
				WT. OF RODS	DROVE "AW" DRILL RODS FROM 0.5 TO 12.0' WITH 300 lb HAMMER FALLING 18"	
1.0				5		
				3		
2.0						
				3		
3.0						
				15		
4.0						
				22		
5.0						
				20		
6.0						
				10		
7.0						
				5		
8.0						
				1		
9.0						
				9		

GENERAL REMARKS:

Probe No. FP-84-18

Site: SCITUATE HARBOR	Probe No. FP-84-18 (FP-18)	Page 2 of 3

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5 = 2.0'						
11.0				6	RECOVERED 8" ON TIP OF OPEN-END DRILL RODS	SILTY GRAVEL, medium to fine gravel, 20-35% coarse to fine sand, 10-20% nonplastic fines, gray, (GM).
				7		
12.0					BOTTOM OF PROBE 12.0'	
13.0						

Site: SCITUATE HARBOR

Probe No. FP-84-18

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-27-84	1630			5.0	6.5	HARBOR BOTTOM +1.5' MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 3 Pages

Probe FP-84-19 Desig. P-8 Diam. (Casing) N/A

Co-ordinates: N 439,429.04 E 812,000.39

Elevation Top -2.0 ~~M.S.L.~~ M.L.W.
Total Overburden Drilled 12.0 Feet
Elevation Top of Rock NONE ENCOUNTERED M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -14.0 ~~M.S.L.~~ M.L.W.
Total Depth 12.0 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft: Diam. In.
Soil Samples N/A In. Diam. No.
Soil Samples N/A In. Diam. No.

Hammer Wt. 300 lbs
Hammer Drop 18"
Casing Left NONE
Subsurface Water Data — Page
Obs. Well N/A
Drilled By C. REIL
Mfg. Dea. Drill ACKER
Inspected By: R. BUKOSKI
Classification By: R. BUKOSKI
Classification By:

Started 4-27-84
Completed 4-27-84

1415
0.8' DEE
2.8 NO
-2.0 M.L.W

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1" = 2'						
				8	DROVE "AW" DRILL RODS FROM HARBOR BOTTOM TO 12.0' WITH 300 lb HAMMER FALLING 18"	COBBLES & GRAVEL ON SURFACE OF BOTTOM.
1.0				7		
2.0				11		
3.0				8		
4.0				4		
5.0				3		
6.0				3		SOFT
7.0				2		
8.0				5		
9.0				16		

GENERAL REMARKS:

Probe No. FP-84-A P-8

Site: SCITUATE HARBOR	Probe No. FP-84-19 P-8	Page 2 of 3

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
	r. 2'				21		SILTY SAND AND GRAVEL coarse to fine sand, medium to fine gravel, 10-20% low plasticity fines, gray, (SM).
	11.0					RECOVERED 9" IN TIP OF OPEN-END DRILL RODS.	
					21		
1430	12.0					BOTTOM OF PROBE 12.0'	

P-8

Site: SCITUATE HARBOR

Probe No. FP-84-19

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-27-84	1415			2.8	0.8'	HARBOR BOTTOM -2.0 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 2 Pages

Probe FP-84-20 Desig. P-10 Diam. (Casing) N/A

Co-ordinates: N 438,850.09 E 812,013.83

Elevation Top -2.25 ~~M.S.L.~~ M.L.W. Hammer Wt. 300 lbs Started 4-30-84

Total Overburden Drilled 9.0 Feet Hammer Drop 18" Completed 4-30-84

Elevation Top of Rock NONE ENCOUNTERED M.S.L. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data — Page —

Elevation Bottom -11.25 ~~M.S.L.~~ M.L.W. Obs. Well N/A

Total Depth 9.0 Feet Drilled By C. DRIL

Core Recovered N/A % No. Boxes Mfg. Dea. Drill ACKER

Core Recovered N/A Ft: Diam. in. Inspected By: R. BURSKI

Soil Samples N/A in. Diam. No. Classification By: R. DLAROSKI

Soil Samples N/A in. Diam. No. Classification By:

OCEANRAC
2.5' Sonic
0 Reach HSO

0900 hr.
5.8 Tide
8.05 MLW
- 2.25 M.L.W.

1000 completed

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1" = 2'						
1.0				5	DROVE OPEN-END "AW" DRILL ROD FROM HARBOR BOTTOM TO 9.0' USING 300 lb HAMMER FALLING 18".	
				6		
2.0				16		
3.0				14		
4.0				9		
5.0				6		
6.0				3		
7.0				3		SILTY SAND, coarse to fine sand, 10-20% medium to fine gravel, 10-20% low plasticity fines, gray (SM).
8.0				3	RECOVERED 8" SILTY SAND IN TIP OF OPEN-END DRILL RODS	
9.0					BOTTOM OF PROBE 9.0'	

GENERAL REMARKS:

Probe No. FP-84-20

P-10

Site: SCITUATE HARBOR

Probe No. FP-84-20

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-30-84	0900			8.05	5.8	HARBOR BOTTOM -2.25 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCituate Harbor — Page 1 of 3 Pages

Probe FP-84-21 Desig. P-6 Diam. (Casing) N/A

Co-ordinates: LAMBERT N 439,837.30 E 811,802.60

Elevation Top -0.95 ~~M.S.L.~~ M.L.W.
Total Overburden Drilled 11.6 Feet
Elevation Top of Rock None Encountered M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -11.95 ~~M.S.L.~~ M.L.W.
Total Depth 11.0 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft: Diam. In.
Soil Samples N/A In. Diam. No.
Soil Samples N/A In. Diam. No.

Hammer Wt. 300 lb
Hammer Drop 18"
Casing Left N/A
Subsurface Water Data — Page
Obs. Well —
Drilled By C. Reil
Mfg. Des. Drill Acker
Inspected By: R. Biaggi
Classification By: R. Biaggi
Classification By:

Started 4-30-84
Completed 4-30-84

1.5 swells

1015
7.8' TIDE
8.75 H2O
-0.95
1005

DEPTH 1" = 2.0'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
				3	DROVE OPEN-END "AW" DRILL RODS FROM HARBOR BOTTOM TO 11.0' WITH 300 lb HAMMER FALLING 18".	
1.0				2		
2.0				8		
3.0				10		
4.0				4		
5.0				2		
6.0				5		
7.0				12		
8.0				12		SILTY SAND & GRAVEL coarse to fine sand, 10-20% low plasticity fines, medium to fine subangular gravel, gray, (SM).
9.0				9	RECOVERED 7"	

GENERAL REMARKS:

Probe No. FP-84-21

P-6

Site: SCituate HARBOR	Probe No. FP-84-21 P-6	Page 2 of 3

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
r. 20				12		
11.0					BOTTOM OF PROBE 11.0'	

Site: SCITUATE HARBOR

Probe No. FP-84-21

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-30-84	1015			8.75	7.8'	HARBOR Bottom -0.95 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 3 Pages

Probe FP-84-22 Desig. P-5 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 439,975.08 E 811,650.15

Elevation Top -0.5 ~~M.S.L.~~ M.L.W.
Total Overburden Drilled 11.0 Feet
Elevation Top of Rock NONE ENCOUNTERED M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -11.5 ~~M.S.L.~~ M.L.W.
Total Depth 11.0 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft: Diam. In.
Soil Samples N/A In. Diam. No.
Soil Samples N/A In. Diam. No.

Hammer Wt. 300 lbs
Hammer Drop 18"
Casing Left N/A
Subsurface Water Data — Page
Obs. Well N/A
Drilled By C. REIL
Mfg. Des. Drill ACKER
Inspected By: R. BUKOSKI
Classification By: R. BUKOSKI
Classification By:

Started 4-30-84
Completed 4-30-84

DEPTH 1" = 2.0'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
				WT. OF RODS	DROVE OPEN-END "AW" DRILL RODS FROM HARBOR BOTTOM TO 11.0' WITH 300 lb HAMMER FALLING 18"	
1.0				3		
				1		
2.0				3		
3.0				5		
4.0				12		
5.0				2		
6.0				4		
7.0				2		
8.0				5		
9.0				5	RECOVERED 13" IN TIP OF OPEN-END RODS	SILTY SAND, fine medium to fine sand, 10-20% nonplastic fines, 5-10% shell fragments, top of recovered sample 10-20% medium subrounded gravel, gray, (SM).

1150
8.5' TIDE
9.0' H2O
-0.5 FLOW
1120

GENERAL REMARKS:

Probe No. FP-84-22

Site: SITUATE HARBOR	Probe No. FP-84-22 P-5	Page 2 of 3

DEPTH		CORE/SAMPLE			BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
	1 = 2.0'	NO.	SIZE	DEPTH RANGE			
					6		
	11.0					BOTTOM OF PROBE 11.0'	

Site: SCITUATE HARBOR

Probe No. FP-84-22

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
7-30-84	1100			9.0	8.5	HARBOR BOTTOM -0.5 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
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NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 3 Pages

Probe FP-84-23 Desig. P-3 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 439,293.41 E 810,556.79

Elevation Top -0.8 ~~M.S.L.~~ M.L.W. — Hammer Wt. 300 lbs — Started 4-30-84

Total Overburden Drilled 13.0 Feet — Hammer Drop 18"

Elevation Top of Rock NONE ENCOUNTERED M.S.L. — Casing Left N/A — Completed 4-30-84

Total Rock Drilled N/A Feet — Subsurface Water Data — Page

Elevation Bottom -13.8 ~~M.S.L.~~ M.L.W. — Obs. Well —

Total Depth 13.0 Feet — Drilled By C. REIL

Core Recovered N/A % — No. Bores — Mfg. Des. Drill ACKER

Core Recovered N/A Ft: — Diam. — In. — Inspected By: R. BUKOSKI

Soil Samples N/A In. Diam. — No. — Classification By: R. BUKOSKI

Soil Samples N/A In. Diam. — No. — Classification By:

1130
8.7 TIDE
9.5 H_2O
-0.8
BOTTOM
1200 hrs

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1" = 2.0'						
10				WT OF RODS AND 300 lb HAMMER	DROVE "AW" DRILL RODS FROM 5.5' TO 13.0' WITH 300 lb HAMMER FALLING 18".	SURFACE - LOW TIDE, NUMEROUS BOULDERS IN VICINITY MAXIMUM DIMENSION 10'±
20						
30						
40						
50						
60				1		
70				2		
80				3		
90				4		
				7		

GENERAL REMARKS: -8

Probe No. FP-84-23

Site: SCITUATE HARBOR	Probe No. FP-84-23	Page 2 of 3

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
110				54	RECOVERED 13": 4" HARBOR BOTTOM SEDIMENTS 5" SILTY SAND - 4" GLACIAL TILL	HARBOR SEDIMENTS: SANDY ORGANIC SILT, low plasticity Fines, 15-35% Fine sand, black (OL).
120				50		
				76		
130					BOTTOM OF PROBE 13.0'	SILTY SAND, Fine med. to Fine sand, 15-25% low plasticity Fines, 10-20% shell Fragments and medium to Fine gravel, gray, (SM). GLACIAL TILL: SILTY SAND AND GRAVEL, Coarse to Fine sand, 10-25% nonplastic Fines medium to Fine gravel, brown, (SM).

Site: SCITUATE HARBOR

Probe No. FP-84-23

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-30-84	1130			9.5	8.7	HARBOR BOTTOM -0.8 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
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NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 3 Pages

Probe FP-84-24 Desig. P-2 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 439,523.47 E 810,479.16

Elevation Top +0.5 M.L.W. ~~M.S.L.~~ — Hammer Wt. 300 lbs — Started 4-30-84

Total Overburden Drilled 10.5 Feet — Hammer Drop 18" — Completed 4-30-84

Elevation Top of Rock Cobble @ -10.5 M.L.W. ~~M.S.L.~~ — Casing Left N/A

Total Rock Drilled N/A Feet — Subsurface Water Data — Page

Elevation Bottom -10.0 M.L.W. ~~M.S.L.~~ — Obs. Well N/A

Total Depth 10.5 Feet — Drilled By C. DEIL

Core Recovered N/A % — No. Boxes — Mfg. Des. Drill ACKER

Core Recovered N/A Ft. — Diam. — In. — Inspected By: R. BUKOSKI

Soil Samples N/A In. Diam. — No. — Classification By: R. BUKOSKI

Soil Samples N/A In. Diam. — No. — Classification By:

1230
8.2 TIDE
7.7
0.5 M.L.W.
RCD

DEPTH 1" = 2.0'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.0				WT. OF RODS AND 300 lb HAMMER	DROVE "AW" DRILL RODS FROM 2.5' TO 10.5' WITH 300 lb HAMMER FALLING 18".	
2.0						
3.0				5		
4.0				13		
5.0				20		
				11		
				18	"	SILTY SAND - medium to fine sand, 10-25% non-plastic fines, gray, (SM).
				10		
				31	RECOVERED 9" IN TIP OF OPEN-END DRILL RODS.	SILTY GRAVEL, medium to fine subangular gravel 20-35% coarse to fine sand, 10-25% nonplastic fines, brown, (GM).
				73		

GENERAL REMARKS:

Probe No. FP-84-24

Site: SCituate HARBOR	Probe No. FP-84-24 P-2	Page 2 of 3

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
	r=20				160/6"	REFUSAL AT 10.5' - 100 BLOWS NO PENETRATION - PUSHING COARSE	
	110					BOTTOM OF PROBE 10.5'	

Site: SCITUATE HARBOR

Probe No. FP-84-24

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-30-84	1230			7.7	8.2	HARBOR BOTTOM +0.5 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
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NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 3 Pages

Probe FP-84-25 Desig. P-1 Diam. (Casing) N/A

Co-ordinates: LAMBERT N 439,810.00 E 810,388.48

Elevation Top +0.7 ~~M.S.L.~~ M.L.W. — Hammer Wt. 300 lbs — Started 4-30-84

Total Overburden Drilled 11.0 Feet — Hammer Drop 18" — Completed 4-30-84

Elevation Top of Rock NONE ENCOUNTERED M.S.L. — Casing Left N/A

Total Rock Drilled N/A Feet — Subsurface Water Data — Page

Elevation Bottom -10.3 ~~M.S.L.~~ M.L.W. — Obs. Well —

Total Depth 11.0 Feet — Drilled By C. REIL

Core Recovered N/A % — No. Boxes — Mfg. Dev. Drill ACKER

Core Recovered N/A Ft: — Diam. — In. — Inspected By: R. BURKOSKI

Soil Samples N/A In. Diam. — No. — Classification By: R. BURKOSKI

Soil Samples N/A In. Diam. — No. — Classification By:

13.5
7.2' TIDE
6.5' MLW
0.7 MLW
3.45

DEPTH 1"=2.0	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
				WT. OF RODS AND 300 lb HAMMER	DROVE "AW" DRILL RODS FROM 2.5 TO USING 300 lb HAMMER FALLING 18".	NUMEROUS LARGE BOULDERS BETWEEN PROBE LOCATION AND SHORE. MAXIMUM DIMENSION 8'±
1.0				3		
2.0				8		
3.0				11		
4.0				119	PUSHED COBBLE @ 7.06'	
5.0				129		
6.0				37		
7.0				96		HARBOR SEDIMENTS: SILTY SAND, medium to fine sand, 20-35% organic fines and shell fragments gray, (SO).
8.0				38	RECOVERED 11" 6" HARBOR SEDIMENTS 5" GLACIAL TILL	
9.0				53		GLACIAL TILL: SILTY SAND, medium to fine sand low to moderately plastic fines, 10-20% medium to fine gravel, mottled gray and brown, (SM).

GENERAL REMARKS:

Probe No. FP-84-25

Site: SCituate HARBOR	Probe No. FP-84-25	Page 2 of 3

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
	1'=20				67		
	11.0					BOTTOM OF PROBE 11.0'	

Site: SCITUATE HARBOR

Probe No. FP-84-25

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
4-30-84	1315			6.5	7.2	HARBOR BOTTOM +0.7 M.L.W.

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site: SCITUATE HARBOR — Page 1 of 3 Pages

Probe: FP-84-26 Desig. P-4 Diam. (Casing): N/A

LAMBERT Co-ordinates: N 440,139.18 E 810,467.12

Elevation Top: +1.0 ~~M.S.L.~~ M.L.W. — Hammer Wt. 300 lbs — Started 5-1-84

Total Overburden Drilled: 12.0 Feet — Hammer Drop 18" — Completed 5-1-84

Elevation Top of Rock: NONE ENCOUNTERED M.S.L. — Casing Left N/A

Total Rock Drilled: N/A Feet — Subsurface Water Data: — Page

Elevation Bottom: -11.0 ~~M.S.L.~~ M.L.W. — Obs. Well N/A

Total Depth: 12.0 Feet — Drilled By: C. REIL

Core Recovered: N/A % — No. Bores — Mfg. Des. Drill: ACKER

Core Recovered: N/A Ft: — Diam. — In. — Inspected By: R. BUKOSKI

Soil Samples: N/A In. Diam. — No. — Classification By: R. BUKOSKI

Soil Samples: N/A In. Diam. — No. — Classification By:

1100 hrs.
7.6 TIDE
6.6 MO
1.0 MLW
1115

DEPTH (1" = 2.0')	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
				WT. OF HAMMER	DROVE OPEN-END "AW" DRILL RODS FROM HARBOR BOTTOM TO 12.0' WITH 300 lb HAMMER FALLING 18".	HARBOR BOTTOM: SANDY
1.0				1		
				2		
2.0				1		
3.0				WT. OF 300 lb HAMMER 3.0 TO 6.0'		
4.0						
5.0						
6.0				5		
7.0				6	RECOVERED 10" 4" PEAT 2" CLAY	PEAT, fibrous organic material, strong organic odor, brown, (Pt).
8.0				6		CLAY: moderately plastic, gray (CL).
9.0				18		

GENERAL REMARKS:

Probe No. FP-84-26

Site: SCITUATE HARBOR	Probe No. FP-84-26 P-4	Page 2 of 3

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
10.0				47		GLACIAL TILL: SILTY SAND, Coarse to Fine sand, low to moderately plastic Fines, 10-20% medium angular gravel Fragments, gray & brown. (SM)
				127	RECOVERED 4" GLACIAL TILL IN TIP OF RODS	
12.0					BOTTOM OF PROBE 12.0'	

Site: SCITUATE HARBOR

Probe No. FP-84-26

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
5-1-84	1100			6.6	7.6	HARBOR BOTTOM +1.0

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR Page 1 of 3 Pages

Probe FP-84-27 Desig. P-9 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 438,613.50 E 812,052.36

Elevation Top -2.0 ~~M.S.L.~~ A.L.W. Hammer Wt. 300 lbs Started 5-1-84

Total Overburden Drilled 12.0 Feet Hammer Drop 18" Completed 5-1-84

Elevation Top of Rock NONE ENCOUNTERED M.S.L. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data — Page

Elevation Bottom -14.0 ~~M.S.L.~~ M.L.W. Obs. Well N/A

Total Depth 12.0 Feet Drilled By C. REIL

Core Recovered N/A % No. Boxes Mfg. Dea. Drill ACKER

Core Recovered N/A Ft: Diam. In. Inspected By: R BUKOSKI

Soil Samples N/A In. Diam. No. Classification By: R. BUKOSKI

Soil Samples N/A In. Diam. No. Classification By:

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1" = 2.0'				WT OF HAMMER		
				1	DROVE OPEN-END "AW" DRILL RODS FROM 0.5 TO 12.0' WITH 300 lb HAMMER FALLING 18".	
1.0				5		
2.0				3		
3.0				3		
4.0				7		
5.0				6		
6.0				5		
7.0				7	RODS PULLED VERY HARD FIRST 4'-4' OUTSIDE RODS SMEARED WITH CLAY.	SILTY SAND, coarse to fine sand, 15-25% nonplastic fines, gray, (SM)
8.0				30	RECOVERED 11" 6" SILTY SAND 5" CLAY	
9.0				44		SILTY CLAY, moderately plastic, hard, mottled gray and brown, (CL).

GENERAL REMARKS:

Probe No. FP-84-27

P-9

Site: SCITUATE HARBOR	Probe No. FP-84-27	Page 2 of 3

DEPTH	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1" = 2.0						
				66		
11.0						
				67		
12.0						
					BOTTOM OF PROBE 12.0'	

Site: SCITUATE HARBOR

Probe No. FP-84 - 27

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
5-1-84	1200			10.5	8.5	HARBOR BOTTOM -2.0 MLW.

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
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NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 2 Pages

Probe FP-84-28 Desig. P-12 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 438,224.19 E 810,989.10

Elevation Top -3.0 ~~M.S.L.~~ M.L.W.
Total Overburden Drilled 7.0 Feet
Elevation Top of Rock NOT ENCOUNTERED M.S.L.
Total Rock Drilled N/A Feet
Elevation Bottom -10.0 ~~M.S.L.~~ M.L.W.
Total Depth 7.0 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft. Diam. In.
Soil Samples N/A In. Diam. No.
Soil Samples N/A In. Diam. No.

Hammer Wt. 300 lbs
Hammer Drop 18"
Casing Left N/A
Subsurface Water Data — Page
Obs. Well N/A
Drilled By C. REIL
Mfg. Des. Drill ACKER
Inspected By: R. BUKOSKI
Classification By: R. BUKOSKI
Classification By:

Started 5-1-84
Completed 5-1-84

1310
8.5 TIDE
11.5 H_2O
3.0 M.L.W.
1420

DEPTH 1"=2.0'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.0				7	DROVE OPEN-END "AW" DRILL RODS FROM HARBOR BOTTOM TO 7.0' WITH 300 lb HAMMER FALLING 18"	
2.0				4		
3.0				5		
4.0				4		
5.0				3		
6.0				7	RECOVERED 6" IN TIP OF OPEN-END RODS	SILTY SAND, coarse to fine sand, 10-25% nonplastic fines, gray (SM).
7.0				4		
8.0					BOTTOM OF PROBE 7.0'	
9.0						

GENERAL REMARKS:

Probe No. FP-84-28

Site: SCituate HARBOR

Probe No. FP-84-28

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
5-1-84	1310			11.5	8.5	HARBOR BOTTOM -3.0 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

U. S. ARMY
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NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site SCITUATE HARBOR — Page 1 of 2 Pages

Probe FP-84-29 Desig. P-11 Diam. (Casing) N/A

LAMBERT Co-ordinates: N 438,038.68 E 811,035.35

Elevation Top -4.8 M.L.W. ~~M.S.L.~~ — Hammer Wt. 300 lbs — Started 5-1-84

Total Overburden Drilled 6.0 Feet — Hammer Drop 18" — Completed 5-1-84

Elevation Top of Rock NONE ENCOUNTERED M.S.L. — Casing Left N/A

Total Rock Drilled N/A Feet — Subsurface Water Data — Page

Elevation Bottom -10.8 M.L.W. ~~M.S.L.~~ — Obs. Well N/A

Total Depth 6.0 Feet — Drilled By C. REIL

Core Recovered N/A % — No. Boxes — Mfg. Des. Drill ACKER

Core Recovered N/A Ft: — Diam. — In. — Inspected By: R. BUKOSKI

Soil Samples N/A In. Diam. — No. — Classification By: R. BUKOSKI

Soil Samples N/A In. Diam. — No. — Classification By:

1500 hrs
5.2 Tide
10.0 MLW
-4.8 M.L.W.
1515

DEPTH 1" = 2.0'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.0, 2.0, 3.0, 4.0				WT. OF 300 lb HAMMER 0.0 TO 5.0'	DROVE OPEN-END "AW" DRILL RODS FROM 5.5 TO 8.0' WITH 300 lb HAMMER FALLING 18"	PEAT, fiberous material, brown, (Pt).
5.0				3	RECOVERED 8" 2" PEAT 6" SILTY SAND	SILTY SAND, medium to fine sand, 20-35% fines, gray, (SM).
6.0				3	BOTTOM OF PROBE 6.0' OVER DRIVE TO 8.0'	
7.0				9		
8.0						
9.0						

GENERAL REMARKS:

Probe No. FP-84-29

P-11

Site: SCITUATE HARBOR

Probe No. FP-84-29

TIDAL OBSERVATIONS

DATE	TIME	DEPTH-BOT OF CASING	DEPTH-BOT OF PROBE	DEPTH TO BOTTOM	ELEVATION OF TIDE	REMARKS
5-1-84	1500			10.0	5.2	HARBOR BOTTOM -4.8 MLW

Note: Depths are in feet below original ground or mudline.

Probe Location Sketch

APPENDIX F

TIDE CHART

HIGH & LOW WATER

AT

BOSTON

MASSACHUSETTS

Day of Month	Day of Week	MARCH						Day of Month	Day of Week	APRIL					
		HIGH				LOW				HIGH				LOW	
		a.m.	Ht.	p.m.	Ht.	a.m.	p.m.			a.m.	Ht.	p.m.	Ht.	a.m.	p.m.
1	T	10 31	9.5	10 58	8.7	4 15	4 47	1	S	11 19	9.5	11 36	9.5	5 06	5 25
2	F	11 09	9.6	11 34	8.9	4 54	5 21	2	M	11 56	9.4	....	...	5 44	6 01
3	S	11 47	9.6	....	...	5 33	5 58	3	T	12 10	9.6	12 34	9.3	6 23	6 38
4	S	12 09	9.1	12 23	9.6	6 10	6 33	4	W	12 47	9.7	1 13	9.1	7 02	7 15
5	M	12 44	9.2	1 01	9.4	6 49	7 09	5	T	1 24	9.7	1 53	8.9	7 43	7 56
6	T	1 19	9.3	1 38	9.2	7 30	7 46	6	F	2 06	9.6	2 38	8.6	8 29	8 41
7	W	1 58	9.3	2 19	8.9	8 09	8 26	7	S	2 52	9.5	3 29	8.4	9 17	9 30
8	T	2 36	9.2	3 05	8.5	8 54	9 10	8	S	3 44	9.4	4 25	8.2	10 12	10 27
9	F	3 21	9.1	3 52	8.2	9 44	9 57	9	M	4 43	9.4	5 25	8.2	11 12	11 30
10	S	4 11	9.1	4 49	8.0	10 36	10 51	10	T	5 45	9.5	6 29	8.5	....	12 15
11	S	5 08	9.1	5 46	7.9	11 36	11 51	11	W	6 49	9.8	7 30	9.1	12 35	1 17
12	M	6 08	9.3	6 50	8.1	....	12 40	12	T	7 52	10.1	8 29	9.7	1 39	2 15
13	T	7 09	9.7	7 52	8.6	12 54	1 41	13	F	8 51	10.5	9 22	10.4	2 37	3 09
14	W	8 10	10.2	8 50	9.2	1 57	2 39	14	S	9 46	10.8	10 13	11.0	3 33	3 59
15	T	9 09	10.7	9 43	9.9	2 55	3 33	15	S	10 39	11.0	11 02	11.4	4 25	4 48
16	F	10 05	11.2	10 36	10.6	3 51	4 25	16	M	11 31	10.9	11 50	11.6	5 17	5 36
17	S	10 57	11.4	11 26	11.1	4 44	5 13	17	T	....	...	12 21	10.6	6 06	6 23
18	S	11 49	11.4	....	...	5 35	6 01	18	W	12 37	11.4	1 11	10.2	6 55	7 10
19	M	12 15	11.4	12 40	11.2	6 26	6 48	19	T	1 25	11.1	2 01	9.6	7 45	7 59
20	T	1 03	11.4	1 31	10.7	7 17	7 36	20	F	2 15	10.5	2 53	9.0	8 36	8 51
21	W	1 53	11.1	2 24	10.0	8 08	8 26	21	S	3 08	9.9	3 48	8.5	9 31	9 45
22	T	2 44	10.6	3 18	9.3	9 02	9 17	22	S	4 03	9.3	4 47	8.1	10 29	10 43
23	F	3 36	10.1	4 16	8.6	9 58	10 13	23	M	5 01	8.9	5 47	7.9	11 28	11 46
24	S	4 35	9.5	5 17	8.1	10 59	11 15	24	T	6 02	8.6	6 46	8.0	....	12 25
25	S	5 35	9.0	6 20	7.8	....	12 02	25	W	7 01	8.6	7 39	8.2	12 46	1 21
26	M	6 37	8.8	7 23	7.8	12 17	1 05	26	T	7 55	8.6	8 26	8.5	1 42	2 10
27	T	7 39	8.8	8 19	8.0	1 20	2 03	27	F	8 44	8.8	9 07	8.9	2 31	2 53
28	W	8 34	8.9	9 08	8.3	2 16	2 51	28	S	9 27	9.0	9 46	9.3	3 16	3 35
29	T	9 19	9.1	9 48	8.6	3 05	3 35	29	S	10 09	9.1	10 24	9.6	3 57	4 13
30	F	10 02	9.3	10 25	9.0	3 48	4 13	30	M	10 48	9.2	11 01	9.8	4 37	4 52
31	S	10 41	9.4	11 01	9.3	4 28	4 49	1	T	1227	9.2	—	—	—	629

Average Rise and Fall 9½ ft.

Scituate HARBOR-TIDE TIMES SAME AS BOSTON

Average Rise in feet 9.5

APPENDIX G

SURVEY FIELD NOTES

COORDINATE FILE:SCITI LENGTH = 56 POINTS; TIME ON FILE: 2 25 27.43
CONDITION SURVEY ***** JOB #0

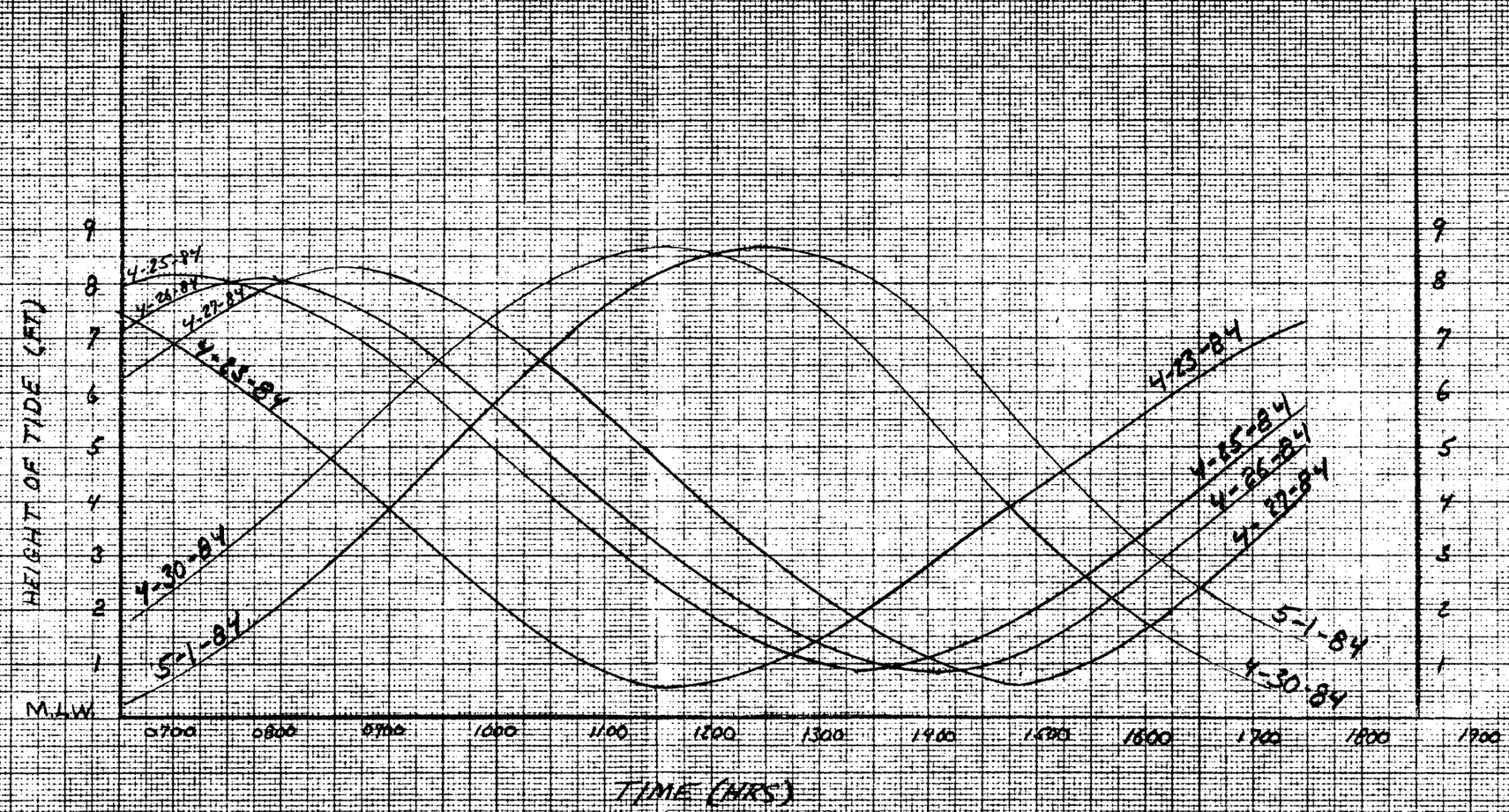
********** COCO **********

FROM	TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING	ELEVATION	
START				39	439,142.1756	809,904.0852	0.0000	POOL
39	INV NE	29 33 31.30	465.34	38	439,546.9476	810,133.6419	0.0000	YATCH
38	S.S. NE	23 58 13.80	489.80	11	439,990.8453	810,331.0041	B1	
38	S.S. NE	44 05 27.58	366.25	13	439,810.0000	810,388.4772	P1	
38	S.S. SE	06 06 45.84	346.32	14	439,523.4695	810,479.1634	P2	
38	S.S. SE	59 04 17.73	493.29	15	439,293.4118	810,556.7931	P3	
38	S.S. NE	29 22 59.05	679.67	12	440,139.1809	810,467.1176	P4	
START				38	439,546.9476	810,133.6419	0.0000	YATCH
38	INV NE	80 01 21.30	2235.48	41	439,934.2668	812,335.3121	0.0000	LIGHT
41	S.S. NW	86 35 26.42	686.37	5	439,975.0846	811,650.1546	P5	
41	S.S. SW	79 41 00.25	541.46	6	439,837.2980	811,802.6046	P6	
41	S.S. SW	60 09 34.17	451.44	7	439,709.6343	811,943.7238	P7	
41	S.S. SW	33 32 28.39	606.15	8	439,429.0437	812,000.3894	P8	
41	S.S. SW	12 05 30.86	1350.74	9	438,613.4961	812,052.3586	P9	
41	S.S. SW	16 30 57.68	1130.04	10	438,850.0889	812,013.8342	P10	
START				38	439,546.9476	810,133.6419	0.0000	YATCH
38	INV SW	29 33 31.30	465.34	39	439,142.1756	809,904.0852	0.0000	POOL
39	S.S. SE	45 42 42.57	1580.33	16	438,038.6803	811,035.3458	P11	
39	S.S. SE	49 46 01.44	1421.25	17	438,224.1949	810,989.1031	P12	
START				3	439,142.1756	809,904.0852	0.0000	POOL
3	INV SE	9 16 32.77	2150.97	1	437,011.4325	810,252.0826	0.0000	WELCH
1	S.S. NE	35 35 58.85	872.88	18	437,721.1745	810,760.2020	P13	
1	S.S. NE	25 34 41.14	622.03	19	437,572.5009	810,520.6379	P14	
1	S.S. NE	15 58 11.79	514.93	20	437,506.4856	810,393.7558	P15	
1	S.S. NE	17 49 17.65	749.30	21	437,724.7811	810,481.4101	P16	
1	S.S. NE	8 49 01.33	663.50	22	437,667.0952	810,353.7842	P17	
1	S.S. NE	0 54 02.25	535.42	23	437,546.7912	810,260.4986	P18	
1	S.S. NE	5 11 08.12	440.06	24	437,449.6962	810,291.8566	B2	
1	S.S. SE	71 16 32.77	1155.00	25	436,640.6619	811,345.9538	B3	
1	S.S. SE	49 46 32.77	1460.00	26	436,068.5928	811,366.8262	B4	
1	S.S. SE	62 16 32.77	1238.00	27	436,435.4945	811,347.9565	P19	
1	S.S. SE	55 16 32.77	1345.00	28	436,245.2840	811,357.5425	P20	
1	S.S. SE	67 16 32.77	965.00	29	436,638.6567	811,142.1743	P21	
1	S.S. SE	57 46 32.77	1060.00	30	436,446.2044	811,148.8084	P22	
1	S.S. SE	49 46 32.77	1195.00	31	436,239.7246	811,164.4926	P23	
1	S.S. SE	43 46 32.77	1320.00	32	436,058.3227	811,165.3086	P24	
1	S.S. SE	60 16 32.77	795.00	33	436,617.2508	810,942.4780	P25	
1	S.S. SE	36 31 32.77	1195.00	34	436,051.1433	810,963.3278	P26	
1	S.S. SE	71 16 32.77	650.00	35	436,802.7737	810,867.6811	P27	
1	S.S. SE	27 46 32.77	1095.00	36	436,042.6004	810,762.3663	P28	
1	S.S. SE	14 01 32.77	1015.00	37	436,026.6929	810,498.0763	P29	

COORDINATE FILE:SCIT1 LENGTH = 56 POINTS; TIME ON FILE: 2 25 27.43
CONDITION SURVEY ***** JOB #0

********** COGO **********

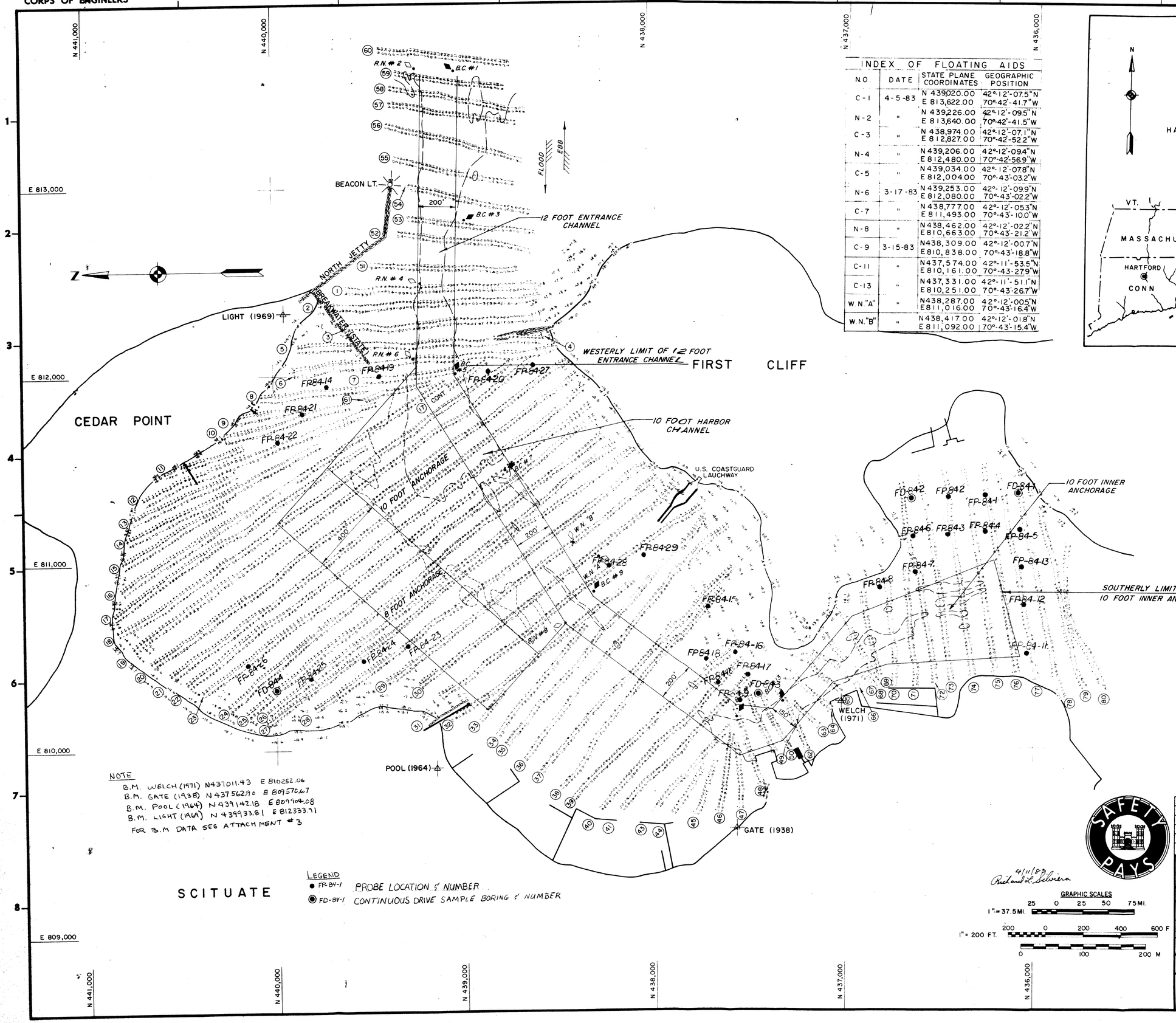
FROM	TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING	ELEVATION	
LIST				5	439,975.0846	811,650.1546		P5
				6	439,837.2980	811,802.6046		P6
				7	439,709.6343	811,943.7238		P7
				8	439,429.0437	812,000.3894		P8
				9	438,613.4961	812,052.3586		P9
				10	438,850.0889	812,013.8342		P10
				11	439,990.8453	810,331.0041		B1
				12	440,139.1809	810,467.1176		P4
				13	439,810.0000	810,388.4772		P1
				14	439,523.4695	810,479.1634		P2
				15	439,293.4118	810,556.7931		P3
				16	438,038.6803	811,035.3458		P11
				17	438,224.1949	810,989.1031		P12
				18	437,721.1745	810,760.2020		P13
				19	437,572.5009	810,520.6379		P14
				20	437,506.4856	810,393.7558		P15
				21	437,724.7811	810,481.4101		P16
				22	437,667.0952	810,353.7842		P17
				23	437,546.7912	810,260.4986		P18
				24	437,449.6962	810,291.8566		B2
				25	436,640.6619	811,345.9538		B3
				26	436,068.5928	811,366.8262		B4
				27	436,435.4945	811,347.9565		P19
				28	436,245.2840	811,357.5425		P20
				29	436,638.6567	811,142.1743		P21
				30	436,446.2044	811,148.8084		P22
				31	436,239.7246	811,164.4926		P23
				32	436,058.3227	811,165.3086		P24
				33	436,617.2508	810,942.4780		P25
				34	436,051.1433	810,963.3278		P26
				35	436,802.7737	810,867.6811		P27
				36	436,042.6004	810,762.3663		P28
				37	436,026.6929	810,498.0763		P29
				38	439,546.9476	810,133.6419	0.0000	YATCH
				39	439,142.1756	809,904.0852	0.0000	POOL
				40	437,634.3471	809,499.4424	12.1334	GATE
				41	439,934.2668	812,335.3121	0.0000	LIGHT



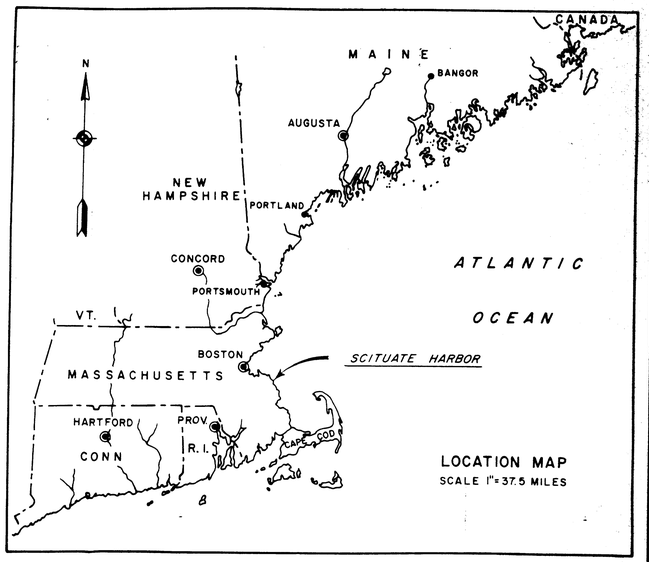
TIDE CURVES FOR SCITUATE HARBOR
SCITUATE, MASSACHUSETTS

No. 875
10 X 10 TO THE CENTIMETER
MADE IN U. S. A.

CORPS OF ENGINEERS — U. S. ARMY



INDEX OF FLOATING AIDS			
NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
C-1	4-5-83	N 439,020.00 E 813,622.00	42°-12'-07.5"N 70°-42'-41.7"W
N-2	"	N 439,226.00 E 813,640.00	42°-12'-09.5"N 70°-42'-41.5"W
C-3	"	N 438,974.00 E 812,827.00	42°-12'-07.1"N 70°-42'-52.2"W
N-4	"	N 439,206.00 E 812,480.00	42°-12'-09.4"N 70°-42'-56.9"W
C-5	"	N 439,034.00 E 812,004.00	42°-12'-07.8"N 70°-43'-03.2"W
N-6	3-17-83	N 439,253.00 E 812,080.00	42°-12'-09.9"N 70°-43'-02.2"W
C-7	"	N 438,777.00 E 811,493.00	42°-12'-05.3"N 70°-43'-10.0"W
N-8	"	N 438,462.00 E 810,663.00	42°-12'-02.2"N 70°-43'-21.2"W
C-9	3-15-83	N 438,309.00 E 810,838.00	42°-12'-00.7"N 70°-43'-18.8"W
C-11	"	N 437,574.00 E 810,161.00	42°-11'-53.5"N 70°-43'-27.9"W
C-13	"	N 437,331.00 E 810,251.00	42°-11'-51.1"N 70°-43'-26.7"W
W.N."A"	"	N 438,287.00 E 811,016.00	42°-12'-00.5"N 70°-43'-16.4"W
W.N."B"	"	N 438,417.00 E 811,092.00	42°-12'-01.8"N 70°-43'-15.4"W



GENERAL NOTES

Soundings are in feet and tenths and are referred to the plane of Mean Low Water.

Hydrography from survey of March 15, 17, & April 5, 1983

B.M. # 4 (USE) (1924) is a Corps of Engineers, U.S. Army standard disk, stamped "GATE 1924", set in front of property and 73 feet southeast of east corner of house at No. 8 Beaver Dam Road. It is 183 feet northwest of B.M. # 8, 101 feet southeast of B.M. # 4 and adjacent to a small white picket fence in the hedge. Elevation = 15.86 M.L.W.

Field books R&H 4129, R&H 4130, & R&H 4131

12 Foot depth contour shown thus

10 Foot depth contour shown thus

8 Foot depth contour shown thus

The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time.

Line numbers shown thus: (16)

Coordinates are on the Lambert Grid System for the Commonwealth of Massachusetts.

Topography from previous surveys and survey by Tibbetts Engineering Corp. on March 21, 22 & 23, 1983.

NOTE

B.M. WELCH (1971) N 437011.43 E 810252.06
B.M. GATE (1938) N 437562.90 E 809570.67
B.M. POOL (1964) N 439142.18 E 809904.08
B.M. LIGHT (1969) N 439933.81 E 812333.91
FOR B.M DATA SEE ATTACHMENT # 3

LEGEND

● FP-84-1 PROBE LOCATION & NUMBER

◉ FD-84-1 CONTINUOUS DRIVE SAMPLE BORING & NUMBER

4/11/83
Richard L. Silveira

GRAPHIC SCALES

1" = 37.5 MI. — 25 0 25 50 75 MI.

1" = 200 FT. — 200 0 200 400 600 F

0 100 200 M

SAFETY PAYS

REVISION	DATE	DESCRIPTION	BY

EASTERN GEOTECHNICAL ASSOCIATES
15 FARRAR FARM RD.
NORWELL, MA. 02061.

DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
WALTHAM, MASS.

DR. BY | TR. BY R.M.S. | CK. BY R.A.M.

SUBMITTED: PROJECT MANAGER

REVIEWED: CHIEF, COAST ENG/SUR SECT.

APPROVAL RECOMMENDED: CHIEF, DESIGN BRANCH

SCITUATE HARBOR, MASS.

BORING/PROBE LOCATION PLAN

APPROVED: CHIEF, ENGINEERING DIVISION — DATE

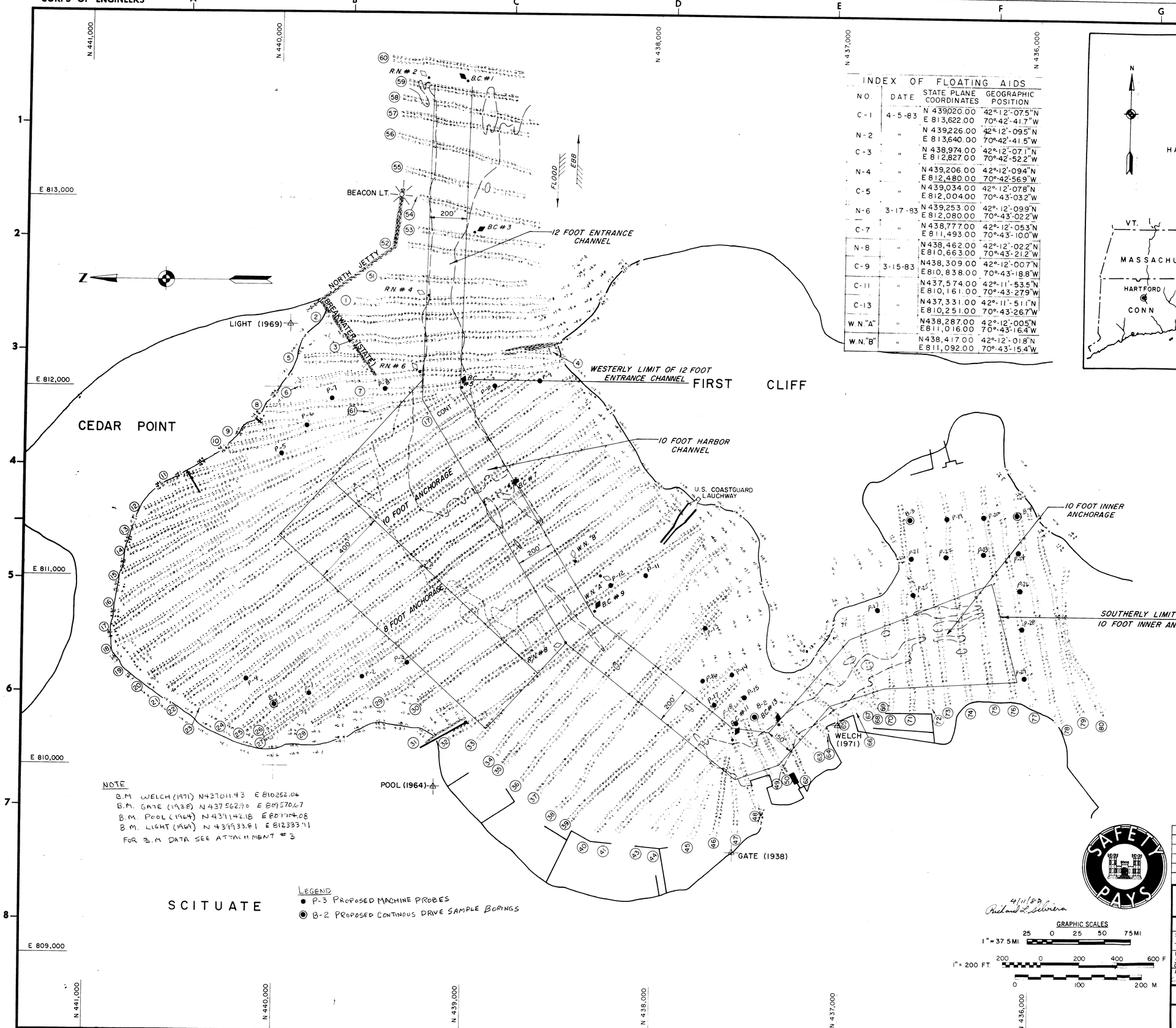
BASE PLAN PROVIDED BY TIBBETS ENGINEERING CORP
MAY 1983

SCALE 1" = 200' | SPEC. NO. DACW 33

DRAWING NUMBER

SHEET 1 OF 1 FIGURE 2

CORPS OF ENGINEERS — U. S. ARMY



INDEX OF FLOATING AIDS			
NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
C-1	4-5-83	N 439,020.00 E 813,622.00	42°-12'-07.5"N 70°-42'-41.7"W
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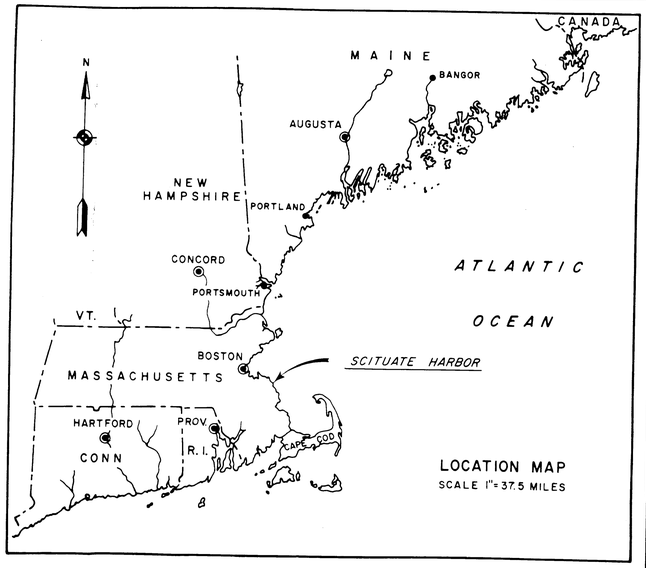
C-13	"	N 437,331.00 E 810,251.00	42°-11'-51.1"N 70°-43'-26.7"W
W.N."A"	"	N 438,287.00 E 811,016.00	42°-12'-00.5"N 70°-43'-16.4"W
W.N."B"	"	N 438,417.00 E 811,092.00	42°-12'-01.8"N 70°-43'-15.4"W



LOCATION MAP
SCALE 1"=37.5 MILES

NOTE

B.M WELCH (1971) N437011.43 E810252.06
B.M. GATE (1938) N437562.90 E809570.67
B.M. POOL (1964) N439142.18 E809104.08
B.M. LIGHT (1969) N439933.61 E812333.91
FOR B.M DATA SEE ATTACHMENT # 3

LEGEND
● P-3 PROPOSED MACHINE PROBES
◉ B-2 PROPOSED CONTINOUS DRIVE SAMPLE BORINGS

GENERAL NOTES

Soundings are in feet and tenths and are referred to the plane of Mean Low Water.

Hydrography from survey of March 15, 17, & April 5, 1983

B.M. # 4 (USE) (1924) is a Corps of Engineers, U.S. Army standard disk, stamped "GATE 1924", set in front of property and 7.3 feet southeast of east corner of house at No. 8 Beaver Dam Road. It is 183 feet northwest of B.M.#8, 101 feet southeast of B.M.#4 and adjacent to a small white picket fence in the hedge. Elevation = 15.86 M.L.W.

Field books R&H 4129, R&H 4130, & R&H 4131

12 Foot depth contour shown thus ——— ——— ———

10 Foot depth contour shown thus — — — — —

8 Foot depth contour shown thus - - - - - - - -

The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time.

Line numbers shown thus: (16)

Coordinates are on the Lambert Grid System for the Commonwealth of Massachusetts.

Topography from previous surveys and survey by Tibbetts Engineering Corp. on March 21, 22 & 23, 1983.

4/11/83
Richard L. Silveira

GRAPHIC SCALES
1" = 37.5 MI. — 25 0 25 50 75 MI.
1" = 200 FT. — 200 0 200 400 600 F
0 100 200 M

SAFETY PAYS

REVISION	DATE	DESCRIPTION	BY

TIBBETTS ENGINEERING CORP.
210 DEANE STREET
NEW BEDFORD, MASS.

DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
WALTHAM, MASS.

DR. BY | TR. BY R.M.S | CK. BY R.A.M.
SUBMITTED: PROJECT MANAGER
REVIEWED: CHIEF, COAST. ENG/SUR SECT.
APPROVAL RECOMMENDED: CHIEF, DESIGN BRANCH

SCITUATE HARBOR, MASS.
CONDITION SURVEY
10-FT. & 12-FT. CHANNEL
8-FT & 10-FT. ANCHORAGES

APPROVED — CHIEF, ENGINEERING DIVISION
DATE MAY 1983

SCALE 1" = 200' | SPEC. NO. DACW 33
DRAWING NUMBER 180 Dr. 19
SHEET 1 OF 1

5083-2 TI

ATTACHMENT #2