Critical Information related to the bid request:

City of Rochester, New York - Bid# C04070:
PORT OF ROCHESTER MARINA DEVELOPMENT PROJECT CONTRACT 2 UTILITY ROADWAY,
PEDESTRIAN SITE & MARINA IMP.
Title: PORT OF ROCHESTER MARINA DEVELOPMENT
PROJECT - CONTRACT 2

Please understand this information was independently developed by William J. Brown
Mr. Brown relied upon the expertise of a Dr. Richard Young, State University of New York at Genesco to develop
this analysis and understanding of the Marina Site Geology at the Genesee River. He also used the City of Rochester's
Marina Draft Environmental Impact Statement and Appendices web references.

The administration of the City of Rochester has continuely stated that they have done their homework in regards to the quailty of the land for the anticipated project work including the opening of the marina and building of ten story buildings on the site.

I agree that there has been plenty of research in regards to the quality of the site created by outside contractors. The city must have paid both Lebella Contractors and Foundation Design well for their work and it appears to be thorough to a point.

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That information alone should cause any engineer much concern about building anything on this site beyond a parking lot. There are three key documents available on the City of Rochester Marina Site pre-development website. They are:

- 1. Appendix G_IV. A. Predevelopment Subsurface Conditions
- 2. Appendix I_IV. B. Remedial Investigation Report
- 3. Appendix W_IV. O. Geotechnical Site Characterization

These documents can be found at: http://www.cityofrochester.gov/article.aspx?id=8589950280

But with that said, there is a breakpoint where the full site could eventually collapse. See the remaining information.

City of Rochester, New York - Bid# C04070: PORT OF ROCHESTER MARINA DEVELOPMENT PROJECT - CONTRACT 2 UTILITY ROADWAY, PEDESTRIAN SITE & MARINA IMP.
Title: PORT OF ROCHESTER MARINA DEVELOPMENT PROJECT - CONTRACT 2

UTILITY ROADWAY, PEDESTRIAN SITE & MARINA IMP. Specification Summary:

ONE (1) PRIME CONTRACTOR

estimate 8 Million

Bid Number: C04070 Issued: 12/15/2014

Pre-Bid Conference: TUESDAY, JANUARY 6, 2015 AT 1:00 PM ON SITE

Bid Open Date:

01/20/2015 Time: 2:00 PM

Bid responses are to be returned to the Office of the Purchasing Agent in a sealed envelope by the date and time indicate above, at which time and place all bids will be opened, read and recorded.

See below for Mailing Instructions *

Contract Type: Public Works

Supplementary Documents: The City of Rochester has adopted uniform Construction

Contract Documents to be utilized for Public Works Projects within the City.

MWBE: This project contains a Minority/Woman Business Enterprise Utilization Goal

APR: None

Other Requirements:

The Federal Aid in Sport Fish Restoration Program is funding this construction thanks to your purchase of fishing equipment and motorboat fuels.

This document was prepared for the New York State Department of State with funds provided under Title II of the Evnironmental Protection Fund Act.

This project contains a Project Labor Agrement (PLA) which contains Minority and Female Participation Requirements.

Bid Deposit: 5 %

Performance Security Requirement: 100% Performance Bond & Labor & Material Pay-

ment Bond

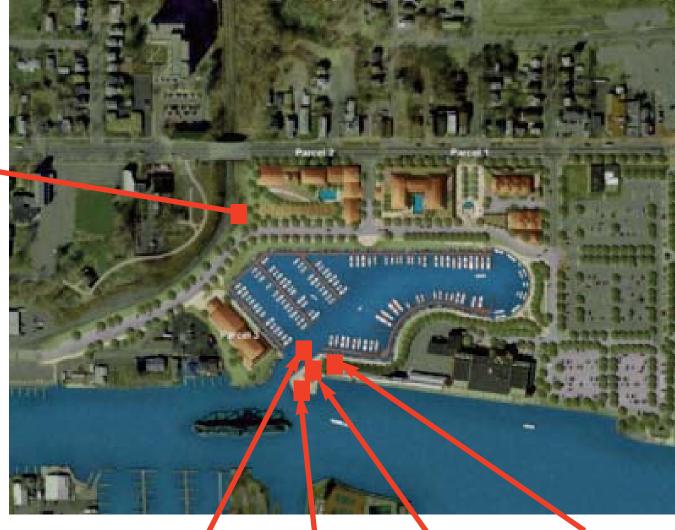
Insurance Requirement: General Liability & Auto - \$1,000,000.00, Workers' Comp & Dis-

ability - Statutory Limits Prevailing Wage Rate: yes Spec. Deposit Charge: \$ 50

Mailing Fee: \$ 25 Addendum Issued: no Other Information:

Planholders as of 12/31/2014

Sealand Contractors Corp Rush New York Ramsey Constructors, Inc. Lakeville, NY CRANE HOGAN SPENCERPORT NY MARK CERRONE INC NIAGARA FALLS NY STRUCTURMARINE MONTREAL CANADA S.R.S. Inc. ROCH NY LECHASE CONSTRUCTION SERVICES ROCH NY TECHNOMARINE REPENTIGNY CANADA CATCO ALDEN NY HERBERT F DARLING WILLIAMSVILLE NY M.L. CACCAMISE ELECTRIC CORP. ROCHESTER, NY FLOTATION DOCKING SYSTEMS INC CEDARVILE MI ECONOMY PAVING, CORTLAND, NY WYCO MECHANICAL, BROCKPORT, NY MADISON CONSTRUCTION, BUFFALO, NY LUEDTKE ENGINEERING, FRANKFORT, MI



HA-107 Depth of Core 54 Ft No Bedrock

B05-4 Depth of Boring 39 Ft
Auger Refusal

HA-103 Depth of Boring 14 Ft Auger Refusal

HA-103A
Depth of Core
71 Ft
Bottom of Test

HA-122 Dept of Boring 42 Ft Auger Refusal

HA-123 Depth of Boring 116 Ft Bedrock (?)

Based on my reading of the research provided by Lebella and Foundation Design a reasonable description of the site would be:

- 1. Due to the Iron Ore Plant, a large portion of the fill is a combination of Slag and other regulated waste materials.
- 2. Due to the location of the site to the river, the water table of the site is equal to that of the river. (Currently the site water in the marina section appears to be equal to the river height).
- 3. Based on the boring test referenced on the map above, it is unclear as to at what depth bedrock exists.

 The deepest bore (HA-123) is at least 116 feet with a second (HA-103a) at about 100 feet.

 This would be at approximately 134 feet ABOVE sea level and 141 feet below the surface of Lake Avenue.
- 4. The river street surface is at approximately 250 feet above sea level.
- 5. From the research, the regulated waste materials can be found up to 10 feet below the surface which is at 250 feet above sea level. Again based on the research it would be assumed that the material from 240 feet above sea level and down would be soft soils based on the boring tests.

Based on these conditions and the knowledge that the full site is inside the canyon walls of the river:

When the marina is opened to the river by removing the wall (10 to 20 feet deep) of waste materials (Slag, concrete and other waste materials from the old iron mill)

- 1. Almost immediately after removing that material from the Iron Ore mill to open the marina to the river **would not** the remaining soft soils begin to be washed away by the current from river flow.
- 2. Over a short time period this erosion **could accelerate** thus reducing support for the remaining site area. This would cause the remaining site to move towards the river **(collapse)**. Since the bedrock is at 116 feet, there would be no support for the current overburden, correct?
- 3. It would also be likely that the support for the current terminal building be eroded as well? The lost of foundation support for that building could make it totally unusable.
- 4. The remainder of the site would not be fit for four ten story buildings since it would be sliding towards the river.

Email Conversation about the Site Information listed above: (All on January 2nd, 2014)

The issues raised by soft, unconsolidated alluvial (river) and lacustrine (lake) soils create problems that take many forms. These types of soils are inherently unstable, as well recognized by most competent engineering firms. Whether river erosion, excavation, foundation load strength, or traffic (vibration) stresses are the issues, such soils require careful analysis to be part of any large project. Simple lateral failure (even without river erosion) could be a predictable outcome in the case of significant marina excavations. This potential, coupled with the potential stresses induced by future activities (whether new construction or heavy traffic impacts) could result in unpredictable failures by various modes that are well document in the literature.

On 1/2/2015 1:38 PM, William J Brown wrote:

Dr. Young,

Next without getting into a lot of detail, you are concern about removing that wall between the river and the site for the marina, correct?

There is a good chance of erosion due to that opening to the river based on the boring information available?

With your responses so far and answers to these two questions, I can definitely work till you get back.

Bill Brown

The same applies (as previous reply) to these low density, low blow count soils, except the till, which is more compact. But the till generally begins below the critical zone of interest for typical foundations. Dick

From: Richard Young

Sent: Friday, January 02, 2015 1:31 PM

To: Bill Brown - Home Account Subject: Re: Marina Boring Tests

Bill:

The saturated, unsolidated natural soils in these borings have relatively low "blow counts" (indicating soft and unsolidated), which indicates soils that have potentially low bearing capacity and may be subject to liquifaction or similar types of failure if stressed beyond their capacities. Dick

--

Richard A. Young, PhD
Department of Geological Sciences (Emeritus)
SUNY Geneseo
1 College Circle
Geneseo, NY 14454
585-245-5296 office
585-243-0087 home
young@geneseo.edu

Bill: Again, these soft, unconsolidated soils (under the fills) seem to me to be at the extreme end of the poor characteristics that one would hope to avoid in foundations for heavy structure, or in areas where long-term stability is important (river banks, artifical channels, etc.).

I am currently involved in a soils analysis and court case in another state where vibration methods (soil compaction of shallow foundation fills) used over unconsolidated glacial deposits for a secondary school addition resulted in the settlement and deformation of the basements and yards of adjacent houses. (Just one example of the problems that can be encountered when building on soft glacial and alluvial materials). Dick

The remaining pages show:

- 1. A map of the site with a full list of boring test points and test pits.
- 2. Specific boring tests reports associated with the area where the marina opening to the river will be constructed

Summary:

Again, please remember most of the information for my research was developed based on the pre-development documents created for the City of Rochester Marina Site contractors.

It should also be noted that request for qualifications for the site development beyond the marina construction were originally sent to 100 developers/contractors. Only three responded and one of those three dropped out of the process very early and a second, Edgewater Resources is owned by the consultant who developed the original plan. To the best of my knowledge based on the Edgewater Resources site, although the owners have been involved with waterfront projects around the world, their company has never attempted a project like this inside a canyon of a river before.

I want to make clear that the marina is a separate project from the site development of a resort hotel and condos. But in either case, if the entrance between the river and the marina erodes, both projects will be in jeopardy.

Please understand that I will not benefit personally in any way whatsoever. This project is already very costly for the taxpayers of this city, this county and state. I have now spoken with several qualified consultants including Dr. Young about this site. It is they who warn about the loose soft soils hazard.

For your reference I have a Master of Science degree in system design (specifically information systems).

Over the years I have developed the ability to analyze systems of all sorts and provide problem solving expertise.

I will leave it to you, if you want to engage your company in such an endeavor.

I offer my contact information if you have questions,

Respectfully submitted,

William J. Brown, 308 Southampton Drive, Rochester, NY 585-621-5825

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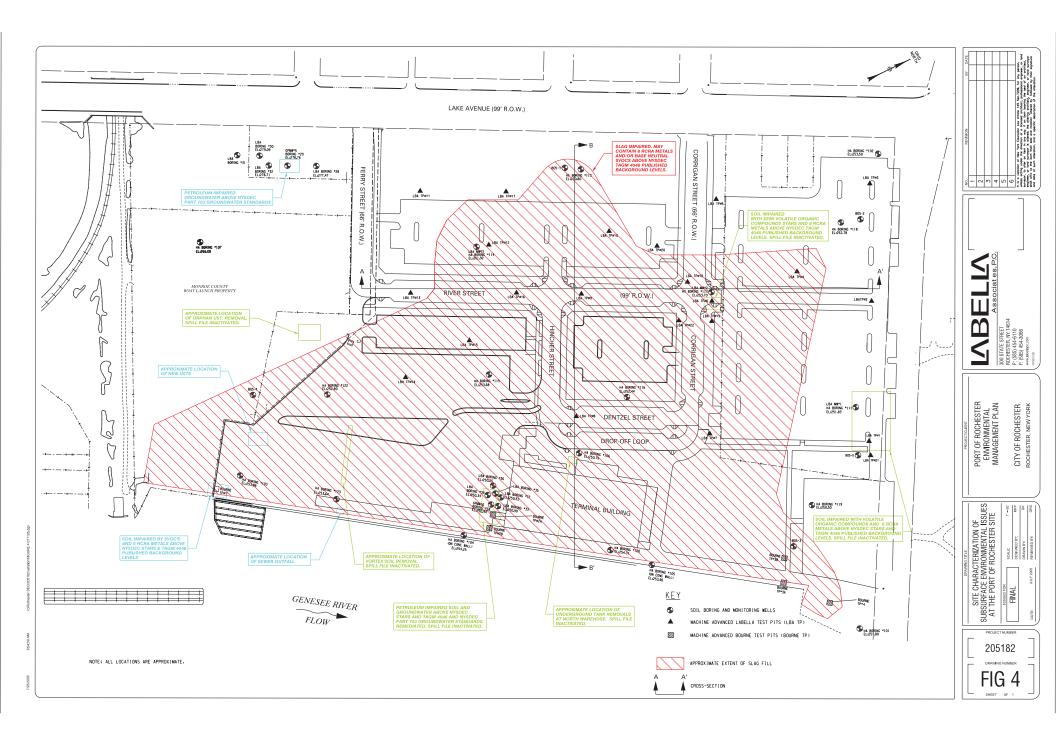
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B05-3 Test Boring No.: Job No.. 5505 1 OF 3 Page: Report Date: 5/20/2005

Project: PORT OF ROCHESTER

Client: LABELLA ASSOCIATES, PC

Elevation: 253.2

Water Level - Casing In: Below Surface - Casing Out: Geologist:

Driller: S. KAHN

Start: 5/19/2005

Completed: 5/20/2005

	С	Blo	ows on	Samp	ler	N		Sample	Soil and Rock Information						
0		0"/6"	6"/12"	12"/18	18"/24"		No.	depth							
	П	10	21						TOPSOIL AND ORGANIC MATTER	0'5"					
	П			12	13	33	1	0'0"-2'0"	FILL MATERIAL C/O MOIST SILT, SAND AND GRAVEL						
	П	7	8						AND SLAG						
	П			15	16	23	2	2'0"-4'0"	FILL MATERIAL C/O SILT, SAND AND GRAVEL,	12222					
5		7	10						TOPSOIL, SLAG AND FOUNDRY SAND	5'0"					
				8	7	18	3	4'0"-6'0"	STIFF GREY BROWN MOIST MOTTLED SILT,						
		8	8						LITTLE CLAY	6'0"					
				12	10	20	4	6'0"-8'0"	FIRM GREY SATURATED M-VF SAND, TRACE						
	Ц								SILT						
10	Ц														
	Н	3	5				_	401011 441011	SIDM ODEY OATHDATED (LITTLE M.E. ODAVEL)						
	Н			8		13	5	10'0"-11'6"	FIRM GREY SATURATED (LITTLE M-F GRAVEL)						
	Н			ļ			_								
40	Н						\vdash		(MUDDED BORING FROM 15' TO TERMINATION)						
15	Н		-	-			-		(WIDDED BOKING FROM 13 TO TERMINATION)						
15	Н	5	5	4		9	6	15'0"-16'6"	LOOSE GREY SATURATED						
	\vdash			1 4		9	0	150-166	LOOSE GREY SATURATED						
	Н		-	-		-	-	ł							
20	\vdash		 	-		_	-								
20	+	4	4	+				1							
	\vdash		1 -	4	CONTRACTOR AND ADDRESS	8	7	20'0"-21'6"	LOOSE GREY SATURATED (MARL NOTED)	21'2"					
	H		 	 		Ť	+-	200 210	MEDIUM GREY SATURATED SILT, SOME VF SAND	23'0"					
	\vdash		 			\vdash	 	1							
25			<u> </u>	+		\vdash		1							
	+	1	2					1							
			T -	3		5	8	25'0"-26'6"	MEDIUM GREY SATURATED ORGANIC SILT						
									5 7 4						
								1							
30									4						
	T	2	1]							
				2		3	9	30'0"-31'6"	SOFT GREY SATURATED						
35							T		2						

lb. wt____Ea. Blow Spoon with N=No. of Blows to Drive

B05-3 Test Boring No.: Job No.. 5505 Page: 2 OF 3 Report Date: 5/20/2005

Project: PORT OF ROCHESTER

Client: LABELLA ASSOCIATES, PC

Elevation: 253.2

Water Level - Casing In: Below Surface - Casing Out: Geologist:

Driller: S. KAHN

Start: 5/19/2005

Completed: 5/20/2005

	С	Blo	ws on	Samp	ler	N		Sample	Soil and Rock Information
35		0"/6"	6"/12"	12"/18	18"/24"		No.	depth	
		W/R	W/H	2		2	10	35'0"-36'6"	SOFT GREY SATURATED (LESS ORGANICS)
40	\exists								
	H	W/H	2	2		4	11	40'0"-41'6"	SOFT GREY SATURATED (MORE ORGANICS)
45									
		W/H	W/H	W/H		W/H	12	45'0"-46'6"	VERY SOFT GREY SATURATED
50	Н	W3/H	2						
		VV3/П	2	2		4	13	50'0"-51'6"	SOFT DARK GREY SATURATED (LESS ORGANICS MARL NOTED)
55		10101							
	F	W/H	3	4		7	14	55'0"-56'6"	MEDIUM DARK GREY SATURATED
60	E								
		W/H	2	3		5	15	60'0"-61'6"	MEDIUM DARK GREY SATURATED
65	E								₫
	F	1	3	4		7	16	65'0"-66'6"	MEDIUM DARK GREY SATURATED
70	F							-	

N=No. of Blows to Drive Spoon with lb. wt Ea. Blow

Test Boring No.: B05-3 Job No.. 5505 3 OF 3 Page: Report Date: 5/20/2005

Project: PORT OF ROCHESTER

Client: LABELLA ASSOCIATES, PC

Elevation: 253, 2

Water Level - Casing In: Below Surface - Casing Out: Geologist:

Driller: S. KAHN

Start: 5/19/2005

Completed: 5/20/2005

	С		ows on	5		N		Sample	Soil and Rock Information
70		0"/6"		12"/18'	18"/24"		No.	depth	
		1	4	4		8	17	70'0"-71'6"	MEDIUM DARK GREY SATURATED (SANDIER)
75								5 3 1 5	
		2	2	2		4	18	75'0"-76'6"	SOFT DARK GREY SATURATED
80									
		1	2	1		3	19	80'0"-81'6"	SOFT DARK GREY SATURATED
85	E								(AUGERED TO 100' REMAINED SOFT)
90	E								
	E								
95	E								
									L *
100									100'0'
									BORING TERMINATED @ 100'0"
105	E	Blows to	2"	Spoon	12"		140	3()"Ea. Blow

Test Boring No.: B05-4 Job No.. 5505 1 OF 2 Page: 5/6/2005 Report Date:

Project: PORT OF ROCHESTER

Client: LABELLA ASSOCIATES, PC

Elevation: 254.7

Water Level - Casing In: Below Surface - Casing Out: Geologist:

Driller: S. KAHN

Start: 5/6/2005

Completed: 5/6/2005

Second and climatic changes may after observed water levels

		Blo	ows on	Samp	ler	N	,	Sample	Soil and Rock Information	
0	٦	0"/6"	6"/12"	12"/18	18"/24"		No.	depth		
	\vdash	7	7	12710	10 /2 1				TOPSOIL AND ORGANIC MATTER	0'5"
			· · · ·	7	7	14	1	0'0"-2'0"	FILL MATERIAL C/O MOIST SILT, SAND AND GRAVEL	
		13	13	<u> </u>			-		LITTLE ASPHALT AND SLAG	
	Н			10	9	23	2	2'0"-4'0"	FILL MATERIAL C/O MOIST SILT, SAND AND GRAVEL	
5	Н	7	7	1.0			_		AND SLAG	
				4	4	11	3	4'0"-6'0"	FILL MATERIAL C/O MOIST FOUNDRY SAND	
	Н	4	10	-	-		-			
	Н			20	20	30	4	6'0"-8'0"	FILL MATERIAL C/O FOUNDRY SAND	7'8"
	Н	15	10							
10	H			15	22	25	5	8'0"-10'0"	FILL MATERIAL C/O SATURATED SLAG	
		21	12							
	H			21	18	33	6	10'0"-12'0"	FILL MATERIAL C/O SATURATED SLAG	
	Н	7	10				-			
	Н			9	4	19	7	12'0"-14'0"	FILL MATERIAL C/O SATURATED SLAG	
15	Н	3	3	 						15'0"
	Н			4	6	7	8	14'0"-16'0"	MEDIUM GREY SATURATED SILT, TRACE ORGANIC	
	Н	6	5						NODULES	15'8'
	П			5	5	10	9	16'0"-18'0"	MEDIUM BLACK MOIST PEAT LIKE MATERIAL	3100000
	П									
20								1	(MUDDED BORING FROM 18' TO TERMINATION)	
		2	3					1		
	П			3	4	6	10	20'0"-22'0"	MEDIUM BLACK GREY WET TO SATURATED	
	П							SHELBY	INTERBEDDED SILT AND PEAT LIKE MATERIAL	
	П							TUBE	MEDIUM GREY SATURATED	24'0"
25	П	2	4							
	П			3	4	7	11	24'0"-26'0"	MEDIUM DARK GREY WET ORGANIC SILT, TRACE	
				1					CLAY	
								1		28'0"
	П		1							
30	\vdash			1		\Box		1	<u></u>	
		2	2	1				1	4	
				2		4	12	30'0"-31'6"	MEDIUM GREY SATURATED SILT, LITTLE CLAY,	
								1	TRACE VF SAND SEAMS (NO ORGANICS)	
			1	1				1		
35	-		1	-	-	1	_	1	7.0	

N=No. of Blows to lb. wt Ea. Blow Spoon with N=No. of Blows to Drive

Test Boring No.: B05-4 Job No.. 5505 Page: 2 OF 2 5/6/2005 Report Date:

Project: PORT OF ROCHESTER

Client: LABELLA ASSOCIATES, PC

Elevation: 254,7

Water Level - Casing In: Below Surface - Casing Out: Geologist:

Driller: S. KAHN Start: 5/6/2005

Completed: 5/6/2005

	С		ows on	Samp		N		d water leve Sample	Soil and Rock Information	
35	П	0"/6"		12"/18	18"/24"		No.	depth		
		7	8	9		17	13	35'0"-36'6"	FIRM RED WET SILT, SOME C-F GRAVEL, WEATHERED ROCK AND VF SAND	35'6
10	Н								AUGER REFUSAL @	39'2'
45								BORING TERMINATED @ 39'2"		
0										
55										
30										
									in the state of th	
65										
70	H								# (#)	

N=No. of Blows to Drive

Spoon

with

lb. wt_____Ea. Blow

TEST BORING REPORT

HA-103

		•							Pa	ge 1 of 3				
PROJECT		PORT OF RO	CHESTER				H&A I	TLE NO.	70819-00					
LOCATIO		ROCHESTER		RK				ECT MGR.	M. VALE					
	41	LABELLA A					FIELD		D. NOST					
CLIENT	OTO P	GEOLOGIC I						STARTED	31-May-0					
CONTRA			ENTERPRIS	ES										
DRILLER		L. TODD					DATE	FINISHED	31-May-0	· ·				
Elevation	253.8	6 ft Dat	tum City		oring Locati		ng Location Plan							
Item		Casing	Sampler (ig Make & N		5 Truck Mount			Drill Mud				
Туре		HSA	SS		Truck	Tripod	✓ Cat-Head	Hamme		Bentonite				
Inside Diam	ieter (in)	3-1/4	1-3/8] ATV	Geoprobe	Winch		Safety	Polymer				
Hammer W	eight (lb)		110		Track	Air Track	Roller Bit		Doughnut	✓ None				
Hammer Fa			1000		Skid	<u>L.J.</u>	Cutting Hea	d Casing		Driven Spun				
Depth (ft)	Casing	Sampler Blows per 6	Sample Number &	Sample Dep	th Change	1	Visual Cla	ssification and	Remarks					
Depta (it)	ft	in	Recovery	(ft)	(ft)	l								
L														
		8	S1	0.0		Medium dense gra	velly coarse to fine s	and, little silt, dr	<u>y.</u>					
		П						FILL						
		15	15"/24"		.0 2.0 —	Medium demonstra	k brown coarse to fin	C SAND FOR	orave Tiells					
		13	S2	2.0	+	ivieudin dense dar	NOWH COMPC TO III		prared, neue Si	u.j.				
		- 11						FILL						
		9 7	10"/24" S3	4.0	.0	Same.								
5		8				Moist to wet begin	ning at 5.5 ft.	FILT						
, –	· ·	4 6			.0			FILL						
		3	S4	6.0		Same, wet.								
		3				Noted refusal and	suspected cobble at 7	FILL						
		507.0	4"/18"		.3			ted copple at 7.5 tt.						
		5	S3	8.0		Same, except blac	ς.							
	ļ	7						FILL						
10		4	6"/24"		.0			(AE ADEL 11						
[·· -		7	\$6	10.0		Medium dense bla	ck coarse to fine san	dy GRAVEL, lit	ue sut, wet.					
		10												
		62	S7	12.0	.0	Same, except very	dense, gray-black.							
	1	26	3/	12.0				FILL	~ ~~					
		29	12"/24"		.0	Driller noted sulpl See Note on Page	iur-like odor in samp	le.						
		 	12 /24	<u> </u>		See 140te off Page	Aug	er Refusal at 14.						
15							Boring moved	8.0 ft. west of o	riginal location	n.				
	1				 	 								
1														
		 	 			 								
1														
1 '			1											
20						-								
1	1		 			-								
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30														
		10/-6	Level Data			S-1	nple ID	T	Summ	urv				
	T =	Elapsed Tim				O Open En	Rod	Overburden (L	inear ft) 1	4				
Date	Time	(hrs)	Casing (f		t) Water (T Thin Wa	Il Tube	Rock Cored (L	inear ft)	10				
			-		_		bed Sample on Sample	Number of Sa		rs and and				
	1	.1	1			- a shurabe	o oznipio	BORING	NO.	HA-103				

TEST BORING REPORT

BORING NO.
HA-103a

ALDI	CH_		1.	POI	DUK	M DIM	CLOKI	L	ı	LIA	-10	Ja
										Page	2 01	f 3
PROJECT	r	PORT OF RO	CHESTER				H&A	FILE NO.	70819-	000		
		ROCHESTER		к				ECT MGR.		LENTIN	E	
LOCATIO	714	LABELLA A						D REP.	R. DED			
CLIENT	OTTO:		$\overline{}$	20				STARTED	31-May			
CONTRA		GEOLOGIC I	ENTERPRISE	స								
DRILLER		L. TODD					DATE	FINISHED	1-Jun-0			
Elevation	253.8	6 ft Dat	tum. City		Boring Location		ring Location Plan					
Item		Casing	Sampler C		lig Make & N		5 - Truck Mount			Drill N		
Туре		HSA	SS		Truck	Tripod	Cat-Head	Hammer			Benton	
Inside Diam		3-1/4	1-3/8	`	J ATV	Geoprobe	Winch		afety		Polyme	er
Hammer W				77070453	Track	Air Track	Roller Bit Cutting Hea		oughnut	Driven	None	Spun .
Hammer Fa	dl (in) Casing	Sampler	30 Sample		Skid Stratum	<u> </u>	Cutting rice	id Casing				орші.
Depth (ft)	Blows per	Blows per 6	Number &	Sample Dep	th Change	1	Visual Cla	ssification and F	temarks			
	ft	in	Recovery	(ft)	(ft)							
- 0 -		A				(Offset 18 west of	original location)					
		^				(Offset 16 west of	original rocation)					
		U										
		G	See Samples									
			for 0-14 ft.									
		Е	in Boring HA-103	ļ								
1		R									<u> </u>	
5		Tr		5.0		Medium dense bro	wn black fine to coa	rse SAND, little s	lt, drv.			
		14		2.0		Jan Solav Gro						
		7		7	.0			FILL				
				, , , , , , , , , , , , , , , , , , ,								
		A U										
		<u> </u>										
		E R										
10		9		10.0		Dense black brown	fine to coarse SAN	D, little silt, slag i	ragments,	wct.		
		19 22										
		20		12	.0	 						
				17.		8						
		7	28	14.0		Same, except med	ium deuse.					
15		15			×							
		8 12	14"/24"	16.0								
		3	No									
		6 7	Recovery	18	.0							
		8	S9	18.0		Medium dense bla	ck brown silty fine t	o coarse SAND, w	ret.			
		10 8						ALLUVIUM				
20		6	6"/24"	20	.0							
				 								
	ļ			ļ								
				ļ								
		5	\$10	24.0		Loose gray brown	fine sand SILT, wet					
25		3										
	1		2"/24"	20	5.0	1						
				 	_	 						
l				 		-						
1	l	2	511	29.0		Loose gray fine se	and SILT, some clay	organics, moist.				
30		3	12"/18"		0.5							
		Water	Level Data				iple ID		Sum			
Date	Time	Elapsed Time		Bottom o		O Open End T Thin Wal		Overburden (Lin Rock Cored (Lin	ear ft)	7		
		(hrs)	Casing (ft)	Boring (fo	2	I I IUIU MARI	Tube ed Sample	Number of Samp		19\$		
	 			1		S Split Spoo	on Sample	BORING N			-103a	
				I		G Geoprobe		1				

TEST BORING REPORT

BORING NO.
HA-103a

Page 3 of 3

				·			Page		of	3
Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Rem	arks			
ł										
- 1										
-										
		1 3	S12	34.0		Loose gray fine sand SILT, some clay, organics, moist.				
35		3	155215	32.0		ALLUVIUM				
			12"/24"	36.0						
į										
		2	S13	39.0		Loose gray silty fine to coarse SAND, trace ogranics, moist.				
40		4								
		4	23"/24"	40.0						
		2	S14	44.0		Loose gray brown fine to medium sandy SILT, little clay, on	anics, moist			
45		4								
		3	22"/24"	46.0						
		2	\$13	49.0		Same.				
50		7								
		3	22"/24"	51.0						
		2	\$16	54.0		Same.				
55		3								
		3	23"/24"	56.0						
					 					
		2	\$17	59.0	 	Same.				
60		2 3								
	L	3	22"/24"	61.0						
	<u> </u>		S18	64.0		Medium dense gray brown fine to medium sandy SILT, little	e clay over-	ice =	alet .	
65		4 4	318	104.0		internal delise giay otowa mie to medium sandy SIL1, iliti	, ciay, organ	acs, m	UISL.	
		7	22"/24"	66.7						
1										
1		 -								
ı			1							
l										
		7	\$19	69.0		Bottom of Exploration at 71.	0 ft.			
1 -70-		10			/	FILE NO. 70819-000 BORIN	G NO.		HA-10	3a
		10	17"/24"	71.0	1/					

TEST BORING REPORT

BORING NO.
HA-107

Page 1 of 2

PROJECT	Γ	PORT OF RO	CHESTER	main is philippe		H&A FILE NO. 70819-000				
LOCATIO		ROCHESTER	, NEW YOR	K			PROJE	CT MGR.	M. VALE	NTINE
CLIENT	98824	LABELLA A					FIELD	REP.	R. DEDRI	CK
CONTRA	CTOP	GEOLOGIC I		es es				STARTED	26-May-0	0
			or i Did Not	~	-			FINISHED	26-May-0	
DRILLER		L. TODD								
Elevation	266.0	8 ft Dat	Name and Address of the Owner, where the Persons of the Owner, where the Persons of the Owner, where the Owner, which the Owner, where the Owner, which the Own	CALIFORNIA PROPERTY AND ADDRESS.	ing Location		ng Location Plan			D 10 17
Item		Casing	Sampler C		Make & M		- Truck Mount	le:	_	Drill Mud
Туре		HSA	SS		Truck	Tripod	Cat-Head	Hammer	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED I	Bentonite
Inside Diam		3-1/4	1-3/8		ATV	Geoprobe	Winch		afety	Polymer
Hammer W		-	140	and their control of a which		Air Track	Roller Bit		oughnut	None
Hammer Fa			30		Skid	<u> </u>	Cutting Head	Casing		Driven Spun
D	Casing	Sampler	Sample Number &	Sample Depth	Stratum Change		Visual Clas	sification and R	emarks	
Depth (ft)	Blows per ft	Blows per 6 in	Recovery	(ft)	(ft)					2022 2022
_			<u>-</u>							
- 0 -					_ 0.5	Medium dense black	Land Carte sour	ASPHALT	caual day	
		5	SI	0.5		Medium dense black	WAME THE 10 COSES	FILL	gratter, dry.	
		21	7"/18"	2.0				75.4		
		13	52	2.0		Medium dense brown	n time to coarse SAI	ND, damp.		
		18	-							
		11	16"/24"	4.0		S 1 11 11 11		Children Carlo	dama	
		3 22	\$3	4.0		Dense brown black fi	ine to coarse SAND	, attie sitt, brick,	, damp.	
5		22								
		30	17"/24"	6.0		Same, except medium	n dense			
		11	S4	6.0		Same, except medium	n ucino.			
		14								
		4 12	20"/24" S5	8.0		Medium dense brown	n orange fine to coa	rse SAND, mois	t.	
		6	- 33	10.0		THE GLAND COLOR				
1		6	1803478	1						
10		,	18"724"	10.0					~~~	
				18.8	13.0 -	Loose brown gray fu	and SILT tenes	to little clay tra	e organice m	iolet
		1 2	56	13.0		Loose brown gray tu	ne sand SIL1, trace	to fittle cray, trai	ce organics, ii	ioist.
	-	3		1						
15		3	21"/24"	15.0				ALLUVIUM		
		2 3	S7	18.0		Same.			Aller 14 Control Co	
		3 4		1						
20		5	24"/24"	20.0						
		 								
1										
	1				22.0					
1		7	S8	23.0	23.0 -	Very dense gray bro	wn silty SAND, so	me gravel. Pocke	ets of brown i	ine to coarse
		35		-		SAND, wet.		CLACIAL TILL		
		21	22"/24"	25.0		 				
25										
				-						
			 	-		 				
		22	59	28,0		Same.				
1		24	37	20,0						
		26								
30		20	20"/24"	30,0	1					
		Water	Level Data			Samp			Summa	
Date	Time	Elapsed Time	e Bottom of		Water (ft	O Open End R		Overburden (Lit	carft) 49	0.0
13	Titue	(hrs)	Casing (ft)	Boring (ft)	18	T Thin Wall 7		Rock Cored (Liz Number of Sam		<u>.</u>
26-May		0.5			18	S Split Spoon		THE RESIDENCE OF THE PARTY OF T	-	HA-107
-	-		-		-	G Geoprobe	2 T.S. W. V. S.	BORING N	o.	MA-10/

TEST BORING REPORT

BORING NO.
HA-107

						Page 2 of 2
Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
-						
				***		Very dense gray brown fine silty sand, little gravel, wet.
		39	\$10	33.0		
		41		32.0		GLACIAL TILL
35		40	19"/24"	35,0		
						AND ADDRESS OF THE PARTY OF THE
		16	SII	38.0		Same,
		26 39				
40		43	17"/24"	40.0		
		25	\$12	43.0		Very dense gray brown fine sandy SILT, trace clay, little gravel, wet.
		65				
		100/.4	16*/17"	44.4		
45						
				 		
1						
		1007.5	S13 11"/12"	48.0		Same, except pocket of red brown fine to coarse SAND, some rock fragments, wet.
1	-	1007.5	11 /12	12.0	49.0 —	Began Rock Coring at 49.0 ft.
50						
						Competent red sandstone with interbedded gray sandstone.
1				 		Competent rea sandstone with interocured gray sandstone.
1						
l						
l				 	54.0	Bottom of Exploration at 54.0 ft.
55						
					-	
1	-					
1				 		
				-		
		-		ļ	 	
- 60-			 	1		
1						
1					-	
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65-					-	
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					1	
			ļ			
					1	
			-	-	1	
70-					1	FILE NO. 70819-000 BORING NO. HA-107
1			1			

TEST BORING REPORT

BORING NO.
HA-115

ALDI	CH		ı	TO I	D		110 10		OILI								A secondaria	
		~~~												Pag	e	1 o	f 1	
PROJECT		PORT OF RO	CHESTER						H&A FI	ILEN	Ю.		70819	-000	g		***	
LOCATIO	Signal P	ROCHESTER		RK			<del></del>	- 1	PROJE	СТМ	GR.		M. VA	ALEN	ITINI	3		
A STATE OF THE PARTY OF THE PAR		LABELLA A							FIELD				R. DE	_	_	-		
CLIENT	CTOP	GEOLOGIC E							DATES		TED		25-Ma					
CONTRA	Section and the second		ENTERPRE	DE3				-	DATE				25-Ma	_				-
DRILLER	(	L. TODD								10	LLED		2J-IVI	.,-00				
Elevation	253.6	8 ft Dat	tum C	ity		Location			cation Plan									ું
Item		Casing		Core Barrel		ake & Mo			k Mount					4	Drill 1			_
Туре		HSA	SS	NX	☑ Tn		Tripod	][	Cat-Head		Hami			$\dashv$	П	Bento		
Inside Diam		3-1/4	1-3/8	2	O AT	_		분	Winch Roller Bit	$\dashv$	뇓	Saf	ety ughnut			Polyn		
Hammer W					Tra		Air Track		Cutting Head	. 1	Casin	_	ugrinut		Driver	_	Spu	-
Hammer F		- Sampler	30 Sample		Ski	tratum			Cuttag Field		C#310	6		<u> </u>	Diiver		1 Sha	-
Depth (ft)	Casing Blows per		Number &	Sample De	enthi	hange			Visual Clas	sificati	ion an	ad Re	marks					
Depta (it)	ft	in	Recovery	(ft)		(ft)						20000					) i	
_ 。_										Term	- France	/Km				er erre	za iliak asa.	
_ · _					-				CRI	USHEI	7810	INE						-
		14	- 01	12.0			Very dense black b	lue ore	v silty fine to a	CORTEC	SANI	) hric	k slao	dry	11.0		624	
		34	SI	2.0	-		rely delise black (	rac gra	, anty mic to c	-1100000	ues se sa s	, 0110	es, stag,	, wy.	2000			
		34			7					FI	L							_
		28	16"/24" S2	4,0	4.0	- 15	ame, except mois											-
	1	48	52	1.0			and the second											
_ 5 _		23 20	14"/24"		6.0							-						_
		12	S3	6.0	0.0		Medium dense bro	wn-blac	k sandy ROC	KFRA	GME	NIS,	wet.					
		13									_							
		12	7"/24"	-	8.0										-			
		7	\$4	8.0		- 5	ame.											_
		7		-												<del></del>	- 10	
		14	447244		10.0													
I 10 -		10 5	\$5	10.0			Same.					-	R 11442					-
	-	3 6		-														_
		6			12.0		Same.											
		12	S6	12.0			Jane.						1				1 - 1	
1		12	787878		17.0			200						-				
		8	6"/24"		14.0													
15																		_
[ '° -			-		-													
1													71000					_
											V							
1					-			-		1								
												068/50						
		2	57	19.0			Loose brown-gray	sandy	SILT. organic	s, wet								
		2	37			Tell trades			, , ,									
20 -		3	10"/24"		21.0			31555		ALLU	JVIUN	M						
1			10 724	<del></del>	21.0													
																		_
					-													
	-		1															
		-		24.0			Same.					200				AMINESTIC.		-
		3	- 56	24.0			Janiv.											_
25 -	1	3			7/													
			3 10"/24"		26.0				Bottom	of Exp	oratio	on at 2	26.0 ft.					
																		Ξ
													-		-			
						11000											****	
												-						-
30	-	-											-					
			r Level Data				O O - E	pple II	)	0	uwd-	70 !-	Su car ft)	imma 26				_
Date	Time	Elapsed Tim (hrs)	Casing (			Water (ft)	O Open En T Thin Wa			Rock	Cored	(Lin	car ft)	-				-
	-	(0.78)	Casing	, Doren	1.57		U Undistur	bed San			or of			85	CONTRACT OF STREET			
							S Split Spo	on Sam	ple	В	ORIN	G N	0.		H	A-11	5	

### TEST BORING REPORT

BORING NO.

HA-122

								515	-3	P.	age	1	of 2
PROJECT	,	PORT OF RO	CHESTER				Н&	A FILE!	VO.	70819-0	00		
LOCATIO	Annual Control of the	ROCHESTER		ıK			PRO	OJECT M	IGR.	M. VAL	ENTIN	E	
CLIENT		LABELLA A						ELD REP.		D. NOST	_		
CONTRA	CTOP	GEOLOGIC I						TE STAP		31-May-			
		L. TODD	(13.					TE FINIS		31-May-			***
DRILLER												_	
Elevation	252.				loring Locati		ring Location Pla	AO			D-2"	M	
Item		Casing			Ug Make & N		5 Truck Mount	d	H	nr Terra	Drill	_	tonito
Туре		HSA	SS		Truck	☐ Tripod ☐ Geoprobe	✓ Cat-Hea  Winch	au .	Hamme	Safety	48		tonite mer
Inside Diam		3-1/4	1-3/8		☐ ATV ☐ Track	Geoprobe Air Track	Roller B	lit		Doughnut	11	Non	
Hammer W			140 <b>3</b> 0		Track □ Skid		Cutting		Casing		Drive	_	Spun
Hammer Fa	dl (in) Casing	- Sampler	Sample		Stratum	<u> </u>	-many						
Depth (ft)	Blows per	Blows per 6	Number &	Sample Dep	Change		Visual	Classifica	tion and	Remarks			
	ft	in	Recovery	(ft)	(ft)				Water				
_ 0		7	SI	0.0	- 0.3	Medium dense dar	k brown, coarse t		SOIL Little ci	nders, little or	avel.		
		7 8	31	15.5		The state of	- Jan Se I						
		10	[202528		.0			F	LL				644 V V
		6	14"/24" S2	2.0	1	Same.							
		6											
		5	10"/24"		.0								
		3	S3	4.0		No Recovery.							
5		3 2				<del> </del>							
		2	0"/24"		.0	I,			nicel :	ca cile			
	-7-10-02-0-19-1	2	S4	6.0		Loose dark brown	coarse to fine sai	na, some gi	avel, tra	ce siit, wet.			
		2			1								
		2	2"/24" S5	8.0	.0	Same.						_	
		2	- 63	3.0									
		3 21	18"/24"	1	0.0				-				
10		1	18"/24" S6	10.0		Same.							
		2											
		6			2.0	1			al abaccata	Vinista.			
		26	\$7	12.0									
		10		+		Dense blue-gray g	ravel, little coars	e to fine sa	nd, wet.				
		9	20"/24"		1.0								
		3 2	S8	14.0	14.3 -	Very loose brown	ORGANICS, tra	ce sand, tra	ice silt, w	vet.	7.3		
15		1	17#1414	1	15.5	Very loose gray-b					moist		
		3	16"/24"	1	5.0	very toose gray-b	TOWN TIME CLAYEY			or games,	anotst.		
				1				ALL	MUIVU				
	1					1							
	<u> </u>	-				-							
20													
_ 10 _		1 2	S9	20.0		Same, except little	e fine sand.	-					
	-	1											
			24"/24"	2	2.0								
						-							
25													
		2 2	\$10	25.0		Same.							
		2											
			3 20"/24"	2	7.0								
1			1			<b></b>					7.50		
						<del></del>							
30													
		I we	Level Data			90-	uple ID			Sumi	narv		
	T =	Elapsed Tim	e Bottom of			O Open End	d Rod			Linear ft)	37		-1
Date	Time	(hrs)	Casing (ft			T Thin Wal	II Tube bed Sample		Cored (I ber of Sa		5 12S		
			-	-			on Sample	-	BORING		-	IA-12	22
	al and a second	_1							UTILLIA	.10.		LIA" A	

### TEST BORING REPORT

BORING NO.

HA-122

Page 2 of

						Page 2 of 2
Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
-		2	311	30.0		Loose gray-brown clayey SILT, little fine sand, little organics, moist.
		3 3				
		3	24"/24"	32.0		ALLUVIUM
				ł		
_ 35		1	S12	35.0		
		6 8			36.0	Medium dense brown-red coarse to fine sandy SILT, some gravel, little clay, damp
		30	15"/24"	37.0	37.0	Medium dense brown-red coarse to fine sandy SILT, some gravel, little clay, damp to moist.  GLACIAL TILL  Observed auger refusal at 37.0 ft. Begin coring at 37.0 ft. See Core Boring Report.
						Observed auger refusal at 37.0 ft. Begin coring at 37.0 ft. See Core Boring Report.
- 40						
						Bottom of Exploration at 42.0 ft.
		ļ				
<b>— 45 —</b>						
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50				<del> </del>		
	700000000000000000000000000000000000000					
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55						
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4				-		
60						
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	and the same of the					
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			<del> </del>			
<b>— 65</b> —						
					1	
70						FILE NO. 70819-000 BORING NO. HA-122
		The second secon	and the same of th			FILE NO. 70819-000 BORING NO. HA-122

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ALDRI	

### CORE BORING REPORT

HA-122

							v70.00.515						P	age 1	of 1
PROJEC	Γ	PORT OF I	ROCHESTI	3R						H&A F	ILE NO.		70819-0		
LOCATIO		ROCHEST					***	<del></del>	-74-000	PROJE	CT MGI	R. 1	M. VAL	ENTINE	
CLIENT		LABELLA								FIELD	REP.	1	R. DEDI	RICK	
CONTRA	CTOR	GEOLOGIC	C ENTERP	RISE			DATE STARTED 30-May-00								
DRILLER		L. TODD								DATE	FINISH	ED 3	30-May-	00	
Elevation		A	Datum		Bor	ing Location									
Item		Casing	Sample	Co		Make & Mo	iel							Drill M	ud
Туре		HAS	SS				] Tri	pod	V	Cat-Head	Ha	mmer T			Bentonite
Inside Dias	neter (in)	3-1/4	1-3/8		2	ATV	_	oprobe		Winch		✓ Safe			Polymer
Hammer V	eight (lb)	-	140					Track		Roller Bit			ghnut		None
Hammer F	ali (im)		30			Skid			Ш	Cutting Head	Ca	sing		Driven	Spun
Depth (ft)	Drilling Rate	Core No.	Recov RQI		Weathering	2332 se service en				Visual Clas	sification	and Ren	narks		
Depin (i.,	(min/ft)	Depth (ft)	(in)	(%)	i -	(ft)									
									-						
1		37.0				37.0	Moden	Coring at 37	.0 ft.	ely weathered	red-brown	-green m	ottled fine	e grained	
l i		37.0					very th	in to thin be	dded S	ANDSTONE	with close	to very c	lose weat	hered	
			48	80		-	shaley	partings.							
		RI	48 35	58	MOD					QUEEN	STON FO	RMATIC	DN		
40					-										
		42.0			+	42.0									
1						-				Bottom	of Boring	g at 42.0 1	it.		
45—															
					-	-									
1															
1															
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50-							-								
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55	-	<b> </b>				-	1					5:05-211			
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1															
		<del> </del>					1								
							-								
	20,000	-													
							-								
65-	1														
			Water Level	Date			-	Sar	mple II	,			Sumi	mary	
Date	Time	Elapsed T	ime Botto	le me	Bottom of Born	ng Water (fi	, 0	Open En	d Rod		Overburd Rock Cor	en (Line	ar ft)	37	
Date	- searce	(hrs)	Casir	g (ft)	(ft)		Ιù	Thin Wal	bed Su	nple	Samples			12S	
							S	Split Spo Geoprob	oon San	nple		ING NO		H	A-122

### TEST BORING REPORT

BORING NO.

HA-123

											ī	age	1	of 4
PROJECT	r ·	PORT OF RO	CHESTER						H&A FILE	NO.	70819-0	000	_	
LOCATIO	F	ROCHESTER							PROJECT	MGR.	M. VAI	ENTIN	E	
CLIENT		LABELLA A	Maria de la companione de						FIELD REF		R. DED			
CONTRA	CTOP	GEOLOGIC I			-				DATE STA		5-Jun-0			
		L. TODD	DI TEKT KI	-					DATE FINI		6-Jun-0			
DRILLER	`				_					JILLY	0-Juli-0	<u> </u>		
Elevation	253.6			City	-	ing Locatio			cation Plan			To the		
Item		Casing		Core Barrel	-	Make & M			k Mount	lu.	Tour	Drill	_	touis
Туре		HSA	SS	NX	-	Truck	Tripod		Cat-Head	Hammer		-1.日		atonite
Inside Dian		3-1/4	1-3/8	2	1-		Geoprobe Air Track	H	Winch Roller Bit		afety Soughnut	무	No	ymer
Hammer W			140		_	Track Skid	☐ Air Irack	님	Cutting Head	Casing	- Cugunut	Drive	_	Spun
Hammer Fa	all (in) Casing	Sampler	30 Sample	THE PERSON NAMED IN		Stratum	<u> </u>		Samue Frodu	Torong		2 20176		орш
Depth (ft)	Blows per	2.0	Number &	Sample De	epth	Change			Visual Classifica	tion and F	lemarks			
	ft	in	Recovery	(11)		(ft)								
- 0 -			- 61				(0,3 ft. TOPSOIL)	100 CT	sandy SILT, little	CORPEC CO	el de:		524 (A-S) 518 (A-S)	
		4 8	SI	0.0	-		wedium dense bro	wii gray		ILL	ci, шy.			
		8	X8 X 7 8		3.6									
		8	8"/24" S2	2,0	2.0		Medium dense bro	wn red s	silty fine to coarse	SAND, trac	e fine grave	el, dry.		
		7									8			
		8	13"/24"	-	4.0									
		3 8	S3	4.0	0		Same, except mois	f						
5		4 3							1924 - January - 1					
		3	16*724*		6.0									
		2	S4	6.0			Loose brown red s	lty fine	to coarse SAND, to	race fine gr	avel, wet.			
1		2 2			$\dashv$								est pour	
1			20"/24"		8.0					64895				
1		1	85	8.0	$\neg$		Medium dense bla	ck brow	n silty fine to coars	e SAND, w	vood, wet.			udilan.
		8												
10		9	16"/24" S6	10.0	10.0		No Recovery.							
A		3	20	10.0	-		no recovery.							
		2	ARE DE		13.8									
		3 2	0*/24* \$7	12.0	12.0		No Recovery.							
		3												
		3	0"/24"		14.0									
		3	S8	14.0			Loose gray brown	silty fin	e to coarse SAND,	some organ	nics, moist.			
15		4											-	
		3	19"/24"		16.0				ALL	UVIUM				
								200,000						
										ACCURATED AND				
1												Salah D		-
					-			-		200			-	
		2	S9	19.0			Loose gray brown	clayey :	SILT, little sand, m	oist.				
20		2					<u> </u>			101 201				
		2	10"/24	th.	21.0			- 22/196						
			·		-					0 20				
					-									
		1	\$10	24.0			Same, except little	clay.						
25		2	-	-										
			14"/24"		26.0									
1														
							<del> </del>							
	1	2	SII	29.0			Same.							
30		2 4	15*/24*		31.0									
-			Level Data			-		iple LD			Sumi		***	
Date	Time	Elapsed Time	e Bottom	of Bottom		Water (ft	O Open End	Rod	Över	burden (Lin	near ft)	114		
-	+	(hrs)	Casing (	ft) Boring	(ft)	1.,	T Thin Wall U Undisturb		ple Rock	Cored (Linber of Sam	near it)	2 24S		
_	+	+	+			1	S Split Spoo	on Samp	. —	ORING N	and the same of th	and the same of th	A-1	23
							G Geographe			- Jamina I			4 2 4	m-J

### TEST BORING REPORT

BORING NO.
HA-123

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Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification	and Remarks			
				31.0		the post financial state (a) on that the report of the formula compatibility states in a considerable state.				
					- Philips (pring) to 100 for all rates to					1120130
		2 2	\$11	34.0		Very loose gray brown fine to medium sand SILT, t	trace clay, organ	ics, moist		
- 35		2 4	20"/24"	36.0						
						ALLUVIU	М			
	~~~~									
		1 2	\$12	39.0		Same.				
40		2 3	14"/24"	41.0						
					,					
		1 2	\$13	44.0		Very loose gray silty fine to medium SAND, moist.				
45		2 3	19"/24"	46.0						
				 						
										
										U
		1 2	\$14	49.0		Loose gray fine sand SILT, trace clay, organics, mo	oist.			
50		3 4	20"/24"	51.0						
			20 124							
			\$15	54.0		Same.				
55		3	20"/24"	56.0						
		3	20 124	30.0						
		1	\$16	59.0		Same.				
60		3								
		4	20"/24"	61.0						
		3	\$17	64.0		Loose gray fine sand SILT, trace clay organics, mo	oist.			
 65 		1 4								
		3	24*/24*	66.0						
		ļ	-							
		WOH	SIE	69.0		Same, except medium dense.				
70		3 7								
(1) (1) (1)		 	22"/24"	71.	5	FILE NO. 70819-000	BORING NO		HA-1	23

TEST BORING REPORT

BORING NO. HA-123

		\	- 0			Page 3 of
Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
		4	\$19	74.0		Medium dense gray fine sandy SILT, trace clay, organics moist.
_ 75		5 8				ALLUVIUM
		9	22"/24"	76.0		
_ 80		5	S20	79.0		Same.
- 80		7 9	23*/24*	81.0		
		3	S21	84.0		Same.
- 85		5 8				
		9	20"/24"	86.0		
		3	S22	89.0		Medium dense gray brown silty medium to fine SAND, trace clay, moist.
_ 90		5	322	67,0		include telese gray brown any measure to the status, take etay, motal.
		8	21"/24"	91.0		
		WOR WOR WOR	S23	94.0		Very loose gray brown silty medium to fine SAND, trace clay, moist.
— 95 —			22"/24"	96.0		
		5	22 124	70.0		
4		5	S24	99,0		Same, except medium dense.
<u> </u>	<u> </u>	7 8				
		9	22"/24"	101.0		
		WOR WOR WOR	\$25	104.0		Same, except very loose.
 105		WOR	24"/24"	106.0		
		TON TON		100.0		
					 	
		3	S26	109.0		Medium dense gray brown silty fine to medium SAND, trace clay, pockets of
		3	1	1	1	Medium dense gray brown silty fine to medium SAND, trace clay, pockets of rock fragments, moist.
			23"/24"		o	FILE NO. 70819-000 BORING NO. HA-123

TEST BORING REPORT

BORING NO.
HA-123

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115	ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks ALLUVIUM Very dense sandy ROCK FRAGMENTS. WEATHERED BEDROCK Began rock coring 114.0 ft. Bottom of Exploration at 116.0 ft.
120		1007.2	\$27 2#/3*	114.0	114,0	Very dense sandy ROCK FRAGMENTS. WEATHERED BEDROCK Began rock coring 114.0 ft.
120		1007.2	\$27 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	114.0	114.0	Very dense sandy ROCK FRAGMENTS. WEATHERED BEDROCK Began rock coring 114.0 ft.
120		1007.2	S27 2"/3"	114.0	114.0	Very dense sandy ROCK FRAGMENTS. WEATHERED BEDROCK Began rock coring 114.0 ft.
120		1007.2	\$27 2"/3"	114.0	114.0	Began rock coring 114.0 ft.
120		1007.2	\$27 2 ¹¹ /3 ³	114.0	114.0	Began rock coring 114.0 ft.
120		1007.2	\$27 24/3*	114.0		Began rock coring 114.0 ft.
120				114.2		Began rock coring 114.0 ft.
						Bottom of Exploration at 116.0 ft.
						The second secon
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