Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING INSPECTION

PERMIT

Please Read Application And Notes, If Any, Attached

Permit Number: 081045

This is to certify that OLD CUMBERLAND ASSOCIATES /Northeast Helical, LLC/Ric

has permission to repair settling foundation

AT 447 CUMBERLAND AVE 036 F020001

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and when permission proceed before this building or part thereof is covered or enclosed-in 24 HOUR NOTICE REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

PERMIT ISSUED

OTHER REQUIRED APPROVALS

Fire Dept. SEP 15 2008

Health Dept.

Appeal Board

Other CITY OF PORTLAND
Department Name

9/15/08
Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Issue Date:	CBL:
08-1045	9/15/08	036 F020001

Location of Construction:	Owner Name:	Owner Address:	Phone:
447 CUMBERLAND AVE	OLD CUMBERLAND ASSOCIAT	170 NEWBURY ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Northeast Helical, LLC /Rich Porter	68 Burgundy Drive Nashua	6088980089
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Additions - Multi Family	R-6

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Multi-Family	Multi- Family - repair settling foundation	$600.00	$57,500.00	2

legal use: 43 residential dwelling units

FIRE DEPT: ☑ Approved ☐ Denied — See Conditions — Signature: Gregory Cass

INSPECTION: Use Group: R-2 Type: 5B — IBC-2003 IEBC-2003 — Signature: 9/15/08

Proposed Project Description:
repair settling foundation

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
ldobson	08/21/2008

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

PERMIT ISSUED
SEP 15 2008
CITY OF PORTLAND

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☐ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone — Maybe required	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☑ Approved
☐ Site Plan — OK.	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: 9/15/08	Date:	Date: 9/9/08 SJH

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT | ADDRESS | DATE | PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE | DATE | PHONE

City of Portland, Maine - Building or Use Permit
389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Date Applied For:	CBL:
08-1045	08/21/2008	036 F020001

Location of Construction:	Owner Name:	Owner Address:	Phone:
447 CUMBERLAND AVE	OLD CUMBERLAND ASSOCIAT	170 NEWBURY ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Northeast Helical, LLC /Rich Porter	68 Burgundy Drive Nashua	(608) 898-0089
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Additions - Multi Family	

Proposed Use:	Proposed Project Description:
Multi- Family - repair settling foundation	repair settling foundation

Dept: Historic **Status:** Approved **Reviewer:** Scott Hanson **Approval Date:** 09/09/2008
Note: **Ok to Issue:** ☑

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 08/26/2008
Note: **Ok to Issue:** ☑

1) ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
2) This is NOT an approval for an additional dwelling unit. You SHALL NOT add any additional kitchen equipment including, but not limited to items such as stoves, microwaves, refrigerators, or kitchen sinks, etc. Without special approvals.
3) This property shall remain a forty-three (43) family dwelling building. Any change of use shall require a separate permit application for review and approval.
4) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Chris Hanson **Approval Date:** 09/15/2008
Note: **Ok to Issue:** ☑

1) Permit approved based on the plans submitted and reviewed w/owner/contractor, with additional information as agreed on and as noted on plans.
2) An inspection of the installation of the steel and concrete and structural bracing shall be conducted by a licensed engineer and his/her certification shall be submitted to this office stating compliance with the approved plans.
3) Separate permits are required for any electrical, plumbing, or HVAC systems.
Separate plans may need to be submitted for approval as a part of this process.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** **Approval Date:** 09/10/2008
Note: **Ok to Issue:** ☑

1) The sprinkler and fire alarm systems shall be operational at all times. OR A fire watch shall be posted.
2) Means of egress to remain accessable at all times

Comments:
9/9/2008-gg: received permit from historic. Gave to Captain Cass. /gg

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

to schedule your inspections as agreed upon

Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.

A Pre-construction Meeting will take place upon receipt of your building permit.

__X__ **Re-Bar Schedule Inspection: Prior to pouring concrete**

__X__ **Foundation Inspection: Prior to placing ANY backfill for below grade occupiable space**

__X__ **Final inspection required at completion of work.**

Certificate of Occupancy is not required for certain projects. Your inspector can advise you if your project requires a Certificate of Occupancy. All projects DO require a final inspection.

If any of the inspections do not occur, the project cannot go on to the next phase, REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.

CERIFICATE OF OCCUPANICES MUST BE ISSUED AND PAID FOR, BEFORE THE SPACE MAY BE OCCUPIED.

_____ _____

Signature of Applicant/Designee Date

_____ _____

Signature of Inspections Official Date

General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: 457 Cumberland Ave		
Total Square Footage of Proposed Structure/Area	Square Footage of Lot	
Tax Assessor's Chart, Block & Lot Chart# 36 Block# F Lot# 20	Applicant *must be owner, Lessee or Buyer* Name Northeast Helical LLC Address 68 Burgundy Dr City, State & Zip Nashua NH 03062	Telephone: 603.598.0089
Lessee/DBA (If Applicable)	Owner (if different from Applicant) Name City of Portland Address City, State & Zip	Cost Of Work: $ 57,500.00 C of O Fee: $ Total Fee: $ 600

Current legal use (i.e. single family) Housing
If vacant, what was the previous use? —
Proposed Specific use: —
Is property part of a subdivision? NO If yes, please name
Project description:
Repair the settling Foundation

Contractor's name: Northeast Helical LLC
Address: 68 Burgundy Drive
City, State & Zip Nashua NH 03062 Telephone: 603.598.0089
Who should we contact when the permit is ready: Rich Porter Telephone: 978.387.8476
Mailing address: 68 Burgundy Dr. Nashua NH 03062

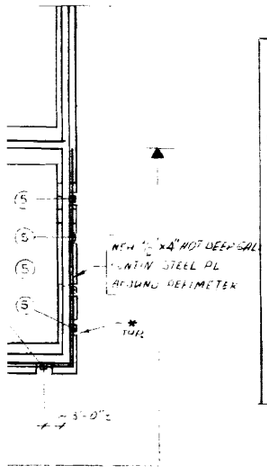
Please submit all of the information outlined on the applicable Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at www.portlandmaine.gov, or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature: [signature] Date: 8/21/2008

This is not a permit; you may not commence ANY work until the permit is issue

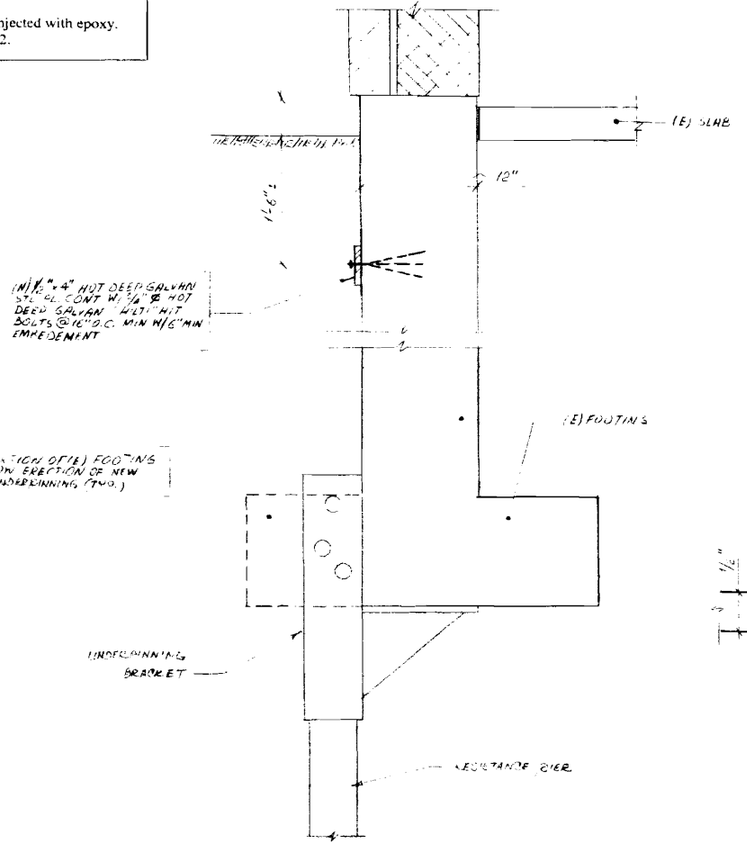


	* REQ'D	PIER/BRACKET	DESIGN LOAD (LBS)	INSTALLATION FORCE (LBS)
①	2	AF-2-UF-2875.185M	30,000	48,000 LBS
②	8	AF-2-UF-2875.185	25,000	40,000 LBS
③	4	AF-2-UF-3500.185M	40,000	64,000 LBS
④	4	AF-2-UFVL-2875.219	50,000	80,000 LBS
⑤	8	AF-2-UF-2875.185	15,000	24,000 LBS

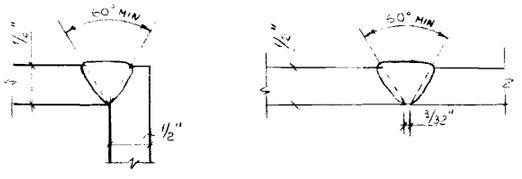
footing to allow erection new UNDERPINNING (TYP.)

NOTES:

1. Cracks to be pressure injected with epoxy.
2. Soil information see S-2.



TYPICAL DETAIL 2
Scale 1½" = 1'-0"



TYPICAL BUILDING JOINTS FOR ½"x4" CONTIN. STEEL PLATE
Scale 16 " = 1'-0"

GENERAL NOTES

STRUCTURAL STEEL

All steel exposed to weather must be hot dip galvanized

All structural steel shall be new steel conforming to the ASTM "Standard Specifications for Structural Steel, Senal D signation A-36," amended to date

Field connections shall be by welding according to the AISC Manual, latest editions All field welded connections shall be by certified welders, shall conform with the American Welding Society Code.

All welds shall be inspected by qualified welding inspectors

REHABILITATION

This office has performed a walk-through visit and a written structural report was issued related to this visit. This report has become part of the contract documents

When information is missing from contract documents, the Structural Engineer must be notified to provide the missing information. If the Contractor chooses to improvise a solution it will be at his own risk.

When the structural work has been completed, the Structural Engineer must be notified in time to visit the site

In case of conflict between different construction documents (plans, specifications, etc.) the most stringent requirements would govern Contractor must bring to the attention of the Structural Engineer any abnormal or unexpected conditions

(E) denotes existing member
(N) denotes new member

If the structures appear to differ from structural drawings or new problems are encountered during construction, Contractor will have to report it immediately to the Structural Engineer

The Structural Engineer assumes no responsibility for Work not reflected in the structural drawings of this project

MISCELLANEOUS

Structural Engineer shall not be responsible for fireproofing

Structural Engineer shall not be responsible for waterproofing

Structural Engineer shall not be responsible for any other structural work beyond what is shown on the drawings.

All temporary bracing and shoring made necessary for execution of structural work and/or made necessary due to improper structural conditions shall be provided by Contractor who shall assume all responsibility for it. All temporary bracing and shoring shall be removed only after work has been completed and checked by Structural Engineer.

All structural steel exposed to the weather shall be hot dip galvanized

Contractor shall verify all dimensions on the job.

Contractor shall not scale dimensions from drawings

No excavation adjacent to existing foundation will encroach a pyramid starting at the perimeter of the existing footing with slopes of one vertical to two horizontal unless otherwise noted.

All requests for changes to the structural drawings from Client, Contractors etc. or any other party must be made in writing to the Structural Engineer, or any other changes to drawings made on the site must be followed up in writing to the Structural Engineer

The Structural Engineer shall not have control or charge of, and shall not be responsible for, construction means, methods, techniques, sequences or procedures, for safety precautions and programs in connection with the Work, for the acts or omissions of the Contractor, Subcontractors or any other persons performing any of the Work, or for the failure of any of them to carry out the Work in accordance with the Contract Documents

In case of conflict between notes and/or sections or details, the most stringent condition shall govern

In case existing conditions differ from those shown on drawings, Contractor shall notify the Structural Engineer before proceeding with pertinent work

Contractor must have the expertise to execute all work indicated on the drawings or shall hire qualified help to do it

Contractor shall submit proposed methods of underpinning existing structures, if required, to the engineer for approval, before proceeding with the work Approval of the engineer shall not relieve the contractor of the responsibility for the safety of the structure

VERY IMPORTANT NOTE:

This underpinning is for exterior walls of this front portion of the building only and does not address the slab on grade condition.

RENE MUGNIER ASSOCIATES, INC.
777 Concord Avenue, Suite 201
Cambridge, Massachusetts 02138
Phone (617) 547-7773, Fax (617) 937-7743

NO.	REVISIONS/ISSUE	DATE

TITLE:
457 CUMBERLAND AVE.
PORTLAND, MAINE

PARTIAL FOUNDATION PLAN
(UNDERPINNING ONLY)

DRAWN: G R	DATE: 08.04.08
CHECKED: R M	SCALE: AS NOTED
	DRAWING NO.: S·1

07-007

GZA GeoEnvironmental, Inc. Engineers and Scientists

457 Cumberland Avenue Crack Evaluation
Portland, Maine

Boring No.: GZ-1
Page: 1 of 1
File No.: 09.0025476.00
Check:

Contractor: Maine Test Boring, Inc.
Foreman: Ron Idano
Logged by: Asbjorn Gustafsen
Date Start/Finish: 1-5-05 / 1-5-05
Boring Location: See Location Plan
GS Elev.: Datum:

Auger/Casing	Sampler	GROUNDWATER READINGS				
Type: HSA	SS	Date	Time	Depth Casing		Stab
I.D.: 2.5 in	1.38 in	1/5/05	1055	18.0 ft	19.1 ft	0
Hammer Wt.:	140 lb					
Hammer Fall:	30 in.					
Rig Type:						

Depth (ft)	Blows (/6")	N Value	Sample Description & Classification	Stratum Desc	Remarks	Equipment Installed
0.0-2.0	5-6 5-5	11	2.25-inch thick Brick sidewalk. Medium dense, gray to brown to tan, fine to medium SAND, trace Silt, trace Cinders, Asphalt. Dry			No Equipment Installed
2.0-4.0	3-2 3-9	5	Soft, tan, fine to medium SAND trace Silt, trace Gravel in tip of spoon. Dry			
4.0-6.0	8-5 8-10	13	Top 4 inches: Medium dense, tan, fine to medium SAND, trace Silt. Bottom 4 inches: Medium dense, gray-brown, fine to coarse SAND and GRAVEL, trace Silt, trace plastic (PVC). Dry	FILL		
6.0-8.0	13-18 33-26	51				
8.0-10.0	16-25 38-19	63	Very dense, brown, fine to coarse SAND, little fine to coarse Gravel, trace Silt, PVC, Glass. Dry Very dense, brown, fine to coarse SAND, little fine to coarse Gravel, trace Silt, pieces of dk. gray Silt. Dry. Moist in tip			
10.0-12.0	8-8 6-5	14	Medium dense, gray-brown, fine to medium SAND, little Silt, trace Gravel, Cinders, Ash. Moist	12.0 ft		
12.0-14.0	4-19 10-10	29	Medium dense, brown, fine to medium SAND, little Gravel (including weathered Rock), little Silt. Wet	SAND		
15.0-17.0	14-27 26-57	53	Top 12 inches: Very dense, gray to orange-brown, fine SAND, little Silt, trace Gravel. Wet Bottom 4 inches: Hard, gray-brown, mottled, Clayey SILT with weathered Bedrock. Wet.	16.5 ft GLACIAL TILL		
19.1-21.1	25/0"	>100	Bottom of boring at 19.1 feet below ground surface. Auger and spit spoon refusal encountered.	19.1 ft		2 3

1. located in brick entranceway. Bricks were removed prior to drilling. Depths were measured from brick subgrade elevation
2. ...ered in at approximately 9 feet below ground surface during auger removal. No stabilized groundwater elevations were obtained
3. ...was backfilled with auger cuttings and bricks were replaced

...approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level ...dings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time ...measurements were made.

Boring No.: GZ-1

GZA GeoEnvironmental, Inc. Engineers and Scientists

457 Cumberland Avenue Crack Evaluation
Portland, Maine

Boring No.: GZ-2
Page: 1 of 1
File No.: 09.0025476.00
Check:

Contractor: Maine Test Boring, Inc.
Foreman: Ron Idano
Logged by: Asbjorn Gustafsen
Date Start/Finish: 1-5-05 / 1-5-05
Boring Location: See Location Plan
GS Elev.: Datum:

Auger/Casing	Sampler	GROUNDWATER READINGS				
Type: HSA	SS	Date	Time	Depth Casing		Stab
I.D.: 2.5 in	1.38 in	1/5/05	1320	12.1 ft	15.0 ft	0
Hammer Wt.:	140 lb					
Hammer Fall:	30 in.					
Rig Type:						

Depth (ft)	No	Pen./Rec. (in)	Depth (ft)	Blows (/6")	N Value	Sample Description & Classification	Stratum Desc	Remarks	Equipment Installed
0	S-1	24/8	0.0-2.0	10-10 16-14	32	2.25-inch thick Brick sidewalk. Dense, brown, fine to coarse SAND, little fine to coarse Gravel, trace Silt, Asphalt. Dry		1	No Equipment Installed
	S-2	24/8	2.0-4.0	6-7 6-6	13	Medium dense, tan, fine to medium SAND, little Gravel, trace Silt. Dry			
	S-3	24/6	4.0-6.0	2-3 5-9	8	Loose, brown, fine SAND, some Silt, trace Gravel, Cinders, Ash, Brick, Roots. Moist			
5	S-4	24/3	6.0-8.0	WOR-5 10-11	15	Medium dense, brown, fine to medium SAND and fine to coarse Gravel, little Silt, trace Cinders, Ash, Roots. Moist	FILL	2 3	
	S-5	24/12	8.0-10.0	14-7 4-6	11	Top 2 inches: Black Cinders and Ash. Middle 7 inches: Medium dense, brown, fine to medium SAND, little Silt, trace Roots. Bottom 3 inches: Brown TOPSOIL (fine Sand), trace Roots. Moist			
10	S-6	24/13	10.0-12.0	6-4 3-4	7	Loose, gray-brown, fine to medium SAND, little Silt, trace Cinders, Ash. Moist to wet			
	S-7	23/7	12.0-13.9	1-11 19-50/5"	30	Medium dense, gray-brown, fine to medium SAND, some (-) Gravel, little (+) Silt, trace Organics. Wet	12.8 ft		
15	S-8	24/7	15.0-17.0	6-3 2-3	5	Loose, dark brown, fine to medium SAND, little Silt, trace Gravel, trace Organics. Wet	(MARINE) SAND	4	
20	S-9	24/0	19.8-21.8	25/0"	>100	Bottom of boring at 19.8 feet below ground surface. Auger and split spoon refusal encountered.	19.8 ft	5	
25									

1. The boring was located in a brick sidewalk. Bricks were removed prior to drilling. Depths were measured from brick subgrade elevation.
2. The auger plug dropped approximately 0.5 foot below the augers at 6 feet. The undisturbed sample interval was 6.5 to 8 feet below ground surface.
3. WOR = Weight of Rod
4. The driller noted a layer of Gravel and/or Cobble at approximately 17 to 17.3 feet below ground surface
5. The borehole was backfilled with auger cuttings and bricks were replaced

All depth measurements are approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Boring No.: GZ-2

GZA GeoEnvironmental, Inc. Engineers and Scientists

457 Cumberland Avenue Crack Evaluation
Portland, Maine

Boring No.: GZ-3
Page: 1 of 1
File No.: 09.0025476.00
Check:

Contractor: Maine Test Boring, Inc.
Foreman: Ron Idano
Logged by: Asbjorn Gustafsen
Date Start/Finish: 1-5-05 / 1-5-05
Boring Location: See Location Plan
GS Elev.: Datum:

Auger/Casing	Sampler	GROUNDWATER READINGS				
Type: HSA	SS	Date	Time	Depth Casing		Stab
I.D.: 2.5 in	1.38 in					
Hammer Wt.:	140 lb					
Hammer Fall:	30 in.					
Rig Type:						

Depth (ft)	No	Pen./Rec. (in)	Depth (ft)	Blows (/6")	N Value	Sample Description & Classification	Stratum Desc	Remarks	Equipment Installed
0	S-1	6/0	0.0-5.0			Light brown/tan, fine to medium SAND, trace Silt, trace Roots. Dry		2	No Equipment Installed
5	S-2	24/13	5.0-7.0	17-30 43-47	73	Very dense, brown, fine to coarse SAND, little fine to coarse Gravel, trace Silt. Dry	FILL		
	S-3	13/7	7.0-8.1	51-53 75/1"	>100	Very dense, brown, fine to coarse SAND and GRAVEL, trace Silt. Dry			
10	S-4	24/4	10.0-12.0	11-21 42-42	63	Very dense, brown, fine to medium SAND, some fine to coarse Gravel, little Silt, trace Cinders, Ash. Moist			
	S-5	24/9	12.0-14.0	25-19 17-12	36	Dense, brown, fine to medium SAND, some Brick, trace Silt, trace Cinders. Moist	14.5 ft		
15	S-6	24/6	15.0-17.0	11-18 16-17	34	Dense, gray-brown, fine to coarse SAND and GRAVEL (some weathered rock fragments), little Silt. Wet.	SAND AND GRAVEL		
20	S-7	24/17	20.0-22.0	12-13 9-5	22	Medium dense, dark brown, fine to medium SAND, little Silt, trace Gravel, Wood fibers, Organics. Wet	20.5 ft		
25	S-8	5/4	25.0-25.4	WOR/5" 25/0"	>100	Very loose, gray, fine to medium SAND, some Silt, trace fine Gravel. Wet	(MARINE) SAND	3	
						Bottom of boring at 25.5 feet below ground surface. Auger refusal encountered	25.5 ft	4 5	

1. The boring was initially located in a paved parking lot. Encountered 2 inches of Asphalt underlain by Concrete. Drilling was stopped and the borehole was moved 2.5 feet towards the building (landscape/drain strip). The asphalt was patched with cold patch.
2. Sample S-1 collected from auger cuttings while drilling from 0 to 5 feet.
3. Split spoon refusal encountered at 25.4 feet below ground surface.
4. The borehole caved in at approximately 8.5 feet below ground surface during auger removal. No stabilized groundwater elevations were obtained.
5. The borehole was backfilled with auger cuttings.

All depth measurements are approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

Boring No.: GZ-3

22 FAX 2078482403 S.W. COLE-BANGOR
NGS, INC.

Weston Associates

SHEET 1 OF 1 HOLE NO B-4

PROJECT NAME: Cumberland Arms
LOCATION: Portland, Maine

LINE & STATION:
OFFSET:

	CASING	SAMPLER	CORE BARREL
TYPE	HW	SS	RW14
SIZE I.D.	4"	1 3/8"	2 5/8"
HAMMER WT.	300	140	
HAMMER FALL	15"	30"	

DATE START 10-19-82 DATE FIN 10-19-82
SURFACE ELEV 83±
GROUND WATER ELEV

REC	DEPTH @ BOT	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	VANE READING	DEPTH	STRATUM DESCRIPTION
3.5	3.5	1	1	1		3.5	Brown silty fine-medium sand w/gravel, ashes (fill)
0.5	7	2	2	2		4.0	Brown ~~silty fine medium~~ sand, w/gravel, brick, ashes, glass, tr. cobbles (fill)
11.5		2	3	4		13.7	Brown silty fine-medium sand w/gravel, cobbles w/sn (fill) ~Loose~
60"	18.7	100				18.7	Bedrock GRAY GNEISS RQD = 98%
							Bottom of boring @ 18.7'

SOIL CLASSIFIED BY: Driller - Visually; Soil Technician - Visually; Laboratory Tests

REMARKS: ± 2 3/8"

HOLE NO. B-4

01/19/2005 14:32 FAX 2078482403 S.W. COLE-BANGOR
MAINE TEST BORINGS, INC.
BREWER MAINE 04412

Weston Associates

SHEET 1 OF 1 HOLE NO B-5

DRILLER: Greg Lidstone
JOB NUMBER: 82-117

PROJECT NAME: Cumberland Arms
LOCATION: Portland, Maine

LINE & STATION:
OFFSET:

GROUND WATER OBSERVATIONS
AT FT AFTER HOURS
AT FT AFTER HOURS

	CASING	SAMPLER	CORE BARREL
TYPE	NB	SS	
SIZE I.D.	2.5"	1 3/8"	
HAMMER WT.		140	
HAMMER FALL		30"	

DATE START 10-19-82 DATE FIN 10-19-82
SURFACE ELEV 81±
GROUND WATER ELEV

CASING BLOWS PER FOOT	NO	SAMPLE OD	SAMPLE PIN	SAMPLE REC	SAMPLE DEPTH @ BOT	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	VANE READING	DEPTH	STRATUM DESCRIPTION
	1D	2"	18"		3.5	4	5	6			Brown ~~silty~~ fine-coarse sand, w/gravel, brick, ash, wood, glass, cobbles (fill) ~Loose~
	2D	2"	18"		6.5	6	2	1		7.0	
						3					
	3D	2"	18"		11.5	5	3	4			Brown silty fine-coarse sand w/gravel, cobbles, trace boulders (fill) ~Loose~
	4D	2"	18"		16.5	5	2	3		16.1	
	5D	2"	18"		21.5	5	12	17		21.3	Brown silty f-m sand w/gray silty clay
	D	2"	0"		22.5	100/0"				22.5	Gray clayey silty f-m sand w/grav, cobb
											Refusal @ 22.5'

SAMPLES: O - Split Spoon; C - 3" Shelby Tube; U - 3" Shelby Tube

SOIL CLASSIFIED BY: Driller - Visually; Soil Technician - Visually; Laboratory Tests

REMARKS

HOLE NO. B-5

RENE MUGNIER ASSOCIATES, INC.
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NO.	REVISIONS/ISSUE	DATE

TITLE:
457 CUMBERLAND AVE.
PORTLAND, MAINE

SUBSURFACE SOIL INFORMATION

DRAWN: G R | DATE: 02.21.07
CHECKED: R M | SCALE:
DRAWING NO.:

S·2

07-007