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: 070981

PERMIT ISSUED
OCT 22 2007
CITY OF PORTLAND

This is to certify that SHERIDAN STREET LLC / Portland Bu...

has permission to New 21 Unit Condominium

AT 129 SHERIDAN ST CBL 013 K002001

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 written permission procured before this building or part thereof is lathed or otherwise closed-in. 24 HOUR NOTICE IS REQUIRED.

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

OTHER REQUIRED APPROVALS

Fire Dept. Greg Cass

Health Dept. _____

Appeal Board _____

Other _____
Department Name

10/17/07

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:
07-0981		013 K002001

Location of Construction:	Owner Name:	Owner Address:	Phone:
129 SHERIDAN ST	SHERIDAN STREET LLC	477 CONGRESS ST 5TH FLOOR	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Portland Builders, Inc.	P.O. Box 4902 Portland	2078790118
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Commercial	Contract Zone Modified R-6

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Vacant	...inium	$31,475.00	$3,138,000.00	1

FIRE DEPT: [x] Approved [ ] Denied
See Conditions
Signature: Greg Cass

INSPECTION:
Use Group: R2/S2 Type 5A
10/12/07
Signature:

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)
Action: [ ] Approved [ ] Approved w/Conditions [ ] Denied
Signature: Date:

Proposed ...
New 2 ...

Permit T...
dmart...

772 7070
cell 653 7510
OWES 75.00
For
Failed
Inspection
Unit 205 - CO

1. Th... A... Fe...
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..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
[ ] Shoreland N/A	[ ] Variance	[x] Not in District or Landmark
[ ] Wetland	[ ] Miscellaneous	[ ] Does Not Require Review
[ ] Flood Zone Panel 14 Zone C	[ ] Conditional Use	[ ] Requires Review
[x] Subdivision	[ ] Interpretation	[ ] Approved
[ ] Site Plan #2006-0214	[ ] Approved	[ ] Approved w/Conditions
Maj [x] Minor [ ] MM [ ]	[ ] Denied	[ ] Denied
OK with Conditions		
Date: 8/13/07	Date:	Date:

PERMIT ISSUED
OCT 2 2 2007
CITY OF PORTLAND

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 Application

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

Permit No:	Issue Date:	CBL:
07-0981		013 K002001

Location of Construction:	Owner Name:	Owner Address:	Phone:
129 SHERIDAN ST	SHERIDAN STREET LLC	477 CONGRESS ST 5TH FLOOR	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Portland Builders, Inc.	P.O. Box 4902 Portland	2078790118
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Commercial	Contract zone modified R-6

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Vacant Land foundation only permit # 07-0365	New 21 Unit Condominium	$31,475.00	$3,138,000.00	1

FIRE DEPT: ☑ Approved ☐ Denied
See Conditions
Signature: Greg Cass

INSPECTION:
Use Group: R-2 Type: 5A
10/12/07
Signature:

Proposed Project Description:
New 21 Unit Condominium

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)
Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied
Signature: Date:

Permit Taken By:	Date Applied For:
dmartin	08/13/2007

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
OCT 2 2 2007
CITY OF PORTLAND

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland N/A	☐ Variance	☑ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone panel 14 zone C	☐ Conditional Use	☐ Requires Review
☒ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan #2006-0214	☐ Approved	☐ Approved w/Conditions
Maj ☒ Minor ☐ MM ☐ OK with conditions	☐ Denied	☐ Denied
Date: 8/13/07	Date:	Date:

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

Received

Quality Assurance Plan 10-22-07

11/26/07 - Dee Email per MJN approving 2 sprinkler systems. 13 & 13R for garage and residence. JMB

3-9-10

Unit 306 needs C.M. detectors SMH

5-24-10 407/OK

CITY OF PORTLAND, MAINE

Department of Building Inspection

Certificate of Occupancy

LOCATION 135 SHERIDAN ST **CBL** 013 K002001

Issued to Sheridan Street Llc /Portland Builders, Inc. Date of Issue 05/25/2010

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 07-0981 , has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES	APPROVED OCCUPANCY
Unit 407	Residential Condominiums Use Group R2/S2 Type 5A IBC 2003

Limiting Conditions:
None

This certificate supersedes certificate issued

Approved:

5.25.2010

(Date) *Inspector* *Inspector of Buildings*

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.

CITY OF PORTLAND, MAINE
Department of Building Inspection

Certificate of Occupancy

LOCATION 135 SHERIDAN ST **CBL** 013 K002001

Issued to Sheridan Street Llc /Portland Builders, Inc. **Date of Issue** 03/12/2010

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 07-0981, has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES	APPROVED OCCUPANCY
Unit # 306	Residential Condominiums Use Group R2/S2 Type 5A IBC 2003

Limiting Conditions:
none

This certificate supersedes certificate issued

Approved:
3-12-2010 Suzanne Hart
(Date) *Inspector*

Inspector of Buildings

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.

CITY OF PORTLAND, MAINE
Department of Building Inspection

Certificate of Occupancy

LOCATION 135 SHERIDAN ST **CBL** 013 K002001

Issued to Sheridan Street Llc /Portland Builders, Inc. **Date of Issue** 03/25/2009

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 07-0981, has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES	APPROVED OCCUPANCY
Unit #101 & #202	Residential Condominiums Use Group R2/S2 Type 5A IBC 2003

Limiting Conditions:
none

This certificate supersedes certificate issued

Approved:

03/25/09 Michael A. Collins / Paul Pitt

(Date) *Inspector* *Inspector of Buildings*

CAPT. K. Gaudian
03-26-09

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.

CITY OF PORTLAND, MAINE

Department of Building Inspection

Certificate of Occupancy

LOCATION 135 SHERIDAN ST **CBL** 013 K002001

Issued to Sheridan Street Llc /Portland Builders, Inc. **Date of Issue** 11/04/2008

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 07-0981, has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES	APPROVED OCCUPANCY
Unit #304, #305, #401	Residential Condominiums Use Group R2/S2 Type 5A IBC 2003

Limiting Conditions:

none

This certificate supersedes certificate issued

Approved:

(Date) *Inspector* *Inspector of Buildings*

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.

CITY OF PORTLAND, MAINE

Department of Building Inspection

Certificate of Occupancy

LOCATION 135 SHERIDAN ST **CBL** 013 K002001

Issued to Sheridan Street Llc /Portland Builders, Inc. **Date of Issue** 02/13/2009

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 07-0981, has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES	APPROVED OCCUPANCY
UNITS 204 & 206	Residential Condominiums Use Group R2/S2 Type 5A IBC 2003

Limiting Conditions:

none

This certificate supersedes certificate issued

Approved:

(Date) *Inspector* *Inspector of Buildings*

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.

CITY OF PORTLAND, MAINE
Department of Building Inspection

Certificate of Occupancy

LOCATION 135 SHERIDAN ST **CBL** 013 K002001

Issued to Sheridan Street Llc /Portland Builders, Inc. **Date of Issue** 07/27/2010

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 07-0981, has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES	APPROVED OCCUPANCY
Unit 205	Residential Condominiums Use Group R2/S2 Type 5A IBC 2003

Limiting Conditions:

None

This certificate supersedes certificate issued

Approved:

7-27-10 Susan Hunt

(Date) *Inspector*

Inspector of Buildings

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.

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:
07-0981	08/13/2007	013 K002001

Location of Construction:	Owner Name:	Owner Address:	Phone:
129 SHERIDAN ST	SHERIDAN STREET LLC	477 CONGRESS ST 5TH FLOOR	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Portland Builders, Inc.	P.O. Box 4902 Portland	(207) 879-0118
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

Proposed Use:	Proposed Project Description:
New 21 Unit Condominium	New 21 Unit Condominium

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 08/13/2007

Note: **Ok to Issue:** ☑

1) All conditions on the foundation permit are still in force
2) This property shall remain a twenty one (21) residential condominium dwelling unit building. Any change of use shall require a separate permit application for review and approval.
3) 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.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Mike Nugent **Approval Date:** 10/18/2007

Note: **Ok to Issue:** ☑

1) 6) The Statement of Special Inspections must be changed to "YES" where it says"No" that a Seismic Q/A plan is not required. This must be submitted prior to framing.
2) 7) The entire structure must be protected with a fire supression system that complies with NFPA 13. (NFPA 13R is not acceptable in this project due to the mixed uses see section 903.3.1.1. of the 2003 IBC)
3) 5) Separate stamped plans must be submitted and separate permits are required for Fire Supression/Stand Pipe systems and Fire Alarm systems prior to installation of same.
4) 4) Openings penetrating floor ceiling assemblies must be enclosed in a rated chase complying with Section 707. of the IBC.
5) 3) Final Carpet choice must be approved by the City . Product info establishing compliance with Chapter 8 of the IBC must be submitted.
6) 1)A Full set of stamped mechanical plans showing complete details including fire damper locations is required to be submitted and approved prior to installation of same , A separate permit is required for this. The Garage ventilation plans and specs must also be included with this.
7) 2)All penetrations of fire separation assemblies must be protected in accordance with Chapter 7. This includes but is not limited to vents , pipes, wires, light fixtures, any penetration.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** Capt Greg Cass **Approval Date:** 09/11/2007

Note: Spoke w/ consultantant this date.
List of issues w/ plans will not hold up construction. **Ok to Issue:** ☑

1) Installation of a Fire Alarm system requires a Knox Box to be installed per city crdinance
2) All construction shall comply with NFPA 101
3) New elevators are required to fit an 80" x 24" stretcher.
4) Fire alarm system requires a Masterbox connection per city ordinance.
5) Carbon Monoxide detection and airhandling in garage need an engineering analysis.

Location of Construction:	Owner Name:	Owner Address:	Phone:
129 SHERIDAN ST	SHERIDAN STREET LLC	477 CONGRESS ST 5TH FLOOR	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Portland Builders, Inc.	P.O. Box 4902 Portland	(207) 879-0118
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

6) The Fire alarm and Sprinkler systems shall be reviewed by a licensed contractor[s] for code compliance. Compliance letters are required.

7) A single source supplier should be used for all through penetrations.

8) The fire alarm system shall comply with NFPA 72

9) The sprinkler system shall be installed in accordance with NFPA 13.

Dept: Public Works **Status:** Approved **Reviewer:** **Approval Date:**
Note: **Ok to Issue:** ☐

Dept: Zoning **Status:** Pending **Reviewer:** **Approval Date:**
Note: **Ok to Issue:** ☐

Dept: Parks **Status:** Approved with Conditions **Reviewer:** **Approval Date:**
Note: **Ok to Issue:** ☐

Dept: Fire **Status:** **Reviewer:** Greg Cass **Approval Date:**
Note: **Ok to Issue:** ☐

1) Applicant must show hydrant within 500' path of travel.

Dept: DRC **Status:** Approved **Reviewer:** Philip DiPierro **Approval Date:** 07/06/2007
Note: **Ok to Issue:** ☑

Dept: Planning **Status:** Approved with Conditions **Reviewer:** Shukria Wiar **Approval Date:** 01/09/2007
Note: **Ok to Issue:** ☐

1) The applicant shall enter into a license agreement with the City to enable installation and maintenance of landscaping on the City-owned property.

2) Applicant shall provide a capacity to serve letter from the Portland Water District.

3) The applicant shall coordinate with the City's Arborist to address the comments in his memo dated January 2, 2007 to include that a buffer of vegetation be planted and maintained by the Homeowners Association to the rear of the property, including city-owned land.

4) All Fire Department issues shall be addressed and any information shall be submitted per Attachment 7, correspondence from Captain Greg Cass.

5) The applicant shall incorporate a revised granite curb detail and pipe trench detail on site plans that is consistent with City standard.

6) The applicant shall submit a copy of the condominium documents for review and approval by the City's Associate Corporation Counsel.

7) The applicant shall submit a copy of the City public access easement for review and approval by the City's Associate Corporation Counsel.

8) Landscape protection and improvements for the Glass property shall be installed as shown on the Landscape Plan (Attachment 2p of the Planning Board Report).

Location of Construction:	Owner Name:	Owner Address:	Phone:
129 SHERIDAN ST	SHERIDAN STREET LLC	477 CONGRESS ST 5TH FLOOR	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Portland Builders, Inc.	P.O. Box 4902 Portland	(207) 879-0118
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

9) Additional protective measures for the Glass home shall be implemented during the construction phase as reviewed and approved by the Planning Authority.

10 The planting guarantee to the landscaping plan for all vegetation called by the plan and modified by Jeff Tarling shall be for three-years from the date of occupancy

11 The Applicant shall work with the Staff to revise the light pole heights and number of poles to an appropriate residential scale and to reduce the light levels for 121 Sheridan Street to the fullest extent possible.

12 The applicant shall revise the plans in accordance with Michael Farmer's memo dated 01.05.2007.

Comments:

8/13/2007-mes: foundation onlty permit is under #07-0365

9/18/2007-ldobson: I have received additional plans routed to MJN

Location of Construction:	Owner Name:	Owner Address:	Phone:
129 SHERIDAN ST	SHERIDAN STREET LLC	477 CONGRESS ST 5TH FLOOR	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Portland Builders, Inc.	P.O. Box 4902 Portland	(207) 879-0118
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

10/10/2007-ldobson: My reponses are in CAPS next to the original questions

a) IMPORTANT>> The Building must be completely protected with a Full NFPA 13 System. {Please review the following code excerpts:

[F] 903.2.9 Group S-2.
An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 or where located beneath other groups.

[F] 903.3.1.1 NFPA 13 sprinkler systems.
Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in Section 903.3.1.1.1.
[F] 903.3.1.1.1 Exempt locations.
Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.
1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the building official.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.

b) Do we access the building on the East entry if we're in a wheelchair, and is the route entirely accessible??

1)Is there a spec book for this project, one was not provided with the plans. THIS IS OK!!!

2) The "Page 3" certification form was passed inessentially blank???? need one filled out. GOT IT!!

3) The exterior bearing walls for this project all need to be Rated as it is 5A construction, the same holds true for all interior bearing or shear walls, columns etc. Please provide these details with UL Listings. THIS IS FINE

4)Please confirm that the building will be protected with a full blown NFPA 13 sprinkler system. SEE ABOVE AND REDESIGN

5) No fire blocking or draft stopping (which may be moot if you're using the full 13 system) OK IF NFPA 13 SYSTEM

6) on page G1.1 you show alternatives to 2C which are not rated etc. You need to dcommit to the shaft wall, no alternatives. IF THE CORRECT ASSEMBLY IS USED IT IS FINE

7)We received the North elevation request for waiver for the % of unprotected openings, you failed to identify the other elevations and their percentages, It looks like they all have limtations as well, please provide all elevations and their percentages THIS IS FINE BECAUSE YOU WILL BE USING A FULL NFPA 13 SYSTEM, OTHERWISE YOU CANNOT CONSIDER THE OPENINGS AS PROTECTED>

8)Please provide exterior stair details, railings etc. THIS IS FINE

9)Accessible egress...1007 looks like we need to include the elevator, back up generator? I AGREE THAT THIS BUILDING IS TOO "SHORT" TO REQUIRE IT

10) Please provide compliance information for all doors that protect openings in fire separation assemblies (NFPA 252 or UL 10c as well as UL 1784 (smoke) and the elevator doors as well. YOUR SPEC BOOK DOES NOT INCLUDE THESE REFERENCED

Location of Construction:	Owner Name:	Owner Address:	Phone:
129 SHERIDAN ST	SHERIDAN STREET LLC	477 CONGRESS ST 5TH FLOOR	
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Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

STANDARDS, PLEASE PROVIDE COMPLIANCE INFORMATION

11) It looks like we have HVAC grear stacked but not protected by a shaft. Please explain. THIS IS STILL NOT CLEAR REGARDING THE TYPE OF HVAC SYSTEM AND IF THERE ARE DAMPERS AND WHERE THEY WILL BE SPECIFICALLY. A NOTE STATING "FIRE DAMPERS WHERE REQUIRED " IS INSUFFICIENT> WE NEED THEM SHOWN ON THE PLANS> I LOOKED AT THE SPEC BOOK AND IT'S STILL NOT CLEAR TO ME WHETHER OR NOT THERE WILL BE THROUGHFLOOR PENETRATIONS OR INDIVIDUAL FORCED HOT AIR SYSTEMS IN EACH UNIT.

12)The section of the third and fourth floor corridors that abut the flat roof are not protected and have windows. Please provide a code justification , (If these are bearing they need to be rated anyway --5A constr) IF WE HAVE THIS BREACH IN RATING, AREN'T WE EXPOSED FROM FIRE FROM THE FLAT ROOF AREA?

13)Safety glass locations aren't clear on A7.0 please provide with the applicable class and testing standard. PLEASE PROVIDE BUILDING ELEVATIONS WITH SAFETY GLAZING LOCATIONS, DON"T WANT TO HAVE TO RETRO FIT THE BUILDING BECAUSE THE LOCATIONS WERE UNCLEAR...BEEN THERE DONE THAT.

14)The "M" series plans are not stamped and provide little detail, no damper locations NEED DETAIL!

15) What is the plan for heating systems? PLEASE ELABORATE IN DETAIL

16)Need alternating tread specs and hatch details THE HATCH IS ONLY 11.25 SQ FT AND NEEDS TO BE 16 SQ.FT. THE THREADS RISERS ETC ARE FINE . DOES THE HANDRAIL MEET SECTION 1009.11, PLEASE PROVIDE CODE COMPLIANT HANDRAIL INFO?

17)Need information that ectablished compliance with applicable smoke and flame spread standards for the interior finishes as shown in Chapter 8. YOU WILL NEED TO ADVISE THE CITY OF THE FINAL CHOICE OF CARPETING AND PROVIDE INFO THAT COMPLIES WITH CHAPTE8 8 PRIOR TO INSTALLATION.

18)Please confirm that a supervisory alarm system in compliance with NFPA 72 will be installed and that a set of plans and separate permit will be submitted. NEED THIS STILL ... DID I MISS IT IN THE SPEC BOOK< SECTION 16700 IS SKIPPED IN MY SPEC BOOK

19) Need Garage Ventilation specs and plans (M plans for everything!) I'LL NEED TO CHECK THE MECHANICAL CODE TO SEE IF THE MINIMUM CFM IS BEING PROVIDED, I DON'T HAVE A COPY HERE, I'LL CHECK IT AT CITY HALL TOMORROW

20) Need a fire separation assembly penetration protection plans for all penetrations. SPEC BOOK SECTION 7841, THANK YOU

21) Need Standpipe details....also sprinkler plans when the time comes! STILL NEED

22) No refenced standards for roofing classification, weather protection performance requirements etc...no spec book! SECTION 7 SPEC BOOK THANKS

23) I saw optional skylights, please provide specs and details. PLEASE PROVIDE INFORMATION THAT ESTABLISHES THAT THE WASCO "SPY" MEETS THE STANDARDS SET FORTH IN SECTION 2405

Thanks,

Mike Nugent
Consulting Plans Examiner
City of Portland

Location of Construction:	Owner Name:	Owner Address:	Phone:
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	Portland Builders, Inc.	P.O. Box 4902 Portland	(207) 879-0118
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

9/29/2007-ldobson: I've completed the review and have the following questions/ comments or need the following info:

1)Is there a spec book for this project, one was not provided with the plans.

2) The "Page #" certification form was passed inessentially blank???? need one filled out.

3) The exterior bearing walls for this project all need to be Rated as it is 5A construction, the same holds true for all interior bearing or shear walls, columns etc. Please provide these details with UL Listings.

4)Please confirm that the building will be protected with a full blown NFPA 13 sprinkler system.

5) No fire blocking or draft stopping (which may be moot if you're using the full 13 system)

6) on page G1.1 you show alternatives to 2C which are not rated etc. You need to dcommit to the shaft wall, no alternatives.

7)We received the North elevation request for waiver for the % of unprotected openings, you failed to identify the other elevations and their percentages, It looks like they all have limtations as well, please provide all elevations and their percentages

8)Please provide exterior stair details, railings etc.

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12)The section of the third and fourth floor corridors that abut the flat roof are not protected and have windows. Please provide a code justification , (If these are bearing they need to be rated anyway --5A constr)

13)Safety glass locations aren't clear on A7.0 please provide with the applicable class and testing standard.

14)The "M" series plans are not stamped and provide little detail, no damper locations

15) What is the plan for heating systems?

16)Need alternating tread specs and hatch details

17)Need information that ectablished compliance with applicable smoke and flame spread standards for the interior finishes as shown in Chapter 8.

18)Please confirm that a supervisory alarm system in compliance with NFPA 72 will be installed and that a set of plans and separate permit will be submitted.

19) Need Garage Ventilation specs and plans (M plans for everything!)

20) Need a fire separation assembly penetration protection plans for all penetrations.

21) Need Standpipe details....also sprinkler plans when the time comes!

22) No refenced standards for roofing classification, weather protection performance requirements etc...no spec book!

23) I saw optional skylights, please provide specs and details.

Location of Construction:	Owner Name:	Owner Address:	Phone:
129 SHERIDAN ST	SHERIDAN STREET LLC	477 CONGRESS ST 5TH FLOOR	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Portland Builders, Inc.	P.O. Box 4902 Portland	(207) 879-0118
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

Please provide this information. I'm going on Vacation from 10/3 to 10/9 FINALLY,
I'll drop this off at City hall until the info come is.

Thanks,

Mike Nugent
Consulting Plans Examiner
City of Portland

Location of Construction:	Owner Name:	Owner Address:	Phone:
129 SHERIDAN ST	SHERIDAN STREET LLC	477 CONGRESS ST 5TH FLOOR	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Portland Builders, Inc.	P.O. Box 4902 Portland	(207) 879-0118
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

10/21/2007-ldobson: Lannie please print this out and put it in my box, I'll get it tomorrow

>>> "Ryan Senatore" <RJS@TFHArchitects.com> 10/19/07 1:34 PM >>>
Mike,

See attached, the revised Special Inspections Statement addressing Item #6 below.

Ryan Senatore LEED-AP
TFH Architects
100 Commercial St
Portland, Maine 04101
t: 207.775.6141
f. 207.773.0194

-----Original Message-----
From: MIke Nugent [mailto:mjn@portlandmaine.gov]
Sent: Wednesday, October 17, 2007 9:03 PM
To: Jeanie Bourke; Ryan Senatore; Richard Lo
Cc: Lannie Dobson; gls@shinbergconsulting.com; Scott Teas
Subject: RE: Sheridan Heights

I'm prepared to sign off on the permit with the following conditions.
Lannie, please place these conditions in U/I:

1)A Full set of stamped mechanical plans showing complete details including fire damper locations is required to be submitted and approved prior to installation of same , A separate permit is required for this. The Garage ventilation plans and specs must also be included with this.

2)All penetrations of fire separation assemblies must be protected in accordance with Chapter 7. This includes but is not limited to vents , pipes, wires, light fixtures, any penetration.

3) Final Carpet choice must be approved by the City . Product info establishing compliance with Chapter 8 of the IBC must be submitted.

4) Openings penetrating floor ceiling assemblies must be enclosed in a rated chase complying with Section 707. of the IBC.

5) Separate stamped plans must be submitted and separate permits are required for Fire Supression/Stand Pipe systems and Fire Alarm systems prior to installation of same.

6) The Statement of Special Inspections must be changed to "YES" where it says"No" that a Seismic Q/A plan is not required. This must be submitted prior to framing.

7) The entire structure must be protected with a fire supression system that complies with NFPA 13. (NFPA 13R is not acceptable in this project due to the mixed uses see section 903.3.1.1. of the 2003 IBC)

Thank you for your Patience!

Location of Construction:	Owner Name:	Owner Address:	Phone:
129 SHERIDAN ST	SHERIDAN STREET LLC	477 CONGRESS ST 5TH FLOOR	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Portland Builders, Inc.	P.O. Box 4902 Portland	(207) 879-0118
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Multi Family	

Mike Nugent

investment engineering
thinking green

September 24, 2008

Code Enforement Office
City of Portland
389 Congress Street
Portland, ME 04101

Attention: To whom it may concern

Subject: Sheridan Heights Condominiums, Portland, ME

Dear Sirs:

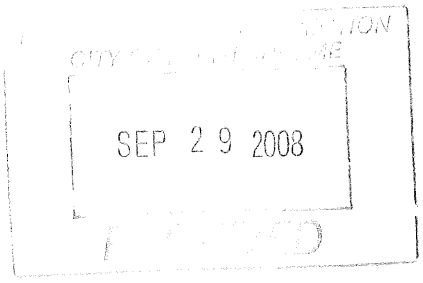
As requested we have visited the above referenced project and verified the operation of the ventilation system as well as the common area fresh air systems.

We confirm the design intent has been met, and the building meets the intent of the applicable contract documents at this time as well as State and local codes.

Going forward it should be notes that there are components of the system that do require periodic calibration and maintenance in order to assure proper system operation.

Sincerely,

Matthew L. Holden, P.E.
Investment Engineering Inc.
Mechanical Engineer of Record for the Project



From: Philip DiPierro
To: Collins , Michael
Date: 10/1/2008 9:12:28 AM
Subject: Re: 129 Sheridan St.

As far as I know the site work is incomplete, no one has called for a final inspection. There were questions about the landscaping, fencing, and banking stabilization out back. I cannot sign off yet.

phil

>>> Michael Collins 10/1/2008 8:59:36 AM >>>
CBL: 013-K-002
Permit # 07-0981
Status of site work?? He is looking for a C/O for base building only.
Thanks

Bill Cuddy

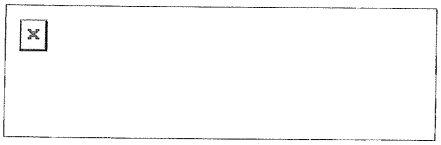
From: Roger Domingo [rdomingo@swcole.com]
Sent: Monday, October 06, 2008 11:14 PM
To: Greg Shinberg
Cc: Josh Cushman; Bill Cuddy
Subject: Gas pipe SI

Attached are flex gas pipe observation reports.

Roger E. Domingo
Construction Services Manager

S. W. Cole Engineering, Inc.
286 Portland Road
Gray, ME 04039-9586

Phone: (207) 657-2866
Fax: (207) 657-2840
Cell: (207) 615-2762
E-mail: rdomingo@swcole.com



www.swcole.com

S.W.COLE ENGINEERING, INC.

CONSTRUCTION OBSERVATION REPORT

Project Name:	Sheridan Heights, Portland, ME	**Project No:**	06-1271.1
Client:	Sheridan Street, LLC	**Date:**	4-11-08
Client's Rep.:	Greg Shinberg	**Page:**	1of 1
Contractor:	Portland Builders	**SWCE REP.**	RED

Weather			**Site Conditions**	
☒ Clear	☐ Snow	☐ Warm	☐ Clear	☐ Dusty
☐ Overcast	☐ Fog	☐ Hot	☐ Muddy	☒ Interior
☐ Rain	☐ Cold	☐ Windy	☐ Frozen	

Worked performed by SWCE		☐ Site Meeting	☐ Field Testing	☒ Observations
☐ Soil	☐ Concrete	☐ Masonry	☐ Asphalt	☐ _____

Equipment Used

☒-Digital Camera

Construction Activities Observed:

- As scheduled, observed interior flexible gas pipe installation levels 2 through 4. The flexible gas pipe appears to be anchored vertically and horizontally per general installation recommendations of pipe system manufacturer provided by Portland Builders and Eastern Mechanical.
- Flexible gas pipe is sleeved at floor penetrations and shielding has been installed to protect from interior wall sheathing fasteners.
-

Discussions, Recommendations:

- During site visit, walked through levels 2 through 4 with representatives of Eastern Mechanical, Portland Builders and Mike Collins from the City of Portland. Inspection by City of Portland included piping and other items. No major deficiencies regarding gas pipe were noted during inspection.
- Confirmed site meeting with pipe system manufacturers' local representative to discuss specific installation done to date. Meeting to be arranged by Portland Builders

Items Observed Not in Conformance to Project Specifications:

Reviewed By: MPL

S.W.COLE ENGINEERING, INC.

CONSTRUCTION OBSERVATION REPORT

Project Name:	Sheridan Heights, Portland, ME	**Project No:**	06-1271.1
Client:	Sheridan Street, LLC	**Date:**	4-14-08
Client's Rep.:	Greg Shinberg	**Page:**	1of 1
Contractor:	Portland Builders	**SWCE REP.**	RED

Weather

☒ Clear ☐ Snow ☐ Warm
☐ Overcast ☐ Fog ☐ Hot
☐ Rain ☐ Cold ☐ Windy

Site Conditions

☐ Clear ☐ Dusty
☐ Muddy ☒ Interior
☐ Frozen

Worked performed by SWCE		☐ Site Meeting	☐ Field Testing	☒ Observations
☐ Soil	☐ Concrete	☐ Masonry	☐ Asphalt	☐ _____

Equipment Used

☒-Digital Camera

Construction Activities Observed:

- As scheduled, observed interior flexible gas pipe installation levels 3 and 4. The flexible gas pipe appears to be anchored vertically and horizontally per general installation recommendations of pipe system manufacturer provided by Portland Builders and Eastern Mechanical.
- Flexible gas pipe is sleeved at floor penetrations and shielding has been installed to protect from interior wall sheathing fasteners.
-

Discussions, Recommendations:

- During site visit, walked through levels 2 through 4 with representatives of Eastern Mechanical, Portland Builders and flexible gas pipe system manufacturer. Representatives were asked to review installation to date specifically; floor penetration sleeves, shielding, joint fixtures and workmanship, clearances, and vertical and horizontal anchorages.
- No major deficiencies regarding gas pipe were noted by manufactures representatives during inspection.
- Some additional shielding was recommended by the representatives at certain locations.

Items Observed Not in Conformance to Project Specifications:

Reviewed By: MPL

S.W.COLE ENGINEERING, INC.

CONSTRUCTION OBSERVATION REPORT

Project Name:	Sheridan Heights, Portland, ME	**Project No:**	06-1271.1
Client:	Sheridan Street, LLC	**Date:**	4-9-08
Client's Rep.:	Greg Shinberg	**Page:**	1of 1
Contractor:	Portland Builders	**SWCE REP.**	RED

Weather

☒ Clear ☐ Snow ☐ Warm
☐ Overcast ☐ Fog ☐ Hot
☐ Rain ☐ Cold ☐ Windy

Site Conditions

☐ Clear ☐ Dusty
☐ Muddy ☒ Interior
☐ Frozen

Worked performed by SWCE		☐ Site Meeting	☐ Field Testing	☒ Observations
☐ Soil	☐ Concrete	☐ Masonry	☐ Asphalt	☐ _____

Equipment Used

☒-Digital Camera

Construction Activities Observed:

- As scheduled, observed interior service main flexible gas pipe installation beginning at gas service entrance in garage level to levels 2 through 4. The flexible gas pipe appears to be anchored vertically and horizontally per general installation recommendations of pipe system manufacturer provided by Portland Builders and Eastern Mechanical.
- Flexible gas pipe is sleeved at floor penetrations and shielding has been installed to protect from interior wall sheathing fasteners.
- See attached photos.

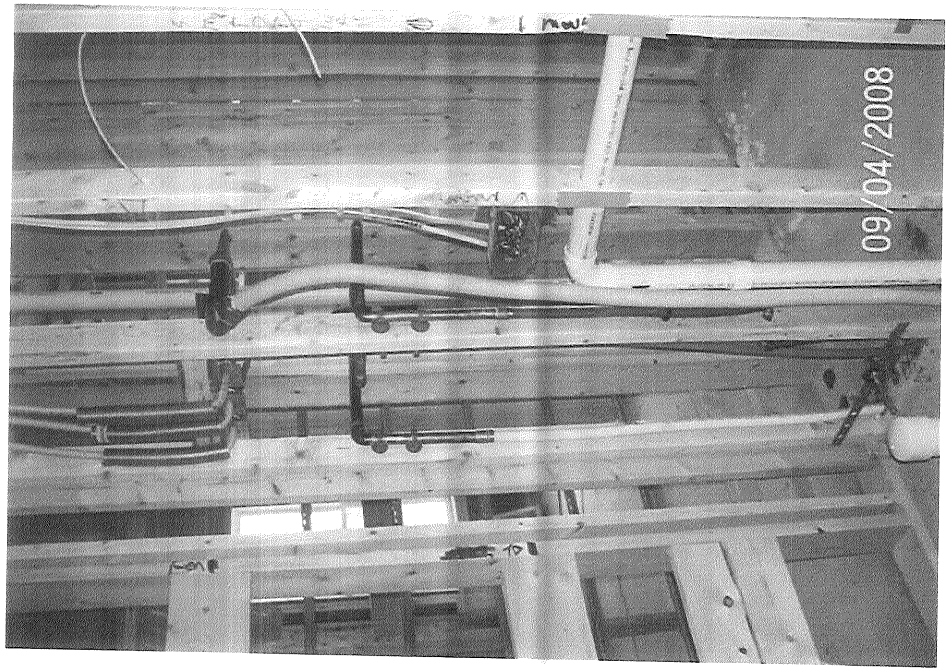
Discussions, Recommendations:

- Requested site meeting with pipe system manufacturers' local representative to discuss installation done to date.

Items Observed Not in Conformance to Project Specifications:

Reviewed By: MPL


09/04/200


09/04/2008


09 4/2008

Final Report of Structural Special Inspections

Project: *Sheridan Heights*

Location: *135 Sheridan St.; Portland Maine*

Owner: *Sheridan St., LLC*

Structural Design Professional in Responsible Charge: *David A. Price, PE / Price Structural Engineers, Inc.*

Date: *September 30, 2008*

To whom is may concern:

To the best of my information, knowledge and belief, the *Structural Special Inspections* required for this project have been performed and discovered discrepancies have been reported and resolved. Copies of statements, field reports, tests and inspections are included with this report.

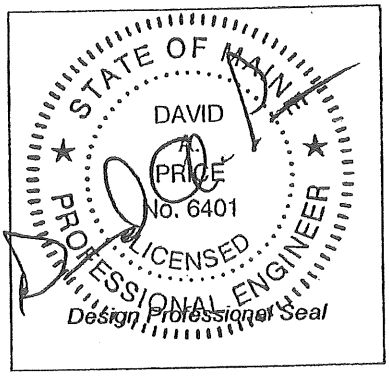
Comments:

Interim reports submitted prior to this final report form a basis for and are to be considered an integral part of this final report.

Respectfully submitted,
Special Inspector

David A. Price, PE
Price Structural Engineers, Inc.
(type or print name)

D. A. P. 9/30/08
Signature Date



Statement of Structural Special Inspections

Project: *Sheridan Heights*

Location: *135 Sheridan Street; Portland Maine*

Owner: *Sheridan St. LLC*

Structural Design Professional in Responsible Charge: *David A. Price, PE*

This *Statement of Structural Special Inspections* is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Structural Special Inspection services applicable to this project as well as the name of the Structural Special Inspection Coordinator and the identity of other approved agencies to be retained for conducting these inspections and tests. This *Statement of Structural Special Inspections* encompass the following disciplines:

X Structural ☐ Mechanical/Electrical/Plumbing

☐ Architectural ☐ Other: _____

The Structural Special Inspection Coordinator shall keep records of inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Registered Structural Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official and the Registered Structural Design Professional in Responsible Charge.

A *Final Report of* Structural *Special Inspections* documenting completion of required inspections, testing and correction of discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency: *As requested by building official* or ☐ per attached schedule.

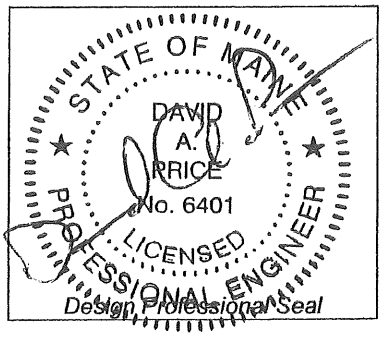
Prepared by:

David A. Price, PE

(type or print name)

D A P July 19, 2007

Signature Date



Design Professional Seal

Owner's Authorization:

Signature Date

Building Official's Acceptance:

Signature Date

Rough Carpentry (cont.)

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

10. Stair Framing Details • Stringer / Landing Framing • Connections	*Agency #1 (PE/SE)*	*Periodic Structural Observations*
11. Lintels • Lintel Sizes • Framing @ Jambs	*Agency #1 (PE/SE)*	*Periodic Structural Observations*
12. Misc. Framing Details	*Agency #1 (PE/SE)*	*Periodic Structural Observations*

Schedule of Structural Inspection and Testing Agencies

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- X Soils and Foundations
- X Cast-in-Place Concrete
- ☐ Precast Concrete
- X Masonry
- X Structural Steel
- ☐ Cold-Formed Steel Framing
- ☐ Spray Fire Resistant Material
- X Wood Construction
- ☐ Exterior Insulation and Finish System
- ☐ Mechanical & Electrical Systems
- ☐ Architectural Systems
- ☐ Special Cases

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. Structural Special Inspector	*Price Structural Engineers, Inc.*	*75 Farms Edge Road* *North Yarmouth, ME 04097* *Tel : (207) 846-0099*
2. Inspection / Testing	*S.W. Cole Engineering*	*286 Portland Road* *Gray, ME 04039* *Tel : (207) 657.2866*
3. Inspection / Testing	*Quality Assurance Labs Inc.*	*80 Pleasant Ave.* *South Portland, ME 04106* *Tel : (207) 799-8911*

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

Quality Assurance Plan

Quality Assurance for Seismic Resistance

Seismic Design Category	*C*
Quality Assurance Plan Required (Y/N)	*Yes*

Description of seismic force resisting system and designated seismic systems:
Structure is braced using light frame shear walls at wood framed areas and masonry / concrete shear walls at the parking garage area. Shear walls occur in each orthogonal direction and are located as indicated on Structural Framing Drawings S4.0 to S4.3. Loads are distributed to shear walls by the floor sheathing diaphragms at wood framed areas and by the composite slab at the garage area.

Inspections and tests for the seismic resisting components are as indicated within the attached schedule and summarized as follows:

1. *Test compaction of foundation backfill adjacent to shearwalls.*
2. *Visually inspect reinforcement and test concrete at concrete shear walls.*
3. *Visually Inspect reinforcement and test masonry at masonry shear walls.*
4. *Visually inspect shear studs, structural steel member sizes and bolting at garage floor system.*
5. *Visually inspect floor sheathing fastener spacing and sheathing edge support at wood framed floor sheathing diaphragms.*
6. *Visually inspect shear wall fastener spacing and sheathing edge support at wood framed shear walls.*
7. *Visually inspect hold- down anchors at wood framed shear walls.*

Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust)	*100 mph*
Wind Exposure Category	*C*
Quality Assurance Plan Required (Y/N)	*Yes*

Description of wind force resisting system and designated wind resisting components:
Structure is braced using light frame shear walls at wood framed areas and masonry / concrete shear walls at the parking garage area. Shear walls occur in each orthogonal direction and are located as indicated on Structural Framing Drawings S4.0 to S4.3. Loads are distributed to shear walls by the floor sheathing diaphragms at wood framed areas and by the composite slab at the garage area.

Inspections and tests for the wind resisting components are as indicated within the attached schedule and summarized as follows:

1. *Test compaction of foundation backfill adjacent to shearwalls.*
2. *Visually inspect reinforcement and test concrete at concrete shear walls.*
3. *Visually Inspect reinforcement and test masonry at masonry shear walls.*
4. *Visually inspect shear studs, structural steel member sizes and bolting at garage floor system.*
5. *Visually inspect floor sheathing fastener spacing and sheathing edge support at wood framed floor sheathing diaphragms.*
6. *Visually inspect shear wall fastener spacing and sheathing edge support at wood framed shear walls.*
7. *Visually inspect hold- down anchors at wood framed shear walls.*

Qualifications of Inspectors and Testing Technicians

The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided if requested.

Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear below the *Agency Number* on the Schedule.

PE/SE	Structural Engineer – a licensed SE or PE specializing in the design of building structures
PE/GE	Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations
EIT	Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineering examination

American Concrete Institute (ACI) Certification

ACI-CFTT	Concrete Field Testing Technician – Grade 1
ACI-CCI	Concrete Construction Inspector
ACI-LTT	Laboratory Testing Technician – Grade 1&2
ACI-STT	Strength Testing Technician

American Welding Society (AWS) Certification

AWS-CWI	Certified Welding Inspector
AWS – ACWI	Associate Certified Welding Inspector
AWS/AISC-SSI	Certified Structural Steel Inspector

American Society of Non-Destructive Testing (ASNT) Certification

ASNT	Non-Destructive Testing Technician – Level II or III.

International Code Council (ICC) Certification

ICC-SMSI	Structural Masonry Special Inspector
ICC-SWSI	Structural Steel and Welding Special Inspector
ICC-SFSI	Spray-Applied Fireproofing Special Inspector
ICC-PCSI	Prestressed Concrete Special Inspector
ICC-RCSI	Reinforced Concrete Special Inspector

National Institute for Certification in Engineering Technologies (NICET)

NICET-CT	Concrete Technician – Levels I, II, III & IV
NICET-ST	Soils Technician - Levels I, II, III & IV
NICET-GET	Geotechnical Engineering Technician - Levels I, II, III & IV

Soils and Foundations

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

Item	Agency # (Qualif.)	Scope
1. Shallow Foundations	*Agency #2 (PE/GE or Qualified Technician supervised by PE/GE)*	*Inspect soils below footings for adequate bearing capacity and consistency with geotechnical report.* *Inspect removal of unsuitable material and preparation of subgrade prior to placement of controlled fill*
2. Structural Fill	*Agency #2 (PE/GE or Qualified Technician supervised by PE/GE)*	*Verify material properties of crushed stone and structural fill adjacent to foundations and below footings* *Inspect placement, lift thickness and compaction of structural fill.* *Test density of each lift of fill by nuclear methods (ASTM D2922). Perform sieve tests (ASTM D422 & D1140) and modified Proctor tests (ASTM D1557 adjacent to foundations and below footings.* *Verify extent and slope of fill placement.*

Cast-in-Place Concrete

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

Item	Agency # (Qualif.)	Scope
1. (a) Mix Design – Before Construction (b) Reinforcement Submittal	*Agency #1* (PE/SE)	*Review cement certificate of compliance as part of mix design submittal review.* *Review steel reinforcement submittal*
2. Concrete Mix – During Construction	*Agency #2* (ACI-CCI)	*Review concrete batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design.*
3. Reinforcement Installation	*Agency #2* (ACI- CCI)	*Inspect size, spacing, cover, positioning and grade of all reinforcing steel, including dowels for masonry walls. Reinforcement shall conform to stamped structural drawings in addition to what is indicated on reinforcement shop drawings.* *Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters*
4. Formwork	*Agency #2* (ACI- CCI)	*Inspect formwork dimensions for compliance with foundation drawings.* *Verify that formwork does not contain debris or ice.* *Verify foundation wall control joint bondouts conform to G2/S3.0*
5. Anchor Rods & Anchor Bolts	*Agency #2* (ACI- CCI)	*Inspect size, positioning and embedment of anchor rods/bolts* *Inspect concrete placement and consolidation around anchors.*
6. Concrete Placement	*Agency #2* (ACI- CCI)	*Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.*
7. Sampling and Testing of Concrete	*Agency #2* (ACI-CFTT)	*Test concrete compressive strength (ASTM C31 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064).*
8. Curing and Protection	*Agency #2* (ACI- CCI)	*Inspect curing, cold weather protection and hot weather protection procedures.*
9. Beam Pockets (F1/S5.2)	*Agency #2* (ACI- CCI)	*Inspect formwork, bolt layout and reinforcement per detail F1/S5.2 for beam pockets.*

Structural Masonry

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

Item	Agency # (Qualif.)	Scope
1. (a) Grout Mix Design – Before Construction (b) Reinforcement Submittal	*Agency #1* (PE/SE)	*Review cement certificate of compliance as part of mix design submittal review.* *Review steel reinforcement submittal*
2. Grout Mix – During Construction	*Agency #2* (ACI-CFTT)	*Review grout batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design.*
3. Reinforcement Installation	*Agency #2* (ACI- CCI)	*Inspect reinforcing steel including both wire joint reinforcement and also deformed bar reinforcement.* *Inspect lap splices and dowels at wall intersections.* *Inspect size, spacing, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar lap splices. Verify that bars are adequately tied.*
4. Concrete Block	*Agency #2* (ACI- CCI)	*Inspect masonry cores to be sure that hardened mortar does not block cells to be grouted.* *Verify inspection ports at bottom of vertically grouted cells* *Perform at least one prism test early in masonry installation to verify concrete block strength*
5. Mortar	*Agency #2* (ACI-CFTT)	*Inspect field preparation of mortar including mortar components, mixing procedures and water content* *Inspect mortar installation procedure*
6. Anchor Bolts	*Agency #2* (ACI- CCI)	*Inspect size, positioning and embedment of anchor rods/bolts*
7. Grout Placement	*Agency #2* (ACI-CFTT)	*Inspect placement of grout. Verify that grout conveyance and depositing avoids segregation or contamination. Verify that grout is properly consolidated. Inspect concrete placement and consolidation around anchors.*
7. Sampling and Testing of Grout	*Agency #2* (ACI-LTT)	*Test grout compressive strength, slump, air-content, and temperature*
8. Curing and Protection	*Agency #2* (ACI- CCI)	*Inspect curing, cold weather protection and hot weather protection procedures.*
9. Grout all cores solid where masonry is below grade	*Agency #2 (ACI- CCI)*	*Periodic inspections*

Structural Steel

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

Item	Agency # (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures	*Agency #3 (AWS-CWI)*	*Review shop fabrication and quality control procedures unless fabricator is an AISC certified plant.* *Review fabricator's written procedures and quality control manuals.*
2. Steel Material Certification	*Agency #1 (PE/SE)*	*Review certificates of compliance as part of structural steel submittal.*
3.Leveling Plates below columns	*Agency #3 (AWS-ACWI)*	*Verify that Leveling plates have been grouted as specified prior to placing beams or columns*
4. Anchor Rods and Bolts	*Agency #3 (AWS-ACWI)*	*Verify that washers are in place as specified and that nuts are tight at all anchor bolts.*
5. Structural Steel components	*Agency #3 (AWS-ACWI)*	*Verify beams and columns have been placed at correct locations based on identification markings and beam depth (or column depth) dimensions.*
6. Bolting	*Agency #3 (AWS-ACWI)*	*Inspect high strength bolt material markings for correct bolt type, diameter, storage in lubricated containers and installation / tightening of high-strength bolt.* *Verify that splines have separated from tension control bolts. Periodically verify proper tightening sequence.*
8. Welding	*Agency #3 (AWS-CWI)*	*Visually inspect 100% of field welds at structural steel members* *Periodically inspect storage of welding rods, pre-heat, post-heat and surface preparation between passes.* *Field fillet welds larger than 5/16" shall be continuously inspected during weld placement.*
8. Metal Deck	*Agency #3 (AWS-CWI)*	*Periodic weld inspection and side-lap fastening of composite floor deck. Periodic testing of welds.*
9. Composite Shear Connector Studs Welded to beams	*Agency #3 (AWS-CWI)*	*Periodic inspection and testing of steel studs on composite beams:* • *Stud quantity* • *Stud diameter and length* • *Welding of studs*

Rough Carpentry

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

Item	Agency # (Qualif.)	Scope
1. Column Sizes and Built-up column requirements	*Agency #1* (PE/SE)	*Periodic Structural Observations*
2. Column Bearing – solid blocking at floor cavities and anchorage at column bases	*Agency #1* (PE/SE)	*Periodic Structural Observations*
3. Stud size, spacing, alignment with truss centerlines, grade	*Agency #1* (PE/SE)	*Periodic Structural Observations*
4. Beam sizes	*Agency #1* (PE/SE)	*Periodic Structural Observations*
5. Simpson Hangers- gap distance at hangers, nails (diameter, quantity), ZMAX finish at PT members,	*Agency #1* (PE/SE)	*Periodic Structural Observations*
6. Porch Framing Details	*Agency #1* (PE/SE)	*Periodic Structural Observation*
7.Shear wall Details • Hold-Down Anchors • Sheathing thickness • Fastener Size / Spacing • Framing @ Sheathing Edges • Stud Spacing • Sheathing material	*Agency #1* (PE/SE)	*Periodic Structural Observations*
8. Floor Diaphragm Details • Sheathing thickness • Fastener Size / Spacing • Framing @ Sheathing Edges • Diaphragm Chords	*Agency #1 (PE/SE)*	*Periodic Structural Observations*
9. Floor & Roof Truss Details • Strong-backs • Banding • End Reinforcement • Cantilevers	*Agency #1 (PE/SE)*	*Periodic Structural Observations*

Price Structural Engineers, Inc.

75 Farms Edge Road
North Yarmouth, ME 04097
Tel: 207-846-0099
Fax: 207-846-1633
E-Mail: PriceStructural@maine.rr.com

October 3, 2008

Greg Shinberg
Shinberg Consulting, LLC
477 Congress Street, 5th Floor
Portland, ME 04101 - 3427

Re: Quality Assurance Plan
Sheridan Heights
Portland, Maine

Dear Greg,

The tests and inspections indicated on the attached Quality Assurance Plan for Seismic Design Category C have been completed. Copies of the tests and inspections are contained in the previously issued Special Inspections Final Report for this project.

If you have any comments or questions or if you need anything else please do not hesitate to contact me.

Yours Sincerely,

D A P

David A. Price, P.E.
President

Copy: Bill Cuddy (Portland Builders)

OCT 6 2008

Quality Assurance Plan

Project: *Sheridan Heights* Date: *October 3, 2008*

Location: *135 Sheridan Street; Portland Maine*

Owner: *Sheridan St. LLC*

Quality Assurance for Seismic Resistance

Seismic Design Category *C*

Quality Assurance Plan Required (Y/N) *Yes*

Description of seismic force resisting system and designated seismic systems:
Structure is braced using light frame shear walls at wood framed areas and masonry / concrete shear walls at the parking garage area. Shear walls occur in each orthogonal direction and are located as indicated on Structural Framing Drawings S4.0 to S4.3. Loads are distributed to shear walls by the floor sheathing diaphragms at wood framed areas and by the composite slab at the garage area.

Inspections and tests for the seismic resisting components were performed as follows (See Special Inspection Final Report for copies of tests and inspections):

1. *Test compaction of foundation backfill adjacent to shearwalls.*
2. *Visually inspect reinforcement and test concrete at concrete shear walls.*
3. *Visually Inspect reinforcement and test masonry at masonry shear walls.*
4. *Visually inspect shear studs, structural steel member sizes and bolting at garage floor system.*
5. *Visually inspect floor sheathing fastener spacing and sheathing edge support at wood framed floor sheathing diaphragms.*
6. *Visually inspect shear wall fastener spacing and sheathing edge support at wood framed shear walls.*
7. *Visually inspect hold- down anchors at wood framed shear walls.*

Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust) *100 mph*

Wind Exposure Category *C*

Quality Assurance Plan Required (Y/N) *Yes*

STATE OF MAINE
DAVID A PRICE
No. 6401
LICENSED
PROFESSIONAL ENGINEER
David A. Price

Description of wind force resisting system and designated wind resisting components:
Structure is braced using light frame shear walls at wood framed areas and masonry / concrete shear walls at the parking garage area. Shear walls occur in each orthogonal direction and are located as indicated on Structural Framing Drawings S4.0 to S4.3. Loads are distributed to shear walls by the floor sheathing diaphragms at wood framed areas and by the composite slab at the garage area.

Inspections and tests for the wind resisting components were performed as follows (See Special Inspection Final Report for copies of tests and inspections):

1. *Test compaction of foundation backfill adjacent to shearwalls.*
2. *Visually inspect reinforcement and test concrete at concrete shear walls.*
3. *Visually Inspect reinforcement and test masonry at masonry shear walls.*
4. *Visually inspect shear studs, structural steel member sizes and bolting at garage floor system.*
5. *Visually inspect floor sheathing fastener spacing and sheathing edge support at wood framed floor sheathing diaphragms.*
6. *Visually inspect shear wall fastener spacing and sheathing edge support at wood framed shear walls.*
7. *Visually inspect hold- down anchors at wood framed shear walls.*

TO: Inspections Department

FROM: Philip DiPierro, Development Review Coordinator

DATE: October 8, 2008

RE: C. of O. for 135 Sheridan Street, Sheridan Heights Condominiums (Id#2006-0214) (CBL 013 K 002001)

After visiting the site, I have the following comments:

Site work complete

At this time, **I recommend issuing a permanent Certificate of Occupancy.**

Cc: Barbara Barhydt, Development Review Services Manager
Jeanie Bourke, Inspection Services Manager
File: Urban Insight

Statement of Structural Special Inspections

PDF

Project: *Sheridan Heights*

Location: *135 Sheridan Street; Portland Maine*

Owner: *Sheridan St. LLC*

Structural Design Professional in Responsible Charge: *David A. Price, PE*

This *Statement of Structural Special Inspections* is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Structural Special Inspection services applicable to this project as well as the name of the Structural Special Inspection Coordinator and the identity of other approved agencies to be retained for conducting these inspections and tests. This *Statement of Structural Special Inspections* encompass the following disciplines:

X Structural ☐ Mechanical/Electrical/Plumbing

☐ Architectural ☐ Other: _____

The Structural Special Inspection Coordinator shall keep records of inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Registered Structural Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official and the Registered Structural Design Professional in Responsible Charge.

A *Final Report of* Structural *Special Inspections* documenting completion of required inspections, testing and correction of discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency: *As requested by building official* or ☐ per attached schedule.

Prepared by:

David A. Price, PE

(type or print name)

D A P July 19, 2007

Signature Date

STATE OF MAINE
DAVID A. PRICE
No. 6401
LICENSED PROFESSIONAL ENGINEER
Design Professional Seal

Owner's Authorization:

7/23/07

Signature Date

Building Official's Acceptance:

Signature Date

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
JUL 24 2007
RECEIVED

Schedule of Structural Inspection and Testing Agencies

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- X Soils and Foundations
- X Cast-in-Place Concrete
- ☐ Precast Concrete
- X Masonry
- X Structural Steel
- ☐ Cold-Formed Steel Framing
- ☐ Spray Fire Resistant Material
- X Wood Construction
- ☐ Exterior Insulation and Finish System
- ☐ Mechanical & Electrical Systems
- ☐ Architectural Systems
- ☐ Special Cases

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. Structural Special Inspector	*Price Structural Engineers, Inc.*	*75 Farms Edge Road* *North Yarmouth, ME 04097* *Tel : (207) 846-0099*
2. Inspection / Testing	*S.W. Cole Engineering*	*286 Portland Road* *Gray, ME 04039* *Tel : (207) 657.2866*
3. Inspection / Testing	*Quality Assurance Labs Inc.*	*80 Pleasant Ave.* *South Portland, ME 04106* *Tel : (207) 799-8911*

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

Quality Assurance Plan

Quality Assurance for Seismic Resistance

Seismic Design Category	*C*
Quality Assurance Plan Required (Y/N)	*No*

Description of seismic force resisting system and designated seismic systems:
Structure is braced using light frame shear walls at wood framed areas and masonry / concrete shear walls at the parking garage area. Shear walls occur in each orthogonal direction and are located as indicated on Structural Framing Drawings S4.0 to S4.3. Loads are distributed to shear walls by the floor sheathing diaphragms at wood framed areas and by the composite slab at the garage area.

Inspections and tests for the seismic resisting components are as indicated within the attached schedule and summarized as follows:

1. *Test compaction of foundation backfill adjacent to shearwalls.*
2. *Visually inspect reinforcement and test concrete at concrete shear walls.*
3. *Visually Inspect reinforcement and test masonry at masonry shear walls.*
4. *Visually inspect shear studs, structural steel member sizes and bolting at garage floor system.*
5. *Visually inspect floor sheathing fastener spacing and sheathing edge support at wood framed floor sheathing diaphragms.*
6. *Visually inspect shear wall fastener spacing and sheathing edge support at wood framed shear walls.*
7. *Visually inspect hold- down anchors at wood framed shear walls.*

Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust)	*100 mph*
Wind Exposure Category	*C*
Quality Assurance Plan Required (Y/N)	*No*

Description of wind force resisting system and designated wind resisting components:
Structure is braced using light frame shear walls at wood framed areas and masonry / concrete shear walls at the parking garage area. Shear walls occur in each orthogonal direction and are located as indicated on Structural Framing Drawings S4.0 to S4.3. Loads are distributed to shear walls by the floor sheathing diaphragms at wood framed areas and by the composite slab at the garage area.

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7. *Visually inspect hold- down anchors at wood framed shear walls.*

773-0194
Copy sent to Ryan Senatore / TFH 10/19/07

Price Structural Engineers, Inc.

75 Farms Edge Road
North Yarmouth, ME 04097
Tel: 207-846-0099
Fax: 207-846-1633
E-Mail: PriceStructural@maine.rr.com

FAX COVER SHEET

Attention: Greg Shinberg
Date: 7/30/07
Company: Shinberg Consulting
Fax. No.: 773-8597
Additional Copy Sent by: ___US Mail ___Fed Ex ___E – mail X Fax Only
Copy also Faxed to:

Project: Sheridan Heights
Subject: Revised page 3 as requested
From: D. Pare
PSE Project No.: 112-07

Page 1 of : 2 **(please verify that all pages have been received)**

OCT 22 2007

Quality Assurance Plan

Quality Assurance for Seismic Resistance

Seismic Design Category	*C*
Quality Assurance Plan Required (Y/N)	*Yes*

Description of seismic force resisting system and designated seismic systems:
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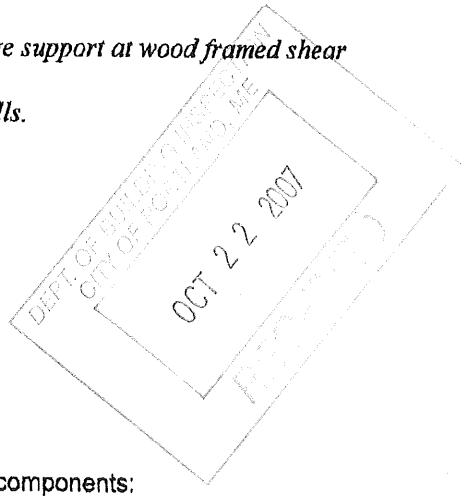
6. *Visually inspect shear wall fastener spacing and sheathing edge support at wood framed shear walls.*
7. *Visually inspect hold- down anchors at wood framed shear walls.*



Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust)	*100 mph*
Wind Exposure Category	*C*
Quality Assurance Plan Required (Y/N)	*Yes*

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6. *Visually inspect shear wall fastener spacing and sheathing edge support at wood framed shear walls.*
7. *Visually inspect hold- down anchors at wood framed shear walls.*

Qualifications of Inspectors and Testing Technicians

The qualifications of all personnel performing Special Inspection and testing activities are subject to the approval of the Building Official. The credentials of all Inspectors and testing technicians shall be provided if requested.

Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear below the *Agency Number* on the Schedule.

PE/SE	Structural Engineer – a licensed SE or PE specializing in the design of building structures
PE/GE	Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations
EIT	Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineering examination

American Concrete Institute (ACI) Certification

ACI-CFTT	Concrete Field Testing Technician – Grade 1
ACI-CCI	Concrete Construction Inspector
ACI-LTT	Laboratory Testing Technician – Grade 1&2
ACI-STT	Strength Testing Technician

American Welding Society (AWS) Certification

AWS-CWI	Certified Welding Inspector
AWS – ACWI	Associate Certified Welding Inspector
AWS/AISC-SSI	Certified Structural Steel Inspector

American Society of Non-Destructive Testing (ASNT) Certification

ASNT	Non-Destructive Testing Technician – Level II or III.

International Code Council (ICC) Certification

ICC-SMSI	Structural Masonry Special Inspector
ICC-SWSI	Structural Steel and Welding Special Inspector
ICC-SFSI	Spray-Applied Fireproofing Special Inspector
ICC-PCSI	Prestressed Concrete Special Inspector
ICC-RCSI	Reinforced Concrete Special Inspector

National Institute for Certification in Engineering Technologies (NICET)

NICET-CT	Concrete Technician – Levels I, II, III & IV
NICET-ST	Soils Technician - Levels I, II, III & IV
NICET-GET	Geotechnical Engineering Technician - Levels I, II, III & IV

Soils and Foundations

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

Item	Agency # (Qualif.)	Scope
1. Shallow Foundations	*Agency #2 (PE/GE or Qualified Technician supervised by PE/GE)*	*Inspect soils below footings for adequate bearing capacity and consistency with geotechnical report.* *Inspect removal of unsuitable material and preparation of subgrade prior to placement of controlled fill*
2. Structural Fill	*Agency #2 (PE/GE or Qualified Technician supervised by PE/GE)*	*Verify material properties of crushed stone and structural fill adjacent to foundations and below footings* *Inspect placement, lift thickness and compaction of structural fill.* *Test density of each lift of fill by nuclear methods (ASTM D2922). Perform sieve tests (ASTM D422 & D1140) and modified Proctor tests (ASTM D1557 adjacent to foundations and below footings.* *Verify extent and slope of fill placement.*

Cast-in-Place Concrete

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

Item	Agency # (Qualif.)	Scope
1. (a) Mix Design – Before Construction (b) Reinforcement Submittal	*Agency #1* (PE/SE)	*Review cement certificate of compliance as part of mix design submittal review.* *Review steel reinforcement submittal*
2. Concrete Mix – During Construction	*Agency #2* (ACI-CCI)	*Review concrete batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design.*
3. Reinforcement Installation	*Agency #2* (ACI- CCI)	*Inspect size, spacing, cover, positioning and grade of all reinforcing steel, including dowels for masonry walls. Reinforcement shall conform to stamped structural drawings in addition to what is indicated on reinforcement shop drawings.* *Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters*
4. Formwork	*Agency #2* (ACI- CCI)	*Inspect formwork dimensions for compliance with foundation drawings.* *Verify that formwork does not contain debris or ice.* *Verify foundation wall control joint bondouts conform to G2/S3.0*
5. Anchor Rods & Anchor Bolts	*Agency #2* (ACI- CCI)	*Inspect size, positioning and embedment of anchor rods/bolts* *Inspect concrete placement and consolidation around anchors.*
6. Concrete Placement	*Agency #2* (ACI- CCI)	*Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.*
7. Sampling and Testing of Concrete	*Agency #2* (ACI-CFTT)	*Test concrete compressive strength (ASTM C31 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064).*
8. Curing and Protection	*Agency #2* (ACI- CCI)	*Inspect curing, cold weather protection and hot weather protection procedures.*
9. Beam Pockets (F1/S5.2)	*Agency #2 (ACI- CCI)*	*Inspect formwork, bolt layout and reinforcement per detail F1/S5.2 for beam pockets.*

Structural Masonry

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

Item	Agency # (Qualif.)	Scope
1. (a) Grout Mix Design – Before Construction (b) Reinforcement Submittal	*Agency #1* (PE/SE)	*Review cement certificate of compliance as part of mix design submittal review.* *Review steel reinforcement submittal*
2. Grout Mix – During Construction	*Agency #2* (ACI-CFTT)	*Review grout batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design.*
3. Reinforcement Installation	*Agency #2* (ACI- CCI)	*Inspect reinforcing steel including both wire joint reinforcement and also deformed bar reinforcement.* *Inspect lap splices and dowels at wall intersections.* *Inspect size, spacing, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar lap splices. Verify that bars are adequately tied.*
4. Concrete Block	*Agency #2* (ACI- CCI)	*Inspect masonry cores to be sure that hardened mortar does not block cells to be grouted.* *Verify inspection ports at bottom of vertically grouted cells* *Perform at least one prism test early in masonry installation to verify concrete block strength*
5. Mortar	*Agency #2* (ACI-CFTT)	*Inspect field preparation of mortar including mortar components, mixing procedures and water content* *Inspect mortar installation procedure*
6. Anchor Bolts	*Agency #2* (ACI- CCI)	*Inspect size, positioning and embedment of anchor rods/bolts*
7. Grout Placement	*Agency #2* (ACI-CFTT)	*Inspect placement of grout. Verify that grout conveyance and depositing avoids segregation or contamination. Verify that grout is properly consolidated. Inspect concrete placement and consolidation around anchors.*
7. Sampling and Testing of Grout	*Agency #2* (ACI-LTT)	*Test grout compressive strength, slump, air-content, and temperature*
8. Curing and Protection	*Agency #2* (ACI- CCI)	*Inspect curing, cold weather protection and hot weather protection procedures.*
9. Grout all cores solid where masonry is below grade	*Agency #2 (ACI- CCI)*	*Periodic inspections*

Structural Steel

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

Item	Agency # (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures	*Agency #3 (AWS-CWI)*	*Review shop fabrication and quality control procedures unless fabricator is an AISC certified plant.* *Review fabricator's written procedures and quality control manuals.*
2. Steel Material Certification	*Agency #1 (PE/SE)*	*Review certificates of compliance as part of structural steel submittal.*
3.Leveling Plates below columns	*Agency #3 (AWS-ACWI)*	*Verify that Leveling plates have been grouted as specified prior to placing beams or columns*
4. Anchor Rods and Bolts	*Agency #3 (AWS-ACWI)*	*Verify that washers are in place as specified and that nuts are tight at all anchor bolts.*
5. Structural Steel components	*Agency #3 (AWS-ACWI)*	*Verify beams and columns have been placed at correct locations based on identification markings and beam depth (or column depth) dimensions.*
6. Bolting	*Agency #3 (AWS-ACWI)*	*Inspect high strength bolt material markings for correct bolt type, diameter, storage in lubricated containers and installation / tightening of high-strength bolt.* *Verify that splines have separated from tension control bolts. Periodically verify proper tightening sequence.*
8. Welding	*Agency #3 (AWS-CWI)*	*Visually inspect 100% of field welds at structural steel members* *Periodically inspect storage of welding rods, pre-heat, post-heat and surface preparation between passes.* *Field fillet welds larger than 5/16" shall be continuously inspected during weld placement.*
8. Metal Deck	*Agency #3 (AWS-CWI)*	*Periodic weld inspection and side-lap fastening of composite floor deck. Periodic testing of welds.*
9. Composite Shear Connector Studs Welded to beams	*Agency #3 (AWS-CWI)*	*Periodic inspection and testing of steel studs on composite beams:* • *Stud quantity* • *Stud diameter and length* • *Welding of studs*

Rough Carpentry

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

Item	Agency # (Qualif.)	Scope
1. Column Sizes and Built-up column requirements	*Agency #1* (PE/SE)	*Periodic Structural Observations*
2. Column Bearing – solid blocking at floor cavities and anchorage at column bases	*Agency #1* (PE/SE)	*Periodic Structural Observations*
3. Stud size, spacing, alignment with truss centerlines, grade	*Agency #1* (PE/SE)	*Periodic Structural Observations*
4. Beam sizes	*Agency #1* (PE/SE)	*Periodic Structural Observations*
5. Simpson Hangers- gap distance at hangers, nails (diameter, quantity), ZMAX finish at PT members,	*Agency #1* (PE/SE)	*Periodic Structural Observations*
6. Porch Framing Details	*Agency #1* (PE/SE)	*Periodic Structural Observation*
7.Shear wall Details • Hold-Down Anchors • Sheathing thickness • Fastener Size / Spacing • Framing @ Sheathing Edges • Stud Spacing • Sheathing material	*Agency #1* (PE/SE)	*Periodic Structural Observations*
8. Floor Diaphragm Details • Sheathing thickness • Fastener Size / Spacing • Framing @ Sheathing Edges • Diaphragm Chords	*Agency #1 (PE/SE)*	*Periodic Structural Observations*
9. Floor & Roof Truss Details • Strong-backs • Banding • End Reinforcement • Cantilevers	*Agency #1 (PE/SE)*	*Periodic Structural Observations*

Rough Carpentry (cont.)

Note: Where "periodic inspections" are performed and deficient items are located, additional inspections shall be performed so that extent of deficient areas can be determined and corrected.

10. Stair Framing Details • Stringer / Landing Framing • Connections	*Agency #1 (PE/SE)*	*Periodic Structural Observations*
11. Lintels • Lintel Sizes • Framing @ Jambs	*Agency #1 (PE/SE)*	*Periodic Structural Observations*
12. Misc. Framing Details	*Agency #1 (PE/SE)*	*Periodic Structural Observations*

S.W.COLE ENGINEERING, INC. • Geotechnical Engineering • Field & Lab Testing • Scientific & Environmental Consulting

1362

06-1271

December 6, 2006

Shinberg Consulting, LLC
Attention: Greg Shinberg
477 Congress Street, 5th Floor
Portland, ME 04101

Subject: Geotechnical Engineering Services
Proposed Housing Structure
135 Sheridan Street
Portland, Maine

Dear Mr. Shinberg:

In accordance with our Agreement, dated October 30, 2006, we have observed test pit explorations and made a geotechnical evaluation relative to foundations associated with the proposed building construction. Our scope of work was limited to observation of test pit explorations, an assessment of bearing capacity of the foundation soils, recommendations for subgrade preparation, foundation drainage and foundation backfill recommendations. This report summarizes our findings and recommendations and its contents are subject to the limitations set forth in Attachment A.

1.0 PROPOSED CONSTRUCTION

Based on a site plan by SGC Engineering, LLC, we understand the L-shaped, 5-level structure will be wood-framed and have a footprint on the order of 9,300 SF. We understand that the proposed ground finished floor elevation will be 121.0 feet. The ground floor of the easterly portion of the structure will be for interior parking while the westerly portion will be for housing. A paved parking area is proposed for the southern end of the site with a paved ramp leading to the proposed interior unheated parking area. We understand that the interior parking area will be a concrete slab. An access drive will connect the parking area to Sheridan Street.

2.0 EXPLORATION AND TESTING

Thirteen test pit explorations (TP-1 through TP-10, TP-E, TP-F, and TP-G) were made at the site on November 3, 2006 by Leavitt Construction using a Volvo EC160B

excavator. The test pit work was coordinated and subcontracted by Shinberg Consulting, LLC. The test pit locations were selected by SGC Engineering and yourself. The approximate locations of the test pits are shown on the Exploration Location Plan, attached as Sheet 1. Sheet 1 is based on an existing conditions plan provided by SGC Engineering. The test pits were excavated to depths of 6 to 16 feet below the existing ground surface. Logs of the test pits are attached as Sheets 2 through 8. A key to the notes and symbols used on the logs is attached as Sheet 9. Laboratory testing consisting of grain size analyses and moisture content testing was performed on selected samples. Moisture content test results are shown on the test pit logs. Results of grain size testing are attached as Sheets 10 to 12.

3.0 SITE AND SUBSURFACE CONDITIONS

3.1 Site Conditions

The site is located on the northeasterly side of Sheridan Street. Based on a site plan provided by SGC Engineering, the ground surface at the site varies from about elevation 120 on the westerly side (Sheridan Street) to about elevation 155 at the northeast corner. The site was reportedly used as a borrow pit in the past. The site is relatively flat from the west to southeast, varying from about elevation 120 on the westerly side to about elevation 126 in the southeast. The proposed building area is generally open and grassed with some small trees and shrubs around the edge of the proposed building area. A 1.5± horizontal to 1 vertical slope exists at the northeast corner of the proposed building area which rises from about elevation 135 near the building corner to about elevation 155 within about 20 to 30 feet from the building corner. Existing houses are located to the west and southwest of the proposed building.

3.2 Subsurface Conditions

In general the test pits encountered fill overlying native sand and gravel. The fill generally consisted of sand, gravel, silt, bricks and some metal, glass, and wood debris. Test pits TP-6 and TP-10 encountered ash fill overlying the native sand and gravel. The fill varied in thickness from about 1 foot in the northwest corner to about 15 feet near the center of the southern wing of the building. A refusal surface, possibly a boulder bedrock, was encountered in test pit TP-8 at a depth of 13 feet. Refer to the attached logs for more detailed descriptions of the subsurface findings at each of the test pit locations.

3.3 Groundwater Conditions

Free groundwater seepage was observed in test pit TP-F at about 15 feet below the existing ground surface. Free groundwater was not observed in the other test pits. In general, groundwater should be expected to fluctuate seasonally and during periods of heavy precipitation and snowmelt.

4.0 EVALUATION AND RECOMMENDATIONS

4.1 General

Based on the subsurface findings and our understanding of the proposed construction, it is our opinion that foundation support of the proposed building appears feasible using conventional spread footing foundations and on-grade floor slabs provided the existing site fills are removed and replaced with compacted fills. Based on existing site grading and proposed finish floor elevations, we anticipate a tapered cut from west to east of as much as 12 to 15 feet to achieve ground floor grade. Deep cuts will be needed in the northeast corner of the building for foundations.

The fill at the site is unsuitable for support of the building due to the uncontrolled placement of the fill and the ash and debris encountered. We recommend the existing site fills be removed and replaced with compacted fill in the area of the building. A test boring to determine the Seismic Site Class not requested. The native soils encountered in the test pits are generally a mix of sands and gravels that do not exhibit the characteristics of Site Class E or F soils as described in Table 1615.1 of the 2003 International Building Code.

4.2 Subgrade Preparation

Site preparation should begin with construction of an erosion control system to protect drainage ways and areas outside the construction limits. Where native sands and gravels are exposed, they should be densified prior to placement of concrete or new compacted fill. The existing fill in the building area should be replaced with a material meeting the gradation requirements of MDOT 703.20 Gravel Borrow. Some of the on-site sandy fill may meet the requirements of Gravel Borrow and be suitable for re-use as compacted fill beneath the building area. The on-site sandy fill will need to be separated from other unsuitable fill and screened to remove oversize particles and gradation testing should be performed to determine its suitability for reuse. Fill placed

within the building area should be compacted to at least 95 percent of the maximum dry density as determined by ASTM D1557. S. W. COLE ENGINEERING, INC. should observe the excavation of the existing fill and provide field density testing to confirm the required compaction is achieved. The zone of compacted Gravel Borrow should continue outside the building perimeter, extending at least two feet beyond the outside edge of exterior footings and downward at a 1 horizontal to 1 vertical slope to the native densified subsoils.

4.3 Excavation

We recommend that all topsoil, organics, fill soils and any existing utilities be removed from beneath the proposed building. The existing fills need to be completely removed from beneath the building area to expose the naturally deposited sand and gravel. Excavation outside the building area should continue laterally one foot for each one foot of overexcavation. In general, the on-site fill soils are not suitable for reuse below foundations or slabs or as backfill against foundations, but it may be possible to reuse the sandy fill for compacted gravel borrow or trench backfill below paved areas or common fill provided they are screened of miscellaneous debris and cobbles and boulders and the material is at a moisture content which is consistent with the required compaction.

Groundwater seepage may be encountered during excavation work, particularly during precipitation and in deeper excavation areas. Ditching, sumping and pumping dewatering techniques should be adequate to control groundwater within foundation excavation. Groundwater and runoff will need to be controlled to protect soil subgrades. Excavations must be properly shored and/or sloped in accordance with OSHA trenching regulations to prevent sloughing and caving of the sidewalls during construction. It is anticipated that sheet piling or other shoring methods will be required at the northeast corner of the building, adjacent to the existing slope.

4.4 Backfill and Compaction

The on-site fills are frost susceptible and are not suitable for reuse as backfill adjacent to foundations or below slabs. Gravel Borrow should be used to raise grades to footing and slab levels where the existing fill is excavated. Structural fill should be utilized for foundation backfill and directly below slabs-on-grade.

The structural fill should be a clean, non-frost susceptible soil meeting the following gradation requirements:

Structural Fill	
Sieve Size	Percent Finer by Weight
4 inch	100
3 inch	90 to 100
¼ inch	25 to 90
No. 40	0 to 30
No. 200	0 to 5

MDOT 703.20 Gravel Borrow should be a granular material with no particles greater than 6 inches and the portion passing the 3 inch sieve should meet the following gradation requirements.

MDOT 703.20 Gravel Borrow	
Sieve Size	Percent Finer by Weight
¼ inch	0 to 70
No. 200	0 to 10

4.5 Spread Footings

To protect spread footings and foundation underdrains from freezing temperatures, perimeter footings should be cast at least 4.5 feet below exterior finish grades. For footings bearing on properly prepared subgrades we recommend the following geotechnical parameters

- Net allowable bearing pressure = 3.0 ksf or less (densified native soils or compacted fill over densified native soils)
- Base friction factor = (tan δ) = 0.35 (mass concrete to native sand and gravel or compacted fill)
- Passive lateral earth pressure coeff. (K_p) = 3.0 (compacted structural fill)
- Active lateral earth pressure coeff. (K_a) = 0.3 (compacted structural fill)

- Active lateral earth pressure coeff. (K_a) = 0.75 (sloping backfill, maximum slope of 30 degrees)
- At-rest lateral earth pressure coeff. (K_o) = 0.5 (compacted structural fill)
- Total unit weight of backfill (γ_t) = 135 pcf (compacted structural fill)
- Angle of Internal Friction (ϕ) = 30 degrees (compacted structural fill)

Note: Lateral earth pressure coefficients assume positive foundation drainage prevents hydrostatic buildup behind foundation walls.

4.6 Floor Slabs

4.6.1 Heated Areas

We recommend that the first floor slab be underlain with at least 12 inches of compacted structural fill. Slab-on-grade floors may be designed using a subgrade reaction modulus of 150 pci provided the concrete slab is underlain by properly prepared subgrades.

For slab-on-grade floors we recommend that a 15-mil vapor retarder be placed directly below the floor slab concrete. The vapor retarder should have a permeance that is less than the floor covering being applied on the slab and should be installed according to the manufacturer's recommended methods including taping all joints and wall connection. Flooring suppliers should be consulted relative to acceptable vapor retarder systems for use with their products. The vapor retarder must have sufficient durability to withstand direct contact with sub-slab fill and construction activity.

We recommend that control joints be installed within floor slabs to accommodate shrinkage in the concrete as it cures. In general, control joints are usually installed at 10 to 15 foot spacing; however, the actual spacing of control joints should be determined by the structural engineer. We recommend that floor slabs be wet-cured for a minimum of 7 days after casting as a measure to reduce the potential for curling of the concrete and excessive shrinkage. We further recommend that consideration be given to using a curing paper or curing compound after the wet-cure period to improve the quality of the completed floor slab.

4.6.2 Unheated and Interior Parking Areas

We recommend that excavations beneath the slabs in unheated areas continue to native sand and gravel or to at least 4.5 feet below finish grade, whichever is encountered first. These areas should be backfilled with compacted non-frost susceptible granular fill meeting the Gravel Borrow gradation to limit abrupt heave or differential movement. The zone of non-frost susceptible material below entrance slabs should transition up to any adjacent pavement subbase or loam at a 3H:1V slope or flatter. We recommend that slabs in unheated areas be underlain with at least 12 inches of compacted structural fill. Slab-on-grade floors may be designed using a subgrade reaction modulus of 150 pci provided the concrete slab is underlain by properly prepared subgrades.

4.7 Entrance Slabs and Sidewalks

Entrance approaches, sidewalks and exterior slabs should be designed to reduce the effects of differential frost action between doorways and entrances. We recommend that excavations beneath the entire width of entrances, sidewalks, and exterior slabs continue to at least 4.5 feet below finish grade. These areas should be backfilled with compacted non-frost susceptible granular fill meeting the Structural Fill gradation to limit abrupt heave or differential movement. The zone of non-frost susceptible material adjacent to exterior foundations and below entrance slabs and sidewalks should transition up to any adjacent pavement subbase or loam at a 3H:1V slope or flatter.

4.8 Foundation Drainage

We recommend that a perimeter foundation drain system be provided adjacent to the exterior side of exterior footings. An underdrain should also be provided for any elevator pit areas. We also recommend that a subslab underdrains be placed under the lower level and be connected to the perimeter underdrains. The foundation drains should be placed at least 4.5 feet from freezing temperatures and should consist of 4-inch diameter rigid underdrain pipe having perforations of ¼ to ½ inches. We recommend that at least 6 inches of crushed stone bedding be provided around the foundation drains and that the stone be wrapped with a geotextile filter fabric having an apparent opening size of at least 70. The foundation drainage system must have a positive gravity outlet.

Exterior foundation backfill should be sealed with a surficial layer of clayey or loamy soil in areas that are not to be paved or occupied by entrance slabs to reduce direct surface

water infiltration into the backfill. Roof drains should be routed in separate non-perforated pipes, also placed below the frost depth. Utilities in non-heated areas, extending through slabs or asphalt paving into underlying soils, should have a gasket at grade to prevent surface water from entering the underlying fills and to allow some differential movement.

4.9 Reuse of Existing Soils

The on-site fills are likely suitable for use as common fills outside the building area. The native sand and gravel is suitable for use as fill below the building, backfill against foundations, and in pavement areas. The ash fill may be suitable for use as common fill in grassed areas and as subgrade fill in paved areas. Some of the on-site sandy fill may meet the requirements of Gravel Borrow and also may be used as subgrade fill in paved areas. On-site fill will need to be screened to remove oversize particles and gradation testing should be performed to determine its suitability for reuse.

4.10 Paved Area Subgrade Preparation

In paved areas the existing on-site fills should be excavated to subgrade elevation and then proof-rolled with a steel drum roller to densify the subgrade prior to placing new subbase fill. It should be anticipated that if the existing fills are not removed from beneath paved areas, some differential settlement and frost heaving can occur which can affect subsurface utilities. It is understood that pavement sections will be provided by others.

4.11 Additional Study

It should be noted that seismic site class evaluation and evaluation of the global slope stability of the slope at the northeasterly corner were not included in our scope of work. Seismic site class and global stability evaluations would require supplemental exploration work, laboratory testing and geotechnical evaluation. Supplemental exploration work would include test borings.

4.12 Design Review and Construction Testing

S. W. COLE ENGINEERING, INC. should be retained to review the final design and specifications to determine that our earthwork recommendations have been properly interpreted and implemented.

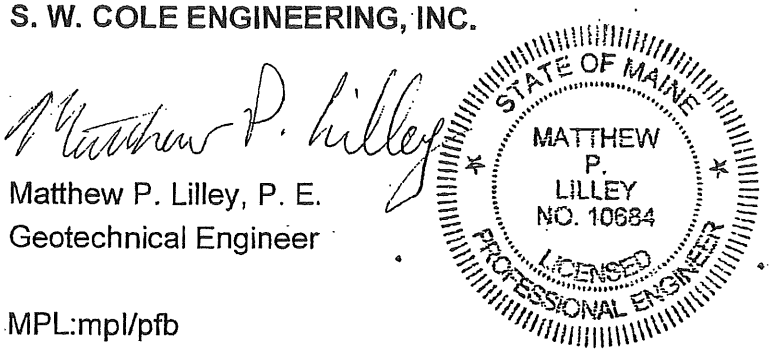
A soils and concrete testing program should also be implemented during construction to observe compliance with the design concepts, plans, and specifications. S. W. COLE ENGINEERING, INC. is available to provide field and laboratory testing services for soil, concrete, masonry, steel, and fireproofing construction materials.

5.0 CLOSURE

It has been a pleasure to be of assistance to you with this phase of your project. If you have any questions, please do not hesitate to contact us.

Sincerely,

S. W. COLE ENGINEERING, INC.



Matthew P. Lilley, P. E.
Geotechnical Engineer

MPL:mpl/pfb

c: Price Structural Engineers (David Price)
SGC Engineering, Inc. (John Riordan)

P:\2006\06-1271 S - Shinberg Consulting LLC - Portland - Housing - 135 Sheridan St - SSI - PFK\Reports and Letters\06-1271 Report.doc

Attachment A - Limitations

This report has been prepared for the exclusive use of Shinberg Consulting, LLC for specific application to the Proposed Housing located at 135 Sheridan Street in Portland, Maine. S. W. COLE ENGINEERING, INC. has endeavored to conduct the work in accordance with generally accepted soil and foundation engineering practices. No warranty, expressed or implied, is made.

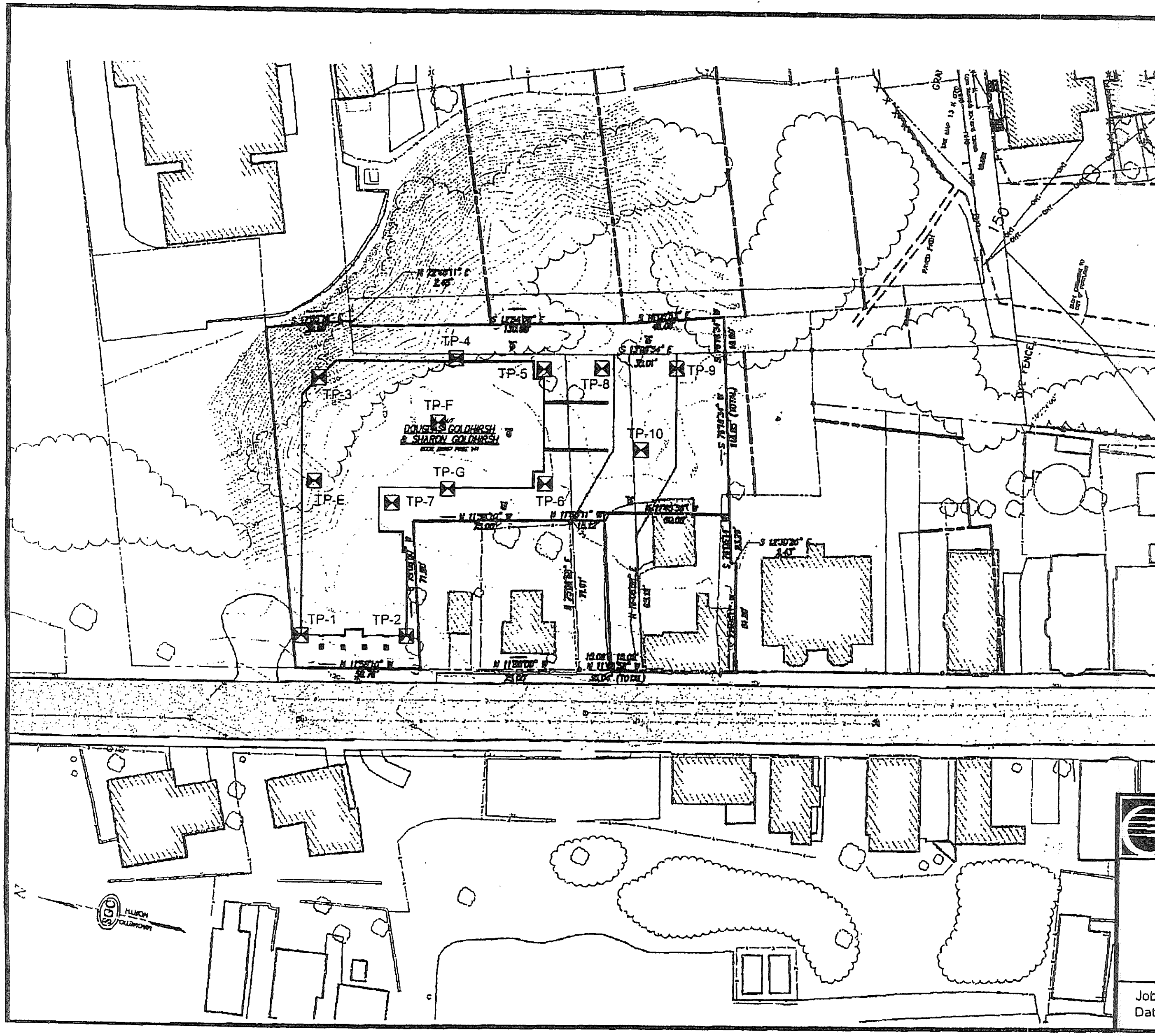
The soil profiles described in the report are intended to convey general trends in subsurface conditions. The boundaries between strata are approximate and are based upon interpretation of exploration data and samples.

The analyses performed during this investigation and recommendations presented in this report are based in part upon the data obtained from subsurface explorations made at the site. Variations in subsurface conditions may occur between explorations and may not become evident until construction. If variations in subsurface conditions become evident after submission of this report, it will be necessary to evaluate their nature and to review the recommendations of this report.

Observations have been made during exploration work to assess site groundwater levels. Fluctuations in water levels will occur due to variations in rainfall, temperature, and other factors.

S. W. COLE ENGINEERING, INC.'s scope of work has not included the investigation, detection, or prevention of any Biological Pollutants at the project site or in any existing or proposed structure at the site. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.

Recommendations contained in this report are based substantially upon information provided by others regarding the proposed project. In the event that any changes are made in the design, nature, or location of the proposed project, S. W. COLE ENGINEERING, INC. should review such changes as they relate to analyses associated with this report. Recommendations contained in this report shall not be considered valid unless the changes are reviewed by S. W. COLE ENGINEERING, INC.



GENERAL NOTES:

MAP REFERENCES:

LEGEND

Approximate Test Pit Location

NOTE :

Base plan provided by SGC Engineering, LLC.

S.W.COLE ENGINEERING, INC.

SHINBERG CONSULTING, LLC

EXPLORATION LOCATION PLAN

Proposed Housing
135 Sheridan Street
Portland, Maine

Job No. 06-1271 S
Date : 11/14/06

Scale 1" = 40'±
Sheet 1

006\06-1271 S - Shinberg Consulting LLC - Portland - Housing - 135 Sheridan St - SSI - PFK\Plans & Details\06-1271 EXP LOC.dwg, 11 x 17, 11/14/2006 9:51:19 AM, DRay, Gray DesignJet 450.pc3, Oversize: ANSI B (landscape), 1:1

S.W.COLE ENGINEERING, INC.

TEST PIT LOGS

PROJECT/CLIENT: 135 SHERIDAN STREET / SHINBERG CONSULTING , LLC
PROJECT NO.: 06-1271
LOCATION: PORTLAND, MAINE
SWC REP.: MPL
BACKHOE FIRM: LEAVITT EARTHWORKS
OPERATOR: BRUCE

TEST PIT TP-1

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		0.2'	TOPSOIL	
		1.0'	BLACK SAND AND GRAVEL (FILL), TRACE ASH	
			TAN SAND AND GRAVEL, OCCASIONAL COBBLES COARSE TO FINE SAND	
		7.0'	BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 7.0' DEPTH TO WATER: NOT OBSERVED

TEST PIT TP-2

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		0.2'	TOPSOIL	
			BLACK SAND AND GRAVEL AND BRICK (FILL), TRACE ASH	
		3.5'	TAN SAND AND GRAVEL, OCCASIONAL COBBLES COARSE TO FINE SAND	
		6.0'	BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 6.0' DEPTH TO WATER: NOT OBSERVED

S.W.COLE ENGINEERING, INC.

TEST PIT LOGS

PROJECT/CLIENT: 135 SHERIDAN STREET / SHINBERG CONSULTING , LLC
LOCATION: PORTLAND, MAINE
BACKHOE FIRM: LEAVITT EARTHWORKS OPERATOR: BRUCE

PROJECT NO.: 06-1271
SWC REP.: MPL

TEST PIT TP-3

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		1.0'	TOPSOIL	
			BLACK SILTY SAND (FILL), SOME GRAVEL AND BRICK	
		4.5'		
			TAN SAND AND GRAVEL COARSE TO FINE SAND	
		8.0'		
			BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 8.0' DEPTH TO WATER: NOT OBSERVED

TEST PIT TP-4

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		1.0'	TOPSOIL	
			BROWN SILTY SAND WITH GRAVEL (FILL) OCCASIONAL COBBLE AND BOULDERS, BRICK	
		8.0'		
		9.0'	BROWN SAND AND GRAVEL	
			BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 9.0' DEPTH TO WATER: NOT OBSERVED

S.W.COLE ENGINEERING, INC.

TEST PIT LOGS

PROJECT/CLIENT: 135 SHERIDAN STREET / SHINBERG CONSULTING , LLC
PROJECT NO.: 06-1271
LOCATION: PORTLAND, MAINE
SWC REP.: MPL
BACKHOE FIRM: LEAVITT EARTHWORKS
OPERATOR: BRUCE

TEST PIT TP-5

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		0.2'	TOPSOIL	
			BROWN SILTY SAND WITH GRAVEL (FILL) OCCASIONAL COBBLES AND BOULDERS	
		6.0'	TAN SAND AND GRAVEL	
		9.0'	BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 9.0' DEPTH TO WATER: NOT OBSERVED

TEST PIT TP-6

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: _____

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		0.1'	TOPSOIL	
			BLACK, GRAY, AND RED ASH (FILL), TRACE BRICK	
		10.0'	TAN SAND AND GRAVEL	
		15.0'	BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 15.0' DEPTH TO WATER: NOT OBSERVED

S.W.COLE ENGINEERING, INC.

TEST PIT LOGS

PROJECT/CLIENT: 135 SHERIDAN STREET / SHINBERG CONSULTING , LLC
PROJECT NO.: 06-1271
LOCATION: PORTLAND, MAINE
SWC REP.: MPL
BACKHOE FIRM: LEAVITT EARTHWORKS
OPERATOR: BRUCE

TEST PIT TP-7

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		0.2'	TOPSOIL	
		4.0'	BLACK SAND (FILL), SOME GRAVEL AND BRICK TRACE ASH, OCCASIONAL BOULDERS AND DEBRIS	
		7.0'	TAN SAND AND GRAVEL, OCCASIONAL COBBLES COARSE TO FINE SAND	
			BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 7.0' DEPTH TO WATER: NOT OBSERVED

TEST PIT TP-8

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: _____

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		13.0'	BROWN SILTY SAND WITH GRAVEL (FILL) OCCASIONAL COBBLES AND BRICK, TRACE DEBRIS AND ASH	
			BOTTOM OF EXPLORATION - REFUSAL POSSIBLE BOULDER OR BEDROCK	

COMPLETION DEPTH: 13.0' DEPTH TO WATER: NOT OBSERVED

S.W.COLE ENGINEERING, INC.

TEST PIT LOGS

PROJECT/CLIENT: 135 SHERIDAN STREET / SHINBERG CONSULTING , LLC
LOCATION: PORTLAND, MAINE
BACKHOE FIRM: LEAVITT EARTHWORKS OPERATOR: BRUCE

PROJECT NO.: 06-1271
SWC REP.: MPL

TEST PIT TP-9

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		1.0'	TOPSOIL	
		6.0'	GRAY SAND AND ASH (FILL)	
		8.0'	TAN SAND	
		11.0'	GRAY SILTY SAND WITH GRAVEL (GLACIAL TILL)	
			BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 11.0' DEPTH TO WATER: NOT OBSERVED

TEST PIT TP-10

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		0.2'	TOPSOIL	
		12.0'	GRAY ASH (FILL)	
		14.0'	TAN SAND AND GRAVEL	
			BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 14.0' DEPTH TO WATER: NOT OBSERVED

S.W.COLE ENGINEERING, INC.

TEST PIT LOGS

PROJECT/CLIENT: 135 SHERIDAN STREET / SHINBERG CONSULTING , LLC
LOCATION: PORTLAND, MAINE
BACKHOE FIRM: LEAVITT EARTHWORKS OPERATOR: BRUCE

PROJECT NO.: 06-1271
SWC REP.: MPL

TEST PIT TP-E

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		0.5'	TOPSOIL	
		1.0'	BLACK SAND (FILL), ASH, BRICK	
			TAN SAND AND GRAVEL COARSE TO FINE SAND	
		7.0'	BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 7.0' DEPTH TO WATER: NOT OBSERVED

TEST PIT TP-F

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		0.1'	TOPSOIL	
			SILTY SAND (FILL), SOME GRAVEL, BRICK TRACE ASH, OCCASIONAL COBBLES BOULDERS TO 6' SIZE	
		15.0'		
		16.0'	TAN SAND, MEDIUM TO FINE SAND BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 16.0' DEPTH TO WATER: SEEPAGE @ 15'

S.W.COLE ENGINEERING, INC.

TEST PIT LOGS

PROJECT/CLIENT: 135 SHERIDAN STREET / SHINBERG CONSULTING , LLC
PROJECT NO.: 06-1271
LOCATION: PORTLAND, MAINE
SWC REP.: MPL
BACKHOE FIRM: LEAVITT EARTHWORKS
OPERATOR: BRUCE

TEST PIT TP-G

DATE: 11/3/2006 SURFACE ELEVATION: _____ LOCATION: SEE SHEET 1

SAMPLE NO.	SAMPLE DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
		0.1'	TOPSOIL	
		1.0'	BLACK SAND (FILL), SOME GRAVEL, BRICK, METAL DEBRIS OCCASIONAL COBBLES, TRACE ASH	
			TAN SAND AND GRAVEL COARSE TO FINE SAND	
		12.0'		
			BOTTOM OF EXPLORATION	

COMPLETION DEPTH: 12.0' DEPTH TO WATER: NOT OBSERVED

KEY TO THE NOTES & SYMBOLS
Test Boring and Test Pit Explorations

All stratification lines represent the approximate boundary between soil types and the transition may be gradual.

Key to Symbols Used:

w	-	water content, percent (dry weight basis)
q_u	-	unconfined compressive strength, kips/sq. ft. - based on laboratory unconfined compressive test
S_v	-	field vane shear strength, kips/sq. ft.
L_v	-	lab vane shear strength, kips/sq. ft.
q_p	-	unconfined compressive strength, kips/sq. ft. based on pocket penetrometer test
O	-	organic content, percent (dry weight basis)
W_L	-	liquid limit - Atterberg test
W_P	-	plastic limit - Atterberg test
WOH	-	advance by weight of hammer
WOM	-	advance by weight of man
WOR	-	advance by weight of rods
HYD	-	advance by force of hydraulic piston on drill
RQD	-	Rock Quality Designator - an index of the quality of a rock mass. RQD is computed from recovered core samples.
γ_T	-	total soil weight
γ_B	-	buoyant soil weight

Description of Proportions:

0 to 5% TRACE
5 to 12% SOME
12 to 35% "Y"
35+% AND

REFUSAL: **Test Boring Explorations** - Refusal depth indicates that depth at which, in the drill foreman's opinion, sufficient resistance to the advance of the casing, auger, probe rod or sampler was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

REFUSAL: **Test Pit Explorations** - Refusal depth indicates that depth at which sufficient resistance to the advance of the backhoe bucket was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

Although refusal may indicate the encountering of the bedrock surface, it may indicate the striking of large cobbles, boulders, very dense or cemented soil, or other buried natural or man-made objects or it may indicate the encountering of a harder zone after penetrating a considerable depth through a weathered or disintegrated zone of the bedrock.

S.W.COLE ENGINEERING, INC.

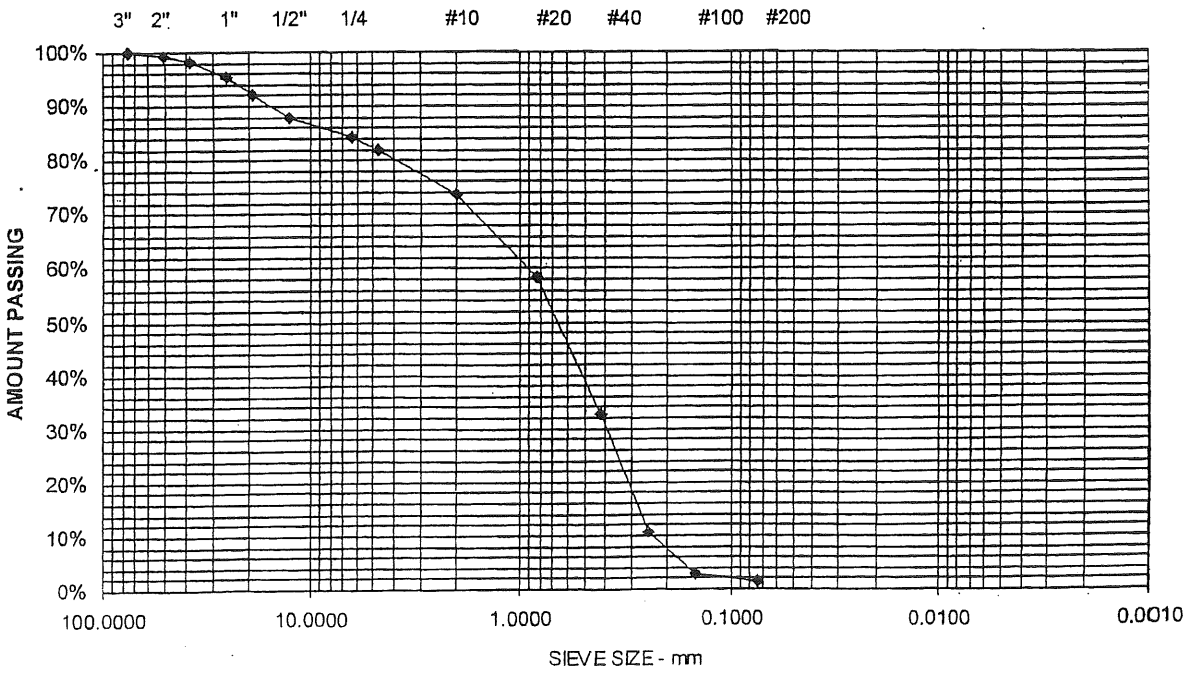
Report of Gradation

ASTM C-117 & C-136

Project Name: PORTLAND - 135 SHERIDAN STREET - HOUSING - GEOTECHNICAL ENGINEERING SERVICES
Client: SHINBERG CONSULTING, LLC
Material Source: TP - 3

Project Number: 06-1271
Lab ID: 5972G
Date Received: 11/6/2006
Date Complete: 11/8/2006
Tested By: JUSTIN BISSON

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	
75 mm	3"	100	
50 mm	2"	99	
38.1 mm	1-1/2"	98	
25.0 mm	1"	96	
19.0 mm	3/4"	92	
12.5 mm	1/2"	88	
6.3 mm	1/4"	84	
4.75 mm	No. 4	82	18.2% Gravel
2.00 mm	No. 10	74	
850 um	No. 20	58	
425 um	No. 40	33	80.4% Sand
250 um	No. 60	11	
150 um	No. 100	3	
75 um	No. 200	1.4	1.4% Fines



Comments:

Sheet 10

S.W.COLE ENGINEERING, INC.

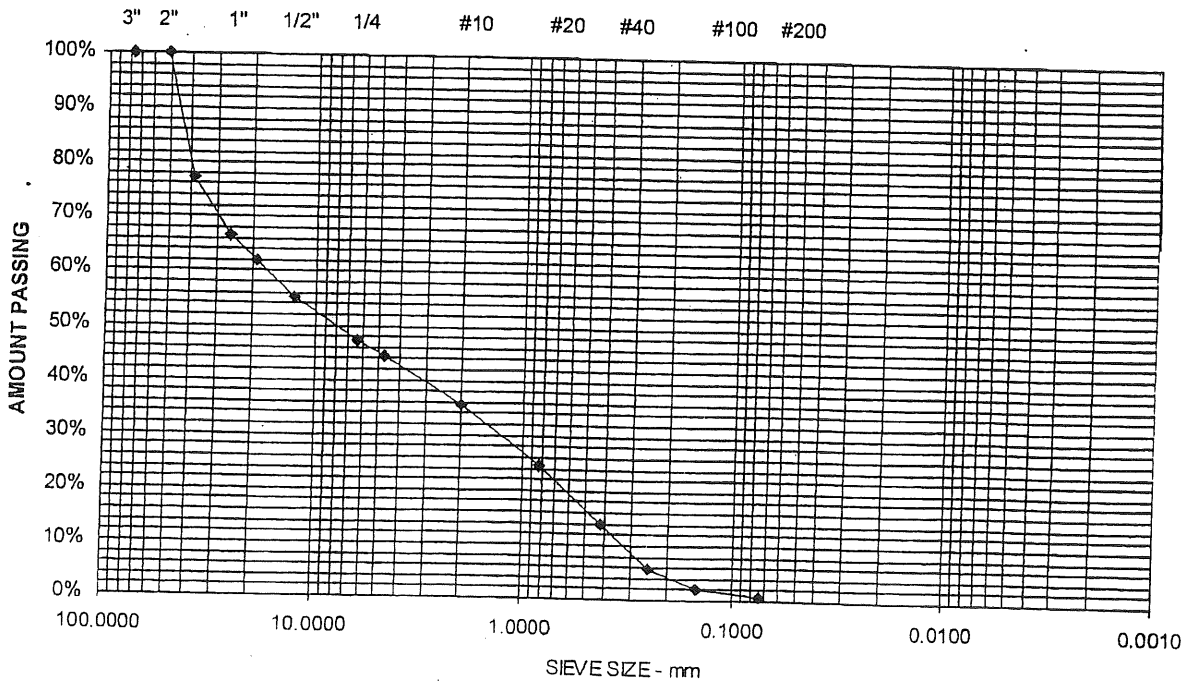
Report of Gradation

ASTM C-117 & C-136

Project Name: PORTLAND - 135 SHERIDAN STREET - HOUSING - GEOTECHNICAL ENGINEERING SERVICES
Client: SHINBERG CONSULTING, LLC
Material Source: TP - 4

Project Number: 06-1271
Lab ID: 5975G
Date Received: 11/6/2006
Date Complete: 11/7/2006
Tested By: JUSTIN BISSON

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	
75 mm	3"	100	
50 mm	2"	100	
38.1 mm	1-1/2"	77	
25.0 mm	1"	67	
19.0 mm	3/4"	62	
12.5 mm	1/2"	55	
6.3 mm	1/4"	47	
4.75 mm	No. 4	45	55.4% Gravel
2.00 mm	No. 10	36	
850 um	No. 20	25	
425 um	No. 40	14	43.8% Sand
250 um	No. 60	6	
150 um	No. 100	2	
75 um	No. 200	0.8	0.8% Fines



Comments:

S.W.COLE ENGINEERING, INC.

Report of Gradation

ASTM C-117 & C-136

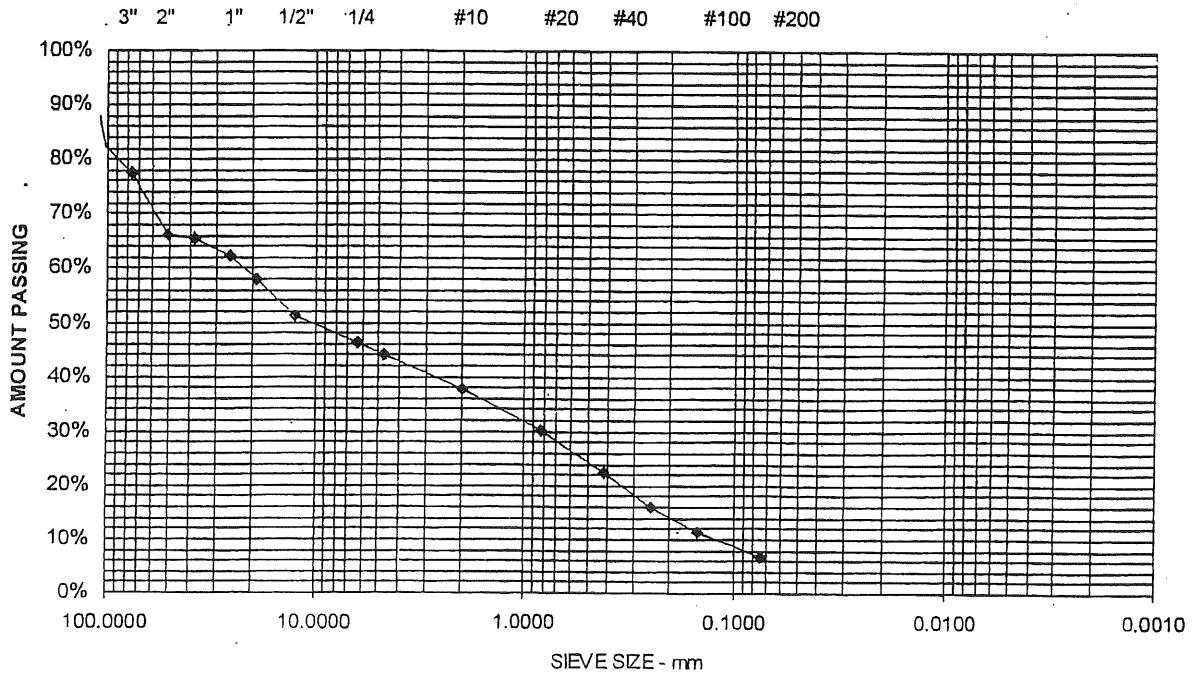
Project Name PORTLAND - 135 SHERIDAN STREET - HOUSING - GEOTECHNICAL ENGINEERING SERVICES

Client SHINBERG CONSULTING, LLC

Material Source TP - 5

Project Number 06-1271
Lab ID 5976G
Date Received 11/6/2006
Date Complete 11/9/2006
Tested By JUSTIN BISSON

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	82	
75 mm	3"	78	
50 mm	2"	66	
38.1 mm	1-1/2"	65	
25.0 mm	1"	62	
19.0 mm	3/4"	58	
12.5 mm	1/2"	51	
6.3 mm	1/4"	46	
4.75 mm	No. 4	44	55.9% Gravel
2.00 mm	No. 10	38	
850 um	No. 20	30	
425 um	No. 40	23	37.3% Sand
250 um	No. 60	16	
150 um	No. 100	11	
75 um	No. 200	6.8	6.8% Fines



Comments: