

**CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
Insp Copy**

2002-0080
Application I. D. Number
03/14/2002
Application Date

United States of America
Applicant
10 Causeway Street, Room 901, Boston, MA 02222
Applicant's Mailing Address
Oak Point Associates
Consultant/Agent
Applicant Ph: (617) 565-5731 Agent Fax:
Applicant or Agent Daytime Telephone, Fax

Upgrade HVAC and Electrical System
Project Name/Description
99 - 99 Commercial St, Portland, Maine
Address of Proposed Site
029 G001001 029 - G001
Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply):
 New Building Building Addition Change Of Use Residential Office Retail
 Manufacturing Warehouse/Distribution Parking Lot Other (specify) Geothermal well installation

Proposed Building square Feet or # of Units _____ Acreage of Site _____ Zoning _____

Check Review Required:

Site Plan (major/minor) Subdivision # of lots _____ PAD Review 14-403 Streets Review
 Flood Hazard Shoreland Historic Preservation DEP Local Certification
 Zoning Conditional Use (ZBA/PB) Zoning Variance Other _____

Fees Paid: Site Plan \$400.00 Subdivision _____ Engineer Review _____ Date 03/25/2002

Insp Approval Status:

Reviewer _____

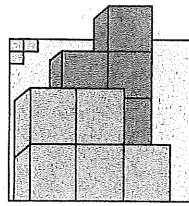
Approved Approved w/Conditions See Attached Denied

Approval Date _____ Approval Expiration _____ Extension to _____ Additional Sheets Attached

Condition Compliance _____
 Performance Guarantee Required* Not Required
 * No building permit may be issued until a performance guarantee has been submitted as indicated below



<input type="checkbox"/> Performance Guarantee Accepted	_____	_____	_____
	date	amount	expiration date
<input type="checkbox"/> Inspection Fee Paid	_____	_____	
	date	amount	
<input type="checkbox"/> Building Permit Issue	_____		
	date		
<input type="checkbox"/> Performance Guarantee Reduced	_____	_____	_____
	date	remaining balance	signature
<input type="checkbox"/> Temporary Certificate of Occupancy	_____	<input type="checkbox"/> Conditions (See Attached)	_____
	date		expiration date
<input type="checkbox"/> Final Inspection	_____	_____	
	date	signature	
<input type="checkbox"/> Certificate Of Occupancy	_____		
	date		
<input type="checkbox"/> Performance Guarantee Released	_____	_____	
	date	signature	
<input type="checkbox"/> Defect Guarantee Submitted	_____	_____	_____
	submitted date	amount	expiration date
<input type="checkbox"/> Defect Guarantee Released	_____	_____	
	date	signature	



OAK POINT

ASSOCIATES

March 15, 2002

Portland City Hall
Inspection Office (Attn: Site Plan Application)
389 Congress Street, Room 315
Portland, Maine 04101

RE: Upgrade HVAC and Electrical Systems (Geothermal Well Installation)
United States Custom House
99 Commercial Street
Portland, Maine

Dear Sir or Madam:

Enclosed please find a check for \$400.00 and nine copies of a Site Plan Application for the above-referenced project. Also enclosed are nine copies of descriptions of four proposed license areas, a Boundary Survey and Civil/Site drawings for the project. The project involves an upgrade to the interior heating, ventilating and air conditioning systems of the building. As part of this upgrade, installation of three geothermal wells with associated pumps, piping, heat exchangers, controls and appurtenances, is proposed. Groundwater drawn from the wells will run through the heat exchangers and be used to heat or cool the building.

As shown on the attached Site Plan (Drawing C1), the wells are proposed within an open (below grade) areaway, approximately eight feet wide, located between the building and a stone retaining wall adjacent to the sidewalk. The areaway surrounds the building on the Pearl Street, Fore Street and Custom House Streets sides. The geothermal well heads will terminate approximately one foot below grade and be accessed by a 24-inch diameter concrete riser. Portions of the concrete riser (and the well at one location) are likely to extend over the street lines of Pearl and Custom House Streets, necessitating acquisition of a license from the City of Portland. It is our understanding acquisition of a license for the work will be easier to obtain from the City than an easement, thus reducing the potential of delays in construction. The proposed license areas are shown on the enclosed Site Plan and the Boundary Survey. As part of the review of this application, we respectfully request representatives of the City proceed with the preparation of the licenses, based on the enclosed descriptions.

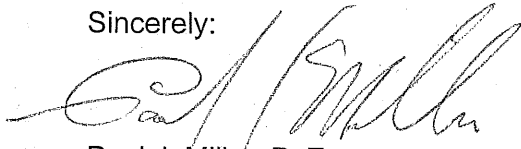
The only other site related aspect of the project is installation of a (pumped) drain line off the process return piping. The drain is proposed to connect to an existing catch basin located in the sidewalk near the intersection of Commercial and Pearl Streets. The drain

ARCHITECTS • ENGINEERS

will only run when the building heating or cooling load is very high and the return water (to the wells) has been heated or cooled beyond the design range (less than 38 or greater than 80 degrees Fahrenheit). Thus, the flow to the pumped drain will be intermittent and relatively small (approximately 25 gallons per minute or less than 0.06 cubic feet per second). This discharge has been approved through the Maine Department of Environmental Protection (see their letter to Oak Point Associates, dated February 22, 2002, copy attached). We have included a license area for this drain. The proposed license area is shown on the plans.

Please contact us as soon as possible with information regarding this project. As you may know, geothermal well installation (on U.S. Government property) is currently underway. We hope to avoid a delay in the construction, so your prompt attention to this project would be appreciated.

Sincerely:

A handwritten signature in black ink, appearing to read 'Paul J. Miller', written in a cursive style.

Paul J. Miller, P. E.
Project Engineer

Cc: Manny Neves

City of Portland Site Plan Application

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

Location/Address of Construction: U.S. Custom House, 99 Commercial St.		
Total Square Footage of Proposed Structure <p style="text-align: center;">NA</p>	Square Footage of Lot <p style="text-align: center;">12,187</p>	
Tax Assessor's Chart, Block & Lot Chart# 29 Block# G Lot# 1	Property owner, mailing address: United States of America Thomas P. O'Neil Jr. Fed Bldg 10 Causeway St., Room 901 Boston, MA 02222	Telephone: 617-565-5731
Consultant/Agent, mailing address, phone & contact person Oak Point Associates 231 Main Street Biddeford, ME 04005 207 283 0193 Paul J. Miller	Applicant name, mailing address & telephone: <p style="text-align: center;">Manny Neves</p> Thomas P. O'Neil Jr., Fed Bldg. 10 Causeway Street, Room 901 Boston, MA 02222 617-565-5731	Project name: Upgrade HVAC and Electrical Systems
Proposed Development (check all that applies) <input type="checkbox"/> New Building <input type="checkbox"/> Building Addition <input type="checkbox"/> Change of Use <input type="checkbox"/> Residential <input type="checkbox"/> Office <input type="checkbox"/> Retail <input type="checkbox"/> Manufacturing <input type="checkbox"/> Warehouse/Distribution <input type="checkbox"/> Parking lot <input type="checkbox"/> Subdivision, amount of lots _____ <input checked="" type="checkbox"/> Other: <u>Geothermal well installation.</u>		
Major Development _____ \$500.00 Minor Development <input checked="" type="checkbox"/> \$400.00		
Who billing will be sent to: General Services Administration Mailing address: Thomas P. O'Neil Federal Building State and Zip: 10 Causeway Street Contact person: Phone: Boston, MA 02222 Manny Neves 617-565-5731		

- Nine (9) separate packets must include the following:
- a. copy of application
 - b. cover letter stating the nature of the project
 - c. site plan containing the information found in the attached sample plans check list

All plans must be folded neatly and in packet form

Section 14-522 of the Zoning Ordinance outlines the process, copies are available at the counter at .25 per page, you may also visit the web site: cl.portland.me.us chapter 14

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

Signature of applicant:	Date: <u>3/14/02</u>
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This application is for site review ONLY, a building Permit application and associated fees will be required prior to construct

License Area No. 1, Commercial Street
225 square feet

A certain lot or parcel of land situated within the right-of-way of Commercial Street, in the City of Portland, County of Cumberland, State of Maine, and being more particularly bounded and described as follows:

Beginning at a point being a 3/8-inch diameter drill hole in the brick sidewalk at the intersection of the northwesterly sideline of Commercial Street and the northeasterly sideline of Pearl Street;

Thence North $41^{\circ} 15' 47''$ East along the northwesterly sideline of Commercial Street, a distance of fifteen and no hundredths (15.00) feet to a point;

Thence South $48^{\circ} 44' 13''$ East a distance of fifteen and no hundredths (15.00) feet to a point;

Thence South $41^{\circ} 15' 47''$ West a distance of fifteen and no hundredths (15.00) feet to a point;

Thence North $48^{\circ} 44' 13''$ West a distance of fifteen and no hundredths (15.00) feet to the point of beginning;

Containing 225 square feet.

Bearings above refer to Grid North of the Maine State Coordinate System, West Zone, based on information shown on the State of Maine Department of Transportation Right of Way Map for Federal Aid Project No. M-0685(1), dated August, 1985, D.O.T. File No. 3-339, sheet numbers 5 and 6.

Meaning and intending to convey a license area for installation and maintenance of underground utilities within the Commercial Street right-of-way.

Reference is made to a Plan Showing a Survey of the U. S. Custom House Lot and Proposed Easements to be Granted by the City of Portland, Maine, to the United States of America, dated March 12, 2002, by Wayne A. Desper, PLS No. 1279.

The drill hole mentioned above is to be set.

License Area No. 2, Pearl Street
40 square feet

A certain lot or parcel of land situated within the right-of-way of Pearl Street, in the City of Portland, County of Cumberland, State of Maine, and being more particularly bounded and described as follows:

Beginning at a point on the northeasterly sideline of Pearl Street, said point being North 49° 37' 38" West a distance of 15.00 feet from a 3/8-inch diameter drill hole in the brick sidewalk at the intersection of the northwesterly sideline of Commercial Street and the northeasterly sideline of Pearl Street;

Thence North 49° 37' 38" West along the northeasterly sideline of Pearl Street, a distance of ten and no hundredths (10.00) feet to a point;

Thence South 40° 22' 22" West a distance of four and no hundredths (4.00) feet to a point;

Thence South 49° 37' 38" East a distance of ten and no hundredths (10.00) feet to a point;

Thence North 40° 22' 22" East a distance of four and no hundredths (4.00) feet to the point of beginning;

Containing 40 square feet.

Bearings above refer to Grid North of the Maine State Coordinate System, West Zone, based on information shown on the State of Maine Department of Transportation Right of Way Map for Federal Aid Project No. M-0685(1), dated August, 1985, D.O.T. File No. 3-339, sheet numbers 5 and 6.

Meaning and intending to convey a license area for installation and maintenance of a geothermal well and all appurtenances, including an access manhole and underground utilities, within the Pearl Street right-of-way.

Reference is made to a Plan Showing a Survey of the U. S. Custom House Lot and Proposed Easements to be Granted by the City of Portland, Maine, to the United States of America, dated March 12, 2002, by Wayne A. Desper, PLS No. 1279.

The drill hole mentioned above is to be set.

License Area No. 3, Custom House Street
40 square feet

A certain lot or parcel of land situated within the right-of-way of Custom House Street, in the City of Portland, County of Cumberland, State of Maine, and being more particularly bounded and described as follows:

Beginning at a point on the southwesterly sideline of Custom House Street, said point being South 49° 35' 13" East a distance of 16.00 feet from a 5/8-inch diameter drill hole in the stone sidewalk at the intersection of the southwesterly sideline of Custom House Street and the southeasterly sideline of Fore Street;

Thence South 49° 35' 13" East along the southwesterly sideline of Custom House Street, a distance of ten and no hundredths (10.00) feet to a point;

Thence North 40° 24' 47" East a distance of four and no hundredths (4.00) feet to a point;

Thence North 49° 35' 13" West a distance of ten and no hundredths (10.00) feet to a point;

Thence South 40° 24' 47" West a distance of four and no hundredths (4.00) feet to the point of beginning;

Containing 40 square feet.

Bearings above refer to Grid North of the Maine State Coordinate System, West Zone, based on information shown on the State of Maine Department of Transportation Right of Way Map for Federal Aid Project No. M-0685(1), dated August, 1985, D.O.T. File No. 3-339, sheet numbers 5 and 6.

Meaning and intending to convey a license area for installation and maintenance of a geothermal well and all appurtenances, including an access manhole and underground utilities, within the Pearl Street right-of-way.

Reference is made to a Plan Showing a Survey of the U. S. Custom House Lot and Proposed Easements to be Granted by the City of Portland, Maine, to the United States of America, dated March 12, 2002, by Wayne A. Desper, PLS No. 1279.

The drill hole mentioned above is to be set.

License Area No. 4, Custom House Street
40 square feet

A certain lot or parcel of land situated within the right-of-way of Custom House Street, in the City of Portland, County of Cumberland, State of Maine, and being more particularly bounded and described as follows:

Beginning at a point on the southwesterly sideline of Custom House Street, said point being North 49° 35' 13" West a distance of 16.00 feet from a 3/8-inch diameter drill hole in the brick sidewalk at the intersection of the southwesterly sideline of Custom House Street and the northwesterly sideline of Commercial Street;

Thence North 49° 35' 13" West along the southwesterly sideline of Custom House Street, a distance of ten and no hundredths (10.00) feet to a point;

Thence North 40° 24' 47" East a distance of four and no hundredths (4.00) feet to a point;

Thence South 49° 35' 13" East a distance of ten and no hundredths (10.00) feet to a point;

Thence South 40° 24' 47" West a distance of four and no hundredths (4.00) feet to the point of beginning;

Containing 40 square feet.

Bearings above refer to Grid North of the Maine State Coordinate System, West Zone, based on information shown on the State of Maine Department of Transportation Right of Way Map for Federal Aid Project No. M-0685(1), dated August, 1985, D.O.T. File No. 3-339, sheet numbers 5 and 6.

Meaning and intending to convey a license area for installation and maintenance of a geothermal well and all appurtenances, including an access manhole and underground utilities, within the Pearl Street right-of-way.

Reference is made to a Plan Showing a Survey of the U. S. Custom House Lot and Proposed Easements to be Granted by the City of Portland, Maine, to the United States of America, dated March 12, 2002, by Wayne A. Desper, PLS No. 1279.

The drill hole mentioned above is to be set.



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

February 22, 2002

ANGUS S. KING, JR.
GOVERNOR

MARTHA KIRKPATRICK
COMMISSIONER

Paul J. Miller, P.E.
Oak Point Associates
231 Main Street
Biddeford, ME 04005

Dear Mr. Miller:

I have reviewed your site plan for the proposed construction project at the U.S. Custom House in Portland. As I have mentioned in a previous telephone conversation, wells which re-inject fluids associated with geothermal heating and cooling are considered Class V wells under the state's and EPA's Underground Injection Control Program. No licensing or permitting is needed for these wells, however, these wells are required to be registered with the state program. I have enclosed a copy of the current Class V well registration form for your use. Please file it prior to operation of the system.

As for the discharge of return water outside your temperature limits, our Licensing Unit Director, Gregg Wood, has reviewed your potential discharge and worse case scenario. In notes to me, he indicates that no waste discharge license or MEPDES permit is needed, as the discharge is considered de minimus in nature.

I will offer one additional piece of advice. It has been many decades since ground water was used in downtown Portland for any purpose and a wide variety of potentially contaminating activities have occurred in that area. In both the interest of protecting the integrity of the heating/cooling system and well as preventing an inadvertent discharge of pollutants to the storm sewer system, I would recommend that a sample from each geothermal well is collected and analyzed. If nothing else, this analysis will provide baseline water quality data for your client should there be any dispute in the future.

Again, please return the Class V registration form prior to commencement of activities and feel free to contact me should there be any questions. I may be reached at (207)287-7814 or by e-mail at tammy.gould@state.me.us.

Sincerely,

Tammy L. Gould, Underground Injection Control Program
Division of Water Resource Regulation
Bureau of Land and Water Quality

Cc: Gregg Wood, Director, Licensing Unit

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 764-1507