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: 080838

This is to certify that BRADLEY REALTY CO /TBD

has permission to TD BankNorth - New 4000 sq ft building, 2 drive up lanes, 64' 7" x 46' 2" & 27' high

AT 1410 CONGRESS ST **CBL** 197 B019001

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 and written permission procured before this building or part thereof is lathed or closed-in. 48 HOUR NOTICE IS REQUIRED.

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

PERMIT ISSUED

OCT 24 2008

CITY OF PORTLAND

Department Name

OTHER REQUIRED APPROVALS

Fire Dept.

Health Dept.

Appeal Board

Other

Director - Building & Inspection Services 10/27/08

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

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

Permit No:	Issue Date:	CBL:
08-0838	10/20/08	197 B019001

Location of Construction:	Owner Name:	Owner Address:	Phone:
1410 CONGRESS ST	BRADLEY REALTY CO	PO BOX 20	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	TBD		
Lessee/Buyer's Name	**Phone:**	**Permit Type:** Commercial	**Zone:** B-2

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Vacant Land Parking Lot	Commercial - TD BankNorth - New 3,000 sq ft building w/ 2 drive up lanes, 64' 7" x 46' 2" & 27' high	$9,595.00	$950,000.00	3

FIRE DEPT: ☑ Approved ☐ Denied

Signature: Greg Cass

INSPECTION: Use Group: B Type: 5B IBC 2003

Signature: CL 10/24/08

Proposed Project Description:
TD BankNorth - New 3,000 sq ft building w/ 2 drive up lanes, 64' 7" x 46' 2" & 27' high

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
ldobson	07/08/2008

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

PERMIT ISSUED
OCT 24 2008
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 3 zone C	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☒ Site Plan 2008-0027	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: OK with Conditions	Date:	Date: 7/15/08

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

General Building Permit Application

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

WESTGATE PLAZA

Location/Address of Construction: 1410 CONGRESS STREET, PORTLAND ME.		
Total Square Footage of Proposed Structure/Area: 3000 SF.	Square Footage of Lot: OVERALL PARCEL = 496,199 SF	
Tax Assessor's Chart, Block & Lot Chart# Block# Lot# TAX MAP 197 LOT B-19	Applicant *must be owner, Lessee or Buyer* Name TD BANKNORTH Address 70 GRAY ROAD City, State & Zip W. FALMOUTH ME 04105	Telephone: PROJECT MANAGER EMILY CLARK 207.317.5103
Lessee/DBA (If Applicable)	Owner (if different from Applicant) Name CHARTER REALTY + DEVELOPMENT Address 800 WESTCHESTER AVE SUITE S-632 City, State & Zip RYE BROOK, NY 10573	Cost Of Work: $ 950,000 C of O Fee: $ 75 Total Fee: $ 9595

Current legal use (i.e. single family) BANK / BUSINESS
If vacant, what was the previous use? N/A
Proposed Specific use: BANK / BUSINESS
Is property part of a subdivision? NO If yes, please name —
Project description: NEW 3,000 SF BRANCH BANK WITH 2 DRIVE-UP LANES. PROPOSED BUILDING DIMENSIONS ARE: 64'-1" X 46'-2" AND 27' HIGH.

Contractor's name: TBD.
Address:
City, State & Zip Telephone:
Who should we contact when the permit is ready: Emily Clark-TD Banknorth Telephone: 317-5103
Mailing address:

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

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

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

Signature: Emily Clark, TD Banknorth Date: 7/8/08

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

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

Permit No:	Date Applied For:	CBL:
08-0838	07/08/2008	197 B019001

Location of Construction:	Owner Name:	Owner Address:	Phone:
1410 CONGRESS ST	BRADLEY REALTY CO	PO BOX 20	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	TBD		
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Commercial	

Proposed Use:	Proposed Project Description:
Commercial - TD BankNorth - New 3,000 sq ft building w/ 2 drive up lanes, 64' 7" x 46' 2" & 27' high	TD BankNorth - New 3,000 sq ft building w/ 2 drive up lanes, 64' 7" x 46' 2" & 27' high

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 07/15/2008
Note: **Ok to Issue:** ☑

1) Separate permits shall be required for any new signage.
2) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Chris Hanson **Approval Date:** 10/20/2008
Note: waiting fo spec book and geo-tec book and special inspections----- Questions answered and submitted. **Ok to Issue:** ☑

1) This permit is approved, all of the review questions/comments have been responded to and adequately satisfy code compliance of this project.
2) Permit approved based on the plans submitted and reviewed w/owner/contractor, with additional information as agreed on and as noted on plans.
3) A certificate of third party inspection, stamped plans, and a photo of the sticker stating third party inspection placed in the structure must be submitted to this office prior to issuance of the Certificate of Occupancy.
4) Separate permits are required for any electrical, plumbing, or HVAC systems.
Separate plans may need to be submitted for approval as a part of this process.
5) Separate Permits shall be required for any new signage.

Dept: Fire **Status:** Approved **Reviewer:** Capt Greg Cass **Approval Date:** 07/23/2008
Note: **Ok to Issue:** ☑

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

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:**
Note: **Ok to Issue:** ☐

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

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

Location of Construction:	Owner Name:	Owner Address:	Phone:
1410 CONGRESS ST	BRADLEY REALTY CO	PO BOX 20	
Business Name:	**Contractor Name:** TBD	**Contractor Address:**	**Phone**
Lessee/Buyer's Name	**Phone:**	**Permit Type:** Commercial	

Dept: DRC **Status:** Approved with Conditions **Reviewer:** Philip DiPierro **Approval Date:** 07/22/2008

Note: **Ok to Issue:** ☑

Dept: Planning **Status:** Approved with Conditions **Reviewer:** Molly Casto **Approval Date:**

Note: **Ok to Issue:** ☑

1) 3.□The applicant shall provide a pre-development assessment of noise levels and a prediction of decibel levels from the proposed speaker system be submitted for review and approval by Planning staff prior to the issuance of a building permit. After construction, post-development noise levels shall be submitted to the Planning Authority for review. If it is determined that the levels exceed the standards of Section 14-187, the applicant shall install noise mitigation measures for the intercom system prior to the release of the performance guarantee.

2) 2.□The applicant shall address, to the satisfaction of the City Transportation Engineer, the location of crosswalks on Lot 3 as well as the any warning signage for lot 3 alerting vehicles to the presence of pedestrian crosswalks. In addition, if the tenant of the building causes "peak hour" traffic volumes to be greater than those included in the traffic analyses conducted for the project as submitted in connection with this application, a revised traffic analysis will be required for review and approval by the City Traffic Engineer (or if already before the Planning Board for site plan approval, then the Planning Board) prior to the issuance of a building permit.

3) 3.□Once a tenant has been finalized for the proposed building on lot 3, the applicant shall submit sign details for the proposed use for review and approval by the Planning Authority prior to the issuance of a building permit.

4) 4.□A pre-development assessment of noise levels and a prediction of decibel levels from the proposed speaker system must be submitted for review and approval by the Planning Authority prior to the issuance of a building permit. Post-development noise levels shall also be taken and submitted quarterly for the first year of operation to the Planning Authority. If it is determined that noise levels exceed the standards of Section 14-187, the applicant shall install noise mitigation measures for the intercom system prior to the release of the performance guarantee.

5) 1.□If the tenant of the proposed building on lot 3 changes such that "peak hour" traffic volumes are greater than that included in the traffic analyses conducted for the project a submitted as part of this application, a revised traffic analysis will be required for review and approval by the City Transportation Engineer.

6) 1.□The applicant should confirm that the survey for the project coincides with approved City standards. The survey needs to be tied to the vertical datum of NGVD 1929 and to the Maine State Plane Coordinate System (2-zone projection), West Zone using the NAD 1983 (HARN) Datum and the U.S. Survey Foot as the unit of measure. This shall be confirmed by The Department of Public Services prior to the issuance of a building permit.

7) 2.□The applicant shall revise the site plan so as to include a continuous travel lane from the Stevens Avenue/Congress Street entrance to the front of retail 'A' of the main shopping plaza. The applicant shall submit final site plans showing the revised travel lane for review and approval by the City Transportation Engineer prior to the issuance of a building permit. The applicant shall also widen the proposed traffic islands in front of retail 'A', the width of which shall be determined by the City Transportation Engineer. The need to include an additional traffic island or additional demarcation in this location shall be determined by the City Transportation Engineer. Nine (9) parking spaces shall be relocated to the rear of the plaza, as shown on Alternative Schematic (2), submitted to the Planning Board on June 10, 2008.

8) Once a tenant for the restaurant has been identified, the applicant must submit final site plans and elevation drawings for the proposed development of Lot 3 for review and approval by the Planning Board prior to the issuance of a building permit. As part of the site plan review, the applicant shall submit information relating to Section 14-183 (a) (6) of the City Code demonstrating that the proposal for Lot 3 complies with zoning requirements, as determined by the City Zoning Administrator.

9) 2.□The applicant shall provide a license to the City of Portland to allow municipal vehicles to turn around at the end of Westland Street for review and approval by Corporation Counsel prior to the issuance of a Certificate of Occupancy.

10 4.□The applicant shall provide evidence of adequate sewer capacity prior to the issuance of a building permit.

Location of Construction:	Owner Name:	Owner Address:	Phone:
1410 CONGRESS ST	BRADLEY REALTY CO	PO BOX 20	
Business Name:	**Contractor Name:** TBD	**Contractor Address:**	**Phone**
Lessee/Buyer's Name	**Phone:**	**Permit Type:** Commercial	

11 5. The applicant shall submit a photometric plan meeting the requirements of the City of Portland Technical and Design Standards, with respect to the rear of the building so as to demonstrate that no unnecessary light, as defined by City Standards, is being passed onto the abutting residential properties. This shall be reviewed and approved by the Planning Authority prior to the issuance of a building permit.

12 6. The applicant shall submit an updated landscaping plan for the rear portion of the property that abuts residential lots that provides continuous buffering along the property line between lot 1 and abutting residential properties for the Planning Authority's review and approval prior to the issuance of a building permit.

13 1. The applicant shall provide easement language for the proposed bus turnout and sidewalk based on as-built condition for review and approval by Corporation Counsel prior to the issuance of a Certificate of Occupancy.

Comments:

7/15/2008-mes: WAIT FOR PLANNING SIGN OFF

9/8/2008-csh: Called jen roy to get special inspections report and geo-tech report and spec. Book 9/08/08

Applicant: TD BANK North Date: 7/15/08

Address: 1410 Congress St C-B-L: 197-B-19

CHECK-LIST AGAINST ZONING ORDINANCE

Date - New lot recently subdivided from westgate

Zone Location - B-2 Zone #08-0830

Interior or corner lot -

Proposed Use/Work - to construct New 3,000# BANK with double drive-thru

Sewage Disposal - City

Lot Street Frontage - 50' min - ≈130' - 135' scaled at the two most

Front Yard - no min but should not exceed the average on either side (42' & 36.5' = 78.5 ÷ 2 = 39.25' max setback)

Rear Yard - (doesn't Abut Resid.) 10' min - 73' to bldg - 60' to drive thru

Side Yard - (doesn't Abut Resid.) - None Req - 7' & ≈75' scaled

Projections -

Width of Lot - None req

Height - 45' max - well less

Lot Area - 10,000# min - 19,246# given 77.48% shown

Lot Coverage/Impervious Surface - 80% max - see separate attachment

Area per Family - N/A

Off-street Parking - 3000 ÷ 334 = 8.98 ≈ 9 spaces req - 19 spaces shown

Loading Bays - N/A

Site Plan - 2008-0027

Shoreland Zoning/Stream Protection - N/A

Flood Plains - panel 13 - zone C

From: Marge Schmuckal
To: Barbara Barhydt ; Molly Casto
Date: 7/15/2008 3:29:08 PM
Subject: Westgate

Molly,
I am starting to get permits for work at the Westgate site and I have questions.

1. Is the subdision/site plan approved? I need a signed, stamped approved plan if so.

2. I have an application for the new TD Bank North. Can that permit be issued after our review and approvals?

3. I have an application for the reuse of the old Friendly's building for a Tim Hortons. Can that permit be issued after our review and approvals?

4. I have a permit for a change of use from retail to Mercy medical offices - 10, 758 sq ft somewhere in the existing main portion of the building. Was the PB aware of that change of use? Was parking reviewed by the traffic engineers for that use? I don't remember that we were aware of this pending use change.

Thanks,
Marge

CC: ALEX JAEGERMAN; PENNY LITTELL

Certificate of Design Application

From Designer: SUMMER MAINI & McKEE

Date: JULY 9, 2008

Job Name: TD BANKNORTH - WESTGATE PLAZA

Address of Construction: 1410 CONGRESS STREET

JUL 11 2008

2003 International Building Code

Construction project was designed to the building code criteria listed below:

Building Code & Year IBC 2003 Use Group Classification (s) B-BUSINESS

Type of Construction 5B UNPROTECTED

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC YES

Is the Structure mixed use? NO If yes, separated or non separated or non separated (section 302.3) N/A

Supervisory alarm System? YES Geotechnical/Soils report required? (See Section 1802.2) YES

Structural Design Calculations

_____ Submitted for all structural members (106.1 – 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown
SLAB ON GRADE	100 PSF

Wind loads (1603.1.4, 1609)

1609.6 Design option utilized (1609.1.1, 1609.6)

100 MPH Basic wind speed (1809.3)

II / 1.00 Building category and wind importance Factor, I_w table 1604.5, 1609.5)

C Wind exposure category (1609.4)

± .18 Internal pressure coefficient (ASCE 7)

25 PSF Component and cladding pressures (1609.1.1, 1609.6.2.2)

21 PSF Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

EQUIV. LATERAL FORCE PROCEDURE Design option utilized (1614.1)

I Seismic use group ("Category")

S_{DS} = .50 Spectral response coefficients, S_{DS} & S_{D1} (1615.1)

E Site class (1615.1.5)

S_{D1} = .10

NONE Live load reduction

10 PSF Roof *live* loads (1603.1.2, 1607.11)

60 PSF Roof snow loads (1603.7.3, 1608)

50 PSF Ground snow load, P_g (1608.2)

N/A If P_g > 10 psf, flat-roof snow load P_f

N/A If P_g > 10 psf, snow exposure factor, C_e

N/A If P_g > 10 psf, snow load importance factor, I_s

1.0 Roof thermal factor, C_t (1608.4)

N/A Sloped roof snowload, P_s (1608.4)

C Seismic design category (1616.3)

STEEL BRACED FRAME Basic seismic force resisting system (1617.6.2)

5 Response modification coefficient, R_I and

4.5 deflection amplification factor C_d (1617.6.2)

SIMPLIFIED Analysis procedure (1616.6, (1617.5))

20 Design base shear (1617.4, 16175.5.1)

Flood loads (1803.1.6, 1612)

ZONE C Flood Hazard area (1612.3)

48.0 Elevation of structure

Other loads

2000 # Concentrated loads (1607.4)

20 PSF Partition loads (1607.5)

N/A Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404

Accessibility Building Code Certificate

Designer: SYMMES MAINI & McKEE

Address of Project: 1410 CONGRESS STREET, PORTLAND ME

Nature of Project: NEW CONSTRUCTION OF 3,000 SF. BANK BUILDING.

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act. Residential Buildings with 4 units or more must conform to the Federal Fair Housing Accessibility Standards. Please provide proof of compliance if applicable.

LICENSED ARCHITECT
EDWARD R. FRENETTE
No. 3003
STATE OF MAINE

(SEAL)

Signature: Edward R Frenette

Title: ARCHITECT, SENIOR VICE PRESIDENT

Firm: SYMMES MAINI & McKEE

Address: 1000 MASSACHUSETTS AVE.
CAMBRIDGE, MA. 02138

Phone: 617.547.5400

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

Building Inspections Division • 389 Congress Street • Portland, Maine 04101 • (207) 874-8703 • FACSIMILE (207) 874-8716 • TTY (207) 874-8936

Certificate of Design

Date: JULY 7, 2008

From: SYMMES MAINI & McKEE

These plans and / or specifications covering construction work on:

TD BANKNORTH - WESTGATE PLAZA

1410 CONGRESS STREET

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the ***2003 International Building Code*** and local amendments.

LICENSED ARCHITECT
EDWARD R. FRENETTE
No. 3003
STATE OF MAINE

(SEAL)

Signature: Edward R Frenette

Title: ARCHITECT, SENIOR VICE PRESIDENT

Firm: SYMMES MAINI & McKEE

Address: 1000 MASSACHUSETTS AVE.

CAMBRIDGE, MA. 02138

Phone: 617. 547. 5400

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

Applicant: Westgate Shopping PLAZA Date: 5/9/08

Address: 1354 Congress St C-B-L: 191-B-19

CHECK-LIST AGAINST ZONING ORDINANCE

	Bank Drive-Thru	Restaurant Drive-Thru
Date -	197-B-19	197-B-18
Zone Location - B-2		
Interior or corner lot -		
Proposed Use/Work -	New 3000 ft Bldg	existing 2,474 ft Bldg
Sewage Disposal - City		
Lot Street Frontage - 50' min	≈ 130' scaled	≈ 145' scaled
Front Yard - No Min, but should not exceed the average Depth of either side	10' scaled at closest 12' on further end could extend to 29'	29' scaled (26.5' Req) currently legally nonconforming for front set back
Rear Yard - 10' (Does not Abut Res)	58' scaled (B' to main Bldg, 60' to drive thru)	10' exactly
Side Yard - None Req (Does Not Abut Residential)	ok 7' scaled	ok
Projections -	—	—
Width of Lot - None Req		
Height - 45' max	well less	well less
Lot Area - 10,000 ft min	19,246 ft given	22,092 ft given
~~Lot Coverage~~/Impervious Surface - 80% max	~~19,246 ft given~~ Needs 3849.2 ft pervious has at least 3472 ft pervious	~~22,092 ft given~~ Needs 4418.4 ft pervious has at least 4822 ft pervious
Area per Family - N/A		
Off-street Parking - rest: 1 per 150 ft retail: 1st 2,000 ft - Ø req offices: 1 per 334 ft	3000 ÷ 334 = 8.98 or 9 spaces req — 19 spaces shown	2474 ft ÷ 150 = 16.50 or 17 spc req 20 spc shown
Loading Bays - N/A		
Site Plan - 2008-0027		
Shoreland Zoning/ Stream Protection -	N/A	N/A
Flood Plains - Panel 13 - Zone C	N/A	N/A

MEMORANDUM

To: FILE

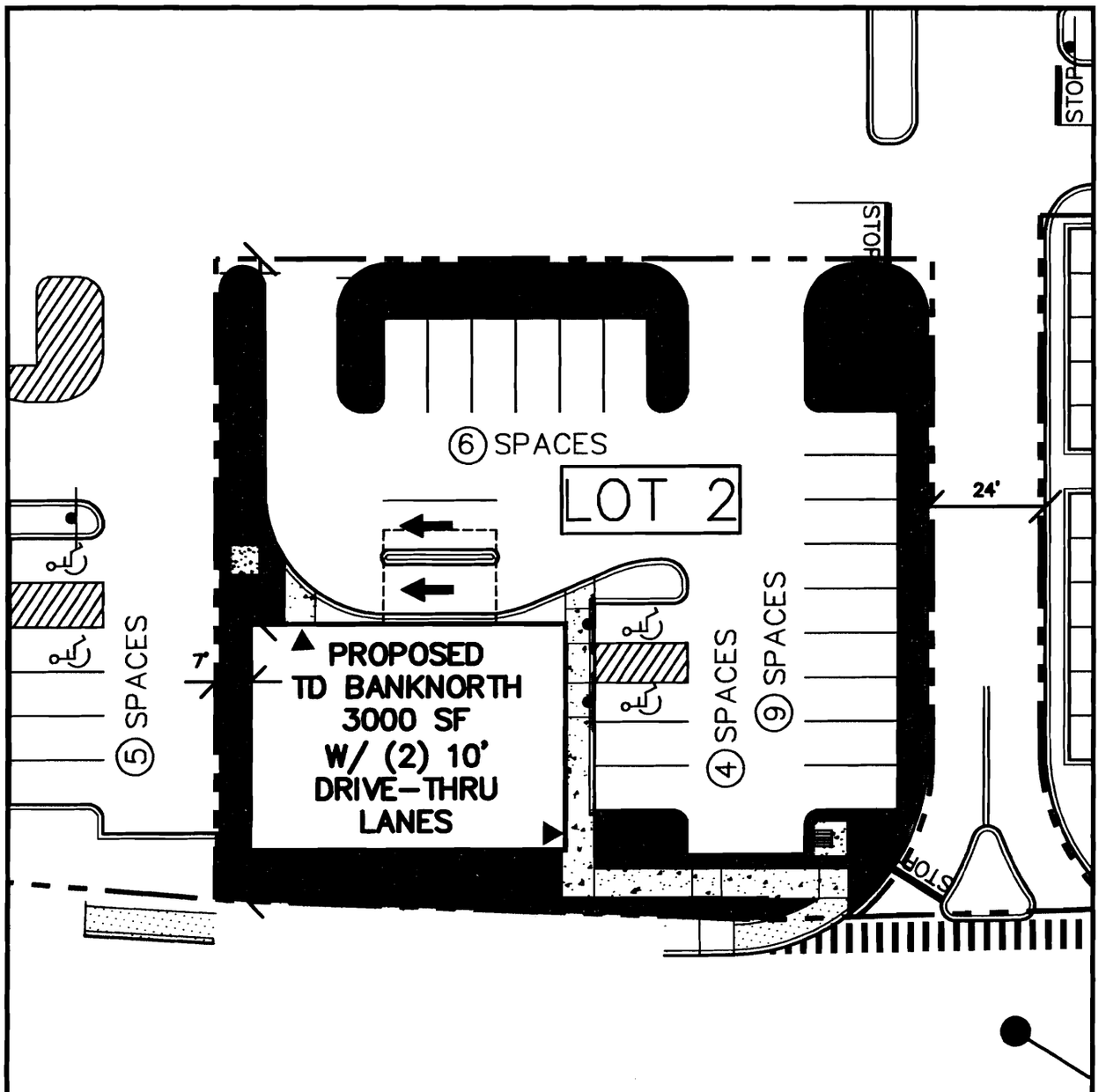
From: Marge Schmuckal **Dept:** Zoning

Subject: Application ID: 2008-0027

Date: 5/13/2008

The applicant has e-mailed me revised figures and a colorized version of what was included within the impervious/pervious calculations for THE BANK. I have accepted the areas that are being included within the pervious area and confirmed that the definition of the impervious surface is being met as shown. THE BANK, Lot #2, is meeting all the requirements of the B-2 Zone and can stand alone as meeting zoning requirements as an individual lot if sold off separately.

Marge Schmuckal
Zoning Administrator



Appledore Engineering Inc.
Pease International Tradeport
15 Rye Street, Suite 305
Portsmouth, New Hampshire 03801
(603) 433-8818 ael@appledoreeng.com

DATE: MAY 12, 2008
PROJECT No.: 2256

WESTGATE PLAZA
CONGRESS ST.
PORTLAND, ME

LOT 2: COVERAGE

SCALE 1:30

1 OF 1

FILE: 2256-SITE.DWG

From: Marge Schmuckal
To: Karen Johnson; Molly Casto
Date: 5/13/2008 11:03:40 AM
Subject: Re: FW: TD Banknorth- Open Space

Thank you Karen for clarifying what was used for the impervious surface calculations. I would accept this revision as meeting the impervious requirements of the B-2 Zone for Lot #2. Admittedly, my calculations were crude and I wanted to confirm what was included within the calculations. You did not include areas that the ordinance does not permit as pervious. I will revise my memo to Molly.

Marge

>>> "Karen Johnson" <karen@chartweb.com> 5/13/2008 10:25:26 AM >>>
Molly - I am sure you are swamped today but wanted you to see Brad's calculations before the workshop.

Marge - if you have a chance to review or any questions, please call. Brad has highlighted only those areas counted towards green space as green and has not counted islands that are smaller than 200 sf and we are at 77.48%. This revised sketch also includes the new ramp for the hc and ped access and a minor adjustment in the bike rack location to better facilitate the ramp access, the original plan that you reviewed shows this area at 74.6%. The only lot that was close is Lot 1 which is 79.5% but we have new landscaped islands we are adding which will further reduce the impervious area. The calculations are based on cad drawings which could be provided for verification.

Thanks

Karen

From: Bradlee Mezquita, P.E. [mailto:BMezquita@appledoreeng.com]
Sent: Monday, May 12, 2008 5:25 PM
To: karen@chartweb.com
Subject: TD Banknorth- Open Space

We get 77.5% for the open space on the bank parcel. The areas that we counted are shown in green.

Pervious area: 4333.69 (22.52%)
Impervious area: 14912.72 (77.48%)
Lot area: 19246.41

Brad Mezquita, PE
Appledore Engineering, Inc.
15 Rye St, Suite 305, Portsmouth, NH 03801
TEL: (603)433-8818
Email: <mailto:bmezquita@appledoreeng.com> bmezquita@appledoreeng.com
www.appledoreeng.com

From: "Karen Johnson" <karen@chartweb.com>
To: "Molly Casto" <MPC@portlandmaine.gov>, "Marge Schmuckal" <mes@portlandmaine.gov>
Date: 5/13/2008 10:26:27 AM
Subject: FW: TD Banknorth- Open Space

Molly - I am sure you are swamped today but wanted you to see Brad's calculations before the workshop.

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Lot area: 19246.41

Brad Mezquita, PE
Appledore Engineering, Inc.
15 Rye St, Suite 305, Portsmouth, NH 03801
TEL: (603)433-8818
Email: <mailto:bmezquita@appledoreeng.com> bmezquita@appledoreeng.com
www.appledoreeng.com

From: Tammy Munson
To: Chris Hanson
Date: 8/22/2008 11:11:01 AM
Subject: TD Banknorth

I couldn't find the permit packet for the above with the designers info and email address. If you know where it is could you please email the designer regarding the following items we reviewed:

1. We need a statement of special inspections
2. We need a new geotechnical report (as the specs called out on the plan do not match what is shown on the report).
3. SPEC BOOK

Maybe the front staff coul help you find it. Thanks.

From: Tammy Munson
To: Chris Hanson
Date: 8/22/2008 11:11:01 AM
Subject: TD Banknorth

I couldn't find the permit packet for the above with the designers info and email address. If you know where it is could you please email the designer regarding the following items we reviewed:

1. We need a statement of special inspections ✓
2. We need a new geotechnical report (as the specs called out on the plan do not match what is shown on the report).

Maybe the front staff coul help you find it. Thanks.

Specs

Call Mike Nugent
423-4056

Called 8:45
Reminder 9/8/08

IH10 Congress
TD BankNorth
call about
P-Review
JB

ARCHITECTURE
ENGINEERING
PLANNING
INTERIORS

SMMA SYMMES MAINI & MCKEE ASSOCIATES

LETTER OF TRANSMITTAL

Project #: 07133.01
Date: 9-12-08

Project: TD Banknorth, Westgate Plaza, 1410 Congress Street
To: City of Portland- Inspections Division
389 Congress Street, Room 315
Portland, Maine 04101

Attention: Christopher Hanson
Regarding: Geotechnical Report

THESE ARE TRANSMITTED AS CHECKED BELOW:

❑ Attached ❑ Under separate cover via
❑ Shop Drawings ❑ Prints/Plans ❑ Specifications ❑ Samples
❑ Copy of letter ❑ Change Order ❑ Diskettes ☒ Other:

COPIES	DATE	NO.	DESCRIPTION
1	5-30-08		Geotechnical Report- prepared by S.W. Cole

SEP 16 2008

THESE ARE TRANSMITTED AS CHECKED BELOW:

❑ For approval ❑ Approved as submitted ❑ Resubmit ___ copies for approval
☒ For your use ❑ Approved as noted ❑ Submit ___ copies for distribution
❑ As requested ❑ Returned for corrections ❑ Return ___ corrected prints
❑ For review and comment ❑ Other:
☒ FOR BIDS DUE ON: July 16, 2008 ❑ PRINTS RETURNED AFTER LOAN TO US

REMARKS

Chris- Please find the geotechnical report, as requested.

Feel free to contact me if you need further information.

Thank you,

COPIES TO: (MF) SIGNED: Jennifer Roy

If enclosures are not as noted, kindly notify us at once.
\\P:\2007\07133\05-TRANS\Lot_Tocity_2008-0912.Doc

1000 Massachusetts Avenue, Cambridge, Massachusetts 02138 T 617.547.5400 F 617.354.5758

GEOTECHNICAL ENGINEERING SERVICES
PROPOSED BANK BUILDING
WESTGATE PLAZA
CONGRESS STREET
PORTLAND, MAINE

08-0395 **June 10, 2008**

Prepared for:
TD Banknorth, NA
Attention: Emily Clark
70 Gray Road
West Falmouth, ME 04105-2019

Prepared by:

S.W.COLE ENGINEERING INC

286 Portland Road
Gray, ME 04039

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

08-0395

June 10, 2008

TD Banknorth, NA
Attention: Emily Clark
70 Gray Road
West Falmouth, ME 04105-2019

SEP 16 2008

Subject: Geotechnical Engineering Services
Proposed Bank Building
Westgate Plaza
Congress Street
Portland, Maine

Dear Emily:

In accordance with our Agreement, dated May 13, 2008, we have made a geotechnical investigation for the proposed bank building at Westgate Plaza on Congress Street in Portland, Maine. This report summarizes our findings and recommendations and its contents are subject to the limitations set forth in Attachment A.

1.0 INTRODUCTION

1.1 Scope of Work

The purpose of our work was to obtain subsurface information in order to develop geotechnical recommendations for foundations and earthwork associated with the proposed construction. Our scope of work included five test boring explorations, soils laboratory testing, a geotechnical evaluation of the subsurface findings and preparation of this report.

1.2 Proposed Construction

Based on information you provided, we understand plans call for construction of a one-story bank building. We understand the building will occupy a plan area of about 3,000 square feet. A two bay drive through is planned on the south side of the building and an underground storm water recovery system is planned near the southeasterly corner of the building. We understand finished floor elevation will be about 48 feet (project datum). Details of the proposed site feature are shown on the "Exploration Location Plan" attached as Sheet 1.

3.4 Seismic and Frost Conditions

According to the 2006 International Building Code, we interpret the subsurface conditions to correspond to a seismic Site Class E. The design freezing index for the Portland, Maine area is about 1,250-Fahrenheit-degree-days, which corresponds to a frost penetration depth of about 4.5 feet.

4.0 EVALUATIONS AND RECOMMENDATIONS

4.1 General

Based on the subsurface findings and our understanding of the proposed construction, it is our opinion that the proposed building can be supported on spread footing foundations. However the existing fill, existing utilities, and other structures will need to be removed beneath the entire building footprint. Existing fills at the site range from about 6 to 10 feet in depth. The existing fill may be suitable for reuse beneath the building provided organics, concrete, and other deleterious material are removed from the fill prior to backfilling.

4.2 Site and Subgrade Preparation

Site preparation should begin with construction of an erosion control system to protect drainage ways and areas outside the construction limits. All pavement, existing utilities, relic foundations, fill and other unsuitable material should be removed from beneath the proposed building area. Over-excavation below the proposed building should continue laterally outward 1 foot for every 1 foot of excavation below the bottom of perimeter footings (1V to 1H bearing splay). Below the fill, excavation may encounter the native silty clay soils. If encountered at footing subgrade elevation, we recommend the native silty clay be overexcavated using a smooth-edged bucket by at least 18 inches below foundations. Care must be exercised during construction to reduce disturbance of the native clay soils.

Existing fills beneath pavements and sidewalks should be densified using a smooth drum vibratory roller. Soils that become soft or yield during the densification process should be overexcavated and backfilled with Granular Borrow.

We recommend that fill used to backfill the overexcavated building area and to raise paved areas consist of sand and gravel meeting the requirements of MDOT Standard Specifications 703.19 Granular Borrow.

drains must be routed in separate non-perforated drain lines such that roof drainage is not introduced into the foundation drainage system.

4.5 Floor Slabs

We recommend that the 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 (minimum) 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 Entrance Slabs and Sidewalks

Entrance slabs and sidewalks should be designed to reduce the effects of differential frost action between doorways and entrances. We recommend that excavations beneath the entire length and width of entrances, sidewalks, and the exterior drive-thru slab continue to at least 4.5 feet below finish grade. These areas should be backfilled with compacted non-frost susceptible Structural Fill to reduce abrupt frost 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 adjacent pavement subbase or sidewalk base at a 3H:1V slope or flatter.

4.7 Pavement

Although traffic loading information was not made available to us, we anticipate traffic loading to consist of passenger vehicles and light delivery vehicles. Thus, we offer the following pavement sections based on our experience with similar construction.

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

Crushed stone should meet the specifications for MDOT 703.22 Underdrain Type C with the following gradation:

Crushed Stone	
Sieve Size	**Percent Finer by Weight**
1 inch	100
3/4 inch	90 to 100
3/8 inch	0 to 75
No. 4	0 to 25
No. 200	0 to 5

Granular Borrow used beneath building and pavement areas should meet the requirements of MDOT Standard Specifications 703.19.

The on-site silty sand with some gravel may be suitable for re-use as granular borrow. This material, if re-used, should be segregated and stockpiled during construction and grain-size analyses should be performed to determine their suitability for re-use on-site. Re-use suitability will also be dependent on moisture content at the time of construction. The on-site soils are not suited for reuse during wet and freezing weather in which case Structural Fill should be used.

Fill and backfill should be placed in horizontal lifts and be compacted. Lift thickness should be such that desired density is achieved throughout the lift thickness with 3 to 5 passes of the compaction equipment. Fill beneath building and paved areas, including foundation backfill

Attachment A - Limitations

This report has been prepared for the exclusive use of TD Banknorth for specific application to the Proposed Bank Building at Westgate Plaza on Congress 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.

S.W.COLE ENGINEERING, INC.

BORING LOG

BORING NO.: B-1
SHEET: 1 OF 1
PROJECT NO.: 08-0395
DATE START: 5/20/2008
DATE FINISH: 5/20/2008
ELEVATION: 47' ±
SWC REP.: MPL

PROJECT / CLIENT: PROPOSED BANK BUILDING, WESTGATE PLAZA / TD BANKNORTH
LOCATION: CONGRESS STREET, PORTLAND, ME
DRILLING CO. : GREAT WORKS TEST BORING DRILLER: JEFFREY LEE

	TYPE	SIZE I.D.	HAMMER WT.	HAMMER FALL
CASING:	HSA	6"		
SAMPLER:	SS	1 3/8"	140 lbs	30"
CORE BARREL:				

WATER LEVEL INFORMATION
SOILS APPEAR SATURATION @ 7'

CASING BLOWS PER FOOT	SAMPLE NO.	PEN.	REC.	DEPTH @ BOT	SAMPLER BLOWS PER 6" 0-6	6-12	12-18	18-24	DEPTH	STRATA & TEST DATA
									0.2'	ASPHALT PAVEMENT
									2.0'	~DENSE~ DARK BROWN SILTY SAND, SOME GRAVEL (FILL)
	1D	24"	18"	2.5'	14	24	28	31		BROWN SILTY SAND, TRACE GRAVEL (FILL)
	2D	24"	4"	7.0'	4	4	3	3		~LOOSE~
									10.0'	
	3D	24"	14"	12.0'	1	1	2	2		BROWN SILTY CLAY
										~STIFF TO MEDIUM STIFF~
	4D	24"	20"	17.0'	3	1 / 12"		1	17.0'	
										BOTTOM OF EXPLORATION @ 17.0'

SAMPLES:
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3.5" SHELBY TUBE

SOIL CLASSIFIED BY:
[ ] DRILLER - VISUALLY
[X] SOIL TECH. - VISUALLY
[ ] LABORATORY TEST

REMARKS:
STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

BORING NO.: B-1

S.W.COLE ENGINEERING, INC.

BORING LOG

BORING NO.: B-2
SHEET: 2 OF 2
PROJECT NO.: 08-0395
DATE START: 5/20/2008
DATE FINISH: 5/20/2008
ELEVATION: 47' ±
SWC REP.: MPL

PROJECT / CLIENT: PROPOSED BANK BUILDING, WESTGATE PLAZA / TD BANKNORTH
LOCATION: CONGRESS STREET, PORTLAND, ME
DRILLING CO.: GREAT WORKS TEST BORING DRILLER: JEFFREY LEE

	TYPE	SIZE I.D.	HAMMER WT.	HAMMER FALL
CASING:	CASED	6"		
SAMPLER:	SS	1 3/8"	140 lbs	30"
CORE BARREL:				

WATER LEVEL INFORMATION
SOILS APPEAR SATURATION @ 7'

CASING BLOWS PER FOOT	SAMPLE NO.	SAMPLE PEN.	SAMPLE REC.	SAMPLE DEPTH @ BOT	SAMPLER BLOWS PER 6" 0-6	6-12	12-18	18-24	DEPTH	STRATA & TEST DATA
										GRAY SILTY CLAY CONTINUES
										~PROBABLE SAND SEAMS~
									~61.5'	ROD PROBE PROBABLE SAND DEPTH / BLOWS PER FOOT 61.5' - 62.5' 36 62.5' - 63.5' 25 63.5' - 64.5' 26 64.5' - 65.5' 26 65.5' - 66.5' 32 66.5' - 67.5' 34 67.5' - 68.5' 44
									68.5'	BOTTOM OF EXPLORATION @ 68.5'

SAMPLES:
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3.5" SHELBY TUBE

SOIL CLASSIFIED BY:
[ ] DRILLER - VISUALLY
[X] SOIL TECH. - VISUALLY
[ ] LABORATORY TEST

REMARKS:
STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

BORING NO.: B-2

S.W.COLE ENGINEERING, INC.

BORING LOG

BORING NO.: B-4
SHEET: 1 OF 1
PROJECT NO.: 08-0395
DATE START: 5/20/2008
DATE FINISH: 5/20/2008
ELEVATION: 47' ±
SWC REP.: MPL

PROJECT / CLIENT: PROPOSED BANK BUILDING, WESTGATE PLAZA / TD BANKNORTH
LOCATION: CONGRESS STREET, PORTLAND, ME
DRILLING CO. : GREAT WORKS TEST BORING
DRILLER: JEFFREY LEE

	TYPE	SIZE I.D.	HAMMER WT.	HAMMER FALL
CASING:	HSA	6"		
SAMPLER:	SS	1 3/8"	140 lbs	30"
CORE BARREL:				

WATER LEVEL INFORMATION
SOILS APPEAR SATURATION @ 7'

CASING BLOWS PER FOOT	SAMPLE NO.	PEN.	REC.	DEPTH @ BOT	SAMPLER BLOWS PER 6" 0-6	6-12	12-18	18-24	DEPTH	STRATA & TEST DATA
	1D	6"	3"	1.5'	14				0.2'	ASPHALT PAVEMENT
									1.5'	BROWN SILTY SAND, SOME GRAVEL (FILL)
										BOTTOM OF EXPLORATION @ 1.5'
										ABANDONED BOREHOLE; POSSIBLE DRAIN PIPE

SAMPLES:
D = SPLIT SPOON
C = 2" SHELBY TUBE
S = 3" SHELBY TUBE
U = 3.5" SHELBY TUBE

SOIL CLASSIFIED BY:
[ ] DRILLER - VISUALLY
[X] SOIL TECH. - VISUALLY
[ ] LABORATORY TEST

REMARKS:
STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

BORING NO.: B-4

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
f	-	fines content (percent by weight passing U.S. No. 200 Sieve)

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.

From: "Roy, Jennifer" <jroy@smma.com>
To: "Chris Hanson" <CSH@portlandmaine.gov>
Date: 10/2/2008 7:55:58 AM
Subject: Re: TDBN-Westgate Plaza 1410 Congress Street (PNUM:07133)Building Permit

Good Morning Chris,

I did receive your email on Monday and I am just waiting for a few more answers from my consultants. I am hoping to have my responses back to you by the end of the day today. In addition, I have a package that I am overnighting to you with specifications, and other requested information.

Feel freeto contact me with any additional questions.

Thank you.

Jennifer Roy
Architecture
SMMA
1000 Mass. Ave Cambridge MA
t: 617.520.9261
m: 617.233.9962
f: 617.354.5758
Sent from Treo

-----Original Message-----

From: "Chris Hanson" <CSH@portlandmaine.gov>
Subj: Re: TDBN-Westgate Plaza 1410 Congress Street (PNUM:07133)Building Permit
Date: Thu Oct 2, 2008 7:31 am
Size: 1K
To: "jroy@smma.com" <jroy@smma.com>

Jennifer did you get my e-mail and attached list of requests? Chris

christopher hanson
code enforcement officer

>>> "Roy, Jennifer" <jroy@smma.com> 09/29 7:54 AM >>>
Good Morning Chris-

I apologize for any confusion; I was on vacation last week.

I also understand that there was some back and forth regarding the permit status; however, we have confirmed that the client would like to
proceed with the building permit process. Thus, per our last phone conversation, I will mail to you the building specifications and revised
structural plan indicating the appropriate seismic class (which was correct on the Certificate of Design Application) as well as the Statement of Special Inspections.

Please let me know if you have any further questions, or need any additional information.

Thank you,

Jennifer Roy

Architecture

Symmes Maini & McKee Associates, Inc.

1000 Massachusetts Avenue, Cambridge, MA 02138

t: 617.520.9261

m: 617.233.9962

f: 617.354.5758

jroy@smma.com

www.smma.com <http://www.smma.com/>

ARCHITECTURE
ENGINEERING
PLANNING
INTERIORS

SMMA SYMMES MAINI & MCKEE ASSOCIATES

MEMORANDUM

To: Chris Hanson
From: Jennifer Roy
Project: TDBN- Portland ME- Westgate Plaza
Re: Plan Review Questions and Responses
Distribution: JR, SKD, SSS, Emily Clark (MF)

Date: October 6, 2008
Project No.: 07133.00

In response to email dated 9-29-08:

1. **Please show calculations used to get from site class "E" to site class "C"**

   The Site Soil Classification is "E" not D as noted on the permit drawings, (D was a typographical error). This value was from the most recent geotechnical report prepared by SW Cole Engineering Inc. dated June 10th 2008, and from the Geotechnical report by JGI Eastern Inc. dated October 30, 2007. According to both reports these soils are not subject to liquefaction under seismic ground motion.

   Given the relative light nature of the one story building, both the lateral seismic and wind forces are under 20kips. All connections for braced frame members have approximately 3 times as much allowable capacity

2. **S.W. Cole based seismic site class using IBC 2006.Portland has not adopted 2006 as of yet please Justify or request a waiver to use IBC 2006**

   Please see Attachment I prepared by S.W.Cole for response

3. **On the submitted plans sht. SO.O1 under General Notes "Foundations" it refers to a Geotechnical report prepared by JGI Eastern, Inc. dated Oct. 30, 2007, please advice or update**

   A geotechnical report was commissioned by the landlord of the entire site (see Attachment B: report by JGI Eastern attached) Subsequently, TD Banknorth hired S.W. Cole to prepare a geotechnical report of their particular site which is the report that was previously sent to the Planning Department for review

4. **The North wall shows a distance of 7' to the property line. AS per Table704.8 justify 25% max. ext. wall openings**

   Please see Attachment C illustrating square footages of openings at North wall (Called East Elevation on SMMA plans).

ARCHITECTURE
ENGINEERING
PLANNING
INTERIORS

SMMA SYMMES MAINI & MCKEE ASSOCIATES

LETTER OF TRANSMITTAL

Project #: 07133.01
Date: 10-07-08

Project: TD Banknorth, Westgate Plaza, 1410 Congress Street
To: City of Portland- Inspections Division
389 Congress Street, Room 315
Portland, Maine 04101

Attention: Christopher Hanson
Regarding: Additional Requested Information

THESE ARE TRANSMITTED AS CHECKED BELOW:

❑ Attached	❑ Under separate cover via		
❑ Shop Drawings	☒ Prints/Plans	☒ Specifications	❑ Samples
❑ Copy of letter	❑ Change Order	❑ Diskettes	☒ Other:

COPIES	DATE	NO.	DESCRIPTION
1	10-06-08		Responses to questions from 9-29-08 email
1			Attachments A-I

THESE ARE TRANSMITTED AS CHECKED BELOW:

❑ For approval	❑ Approved as submitted	❑ Resubmit	copies for approval
☒ For your use	❑ Approved as noted	❑ Submit	copies for distribution
❑ As requested	❑ Returned for corrections	❑ Return	corrected prints
❑ For review and comment		❑ Other:	
❑ FOR BIDS DUE ON:		❑ PRINTS RETURNED AFTER LOAN TO US	

REMARKS

Feel free to contact me if you need further information.

Thank you,

COPIES TO: (MF)

SIGNED: Jennifer Roy (617) 520-9261

If enclosures are not as noted, kindly notify us at once.

\\P:\2007\07133\05-TRANS\Lot_Tocity_2008-1007.Doc

1000 Massachusetts Avenue, Cambridge, Massachusetts 02138 T 617.547.5400 F 617.354.5758

Statement of Special Inspections

Project: *TD Banknorth- Westgate Plaza*

Location: *1410 Congress Street, Portland ME 04101*

Owner: *TD Banknorth*

Design Professional in Responsible Charge: *Symmes, Maini & McKee Associates*

This *Statement of 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 Special Inspection services applicable to this project as well as the name of the Special Inspection Coordinator and the identity of other approved agencies to be retained for conducting these inspections and tests. This *Statement of Special Inspections* encompass the following disciplines:

☒ Structural ☐ Mechanical/Electrical/Plumbing

☐ Architectural ☐ Other: _____

The Special Inspection Coordinator shall keep records of all 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 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 Design Professional in Responsible Charge.

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

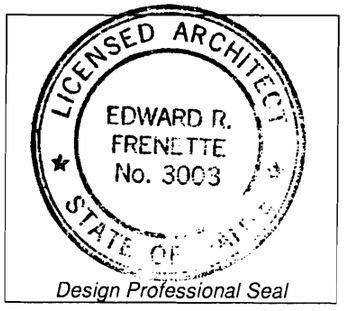
Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency: or ☒ per attached schedule.

Prepared by:

Edward Frenette
(type or print name)

Edward R Frenette 10·7·08
Signature Date



Design Professional Seal

Owner's Authorization:

Signature Date

Building Official's Acceptance:

Signature Date

Schedule of Inspection and Testing Agencies

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

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

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. **Special Inspection Coordinator**	*TBD*	*TBD*
2. Inspector		
3. Inspector		
4. Testing Agency		
5. Testing Agency		
6. Other		

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.

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/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

Exterior Design Institute (EDI) Certification

EDI-EIFS	EIFS Third Party Inspector

Other

Soils and Foundations

Item	Agency # (Qualif.)	Scope
1. Shallow Foundations	*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. Controlled Structural Fill	*PE/GE*	*Perform sieve tests (ASTM D422 & D1140) and modified Proctor tests (ASTM D1557) of each source of fill material.* *Inspect placement, lift thickness and compaction of controlled fill.* *Test density of each lift of fill by nuclear methods (ASTM D2922)* *Verify extent and slope of fill placement.*
3. Deep Foundations	*PE/GE*	*Inspect and log pile driving operations. Record pile driving resistance and verify compliance with driving criteria.* *Inspect piles for damage from driving and plumbness.* *Verify pile size, length and accessories.* *Inspect installation of drilled pier foundations. Verify pier diameter, bell diameter, lengths, embedment into bedrock and suitability of end bearing strata.*
4. Load Testing		
4. Other:		

Cast-in-Place Concrete

Item	Agency # (Qualif.)	Scope
1. Mix Design	*ACI-CCI ICC-RCSI*	*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.*
2. Material Certification		
3. Reinforcement Installation	*ACI-CCI ICC-RCSI*	*Inspect size, spacing, cover, positioning and grade of reinforcing steel. 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. Post-Tensioning Operations	*ICC-PCSI*	*Inspect placement, stressing, grouting and protection of post-tensioning tendons. Verify that tendons are correctly positioned, supported, tied and wrapped. Record tendon elongations.*
5. Welding of Reinforcing	*AWS-CWI*	*Visually inspect all reinforcing steel welds. Verify weldability of reinforcing steel. Inspect preheating of steel when required.*
6. Anchor Rods		*Inspect size, positioning and embedment of anchor rods. Inspect concrete placement and consolidation around anchors.*
7. Concrete Placement	*ACI-CCI ICC-RCSI*	*Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.*
8. Sampling and Testing of Concrete	*ACI-CFTT ACI-STT*	*Test concrete compressive strength (ASTM C31 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064).*
9. Curing and Protection	*ACI-CCI ICC-RCSI*	*Inspect curing, cold weather protection and hot weather protection procedures.*
10. Other:		

Masonry

Required Inspection Level: ☐ 1 ☐ 2

Item	Agency # (Qualif.)	Scope
1. Material Certification		
2. Mixing of Mortar and Grout	*ICC-SMSI*	*Inspect proportioning, mixing and retempering of mortar and grout.*
3. Installation of Masonry	*ICC-SMSI*	*Inspect size, layout, bonding and placement of masonry units.*
4. Mortar Joints	*ICC-SMSI*	*Inspect construction of mortar joints including tooling and filling of head joints.*
7. Weather Protection	*ICC-SMSI*	*Inspect cold weather protection and hot weather protection procedures. Verify that wall cavities are protected against precipitation.*
9. Evaluation of Masonry Strength	*ICC-SMSI*	*Test compressive strength of mortar and grout cube samples (ASTM C780).* *Test compressive strength of masonry prisms (ASTM C1314).*
10. Anchors and Ties	*ICC-SMSI*	*Inspect size, location, spacing and embedment of dowels, anchors and ties.*
11. Other:		

Structural Steel

Item	Agency # (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures ☐ Fabricator Exempt	*AWS/AISC-SSI ICC-SWSI*	*Review shop fabrication and quality control procedures.*
2. Material Certification	*AWS/AISC-SSI ICC-SWSI*	*Review certified mill test reports and identification markings on wide-flange shapes, high-strength bolts, nuts and welding electrodes*
3. Open Web Steel Joists		*Inspect installation, field welding and bridging of joists.*
4. Bolting	*AWS/AISC-SSI ICC-SWSI*	*Inspect installation and tightening of high-strength bolts. Verify that splines have separated from tension control bolts. Verify proper tightening sequence. Continuous inspection of bolts in slip-critical connections.*
5. Welding	*AWS-CWI* *ASNT*	*Visually inspect all welds. Inspect pre-heat, post-heat and surface preparation between passes. Verify size and length of fillet welds.* *Ultrasonic testing of all full-penetration welds.*
6. Shear Connectors	*AWS/AISC-SSI ICC-SWSI*	*Inspect size, number, positioning and welding of shear connectors. Inspect suds for full 360 degree flash. Ring test all shear connectors with a 3 lb hammer. Bend test all questionable studs to 15 degrees.*
7. Structural Details	*PE/SE*	*Inspect steel frame for compliance with structural drawings, including bracing, member configuration and connection details.*
8. Metal Deck	*AWS-CWI*	*Inspect welding and side-lap fastening of metal roof and floor deck.*
9. Other:		

MAPQUEST

Sorry! When printing directly from the browser your directions or map may not print correctly. For best results, try clicking the Printer-Friendly button.

START 15 Sleeper St
Boston, MA 02210-1225

END 34 Washington St
Wellesley, MA 02481-1934

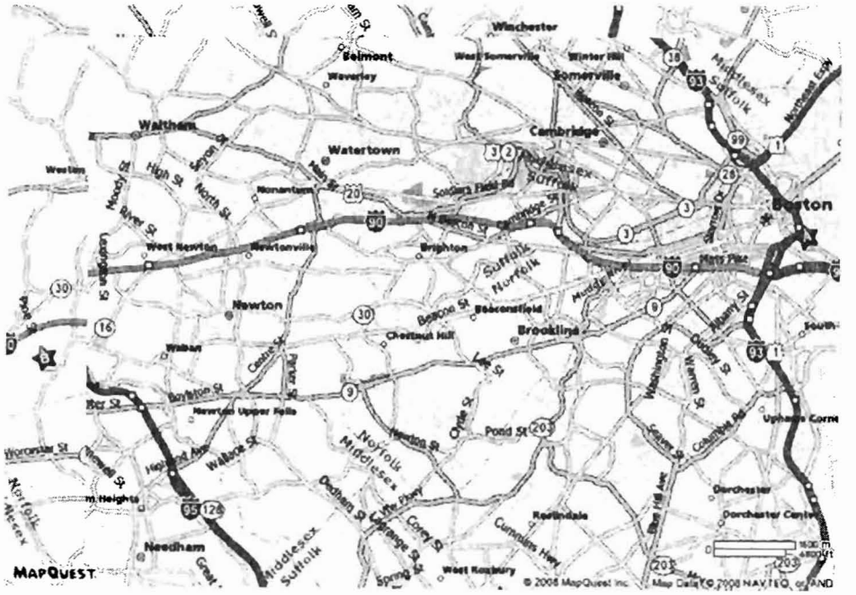
Total Estimated Time: 22 minutes
Total Estimated Distance: 12.85 miles

▼ **Directions from A to B:**

START	1: Start out going SOUTHWEST on SLEEPER ST toward CONGRESS ST.	0.0 mi
	2: Turn RIGHT onto CONGRESS ST.	0.3 mi
	3: Turn SLIGHT RIGHT onto ATLANTIC AVE.	0.0 mi
	4: Turn LEFT onto PEARL ST.	0.0 mi
	5: Turn LEFT onto PURCHASE ST/JOHN F FITZGERALD SURFACE RD.	0.0 mi
	6: Turn LEFT onto CONGRESS ST.	0.0 mi
RAMP	7: Take the ramp toward I-93 SOUTH/QUINCY/I-90 WEST/WORCESTER.	0.5 mi
EXIT	8: Take the exit toward I-90 WEST/MASS PIKE/ALBANY ST.	0.1 mi
I-90	9: Merge onto I-90 W/MASS PIKE/MASSACHUSETTS TURNPIKE toward WORCESTER (Portions toll).	9.2 mi
EXIT	10: Take the RT-16 W exit, EXIT 16, toward WELLESLEY.	0.4 mi
	11: Turn SLIGHT RIGHT onto MA-16 W/WASHINGTON ST.	2.3 mi
END	12: End at 34 Washington St Wellesley, MA 02481-1934	

Estimated Time: 22 minutes Estimated Distance: 12.85 miles

Total Estimated Time: 22 minutes **Total Estimated Distance:** 12.85 miles



E

COM*check* Software Version 3.5.3

Envelope Compliance Certificate

90.1 (2004) Standard

Report Date: 10/07/08

Data filename: P:\2007\07133\08-CODES\ComCheck.cck

Section 1: Project Information

Project Type: **New Construction**

Project Title : TD Banknorth- Westgate Plaza

Construction Site:
1410 Congress Street
Portland, ME 04101

Owner/Agent:
Emily Clark
TD Banknorth
70 Gray Road
West Falmouth, ME 04105
207-317-5103
Emily.Clark@tdbanknorth.com

Designer/Contractor:
Jennifer Roy
Symmes, Maini & McKee
1000 Massachusetts Ave
Cambridge, MA 02138
617-520-9261
jroy@smma.com

Section 2: General Information

Building Location (for weather data):	**Portland, Maine**
Heating Degree Days (base 65 degrees F):	**7378**
Cooling Degree Days (base 50 degrees F):	**1943**
Building Type for Envelope Requirements:	**Non-Residential**
Vertical Glazing / Wall Area Pct.:	**24%**

Building Type	Floor Area
Retail	3000

Section 3: Requirements Checklist

Envelope PASSES: Design 20% better than code.

Climate-Specific Requirements:

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof 1: Insulation Entirely Above Deck	3000	---	30.0	0.032	0.063
Exterior Wall 1: Steel-Framed, 16" o.c.	2430	19.0	5.0	0.071	0.084
Window 1: Metal Frame:Double Pane with Low-E, Clear, Fixed, SHGC 0.49	526	---	---	0.440	0.570
Door 1: Glass, Clear, SHGC 0.49	48	---	---	0.440	0.570
Door 2: Insulated Metal, Swinging	21	---	---	0.350	0.700
Floor 1: Slab-On-Grade:Unheated	221	---	---	---	---

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

Insulation:

- ☐ 1. Open-blown or poured loose-fill insulation has not been used in attic roof spaces with ceiling slope greater than 3 in 12.
- ☐ 2. Wherever vents occur, they are baffled to deflect incoming air above the insulation.
- ☐ 3. Recessed lights, equipment and ducts are not affecting insulation thickness.
- ☐ 4. No roof insulation is installed on a suspended ceiling with removable ceiling panels.
- ☐ 5. All exterior insulation is covered with protective material.
- ☐ 6. Cargo and loading dock doors are equipped with weather seals.

I

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

MEMORANDUM

To: Emily Clark / TD Banknorth
From: Matthew Lilley / S. W. COLE ENGINEERING, INC
Project No.: 08-0395
Date: 10/6/2008
Subject: Plan Review Questions and Response Item No. 2
Proposed Bank – Westgate Plaza, Portland, ME

We have reviewed item no. 2 from the Plan Review Questions and Responses. We understand that the City of Portland has not adopted IBC 2006 at this time and is currently using IBC 2003. The seismic site class given in our geotechnical report was based on IBC 2006, however, the methodology used to calculate seismic site class is the same in both IBC 2003 (refer to table 1615.1.1 and section 1615.1.5) and IBC 2006 (refer to table 1613.5.2 and section 1613.5.5). The seismic site class as calculated is appropriate for both IBC 2003 and IBC 2006.

If you have any questions, please do not hesitate to contact us.

GRAY, ME OFFICE
286 Portland Road, Gray, ME 04039•Tel (207) 657-2866•Fax (207) 657-2840•E-Mail infogray@swcole.com•www.swcole.com
Other offices in Augusta, Bangor and Caribou, Maine & in Somersworth, New Hampshire

BUILDING PERMIT INSPECTION PROCEDURES

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

to schedule your inspections as agreed upon

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

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

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

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

__X__ **Footing/Building Location Inspection: Prior to pouring concrete or setting precast piers**

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

__X__ **Framing/Rough Plumbing/Electrical: Prior to Any Insulating or drywalling**

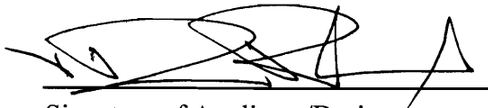
__X__ **Final/Certificate of Occupancy: Prior to any occupancy of the structure or use. NOTE: There is a $75.00 fee per inspection at this point.**

__X__ **The final report of Special Inspections shall be submitted prior to the final inspection or the issuance of the Certificate of Occupancy**

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

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

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



Signature of Applicant/Designee

10/24/08
Date

Signature of Inspections Official

Date

CBL: 197 B019001 **Building Permit #:** 08-0838

B

JGI
EASTERN, Inc.
A Terracon COMPANY
201 Hammer Mill Road
Rocky Hill, CT 06067
Phone (860) 721-1900
Fax (860) 721-1939
www.terracon.com

October 30, 2007

Site Class E ✓
Design Category D ✓

Ms. Karen Johnson
Charter Realty and Development Corporation
800 Westchester Avenue, Suite S-632
Rye Brook, NY 10573

Advance Copy by Email

Re: Geotechnical Evaluation
Proposed Bank
Westgate Plaza
Portland, Maine

JGI Project No: J3075505

Dear Ms. Johnson,

JGI EASTERN, Inc., A Terracon Company (JGI), is pleased to present this geotechnical engineering evaluation of subsurface conditions as they relate to foundation and pavement design and earthwork construction for the above-referenced project. Our services were conducted in general accordance with our August 31, 2007 proposal, and are subject to the limitations contained herein. JGI is also preparing a Phase I Environmental Site Assessment and Limited Site Investigation for the site, which will be submitted under separate cover.

SITE AND PROJECT DESCRIPTION

The property is located southwest of the intersection of Congress Street and Stevens Avenue in the City of Portland, Maine, as shown on Figure 1, Site Location Map. The property is currently developed as the Westgate Shopping Plaza with the associated parking and landscaped areas. The topography of the site is relatively level between Elevation (El) 46 to 48 feet.

The project includes the construction of a bank at the northern portion of the site, just to the east of the existing secondary access drive to the shopping plaza. The exact size and location of the proposed structure has not been finalized. However, we have estimated that the size of the bank will be less than 5,000 square feet (sf). In addition, we understand that the building will be constructed partially over the footprint of a former gas station, which has since been demolished. We further understand that building improvements are also planned to the existing Friendly's Restaurant located

From: Tammy Munson
To: Chris Hanson
Date: 8/22/2008 1:30:01 PM
Subject: TD Bank North

We need a spec book too.

both buildings. The finished floor elevations (FFE) of the buildings were not provided prior to the issuance of this report. However, based on the existing site topography, we have assumed that the FFE will be at or near (less than one foot) existing grade. Should the grade be raised higher than 1 foot, we request the opportunity to review our recommendations herein.

SUBSURFACE EXPLORATIONS AND CONDITIONS

JGI monitored the advancement of 7 test borings (JB-5 through JB-11) by Maine Test Borings, Inc. of Brewer, Maine on September 19 though 21, 2007 using a truck-mounted drill rig. Test borings JB-5 through JB-8 were advanced proximal to the proposed building. The remaining test borings were advanced around the existing Friendly's building. The test borings were advanced with 3¼-inch inside diameter hollow stem augers (HSA) to depths ranging from 12 to 27.5 feet. Standard Penetration Tests (SPTs) were performed at sampling intervals by driving the split spoon sampler with a 140-pound hammer, falling 30 inches. The approximate test boring locations are shown on Figure 2, Subsurface Exploration Location Plan. The test boring logs are attached.

The subsurface profile generally consists of asphalt over fill, underlain by a marine deposit. Asphalt (approximately 3 inches) was encountered in all of the test borings. Fill was encountered directly below the asphalt and extends to depths ranging from 1.5 to 2 feet. The fill generally consists of dense to very dense, brown to tan, coarse to fine sand, some to and gravel, trace to little silt. The marine deposit was encountered below the fill and extends beyond the depth of the explorations. However, probes were advanced beyond the sampling depths in two of the test borings to evaluate the thickness of the marine deposit. Probe refusal, presumably on dense glacial till or bedrock, was encountered in JB-8 and JB-9 at a depth of 72.5 to 47.5 feet, respectively. The marine deposit consists of an upper layer of stiff to very stiff, brown, silt and clay, trace to little medium to fine sand and a lower layer of very soft to soft, blue-gray clay. The upper layer of the marine deposit extends to a depth of about 7 to 8.5 feet.

Groundwater was encountered all of the test borings completed as part of our subsurface evaluation at depths ranging from 7 to 9.5 feet. However, the groundwater level will vary depending upon season, precipitation, and other conditions that may differ from those at the time of drilling.

Field Testing

In-situ Vane Shear Testing (ASTM D2573-72) was performed in two of the test borings advanced in the areas of proposed development. The vane shear tests measured the peak and remolded shear strengths of the marine deposit at various depths. The results of the tests were used for foundation design and settlement estimation, and to evaluate the sensitivity (S_t) of the clay. The *in-situ* shear test results are shown on the test boring logs (JB-6 and JB-9).

GEOTECHNICAL EVALUATION

Building Foundation Type and Design Criteria

Provided the site grade is not increased by more than one foot, the proposed bank building and additional footings at the Friendly's building, if constructed, may be supported on shallow spread footings deriving support from the undisturbed native marine deposit, or from structural fill placed on the native marine deposit. If the site grade is raised by more than one foot, we estimate that the marine deposit may consolidate in excess of an inch, which may not be acceptable. Grade changes greater than a couple of feet would likely require a preload to induce settlements prior to building construction or a deep foundation system. We therefore recommend that the finished floor elevation of the buildings and the impact it has on construction be carefully evaluated prior to finalizing the design.

The existing fill is not suitable for foundation support and should be removed within the foundation bearing zone, defined as the volume beneath 1H:1V lines extending downward and outward from the lower edges of the footings. During our investigation, the fill was only encountered to a depth of about 2 feet. However, we understand the area of the bank was formerly a gas station, which likely had underground storage tanks. As such, fill may therefore be encountered at depths in excess of 8 feet in the footprint of the proposed bank. We estimate that the fill depths, adjacent to the existing Friendly's building, would extend to the depth of the existing footings, which are likely installed at a depth of about 4.5 feet for frost protection.

Where shallow spread footings derive support from the undisturbed marine silt and clay deposit (i.e. not on structural fill placed following the overexcavation of deeper fills), a concrete mud slab at least 4 inches thick should be placed to protect the undisturbed marine deposit. Alternatively, the area under the footing location, and a 8-inch wide strip around spread footings and either side of strip footings should be overexcavated by 8 inches, a woven geotextile separation fabric (Mirafi 500X, or equivalent) placed, and then minus ¾-inch crushed stone placed with limited static compaction for seating on the geotextile separation fabric to raise the grade to underside of footing level.

Shallow spread footings should be designed using a maximum net allowable bearing pressure of 3 kips per square foot (ksf). The minimum widths of isolated spread and continuous strip footings should be 24 and 18 inches, respectively.

The underside of soil-supported footings should be at least 4.5 feet below the lowest exterior grade that is exposed to freezing, in accordance with the local building code ordinances. Interior footings, not exposed to outside temperatures, should be placed at least 1.5 feet below finished floor level. However, if interior footings are to be exposed to freezing temperatures during construction, the underside of interior footings should also be at least 4.5 feet below adjacent grade, or equivalent insulating material used. If construction occurs during cold weather, the soil bearing surfaces in exposed footing excavations should be protected from frost.

Floor Slab Design Criteria

Floor slabs may be soil supported, bearing on a minimum 12-inch thick layer of compacted structural fill with a maximum particle size of 2 inches. Excavated existing fill may be selectively reused as structural fill at depths in excess of 12 inches below the underside of the slab. A modulus of subgrade reaction (k_s) of 225 pounds per cubic inch may be used for design of slabs-on-grade. Compacted structural fill should be used to raise the grade and as backfill for utilities located below the floor slab, except where bedding material is used to seat the utilities. A vapor barrier will be required below concrete slabs-on-grade.

An ultimate friction factor (tan δ) of 0.4 may be used for the calculation of the sliding resistance between the native soils and concrete surfaces. An ultimate friction factor (tan δ) of 0.5 may be used for the calculation of the sliding resistance between imported structural fill or crushed stone and concrete surfaces. A factor of safety of at least 1.5 should be applied to the calculated ultimate sliding resistance.

Existing fill, where encountered, is not suitable for slab-on-grade support and should be removed under the slab. Compacted structural fill should be used to raise the grade below slabs and as backfill for utilities located below the slab. Structural fill within 12 inches of the underside of the floor slab should have a maximum particle size of 2 inches.

Seismic Design Criteria

Seismic design requirements for the State of Maine are based on the Maine Model Building Code, which incorporates the Seismic Design Category approach from the 2003 International Building Code. The Seismic Design Category determination is based on:

- Building Importance (grouping based on use of building)
- Mapping factors (expected maximum considered ground motions)
- Site classification (soil type)

From our test borings and in-situ shear strength testing, we consider that the site subsurface conditions within the building pad generally match the soil profile of "soft soil profile". The Site Class is therefore E. We expect that the bank building would not represent a substantial hazard to human life in the event of a collapse or significant failure, i.e. Category I Seismic Use Group. Based on the above, and a review of USGS National Seismic Hazard Mapping, we would consider the bank building to be in Seismic Design Category D. These determinations should be confirmed by the structural engineer. The site does not appear to be susceptible to liquefaction in the event of an earthquake.

Compacted Fill

Structural Fill: Structural fill should be free of organic, frozen, or other deleterious material and conform to the gradation requirements in Table 1. Structural fill should have a plasticity index (PI) no greater than 5. Visual classification and sieve analyses indicate that the excavated existing fill may be selectively re-used as structural fill, provided it can be compacted. However, based on our visual classification, excavated marine deposit will not be suitable for re-use as structural fill.

Structural fill should be placed in loose lifts not exceeding 12 inches in thickness for self-propelled vibratory rollers and 8 inches for vibratory plate compactors. Structural fill placed within the foundation bearing zone and below the floor slab should be compacted to at least 95 percent of the maximum dry density, as measured by ASTM D1557, Method C. The foundation bearing zone is the volume within 1H:1V lines drawn outward and downward from the lower edges of the footing.

Common Fill: Common fill should consist of mineral soil, free from frozen soil, debris, organic, or other deleterious material. Common fill should have a PI no greater than 10. Much of the native soil will not be suitable for reuse as common fill. However, parts of the marine deposit have higher percentages of sand and may be suitable for reuse as common fill, provided the PI is not greater than 10 and the soil can be uniformly dried to an appropriate moisture content before attempting to apply compactive effort. The field geotechnical engineer can provide guidance on the possible use of native soils as common fill. The contractor should be aware of the limitations of the native soils for use as common fill before attempting to use them.

Imported common fill should have a maximum particle size of 8 inches with no more than 25 percent by weight passing the No. 200 sieve. Common fill may be used to achieve finished grades outside the building footprint and foundation bearing zones. Common fill should be placed in the lift thickness recommended above for structural fill.

Common fill below pavements and sidewalks should be compacted to at least 95 percent of the maximum dry density, as determined by ASTM D1557. Elsewhere on the site, common fill should be compacted to at least 92 percent of the maximum dry density, as determined by ASTM D1557.

Support of Site Appurtenances

Site underground utilities, drainage structures, light standard foundations, and the like may be soil supported. Foundations for such structures should use a net allowable bearing pressure of 2 ksf. Subgrades for site appurtenances should be prepared in a similar manner to the subgrades of building foundations. To reduce the likelihood of frost heave, the underside of foundation elements should be

at least 4.0 feet below finished ground surface adjacent to the foundation element.

Pavement Design

Flexible pavement designs for standard- and heavy-duty sections are based on the *AASHTO Guide for Design of Pavement Structures (1993).* The thickness of each pavement course is a function of subgrade strength, traffic, design life, serviceability factors, and frost susceptibility. A 20-year design life and 20,000 18-kip Equivalent Axle Loads (EALs) were used for standard-duty pavement design. A 20-year design life and 75,000 EALs were used for heavy-duty pavement design. A California Bearing Ratio (CBR) value of 3 was used for pavement design. The following is a summary of design recommendations. References have been made to the State of Maine Department of Transportation (MEDOT) *Standard Specifications, Revision of December 2002.*

	Thickness (inches)	
Pavement Material	**Standard Duty**	**Heavy Duty**
Bituminous Concrete Wearing Course	1.5	1.5
Bituminous Concrete Binder Course	1.5	2.5
Granular Base MEDOT Section 703.06 a. Type A	6.0	6.0
Granular Subbase MEDOT Section 703.06 b. Type D	6.0	6.0

The granular materials should be compacted to at least 95 percent of the maximum dry density, as measured by ASTM D1557, Method C. Bituminous concrete should be placed in general accordance with MEDOT standards and compacted to at least 92 percent as compared to Marshall test methods. However, in a subsequent section of this report, we have provided an option to scarify the existing asphalt and mix it with the gravel base in order to reuse the site materials. Specific recommendations for this procedure and the pertinent specifications are included in the subsequent section.

CONSTRUCTION CONSIDERATIONS

Foundation and Slab Subgrade Preparation

The foundation bearing subgrades should be prepared and reviewed as outlined in this report prior to foundation construction. Fill or concrete should not be placed on frozen subgrades, nor should frozen materials be used as fill. Existing fill is not suitable for foundation support and should be removed within the foundation bearing zone. The slab and foundation subgrades consisting of native marine deposits should be carefully excavated with a flat blade bucket to reduce disturbance to the subgrade. Geotextile separation fabric should be placed over the marine deposit prior to the placement of structural fill or crushed stone.

Where the foundations are deriving support from the marine deposit, the foundation subgrade should consist of either a mud slab on the undisturbed silt and clay, or an 8-inch thickness of crushed stone placed on geotextile separation fabric on the undisturbed silt and clay. To reduce the likelihood of disturbance to the bearing soil, the exposed marine deposit should not be proofrolled.

Elsewhere, the exposed subgrade should generally be proofrolled with at least six passes of a 5-ton (minimum static weight) roller operated initially in static mode. The degree of proofrolling and the application of vibratory impact will be adapted by the site geotechnical engineer to the soil conditions encountered. The intent of an adjustment to the proofrolling will be to reduce the likelihood of disturbing the underlying soils. During the proofrolling process, the subgrade should be observed to identify soft or loose areas by the geotechnical engineer or his representative.

Pavement Subgrade Preparation

Parking and driveway areas should be stripped of bituminous concrete. The resulting subgrade will likely consist of existing granular fill, unless the fill thickness decreases in areas of the site where test borings were not advanced. Soil subgrade, comprising the existing granular fill, should be proofrolled with at least six passes of a minimum 10-ton vibratory roller. During the proofrolling process, the subgrade should be observed by the geotechnical engineer to identify soft or loose areas. Soft/loose areas and unstable zones should be replaced with compacted common fill. Once proofrolling is successfully completed, depending on grade, common fill or subbase may be placed.

We consider that pavement reconstruction procedures may be appropriate for the existing bituminous concrete pavement, as discussed below.

Pavement Reconstruction

The existing bituminous concrete may be scarified and mixed with the underlying granular fill to a depth of 12 inches below the existing grade. Grain size analyses should be performed on representative samples of the blended/mixed material to check that it is well graded, with a maximum 2-inch particle size and contains no more than 12 percent of the material passing a US No. 200 sieve. Blended material not meeting the above criteria should be reprocessed and mixed with additional sand and gravel, as needed. Once the minimum 12-inch layer of reclaimed bituminous gravel has been properly blended, it may be used in place as subbase/base or stockpiled for use as subbase elsewhere on the site.

We recommend that the reclaimed bituminous gravel be compacted to at least 95 percent of the maximum dry density, as determined by AASHTO T-180, Method D, rather than the ASTM specification.

Potential Impact of Weather on Earthwork Activities

The predominant soil subgrade generally consists of marine silt and clay, which because of high silt/clay content have a low permeability. Such soils are also sensitive to moisture and are adversely affected by construction traffic. Contractors experienced in earthwork construction in New England should be aware of this soil behavior and the effect that moisture and site traffic have on its workability. The contractor should include a contingency in his cost estimate to allow the use of imported suitable common fill and the disposal of unsuitable site soils, based on his assessment of the amount of overexcavation that may be required, the need for providing and placing geotextile and/or geogrid, and the use of crushed stone.

Construction Dewatering

Dewatering will likely not be required during foundation construction. However, the contractor should be required to maintain a stable subgrade during construction. The contractor should prevent groundwater, if encountered, and surface water runoff from collecting in excavations. Subgrade soils that become unstable because of water and/or reworking by construction activity should be replaced with compacted structural fill or minus ¾-inch crushed stone, as necessary.

Temporary Excavations

Temporary excavations deeper than 4 feet should be designed in compliance with recent governing regulations. Temporary excavation slopes should be cut to a stable incline or braced, depending upon the excavation depth and encountered subsurface conditions. Temporary excavation slopes should be monitored for signs of mass movement. If movements and/or potential stability problems are observed, work should cease; the geotechnical engineer should be immediately contacted. The responsibility for excavation safety and stability of temporary excavation slopes should lie solely with the contractor.

LIMITATIONS

The analyses and recommendations submitted in this report are based upon the data obtained from the test borings. The nature and extent of variations from the conditions observed within the explorations may not become evident until construction. If variations then appear evident, JGI should re-evaluate the recommendations of this report.

We request the opportunity to review final design drawings and specifications to evaluate the appropriate implementation of our recommendations. In the event that changes in the nature, design, or location of the building are planned, the conclusions and recommendations contained in this report shall not be considered valid unless we review the changes, and the conclusions of the report are modified or verified by us in writing.

A geotechnical engineer should be retained to provide testing and monitoring services during the earthwork phase of the project. This is to observe compliance with our design concepts, specifications, and recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.

This report has been prepared for the exclusive use of Charter Realty and Development Corporation in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made. This report has been prepared for preliminary design purposes and may be limited in its scope to complete an accurate bid. Contractors wishing a copy of the report may secure it with the understanding that its scope is limited to evaluation only.

If you have questions, please contact us. It was a pleasure working with you on this project and we look forward to continuing our work as the project progresses.

Very truly yours,

JGI EASTERN, Inc.
A Terracon Company

Robert W. Olah, P.E.
Geotechnical Engineer

Ryan R. Roy, P.E.
Principal/Senior Engineer

/ekc/J3075505

Attachments: Table 1 – Gradation Requirements
Figure 1 – Site Location Map
Figure 2 – Subsurface Exploration Location Plan
Test Boring Logs

Table 1

West Gate Plaza
Portland, Maine
Project No. J3075505

Gradation Specifications

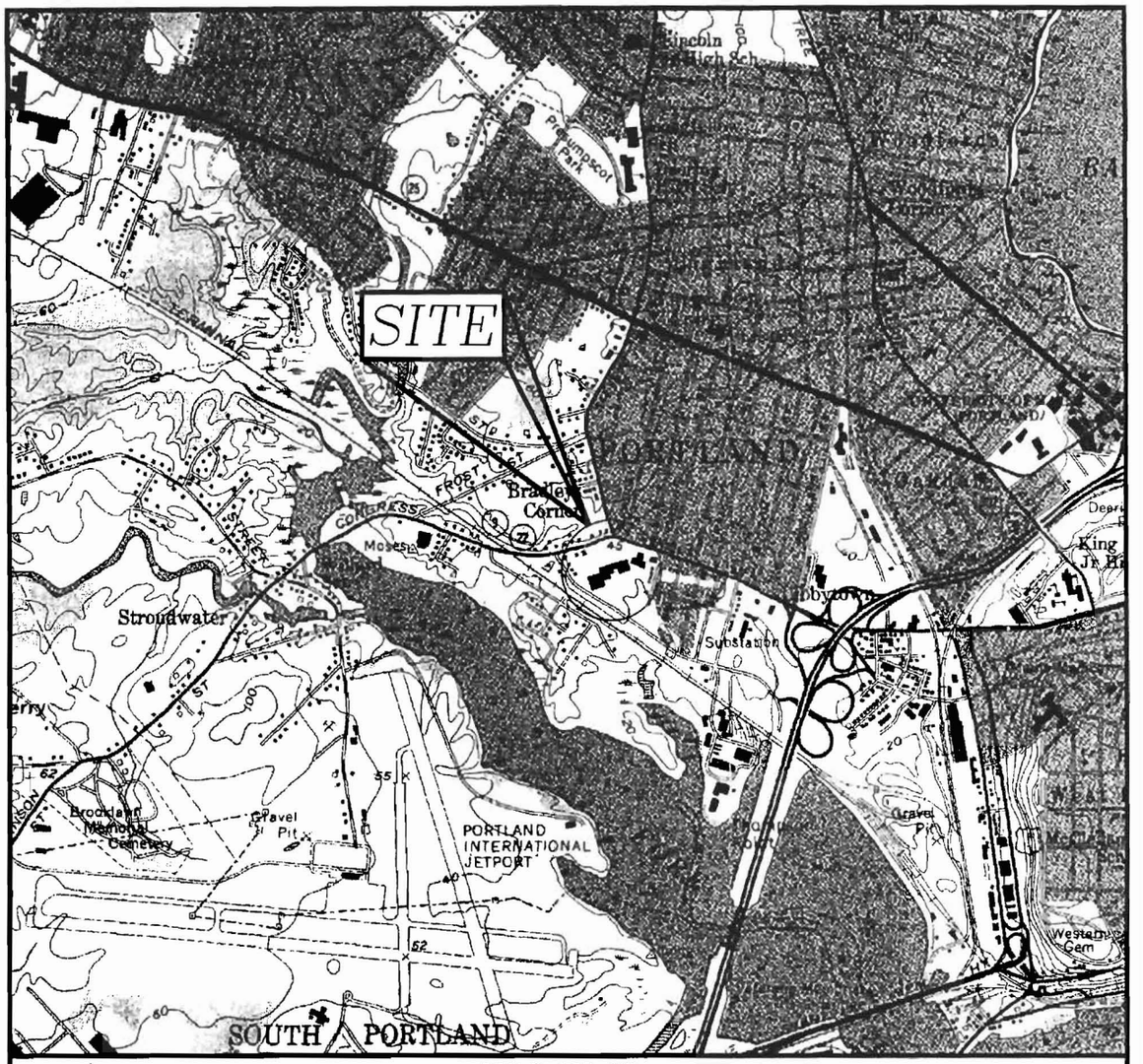
Sieve Size	Percent Passing by Weight			
	Structural [1] Fill	Aggregate [2] for Subbase	Aggregate [3] for Base	Common Fill
8"	100	- -	- -	100
6"	- -	100	- -	- -
4"	- -	- -	- -	- -
3"	70 - 100	- -	- -	- -
2"	(100)[1]		100	
¾"	45 - 95	- -	- -	- -
½"	- -	- -	45 - 70	- -
¼"		25 - 70	30 - 55	
No. 4	30 - 90	- -	- -	- -
No. 10	25 - 80	- -	- -	- -
No. 40	10 - 50	0 - 30	0 - 20	- -
No. 200	0 - 12	0 - 7	0 - 5	0 - 25

Notes:

[1] Two inch maximum particle size within 12 inches of underside of slab-on-grade

[2] From Maine Department of Transportation Standard Specifications Revision of December 2002, Section 703.06 b. Type D

[3] From Maine Department of Transportation Standard Specifications Revision of December 2002, Section 703.06 a. Type A



PROJECT: SHAW'S WESTGATE PLAZA
1364 CONGRESS STREET
PORTLAND, MAINE

PROJECT NO. J3075505

DATE: OCTOBER 2007

SOURCE: PORTLAND WEST, ME
USGS QUAD REV. 1978

FIGURE 1

SITE LOCATION MAP

JGI EASTERN, Inc.
A Terracon COMPANY

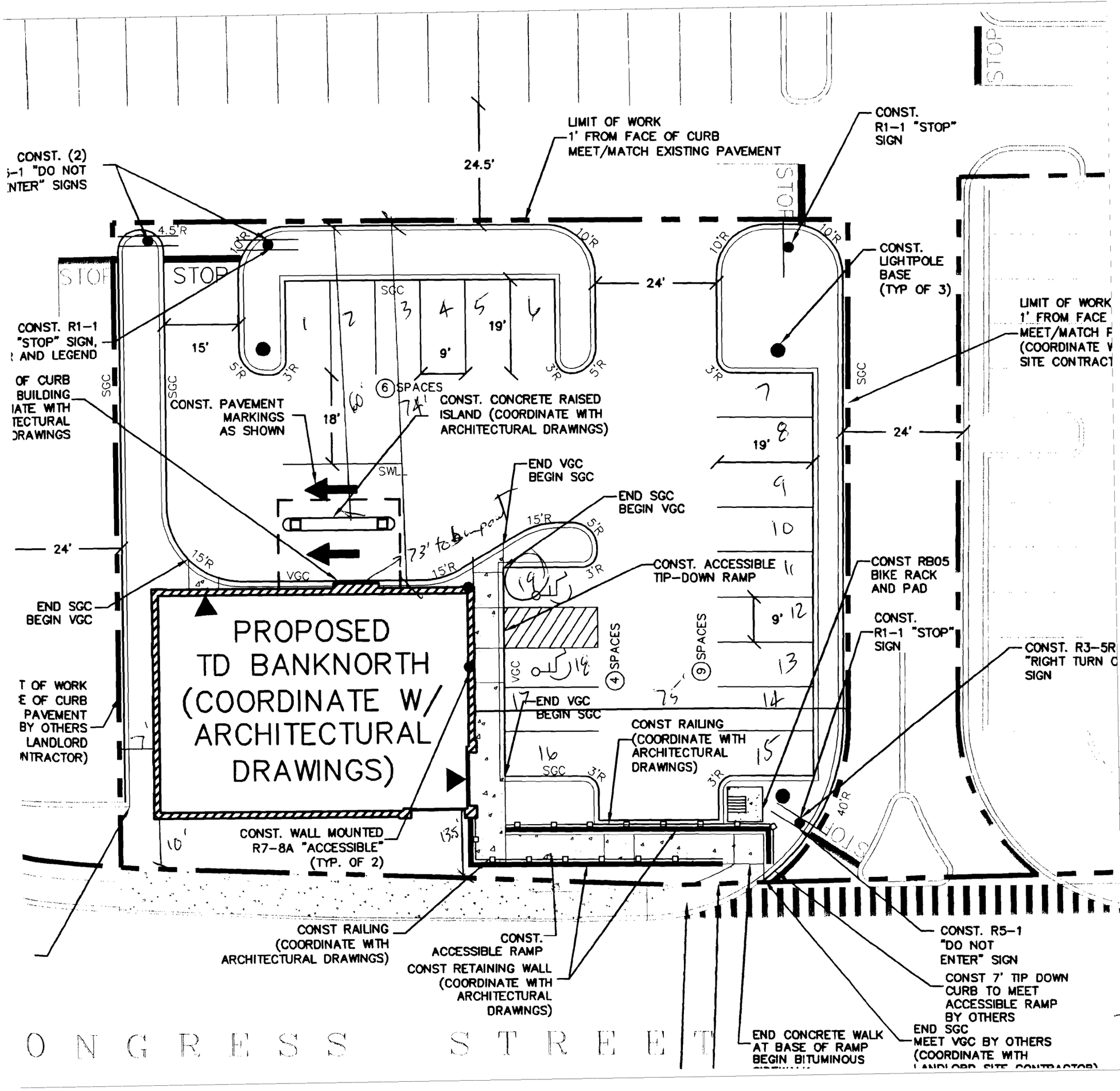
PCL XL error

Subsystem: VECTOR

Error: InsufficientMemory

Operator: LineRelPath

Position: 12838


CONST. (2) ;-1 "DO NOT NTER" SIGNS
LIMIT OF WORK 1' FROM FACE OF CURB MEET/MATCH EXISTING PAVEMENT
CONST. R1-1 "STOP" SIGN
24.5'
STOP
CONST. LIGHTPOLE BASE (TYP OF 3)
24'
CONST. R1-1 "STOP" SIGN, AND LEGEND
OF CURB BUILDING IATE WITH TECTURAL DRAWINGS
15'
19'
9'
SGC
4.5'R
10'R
5'R
3'R
6 SPACES
CONST. PAVEMENT MARKINGS AS SHOWN
18'
CONST. CONCRETE RAISED ISLAND (COORDINATE WITH ARCHITECTURAL DRAWINGS)
SWL
END VGC BEGIN SGC
END SGC BEGIN VGC
15'R
73' to bumper
VGC
CONST. ACCESSIBLE TIP-DOWN RAMP
CONST RB05 BIKE RACK AND PAD
END SGC BEGIN VGC
PROPOSED TD BANKNORTH (COORDINATE W/ ARCHITECTURAL DRAWINGS)
4 SPACES
9 SPACES
9'
CONST. R1-1 "STOP" SIGN
CONST. R3-5R "RIGHT TURN O SIGN
T OF WORK E OF CURB PAVEMENT BY OTHERS LANDLORD NTRACTOR)
END VGC BEGIN SGC
CONST RAILING (COORDINATE WITH ARCHITECTURAL DRAWINGS)
40'R
CONST. WALL MOUNTED R7-8A "ACCESSIBLE" (TYP. OF 2)
CONST RAILING (COORDINATE WITH ARCHITECTURAL DRAWINGS)
CONST. ACCESSIBLE RAMP
CONST RETAINING WALL (COORDINATE WITH ARCHITECTURAL DRAWINGS)
CONST. R5-1 "DO NOT ENTER" SIGN
CONST 7' TIP DOWN CURB TO MEET ACCESSIBLE RAMP BY OTHERS
END SGC MEET VGC BY OTHERS (COORDINATE WITH
END CONCRETE WALK AT BASE OF RAMP BEGIN BITUMINOUS
ONGRESS STREET