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: 040501

PERMIT ISSUED
MAY 26 2004
CITY OF PORTLAND

This is to certify that Delta Air Lines Inc/Ledgewood Inc.

has permission to Enlarge Baggage Claim Facil

AT 1001 Westbrook St CBL 208 A001002

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

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

Notification of inspection must be given and written permission procured before this building or part thereof is lathed or otherwise closed-in. 24 HOUR NOTICE IS REQUIRED.

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

OTHER REQUIRED APPROVALS

Fire Dept. 4/29/04

Health Dept. _____

Appeal Board _____

Other _____
Department Name

5/25/04
Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

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

Permit No:	Issue Date:	CBL:
04-0501	PERMIT ISSUED MAY 26 2004 CITY OF PORTLAND	208 A001002

Location of Construction:	Owner Name:	Owner Address:	Phone:
1001 Westbrook St	Delta Air Lines Inc	Po Box 45852	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Ledgewood Inc.	27 Main Street South Portland	2077671866
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Additions - Commercial	AB

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Airport	Airport with Enlarged Baggage Claim Facility	$32,781.00	$3,639,463.00	3

FIRE DEPT: ☐ Approved ☐ Denied — Signature:

INSPECTION: Use Group: Type: — Signature:

Proposed Project Description:
Enlarge Baggage Claim Facility

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

Permit Taken By:	Date Applied For:
kwd	04/29/2004

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..

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 12 Zone X	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☒ Site Plan 2004-0014	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☒ MM ☐	☐ Denied	☐ Denied
Date: ok 4/29/04	Date:	Date:

CERTIFICATION

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

SIGNATURE OF APPLICANT | ADDRESS | DATE | PHONE

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

01/11/05 - FRAMING (1ST FLOOR ONLY) OKAY
- NEED SPECIAL INSPECTION FOR STEEL & CONCRETE WORK

03/25/05 - preliminary walk thru for phase II
@ airport baggage area w/ Mike Ellers, L.D. +
Jay Reynolds - all looks good - Jan M

TO: Inspections Department

FROM: Jay Reynolds, Development Review Coordinator

DATE: April 22, 2005

RE: C. of O. for the Jetport Baggage Claim Facility Expansion (CBL199A001) (ID#2004-0014)

After visiting the site, I have the following comments:

Miscellaneous Site work incomplete:

I anticipate this work can be completed by **June 15, 2005**.
At this time, **I recommend issuing a temporary Certificate of Occupancy.**

Cc: Sarah Hopkins, Development Review Services Manager
Mike Nugent, Inspection Services Manager
File: Urban Insight

File: O:\plan\drc\jetportbaggage1.doc

CITY OF PORTLAND, MAINE
Department of Building Inspection

Certificate of Occupancy

LOCATION 1001 Westbrook St **CBL** 208 A001002

Issued to Delta Air Lines Inc/Ledgewood Inc. Date of Issue 04/22/2005

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 04-0501 , has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES	APPROVED OCCUPANCY
New Baggage Claim Area(Extreme Left Side) Two Carousells	Use Group AB/B/S Type 2C Boca 1999

Limiting Conditions:

This is a temporary Certificate of Occupancy for Phase 1and 2 only. A permanent c/o shall be issued upon completion of the entire project as shown in the approved building permit.
Site work incomplete. TEMPORARY CERTIFICATE UNTIL JUNE 15, 2005

This certificate supersedes certificate issued

Approved:

4/22/05 Thomas M. Markley
(Date) *Inspector*

Thomas M. Markley for Mike Nugent
Inspector of Buildings

MC MC

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

CITY OF PORTLAND, MAINE

Department of Building Inspection

Certificate of Occupancy

LOCATION 1001 Westbrook St **CBL** 208 A001002

Issued to Delta Air Lines Inc/Ledgewood Inc. Date of Issue 06/03/2005

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 04-0501 , has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES	APPROVED OCCUPANCY
New Baggage Claim Area(Right Side)One Carousell	Use Group AB/B/S Type 2C BOCA 1999

Limiting Conditions:

This is a tempoary Certificate of Occupancy for Phase 3 only. A permanent C/O shall be issued upon completion of the entire project as shown in the approved building permit. Site work incomplete. TEMPORARY C/O UNTIL JULY 03, 2005.

This certificate supersedes certificate issued

Approved:

(Date) *Inspector* *Inspector of Buildings*

Add Grey Cons PFD 6-2-05

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

City of Portland, Maine - Building or Use Permit Application

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

PERMIT ISSUED
MAY 26 2004
CITY OF PORTLAND

Permit No:	Issue Date:	CBL:
04-0501		208 A001002

Location of Construction:	Owner Name:	Owner Address:	Phone:
1001 Westbrook St	Delta Air Lines Inc	Po Box 45852	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Ledgewood Inc.	27 Main Street South Portland	2077671866
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Additions - Commercial	

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Airport	Airport with Enlarged Baggage Claim Facility	$32,781.00	$3,639,463.00	3

FIRE DEPT: ☑ Approved ☐ Denied

Signature: [signature]

INSPECTION: Use Group: A3/B/S1 Type: 2C

5/25/04

Signature [signature]

Proposed Project Description:
Enlarge Baggage Claim Facility

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
kwd	04/29/2004

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.
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☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date:	Date:	Date:

CERTIFICATION

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

SIGNATURE OF APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE

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

2004-0014
Application I. D. Number

Portland International Jetport
Applicant

1/30/2004
Application Date

1001 Westbrook Street, Portland, ME 04101
Applicant's Mailing Address

Baggage Claim Facility Expansion
Project Name/Description

Consultant/Agent

1001 - 1001 Westbrook St, Portland, Maine
Address of Proposed Site

Applicant Ph: (207) 772-0466 Agent Fax:
Applicant or Agent Daytime Telephone, Fax

199 A001001
Assessor's Reference: Chart-Block-Lot

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

Proposed Building square Feet or # of Units | Acreage of Site | AB Zoning

Check Review Required:

☑ Site Plan (major/minor) ☐ Subdivision # of lots ☐ PAD Review ☐ 14-403 Streets Review

☐ Flood Hazard ☐ Shoreland ☐ HistoricPreservation ☐ DEP Local Certification

☐ Zoning Conditional Use (ZBA/PB) ☐ Zoning Variance ☐ Other

Fees Paid: Site Pla $500.00 Subdivision Engineer Review Date 2/2/2004

Fire Approval Status:

Reviewer Lt. MacDougal

☐ **Approved** ☑ **Approved w/Conditions** See Attached ☐ **Denied**

Approval Date 3/23/2004 Approval Expiration 3/23/2005 Extension to ☑ Additional Sheets Attached

☑ Condition Compliance Lt. MacDougal (signature) 3/23/2004 (date)

Performance Guarantee ☐ **Required*** ☐ **Not Required**

* No building permit may be issued until a performance guarantee has been submitted as indicated below

☐ Performance Guarantee Accepted — date | amount | expiration date

☐ Inspection Fee Paid — date | amount

☐ Building Permit Issue — date

☐ Performance Guarantee Reduced — date | remaining balance | signature

☐ Temporary Certificate of Occupancy — date ☐ Conditions (See Attached) | expiration date

☐ Final Inspection — date | signature

☐ Certificate Of Occupancy — date

☐ Performance Guarantee Released — date | signature

☐ Defect Guarantee Submitted — submitted date | amount | expiration date

☐ Defect Guarantee Released — date | signature

CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
ADDENDUM

2004-0014
Application I. D. Number

Portland International Jetport
Applicant

1/30/2004
Application Date

1001 Westbrook Street, Portland, ME 04101
Applicant's Mailing Address

Baggage Claim Facility Expansion
Project Name/Description

Consultant/Agent

1001 - 1001 Westbrook St, Portland, Maine
Address of Proposed Site

Applicant Ph: (207) 772-0466 Agent Fax:
Applicant or Agent Daytime Telephone, Fax

199 A001001
Assessor's Reference: Chart-Block-Lot

Approval Conditions of Fire

1 additional hydrant required on the east end near the FAA tower

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:
04-0501	04/29/2004	208 A001002

Location of Construction:	Owner Name:	Owner Address:	Phone:
1001 Westbrook St	Delta Air Lines Inc	Po Box 45852	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Ledgewood Inc.	27 Main Street South Portland	(207) 767-1866
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Additions - Commercial	

Proposed Use:	Proposed Project Description:
Airport with Enlarged Baggage Claim Facility	Enlarge Baggage Claim Facility

Dept: Zoning **Status:** Approved **Reviewer:** Marge Schmuckal **Approval Date:** 04/29/2004

Note: **Ok to Issue:** ☑

Dept: Building **Status:** Approved with Conditions **Reviewer:** Mike Nugent **Approval Date:** 05/25/2004

Note: **Ok to Issue:** ☑

1) Following issues have to be resolved prior to fabrication of these components:
1) Guards as shown on plans have an ornamental pattern that is a ladder in effect. Phil Doughty will redesign and submit for approval.
2) Handrails are shown at 33 inches above the leading edge of the treads, must be at least 34" but not more than 38". Phil Doughty will redesign and submit for approval.
3) All Treads must be at least 11" net and risers must not be greater than 7".
4) Phil Doughty will provide assignments for the mixed use groups, this review was based on the following. The baggage claim area is "A3". The undesignated area on the fourth floor is "B" and the exterior baggage handling area is "S1".
It should be noted that future use of the second floor is limited as the the loading is only 50 PSF, thus precluding any future terminal (A3) use with out structural alteration.

A separate permit is required for the use of the second floor.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** Lt. MacDougal **Approval Date:** 05/04/2004

Note: **Ok to Issue:** ☑

1) the fire alarm system and the sprinkler system shall be tested to the appropriate standard and the results submitted to the Portland Fire Department
2) the fire alarm system shall be installed in accordance with NFPA 72 standards
3) the sprinkler system shall be installed in accordance with NFPA 13 standards

Dept: Planning **Status:** Approved **Reviewer:** Ethan Macomber **Approval Date:** 05/20/2004

Note: **Ok to Issue:** ☑

Comments:

4/29/2004-kwd: 4/29/2004: Full size Plans & Spec books to MJN; plans only to MES. Kwd

04-0501

All Purpose Building Permit Application

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

Location/Address of Construction: 1001 Westbrook Street Portland, Maine 04102		
Total Square Footage of Proposed Structure 31,200 SF	Square Footage of Lot N/A	
Tax Assessor's Chart, Block & Lot Chart# 20R Block# A Lot# 001002	Owner: City of Portland	Telephone: 874-8877
Lessee/Buyer's Name (If Applicable)	Applicant name, address & telephone: Ledgewood, Inc. P.O. Box 8107 Portland, ME 04104 767-1866	Cost Of Work: $ 3,639,463.00 **Fee: $** 32,781.00

DEPT. OF BUILDING INSPECTION CITY OF PORTLAND, ME RECEIVED APR 29 2004

Current use: Jetport

If the location is currently vacant, what was prior use: _____

Approximately how long has it been vacant: _____

Proposed use: Baggage Claim Facility

Project description:

Contractor's name, address & telephone: Ledgewood, Inc., P.O. Box 8107, Portland, ME 04104 767-1866 ex cell

Who should we contact when the permit is ready: Kevin McCosh

Mailing address: P.O. Box 8107 Portland, ME 04104

We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A stop work order will be issued and a $100.00 fee if any work starts before the permit is picked up. **PHONE:**

IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT, WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APROVE THIS PERMIT.

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

Signature of applicant:	**Date:** 4/26/04

This is NOT a permit, you may not commence ANY work until the permit is issued.
If you are in a Historic District you may be subject to additional permitting and fees with the Planning Department on the 4th floor of City Hall

CITY OF PORTLAND
BUILDING CODE CERTIFICATE
389 Congress St., Room 315
Portland, Maine 04101

ACCESSIBILITY CERTIFICATE

Designer: PHILLIP J. DOUGHTY ASSOCIATES -ARCHITECTS

Address of Project: 1001 WESTBROOK STREET PORTLAND, ME

Nature of Project: EASTERLY EXPANSION OF THE BAGGAGE CLAIM FACILITY

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.

Signature: Phillip J Doughty

Title: ARCHITECT / OWNER

(SEAL)

LICENSED ARCHITECT
PHILLIP J. DOUGHTY
1108
STATE OF MAINE

Firm: PHILLIP J. DOUGHTY ASSOC. ARCHTS

Address: 362 US RT 1
FALMOUTH, MAINE

Phone: (207) 781-5346

CITY OF PORTLAND
BUILDING CODE CERTIFICATE
389 Congress St., Room 315
Portland, Maine 04101

TO: Inspector of Buildings City of Portland, Maine
Department of Planning & Urban Development
Division of Housing & Community Service

FROM DESIGNER: BECKER STRUCTURAL ENGINEERS, INC.
75 YORK ST., PORTLAND, ME 04101

DATE: APRIL 22, 2004

Job Name: EASTERLY EXPANSION OF BAGGAGE CLAIM FACILITY

Address of Construction: PORTLAND INTERNATIONAL JETPORT, PORTLAND, ME

THE BOCA NATIONAL BUILDING CODE / 1999 (FOURTEENTH EDITION)
Construction project was designed according to the building code criteria listed below:

Building Code and Year 1999 Use Group Classification(s) MIXED USE

Type of Construction TYPE 2C

Structural Systems

Roof Snow Load

60 Ground Snow Load (Pg)
46 If Pg >10 psf, Flat Roof snow load, Pf
0.9 If Pg >10 psf, snow exposure factor, Ce
1.0 If Pg >10 psf, roof thermal factor
1.20 If Pg >10 psf, snow load importance factor, I
N/A Sloped Roof Snowload Ps

Earthquake Loads

0.12 Peak velocity-related acceleration, Av
0.12 Peak acceleration, Aa
II Seismic hazard exposure group
C Seismic performance category
SI Soil profile type
BF/MF Basic structural system /seismic-resisting system
(BF.) R=5/CD=4.5 Response modification factor, R, and deflection
(M.F.) R=4.5/CD=4 amplification factor, Cd,

✓ The documents must account for Drift snow load, unbalanced snow load and Sliding snow loads as required.

Wind Loads

85 Basic Wind Speed +/- 0.25 Internal Pressure Coefficient
C Wind Exposure Category 18.5 Wind Design Pressure 1.23 Wind Importance Factor

CITY OF PORTLAND
BUILDING CODE CERTIFICATE
389 Congress St., Room 315
Portland, Maine 04101

TO: Inspector of Buildings City of Portland, Maine
Department of Planning & Urban Development
Division of Housing & Community Service

FROM: PHILLIP J. DOUGHTY – ARCHITECT

RE: Certificate of Design

DATE: 4/25/04

These plans and / or specifications covering construction work on:

PORTLAND INTERNATIONAL JETPORT BAGGAGE CLAIM EXPANSION – 1001 WESTBROOK ST PORTLAND MAINE

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the ***BOCA National Building Code / 1999 (Fourteenth Edition)*** and local amendments. – TO THE BEST OF OUR KNOWLEDGE.

(SEAL)

LICENSED ARCHITECT
PHILLIP J. DOUGHTY
1108
STATE OF MAINE

Signature: Phillip J Doughty

Title: Owner / Architect

Firm: PHILLIP J. DOUGHTY ASSOC.

Address: 362 U.S. RT 1
FALMOUTH, MAINE 04105

As per Maine State Law:

$50,000.00 or more in new construction, repair expansion, addition, or modification for Building or Structures, shall be prepared by a registered design Professional.

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:
04-0501	04/29/2004	208 A001002

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	Ledgewood Inc.	27 Main Street South Portland	(207) 767-1866
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Additions - Commercial	

Proposed Use:	Proposed Project Description:
Airport with Enlarged Baggage Claim Facility	Enlarge Baggage Claim Facility

Dept: Zoning **Status:** Approved **Reviewer:** Marge Schmuckal **Approval Date:** 04/29/2004

Note: **Ok to Issue:** ☑

Dept: Building **Status:** Approved with Conditions **Reviewer:** Mike Nugent **Approval Date:** 05/25/2004

Note: **Ok to Issue:** ☑

1) Following issues have to be resolved prior to fabrication of these components:
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   A separate permit is required for the use of the second floor.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** Lt. MacDougal **Approval Date:** 05/04/2004

Note: **Ok to Issue:** ☑

1) the fire alarm system and the sprinkler system shall be tested to the appropriate standard and the results submitted to the Portland Fire Department
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04/29/2004-kwd: 4/29/2004: Full size Plans & Spec books to MJN; plans only to MES. Kwd

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BUILDING CODE CERTIFICATE
389 Congress St., Room 315
Portland, Maine 04101

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Nature of Project: EASTERLY EXPANSION OF THE BAGGAGE CLAIM FACIL

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.

Signature: Phillip J Doughty

Title: ARCHITECT / OWNER

Firm: PHILLIP J. DOUGHTY ASSOC. ARCHTS

Address: 302 US RT 1

FALMOUTH, MAINE

Phone: (207) 781-5346

(SEAL)

LICENSED ARCHITECT
PHILLIP J. DOUGHTY
1108
STATE OF MAINE

LETTER OF TRANSMITTAL

73

MARSH CONSTRUCTION SERVICES, INC.
10 Wisteria Lane
ROCHESTER, NY 14617

(585) 342-1150
FAX (585) 342-1172

TO City Of Portland
389 Congress St.
Room 315
Portland, ME 04101

JOB NUMBER/PHONE	DATE
	4/29/2004
ATTENTION: Mike Nugent	
RE: Paradies Shop Airside PWM	

WE ARE SENDING YOU X Attached Under separate cover via the following items.

>

Shop drawings Prints Plans Specifications Samples

Copy of letter Change order X Other:

COPIES	DATE	NUMBER	DESCRIPTION
			Building Code Certificates Signed By Design Professional

THESE ARE TRANSMITTED as checked below:

For your approval — Approved as submitted — Resubmit — copies for approval

For your use — Approved as noted — Submit — copies for distribution

X As requested — Returned for corrections — Return — corrected prints

For review and comment — Other

FOR BIDS DUE/DATE:

PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO File

SIGNED

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

Applicant: Delta Air Lines Inc Date: 4/29/04

Address: 1001 Westbrook St C-B-L: 208-A-001/002

CHECK-LIST AGAINST ZONING ORDINANCE

Date - Developed site permit #04-0501

Zone Location - AB

Interior or corner lot -

Proposed Use/Work - Expand baggage Area

Sewage Disposal - City

Lot Street Frontage -

Front Yard -

Rear Yard -

Side Yard -

Projections -

None required

Width of Lot -

Height - 45' MAX - Less than 75 ft & 25'

Lot Area -

Lot Coverage/ Impervious Surface - NEAS

Area per Family - N/A

Off-street Parking - N/A → New parking spaces

Loading Bays - N/A

Site Plan - # 2004-0014

Shoreland Zoning/ Stream Protection - N/A

Flood Plains - panel 12 Zone X

PORTLAND INTERNATIONAL JETPORT
Manager's Office
1001 Westbrook Street
Portland, Maine 04102
(207) 772-0690

LETTER OF TRANSMITTAL

DATE	JOB NO
04.23.04	JTPC-21
ATTENTION	MIKE NUGENT
RE	EASTERLY BAG CLAIM EXPANSION PROJECT

TO MIKE NUGENT
PLANNING &
PERMITTING DEPT

GENTLEMEN:

WE ARE SENDING YOU ☑ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☑ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
1	04.23.04	—	1 FULL SET OF CONSTRUCTION DRAWINGS FOR THE EASTERLY BAG CLAIM PROJECT

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 ☐ _____

☐ FOR BIDS DUE _____ 19 ____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS As requested attached is the requested full set of construction drawings for your review.

756-
~~8314~~ 8314

COPY TO Maple Meeting 4/23/04 SIGNED: R S Williams

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

FAX COVER SHEET

Ledgewood Inc PO Box 8107, Portland ME 04104 (207)767-1866 Fax (207)767-1869

Date: May 14, 2004

Please deliver the following pages to:

Name: Mike Nugent

Firm: City of Portland Building Inspections

Address:

Fax number: 874-8716 **Total pages sent:** 12

From: Eric Mora

Comments:

Mike,

Re-fax of the Special Inspection report that was sent to you on the 4th.

As far as the Geotechnical Report, please refer to the Appendicies section of the specifications located in Volume 3 of 3, which was submitted to you with the building permit application.

Any questions please call me at the office.

CC: Peter Benard, L.I.
Kevin McCosh, L.I.

FAX COVER SHEET

Ledgewood Inc PO Box 8107, Portland ME 04104 (207)767-1866 Fax (207)767-1869

Date: May 4, 2004

Please deliver the following pages to:

Name: Michael Nugent

Firm: City of Portland

Address:

Fax number: 874-8716 **Total pages sent:** 11

From: Rebecca Knox

Comments:

Michael,

Here is the Inspection Report that I spoke about during our phone conversation. Please let us know if there is anything else you require.

Thank you,
Becky Knox

BECKER
structural engineers, inc.

Transmittal

TO: Ledgewood Inc
27 Main Street
South Portland, Maine
767-1866

ATTN: **Peter Benard**
DATE: May 5, 2004
PROJECT: Jetport Baggage Claim Special Inspections
PROJECT No: 1207

☒ Attached ☐ Under separate cover via:

☐ For Approval
☒ For Your Use
☐ For Review & Comment

☐ Reviewed
☐ For Signature
☐ Returned for Corrections
☐ Other:

☐ Prints ☐ Specifications ☐ Bond Reproducibles
☐ Mylars ☐ Calculations ☐ Shop Drawings
☐ Sepias ☐ Letter ☒ Other: Special Inspection Report

Copies	Date	Submittal No.	Description
1	5/3/04		Special Inspection Report

Comments:
Peter,
Please find enclosed the Special Inpsection Report required for the building permit. Note that you need to sign as the "Applicant". If you have any questions please feel free to call

Signed:
Todd M. Neal, P.E.

75 York Street, Portland, ME 04101-4701 ▪ Tel 207-879-1838 ▪ Fax 207-879-1822

BECKER
structural engineers, inc.

STATEMENT OF SPECIAL INSPECTIONS

PROJECT: Portland International Jetport, Additions and Alterations: Easterly Expansion of Baggage Claim Facility

LOCATION: Portland, Maine

PERMIT APPLICANT: Ledgewood, Inc.

APPLICANT'S ADDRESS: P.O. Box 8107, Portland, Maine 04104

STRUCTURAL ENGINEER OF RECORD: Todd M. Neal, P.E. – Becker Structural Engineers, Inc.

ARCHITECT OF RECORD: Phillip J. Doughty – Phillip J. Doughty Associates

This Statement of Special Inspections is submitted in accordance with Section 1705.0 of the 1999 BOCA National Building Code. It includes a listing of special inspections applicable to this project as well as the name of the Special Inspector, and the names of other agencies intended to be retained for conducting these inspections.

The Special Inspector shall keep records of all inspections listed herein, and shall furnish inspection reports to the Code Official and to the Registered Design Professional of Record. All discrepancies shall be brought to the immediate attention of the Contractor for correction. If the discrepancies are not corrected the discrepancies shall be brought to the attention of the Code Official and L_0 the Registered Design Professional of Record. Interim reports shall be submitted to the Code Official and to the Registered De sign Professional of Record monthly, unless more frequent submissions are requested by the Code Official.

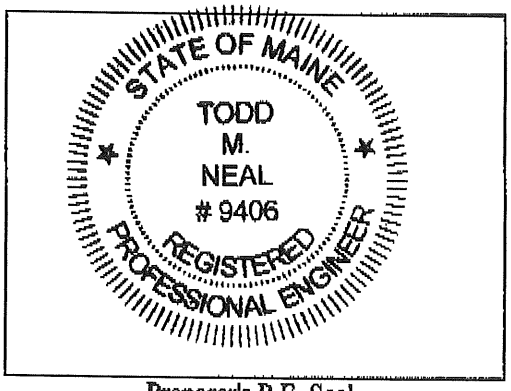
Job site safety is solely the responsibility of the Contractor. Materials and activities to be inspected are not to include the Contractor's equipment and methods used to erect or install the materials listed.

Prepared By:

Todd M. Neal, P.E.

NAME

SIGNATURE 5/3/04 DATE



Preparer's P.E. Seal

Applicant's Authorization:

SIGNATURE DATE

Building Code Official:

SIGNATURE DATE

75 York Street, Portland, ME 04101-4701 ▪ Tel 207-879-1838 ▪ Fax 207-879-1822

BECKER
structural engineers, inc.

LIST OF AGENTS

PROJECT: Portland International Jetport, Additions and Alterations:
Easterly Expansion of Baggage Claim Facility

STRUCTURAL ENGINEER OF RECORD: Todd M.Neal , P.E. - Becker Structural Engineers, Inc.
Name Firm
75 York Street – Portland, ME 04101
Address

ARCHITECT OF RECORD: Phillip J. Doughty – Phillip J. Doughty Associates
Name Firm
362 U.S. Route 1 – Falmouth, ME 04105
Address

Following is the List of Agents selected for performance of Special Inspections for this project:

		Name	Firm	Abbreviation
1.	Special Inspector	Todd M. Neal, P.E.	Becker Structural Engineers, Inc.	BSE
2.	Special Inspector	Thaddeus P. Gabryszewski, P.E.	"	BSE
3.	Special Inspector	Scott M. Blouin, P.E.	"	BSE
4.	Testing Laboratory	Robert Gillespie	R.W. Gillespie & Assocaites	TL

BECKER
structural engineers, inc.

FINAL REPORT OF SPECIAL INSPECTIONS

PROJECT: Portland International Jetport, Additions and Alterations: Easterly Expansion of Baggage Claim Facility

LOCATION: Portland, Maine

PERMIT APPLICANT: Ledgewood, Inc.

APPLICANT'S ADDRESS: P.O. Box 8107, Portland, Maine 04104

STRUCTURAL ENGINEER OF RECORD: Paul B. Becker, P.E. - Becker Structural Engineers, Inc.
Name Firm

ARCHITECT OF RECORD: Phillip J. Doughty – Phillip J. Doughty Associates
Name Firm

GENERAL CONTRACTOR: Peter Benard – Ledgewood, Inc.

To the best of my information, knowledge, and belief, the Special Inspections required for this project, and described in the Statement of Special Inspections submitted for the project, have been completed.

The following discrepancies that were outstanding since the last interim report, No.___ dated _____, have been corrected:

(Use additional sheets, if necessary)

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

Submitted By:
SPECIAL INSPECTOR

Todd M. Neal, P.E.
NAME

SIGNATURE DATE

Special Inspector's P.E. Seal

SCHEDULE OF SPECIAL INSPECTION SERVICES

Project: Portland International Jetport Additions and Alterations: Easterly Expansion of Baggage Claim Facility

Summary of Services (Exhibit A)

Material/Activity	Item	Service	Y/N	Extent	Comments	Agent	Date	Rev
1705.2 Inspection of Fabricators	1.00							
		Fabrication Procedures	Y			BSE		
		Procedure Implementation	Y					
1705.3 Steel Construction	2.00							
Steel Fabrication		In-Plant-Review Part A-Fabrication/QA						
		1. AISC	Y	Provide Certification	Conventional Steel Building Structures	BSE		
		2. AWS Quality Assurance	Y	Provide Certification		BSE		
		Part B – Procedures Implementation Review Conformance to Part A						
		1. Bolts, Nuts, Washers	Y	Sample	AISC ASD A3.4	BSE		
		2. Structural Steel	Y	Sample	AISC A6 or A568	BSE		
		3. Weld Filler Material	Y	Sample	AISC ASD A3.6	BSE		
		Review Connections						
		1. Shop Bolted	N					
		2. Shop Welded	Y	All	In Field-Visual	TL		
		3. Connection Design Calcs	Y	All		BSE		
		4. Shop Welder Certs	Y	All		TL		
Steel Erection		**Review Material Certs of Compliance**						
		1. Bolts, Nuts, Washers	Y	All		BSE		
		2. Structural Steel	Y	All		BSE		
		3. Weld Filler Material	Y	All		BSE		
		Review Primary Steel Connections						
		Moment Connections	Y	All		TL		
		Shear Connections						
		1. Field Bolted	Y	All		TL		
		2. Field Welded	Y	All		TL		

SCHEDULE OF SPECIAL INSPECTION SERVICES

Project: Portland International Jetport Additions and Alterations: Easterly Expansion of Baggage Claim Facility

Material/Activity	Item	Service	Y/N	Extent	Comments	Agent	Date	Rev
1705.3 Steel Construction Cont'd	2.00							
Steel Erection Cont'd								
		Review Welded Column Splices	N					
		Review Base Metal Testing for "t">1 ½"	N					
		Review Secondary Steel Connections						
		1. Girts	Y	Sample		TL		
		2. Lintels	Y	Sample		BSE		
		3. Steel Deck	Y	All		TL		
		4. Precast Wall Panel Connections	Y	All		BSE/TL		
		5. Lintels/Relieving Angles	N					
		6. Installation of Shear Studs	Y	All		TL		
		7. Review Details/Steel Frame	Y	Sample		BSE/TL		
Steel Joist & Joist Girders		Part A – Fabrication Procedures						
		In Plant Review	N					
		SJI	Y	Provide Certification		BSE		
		Part B – Procedures Implementation	N					
		1. Review Connections	N					
		2. Review Welder Certifications	Y	All		BSE		
		Part C – Material Certifications						
		1. Structural Steel	Y	All		BSE		
		2. Weld Material	Y	All		BSE		
Joist Erection		Review Joist Bearing Connections	Y	All		BSE		
		Review Joist Bearing Length	Y	All				
		Review Joist Bridging	Y	All				

SCHEDULE OF SPECIAL INSPECTION SERVICES

Project: Portland International Jetport Additions and Alterations: Easterly Expansion of Baggage Claim Facility

Material/Activity	Item	Service	Y/N	Extent	Comments	Agent	Date	Rev
1705.4 Concrete Construction	4.00							
Concrete Materials		1. Cement	Y	All	ASTM C150	BSE		
		2. Normal Weight Aggregates	Y	All	ASTM C33	BSE		
		3. Air Entraining Admixture	Y	All	ASTM C260	BSE		
		4. Normal Range Water Reducer	Y	All	ASTM C494	BSE		
		5. Hi-Range Water Reducer	Y	All	ASTM C494	BSE		
		6. Accelerator	Y	All	ASTM C494 TYPE A	BSE		
Concrete Accessories		1. Vapor Retarder	Y	All		BSE		
		2. Curing Products	Y	All		BSE		
		3. Preformed Expansion Joints	Y	All		BSE		
Mix Design		Review Mix Designs			ACI Chapter 4			
		1. FDN Walls & Footings	Y	All		BSE		
		2. Slabs on Grade	Y	All		BSE		
		3. Elevated Slabs	Y	All		BSE		
		4. Exterior Slabs	Y	All		BSE		
Reinforcement Material		Reinforcement Material Certifications	Y	All		BSE		
Placing Reinforcement		Review condition & placement of reinforcing						
		1. Footings & Foundation Walls	Y	Sample		BSE		
		2. Slabs on Grade	Y	Sample		BSE		
		3. Elevated Slabs	Y	Sample		BSE		
		4. Topping Slabs	Y	Sample		BSE		
		5. Review Embedded Items: Bolts, Plates, etc.	Y	Sample		BSE		
Formwork		Review installation of Forms	Y	Sample		BSE		
		Review Form Removal & Reshoring	Y	Sample		BSE		

SCHEDULE OF SPECIAL INSPECTION SERVICES

Project: Portland International Jetport Additions and Alterations: Easterly Expansion of Baggage Claim Facility

Material/Activity	Item	Service	Y/N	Extent	Comments	Agent	Date	Rev
1705.4 Concrete Construction Cont'd	4.00							
Concrete Operations		1. Field Sampling & Testing of Concrete	Y	As per Specifications		TL		
		2. Review Concrete Strength Results	Y		ACI 318.5.6	BSE/TL		
		3. Review Mix Proportions & Technique	Y		ACI 318.5.2 – 5.4, & 5.8	TL		
		4. Review Concrete Placement	Y	Sample	ACI 318.5.9 & 5.10	BSE/TL		
		5. Review Curing Technique & Temperature	Y	Sample	ACI 318.5.11, 5.12, & 5.13			
Prestressing Operations		Review Application of Prestressing Force	Y	Sample	ACI 318 Section 18.18	BSE		
Precast Manufacturing		**Part A – Fabrication Procedures** In- Plant Review – Architectural	Y	One Site Plant Visit		BSE		
		In- Plant Review – Structural	Y	One Site Plant Visit		BSE		
Erection of Precast		**Part A – Architectural**						
		1. Review Erection of Precast Units	Y	Sample		BSE		
		2. Review Connections	Y	Sample		BSE		
		3. Review Sealant	Y	Sample		BSE		
		4. Review Grouting	Y	Sample		BSE		
		Part B – Structural						
		1. Review Erection of Precast Units	Y	Sample		BSE		
		2. Review Connections	Y	Sample		BSE		
		3. Review Key Reinforcement	Y	Sample		BSE		
		4. Review Grouting	Y	Sample		BSE		

SCHEDULE OF SPECIAL INSPECTION SERVICES

Project: Portland International Jetport Additions and Alterations: Easterly Expansion of Baggage Claim Facility

Material/Activity	Item	Service	Y/N	Extent	Comments	Agent	Date	Rev
1705. 5 Masonry Construction	4.00							
Materials		Review Material Certifications						
		1. Masonry Units	Y	All		BSE		
		2. Reinforcing Steel	Y	All		BSE		
Mix Designs		Review mortar materials & design	Y	All		BSE		
		Review Grout Materials & Design	Y	All		BSE		
Testing		Grout – Compressive Strength	Y	Sample		TL		
		Mortar – Compressive Strength	Y	Sample	ASTM C780	TL		
Masonry Installation		Review Mortar Mix proportions and Mixing	Y	Sample	ACI 530.1 – 2.3, 2.5	TL		
		Review Grout Mix proportions and Mixing	Y	Sample	ACI 530.1 – 2.3, 2.5	TL		
		Review General Installation of Mortar	Y	Sample	ACI 530.1; 4.2.2	BSE		
		Review General Installation of Grout	Y	Sample	ACI 530.1; 4.2.2	BSE		
		Review Installation of Masonry Units	Y	Sample	ACI 530.1;2.3.3.3, 4.3.3	BSE		
		Review Installation of Reinforcement	Y	Sample	ACI 530.1, Chapter 8	BSE		
		Review Hot/Cold Weather procedures	Y	Sample	ACI 530.1; 2.3.2.2,2.3.2.3	BSE		
		Review Installation of Anchorage	Y	Sample	ACI 530.1; 4.2, 5.14	BSE		
1705.7 Wood Construction	5.00	NOT APPLICABLE						
1705.7 Prepared Fill	6.00							
Site Preparation		Review Site Preparation prior to fill placement	Y		Building Only	TL		
Fill Placement		Review Compliance to Soils Repot						
		1. Material	Y	Sample	Building Only	TL		
		2. Lift Thickness	Y	Sample	Building Only	TL		
Evaluation		Review in-place dry density for compliance with soils report	Y	Sample	Building Only	TL		

SCHEDULE OF SPECIAL INSPECTION SERVICES

Project: Portland International Jetport Additions and Alterations: Easterly Expansion of Baggage Claim Facility

Material/Activity	Item	Service	Y/N	Extent	Comments	Agent	Date	Rev
1705.8 Pile Foundations	7.00							
Materials		1. Pile tip assembly	Y	Sample		TL		
		2. Pile Splice Assembly	Y	All		TL		
		3. Steel Pile Certifications	Y	All		TL/BSE		
Fabrication		1. Plant Certification	Y	Submit Certification		BSE		
Pile Driving		1. Review Pile Driving Records	Y	All		TL		
		2. Review Pile Driving Equipment & Procedure	Y	All		TL		

PROJECT MEMORANDUM

FILE

To: Scott Blouin
Becker Structural Engineers
Portland, Maine

From: Matthew P. Lilley, E. I.

Charles R. Nickerson, P.E. CRN

R. W. Gillespie & Associates, Inc.
Saco, Maine

cc: Owens McCullough, P.E.
Sebago Technics, Inc.

Philip Doughty, AIA
Philip J. Doughty Associates

Date: 17 October 2002

Subject: Seismic Site Parameters
New Jetway and Baggage Handling Addition
Portland International Jetport
RWG&A Project No. 572-29

As requested R. W. Gillespie & Associates, Inc. is pleased to provide the following additional information for seismic design. In accordance with *The **BOCA** National Building Code / **1999***, the soil profile at the site is classified as S_1, with a seismic coefficient "S" of 1.0. The effective peak acceleration coefficient (A_a) is approximately 0.12 and the effective peak velocity-related acceleration coefficient (A_v) is approximately 0.12. These coefficients should be used in conjunction with the design occupancy to determine the seismic hazard exposure group and seismic performance category.

We trust this information is complete and sufficient to meet the project's current needs. Please do not hesitate to contact us if you have any questions or need additional information.

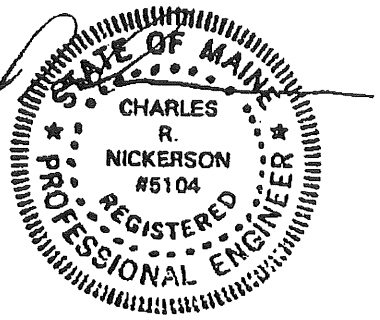
R. W. Gillespie & Associates, Inc.

Alternately, the canopy foundations may be designed as soil supported mat foundations with dimensions similar to or slightly larger than the proposed pile caps. Criteria for design of the mats is presented in our geotechnical investigation report dated 24 June 2002 (note: see section 6.2.2 Jetway Foundations).

We trust that the above information meets the current needs of the project. Please do not hesitate to contact us if you have any questions or if we can be of further service.

Very truly yours,
R. W. GILLESPIE & ASSOCIATES, INC.

Charles R. Nickerson, P.E.
Chief Geotechnical Engineer



CRN:ci

cc: Phillip J. Doughty, AIA - Phillip J. Doughty Associates
Owens McCullough, P.E. - Sebago Technics, Inc.
Joseph Hennessey - OEST Associates

FILE COPY

R. W. Gillespie & Associates, Inc.
Geotechnical Engineering • Geohydrology • Materials Testing Services

23 August 2002

Mr. Paul B. Becker, P.E.
Becker Structural Engineers, Inc.
19 Commercial Street
Portland, Maine 04101

Subject: Jetport Canopy
Addition to Baggage Claim Area
Portland, Maine
RWG&A Project No. 572-29.GI

Dear Paul:

In accordance with our telephone conversations and your facsimile of 23 August 2002, R. W. Gillespie & Associates, Inc., (RWG&A) has evaluated foundation support options for the extension of the Jetport Canopy associated with the proposed addition to the baggage claim area. It is understood the canopy has, historically, been supported on pile foundations consisting of end-bearing H-piles. This letter presents alternate measures to support and resist the loads provided in your facsimile.

Soil borings in the area of the addition indicate surficial fill over a relatively thin layer of stiff silty clay underlain by dense glacial till at a depth of about 12.5 feet below current ground surface. Based on the design information provided, it is anticipated that the bottom of the pile cap would be about 5 feet below ground surface and on the order of 4 feet thick. Loads based on above design are understood to result in design compressive and uplift loads of 85 and 35 kips per pile, respectively.

It is anticipated that the compressive capacities can be accommodated by driving the H-piles to the required end-bearing capacity. However, our calculations indicate that, due to the shallow depth to the glacial till, the current pile configuration which is based on a singular pile to resist uplift loads would not develop sufficient uplift resistance. Alternative measures to increase the uplift resistance would be to add more piles and change the pile type. In summary, our analysis indicates the following pile types, capacities and numbers:

Pile Type	Design Uplift Capacity	Number Required
10X42 H-Pile	9 kips	4 per foundation
12-inch Diameter Steel Pipe	15 kips	3 per foundation

R. W. Gillespie & Associates, Inc.

86 Industrial Park Road, Suite 4
Saco, ME 04072
Tel: 207-286-8008
Fax: 207-286-2882

200 International Drive, Suite 170
Portsmouth, NH 03801
Tel: 603-427-0244
Fax: 603-430-2041

LETTER OF TRANSMITTAL

RECEIVED
JAN - 7 2003
DUFRESNE-HENRY INC.
PORTLAND, ME

Dufresne-Henry, Inc.
22 Free Street
Portland, ME 04101-3900

Date:	Project No.:
06 Jan. 02	572-29
Attention: David Nadeau, EIT	
Re: New Jetway and Baggage Handling Addition Portland International Jetport	

We are sending you: ✓ Enclosed ___ Attached ___ Under separate cover via _____ the following items:

___ Copy of Invoice ___ Copy of Documentation/Details for Invoice ___ Copy of Letter ___ Copies of Report

One copy of our Report of Geotechnical Investigation dated 24 June 2002 for the referenced project
One copy of our letter to Paul B. Becker, P.E., dated 23 August 2002
One copy of our memorandum to Scott Blouin of Becker Structural Engineers dated 17 October 2002

These are transmitted: ✓ As Requested ___ For Your Use ___ For Approval ___ For Review and Comment

Remarks:

Copy To: John Finn, Phil Doughty Associates (trans.only)

Signed: Charles R. Nickerson, P.E.

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

Report
of
GEOTECHNICAL INVESTIGATION
for
NEW JETWAY & BAGGAGE HANDLING ADDITION
PORTLAND INTERNATIONAL JETPORT

Prepared
for
SEBAGO TECHNICS, INC.
WESTBROOK, MAINE

Prepared
by
R. W. GILLESPIE & ASSOCIATES, INC.
SACO, MAINE

RWG&A Project No. 572-29

June 2002

Application for Barrier-Free Permit

Department of Public Safety
Licensing & Inspections
164 State House Station
Augusta, Maine 04333-0164

Tel: 207-624-8744 x 1
Fax: 207-624-8767

Project Name: PORTLAND INTERNATIONAL JETPORT
Street Location: 1001 WESTBROOK ST Town Location:
County: CUMBERLAND State: MAINE Zip Code: 04102

ADDITION [X]

New Building: ☐ Renovation: ☐ Change of Use: ☐ NO

Project Cost: 6.9 MIL. Fee (fee schedule is on back): $250.00

Design Professional's Name: PHILIP J. DOUGHTY ASSOC. AIA-CSI
Mailing Address: 362 US RT 1
Town: FALMOUTH State: MAINE Zip Code: 04105
Maine Registration Number: 1108
Design Professional's Signature: Philip J Doughty Date: 4/21/04

Approved for Permit: ☐ Date: Plan Reviewer:
Comments:

LOG #	DATE PLANS RECEIVED	REVIEW FEE	DATE FEE RECEIVED	CHECK #	PLAN REVIEWER	DATE PERMIT ISSUED	PERMIT #

389 Congress St.Rm 315
Portland, ME 04101
Phone: (207)874-8700
Fax: (207)874-8716

facsimile transmittal

To: Phil Doughty **From:** Mike Nugent

Fax: 781-2908 **Date:** May 12, 2004

Phone **Pages:** 1

Re: Jetport Baggage expansion (208_A001)

☐ Urgent ☐ For Review ☐ Please Comment ☑ Please Reply ☐ Please Recycle

I have commenced a partial review the submissions for the above permit and have the following questions:

1) There is no Statement of Special Inspections pursuant to Section 1705 of the Code.
2) Need a statement from the Structural Engineer certifying the ability of the existing structure to perform satisfactorily with the new Loads.
3) I didn't find the Geotechnical report, was a copy sent?
4) Planning has not signed off on the project as of this date and time.

R. W. Gillespie & Associates, Inc.

TABLE OF CONTENTS

FILE COPY

R. W. Gillespie & Associates, Inc.
Geotechnical Engineering • Geohydrology • Materials Testing Services

24 June 2002

Mr. Owens McCullough, P. E.
Sebago Technics, Inc.
P. O. Box 1339
Westbrook, Maine 04098-1339

Subject: Geotechnical Investigation
New Jetway and Baggage Handling Addition
Portland International Jetport
RWG&A Project No. 572-29

Dear Mr. McCullough:

As requested and authorized, R. W. Gillespie & Associates, Inc., (RWG&A) has conducted a geotechnical investigation at the site of the proposed jetway and the baggage handling addition at the Portland International Jetport. Included in this report are the findings of our field work and associated recommendations for foundation design and construction

Subsoils at the site consist of a gravelly sand fill over naturally deposited silty clay underlain by silty sand and gravel. Spread footings with a slab-on-grade ground floor are recommended for support of the baggage handling addition, and a soil supported mat foundation is recommended for the jetway supports.

We appreciate the opportunity to serve you on this project. If you have any questions or if we may be of further service, please contact us.

Very truly yours,
R. W. GILLESPIE & ASSOCIATES, INC.

Matthew P. Lilley, E. I.
Geotechnical Engineer

Charles R. Nickerson, P. E.
Chief Geotechnical Engineer

CRN/MPL:ci
In duplicate
cc: Phillip Doughty, AIA, Phillip J. Doughty Associates
Todd Neal, P.E., Becker Structural Engineers
Joseph Hennessey, OEST Associates

1.0 INTRODUCTION

This report presents the results of our geotechnical investigation for the proposed jetway and the baggage handling addition at the Portland International Jetport. The purpose of this investigation was to obtain information regarding subsurface conditions and soil properties on which to base recommendation for design and construction of foundations and ground floor slabs.

The proposed construction consists of an addition to the existing terminal building with additional baggage handling facilities and a new jetway to serve two aircraft parking positions. The baggage handling addition will be located on the east end of the terminal building. The area encompassed by the building addition is approximately 85 feet by 100 feet in plan. The jetway will consist of a fixed passenger boarding bridge and two apron passenger boarding bridges. The project location is shown on Figure 1, Site Locus Map.

2.0 SUBSURFACE EXPLORATION

The subsurface exploration program for this investigation consisted of six soil borings drilled to depths of 22 to 27 feet below the local surface at the locations shown on Figure 2, Exploration Location Plan. Three borings were drilled in the baggage handling addition area and three in the jetway area. Drilling was performed on 13 and 14 May 2002 by Great Works Pump & Test Boring, Inc., of Rollinsford, New Hampshire. Explorations were made with truck-mounted rotary drill rigs and solid-stem augers.

Standard penetration resistance tests were below the existing pavement and at 5-foot intervals thereafter. A pocket penetrometer was used on selected samples to estimate the undrained shear strength and two thin walled tube samples were taken in boring B-102. Recovered samples and auger cuttings were used to describe the soils and prepare the boring logs presented in Appendix A. Stratification lines shown on the boring logs represent the approximate boundaries between soil types encountered; the actual transitions may be more gradual and may vary over short distances.

3.0 LABORATORY TESTING

All samples were visually examined and, when necessary, reclassified using the procedures of the Unified Soil Classification System. To aid in classification and to obtain an estimate of certain engineering properties, moisture content and grain-size analyses were performed on selected samples. Laboratory test results are presented in Appendix B.

4.0 SUBSURFACE CONDITIONS

4.1 Subsurface

Subsoils consist of fill, silty clay, and glacial till composed of silty sand with gravel. Thickness of the fill varies from 1 to 4.5 feet and consists of gravelly sand and sand. The encountered thickness of the silty clay layer was about 10.5 to 17.5 feet. Standard penetration resistance blow counts (N-values) indicate the clay is very stiff to soft. The N-values indicate the glacial till is medium to very dense

4.2 Groundwater

Free water was encountered at depths of 7 to 9 feet below local ground surface. Groundwater levels across the site will fluctuate due to season, temperature, precipitation, and construction activity in the area. Therefore, water levels during and following construction will vary from those observed in the subsurface explorations.

5.0 EVALUATION OF GEOTECHNICAL DATA

From a geotechnical standpoint, the site is appropriate for the proposed construction. Subsurface conditions are suitable for the use of shallow foundations such as spread footings with slab-on-grade ground floors for the baggage handling addition and a mat foundation for the jetway. Footings would bear on undisturbed silty clay or compacted structural fill. Due to the nature and thickness of the clay and the anticipated loads, post-construction settlements are anticipated to be less than one inch.

6.0 RECOMMENDATIONS

Foundation requirements and site development considerations are significantly affected by the subsurface conditions present at the proposed site. Comments and recommendations pertaining

to foundations and site development are presented in the following sections. Foundation design and construction should be in accordance with all applicable requirements of *the ICC International Building Code / 2000.*

6.1 Excavation and Filling

1. All pavement, utilities, fill, and other unsuitable materials should be removed from the areas receiving new constructed facilities.

2. Site grading should provide positive drainage away from constructed facilities both during and after construction.

3. Dewatering requirements will vary across the site based on groundwater levels encountered during construction and soil type. In general, it should be practical to accomplish construction dewatering from within excavations by open pumping methods to depths of one to two feet below groundwater. Surface runoff and infiltration of groundwater should be controlled so that excavation, filling, and foundation construction can be completed in-the-dry.

4. Structural fill for support of foundations and floor slabs, and for use as backfill, should be a clean, well-graded sand and gravel mixture meeting the following gradation.

Structural Fill Gradation

Screen or Sieve Size	Percent Passing
6 inches	100
3 inches	70 - 100
No. 4	35 - 70
No. 40	5 - 35
No. 200	0 - 5

Note: Maximum particle size limited to 3 inches within two feet of walls, pile caps, and ground floor slabs.

5. In open areas, structural fill should be placed in level, uniform lifts not exceeding 9 inches in uncompacted thickness and compacted with self-propelled compaction equipment. In confined areas, structural fill should be placed in lifts not exceeding 6 inches in uncompacted thickness (note: maximum particle size 3 inches) and compacted with hand-operated

Seismic Design Parameters		
	Short Period	*1-second Period*
	Site Class D	
Mapped Spectral Accelerations (%g)	(S_S)	(S_1)
	37.2	9.8
Site Coefficients	(F_a)	(F_v)
	1.50	2.40
Maximum Considered Earthquake Spectral Response Accelerations (%g)	(S_{MS})	(S_{M1})
	55.8	23.6
Design Spectral Response Accelerations (%g)	(S_{DS})	(S_{D1})
	37.2	15.7

13. Lateral foundation loads from wind and earthquake may be resisted by friction between the bottom of the spread/continuous footings or mat and bearing subgrade. A friction coefficient of 0.35 is recommended for use in design.

6.3 Ground Floor Slabs

14. Slab-on-grade ground floors supported on structural fill placed and compacted over the naturally deposited silty clay may be used for this project. No less than one foot of structural fill should be placed beneath the slab and compacted in accordance with the above recommended criteria. A modulus of subgrade reaction of 150 pounds per cubic inch may be used in the design of slab-on-grade floors.

6.4 Utilization of On-Site Materials

15. In general, on-site materials appear to be suitable for use as structural or common fill. On-site materials should be segregated and stockpiled. Further laboratory testing should be performed on stockpile samples to determine their suitability for use as structural or common fill.

compaction equipment. Structural fill should be compacted to at least 95 percent of maximum dry density as determined by *ASTM D1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3))*.

6. Only structural fill should be used as fill to raise grade and support the proposed foundations and ground floors.

6.2 Foundations

6.2.1 Baggage Handling Addition Foundations

7. The proposed building may be supported on spread and/or continuous footings bearing on undisturbed naturally deposited silty clay. Footings should be designed for a maximum contact pressure of 3,000 pounds per square foot. Minimum footing width should be in accordance with concrete design and building code requirements, and not less than 2 feet.

8. Areas where utility trenches cross the building should be excavated to the bottom of the trench and backfilled with compacted structural fill.

6.2.2 Jetway Foundations

9. The proposed jetway may be supported on mat foundations designed for a maximum contact pressure of 4,500 pounds per square foot. A modulus of subgrade reaction of 150 pounds per cubic inch should be used in the design of a mat foundation.

6.2.3 General Foundation Recommendations

10. A smooth edged bucket should be used during footing excavation to minimize disturbance to the clay subgrade. The exposed subgrade should be protected from disturbance, moisture, and freezing until the footing concrete is placed.

11. It is recommended that design bottom of footing level for exterior footings bearing on undisturbed clay be a minimum of 4 feet below the lowest adjacent ground surface exposed to freezing.

12. The foundations should be designed to withstand lateral, uplift, and overturning forces due to earthquakes. In accordance with *The ICC International Building Code / 2000* the following parameters should be used for seismic design purposes.

6.5 Geotechnical Observation

16. Since the above geotechnical recommendations are based on limited numbers of observations and tests, the Owner should be particularly sensitive to the potential need for adjustments in the field. It would be in the best interests of the Owner and project to retain RWG&A to observe geotechnical construction aspects of the project, observe general compliance with the design concepts, specifications, and recommendations, and to assist in development of design changes should subsurface conditions differ from those anticipated. Such observation increases the likelihood of the design intent being considered adequately during construction and will allow RWG&A to confirm its design recommendations.

7.0 CLOSURE

This report has been prepared for specific application to the proposed jetway and the baggage handling addition at the Portland International Jetport and for the exclusive use of Sebago Technics, Inc. This work has been completed in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made. In the event that any changes are made in the nature or location of the project, the conclusions and recommendations of this report should be reviewed by RWG&A.

PDA *Phillip Doughty Associates — Architects*
362 U.S. Route One, Falmouth, ME 04105
Telephone: 207.781.5346
e-mail: pdarch@maine.rr.com
Fax: 207.781.2908

Fax

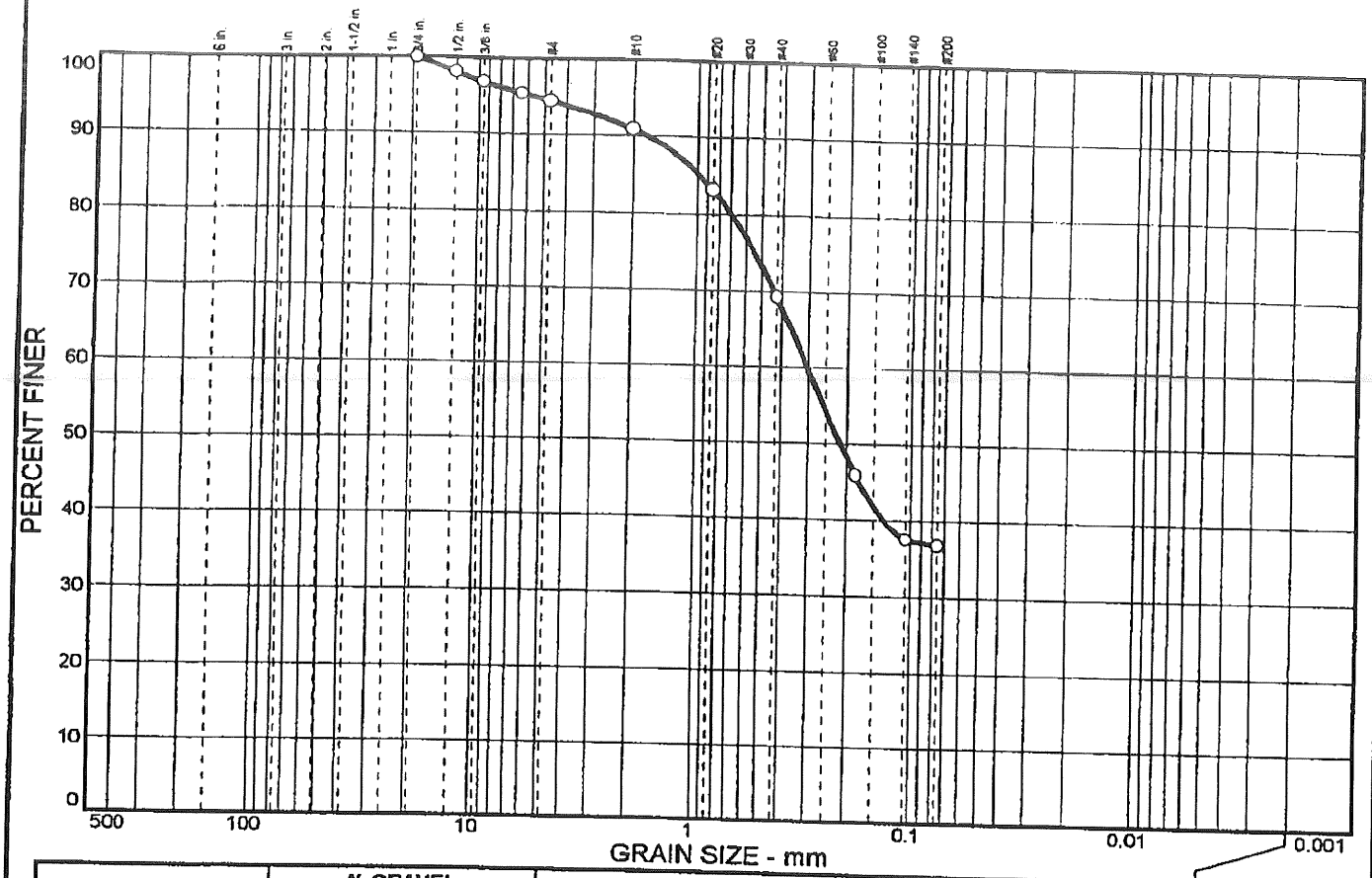
To:	Mike Nugent	From:	Sue Edwards
Company:	City Inspections		
Fax:	874-8716	Pages:	36 (inc. cover)
Project #:	03C-002 Jetport Baggage Claim Permitting	Date:	May 13, 2004
Re:	Geotechnical report	CC:	Paul Bradbury, File

☐ Urgent ☐ For Review and Comment ☐ For Your Use ☒ **Please call to confirm receipt**

✍ ***Comments:***

Following are
- City of Portland Building Code Certificate (3 pages)
- State Fire Marshall Application for Construction Permit
- State Fire Marshall Application for Barrier-Free Permit
- Report of Geotechnical Investigation (30 pages)

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	5.6	3.6	21.5	32.5	36.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75 in.	100.0		
.5 in.	98.1		
.375 in.	96.8		
.25 in.	95.4		
#4	94.4		
#10	90.8		
#20	83.2		
#40	69.3		
#80	45.9		
#140	37.5		
#200	36.8		

*(no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.975 D_{60}= 0.303 D_{50}= 0.212
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

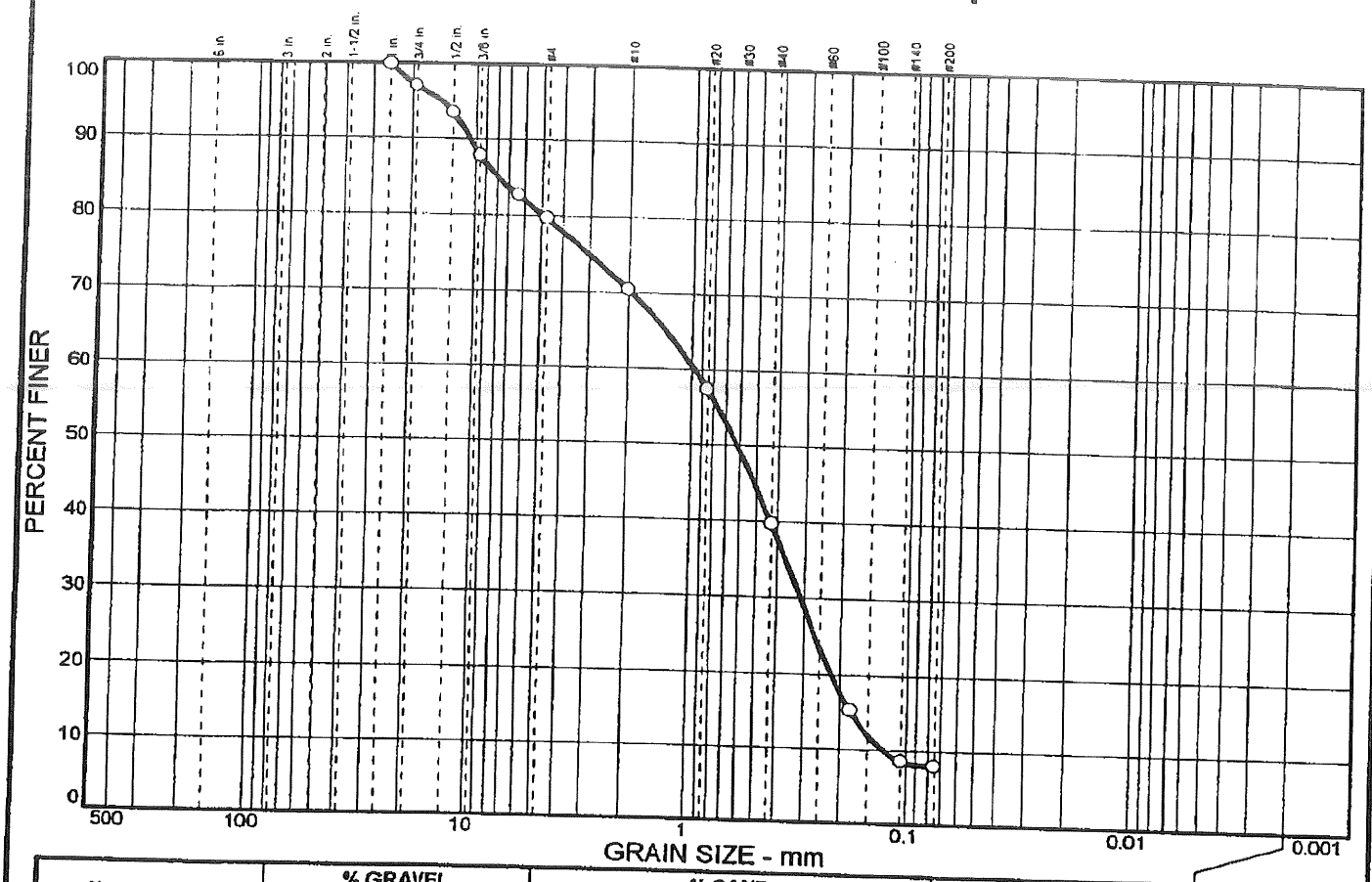
Moisture Content 14.5%
Tested by AMA

Sample No.: 1 **Source of Sample:** B-106 **Date:** 5/28/2002
Location: Portland, ME **Elev./Depth:** 0-2'

R.W. Gillespie & Associates, Inc.

Client: New Jetways and Baggage
Project: Sebago Technics
Project No: 572-29 **Lab No.** 6067B

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	3.0	17.3	9.2	30.8	31.7	8.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1 in.	100.0		
.75 in.	97.0		
.5 in.	93.5		
.375 in.	87.8		
.25 in.	82.7		
#4	79.7		
#10	70.5		
#20	57.4		
#40	39.7		
#80	15.3		
#140	8.6		
#200	8.0		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 7.90 D_{60}= 0.971 D_{50}= 0.616
D_{30}= 0.310 D_{15}= 0.177 D_{10}= 0.128
C_u= 7.61 C_c= 0.78

Classification

USCS= SP-SM AASHTO=

Remarks

Moisture Content 5.8%
Tested by AMA

Sample No.: 1 **Source of Sample:** B-105 **Date:** 5/28/2002
Location: Portland, ME **Elev./Depth:** 0-2'

R.W. Gillespie & Associates, Inc.

Client: New Jetways and Baggage
Project: Sebago Technics
Project No: 572-29 **Lab No.** 6067A

R. W. Gillespie & Associates, Inc.

APPENDIX B

LABORATORY TESTS

New Jetway & Baggage Handling Addition
Portland International Jetport

BORING LOG B-106

Project: Portland Jetport
Location: Portland, Maine

Approximate Surface Elevation: 58.04'
Ground Water Depth: 8'

Client: Sebago Technics

Project No. 572-29

Date: 5/14/02

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	Lab Tests
0			S-1	TOPSOIL AND ORGANIC MATERIAL (0.5')	20	2 8 8 15	16	14.5	GS
				FILL: Silty Sand with gravel, medium dense, moist, medium to fine sand, little silt, trace gravel, brown.					
				SILTY CLAY (CL); hard, moist, olive brown. Pocket Penetrometer: Su = 4.5+ ksf					
5			S-2		24	10 14 19 20	33	25.8	
10			S-3	Pocket Penetrometer: Su = 2.0 to 2.5 ksf	24	7 8 9 11	17	26.5	
15			S-4	Becomes medium stiff, wet, gray.	24	3 2 3 3	5	32.3	
				SILTY SAND (SM); dense, wet, coarse to fine sand, little silt, little to trace gravel, gray. (Glacial Till)					
20			S-5		17	15 25 33 38	58		
				Bottom of Exploration at 22': no refusal.					
25									
30									
35									

R.W. Gillespie & Associates, Inc.
Saco, Maine

BORING LOG B-105

Project: Portland Jetport
Location: Portland, Maine

Approximate Surface Elevation:
Ground Water Depth: 7'

Client: Sebago Technics

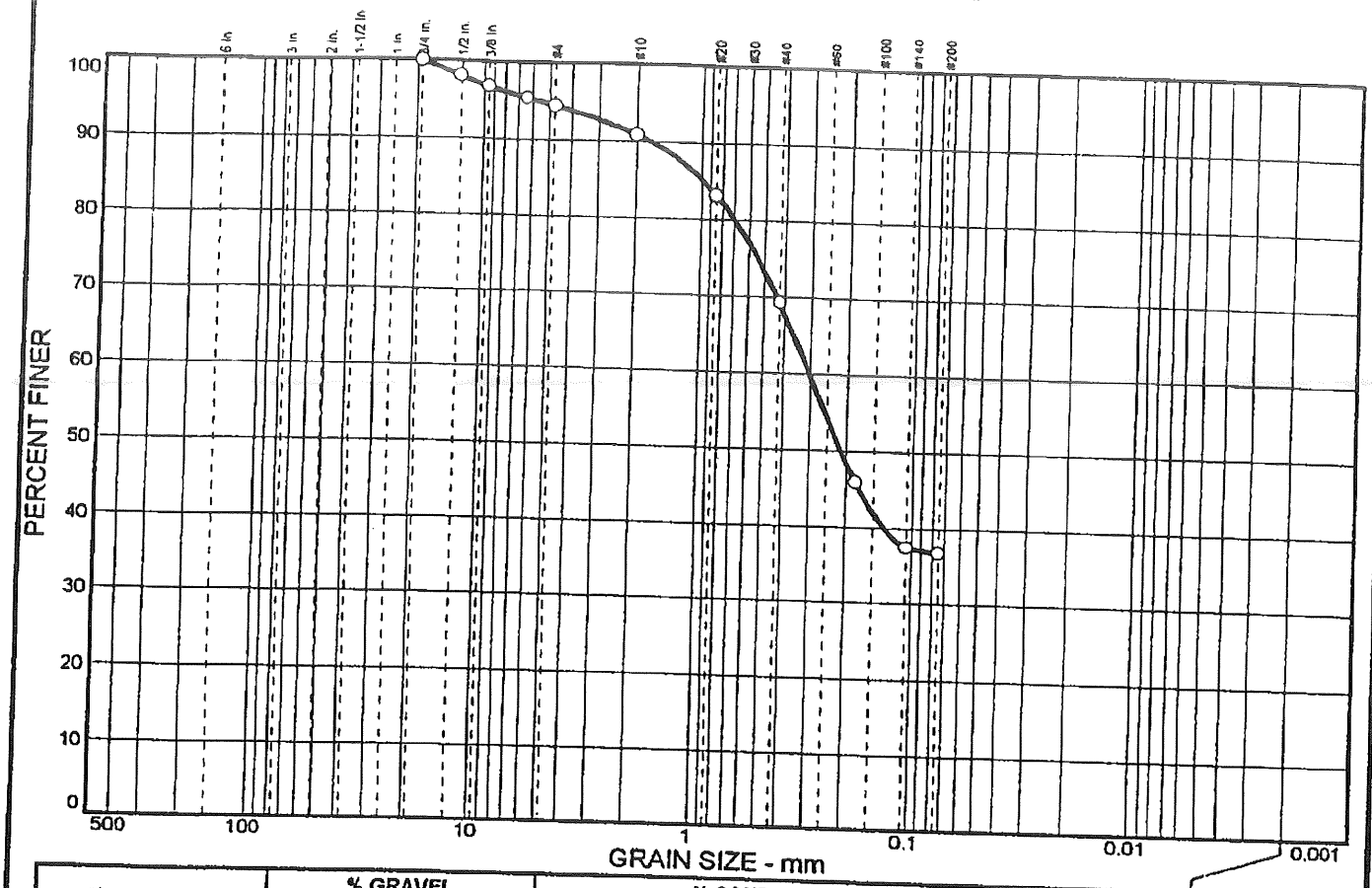
Project No. 572-29

Date: 5/14/02

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	Lab Tests
0			S-1	ASPHALTIC PAVEMENT (3.5")	15	16 25 27 18	52	5.8	GS
				FILL: Gravelly Sand, dense, moist, medium to fine sand, little to some gravel, trace silt, brown.					
5			S-2	SILTY CLAY (CL); hard, moist, olive brown. Pocket Penetrometer: Su = 4.5+ ksf	24	6 12 17 17	29	6.8	
10			S-3	Pocket Penetrometer: Su = 2.5 to 2.75 ksf	24	6 10 11 14	21		
15			S-4	SILTY SAND (SM); medium dense to dense, wet, coarse to fine sand, little to some silt, little to trace gravel, gray. (Glacial Till)	18	8 12 22 25	34		
20			S-5		17	18 15 9 8	24		
				Bottom of Exploration at 22': no refusal.					
25									
30									
35									

R.W. Gillespie & Associates, Inc.
Saco, Maine

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	5.6	3.6	21.5	32.5	36.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75 in.	100.0		
.5 in.	98.1		
.375 in.	96.8		
.25 in.	95.4		
#4	94.4		
#10	90.8		
#20	83.2		
#40	69.3		
#80	45.9		
#140	37.5		
#200	36.8		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.975 D_{60}= 0.303 D_{50}= 0.212
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

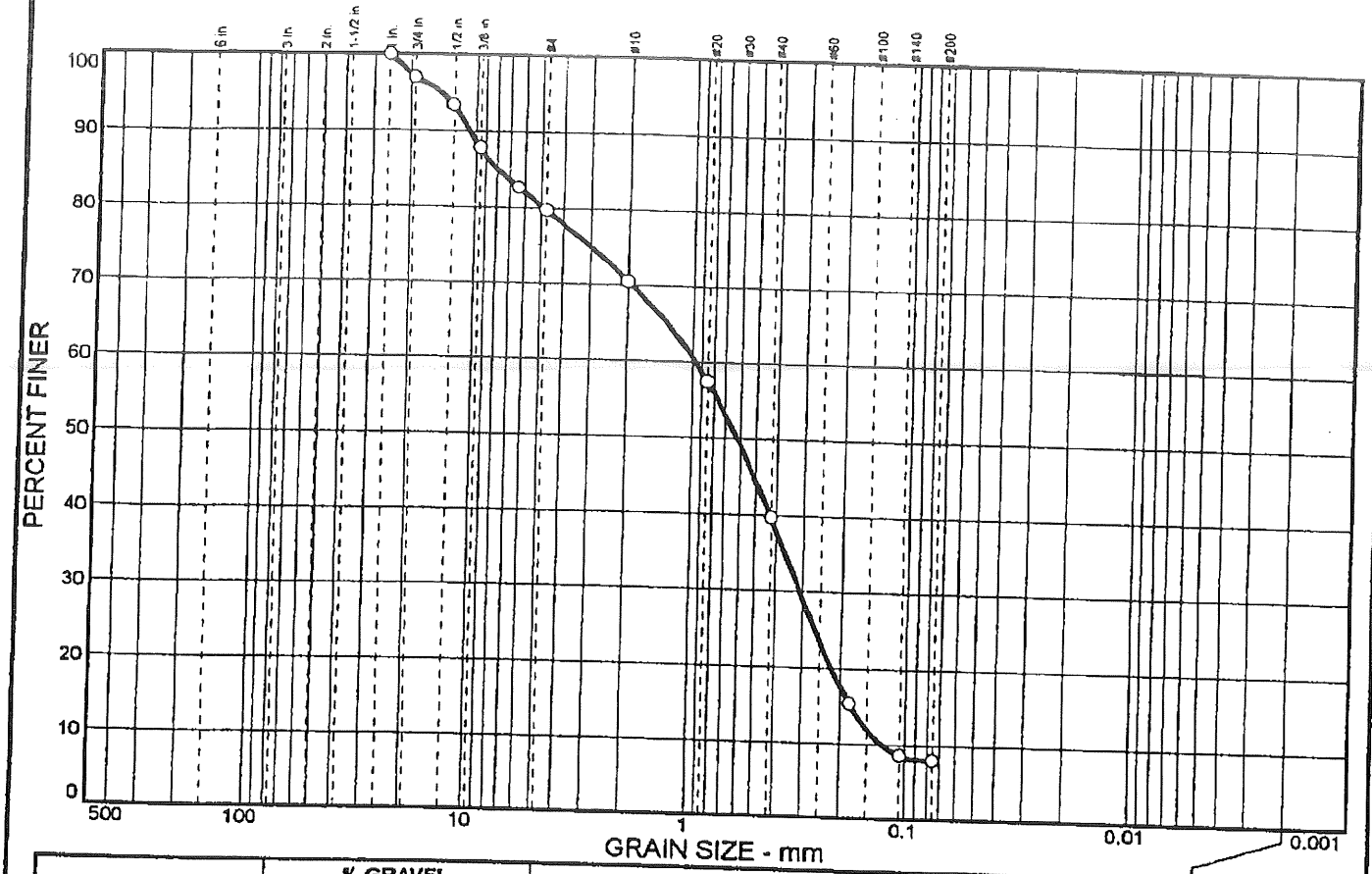
Moisture Content 14.5%
Tested by AMA

Sample No.: 1 **Source of Sample:** B-106 **Date:** 5/28/2002
Location: Portland, ME **Elev./Depth:** 0-2'

R.W. Gillespie & Associates, Inc.

Client: New Jetways and Baggage
Project: Sebago Technics
Project No: 572-29 **Lab No.** 6067B

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	3.0	17.3	9.2	30.8	31.7	8.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1 in.	100.0		
.75 in.	97.0		
.5 in.	93.5		
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.25 in.	82.7		
#4	79.7		
#10	70.5		
#20	57.4		
#40	39.7		
#80	15.3		
#140	8.6		
#200	8.0		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 7.90 D_{60}= 0.971 D_{50}= 0.616
D_{30}= 0.310 D_{15}= 0.177 D_{10}= 0.128
C_u= 7.61 C_c= 0.78

Classification

USCS= SP-SM AASHTO=

Remarks

Moisture Content 5.8%
Tested by AMA

Sample No.: 1 **Source of Sample:** B-105 **Date:** 5/28/2002
Location: Portland, ME **Elev./Depth:** 0-2'

R.W. Gillespie & Associates, Inc.

Client: New Jetways and Baggage
Project: Sebago Technics
Project No: 572-29 **Lab No.** 6067A

R. W. Gillespie & Associates, Inc.

APPENDIX B

LABORATORY TESTS

New Jetway & Baggage Handling Addition
Portland International Jetport

BORING LOG B-106

Project: Portland Jetport
Location: Portland, Maine

Approximate Surface Elevation: 58.04'
Ground Water Depth: 8'

Client: Sebago Technics

Project No. 572-29

Date: 5/14/02

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	Lab Tests
0			S-1	TOPSOIL AND ORGANIC MATERIAL (0.5')	20	2	16	14.5	GS
				FILL: Silty Sand with gravel, medium dense, moist, medium to fine sand, little silt, trace gravel, brown.		8			
				SILTY CLAY (CL); hard, moist, olive brown.		8			
				Pocket Penetrometer: Su = 4.5+ ksf		15			
5			S-2		24	10	33	25.8	
						14			
						19			
						20			
10			S-3	Pocket Penetrometer: Su = 2.0 to 2.5 ksf	24	7	17	26.5	
						8			
						9			
						11			
15			S-4	Becomes medium stiff, wet, gray.	24	3	5	32.3	
						2			
				SILTY SAND (SM); dense, wet, coarse to fine sand, little silt, little to trace gravel, gray. (Glacial Till)		3			
						3			
20			S-5		17	15	58		
						25			
						33			
				Bottom of Exploration at 22': no refusal.		38			
25									
30									
35									

R.W. Gillespie & Associates, Inc.
Saco, Maine

BORING LOG B-105

Project: Portland Jetport
Location: Portland, Maine

Approximate Surface Elevation:
Ground Water Depth: 7'

Client: Sebago Technics

Project No. 572-29

Date: 5/14/02

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	Lab Tests
0			S-1	ASPHALTIC PAVEMENT (3.5")	15	16	52	5.8	GS
				FILL: Gravelly Sand, dense, moist, medium to fine sand, little to some gravel, trace silt, brown.		25			
						27			
						18			
				SILTY CLAY (CL); hard, moist, olive brown.					
5			S-2	Pocket Penetrometer: Su = 4.5+ ksf	24	6	29	6.8	
						12			
						17			
						17			
10			S-3	Pocket Penetrometer: Su = 2.5 to 2.75 ksf	24	6	21		
						10			
						11			
						14			
15			S-4	SILTY SAND (SM); medium dense to dense, wet, coarse to fine sand, little to some silt, little to trace gravel, gray. (Glacial Till)	18	8	34		
						12			
						22			
						25			
20			S-5		17	18	24		
						15			
						9			
				Bottom of Exploration at 22': no refusal.		8			
25									
30									
35									

R.W. Gillespie & Associates, Inc.
Saco, Maine

BORING LOG B-104

Project: Portland Jetport
Location: Portland, Maine

Approximate Surface Elevation:
Ground Water Depth: 7'

Client: Sebago Technics

Project No. 572-29

Date: 5/14/02

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	Lab Tests
0			S-1	ASPHALTIC PAVEMENT (3").	19	15	27		
				FILL: Gravelly Sand, medium dense, moist, coarse to fine sand, mostly medium, little gravel, trace silt, brown.		19			
				SILTY CLAY (CL); hard, moist, olive brown.		8			
				Pocket Penetrometer: Su = 4.5+ ksf		7			
5			S-2		24	9	32		
						13			
						19			
						22			
10			S-3	Pocket Penetrometer: Su = 2.0 to 2.5 ksf	24	6	18		
						9			
						9			
				SILTY SAND (SM); dense to very dense, wet, coarse to fine sand, little to some silt, little to trace gravel. (Glacial Till).		11			
15			S-4		16	10	32		
						16			
						16			
						31			
20			S-5		15	15	68		
						25			
						43			
				Bottom of Exploration at 22': no refusal.		32			
25									
30									
35									

R.W. Gillespie & Associates, Inc.
Saco, Maine

BORING LOG B-103

Project: Portland Jetport
Location: Portland, Maine

Approximate Surface Elevation: 57.30'
Ground Water Depth: 9'±

Client: Sebago Technics

Project No. 572-29

Date: 5/13/02

DEPTH, FT.	SYMBOL	SAMPLES SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	Lab Tests
0		S-1	ASPHALTIC PAVEMENT (5"). Fill: Gravelly Sand, dense, moist, medium to fine sand, some gravel, little to trace silt, gray.	18	20 23 33 31	56		
			FILL: SAND (SP); dense, moist, medium to fine sand, little to trace silt, gray.					
5		S-2	SILTY CLAY (CL); hard, moist olive brown. Pocket Penetrometer: Su = 4.5+ ksf	24	5 9 17 18	26	26.4	
10		S-3	Becomes medium stiff. Pocket Penetrometer: Su = 2.0-2.5 ksf	24	3 6 8 9	14	47.9	
15		S-4	Becomes soft, wet, gray.	24	WOR		37.6	
20		S-5		8	6 7 8 9	15		
			SILTY SAND (SM); with gravel, medium dense to dense, wet, coarse to fine sand, little silt, trace to little gravel, gray. (Glacial Till)					
25		S-6		4	11 18 28 34	46		
			Bottom of Exploration at 27', no refusal.					
30								
35								

R.W. Gillespie & Associates, Inc.
Saco, Maine

BORING LOG B-102

Project: Portland Jetport
Location: Portland, Maine

Approximate Surface Elevation: 57.83'
Ground Water Depth: 9'±

Client: Sebago Technics

Date: 5/13/02

Project No. 572-29

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	Lab Tests
0			S-1	ASPHALTIC PAVEMENT (5"). FILL: Gravelly Sand, dense, moist, medium to fine sand, some gravel, little to trace silt.	21	24 29 22 25	51		
5			S-2	SILTY CLAY (CL); hard, moist, olive brown. Pocket Penetrometer: Su = 4.5+ ksf.	24	5 10 11 14	21		
10			U-1	Becomes medium stiff.	24/ 24				
15			U-2	Becomes wet, gray.	24/ 24				
			S-3	SILTY SAND (SM); dense, wet, coarse to fine sand, little silt, little to trace gravel, gray.					
20			S-4		10	10 16 23 19	39		
				Bottom of Exploration at 22': no refusal.					
25									
30									
35									

R.W. Gillespie & Associates, Inc.
Saco, Maine

BORING LOG B-101

Project: Portland Jetport
Location: Portland, Maine

Approximate Surface Elevation: 57.41'
Ground Water Depth: 9'±

Client: Sebago Technics

Date: 5/13/02

Project No. 572-29

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT %	Lab Tests
0			S-1	ASPHALTIC PAVEMENT (5").	18	20	63		
				FILL: Gravelly Sand, dense moist, medium to fine sand, little to some gravel, trace silt, gray.		30			
				FILL: Sand, medium dense to dense, moist, medium to fine sand, trace gravel, little to trace silt, gray.		33			
						38			
5			S-2	SILTY CLAY (CL); hard, moist, olive brown. Pocket Penetrometer: Su = 4.5 ksf	24	7	25	25.3	
						9			
						16			
						16			
10			S-3	Pocket Penetrometer: Su = 2.5 - 3.0 ksf	24	3	12	29.3	
						6			
						6			
						7			
15			S-4	Becomes medium stiff, wet, gray.	24	1	3	34.5	
						1			
						2			
						2			
20			S-5		16	4	14		
				SILTY SAND WITH GRAVEL (SM); medium dense, wet, coarse to fine sand, some silt, little to trace gravel, gray (Glacial Till).		6			
						8			
						10			
25			S-6		15	8	62+		
						12			
				Bottom of Exploration at 26.3': spoon refusal, possible boulder or bedrock.		50/			
						3"			
30									
35									

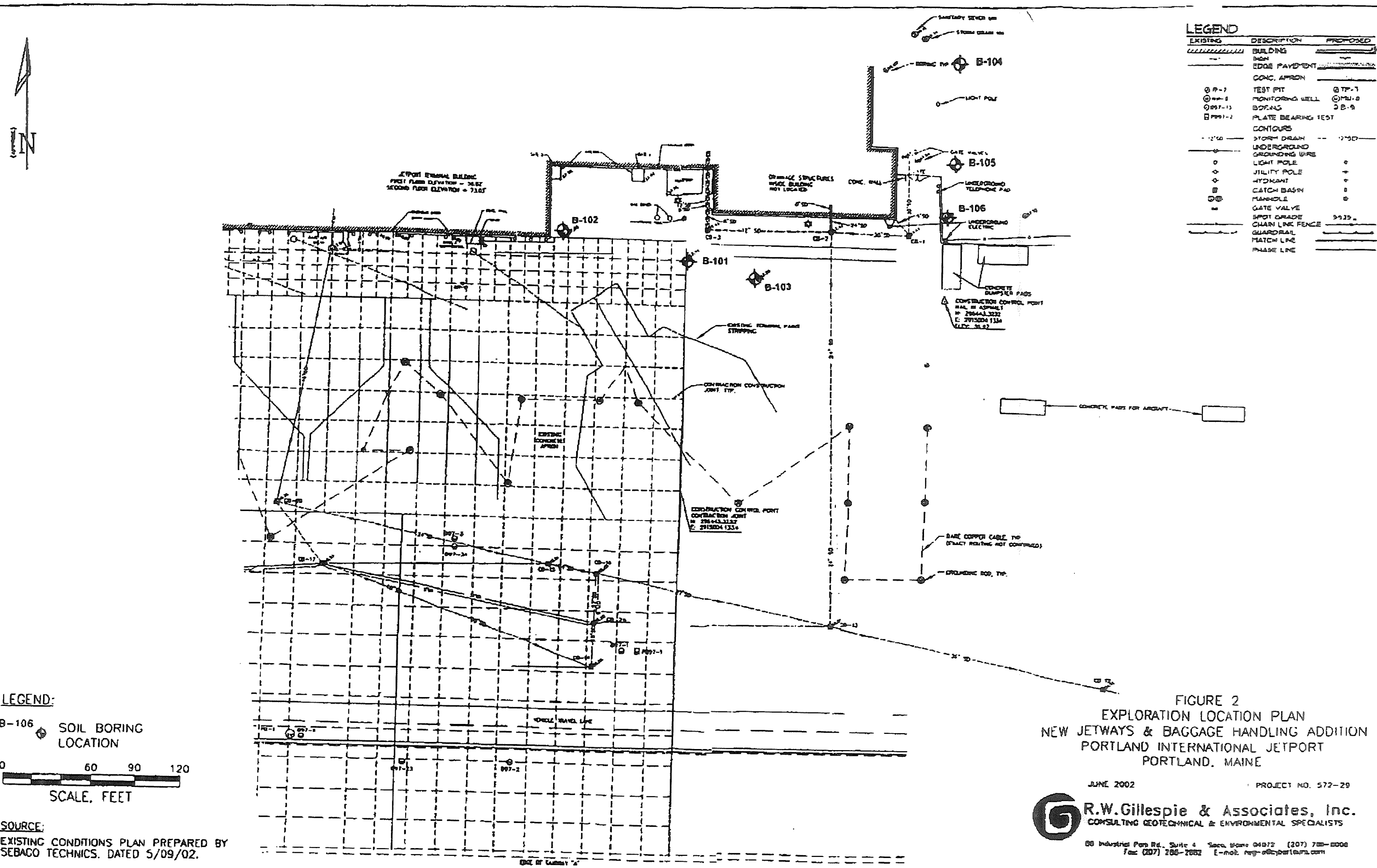
R.W. Gillespie & Associates, Inc.
Saco, Maine

R. W. Gillespie & Associates, Inc.

APPENDIX A

TEST BORING LOGS

New Jetway & Baggage Handling Addition
Portland International Jetport



LEGEND:

B-106 ⊕ SOIL BORING LOCATION

0 60 90 120

SCALE, FEET

SOURCE:

EXISTING CONDITIONS PLAN PREPARED BY SEBACO TECHNICS, DATED 5/09/02.

FIGURE 2
EXPLORATION LOCATION PLAN
NEW JETWAYS & BAGGAGE HANDLING ADDITION
PORTLAND INTERNATIONAL JETPORT
PORTLAND, MAINE

JUNE 2002 PROJECT NO. 572-29

R.W.Gillespie & Associates, Inc.
CONSULTING GEOTECHNICAL & ENVIRONMENTAL SPECIALISTS

FIGURE 1
SITE LOCUS MAP
NEW JETWAYS & BAGGAGE
PORTLAND INTERNATIONAL JETPORT
SOUTH PORTLAND, MAINE

JUNE 2002 PROJECT NO. 572-29

SOURCE:
USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLE OF PORTLAND WEST, DATED 1978.

R.W. Gillespie & Associates, Inc.
CONSULTING GEOTECHNICAL & ENVIRONMENTAL SPECIALISTS
86 Industrial Park Rd., Suite 4 Saco, Maine 04072 (207) 286-8008
Fax: (207) 286-2882 E-mail: rwg-a@cybertours.com

Application for Construction Permit

SHADED AREAS ARE FOR OFFICE USE ONLY (10-03)

Department of Public Safety
State Fire Marshal's Office
52 State House Station
Augusta, Maine 04333-0052
Tel: 207-624-8744 x 1
Fax: 207-624-8767

Project Information

Project Name: PORTLAND INTERNATIONAL JETPORT
Street Location: 1001 WESTBROOK ST Town Location: Portland, ME
County: CUMBERLAND CITY ME. EXPANSION/ADDITION Number of Stories: 2 + MECH. PENTHOUSE
New Building: ☐ Renovation: ☒ Addition: ☒ Occupancy Change: ☐ (NO)
Sprinkler System: (Yes) ☐ No Supervised: (Yes) ☐ No Square Footage: 25,604
Date of Construction Start-up: 5/04 Estimated Project Cost: $6,900,000
Date of Construction Completion: 5/05 Construction Permit Fee: $ (Fee schedule is on back) C.05 x 8000 = 400 - $752. C.02 x 17,604 = 352.1

Occupancy Classification

Apartments	☐	Nursing Home	☐	Educational	☐
Hotel / Motel	☐	Industrial	☐	Daycare	☐
Rooming & Lodging	☐	Residential Care Level I	☐	Detention	☐
Congregate Housing	☐	Residential Care Level II	☐	Business	☐
Hospital	☐	1ST FL: Assembly Class ≥1000 ☒	≥300≤1000 ☐	≤300 ☐	Other ☒ $
Limited Care	☐	Mercantile A ☐	B ☐	C ☐	# 17,600 UN-OCCUPIED

Construction Type

Fire Resistive: Type I (443), (332)	☐	Unprotected Ordinary: Type III (200)	☐
Protected Non-Combustible: Type II (222), (111)	☐	Heavy Timber: Type IV (2HH)	☐
Unprotected Non-Combustible: Type II (000) 2ND FL	☒	Protected Wood Frame: Type V (111)	☐
Protected Ordinary: Type III (211) (FIRST FLOOR)	☒	Unprotected Wood Frame: Type V (000)	☐

Addresses

Owner's Name: PORTLAND INT'NL JETPORT Telephone: 7747301 Fax: 774-7740
Mailing Address: 1001 WESTBROOK ST
Town: PORTLAND, MAINE State: Zip Code: 04102

Design Professional: PHILLIP J. DOUGHTY ASSOC Telephone: 781-5346 Fax: 781-2908
Maine Registration Number: 1108 E-mail: PDARCH@MAINE.RR.COM
Mailing Address: 362 US RT #1
Town: FALMOUTH, MAINE State: Zip Code: 04105

General Contractor: LEDGEWOOD INC Telephone: 767-1866 Fax:
Mailing Address: 27 MAINE ST
Town: SO PORTLAND, State: MAINE Zip Code: 04106

Signature of Applicant: Phillip J Doughty 4-21-04

Preliminary Approval:	☐	Date:		Approved By:	
Construction Permit:	☐	Date:		Approved By:	
Approval Letter: -When a permit is not required	☐	Date:		Approved By:	

LOG #	DATE PLANS RECEIVED	REVIEW FEE	DATE FEE RECEIVED	CHECK #	PLAN REVIEWER	DATE PERMIT ISSUED	PERMIT #

CITY OF PORTLAND
BUILDING CODE CERTIFICATE
389 Congress St., Room 315
Portland, Maine 04101

TO: Inspector of Buildings City of Portland, Maine
Department of Planning & Urban Development
Division of Housing & Community Service

FROM DESIGNER: BECKER STRUCTURAL ENGINEERS, INC.
75 YORK ST., PORTLAND, ME 04101

DATE: APRIL 23, 2004

Job Name: EASTERLY EXPANSION OF BAGGAGE CLAIM FACILITY

Address of Construction: PORTLAND INTERNATIONAL JETPORT, PORTLAND, ME

THE BOCA NATIONAL BUILDING CODE / 1999 (FOURTEENTH EDITION)
Construction project was designed according to the building code criteria listed below:

Building Code and Year 1999 Use Group Classification(s) MIXED USE

Type of Construction TYPE 2C

Structural Systems

Roof Snow Load

60 Ground Snow Load (Pg)
46 If Pg >10 psf, Flat Roof snow load, Pf
0.9 If Pg >10 psf, snow exposure factor, Ce
1.0 If Pg >10 psf, roof thermal factor
1.20 If Pg >10 psf, snow load importance factor, I
N/A Sloped Roof Snowload Ps

Earthquake Loads

0.12 Peak velocity-related acceleration, Av
0.12 Peak acceleration, Aa
II Seismic hazard exposure group
C Seismic performance category
SI Soil profile type
BF/MF Basic structural system /seismic-resisting system
(B.F.) R=5/CD=4.5 (M.F.) R=4.5/CD=4 Response modification factor, R, and deflection amplification factor, Cd,

✓ The documents must account for Drift snow load, unbalanced snow load and Sliding snow loads as required

Wind Loads

85 Basic Wind Speed
C Wind Exposure Category
+/- 0.25 Internal Pressure Coefficient
18.5 Wind Design Pressure
1.23 Wind Importance Factor

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

CITY OF PORTLAND
BUILDING CODE CERTIFICATE
389 Congress St., Room 315
Portland, Maine 04101

TO: Inspector of Buildings City of Portland, Maine
Department of Planning & Urban Development
Division of Housing & Community Service

FROM: PHILLIP J. DOUGHTY – ARCHITECT

RE: Certificate of Design

DATE: 4/25/04

These plans and / or specifications covering construction work on:

PORTLAND INTERNATIONAL JETPORT BAGGAGE CLAIM EXPANSION – 1001 WESTBROOK ST PORTLAND MAINE

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the ***BOCA National Building Code / 1999 (Fourteenth Edition)*** and local amendments. TO THE BEST OF MY KNOWLEDGE.

(SEAL)

LICENSED ARCHITECT
PHILLIP J. DOUGHTY
1103
STATE OF MAINE

Signature: Phillip J. Doughty

Title: Owner / Architect

Firm: PHILLIP J. DOUGHTY ASSOC.

Address: 362 U.S. RT 1
FALMOUTH, MAINE 04105

As per Maine State Law:

$50,000.00 or more in new construction, repair expansion, addition, or modification for Building or Structures, shall be prepared by a registered design Professional.

CITY OF PORTLAND MAINE
DEPARTMENT OF TRANSPORTATION AND WATERFRONT
PORTLAND INTERNATIONAL JETPORT
FACILITIES DEPARTMENT
FAX

Fax to: Mike Nugent **Date: 04 30 04**

Fax No: 874 8716 **Re: Easterly Bag Claim Project**

From: **Roy Williams**

Fax No: (207) 774-7740
Tel. No: (207) 756-8314

Message:

Mike

As per my recent email attached are the two schedules that I have received from Ledgewood Inc to date. One schedule is an overview of the coming month of May and the other is an overall project schedule covering the year.

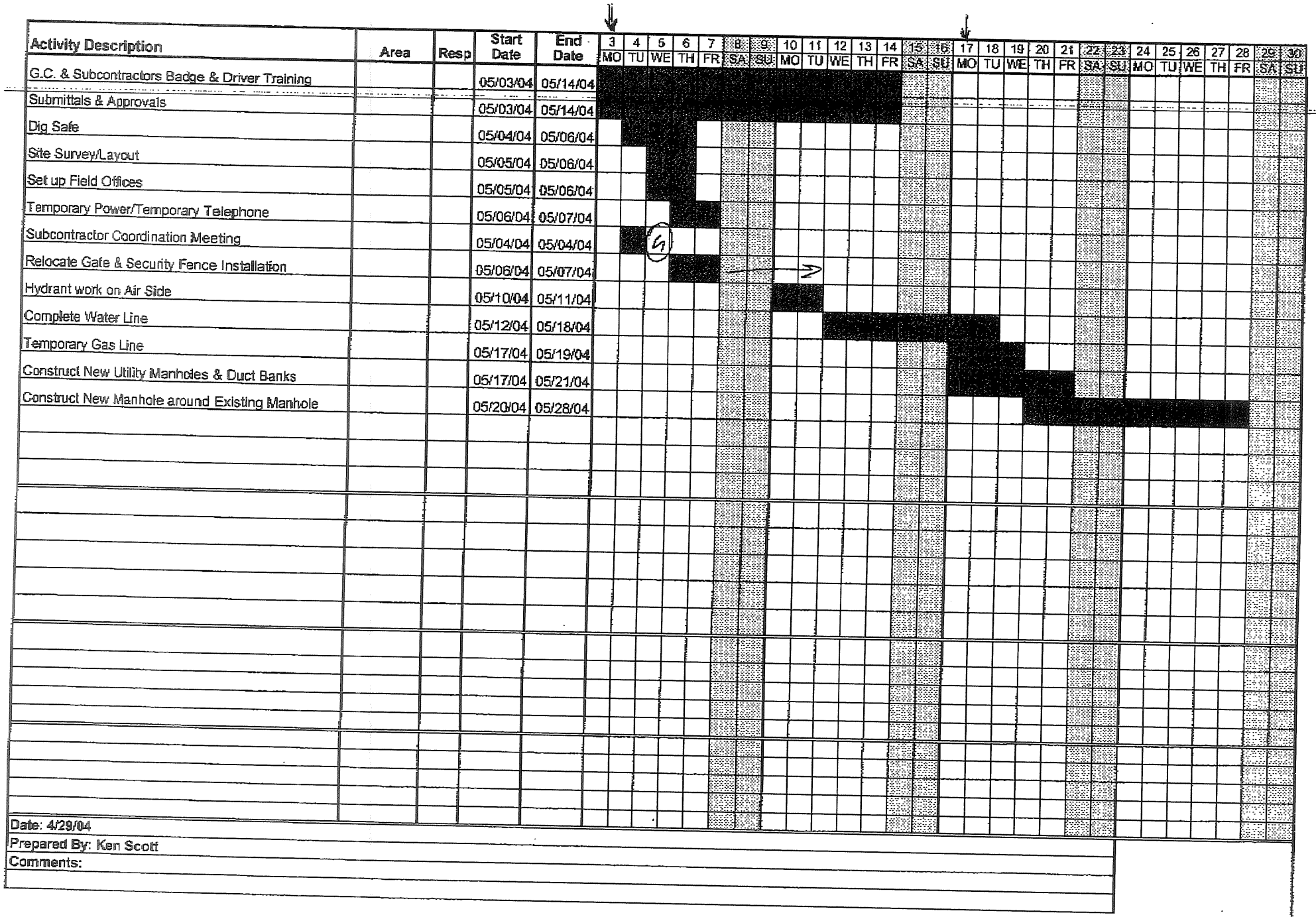
Please call me if you have any questions

Regards

Roy Williams

SHORT TERM LOOK AHEAD SCHEDULE

#04445- Portland International Jetport 5/3/2004



Activity Description	Area	Resp	Start Date	End Date
G.C. & Subcontractors Badge & Driver Training			05/03/04	05/14/04
Submittals & Approvals			05/03/04	05/14/04
Dig Safe			05/04/04	05/06/04
Site Survey/Layout			05/05/04	05/06/04
Set up Field Offices			05/05/04	05/06/04
Temporary Power/Temporary Telephone			05/06/04	05/07/04
Subcontractor Coordination Meeting			05/04/04	05/04/04
Relocate Gate & Security Fence Installation			05/06/04	05/07/04
Hydrant work on Air Side			05/10/04	05/11/04
Complete Water Line			05/12/04	05/18/04
Temporary Gas Line			05/17/04	05/19/04
Construct New Utility Manholes & Duct Banks			05/17/04	05/21/04
Construct New Manhole around Existing Manhole			05/20/04	05/28/04

3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA	SU

Date: 4/29/04
Prepared By: Ken Scott
Comments:

BECKER
structural engineers

Date: 12/2/2004
Time: 10:00 AM
Temp: 34 F
Weather: Partly Cloudy/showers

Observation Report 033
General Review

Project: **Portland Jetport Baggage Claim Addi**
Portland, ME

Job #: 826

Location: Walked through the whole addition.

	Satisfactory	Unsatisfactory	Not Completed	N/A
Bolt Condition				
Weld Condition				
Weld Location				
Cover Plates				
Epoxy Adhesive				
Fitup				
Grouting				

Satisfactory	Unsatisfactory	Not Completed	N/A

Notes: Reviewed installation of reinforcement for Mechanical Pads. Confirmed 6" max height with Polina

Signed: Todd M. Neal Date: 12/2/2004

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

BECKER
structural engineers

Date: 1/6/2005
Time: 10:00 AM
Temp: 34 F
Weather: Cloudy and snowy

Observation Report 034
General Review

Project: **Portland Jetport Baggage Claim Addi**
Portland, ME

Job #: 826

Location: Walked through the whole addition.

	Satisfactory	Unsatisfactory	Not Completed	N/A
Bolt Condition				
Weld Condition				
Weld Location				
Cover Plates				
Epoxy Adhesive				
Fitup				
Grouting				

Satisfactory	Unsatisfactory	Not Completed	N/A

Notes:

Signed: Todd M. Neal Date: 1/6/2005

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

BECKER
structural engineers

Date: 2/17/2005
Time: 10:00 AM
Temp: 40 F
Weather: Sunny

Observation Report 035
Seismic Retrofit

Project: **Portland Jetport Baggage Claim Addi**
Portland, ME

Job #: 826

Location: Exsting 2nd Floor at Y/35 & Y/38

	Satisfactory	Unsatisfactory	Not Completed	N/A
Bolt Condition				
Weld Condition				
Weld Location				
Cover Plates				
Epoxy Adhesive				
Fitup				

Satisfactory	Unsatisfactory	Not Completed	N/A

Notes: As per the contract drawings Ledgewood exposed the reinforcement at the top of the existing concrete columns. BSE confirmed that the reinforcement was not continuous at the bottom of the beam over the columns. Therefore a splice is required.
BSE also confirmed spacing of existing stirrups.

Signed: Todd M. Neal Date: 2/17/2005

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

03300

BECKER
structural engineers

Date: 3/16/2005
Time: 8:00 AM
Temp: 45 F
Weather: partly sunny

Observation Report - 036
Cast-in-Place Concrete

Project: **Portland Jetport - Baggage Claim Expansion**
Portland, ME

Job #: 826

Location: Cast-in-place wall infill placement first floor between gridlines W/35 and W/38.

Satisfactory	Unsatisfactory	Not Completed	N/A	
X				Reinforcement Size
X				Quantity
X				Condition
X				Placement
			X	Embed/Anchors
X				Laps/ Splices
				Reinf. Weld
			X	Hot Weather
			X	Cold Weather

Satisfactory	Unsatisfactory	Not Completed	N/A	Additional Items:

Notes: BSE asked Ledgwood to ensure that proper cover was maintain with chairs on the side of the form.

Signed: Todd M. Neal, P.E. Date: 11/23/2004

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

03300

BECKER
structural engineers

Date: 3/21/2005
Time: 8:00 AM
Temp: 40 F
Weather: sunny

Observation Report - 036A
Cast-in-Place Concrete

Project: **Portland Jetport - Baggage Claim Expansion**
Portland, ME

Job #: 826

Location: Pre-placement review of Phase II slab on grade

Satisfactory	Unsatisfactory	Not Completed	N/A	
X				Reinforcement Size
X				Quantity
X				Condition
			X	Placement
			X	Embed/Anchors
	X			Laps/ Splices
				Reinf. Weld
			X	Hot Weather
			X	Cold Weather

Satisfactory	Unsatisfactory	Not Completed	N/A	Additional Items:
x				Vapor Retarder

Notes: BSE discussed adding additiona chairs and several location where the lap splices were not sufficient. We also pointed out a location where the radiant heating tubes appeared to be high. Ledgewood confirmed that all these issues had been addressed via e-mail at the end of the day.

Signed: Todd M. Neal, P.E. Date: 11/23/2004

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

BECKER
structural engineers

Date: 3/29/2005
Time: 11:00 AM
Temp: 45 F
Weather: Cloudy

Observation Report 037
Structural Steel

Project: **Portland Jetport - Baggage Claim Ex**
Portland, ME

Job #: 826

Location: 2nd Floor gridlines 29 to 38

Satisfactory	Unsatisfactory	Not Completed	N/A		Satisfactory	Unsatisfactory	Not Completed	N/A
				Bolt Condition				
			x	Weld Condition				
x				Weld Location				
x				AB's, Nuts & Wash				
x				Grout/Level PLs				
			x	Plumbness/Fitup				
			x	Mtl Deck Welds				
			x	Pour Stops				
			x	Bracing				

Notes: Repairs completed as per sketches dated 3/29 except Y.1/32 and W.1/38. Ledgewood informed of this and will repair.

Signed: Todd M. Neal Date: 3/29/2005

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

BECKER
structural engineers

Date: 4/4/2005
Time: 10:00 AM
Temp: 50 F
Weather: Partly Cloudy/showers

Observation Report 038
Seismic Retrofit

Project: **Portland Jetport Baggage Claim Addi**
Portland, ME

Job #: 826

Location: Y/35, Y/38, X/35, and X/38

Satisfactory	Unsatisfactory	Not Completed	N/A	
		X		Bolt Condition
		X		Weld Condition
				Weld Location
X				Cover Plates
X				Epoxy Adhesive
X				Fitup
X				Grouting

Satisfactory	Unsatisfactory	Not Completed	N/A

Notes: At the time of this review the retrofit at Y/35 & Y/38 includes only the beam reiforcement on the south side. Remainder to be completed as part of Phase IV.
At hight tabs there is a large gap between plate and existing concrete. Ledgewood to fill with epoxy.

Signed: Todd M. Neal Date: 4/4/2005

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

BECKER
structural engineers

Date: 4/5/2005
Time: 2:30 PM
Temp: 57 F
Weather: Partly cloudy

Observation Report 039
Structural Steel

Project: **Portland Jetport - Canopy Expansion**
Portland, ME

Job #: 826

Location: From grid 15 to 18

Satisfactory	Unsatisfactory	Not Completed	N/A	
		x		Bolt Condition
		x		Weld Condition
	x			Weld Location
x				AB's, Nuts & Wash
		x		Grout/Level PLs
		x		Plumbness/Fitup
		x		Mtl Deck Welds
			x	Pour Stops
			x	Bracing

Satisfactory	Unsatisfactory	Not Completed	N/A	

Notes: At the time of my observation canopy was in the process of being erected. Piece A4 (2-L3X2X1/4) lower canopy next to grid 18 is welded less than the 4" specified. SKSCP-7 was not addressed to date. Detail SKSCP-5 was not fully completed- welds are insufficient at flange plates and tab. Piece B2 (2-L3X2X1/4) lower canopy next to grid 15 was not installed. Connections between the channels and stubs at the upper truss were field welded and not bolted as specified. The horizontal angle bracing were only welded from the top. They should be welded top and bottom.

Signed: Scott M. Blouin Date: 4/5/2005

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

BECKER
structural engineers

Date: 4/15/2005
Time: 4:00 PM
Temp: 45 F
Weather: Sunny

Observation Report 039A
Seismic Retrofit

Project: **Portland Jetport Baggage Claim Addi**
Portland, ME

Job #: 826

Location: Y/35, Y/38, X/35, and X/38

Satisfactory	Unsatisfactory	Not Completed	N/A	
		X		Bolt Condition
		X		Weld Condition
				Weld Location
X				Cover Plates
X				Epoxy Adhesive
X				Fitup
X				Grouting

Satisfactory	Unsatisfactory	Not Completed	N/A

Notes: At the time of this review the retrofit at Y/35 & Y/38 includes only the beam reiforcement on the south side. Remainder to be completed as part of Phase IV.
At hight tabs there is a large gap between plate and existing concrete. Ledgewood to fill with epoxy.

Signed: Todd M. Neal Date: 4/14/2005

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

BECKER
structural engineers, inc.

Memorandum

TO: Phil Doughty
FROM: Scott Blouin, P.E.
DATE/TIME: April 12, 2005
SUBJECT: WO 1207- Jetport Canopy Special Inspections

Phil,
A question came up at the Portland Jetport Canopy jobsite concerning what welds have to be inspected. This information is provided in Section 05120 – STRUCTURAL STEEL of the project specification. Refer specifically to 3.02 C for all inspection requirements.

Please contact me if there are any questions about this requirement.

75 York Street, Portland, ME 04101-4701 ■ Tel 207-879-1838 ■ Fax 207-879-1822

BECKER
structural engineers

Date: 4/11/2005
Time: 3:30 PM
Temp: 47 F
Weather: Partly cloudy

Observation Report 040
Structural Steel

Project: **Portland Jetport - Canopy Expansion**
Portland, ME

Job #: 826

Location: From grid 15 to 18

Satisfactory	Unsatisfactory	Not Completed	N/A	
		x		Bolt Condition
		x		Weld Condition
	x			Weld Location
x				AB's, Nuts & Wash
		x		Grout/Level PLs
		x		Plumbness/Fitup
		x		Mtl Deck Welds
			x	Pour Stops
			x	Bracing

Satisfactory	Unsatisfactory	Not Completed	N/A

Notes: At the time of my observation canopy was in the process of being erected. **Correction to observation report 039**: Piece A1 (not A4) (2-L3X2X1/4) lower canopy next to grid 18 is welded less than the 4" specified. SKSCP-7 was in the process of being installed. SKSCP-5 welds were completed as shown in sketch. The horizontal angle bracing at lower canopy was still only welded from the top. They should be welded top and bottom. SKSCP-8 was completed. Install washers at all anchor bolts. Two were missing at the 6" diameter column at grid 18. At grid 15 the truss bot chord (W14x22) was not bolted as specified. The field weld is sufficient as long was it is minimum 5/16" fillet weld on each side to be confirmed by weld inspector.

Signed: Scott M. Blouin Date: 4/11/2005

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

BECKER
structural engineers

Date: 4/18/2005
Time: 1:30 PM
Temp: 62 F
Weather: Sunny

Observation Report 041
Structural Steel

Project: **Portland Jetport - Canopy Expansion**
Portland, ME

Job #: 826

Location: From grid 15 to 18

Satisfactory	Unsatisfactory	Not Completed	N/A	
x				Bolt Condition
x				Weld Condition
x				Weld Location
x				AB's, Nuts & Wash
		x		Grout/Level PLs
		x		Plumbness/Fitup
		x		Mtl Deck Welds
			x	Pour Stops
			x	Bracing

Satisfactory	Unsatisfactory	Not Completed	N/A

Notes: At the time of my observation canopy metal decking was in the process of being erected. Piece A1 was welded on 3 sides, about 5" of weld per angle. This is less than what was originally specified, but after investigating the design force for that particular piece, it is acceptable. Washers were installed that were previously missing at the pipe columns. The deck support angle at perimeter channel was not yet installed. The clevis connections with 2" dia. pin should have a minimum 3" dimension from center of pin to edge of steel plate (minimum). This will have to be verified as it is a critical connection. Deck fastening will also be confirmed during the next site visit.

Signed: Scott M. Blouin Date: 4/18/2005

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

BECKER
structural engineers

Date: 4/19/2005
Time: 12:30 PM
Temp: 62 F
Weather: Sunny

Observation Report 042
Structural Steel

Project: **Portland Jetport - Canopy Expansion**
Portland, ME

Job #: 826

Location: From grid 15 to 18

Satisfactory	Unsatisfactory	Not Completed	N/A	
x				Bolt Condition
x				Weld Condition
x				Weld Location
x				AB's, Nuts & Wash
x				Grout/Level PLs
		x		Plumbness/Fitup
x				Mtl Deck Welds
			x	Pour Stops
			x	Bracing

Satisfactory	Unsatisfactory	Not Completed	N/A	
	x			Clevises and Pins

Notes: Reviewed deck welding and condition of clevis and pins while on the lower and upper canopy roofs. It was observed that 1 1/2" diameter bolts were used to replace 1 1/2" pins at grid 15. This is unacceptable. Pins shall be used at these clevises. Replace temporary cotter pins with standard. Verified that the edge distance from center of pin to edge of steel plate is 3 1/2" as specified.

Signed: Scott M. Blouin Date: 4/19/2005

Becker Structural Engineers, Inc
75 York Street
Portland, Maine 04101
Phone: (207) 879-1838
Fax(207) 879-1822

BECKER
structural engineers, inc.

Special Inspections Interim Report No. 04

TO:	Paul Bradbury, P.E., Roy Williams @ Portland International Jetport
FROM:	Todd M. Neal, P.E.
DATE/TIME:	April 22, 2005
Project:	**Portland International Jetport Additions and Alterations** **Easterly Expansion of Baggage Claim Facility**

Demolition and excavation for this project began in the first part of July and we started our Special Inspections on July 16, 2004. The following is a summary of the work completed through April 22, 2005.

Baggage Claim Addition
At this time baggage carousel #3 is operational and the 1st floor of the addition has been turned over to the Jetport. There is no floor covering due to moisture issues in the slab. Based on this issue the slab detail was revised by PDA for Phase II slab.

The slab on grade for Phase II has been completed.

It was noted in a correspondence for Roy Williams that the baseplates and anchor bolts on the second floor from column line 29 to line 38 were not installed correctly. BSE was aware of this situation based on our work with Ledgewood during the erection of these pieces. Repair sketches were submitted to Ledgewood and the work completed.

At the contractor's request and the Jetport's approval BSE revised the seismic retrofit design from the carbon fiber details indicated on the contract drawings to steel plates as indicated on SKST-19. At the time of this report this work had been completed within the extent of the Phase II.

Canopy Extension
At this time the canopy structure is substantially complete and we are waiting for testing reports from R. W. Gillespie to complete this portion of the Special Inspections Program.

If you have any questions or would like additional clarification please do not hesitate to contact us.

CC: Phil Doughty @ PDA, Mike Nugent @ the City of Portland.
Attachments: Observation Reports 33 to 42

75 York Street, Portland, ME 04101-4701 ▪ Tel 207-879-1838 ▪ Fax 207-879-1822

BECKER
structural engineers, inc.

PHASE 2 REPORT OF SPECIAL INSPECTIONS

PROJECT: Portland International Jetport, Additions and Alterations: Easterly Expansion of Baggage Claim Facility

LOCATION: Portland, Maine

PERMIT APPLICANT: Ledgewood, Inc.

APPLICANT'S ADDRESS: P.O. Box 8107, Portland, Maine 04104

STRUCTURAL ENGINEER OF RECORD: Todd M. Neal, P.E. - Becker Structural Engineers, Inc.
Name Firm

ARCHITECT OF RECORD: Phillip J. Doughty – Phillip J. Doughty Associates
Name Firm

GENERAL CONTRACTOR: Peter Benard – Ledgewood, Inc.

To the best of my information, knowledge, and belief, the Special Inspections required for this project, and described in the Statement of Special Inspections submitted for the project, have been completed.

The following discrepancies that were noted since the Phase 1 Report of Special Inspections report, dated 2/28/05 and have been corrected:

1. Anchor bolts on second floor from line 29 to 38 were corrected as per sketches dated 3/29/05.
2. Seismic Retrofit was changed from carbon fiber to steel plates as detailed on SKST-19.
3. Interior slab on grade details were revised to have the vapor retarder directly below slab to minimize retained moisture. Detail revised by Architect.

Note: This report does not include the canopy. BSE is waiting for final inspection reports for Gillespie to confirm welds and bolted connections.

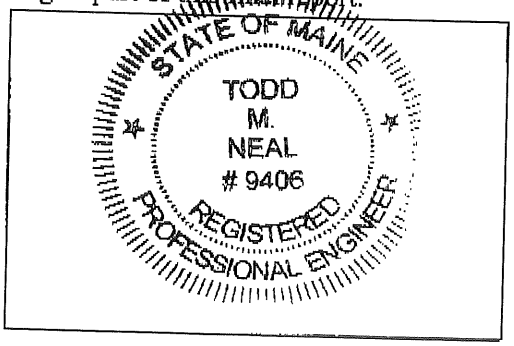
(Use additional sheets, if necessary)

Interim reports submitted to this final report and numbered 01 to 03 and Phase 1 Report of Special Inspections , form a basis for, and are to be considered an integral part of this final report.

Submitted By:
SPECIAL INSPECTOR

Todd M. Neal, P.E.
NAME

SIGNATURE DATE



Special Inspector's P.E. Seal

75 York Street, Portland, ME 04101-4701 ▪ Tel 207-879-1838 ▪ Fax 207-879-1822

Becker Structural Engineers, Inc.

75 York Street
Portland, ME 04101-4550
207.879.1838 phone
207.879.1822 fax

FAX COVER

TO: John Reed @ City of Portland

FAX NO: 874-8716

FROM: Todd Neal, P.E.

DATE/TIME: April 25, 2005/10:05 AM

SUBJECT: Phase 2 Report of Special Inspection

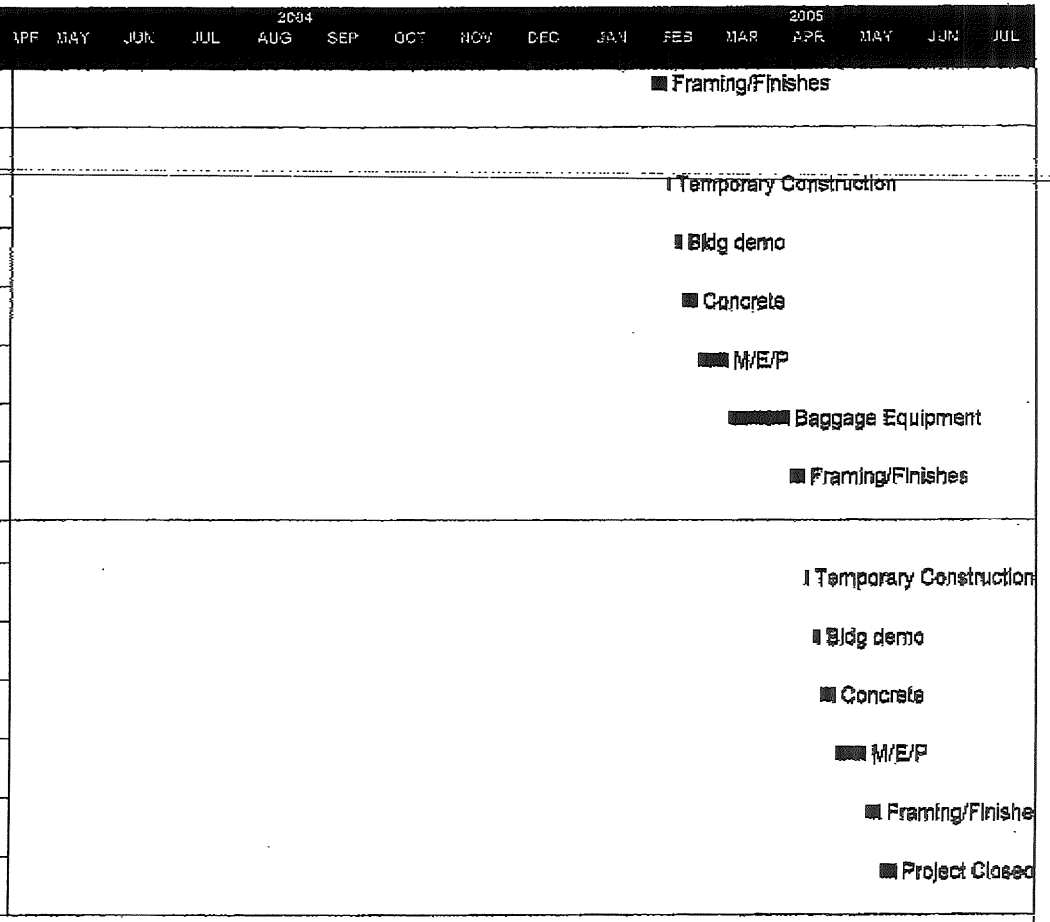
Portland International Jetport, Additions and Alterations, Easterly Expansion of Baggage Claim Facility

John,

Attached is the Phase 2 report. Please call if you have any questions

Cc: Cuyler Feagles @ 879-2282
Roland @ Ledgewood 879-1985
Roy Williams @ Portland International Jetport 774-7740

Act ID	Description	Orig Dur	Early Start	Early Finish
3200	Framing/Finishes	5	03FEB05	09FEB05
PHASE 3				
4500	Temporary Construction	2	10FEB05	11FEB05
4600	Bldg demo	3	14FEB05	16FEB05
4700	Concrete	5	17FEB05	23FEB05
4800	M/E/P	10	24FEB05	09MAR05
4900	Baggage Equipment	20	10MAR05	06APR05
5000	Framing/Finishes	5	07APR05	13APR05
PHASE 4				
3700	Temporary Construction	2	14APR05	15APR05
3800	Bldg demo	3	18APR05	20APR05
3900	Concrete	5	21APR05	27APR05
4000	M/E/P	10	28APR05	11MAY05
4200	Framing/Finishes	5	12MAY05	18MAY05
4300	Project Closeout	5	19MAY05	25MAY05



Start date	19APR04
Finish date	25MAY05
Data date	19APR04
Run date	22APR04
Page number	2A

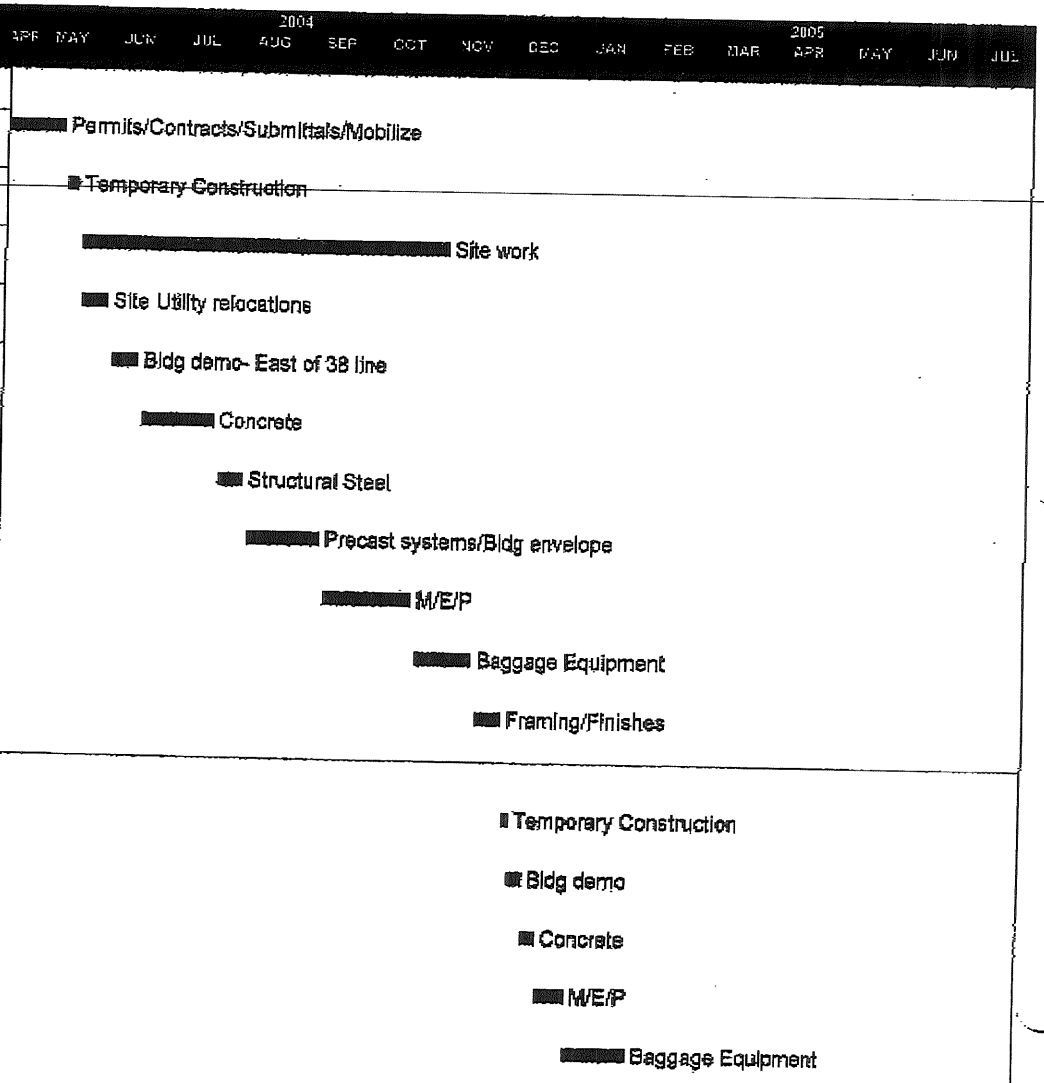
Ledgewood, Inc.

Portland International Jetport
Baggage Claim Facility

Preliminary Schedule
Dated: 4/19/23

- Early bar
- Progress bar
- Critical bar
- Summary bar
- Start milestone point
- Finish milestone point

Act ID	Description	Orig Dur	Early Start	Early Finish
PHASE 1				
1000	Permits/Contracts/Submittals/Mobilize	20	19APR04	14MAY04
1100	Temporary Construction	5	17MAY04	21MAY04
1200	Site work	120	24MAY04	05NOV04
1300	Site Utility relocations	10	24MAY04	04JUN04
1400	Bldg demo- East of 38 line	10	07JUN04	18JUN04
1500	Concrete	25	21JUN04	23JUL04
1600	Structural Steel	10	26JUL04	06AUG04
1700	Precast systems/Bldg envelope	25	09AUG04	10SEP04
1800	M/E/P	30	13SEP04	22OCT04
1900	Baggage Equipment	20	25OCT04	19NOV04
2000	Framing/Finishes	10	22NOV04	03DEC04
PHASE 2				
2300	Temporary Construction	3	06DEC04	08DEC04
2600	Bldg demo	5	09DEC04	15DEC04
2700	Concrete	5	16DEC04	22DEC04
3000	M/E/P	10	23DEC04	05JAN05
3100	Baggage Equipment	20	06JAN05	02FEB05



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Ledgewood, Inc.

Portland International Jetport
Baggage Claim Facility

Preliminary Schedule
Dated: 4/19/23

- Early bar
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- Start milestone point
- Finish milestone point

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 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.

RMK / **Pre-construction Meeting**: Must be scheduled with your inspection team upon receipt of this permit. Jay Reynolds, Development Review Coordinator at 874-8632 must also be contacted at this time, before **any** site work begins on any project other than single family additions or alterations.

RMK / **Footing/Building Location Inspection:** Prior to pouring concrete

RMK / **Re-Bar Schedule Inspection:** Prior to pouring concrete

RMK / **Foundation Inspection:** Prior to placing ANY backfill

RMK / **Framing/Rough Plumbing/Electrical:** Prior to any insulating or drywalling

RMK / **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.

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

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

RMK / **CERIFICATE OF OCCUPANICES MUST BE ISSUED AND PAID FOR, BEFORE THE SPACE MAY BE OCCUPIED**

X Rebecca M. Kemp — 5/26/04
Signature of Applicant/Designee — Date

Signature of Inspections Official — 5/26/04
Date

CBL: 208 A001 Building Permit #: 04 0501

BOCA®
NATIONAL BUILDING CODE/1999
PLAN REVIEW RECORD

Valuation: 3,639,463. Plan Review # 040501

Fee: 32,781.00 Date: 5/5/04

JURISDICTION PORTLAND
(City, County, Township, etc.)

BUILDING LOCATION 1001 WESTBROOK ST.
(Street address)

BUILDING DESCRIPTION JET PORT BAGGAGE CLAIM EXPANSION

REVIEWED BY [signature]

Numerals indicated in parenthesis are applicable code sections of the 1999 *BOCA National Building Code*. The plan review accomplished as indicated in this record is limited to those code sections specifically identified herein. This record references commonly applicable code sections. It does not reference all code provisions which may be applicable to specific buildings. This record is designed to be used only by those who are knowledgeable and capable of exercising competent judgement in evaluating construction documents for code compliance.

CORRECTION LIST

No.	DESCRIPTION	Code Section
1	PLEASE SPECIFY THE "MIXED USE"	
2	3" S.S. MESH - LADDER IN ~~EGRESS~~	
~~3~~	~~LADDER ONLY~~	
4	EXTERIOR STAIRS OPEN RISERS & BALLUSTER CONFIGURATION	
5	NEED TREAD & RISER DIMENSIONS ON A17	
6	9/A16 HAND RAIL 33" ABOVE NOSING)	

NOTES: N.R. — Not required
N.A. — Not applicable

ADMINISTRATION (Chapter 1)

✓ Complete construction documents *(107.5, 107.6, 107.7)*

✓ Signed/sealed construction documents *(107.7, 114.1)*

BUILDING PLANNING (Chapters 3, 4, 5, 6)

USE OR OCCUPANCY CLASSIFICATION (302.0-313.0)

B/A3 Single Use Group

Specific occupancy areas *(302.1.1)*

Mixed Use Groups

Accessory areas *(302.1.2)*

GENERAL BUILDING LIMITATIONS (Chapters 5 & 6)

Apply Case 1 to determine the allowable height and area and permitted types of construction for a building containing a single use group or nonseparated mixed use groups. Apply Case 2 to determine the allowable height and area and permitted types of construction for a building containing separated mixed use groups.

AREA MODIFICATIONS TO TABLE 503

% of Allowable tabular area *(Table 503)*	100%
% Reduction for height *(Table 506.4)*	– NA %
% Increase for open perimeter *(506.2)*	+ 110 %
% Increase for automatic sprinklers *(506.3)*	+ 100 %
Total percentage factor	= 310 %

Conversion factor 310/100 = 3.1
(Total percentage factor/100%)

Open perimeter *(506.2)*: 173 North | ____ East | 173 South | 117 West

Open perim. 463 ft. Perimeter 580 ft.

% Open perimeter = 463/580 = 79%
(Open perim./perim.) x 100%

% Tab. area increase = 79 - 25 = 54% x 2 = 110%
(506.2) *2x(% Open perim. -25%)*

CASE 1 — SINGLE USE OR NONSEPARATED MIXED USE GROUPS *(313.1.1)*

Using Table 503, identify the allowable height and area of the single use group or the most restrictive of the nonseparated mixed use groups. Construction types that provide an allowable tabular area equal to or greater than the adjusted floor area and allowable heights (as modified by Section 504.0) equal to or greater than the actual building height are permitted.

Actual floor area 20241 ft.^{2} Actual building height 47 feet 3 stories

Adjusted floor area* 26 040 ft.^{2} Allowable building height 50 feet 3 stories

*Adjusted floor area = actual floor area/conversion factor

Permitted types of construction All Except 5 Type of construction assumed for review *(602.3)* 2C

ADDITION SEPARATED BY 2HR FIRE WALL

CASE 2 — MIXED USE SEPARATED USE GROUPS *(313.1.2)*

Using Table 503, identify the allowable height and area of each of the separated use groups within the building. Construction types that provide, for each story of the building, tabular areas which result in a sum of the ratios of 1.00 or less and allowable heights (as modified by Section 504.0) equal to or greater than the actual height of the use group are permitted.

Story	Use Group	Actual floor area	Adjusted floor area*	Actual height	Allowable height (Table 503)
1	A-3	20,241 ft²	26,040 ft²	46 ft 3 stories	50 ft 3 stories
2	B (UNSPRINKLERED)	13,175 ft²	44,000 ft²	46 ft 3 stories	50 ft 3 stories
		ft²	ft²	ft stories	ft stories
		ft²	ft²	ft stories	ft stories
		ft²	ft²	ft stories	ft stories
		ft²	ft²	ft stories	ft stories
		ft²	ft²	ft stories	ft stories

*Adjusted floor area = actual floor area/conversion factor

$$\Sigma \frac{\text{Adjusted floor area *}}{\text{Allowable area } \textit{(Table 503)}} = 77\% + 29\% + \_\_\_ + \_\_\_ = \_\_\_ \leq 1.00$$

Permitted types of construction A-B EXCEPT 5 Type of construction assumed for review *(602.3)* 2C

UNLIMITED AREA ONE-STORY BUILDINGS

- Use group classification *(507.1)*
- Building height (story, feet) *(507.1)*
- Type of construction *(507.1)*
- Automatic sprinkler system *(507.1, 904.12)*
- Area limitation *(505.2)*
- Egress *(505.3)*

MEZZANINES

- School buildings *(507.1.1)*
- High-hazard use groups *(507.1.2)*
- Exterior walls *(507.2)*
- Openness *(505.4)*

SPECIAL USE AND OCCUPANCY (Chapter 4)

COVERED MALL BUILDINGS

- Tenant separations *(402.4)*
- Egress *(402.5)*
- Mall width *(402.6)*
- Structural elements *(402.7)*
- Roof coverings *(402.8)*
- A-1, A-2 occupancy *(402.9)*
- Automatic sprinkler system *(402.10)*
- Standpipes *(402.11)*
- Fire department access *(402.12)*
- Kiosk requirements *(402.14)*
- Parking structures *(402.15)*
- Smoke control (see Atriums)

HIGH-RISE BUILDINGS

- Automatic sprinkler system *(403.2)*
- Alternative sprinkler modifications *(403.3)*
- Automatic fire detection *(403.4)*
- Voice/alarm signaling systems *(403.5)*
- Fire department communication *(403.6)*
- Fire command station *(403.7)*
- Elevators *(403.8)*
- Standby systems *(403.9)*
- Stairway doors *(403.10)*

ATRIUMS

- Automatic sprinkler system *(404.2)*
- Occupancy *(404.3)*
- Smoke control *(404.4)*
- Enclosure *(404.5)*
- Fire alarm system *(404.6)*
- Travel distance *(404.7)*

OTHER SPECIAL USE AND OCCUPANCY

- Underground structures *(405.0)*
- Open parking structures *(406.0)*
- Private garages *(407.0)*
- Public garages *(408.0)*
- Use Group I-2 *(409.0)*
- Use Group I-3 *(410.0)*
- Stages and platforms *(412.0)*
- Special amusement buildings *(413.0)*
- HPM facilities *(416.0)*
- Hazardous materials *(307.8, 417.0)*
- Use Groups H-1, H-2, H-3 and H-4 *(418.0)*
- Swimming pools *(421.0)*
- Storage racks *(422.0)*

FIRE PROTECTION (Chapters 6, 7, 8, 9)

FIRERESISTANT MATERIALS AND CONSTRUCTION (Chapter 7 and Table 602)

Note: Entry in ☐ indicates required rating in hours. NC indicates noncombustible construction required.

COMBUSTIBILITY *(603.0, 604.0, 605.0, 606.0)*

- N/R Exterior walls
- Interior elements
- N/R Roof

CONSTRUCTION DOCUMENTS *(703.0)*

- Fire tests *(704.0)*

EXTERIOR WALLS *(507.2, 705.0, 716.6)*

	North	East	South	West
Fire separation distance	MORE THAN 30' ALL AROUND			
Loadbearing				
Nonloadbearing				N/R

- ☐ N/R Exterior opening protectives *(705.3, 706.0)*
- ☐ N/R Continuity of exterior walls *(705.6)*

FIRE SEPARATION ASSEMBLIES

- ☐ 1 HR Exit enclosures *(709.0, 710.0, 1014.11)*
- ☐ 2HR Other shafts *(709.0, 710.0)* ELEVATOR
- ☐ Mixed use and fire area separations *(313.1.2)*
- ☐ Other separation assemblies *(302.1.1, Table 602)*

FIRE PARTITIONS

- ☐ NONE Exit access corridors *(711.0,1011.4)*
- ☐ Tenant separations *(711.0)*
- ☐ Dwelling unit separations *(711.0)*
- ☐ 1/4 Guestroom separations *(711.0)*

OTHER FIRERESISTANT CONSTRUCTION

- ☐ 2HR Fire and party walls *(707.0 and Table 707.1)*
- ☐ N/R Smoke barriers *(712.0)*
- ☐ 0 Nonloadbearing partitions *(Table 602)*
- ☐ 0 Interior loadbearing walls, columns, girders, trusses *(716.0)*
- ☐ 0 Supporting construction *(716.0)*
- ☐ 0 Floor construction *(713.0, 1006.3.1)*
- ☐ 0 Roof construction *(713.0, 715.0)*
- Penetrations *(714.0)*
- Opening protectives *(717.0, 719.0, 720.0)*
- Fire dampers *(718.0)*
- Fireblocking/draftstopping *(721.0)*
- N/A Thermal and sound-insulating materials *(723.0)*

INTERIOR FINISHES (Chapter 8)

_____ Smoke development *(803.3.2)*

_____ Flame spread *(803.4)*

_____ Floor finish *(805.0, 806.0)*

_____ Interior hangings and decorations *(807.0)*

FIRE PROTECTION SYSTEMS (Chapter 9)

FIRE SUPPRESSION SYSTEMS (Where required)

✓ Assembly (A-1, A-3, A-4) *(904.2)*

_____ Assembly (A-2) *(904.3)*

_____ Educational (E) *(904.4)*

_____ High-hazard (H) *(904.5)*

_____ Institutional (I) *(904.6)*

_____ Mercantile (M), Moderate-hazard storage (S-1), Factory and Industrial (F-1) *(904.7)*

_____ Residential (R-1) *(904.8)*

_____ Residential (R-2) *(904.9)*

_____ Residential care *(904.10)*

_____ Windowless story *(904.11)*

_____ Specific occupancy areas *(302.1.1, 904.12)*

_____ Covered mall buildings *(402.10)*

_____ High-rise buildings *(403.2, 403.3)*

_____ Atriums *(404.2, 404.3)*

_____ Underground structures *(405.3)*

_____ Public garages *(408.3.1)*

_____ Sound stages *(411.7)*

_____ Stages and enclosed platforms *(412.6)*

_____ Special amusement buildings *(413.4)*

_____ HPM facilities *(416.4)*

_____ Paint spray booths and storage rooms *(419.3)*

_____ Unlimited area buildings *(507.1)*

_____ Exit discharge lobbies *(1020.4)*

_____ Drying rooms *(2808.4)*

_____ Waste- and linen-chutes/termination rooms *(2809.6)*

_____ Refuse vaults *(2810.4)*

FIRE SPRINKLER SYSTEMS*

✓ NFPA 13 system *(906.2.1)*

_____ NFPA 13R system *(906.2.2)*

_____ NFPA 13D system *(906.2.3)*

_____ Design *(906.3)*

_____ Actuation *(906.4)*

_____ Sprinkler alarms *(906.5)*

_____ Sprinkler riser *(906.7)*

*See also Sprinkler Plan Review Record

LIMITED AREA SPRINKLER SYSTEMS

_____ Where permitted *(907.2)*

N/A Design *(907.3)*

_____ Actuation *(907.4)*

_____ Standpipe connection *(907.6)*

_____ Domestic supply *(907.6.1)*

_____ Cross connection *(907.6.2)*

_____ Shutoff valve *(907.6.3)*

OTHER SUPPRESSION SYSTEMS

_____ Water-spray fixed systems *(908.0)*

_____ Carbon dioxide extinguishing systems *(909.0)*

_____ Dry-chemical extinguishing systems *(910.0)*

_____ Foam-extinguishing systems *(911.0)*

_____ Halogenated extinguishing systems *(912.0)*

_____ Clean agent fire extinguishing systems *(913.0)*

_____ Wet-chemical range hood extinguishing systems *(914.0)*

STANDPIPE SYSTEMS

_____ Building height *(915.2.1)*

_____ Building area *(915.2.2)*

_____ Malls *(915.2.3)*

_____ Stages *(915.2.4)*

_____ Approved system *(915.3, 915.3.1)*

_____ Piping design *(915.4)*

_____ Water supply *(915.5)*

_____ Control valves *(915.6)*

_____ Hose connection *(915.7)*

FIRE DEPARTMENT CONNECTIONS

PER PFD Required *(916.1)*

PFD Connections *(916.2)*

YARD HYDRANTS

PER PFD Fire hydrants *(917.1)*

FIRE ALARM SYSTEMS

PER PFD Approval *(918.3)*

_____ Assembly (A-4), Educational (E) *(918.4.1)*

_____ Business (B)*(918.4.2)*

_____ High-hazard (H) *(918.4.3)*

_____ Institutional (I) *(918.4.4)*

_____ Residential (R-1) *(918.4.5)*

_____ Residential (R-2) *(918.4.6)*

_____ Location/details *(918.5)*

_____ Power supply/wiring *(918.6, 918.7)*

_____ Alarm-notification appliances *(918.8)*

_____ Voice/alarm signaling system *(918.9)*

AUTOMATIC FIRE DETECTION SYSTEMS

PER PFD Approval *(919.3)*

_____ Institutional (I) *(919.4.1, 919.4.2, 919.4.3)*

_____ Residential (R-1) *(919.4.4)*

_____ Sprinklered buildings exception *(919.5)*

_____ Zones *(919.6)*

SINGLE- AND MULTIPLE-STATION SMOKE DETECTORS

✓ Residential (R-1) *(920.3.1)*

_____ Residential (R-2, R-3) *(920.3.2)*

_____ Institutional (I-1) *(920.3.3)*

_____ Interconnection *(920.4)*

_____ Battery backup *(920.5)*

FIRE EXTINGUISHERS

PER PFD Approval *(921.1)*

_____ Required *(921.2)*

SMOKE CONTROL SYSTEMS

N/R Passive system *(922.2.1)*

_____ Mechanical system *(922.2.2)*

_____ Smoke removal *(922.3)*

_____ Activation *(922.4)*

_____ Standby power *(922.5)*

SMOKE AND HEAT VENTS

N/R Size and spacing *(923.2)*

SUPERVISION

PER PFD Fire suppression systems *(924.1)*

_____ Fire alarm systems *(924.2)*

OCCUPANT NEEDS (Chapters 10, 11, 12)

MEANS OF EGRESS (Chapter 10)

OCCUPANT LOAD *(1008.0 and Table 1008.1.2)*

Location	Floor Area	÷ Sq.ft./ person	= Occt. load	Other occt. loads	Total
1ST.	7300	÷ 3	= 2433		2433
2ND	11,200	÷ 100 GROSS			112
UNASSIGNED (CALC. BY US GEOMETRY)					
		16.8 REQUIRED			
		72 SHOWN			
				364 INCHES REQUIRED 1ST FLOOR	
				408 SHOWN	

CAPACITY OF EGRESS COMPONENTS *(1009.0 and Table 1009.2)*

Egress width (inch/occupant)

Stairways _____

Doors/ramps/corridors _____

CAPACITY

Location	Stairways	Doors/ramps corridors
2ND	91-48 = 44	
1 EXISTING		

NUMBER OF EXITS *(1010.0)*

Location	Required	Shown
1ST	SEE ABOVE	6
2ND		2

MEANS OF EGRESS (continued)

- ✓ General limitations *(1005.0)*
- _____ Air movement in egress elements *(1005.7)*
- ✓ Types and location of egress *(1006.0)*
- ✓ Exit access travel distance *(1006.5 and Table 1006.5)*
- N/A Accessible means of egress *(1007.0)*
- N/R Emergency escape *(1010.4)*
- N/A Exit access passageways and corridors *(1011.0)*
- N/A Aisles and accessways *(1012.0)*
- N/A Grandstands *(1013.0)*
- ✓ Interior stairways *(1014.1 - 1014.11)*
- _____ Exterior stairways *(1014.1 - 1014.10, 1014.12)*
- N/A Smokeproof enclosures *(1015.0)*

- NONE Ramps *(1016.0)*
- ✓ Means of egress doorways *(1017.0)*
- ✓ Number of doorways *(1017.2)*
- ✓ Size of doors *(1017.3)*
- _____ Door hardware *(1017.4)*
- _____ Revolving doors *(1018.0)*
- _____ Horizontal exits *(1019.0)*
- _____ Discharge from exit stairways *(1020.0)*
- _____ Guards *(1021.0)*
- _____ Handrails *(1022.0)*
- ✓ Exit signs and lights *(1023.0)*
- ✓ Means of egress lighting *(1024.0)*
- ✓ Access to roof *(1027.0)*

ACCESSIBILITY* (Chapter 11)

- ✓ Required *(1103.0)*
- ✓ Accessible route *(1104.0)*
- ✓ Parking facilities *(1105.0)*
- ✓ Accessible entrances *(1106.0)*
- _____ Special use groups *(1107.0)*
- _____ Features and facilities *(1108.0)*
- _____ Warnings and signage *(1109.0)*

*See also Accessibility Plan Review Record

INTERIOR ENVIRONMENT (Chapter 12)

- N/A Room dimensions *(1204.0)*
- _____ Roof spaces *(1210.1, 1211.2)*
- _____ Crawl spaces *(1210.2, 1211.1)*
- N/A Air-borne noise (STC) *(1214.2)*
- N/A Structure-borne sound (IIC) *(1214.3)*
- _____ Ratproofing *(1215.0)*

BUILDING ENVELOPE (Chapters 13*, 14, 15)

EXTERIOR WALL COVERINGS (Chapter 14)

- ✓ Construction documents *(1403.0)*
- ✓ Performance requirements *(1404.0)*
- ✓ Wall sidings and veneers *(1405.0, 1406.0)*
- ✓ Combustible material restrictions *(1407.0)*

*See Energy Conservation Plan Review Record

ROOFS AND ROOF STRUCTURES (Chapter 15)

_____ Performance requirements *(1505.0)*

EDPM Fire classification *(1506.0)*

_____ Steep-slope roof coverings *(1507.4)*

_____ Low-slope roof coverings *(1507.5)*

_____ Flashing *(1508.0)*

_____ Roof structures *(1510.0)*

STRUCTURAL SYSTEMS (Chapters 16, 17, 18)

STRUCTURAL LOADS (Chapter 16)

DESIGN LOADS ON CONSTRUCTION DOCUMENTS *(1603.1)*

Uniformly distributed floor live loads *(1603.2, 1606.0)*

Floor Area Use	Loads Shown
1ST BAGGAGE	100 PSF
STAIRS	100 PSF
2ND (POTENTIAL OFFICE)	50 PSF + 20 DL
2ND CORRIDOR	80 PSF
MECH. ROOM	125 PSF.

_____ Live load reduction *(1603.2, 1606.7)*

_____ Roof live loads *(1603.3, 1607.0)*

Roof snow loads *(1603.4, 1608.0)*

_____ Ground snow load, P_g *(1608.2)*

_____ If P_g > 10 psf, flat-roof snow load, P_f *(1608.3)*

_____ If P_g > 10 psf, snow exposure factor, C_e *(Table 1608.3.1)*

_____ If P_g > 10 psf, roof thermal factor *(Table 1608.3.2)*

_____ *If* P_g > 10 psf, snow load importance factor, *I (Table 1608.3.3)*

_____ Sloped roof snowload, P_s *(1608.4)*

Wind loads *(1603.5, 1609.0)*

_____ Basic wind speed *(1609.3)*

_____ Wind exposure category *(1609.4)*

_____ Wind importance factor, *I (Table 1609.5)*

_____ Internal pressure coefficient *(Table 1609.7[6])*

_____ Wind design pressure, *P (1609.7)*

Earthquake loads *(1603.6, 1610.0)*

_____ Peak velocity-related acceleration, A_v *(1610.1.3)*

_____ Peak acceleration, A_a *(1610.1.3)*

_____ Seismic hazard exposure group *(1610.1.5)*

_____ Seismic performance category *(1610.1.2)*

_____ Soil-profile type *(Table 1610.3.1)*

_____ Basic structural system and seismic-resisting system *(Table 1610.3.3)*

_____ Response modification factor, *R*, and deflection amplification factor, C_d *(Table 1610.3.3)*

_____ Analysis procedure *(1610.4, 1610.5)*

Other loads

_____ Attic load *(1606.2.2, 1606.2.3)*

_____ Partition loads *(1606.2.4)*

_____ Concentrated loads *(1606.3)*

_____ Impact loads *(1606.6)*

_____ Misc. loads *(1606.4, 1606.8, 1606.9, 1607.5, 1612.0)*

STRUCTURAL DESIGN CALCULATIONS

_____ Submitted for all structural members *(107.7)*

STRUCTURAL DESIGN CALCULATIONS (continued)

✓ Signed/sealed *(107.7, 114.1)*

✓ Deflection limits considered *(1604.5)*

✓ Sliding snow loads considered *(1608.4.1)*

✓ Unbalanced snow loads considered *(1608.5)*

✓ Drift snow loads considered *(1608.6)*

+/- 0.25 Internal pressure effects considered *(1609.7, 1609.8)*

✓ Components and cladding effects considered *(1609.8)*

✓ Load combinations considered *(1613.1)*

TESTS AND INSPECTIONS (Chapter 17)

_____ Material performance technical data or BOCA International Evaluation Services or National Evaluation Services report supplied (1703.0) Report No._____

✓ Owner's special inspection program specified *(1705.0)*

✓ Prefabricated items *(1705.2)*

✓ Steel construction *(1705.3)*

✓ Concrete construction *(1705.4)*

✓ Masonry construction *(1705.5)*

N/A Wood construction (1705.6)

✓ Prepared fill and foundations *(1705.7, 1705.8, 1705.9)*

N/A Fireresistive materials *(1705.12)*

✓ Wall panels and veneers *(1705.10, 1705.13)*

FOUNDATIONS AND RETAINING WALLS (Chapter 18)

✓ Soil type *(1611.0, 1802.1, 1804.1)*

3000 PSF Bearing value *(1611.0, 1802.1, 1804.1)*

✓ Soil report *(1802.1, 1804.1)*

✓ Prepared fill *(1804.1.1)*

✓ Footings *(1806.0 - 1811.0)*

_____ Foundations *(1814.0 - 1824.0)*

✓ Foundation walls *(1611.0, 1812.0)*

✓ Waterproofing/dampproofing *(1813.0)*

N/A Retaining walls *(1611.0, 1825.0)*

STRUCTURAL MATERIALS (Chapters 19, 21, 22, 23)

CONCRETE (Chapter 19)

03300 SPEC BOOK Plain, reinforced and prestressed concrete design/construction standard specified *(1901.1, 1903.1.1)*

✓ Minimum slab requirements *(1905.1)*

✓ Minimum concrete strength *(Table 1907.1.2[1])*

✓ Cold-weather and hot-weather curing specified *(1908.9, 1908.10)*

MASONRY (Chapter 21)

SECTION 04200 SPEC BOOK Engineered masonry design/construction standard specified *(2101.1.1)*

Empirical masonry design *(2101.1.2)*

✓ Construction materials *(2104.0)*

✓ Mortar type *(2104.7)*

✓ Cold-weather and hot-weather construction specified *(2111.3, 2111.4)* PAGE 5 04200

N/A Fireplaces and chimneys *(2103.2, 2113.0 - 2117.0)*

N/A Glass block *(2118.0)*

STEEL (Chapter 22)

- Structural steel design/construction standard specified *(2203.1, 2203.2)*
- Shop drawing preparation specified *(2203.4)*
- Open-web steel joist design/construction standard specified *(2205.1)*
- Formed steel design/construction standard specified *(2206.1)*
- Formed steel member identification *(2206.6)*
- Lateral resistance — steel stud walls *(2211.0)*

WOOD (Chapter 23)

- Installation inspections *(2301.2)*
- Design/construction standard specified *(2303.1)*
- Grade mark specified *(2303.2)*

HEAVY TIMBER CONSTRUCTION

- Minimum dimensions *(605.1, 2304.0)*
- Design/construction standard specified *(2304.1)*

WOOD FRAME CONSTRUCTION

- Fastening and construction details *(2305.0, Table 2305.2)*
- Wind bracing design required *(2305.7)*
- Seismic bracing *(2305.8)*
- Foundation anchorage *(2305.17)*
- Seismic requirements *(2306.0)*
- Wood structural panels *(2307.0)*
- Particleboard *(2308.0)*
- Fiberboard *(2309.0)*
- Fireretardant-treated wood *(2310.0)*
- Decay and termite protection *(2311.0)*
- Joist hangers *(2312.0)*
- Prefabricated components *(2313.1, 2313.2)*
- Metal-plate-connected trusses *(2313.3.1, 2313.3.2)*

NONSTRUCTURAL MATERIALS (Chapters 24, 25, 26)

GLASS AND GLAZING (Chapter 24)

- Design loads *(2404.0)*
- Skylights *(2405.0)*
- Safety glazing *(2405.0, 2406.0, 2407.0)*

GYPSUM BOARD AND PLASTER (Chapter 25)

- Gypsum board materials *(2503.0, Table 2503.2, Table 2503.3)*
- Plaster *(2504.0, 2505.0, 2506.0)*

PLASTIC (Chapter 26)

- Approved materials *(2601.2)*
- Identification *(2601.4)*
- Interior trim *(2603.7)*
- Alternative approval *(2603.9)*

FOAM PLASTIC *(2603.0)*

- Labeling *(2603.2)*
- Surface-burning characteristics *(2603.3)*
- Thermal barrier *(2603.4)*
- Exterior walls *(2603.5, 2603.6)*

LIGHT-TRANSMITTING PLASTIC *(2604.0-2610.0)*

- Diffusing systems *(2604.5)*
- Wall panels *(2605.0)*
- Unprotected openings *(2606.0)*
- Roof panels *(2607.0)*
- Skylight glazing *(2608.0)*
- Plastic canopies *(2610.0)*

BUILDING SERVICES* (Chapters 28, 30)

MECHANICAL SYSTEMS (Chapter 28)

- Equipment platforms *(2805.0)*
- Plenums *(2807.0)*
- Waste- and linen-handling systems *(2809.0)*
- Refuse vaults *(2810.0)*

ELEVATORS AND CONVEYING SYSTEMS (Chapter 30)

- Construction standard specified *(3001.2)*
- Elevator emergency operation *(3006.2)*
- Hoistway enclosure *(3007.1)*
- Venting *(3007.3 - 3007.6)*
- Opening protectives *(3008.2)*
- Conveyors and escalators *(3010.0, 3011.0)*

*See also Mechanical, Plumbing and Electrical Plan Review Records

SPECIAL DEVICES AND CONDITIONS (Chapters 31, 34)

SPECIAL CONSTRUCTION (Chapter 31)

- Membrane structures *(3103.0)*
- Flood-resistant construction *(3107.0)*
- Towers *(3108.0)*

PEDESTRIAN WALKWAYS *(3106.0)*

- Construction and use *(3106.1 - 3106.3)*
- Separation *(3106.4)*
- Local approval *(3106.5)*
- Egress and size *(3106.6 - 3106.8)*

EXISTING STRUCTURES (Chapter 34)

ADDITIONS, ALTERATIONS OR CHANGE OF OCCUPANCY

- General requirements *(3402.0)*
- Structural loads *(1614.0, 3402.5)*
- Accessibility *(1110.0, 3402.7)*
- Additions/alterations *(3403.0, 3404.0)*
- Change of occupancy *(1110.3, 3405.0)*
- Compliance alternative evaluation *(3408.0)*

BUILDING EVALUATION SUMMARY *(Table 3408.7)*

Existing use group _____ Proposed use group _____

Year building was constructed _____ Number of stories _____ Height in feet _____

Type of construction _____ Area per floor _____

Percentage of open perimeter _____% Percentage of height reduction _____ %

Completely suppressed: Yes _____ No _____ Corridor wall rating _____

Compartmentation: Yes _____ No _____ Required door closers: Yes _____ No _____

Fireresistance rating of vertical opening enclosures _____

Type of HVAC system _____, serving number of floors _____

Automatic fire detection: Yes _____ No _____, type and location _____

Fire alarm system: Yes _____ No _____, type _____

Smoke control: Yes _____ No _____, type _____

Adequate exit routes: Yes _____ No _____ Dead ends: Yes _____ No _____

Maximum exit access travel distance _____ Elevator controls: Yes _____ No _____

Means of egress emergency lighting: Yes _____ No _____ Mixed use groups: Yes _____ No _____

Safety parameters	Fire safety (FS)	Means of egress (ME)	General safety (GS)
3408.6.1 Building height			
3408.6.2 Building area			
3408.6.3 Compartmentation			
3408.6.4 Tenant and dwelling unit separations			
3408.6.5 Corridor walls			
3408.6.6 Vertical openings			
3408.6.7 HVAC systems			
3408.6.8 Automatic fire detection			
3408.6.9 Fire alarm system			
3408.6.10 Smoke control	* * * *		
3408.6.11 Means of egress	* * * *		
3408.6.12 Dead ends	* * * *		
3408.6.13 Max. exit access travel distance	* * * *		
3408.6.14 Elevator control			
3408.6.15 Means of egress emergency lighting	* * * *		
3408.6.16 Mixed use groups		* * * *	
3408.6.17 Sprinklers		÷ 2 =	
3408.6.18 Specific occupancy area protection			
Building score — total value			

* * * * No applicable value to be inserted.

BUILDING SAFETY EVALUATION SCORE *(Table 3408.9)*

Formula	Table 3408.7		Table 3408.8		Score	Pass	Fail
FS-MFS ≥ 0	_____ (FS)	-	_____ (MFS)	=	_____	_____	_____
ME-MME ≥ 0	_____ (ME)	-	_____ (MME)	=	_____	_____	_____
GS-MGS ≥ 0	_____ (GS)	-	_____ (MGS)	=	_____	_____	_____

FS = Fire Safety
ME = Means of Egress
GS = General Safety

MFS = Mandatory Fire Safety
MME = Mandatory Means of Egress
MGS = Mandatory General Safety