

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

2005-0178
Application I. D. Number

Neptune Properties
Applicant
120 Exchange Street, Portland, ME 04101
Applicant's Mailing Address

8/5/2005
Application Date

Neptune Aircraft Hanger
Project Name/Description

Consultant/Agent
Applicant Ph: (207) 775-2100 Agent Fax:
Applicant or Agent Daytime Telephone, Fax

1111 - 1111 Westbrook Street, Portland, Maine
Address of Proposed Site
199 A001
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) _____

8000 s.f. AB
Proposed Building square Feet or # of Units Acreage of Site Zoning

Check Review Required:

- | | | | |
|--|---|--|--|
| <input checked="" type="checkbox"/> Site Plan
(major/minor) | <input type="checkbox"/> Subdivision
of lots _____ | <input type="checkbox"/> PAD Review | <input type="checkbox"/> 14-403 Streets Review |
| <input type="checkbox"/> Flood Hazard | <input type="checkbox"/> Shoreland | <input type="checkbox"/> Historic Preservation | <input type="checkbox"/> DEP Local Certification |
| <input type="checkbox"/> Zoning Conditional
Use (ZBA/PB) | <input type="checkbox"/> Zoning Variance | <input type="checkbox"/> Other _____ | |

Fees Paid: Site Pla \$400.00 Subdivision _____ Engineer Review _____ Date 8/9/2005

Planning Approval Status:

Reviewer _____

- Approved** **Approved w/Conditions**
See Attached **Denied**

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

OK to Issue Building Permit _____
signature date

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

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

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



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life® www.portlandmaine.gov

Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

October 3, 2005

Mr. Michael Scarks
Neptune Properties
120 Exchange Street
Portland, Maine 04101

RE: 1111 Westbrook Street, Neptune Aircraft Hangar
CBL: 199 A001

Dear Mr. Scarks,

On September 29, 2005, the Portland Planning Authority approved a minor site plan for a 8000 square foot aircraft hangar at 1111 Westbrook Street at the Portland Jetport as shown on the approved plan.

The approval includes a waiver for the requirement to install granite curb and sidewalk along the Westbrook Street right of way frontage in light of the Jetport's commitment to construct such improvements along the project site.

The approval is subject to the following conditions:

The proposed lighting plan shall be revised to reflect the following:

- The four building mounted lighting fixtures on the westerly (Westbrook Street) side of the building, labeled "CE8" on the lighting schedule, be revised to provide full "cut off" shielding; and,
- The seven remaining building mounted lights, labeled "CF" on the lighting schedule, be mounted at a zero degree angle of tilt so as to achieve full "cut off" shielding.

Revised lighting fixture and mounting details shall be submitted for Planning Authority review and approval prior to installation.

The approval is based on the submitted site plan. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.

cc: Lee D. Urban, Planning and Development Department Director
Alexander Jaegerman, Planning Division Director
Sarah Hopkins, Development Review Services Manager
Bill Needelman, Senior Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Inspections
Michael Bobinsky, Public Works Director
Traffic Division
Eric Labelle, City Engineer
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Greg Cass, Fire Prevention
Assessor's Office
Jeff Bourk, Jetport
John Peverada, Parking Manager
Elizabeth Hoglund, Stroudwater Village Neighborhood Association
Approval Letter File



NEPTUNE PROPERTIES, INC.

120 EXCHANGE STREET

PORTLAND, MAINE 04101

TO: BILL NEEDS MORN

3 TOTAL

FROM: MIKE SEARIS

7568258

RE: JST PORT HANGAR

BILL: ATTACHED ARE THE COUNCIL RESOLUTIONS FOR 7/6/05
WILL INCLUDE THE LEASE FOR THE HANGAR
CALL WITH QUESTIONS.

MIKE

IN COUNCIL REGULAR MEETING JULY 6, 2005 VOL. 122 PAGE 4

ROLL CALL: Mayor Duson called the meeting to order at 7:03 P.M. Councilor O'Donnell was absent.

Order 16-05/06 Granting Municipal Officer's Approval of Island Operation, LLC, d/b/a Inn on Peaks Island/Big Fish Grill, at 33 Island Avenue on Peaks Island. Application to Expand Existing Licensed Area for a Class I Food Service Establishment Liquor and Entertainment with Dance and Outside Seating License to Include Larger Area for Outdoor Events, Weddings, Etc., Sponsored by Linda C. Cohen, City Clerk.

Motion was made by Councilor Gorham and seconded by Councilor Mavodones to withdraw this item. Passage 8-0.

APPROVAL OF MINUTES OF PREVIOUS MEETING:

Motion was made by Councilor Mavodones and seconded by Councilor Cloutier to approve the minutes of the regular meeting of 6/20/05 and the special meeting of 6/27/05. Passage 8-0.

PROCLAMATIONS:

Proc 1-05/06 Honoring Officer John Halpin as Police Officer of the Month for June 2005 - Sponsored by Jill C. Duson, Mayor.

APPOINTMENTS:

CONSENT ITEMS:

BUDGET ITEMS:

COMMUNICATIONS:

RESOLUTIONS:

UNFINISHED BUSINESS:

Order 11-05/06 Approving Collective Bargaining Agreement with the Communications Employee Association - Sponsored by Joseph E. Gray, Jr., City Manager. Given first reading at special meeting on 7/6/05.

Motion was made by Councilor Gorham and seconded by Councilor Cohen for emergency passage. Passage 7-0 (Carr abstaining).

IN COUNCIL REGULAR MEETING JULY 6, 2005 VOL. 122 PAGE 5

Order 12-05/06 Approving Collective Bargaining Agreement with Local 740, International Association of Firefighters, AFL-CIO - Sponsored by Joseph E. Gray, Jr., City Manager. Given first reading at special meeting on 7/6/05.

Motion was made by Councilor Gorham and seconded by Councilor Mavodones for emergency passage. Passage 7-0 (Carr abstaining).

Order 211A-04/05

Authorizing Lease Agreement with Neptune Hangar, LLC Re: Hangar at Portland International Jetport – Sponsored by the Transportation Committee, Councilor James I. Cohen, Chair. Referred to Transportation Committee on 4/4/05.

Motion was made by Councilor Gorham and seconded by Councilor Cohen for passage. Passage 8-0.

Order 290-04/05

Amendment to Zoning Map Re: Zoning from R-6 Residential to R-7 Compact Urban Residential Zone Vicinity of 44 East Oxford Street – Sponsored by the Planning Board, Leslie Lowry, III, Chair. Given first reading on 6/6/05 and postponed on 6/20/05.

Motion was made by Councilor Cohen and seconded by Councilor Mavodones for passage.

Motion was made by Councilor Geraghty and seconded by Councilor Gorham to postpone this item to 8/1/05. Passage 8-0.

Order 302-04/05

Amending Council Order No. 67-04/05 Re: Conditional Rezoning for 802-828 Ocean Avenue Graves Hill Land Company, LLC – Sponsored by the Planning Board, Leslie Lowry, III, Chair. Given first reading on 6/20/05.

Motion was made by Councilor Gorham and seconded by Councilor Mavodones for passage.

Motion was made by Councilor Mavodones and seconded by Councilor Gorham to amend the agreement on Page 6 in Paragraph 7 regarding modification by the Planning Board for drainage and detention ponds. Passage 8-0.

Passage, as amended, 8-0.

IN COUNCIL REGULAR MEETING JULY 6, 2005 VOL. 122 PAGE 6

Order 303-04/05

Expanding the Geographical Boundaries of the Bayside Redevelopment Tax Increment Financing District - Sponsored by the Community Development Committee, Councilor James F. Cloutier Chair. Given first reading on 6/20/05.

Motion was made by Councilor Gorham and seconded by Councilor Cohen for passage. Passage 8-0.

Order 306-04/05

Reallocating and Appropriating \$38,000 in Community Development Block

<http://www.portlandmaine.gov/ccminutes/FY06/2005-07-06minutes.htm>

8/10/2005

From: Jeff Bourk
To: Hoglund, Elizabeth
Date: 09/30/2005 11:51:09 AM
Subject: Scarks Hangar Project

Scarks Hangar Project

As you know the Site Plan is currently under review by the City Planning Department. They have reviewed the plan to ensure all applicable standards are met. I have been told by Bill Needelman with the City Planning Department that all of the standards have been met and approve of the project is expected soon.

I have been doing my best to inform you and the Stroudwater Village Association of the progress of the Scarks Hangar Project. Yesterday at lunch I told you everything I know about this project. We have also had several phone conversations and lunch meetings discussing this project as well as other issues since the City Council approved the ground lease in early July. I would be happy to meet with anyone else from Stroudwater who still has concerns about this project including Tom to discuss any new information. However, I think all issues have been discussed and every possible situation has been covered. My personal opinion is that as a group (Stroudwater, Jetport, City and Scarks) worked well together to make this contentious project a success. I Also feel you specifically as President of the Stroudwater Village Association have done a good job to trying to balance the issues relating to this emotional project and actually try to make a difference (which you have - the final site plan is completely different than the original proposal) rather than just trying arbitrarily to delay the project.

At yesterdays lunch meeting when we went over the site plan, and hangar design it sounded like Stroudwater was pleased with the outcome of this process. If the Stroudwater Village Association has any concerns relating to this project that I am not aware of please let me know.

Thanks,

Jeff Bourk
Assistant Airport Manager
Portland International Jetport

CC: Joe Gray ; Monroe , Jeffrey; mscarks@hotmail.com; Schultes, Jeff; William Needelman

From: Jeff Bourk
To: William Needelman
Date: 09/08/2005 1:15:34 PM
Subject: Re: Fwd: Sidewalk Waiver for the Scarks Hangar

I review the side walk waiver. I have also reviewed future airport plans for that area with airport operations. We are planning on adding a side walk that will extend past Mike Scarks lease area to the fire gate across from the culda-sac. We think mike should be responsible for that area of side walk. However, at the end of his ramp on the airfield side is a vehicle roadway approximately 14 feet wide which we are responsible for. My thought is perhaps we can cut a deal that would require him to billed the part of the vehicle road directly in front of the ramp and us to build the side walk. By doing it this way I think it would be cheaper for everyone and cause less problems with construction and design.

What do you think?

>>> Paul Bradbury 9/7/2005 2:30:23 PM >>>
Jeff,

FYI, feel free to send any comments or concerns to Bill.

Thanks

>>> William Needelman 9/7/2005 1:46:03 PM >>>
To all:

Attached is a draft note to file regarding the Scarks aviation hangar and the application of the curb and sidewalk waivers.

I am looking for feedback.

With Eric out on vacation, perhaps Kathi could weigh in for Public Works.

Thank you.

Bill

CC: Bradwallace@AOL.com; DARTH1129@aol.com; Paul Bradbury; Schultes, Jeff

STROUDWATER VILLAGE ASSOCIATION
12 Garrison Street
Portland ME 04102

Bill -
Can you let Helen
know this is minor
revisions?
Thanks -
Carol

August 30, 2005

Via E-Mail – lloewry@jbggh.com

Leslie Lowry, III, Chairman
Portland Planning Board
Portland City Hall
389 Congress Street
Portland ME 04101

RE: Hangar Proposal – Portland Jetport, Westbrook Street, Portland

Dear Chairman Lowry:

Soon the Planning Board will be asked to approve construction of a new hangar located just off Westbrook Street at the Portland International Jetport. The Stroudwater Village Association just learned that Neptune Properties has filed a written site plan proposal, and it is expected to file elevations of the proposed structure in the near term. On hearing of the filing of the proposal by Neptune Properties, a call was placed to bill Needelmann of the Planning Department to find out details. Mr. Needelman was his usual, very responsive self and has sent a partial copy of the First Site Plan proposal by Neptune and a partial copy of the current proposal submitted by Neptune Properties regarding this project. The point of this letter is not to necessarily find fault with the proposal we have not had enough time or information to fairly evaluate it. Rather, it is the intent of this letter to request additional time to thoroughly evaluate the current site plan and to review any elevations that may become available for the actual building proposed by this developer.

In passing, let me say this is the third time that this project has proceeded at some level of administrative review without written notice to Stroudwater Village Association. Stroudwater is extremely interested in this particular project as it may impact the adjacent National Historic District and the greater Stroudwater community. It is simply astounding to the Association that the proposed construction could be on a fast track to approval without so much as a courtesy transmittal letter from the developer or, indeed, the Jetport staff at the time of proposal submission.

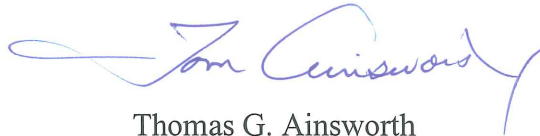
It is, therefore, respectfully requested:

1. That this matter may be tabled for a suitable period of time to allow the Stroudwater Village Association to fully review the filing and its implications, and;

Leslie Lowry, III, Chairman
August 30, 2005
Page 2

2. Request a change in the procedures used by developers before the Planning Board to require them to submit copies of all filings to interested groups, especially where oppositional interests have been identified prior to the filing date.

Sincerely,



Thomas G. Ainsworth

TGA/lsw

c: Jeff Bourk, Portland International Jetport
Neptune Properties, Attn. Michael Skarks
Elizabeth Hoglund, SVA President
Bill Needelman

HARRIS MILLER MILLER & HANSON INC.

15 New England Executive Park
Burlington, MA 01803
T 781.229.0707
F 781.229.7939
W www.hmmh.com

September 12, 2005

Mr. Jeffrey Bourk
Assistant Airport Manager
Portland International Jetport
Westbrook Street
Portland, ME 04102

Subject: Acoustical Evaluation of Scarks Hangar and Noise Barrier
Reference: HMMH Project Number 300721

Dear Mr. Bourk:

We have reviewed the site plan of the proposed hangar and noise barrier at Portland International Jetport provided by Sebago Technics ("Site Plan of North Hangar – Portland International Jetport," September 12, 2005). It is our opinion that the noise barrier as shown in the drawing meets the requirements of our letter dated May 23, 2005 (letter to Councilor James Cohen, Subject: Acoustical Evaluation of Proposed Hangar, Alternate Location, HMMH Job No. 300721).

Specifically, the referenced letter stated that

A noise barrier located along the northern edge of the proposed hangar's apron with top elevation 12 to 15 feet above pavement level would reduce noise levels at nearby homes by about 4 to 7 dB and would negate the potential increases in single event levels described above. The western end of the noise barrier should be connected to the northeast corner of the hangar and sealed so that no gaps exist between the barrier and the hangar. In addition, there should be no gaps between the bottom of the barrier and the pavement or ground. The barrier would run to the east from the hangar for approximately 80 feet along the apron's northern edge. If necessary, the barrier could be set back from the apron's edge by up to 25 feet to allow emergency access. In this case, the western end should remain connected to the hangar.

Although portions of the noise barrier will be somewhat farther than 25 feet from the apron's northern edge to allow for snow storage, the barrier's top elevation of 75 feet MSL will be approximately 15 feet above the highest point on the ramp and will adequately break the direct line-of-sight to affected residences. We appreciate having had the opportunity to review this drawing. Please feel free to give me a call if you have any questions or if we can provide any additional services.

Sincerely yours,

HARRIS MILLER MILLER & HANSON INC.



Douglas E. Barrett
Vice President

HARRIS MILLER MILLER & HANSON INC.


15 New England Executive Park
Burlington, MA 01803
Tel. (781) 229-0707
Fax (781) 229-7939

May 23, 2005

Councilor James Cohen
Transportation Committee Chair
Portland International Jetport
1001 Westbrook Street
Portland, Maine 04102

Subject: Acoustical Evaluation of Proposed Hangar, Alternate Location
Reference: HMMH Job No. 300721

Dear Mr. Cohen:



Harris Miller Miller & Hanson Inc. (HMMH) is providing the following information to supplement our letters of March 16 and April 20, 2005 regarding the proposed Scarks Hangar at Portland International Jetport (PWM). This evaluation addresses an alternate location for the hangar based on "Lease Exhibit Sketch – Option C" prepared by Sebago Technics and dated May 10, 2005. The proposed hangar would be located on the current site of a parking lot north of the existing General Aviation (GA) hangars.

1. Potential Increases in Noise Exposure Attributable to the Proposed Hangar

The Federal Aviation Administration (FAA) requires that the yearly Day-Night Average Sound Level (DNL) be used as the primary metric to assess aircraft noise exposure around airports.¹ FAA also has identified "an increase in noise of DNL 1.5 dB or more at or above DNL 65" to be a significant noise impact.²

From noise analyses conducted for PWM as part of its recent Noise Compatibility Program Update,³ only a small portion of the projected 2007 DNL 65 contour, assuming no new noise mitigation measures are implemented, extends beyond the Jetport's property line and into the Stroudwater neighborhood. The contour appears to include the backyards of approximately three homes on the east side of Westbrook Street. This is a conservative estimate of the noise in this area because (a) it is based on a forecast of 120,830 operations, or approximately 31,000 (35 percent) more operations than the 89,359 that actually occurred in 2004; and (b) while the recommended improvements to the existing preferential runway use program are expected to provide substantive improvements to the Stroudwater neighborhood, the FAA has not yet completed its review of the document nor issued its record of approval; until that happens, measures involving FAA participation are not expected to be implemented.

With regard to potential increases in these projected noise exposure levels that might be attributable to the proposed hangar, Table 1 indicates that, with decibel addition, any new noise source making a contribution of DNL 61 or greater at a location where the existing noise exposure is DNL 65 will cause an increase in the DNL of 1.5 dB.

¹ Federal Aviation Administration Order 1050.1E, Appendix A, Section 14.1a.

² Ibid., Section 14.3.

³ Portland International Jetport Federal Aviation Regulation Part 150 Noise Compatibility Program Update, March 2004.

HARRIS MILLER MILLER & HANSON INC

Councilor James Cohen
 HMMH Job No. 300721
 May 23, 2005
 Page 2

Table 1. Noise from Existing and New Sources Required to Achieve 1.5 dB Increase in DNL

Day-Night Average Sound Level (DNL)			
Existing	New Source	Existing + New Source	Increase
65.0	61.0	66.5	1.5

Table 2 shows the approximate amount of time that each of two representative new activities would need to occur at the proposed hangar to increase existing noise exposure by this threshold. The corporate jet and helicopter types used in this illustration are similar to those owned by Mr. Scarks and are representative of the types that are expected to be hangared at the new facility. Row (1) of the table shows engine idle (as would occur after engine start-up and before a departing aircraft leaves the hangar area) for a Cessna Citation business jet. On any given day, the aircraft would need to idle on the hangar apron for approximately 4.4 hours to cause a change of DNL 1.5 dB, the level of significance established by FAA. Row (2) shows that a Bell 206L helicopter would need to idle for approximately 5.5 hours per day on the hangar apron to cause an increase of DNL 1.5 dB.

Table 2. Change in DNL Caused by Noise Sources at Proposed Hangar

Activity at Proposed Hangar		Noise Exposure at Closest Stroudwater Homes (DNL)			
New Noise Source	Duration Every Day (Hours)	New Noise Source at Nearest Homes	Existing	Existing + New Source	Increase
(1) Citation Jet Idle	4.4	61.0	65.0	66.5	1.5
(2) B206L Helicopter Idle	5.5	61.0	65.0	66.5	1.5

(Assumptions: nearest home within DNL 65 contour is 500 feet from aircraft location on hangar apron; no shielding or excess attenuation assumed.)

Because FAA requires computation of DNL for an Annual Average Day (AAD), these activities would need to occur each day throughout the year for the durations shown to cause the indicated changes in the DNL contour. If, for example, the activities occurred only every other day, the required idle durations would be twice as long to cause the same change in AAD DNL.

In contrast, the aircraft using the hangar are expected to be used only several times per week. During each use, the aircraft may idle on the ramp in front of the hangar for several minutes after engine start-up. The idle times are not expected to approach the durations shown in Table 2. Therefore, activities at the proposed hangar are expected to cause no adverse effects based on the threshold of a 1.5 dB increase in AAD DNL.

2. Potential Increases in Single Event Sound Levels Attributable to the Proposed Hangar

Currently, aircraft that would be housed at the new hangar are located in the GA hangars south of the proposed site. Activities at the new hangar site, including engine start-up, idle, and taxi, would be similar to those activities now conducted at the existing GA hangars. However, because the new hangar site would be somewhat closer to some residences, there is the potential for higher community sound levels during these activities. The maximum sound level, or L_{max} , is the highest sound level achieved during a


HARRIS MILLER MILLER & HANSON INC.

Councilor James Cohen
HMMH Job No. 300721
May 23, 2005
Page 3

single event and is often used to assess the potential effects of single events. Unlike DNL, L_{max} does not take into account the duration or overall noise exposure caused by an activity.

Table 3 shows the potential increase in L_{max} caused by relocating activities at the existing GA hangars approximately 300 feet north to the proposed location of the new hangar. The expected increases in maximum sound levels range between about 4 dB and 6 dB. Changes in environmental sound levels of 3 dB or greater are generally considered to be perceptible and changes of 5 dB or more may be readily noticed. The projected increases in L_{max} would diminish at greater distances from the proposed hangar and would be less noticeable at homes set farther back into the community.

Table 3. Potential Increase in L_{max} Caused by Noise Sources at Proposed Hangar



Receiver Location	Distance from center of existing GA hangar apron	Distance from northern edge of proposed hangar apron	Expected increase in L_{max}
(1) Closest house with yard within DNL 65 dB contour	815 ft.	510 ft.	4 to 5 dB
(2) Closest house to proposed hangar	675 ft.	400 ft.	5 to 6 dB

(Assumptions: No shielding; spherical dispersion with up to 5 dB of excess attenuation per distance doubling.)

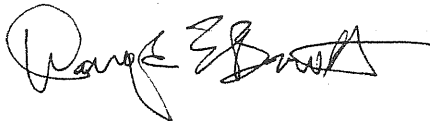
3. Recommended Mitigation

A noise barrier located along the northern edge of the proposed hangar's apron with top elevation 12 to 15 feet above pavement level would reduce noise levels at nearby homes by about 4 to 7 dB and would negate the potential increases in single event levels described above. The western end of the noise barrier should be connected to the northeast corner of the hangar and sealed so that no gaps exist between the barrier and the hangar. In addition, there should be no gaps between the bottom of the barrier and the pavement or ground. The barrier would run to the east from the hangar for approximately 80 feet along the apron's northern edge. If necessary, the barrier could be set back from the apron's edge by up to 25 feet to allow emergency access. In this case, the western end should remain connected to the hangar. If the noise barrier is to be constructed, a qualified acoustician should review the plans, including material specifications, prior to construction to ensure that the barrier provides the intended benefit.

We appreciate having had the opportunity to provide this evaluation. Please feel free to contact me should you have any further questions.

Sincerely,

HARRIS MILLER MILLER & HANSON INC.



Douglas E. Barrett
Vice President

Elizabeth Hogland
138 Strandwater avl

Village Assoc
Strandwater ~~Hogland~~
09102

NOTE TO FILE

Staff findings

September 29, 2005

**1111 Westbrook Street, Neptune Properties Hangar Project
Sidewalk and Curb waiver review comments by criteria.**

Code Citation

Sec.14 -506 (b) Modifications.

(b) Where the planning board or planning authority finds that, for each of the requirements listed below, two or more of the conditions exist with respect to compliance with the requirements set forth in sections 14-498 and 14-499 pertaining to the provision and construction of curbs and/or sidewalks, it may vary the regulations so that substantial justice may be done and the public interest secured:

(Review Comments provided below in Bold font.)

Sidewalks-

1. There is no reasonable expectation for pedestrian usage coming from, going to and traversing the site.

The industrial character of the facility and area discourages pedestrian activity to and from the site. There are currently no connecting sidewalks from the Stroudwater neighborhood, though anecdotal reports from airport staff (Jeff Burke) indicate that occasional pedestrians from the neighborhood, area business and airport passengers use Westbrook Street to as a route between the airport and the Stroudwater neighborhood.

2. There is no sidewalk in existence or expected within 1000 feet and the construction of sidewalks does not contribute to the development of a pedestrian oriented infrastructure.

There is a pedestrian sidewalk located at the airport +/- 400 from the subject site and on the same side of the facility.

3. A safe alternative-walking route is reasonably available, for example, by way of a sidewalk on the other side of the street.

The Westbrook Street reconstruction includes sidewalk on the project side of the street. This project is funded and currently under design.

4. The reconstruction of the street is specifically identified in the first or second year of the current Capital Improvement Program.

Westbrook Street is scheduled to be reconstructed in spring 2006 with airport funding. See criteria 3 above.

5. The street has been constructed or reconstructed without sidewalks within the last 24 months.
NA

6. Strict adherence to the sidewalk requirement would result in the loss of significant site features related to landscaping or topography that are deemed to be of a greater public value.

NA

Staff Findings: Sidewalk waiver criteria 3 and 4 are met through the funded reconstruction of Westbrook Street.

Curbing-

7. The cost to construct the curbing, including any applicable street opening fees, is in excess of 5% of the overall project cost.

Approximate construction cost is \$500K, +/- 230lin. ft. of curb at \$35/lin. ft. (\$8050 installed cost,) assuming no road opening fee because of proposed road reconstruction (+/-1.6%)

8. The street is scheduled for major reconstruction as a component of the Capital Improvement Program.

Westbrook Street is scheduled for reconstruction spring of 2006

9. The street has been rehabilitated without curbing in the last 60 months.NA
10. Strict adherence to the curb requirement would result in the loss of significant site features related to landscaping or topography that are deemed to be of a greater public value.NA
11. Runoff from the development site or within the street does not require curbing for stormwater management.

No stormwater problems are evident in the current condition without curbing.

In no event shall the waiver have the effect of creating potentially hazardous vehicle and pedestrian conflict or nullifying the intent and purpose and policies of the land development plan relating to transportation and pedestrian infrastructure and the regulations of this article. At its discretion, the planning authority may refer any petition for a waiver from the curb and sidewalk requirement to the planning board for decision.

Staff Findings: Curb waiver criteria 2 and 5 are met through the funded reconstruction of Westbrook Street and the lack of existing stormwater problems.

Planning Authority waiver to be granted concurrently with site plan approval.

REVIEWER, WBN, 9-29-05



MAINE HISTORIC PRESERVATION COMMISSION
 55 CAPITOL STREET
 65 STATE HOUSE STATION
 AUGUSTA, MAINE
 04333

JOHN ELIAS BALDACCI
 GOVERNOR

EARLE G. SHETTLER, JR.
 DIRECTOR

June 27, 2005

John Silva
 Manager, Environmental Programs
 Federal Aviation Administration
 12 New England Executive Park
 Burlington, MA 01803-5299

Project: MHPC #0784-05 - proposed Scarks Hangar & Apron; Portland International Jetport (PWM)
 Town: Portland, ME

Dear Mr. Silva:

In response to your letter of June 7, 2005, I have reviewed the revised project plans ("Lease Exhibit Sketch-Option 'C' of: North Hangar-Portland International Jetport"), visual simulations and the May 23, 2005 *Acoustical Evaluation of Proposed Hangar, Alternate Location* to continue consultation on the proposed undertaking pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended.

Based on the above referenced materials, Article 15.14 of the *Ground Lease Agreement*, and the Commission's understanding that the mitigation measures recommended in the May 23, 2005 Harris Miller Miller & Hanson Inc. acoustical evaluation will be implemented as specified and that the overall project will not result in a perceptible increase in either the maximum sound level (≤ 2 dB Lmax) for single aircraft events or result in a significant increase in the Day-Night Average Sound Level (DNL) (< 1.5 dB) relative to the Stroudwater Historic District, I concur with the Federal Aviation Administration's (FAA) determination that the proposed undertaking will have no adverse effect upon historic properties. This concurrence is made with the observation that Mr. Scarks has voluntarily agreed, and is not legally obligated, to taxi his helicopter to the central area of the airport prior to departure, and it is the Commission's understanding that the above referenced acoustical evaluation did not consider noise generated if a helicopter were to regularly depart directly from the proposed apron. However, the Commission has been assured that such practice would likely bring neighboring residences within the 65 DNL contour and would, pursuant to Article 5.14.2 of the *Ground Lease Agreement*, obligate the tenant to operational restrictions to abate noise.

Also, while the Maine Historic Preservation Commission is aware that neither the PWM or the FAA are willing or able to make helicopter flight routes mandatory due to safety issues, we strongly recommend the official adoption of voluntary helicopter routes to avoid the Stroudwater Historic District and PWM's good-faith effort to encourage the use of such routes.



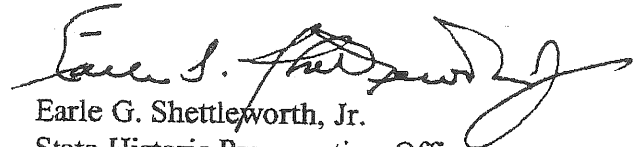
MAINE HISTORIC PRESERVATION COMMISSION

55 Capitol Street
State House Station 65
Augusta, Maine 04333



Please contact Mike Johnson of my staff if we can be of further assistance in this matter.

Sincerely,


Earle G. Shettleworth, Jr.
State Historic Preservation Officer

cc: Councilor James Cohen, Transportation Committee Chair
Jeff Bourk, PWM Assistant Manager
Tom Ainsworth, Stroudwater Village Association
✓ Owens McCullough, Sebago Technics



NEPTUNE PROPERTIES, INC.

120 EXCHANGE STREET PORTLAND, MAINE 04101

7568258

TO: ERIC LABELLE
FROM: MIKE SCARKS
RE: HANGER SEWER CONNECTION

< COPY FOR B. NEEDLEMAN >

ERIC: TO FOLLOW-UP ON OUR PHONE CONVERSATION OF LAST FRIDAY (8/11)
I MET WITH DAVE PETERSON AT YOUR SUGGESTION TO DISCUSS THE
SEWER CONNECTION FOR MY NEW HANGER AT 1111 WESTBROOK ST.

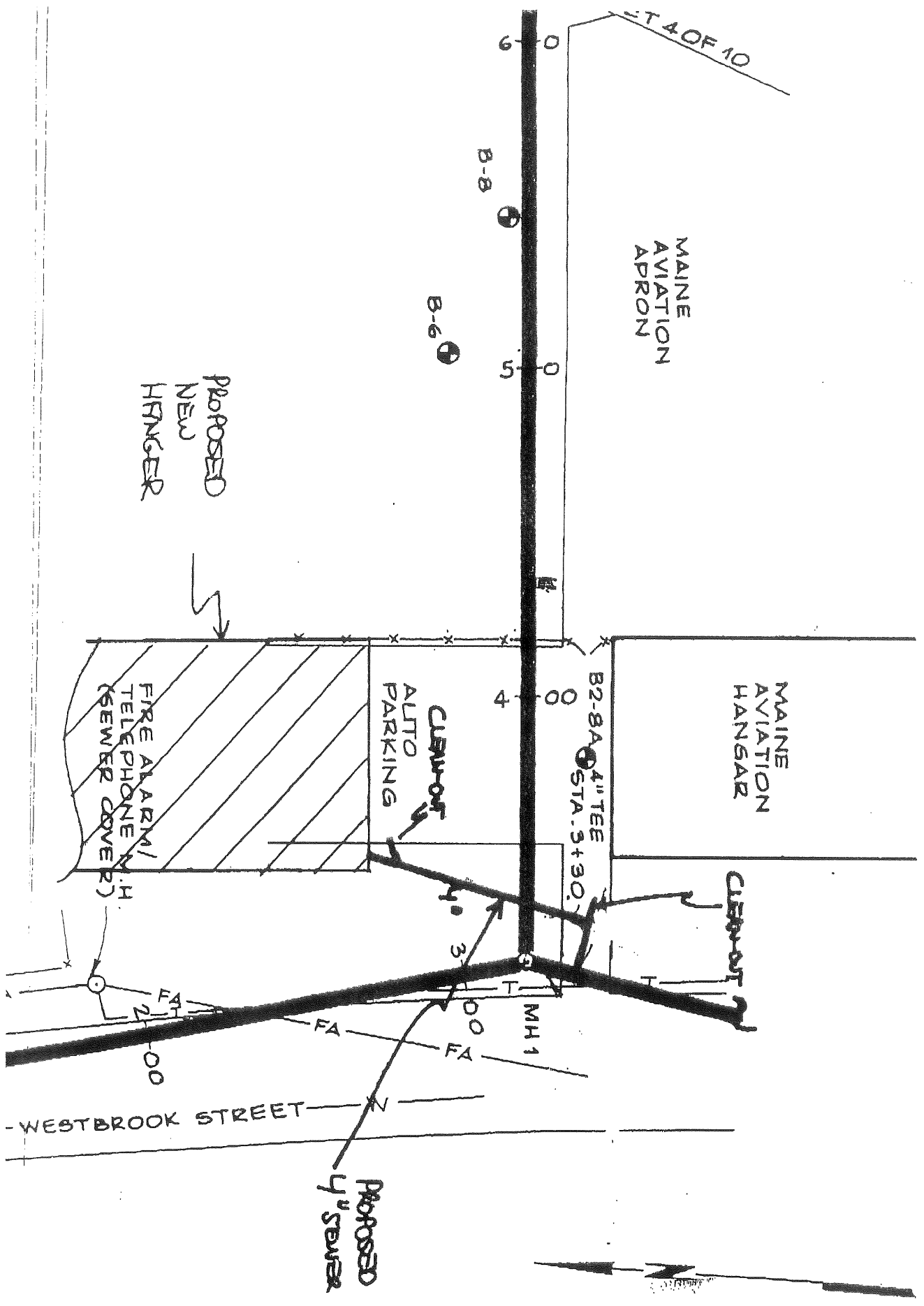
AFTER CHECKING IN THE FIELD THERE IS AN EXISTING 8" DROP
INLET INTO THE MANHOLE IN QUESTION, AND ALTHOUGH THE INSET
OF THE MANHOLE IS 20'+ DEEP THE 8" PIPE PRIOR TO THE DROP
IS ONLY 7'+ BELOW GRADE. DAVE AND I DISCUSSED HOW TO
CONNECT TO THIS PIPE AND I SAID I'D FOLLOW-UP WITH A
SKETCH. THAT PLAN IS ATTACHED HERE AS 8 1/2 X 11 PORTION OF
THE FULL-SIZE SEWER PLAN I PROVIDED TO DAVE DONE BY
DUFRESNE-HENRY. IF THIS IS OK WITH YOU PLEASE CALL BILL NEEDLEMAN
SO HE'S OK WITH IT. I ALSO AM LOOKING FOR A "CAPACITY LETTER" FROM
FRANK BRANCEY. I RAN INTO FRANK WHILE AT PUBLIC WORKS THIS TUESDAY,
SO MAYBE YOU COULD GIVE BILL THE OK ON THAT ALSO IF FRANK IS DOING
HIS WORK. CALL IF YOU HAVE ANY QUESTIONS.

THANKS FOR YOUR PROMPT RESPONSE IN THIS MATTER.

MIKE SCARKS

CC: DAVE PETERSON
BILL NEEDLEMAN

SCALE: 1"=40'



INV. EL. 41.14

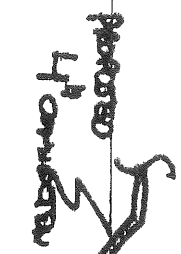
PLAN
1"=40'

CE

AUTO
PARKING

M.H. 1
STA. 3+20

B2-B4



3' DROP (MUST BE LOCATED ON INSIDE OF HW)

FIRE ALARM / TELEPHONE
CABLE

17' TO LEDGE

10" PVC (TYP.)

S = 0.003 (TYP.)

INV. EL. 42.28

EXISTING M.H.
RIM EL. 55.34

INV. EL. 41.30

EXISTING 10" SEWER STRIP



NEPTUNE PROPERTIES, INC.

120 EXCHANGE STREET

PORTLAND, MAINE 04101

Mr. Frank Brancey
Public Works Department
55 Portland Street
Portland, ME 04101

August 19, 2005

Dear Frank:

As per our phone conversation of this morning I am requesting a sewer capacity letter for the aircraft storage hanger I am building at 1111 Westbrook Street. The hanger has no permanent employees or users so the flow from the 2 bathrooms should be minimal and very intermittent. I am estimating the peak usage at 50 GPD. The connection will be via a 4" SDR 35 lateral to the existing main line, which runs through the parking lot next to the hanger. I have included a copy of the plan/profile for the main line provided to me by Mike DeLucca, the airport's consultant.

I would appreciate your prompt attention to this matter so I can complete my minor site review process. Please call with any questions.

Sincerely,

Mike Scarks
775-2100

CC: Bill NEEDLEMAN



NEPTUNE PROPERTIES, INC.

120 EXCHANGE STREET

PORTLAND, MAINE 04101

Bill Needelman, Sr. Planner
City of Portland
Planning Department
389 Congress Street
Portland, ME 04101

August 19, 2005

Dear Bill:

As per our phone conversation of yesterday (8/18/05) please find attached the revised site plan showing the hanger dimensions at 70' x 126' @ 1" = 30' scale.

I have delivered a letter and information packet to Frank Brancey requesting a sewer capacity letter; I don't envision any problem as there are only 2 bathrooms planned for the storage hanger with no permanent employees.

I am requesting a waiver from the sidewalk and curb requirement. I believe you are aware, the airport is currently designing the reconstruction of this section of Westbrook Street and plans to do the construction this spring.

I will forward the elevations to you early next week. I will also confirm the type of sewer connection with Eric Labelle. If you need any additional information or have any questions please call me at 775-2100.

Thanks,

Mike Scarks

City of Portland Site Plan Application

If you or the property owner owe real estate taxes, personal property taxes or user charges on any property within the City of Portland, payment arrangements must be made before permit applications can be received by the Inspections Division.

Address of Proposed Development: 1111 WESTBROOK ST.		Zone: AB
Total Square Footage of Proposed Structure: 8000 SF		Square Footage of Lot: 24,000 +/- SF
Tax Assessor's Chart, Block & Lot: Chart# Block# Lot# 199 A 1		Property owner's mailing address: LEASEE: NEPTUNE PROPERTIES, LLC 120 EXCH RANGES ST. PORTLAND, ME 04101
		Telephone #: 207. 7752100
Consultant/Agent, mailing address, phone # & contact person: SAME	Applicant's name, mailing address, telephone #/Fax#/Pager#: JAMS FAX 874 6988	Project name: NEPTUNE AIRCRAFT HANGER
Proposed Development (check all that apply) <input checked="" type="checkbox"/> New Building <input type="checkbox"/> Building Addition <input type="checkbox"/> Change of Use <input type="checkbox"/> Residential <input type="checkbox"/> Office <input type="checkbox"/> Retail <input type="checkbox"/> Manufacturing <input type="checkbox"/> Warehouse/Distribution <input type="checkbox"/> Parking lot <input type="checkbox"/> Subdivision (\$500.00) + amount of lots _____ (\$25.00 per lot) \$ _____ <input type="checkbox"/> Site Location of Development (\$3,000.00) (except for residential projects which shall be \$200.00 per lot _____) <input type="checkbox"/> Traffic Movement (\$1,000.00) <input type="checkbox"/> Stormwater Quality (\$250.00) <input type="checkbox"/> Section 14-403 Review (\$400.00 + \$25.00 per lot) <input type="checkbox"/> Other _____		
Major Development (more than 10,000 sq. ft.) <input type="checkbox"/> Under 50,000 sq. ft. (\$500.00) <input type="checkbox"/> 50,000 - 100,000 sq. ft. (\$1,000.00) <input type="checkbox"/> Parking Lots over 100 spaces (\$1,000.00) <input type="checkbox"/> 100,000 - 200,000 sq. ft. (\$2,000.00) <input type="checkbox"/> 200,000 - 300,000 sq. ft. (\$3,000.00) <input type="checkbox"/> Over 300,000 sq. ft. (\$5,000.00) <input type="checkbox"/> After-the-fact Review (\$1,000.00 + applicable application fee)		
Minor Site Plan Review <input checked="" type="checkbox"/> Less than 10,000 sq. ft. (\$400.00) <input type="checkbox"/> After-the-fact Review (\$1,000.00 + applicable application fee)		
Plan Amendments <input type="checkbox"/> Planning Staff Review (\$250.00) <input type="checkbox"/> Planning Board Review (\$500.00)		



- Please see next page -

Who billing will be sent to: (Company, Contact Person, Address, Phone #)

NEATUNG PROPERTIES, LLC
120 EXCHANGE ST.
PORTLAND, ME. 04101

Submittals shall include (9) separate folded packets of the following:

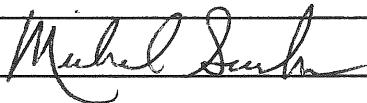
- a. copy of application
- b. cover letter stating the nature of the project
- c. site plan containing the information found in the attached sample plans check list

Amendment to Plans: Amendment applications should include 6 separate packets of the above (a, b, & c)
ALL PLANS MUST BE FOLDED NEATLY AND IN PACKET FORM

Section 14-522 of the Zoning Ordinance outlines the process, copies are available at the counter at .50 per page (8.5 x11)
you may also visit the web site: ci.portland.me.us chapter 14

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

Signature of applicant:



Date:

7/24/05

This application is for site review ONLY, a building Permit application and associated fees will be required prior to construction.



NEPTUNE PROPERTIES, INC.

120 EXCHANGE STREET

PORTLAND, MAINE 04101

July 25, 2005

Sarah Hopkins
Development Review Program Manager
Planning Department
City Hall
389 Congress Street
Portland, Maine 04101

Dear Sarah:

Please find enclosed 9 sets of plans for minor site plan review of my hanger at the Portland International Jetport.

As we discussed at the "SWAT" meeting, this is virtually the same plan that was presented to the transportation committee and the city council. This plan is an evolution through the past 6 months that included approximately nine public hearings/meetings.

Please accept the following as a written statement to supplement the plans submitted from the site plan checklist:

- ITEM #34 Aircraft storage, supporting office space, or other approved uses of the airport's minimum standards document.
- ITEM #35 There is no residential use proposed.
- ITEM #36 The total leased area is approximately 24,000 SF.
- ITEM #37 The footprint of the hanger is 8,000 SF.
- ITEM #38 The burdens of the site relate to FAA standards for setback and structure height. These have been reviewed and approved through the jetport administration but will be formally reviewed under FAA Form 7460. There are no other known easements on the site.
- ITEM #39 Solid waste will be stored indoors in sealed trashcans and will be serviced as required. There is very little anticipated trash generation as the function of the hanger is for storage.
- ITEM #40 Off-site facilities are available either adjacent to the site or on Westbrook Street. Utilities used will be gas, electric, water, sewer, telephone and cable. Since the use is primarily storage the demand for utilities will be minimal.
- ITEM #41 All drainage will be by surface flow to the north and northeast. The drainage review is exempt from site plan review as per the zoning ordinance.
- ITEM #42 The time to construct will be approximately 6 months depending on if winter conditions are encountered.

- ITEM #43 The FAA must approve form 7460 prior to construction. This form will be submitted prior to 8/5/05.
- ITEM #44 None-pending.
- ITEM #45 The FAA has already reviewed and approved this site at the request of the Jetport's administration staff. Formal approval should take less than 2 weeks.
- ITEM #46 ?
- ITEM #47 Attached as Attachment #1.

Please feel free to contact me for any additional information at 775-2100.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Scarks". The signature is fluid and cursive, with a large initial "M" and a long, sweeping underline.

Michael Scarks, President



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www.norwaysavingsbank.com

120 Exchange Street
Portland, ME 04101
Tel.: 207-879-4307
Fax: 207-761-9692

Robert S. Blackwood, Jr.
*Senior Vice President
Commercial Lending*
rblackwood@norwaysavingsbank.com

July 26, 2005

Sarah Hopkins, Development Review Manager
Planning & Development Department
City of Portland
389 Congress Street
Portland, Maine 041001

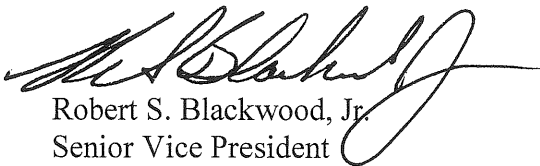
RE: Michael Scarks

Dear Ms Hopkins:

This letter is to advise that in our opinion Michael Scarks has the financial capacity to complete the construction of the proposed 8,000 square foot hangar on leased land at the Portland International Airport. We consider Michael Scarks to be excellent customers of Norway Savings Bank.

Please contact me if you have any questions.

Sincerely,



Robert S. Blackwood, Jr.
Senior Vice President

26 August 2005

Mr. Michael Scarks,
Neptune Properties, Inc.,
120 Exchange Street,
Portland, Maine 04101.

**RE: The Capacity to Handle an Anticipated Increase in Wastewater Flows,
From The Proposed Aircraft Storage Hanger, at the Portland International Jetport,
1111 Westbrook Street, Portland, Maine.**

Dear Mr. Scarks:

The existing eight inch diameter polyvinyl chloride (PVC) sanitary sewer pipe, located in Westbrook Street has adequate capacity to **transport**, while The Portland Water District sewage treatment facilities, located off Marginal Way, have adequate capacity to **treat** the anticipated wastewater flows of **45 GPD**, from your proposed hanger.

Anticipated Wastewater Flows from the Proposed Hanger:

3 Proposed Employees @ 15 GPD/Employee	= 45 GPD
Total Proposed Increase in Wastewater Flows for this Project	= 45 GPD

The City combined sewer overflow (C.S.O.) abatement consent agreement, with the U.S.E.P.A. and the Maine D.E.P., requires C.S.O. abatement, as well as storm water mitigation, in order to offset any increase in sanitary flows, from all projects.

If The City can be of further assistance, please call 874-8832.

Sincerely,
CITY OF PORTLAND

Frank J Brancely, B.A., and M.A.
Senior Engineering Technician

FJB

cc: Alexander Q. Jaegerman, Acting Co-Director, Department of Planning, and Urban Development, City of Portland
William B. Needelman, Senior Planner, Department of Planning, and Urban Development, City of Portland
Eric Labelle, P.E., City Engineer, City of Portland
Bradley A. Roland, P.E., Environmental Projects Engineer, City of Portland
Stephen K. Harris, Assistant Engineer, City of Portland
Jane Ward, Administrative Assistant, City of Portland
Desk file

~~980 Riverside Street~~ 25x90 ~~Self~~ Self

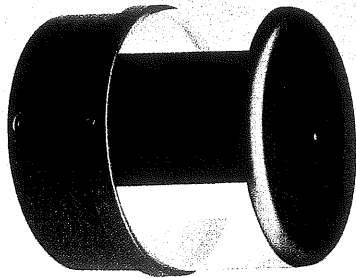
Richard Abraham 885-0214

8-8-05 - Mike Nugent called
Contractor and informed
that we need site plan

8

Shoridern plans =

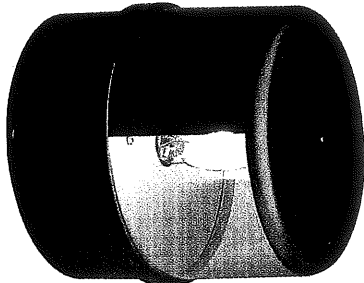
Provision aerial, Pen islet, Existing ~~shed~~, 4 shot pole
S-D0, S-D1, S-D2
S-5 righty



Lamp
Included!

CE5 Series

CE8 Series



Up/Down Cutoff & Deep Shielded

CE5 Series

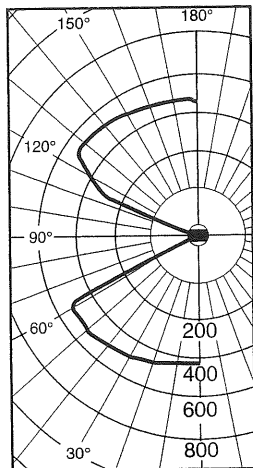
Up/Down Cutoff

The optics provide good horizontal illumination and vertical wall brightness.

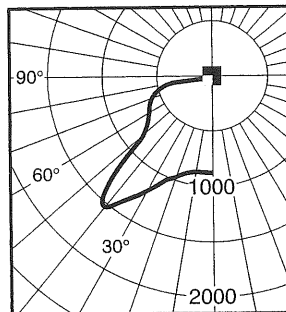
CE8 Series

Deep Shielded

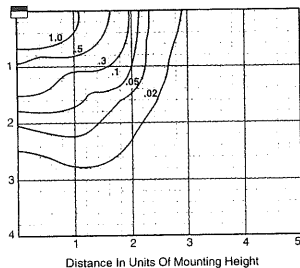
Provides a wide distribution as well as deep shielding for low brightness and glare control. Ideal over entry areas.



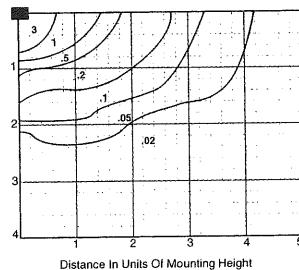
Candlepower Distribution Curve of 50W HPS CE5 Up/Down Cutoff Light.



Candlepower Distribution Curve of 70W HPS CE8 Deep Shielded Light.



Isofootcandle plot of one 50W HPS CE5 Up/Down Cutoff Light at 15' (4.6 m) mounting height (plan view).



Isofootcandle plot of one 70W HPS CE8 Deep Shielded Light at 15' (4.6 m) mounting height (plan view).

CE Series Order Information

Description	Wattage/ Lamp Type	Catalog Number	Mounting Position	Prepay Price
Up/Down Cutoff	35W HPS	CE5503-1	Any	\$109
	50W HPS	CE5505-1	Any	\$109
	13W Fluorescent	CE5213-1	Any	\$68
	26W Fluorescent	CE5226-UL		\$87
	32W Fluorescent	CE5232-UL		\$89
	42W Fluorescent	CE5242-UL		\$91
Deep Shielded	50W MH	CE8405-D	Wall Downlight only	\$137
	70W MH	CE8407-D	Wall Downlight only	\$137
	35W HPS	CE8503-1	Any	\$109
	50W HPS	CE8505-1	Any	\$109
	70W HPS	CE8507-1	Wall Downlight only	\$109
	100W HPS	CE8510-1	Wall Downlight only	\$109
	13W Fluorescent	CE8213-1	Any	\$68
	26W Fluorescent	CE8226-UL		\$87
	32W Fluorescent	CE8232-UL		\$89
	42W Fluorescent	CE8242-UL		\$91

Options: (Factory-installed)	Change Suffix To	Add After Suffix	Prepay Adder
277V ballast (35-50W HPS only)	2		\$22
277V ballast (Fluorescent only)	2		\$10
Single-volt ballast (208V or 240V) (35-50W HPS only)	3 or 4		\$22
Quad-volt ballast (70-100W MH only)	M		\$22
Quad-volt ballast (50-70W MH)	M		\$5
Tri-volt ballast (70W HPS only) (Canada only)	T		\$33
Tri-volt ballast (50 & 70W MH only) (Canada only)	T		\$5
347V ballast (50W HPS only)	6		\$22
Photocell (120V, 277V, 208V, 240V or 347V)	1, 2, 3, 4 or 6	P or LP	\$15
(P = Magnetic ballast, LP = Electronic Ballast)			
High Power Factor ballast		H	\$10
Tamperproof Lens Fasteners		J	\$2
Polycarbonate Lens		V	\$22

Accessory:	Catalog Number	Prepay Price
Tamperproof Screwdriver	TPS-1	\$17
Catalog Number Logic/Voltage Suffix Key		Page 11
Bollard Panel		Page 31
Accessories		Page 39

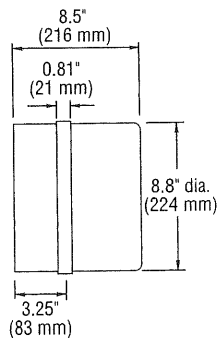
Height	Multiplier
8' (2.4 m)	3.52
10' (3.0 m)	2.25
12' (3.7 m)	1.56
15' (4.6 m)	1.00
20' (6.1 m)	0.56
25' (7.6 m)	0.36

The Up/Down Cutoff photometric data was developed in testing Ruud fixtures with clear, 70W HPS 4,000 lumen medium base lamps. Footcandle readings for other wattages and lamp types may be obtained by multiplying the chart values by the following:

Lamp/Wattages	Multiplier
35W HPS	0.56

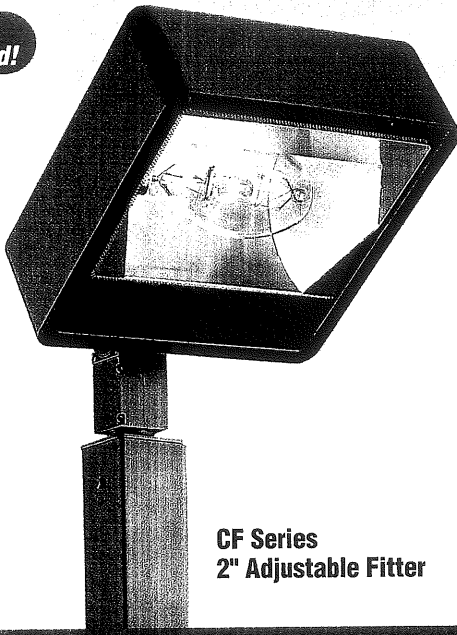
The Deep Shielded photometric data was developed in testing Ruud fixtures with clear, 70W HPS 6,400 lumen medium base lamps. Footcandle readings for other wattages and lamp types may be obtained by multiplying the chart values by the following:

Lamp/Wattages	Multiplier
13W Fluor.	0.14
50W MH	0.53
70W MH	0.86
35W HPS	0.35
50W HPS	0.63
100W HPS	1.48



Quality For Less ... Buy Factory Direct!
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**Lamp
Included!**



**Cutoff
Floodlight**

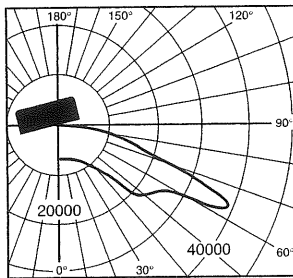
**CF Series
2" Adjustable Fitter**

Cutoff Floodlight

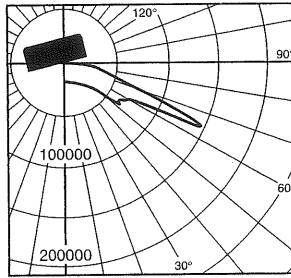
This cutoff luminaire has an optical system specifically designed to assure maximum main beam projection, while minimizing spill light. It is generally positioned with a 15° to 25° tilt above horizontal to reduce glare and obtain optimum performance. The CF Series can be used for parking lots, auto sales lots and outdoor sports areas (volleyball, tennis courts, etc.).

Three Sizes:

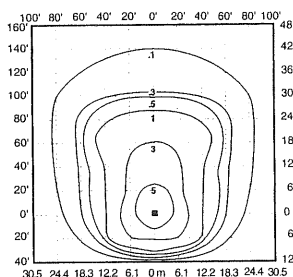
- 12" square x 5" deep (305 x 127 mm)
- 16" square x 6.5" deep (406 x 165 mm)
- 22" square x 9.25" deep (559 x 235 mm)



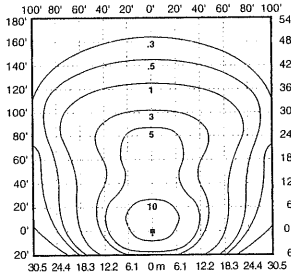
Candlepower Distribution Curve of 400W HPS Cutoff Floodlight, 20° tilt above horizontal.



Candlepower Distribution Curve of 1000W HPS Cutoff Floodlight, 20° tilt above horizontal.



Isofootcandle plot of one 400W HPS Cutoff Floodlight at 30' (9.1 m) mounting height, and 20° tilt above horizontal.



Isofootcandle plot of one 1000W HPS Cutoff Floodlight at 40' (12.2 m) mounting height, and 20° tilt above horizontal.

CF Series Order Information

Housing Size (sq.)	Lamp	Wattage/	Catalog Number	Prepay Price	Mounting Code (Insert Code at * in Catalog #)	Prepay Adder
12"	150W PSMH		MCF*615-M	\$188	3 = 2" Adjustable Fitter	\$22
16"	320W PSMH		CF*632-M	\$210	4 = Yoke Mount	\$10
22"	750W PSMH		CF*675-M	\$384	5 = Fixed 20" Mount	\$39
12"	50W MH		MCF*405-D	\$175	6 = 1/2" Adjustable Fitter	\$10
12"	70W MH		MCF*407-D	\$175	(1/2" Adj. Fitter for use on 12" housing only)	
12"	100W MH		MCF*410-D	\$175	8 = Without Mounting (hardware)	\$3
12"	175W MH		MCF*417-M	\$163	(factory-drilled)	
16"	175W MH		CF*417-M	\$190		
16"	250W MH		CF*425-M	\$192		
16"	400W MH		CF*440-M	\$198		
22"	1000W MH		CF*499-M	\$327		
12"	35W HPS		MCF*503-1	\$154		
12"	50W HPS		MCF*505-D	\$159		
12"	70W HPS		MCF*507-M	\$159		
12"	100W HPS		MCF*510-M	\$159		
12"	150W HPS		MCF*515-M	\$162		
16"	250W HPS		CF*525-M	\$205		
16"	400W HPS		CF*540-M	\$214		
22"	1000W HPS		CF*599-M	\$401		

Other lamp wattages available—consult factory

Options: (Factory-installed)	Change Suffix To	Add After Suffix	Prepay Adder
277V Reactor Ballast (PSMH only)			no adder
120V Reactor ballast (50–150W HPS 12" housing only)	1		deduct \$9
480V ballast (320W PSMH, 175–1000W MH & 70–1000W HPS only)	5		no adder
347V ballast (50W HPS only) (Canada only)	6		\$22
Quad-volt ballast (50–100W MH only)	M		\$5
Tri-volt ballast (320W PSMH, 50–1500W MH & 70–1000W HPS only) (Canada only)	T		no adder
Single Fuse (277V Reactor, 120V, 277V or 347V)	27, 1, 2 or 6	F	\$13
Dual Fuse (208V, 240V or 480V)	3, 4 or 5	F	\$22
Quartz Standby (delay-relay type) (includes 100W Q lamp) (n/a 277V Reactor)		Q	\$49
Uplight Lens Frame		U	\$8
Button Photocell (Factory-installed with all mountings other than 2" Adjustable Fitter)			
NOTE: n/a on 1000W w/120V; all 480V	27, 1, 2, 3, 4 or 6	P	\$15
External Photocell (Factory-installed) (Page 133)			
For fixtures w/1000W, 120V	1	P	\$20
For fixtures w/480V	5	P	\$24

Accessories: (Field-installed)	Prepay Price	Prepay Price	Prepay Price
	12" housing	16" housing	22" housing
Wire Guard	FWG-12 \$13	FWG-16 \$17	FWG-22 \$35
Backlight Shield	SBL-12 \$5	SBL-16 \$5	SBL-22 \$8
Polycarbonate (n/a if fixture is used in an uplight position)			
Vandal Shield	LS-12 \$15	LS-16 \$22	LS-22 \$41
Button Photocell (Field-installed in fixtures with 2" Adjustable Fitter)		Catalog #	Prepay Price
For fixtures w/120V (n/a on 1000W)		PC-1	\$10
For fixtures w/208, 240 or 277V		PC-2	\$10
For fixtures w/347V		PC-6	\$10

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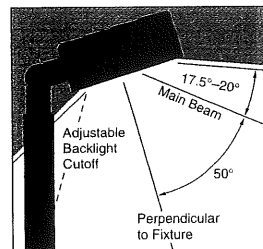
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The main beam is 50° above a line perpendicular to the face of the fixture.

RUUD LIGHTING