Luckse Design, LLC

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3 January 2013

Jeanie Bourke, CEO
City of Portland, Inspections Division
389 Congress Street
Portland, ME 04010

Dear Jeanie,

As per our telephone discussion this afternoon, please find the attached packet containing a Building Permit Application, (2) page Certificate of Design, (6) page structural review, and (4) sheet As-Built set. This application packet covers only the (9) dormers that were constructed without a building permit and are in connection with a "stop-work" order issued by your office.

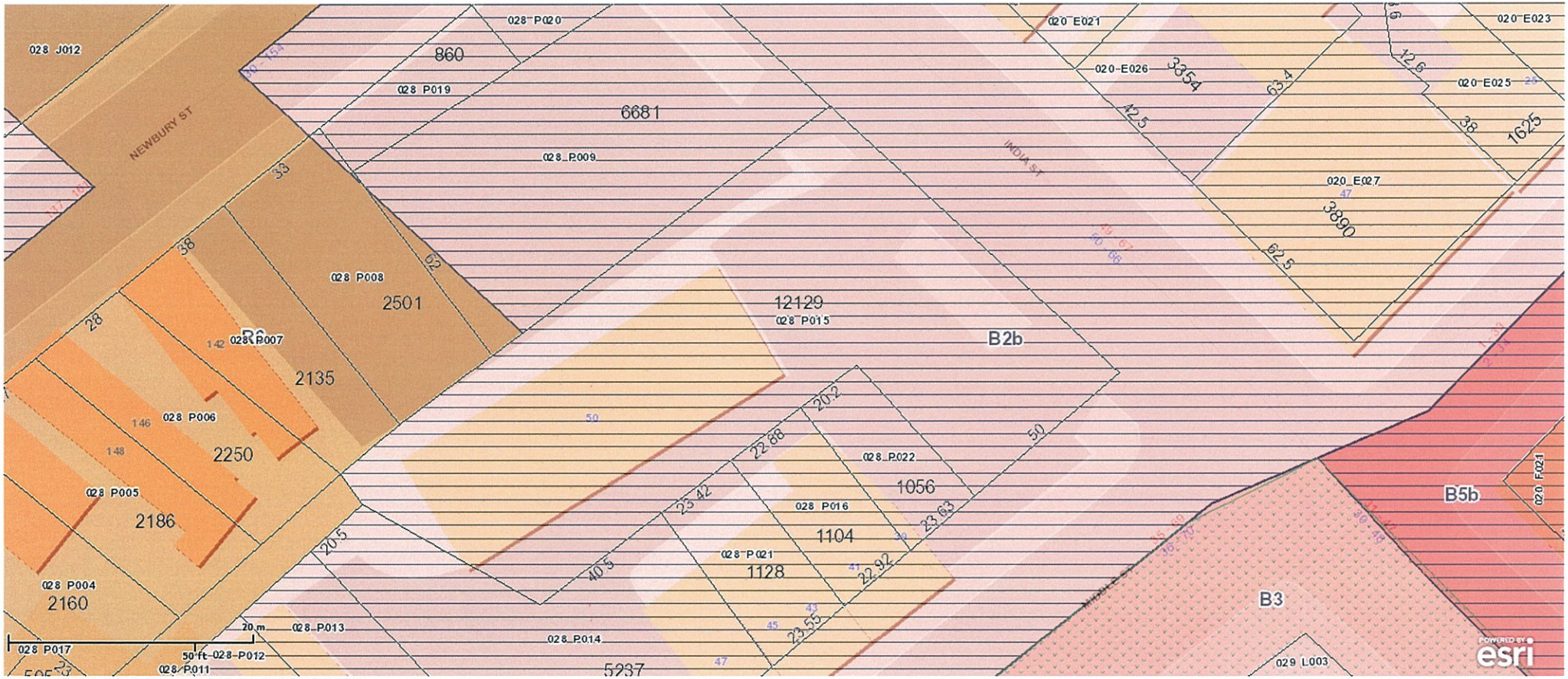
It is my understanding that the only remaining item you will require for this building permit is the payment of all current and outstanding fees in connection with the existing dormer construction. Once the dormer permit is approved and payment is made, Port City Glass intends to explore new options that may include applying for a change of use on the second floor level.

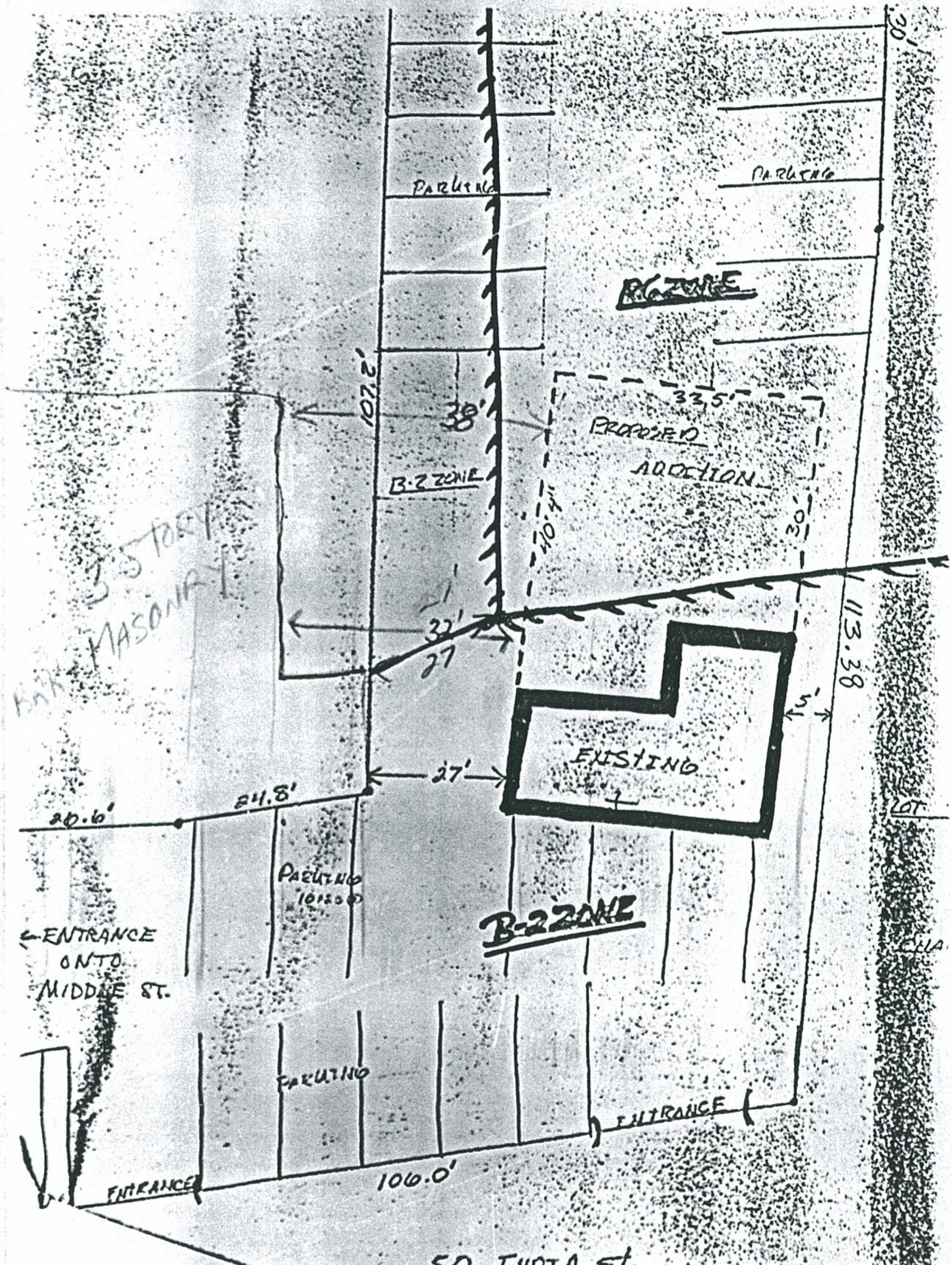
Also, since our conversation today, Marie Harmon indicated to me via a telephone conversation that her outside stairs, door, and associated dormer were actually installed in the late 1980's to satisfy an egress requirement. I made note of this on the as-built drawings.

Sincerely,

Matthew Daughdrill, Assoc. AIA
Cc: File, Marie Harmon

My Map





PARKING
PARKING
R6 ZONE
38'
33.5'
PROPOSED
ADDITION
107.2'
B-2 ZONE
40.4'
30'
3 STORY
BRK MASONRY
32'
27
5'
113.38
27'
EXISTING
84.8'
20.6'
PARKING
B-2 ZONE
ENTRANCE
ONTO
MIDDLE ST.
PARKING
ENTRANCE
ENTRANCE
106.0'
50 INDIA ST.
30'
LOT

Downeast Structural Consultants
LLC

January 3, 2013

Port City Glass
50 India Street
Portland, ME 04101

RE: Port City Glass Permit Application; 50 India Street, Portland, ME (28-P-15)
DSC Project No. 2012-141

At your request, Downeast Structural Consultants, LLC performed a Limited Structural review of the Dormer Roof Framing at the Port City Glass Building located at 50 India Street in Portland, Maine on December 3, 2012. This report has been prepared based on that review.

Our review is for general compliance with construction industry standards and not for conformance to current building design code. The purpose of this site visit is limited to review of the existing dormer roof framing and evaluate whether the framing detrimentally affects the overall building structural integrity.

The review excludes the following, but not limited to, all major mechanical, electrical, plumbing, fire protection and life safety systems with regard to condition and useful future life of those features.

As Professional Engineers, it is our responsibility to evaluate available evidence relevant to the purpose of this review. We are not responsible for conditions that could not be seen or were not within the scope of our services at the time our site visit. No destructive or invasive testing was performed. This report is not to be considered a guarantee of condition and no warranty is implied.

All ratings are determined by comparison to other structures of similar age and construction type.

For your reference while reading the content of this report, the following definitions may be helpful:

Good - Good compares the component or assembly to items typical of construction in the geographic region in which the inspection occurs. It compares the component or assembly to buildings of similar age and construction type and is intended to be region specific. Component or system is structurally sound and performing in accordance with its intended design, although it may show signs of normal wear and tear. Some minor repairs or upgrade rehabilitation work may be required.

5 Oak Street Cumberland, Maine 04021 Office 207.829.8015 Mobile 207.650.3093

Fair - The condition of a building component or assembly may contain one or more of the following: a) Evidence of previous repairs not in compliance with general methods of construction, b) The quality of the component or assembly is not in compliance with general construction methods, c) building component or assembly is obsolete, d) Building component or assembly is near the end of its expected useful life. Repair or replacement is required to prevent further deterioration or extend expected useful life.

Poor - Building component or assembly has either failed, or component cannot be expected to perform as originally designed and constructed. Current condition of the building component or assembly is beyond repair; unplanned or sudden collapse of the component is possible and presently may contribute or cause the deterioration to adjacent or adjoining building elements. Replacement is required.

Description

The property is located at 50 India Street in Portland, Maine and features an approximately 6000-square foot, two-story commercial building constructed in several phases beginning in 1940. The building currently operates as a commercial glass fabrication and service business (Refer to Photos 2 & 3).

The basic construction of this building consists of perimeter concrete foundation walls with a first floor concrete slab on grade. The building superstructure is constructed with interior and exterior wood framed load-bearing walls. The second floor walls support pre-manufactured roof trusses and 2x dimensional wood rafter framing.

Our review is limited to the existing ten small framed roof dormers and construction documents provided by Luckse Design, LLC dated December 20, 2012 with sheets S-1 through S-4. The review excludes concealed structural systems associated with the overall building and all other floor framing areas.

Observations and Evaluations

The following list outlines the areas of focus for this review to be discussed in detail:

A. Roof Area:

1. Roof Dormer Framing (Refer to Photos 2, 3 & 4).

Attached to this document are photographs, which have been integrated into this report.

The following are limitations of our review and areas excluded from assessment:

- Complete Building Structural Analysis.
- Foundation Structural Analysis.

This evaluation consists of a visual survey of the current condition of the concrete slab-on-grade (Engineer's Observations are in normal font, Evaluations are *italicized*).

The following is summary of our observations of the existing conditions as they appeared on December 3, 2012:

A. Roof Dormer Areas:

1. At the time of our site visit ten small roof dormers were previously constructed into the existing roof system of the Port City Glass Building. The dormers are approximately 8-feet by 5-feet and are equally spaced along each side of the building (Refer to Photo 2).
2. The dormers are constructed of 2x dimensional lumber and supported on interior and exterior load bearing walls (Refer to construction documents provided by Luckse Design, LLC dated December 20, 2012 with sheets S-1 through S-4.
3. An unfinished balcony is located along the rear of the building.
4. While on the first floor at the rear of the building we observed a steel beam spanning between the Workshop/Garage Bay and the Storage Area. The steel beam spans approximately 42-feet and supports the second floor joist framing. The beam is only supported at each end.

Evaluation

Based on information provided to Downeast Structural Consultants, the roof dormers were constructed several years ago without obtaining an approved building permit from the City of Portland. Our purpose in this review is to provide assurance the dormers were constructed to industry standards and do not detrimentally affect the overall structural integrity of the existing building.

Based on our review, the dormers appear adequately constructed and do not adversely affect the roof framing or adversely affect the overall structural integrity of the building.

The unfinished balcony appears dilapidated and in poor condition. We recommend dismantling this structure immediately.

Following our review of the framing tributary to the steel beam located at the rear of the building we recommend additional permanent columns be installed. Based on an occupancy of "Uninhabitable Attic Space" at the Cold Storage Area along the second floor we recommend additional columns be placed at third-points along the beam length. The columns shall be either 8x8 wood composite or structural steel framing members. The columns shall bear on ½-inch steel plates bolted to 2'-6" square by 1'-0" deep reinforced concrete footings.

Recommendations:

1. *We recommend removal of the wood balcony at the rear of the building (Refer to Photo 4).*
2. *Provide (2) 8x8 Composite Wood or Steel Columns at Garage Bay/Workshop Area at Third-Points along existing steel beam length. Provide column cap connection to existing steel beam above and column base connection to ½-inch steel plate below.*

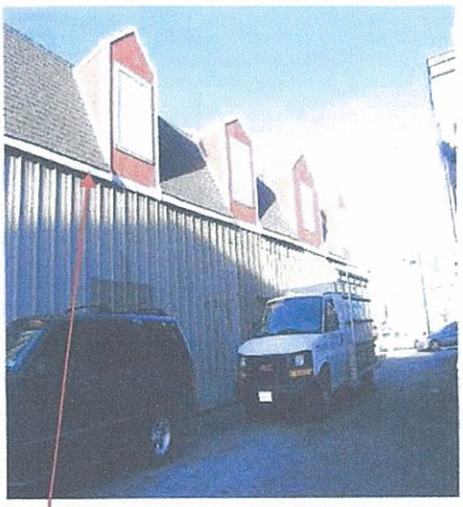
Building Location:
Port City Glass
50 India St,
Portland, ME

Photo Taken By:
Christopher Ray, P.E.

Date:
December 3, 2012

Description:
Exterior Front Elevation.

Number 1.



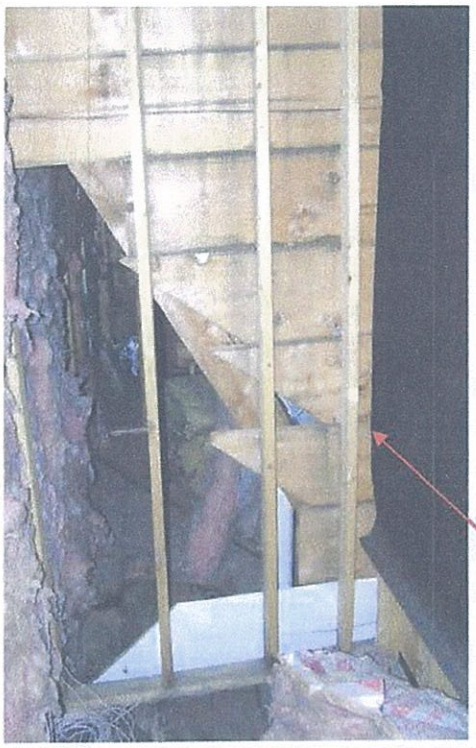
Building Location:
Port City Glass
50 India St,
Portland, ME

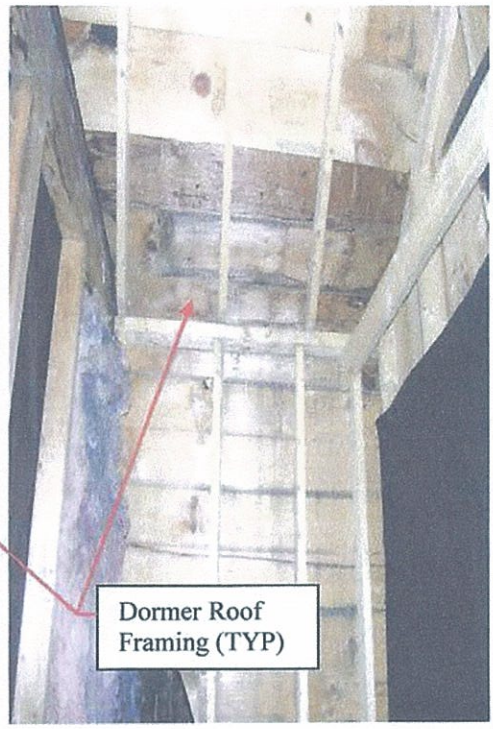
Photo Taken By:
Christopher Ray, P.E.

Date:
December 3, 2012

Description:
Exterior Elevation.

Number 2.





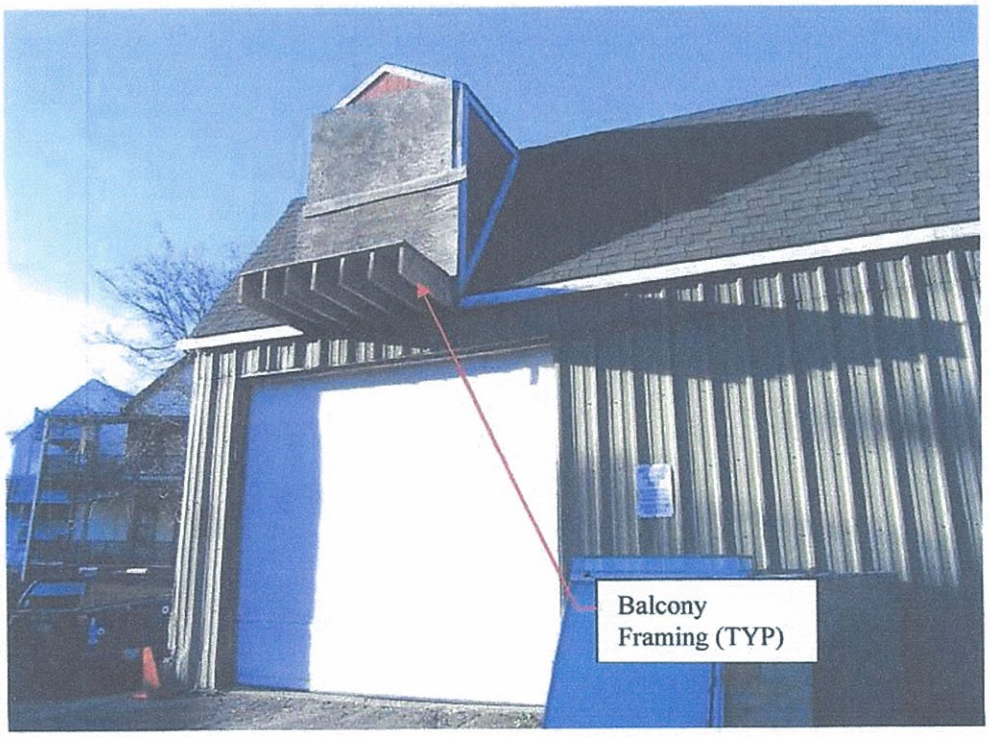
Building Location:
Port City Glass
50 India St,
Portland, ME

Photo Taken By:
Christopher Ray, P.E.

Date:
December 3, 2012

Description:
Dormer Roof Framing.

Number 3.



Building Location:
Port City Glass
50 India St,
Portland, ME

Photo Taken By:
Christopher Ray, P.E.

Date:
December 3, 2012

Description:
Balcony Framing.

Number 4.