



# CPED STAFF REPORT

Prepared for the Heritage Preservation Commission

HPC Agenda Item #1  
 May 5, 2015  
 BZH-28634

## HERITAGE PRESERVATION APPLICATION SUMMARY

*Property Location:* 400-404 3<sup>rd</sup> Avenue North  
*Project Name:* Scratch Restaurant Elevated Balcony  
*Prepared By:* [Shanna Sether](#), Senior City Planner, (612) 673-2307  
*Applicant:* Historic Crane Building  
*Project Contact:* Hellier Design, Bruce Hellier  
*Ward:* 3  
*Neighborhood:* North Loop Neighborhood Association, adjacent to Downtown Minneapolis Neighborhood Association  
*Request:* To allow for the construction of a new balcony and mechanical screening at the rear of the existing building.

*Required Applications:*

<b>Certificate of Appropriateness</b>	To allow a new balcony and mechanical screening in the Warehouse Historic District.
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## HISTORIC PROPERTY INFORMATION

<b>Current Name</b>	Crane Building
<b>Historic Name</b>	Crane Building
<b>Historic Address</b>	400 3 <sup>rd</sup> Avenue North
<b>Original Construction Date</b>	Two separate structures, constructed independently in 1885 and 1895. The facades were unified in 1908.
<b>Original Architect</b>	F.A. Clark
<b>Original Builder</b>	John Youngren and Peter Egstrom
<b>Original Engineer</b>	N/A
<b>Historic Use</b>	Regional distributor of plumbing supplies.
<b>Current Use</b>	Bar/restaurant and dwelling units.
<b>Proposed Use</b>	Bar/restaurant and dwelling units.

<b>Date Application Deemed Complete</b>	April 13, 2015	<b>Date Extension Letter Sent</b>	Not applicable
<b>End of 60-Day Decision Period</b>	June 12, 2015	<b>End of 120-Day Decision Period</b>	Not applicable

**CLASSIFICATION**

<b>Local Historic District</b>	Warehouse Historic District
<b>Period of Significance</b>	1865-1930
<b>Criteria of Significance</b>	<ul style="list-style-type: none"> <li>(1) The property is associated with significant events or with periods that exemplify broad patterns of cultural, political, economic or social history.</li> <li>(4) The property embodies the distinctive characteristics of an architectural or engineering type or style, or method of construction.</li> <li>(6) The property exemplifies works of master builders, engineers, designers, artists, craftsman or architects.</li> </ul>
<b>Date of Local Designation</b>	1978
<b>Date of National Register Listing</b>	1989
<b>Applicable Design Guidelines</b>	<a href="#"><i>Minneapolis Warehouse Historic District Design Guidelines (2010)</i></a>

**SUMMARY**

**BACKGROUND.** The Crane Building consists of two separate structures, one built in 1885 and an adjacent building constructed in 1895. Building modifications to unify the facades were made in 1908 by Bertrand and Chamberlain. The resulting Romanesque Revival Style building features brick and stone pilasters on the first floor and windows with segmental arches on the second and third floors. The fourth story windows have rounded arches and connecting molded hoods. A medieval style corbelled cornice with a series of pointed arches completes the building. A loading dock runs along the entire width of the 3<sup>rd</sup> Avenue North façade. The building was converted to a bar in 1988, and in 2004, the upper stories were converted to residential units. The windows have been replaced and the storefronts significantly altered. Despite the alterations, the building retains its integrity. The rear of the building faced the Minneapolis & St. Louis Railroad freight depot and the building was serviced by a rail spur.

**APPLICANT’S PROPOSAL.** The applicant is proposing to construct a new 511 square foot metal balcony that would tie into the existing metal egress landing and stairs at the rear of the existing building. The proposed metal balcony will be used for a new outdoor seating area for the existing bar/restaurant. The balcony will be constructed with steel I-Beams and guardrails made from tube steel and designed to match the guardrail outside of Bev’s Wine Bar (see attached photos). The top of the deck will be concrete. There would not be any new penetrations to the existing building; the balcony would be supported with six new 12-inch concrete columns and footings. Staff was not able to find approval for the exterior stairs and landings, but would approximate that they were added to the building in 1988, when the building was converted to the bar/restaurant.

The applicant is also proposing to add an 8-foot tall, anodized aluminum screen wall around the duct work and HVAC systems at the rear of the building. The intent of adding the screening is to add a visual and noise barrier for the patrons using the new outdoor seating area.

**RELATED APPROVALS.**

Planning Case #	Application	Description	Action
BZH-26874	Certificate of No Change	Sign panel replacement on existing sign cabinet	Approved administratively 5/20/2011

**PUBLIC COMMENTS.** At the time of writing the staff report, staff has not received any public comments regarding the requested application. Any correspondence received prior to the public meeting will be forwarded on to the Heritage Preservation Commission for consideration.

**ANALYSIS**

**CERTIFICATE OF APPROPRIATENESS**

The Department of Community Planning and Economic Development has analyzed the application to allow for the construction of a balcony and metal screening based on the following findings:

1. *The alteration is compatible with and continues to support the criteria of significance and period of significance for which the landmark or historic district was designated.*

The proposed alterations are compatible with and support the criteria and period of significance for the building. The street facing façade mainly communicates the building’s significance. The proposed alterations would be made to a secondary facade with no visibility from the street.

2. *The alteration is compatible with and supports the interior and/or exterior designation in which the property was designated.*

The exterior portions of the building communicate the building’s significance. The building is significant for its contributions to industry and commerce, as well as its architecture. The *Minneapolis Warehouse Historic District Design Guidelines* state that balconies shall not be located on street-facing facades and shall be set back one structural bay from the primary façade. In addition, details of balconies and railings shall reflect the industrial heritage of the area. Additionally, fences between the building and public right-of-way are not allowed. The proposed balcony and mechanical screening will be incorporated into the existing fire escapes on the secondary façade and will not require any new penetrations into the existing building. Therefore, staff finds that the proposed alterations are compatible with the exterior designation within the Warehouse Historic District.

3. *The alteration is compatible with and will ensure continued integrity of the landmark or historic district for which the district was designated.*

Both the [City of Minneapolis’ Preservation Regulations](#) and the National Register of Historic Places identify integrity as the authenticity of historic properties and recognize seven aspects that define a property’s integrity. Based on the evidence provided below, the proposed work would impact but not impair the integrity of the contributing resource.

**Location:** The applicant is not proposing to change the location of the structure, thus the project will not impair the contributing resource within the Warehouse Historic District.

**Design:** The proposed balcony and mechanical screening will be located on the secondary façade with limited visibility from the Interstate 94 approach into downtown Minneapolis and

from South 5<sup>th</sup> Street. These alterations would not have a substantial impact on the integrity of design.

**Setting:** The applicant is not proposing any modifications that would have an impact on the integrity of setting.

**Materials:** The applicant is proposing to construct a new 511 square foot metal balcony that would tie into the existing metal egress landing and stairs at the rear of the existing building. The proposed metal balcony will be used for a new outdoor seating area for the existing bar/restaurant. The balcony will be constructed with steel I-Beams and guardrails made from tube steel and designed to match the guardrail outside of Bev's Wine Bar (see attached photos). The top of the deck will be concrete. There would not be any new penetrations to the existing building; the balcony would be supported with six new 12-inch concrete columns and footings. Staff was not able to find approval for the exterior stairs and landings, but would approximate that they were added to the building in 1988, when the building was converted to the bar/restaurant. The applicant is also proposing to add an 8-foot tall, anodized aluminum screen wall around the duct work and HVAC systems at the rear of the building.

**Workmanship:** The new balcony and screening would not result in the loss or alteration of any distinct, decorative or character defining elements on the building and would not have an impact on the integrity of workmanship.

**Feeling:** The proposed alterations will occur on the secondary façade, which had previously faced the Minneapolis & St. Louis Railroad freight depot and the building was serviced by a rail spur. The former rail corridor has since been converted to a series of paved parking lots and will likely be redeveloped in the future.

**Association:** The proposed alterations would not have a substantial impact on the integrity of association.

4. *The alteration will not materially impair the significance and integrity of the landmark, historic district or nominated property under interim protection as evidenced by the consistency of alterations with the applicable design guidelines adopted by the commission.*

The Heritage Preservation Commission adopted the *Minneapolis Warehouse Historic District Guidelines* in 2010. The following guidelines apply to this proposal:

**Fenestration – Balconies: Requirement:**

2.51. Balconies on the street facing facades of buildings are not allowed.

2.52. Balconies shall maintain the fenestration patterns of the building.

*Advisory:*

2.53. Details which reflect the industrial heritage of the area are most appropriate for balconies and railings.

*Other Considerations:*

2.54. Balconies on facades that do not face public streets will be considered.

They shall be setback one structural bay from the primary facade(s).

**Street wall – Building Placement on Site:**

3.2. Fences and grade separations between the building and public right-of-way are inappropriate and shall not be allowed.

The proposed balcony and mechanical screening will be incorporated into the existing fire escapes on the secondary façade and will not require any new penetrations into the existing building. Therefore, staff finds that the proposed alterations are compatible with the exterior designation within the Warehouse Historic District.

5. *The alteration will not materially impair the significance and integrity of the landmark, historic district or nominated property under interim protection as evidenced by the consistency of alterations with the recommendations contained in The Secretary of the Interior's Standards for the Treatment of Historic Properties.*

The proposed development will be consistent with the following Secretary of the Interior's Standards for Rehabilitation:

3. *Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.*
5. *Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.*
9. *New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.*
10. *New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

Staff finds that the alteration will not materially impair the significance and integrity of this contributing resource to the Warehouse Historic District.

6. *The certificate of appropriateness conforms to all applicable regulations of this preservation ordinance and is consistent with the applicable policies of the comprehensive plan and applicable preservation policies in small area plans adopted by the city council.*

The proposed balcony and mechanical screening are consistent with the following policy of *The Minneapolis Plan for Sustainable Growth*:

**Heritage Preservation Policy 8.1: Preserve, maintain, and designate districts, landmarks, and historic resources which serve as reminders of the city's architecture, history, and culture.**

- 8.1.1 Protect historic resources from modifications that are not sensitive to their historic significance.
  - 8.1.2 Require new construction in historic districts to be compatible with the historic fabric.
  - 8.1.3 Encourage new developments to retain historic resources, including landscapes, incorporating them into new development rather than removal.
  - 8.1.4 Designate resources recommended for designation from historic surveys and listed on the National Register of Historic Places which have no local protection.
7. *Destruction of any property. Before approving a certificate of appropriateness that involves the destruction, in whole or in part, of any landmark, property in an historic district or nominated property under interim*

*protection, the commission shall make findings that the destruction is necessary to correct an unsafe or dangerous condition on the property, or that there are no reasonable alternatives to the destruction. In determining whether reasonable alternatives exist, the commission shall consider, but not be limited to, the significance of the property, the integrity of the property and the economic value or usefulness of the existing structure, including its current use, costs of renovation and feasible alternative uses. The commission may delay a final decision for a reasonable period of time to allow parties interested in preserving the property a reasonable opportunity to act to protect it.*

The project does not involve the destruction of the property.

Before approving a Certificate of Appropriateness, and based upon the evidence presented in each application submitted, the Commission shall make findings that alterations are proposed in a manner that demonstrates that the Applicant has made adequate consideration of the following documents and regulations:

8. *The description and statement of significance in the original nomination upon which designation of the landmark or historic district was based.*

The Minneapolis Warehouse Historic District is historically significant as an area of commercial development during the early growth of the city and the region. The city's warehouse district developed during the late nineteenth and early twentieth centuries when Minneapolis became a major distribution and jobbing center for the upper Midwest. The commercial development of the warehousing industries was facilitated by the connections to markets created by the railroads. The interconnectedness of these industries manifests itself physically throughout the district from grade changes to building locations to the design and orientation of the buildings.

The district is also architecturally significant for its concentration of commercial buildings designed by the city's leading architects in styles that evolved from the Italianate Style of the 1860s to the curtain-wall structures of the early twentieth century.

The alterations will be located on a secondary facade with little to no visibility from adjacent streets. Additionally, the applicant is proposing to use appropriate materials to differentiate the contributing resource from the proposed project. Finally, the proposed balcony and screening are reversible alterations and will not impair the district.

9. *Where applicable, adequate consideration of Title 20 of the Minneapolis Code of Ordinances, Zoning Code, Chapter 530, Site Plan Review.*

The proposed balcony and screening fence do not require additional review for compliance with Chapter 530, Site Plan Review in the zoning code.

10. *The typology of treatments delineated in the Secretary of the Interior's Standards for the Treatment of Historic Properties and the associated guidelines for preserving, rehabilitating, reconstructing, and restoring historic buildings.*

The project complies with the rehabilitation guidelines of the *Secretary of the Interior's Standards for the Treatment of Historic Properties* as discussed in finding #5 above.

Before approving a Certificate of Appropriateness that involves alterations to a property within an historic district, the Commission shall make findings based upon, but not limited to, the following:

11. *The alteration is compatible with and will ensure continued significance and integrity of all contributing properties in the historic district based on the period of significance for which the district was designated.*

The proposed alterations are reversible and will not require any new penetrations into the existing building. Thus the alterations are compatible with and will continue the significance and integrity of this contributing resource to the Warehouse Historic District.

12. *Granting the certificate of appropriateness will be in keeping with the spirit and intent of the ordinance and will not negatively alter the essential character of the historic district.*

The proposed alterations are in keeping with the spirit and intent of the Heritage Preservation Regulations and will not negatively alter the essential character of the Warehouse Historic District. The alterations will be located on a secondary facade with little to no visibility from adjacent streets. Additionally, the applicant is proposing to use appropriate materials to differentiate the contributing resource from the proposed project. Finally, the proposed balcony and screening are reversible alterations and will not impair the district.

13. *The certificate of appropriateness will not be injurious to the significance and integrity of other resources in the historic district and will not impede the normal and orderly preservation of surrounding resources as allowed by regulations in the preservation ordinance.*

The proposed balcony will be located up to the rear property line, but will be elevated above an existing surface parking area. Staff finds that the proposed project will not be injurious to the significance and integrity of other resources in the Warehouse Historic District and will not impede on the normal and orderly preservation of surrounding resources.

## RECOMMENDATIONS

The Department of Community Planning and Economic Development recommends that the Heritage Preservation Commission adopt staff findings for the application by Hellier Design for the property located at 400-404 3<sup>rd</sup> Avenue North in the Warehouse Historic District:

### A. Certificate of Appropriateness.

Recommended motion: **Approve** the certificate of appropriateness to allow for the construction of a balcony and metal screening at 400 3<sup>rd</sup> Avenue North in the Warehouse Historic District, subject to the following conditions:

1. The balcony shall match in material and color to the existing egress landing and stairs and not create any new penetrations into the existing building.
2. The proposed mechanical screening shall be metal and not exceed 8 feet in height.
3. By ordinance, approvals are valid for a period of two years from the date of the decision unless required permits are obtained and the action approved is substantially begun and proceeds in a continuous basis toward completion. Upon written request and for good cause, the director may grant up to a one year extension if the request is made in writing no later than May 5, 2017.
4. By ordinance, all approvals granted in this certificate of appropriateness shall remain in effect as long as all of the conditions and guarantees of such approvals are observed. Failure to comply with such conditions and guarantees shall constitute a violation of this Certificate of Appropriateness and may result in termination of the approval.

## ATTACHMENTS

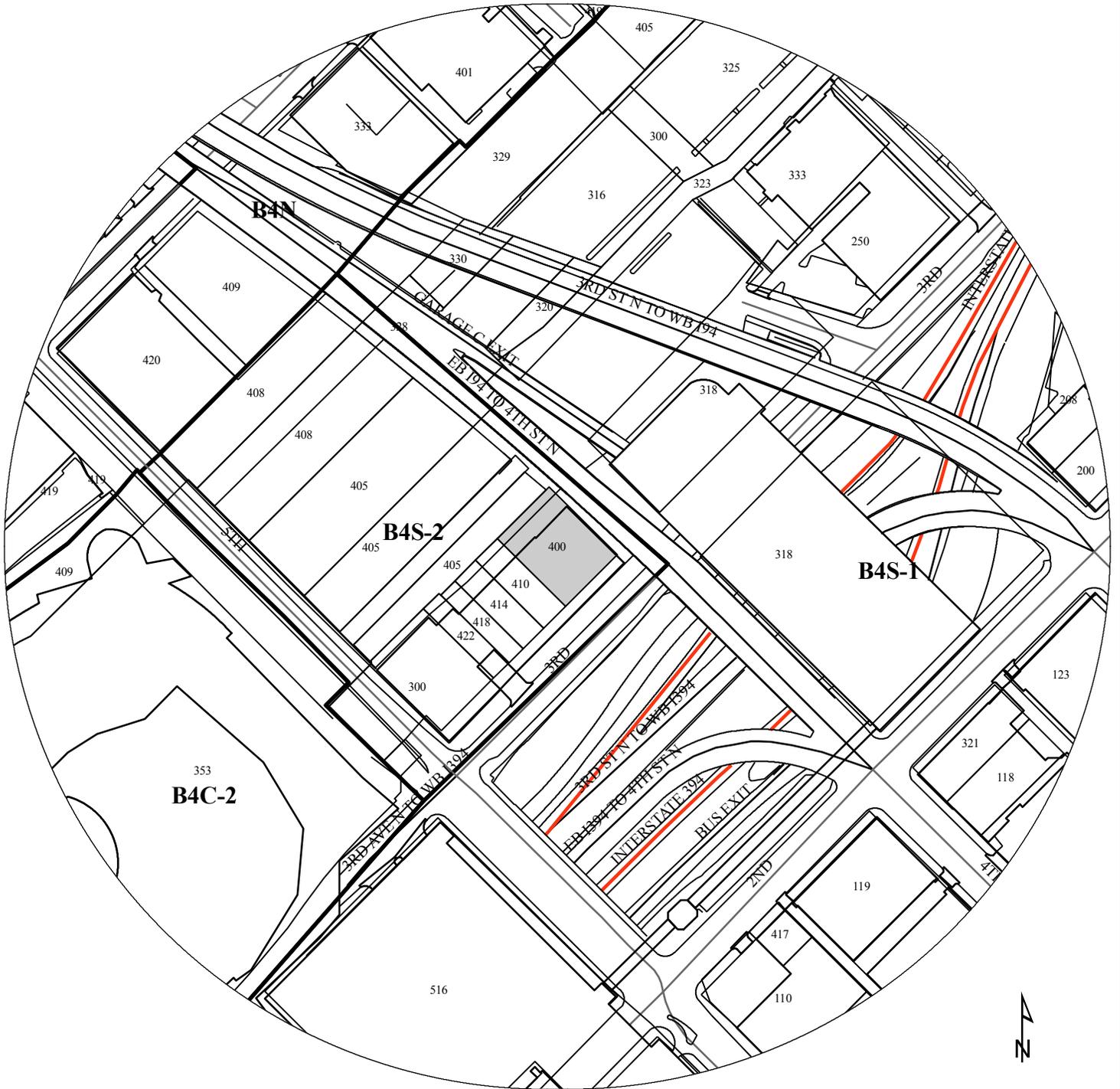
1. Zoning map
2. Written description and findings submitted by applicant
3. Site plan
4. Site survey
5. Plans
6. Building elevations
7. Photos
8. Correspondence

# Historic Crane Building

3rd

NAME OF APPLICANT

WARD



200 100 0 200 400

PROPERTY ADDRESS

400 3rd Avenue North

FILE NUMBER

BZH-28634

# HELLIER DESIGN

9480 Aspen Circle, Eden Prairie MN. 55347 Mobil (612) 419-3012

April 10, 2015

Shanna Sether  
Senior City Planner  
250 South 4th Street  
Room 300  
Minneapolis, MN 55415

Shanna,

The following is the written statement by the applicant:

1. We believe that the design of the new elevated deck and guard rail is compatible with and supports the period significance for it is designed.
2. This alteration compatible with the interior and exterior it will serve.
3. This alteration will ensure continued integrity for the district it is designed.
4. This elevated deck will not materially impair the landmark or historic district; we believe it will improve the local area by covering up unsightly HVAC equipment.
5. We believe this alteration will not impair this landmark or this historic district as put forth in The Secretary of the Interior's Standards for the treatment of Historic Properties.
6. We understand and agree to this statement.
7. No destruction is involved in this alteration.
8. We have made consideration in the description and significance with the original nomination and designation of the historic district is based.
9. Title 20 of the Minneapolis Code and Ordinances, Chapter 530 Site Plan Review was reviewed.
10. We have taken consideration into the Secretary of Interior's Standards for the treatment of Historic Properties.
11. We believe the alteration is compatible with and ensure continued significance and integrity of all contributing properties in the historic district based on the period of significance for which the district was designated.
12. We believe granting the certificate of appropriateness will be in keeping with the spirit and intent of the ordinance and will not negatively alter the essential character of the historic district.
13. We believe the certificate of appropriateness will not be injurious to the significance and integrity of other resources in the historic district and will not impede the normal and orderly preservation of surrounding resources as allowed by regulations in the preservation ordinance.
14. There will be no demolition.
15. We are not requesting a variance.

Please let me know if you require any additional information.

Thank You

**Bruce Hellier**  
**Hellier Design**

# HELLIER DESIGN

9480 Aspen Circle, Eden Prairie MN. 55347 Mobil (612) 419-3012

April 10, 2015

North Loop Neighborhood Association

Ladies and Gentlemen,

We are planning on adding an elevated deck to the rear of the Scratch Restaurant located at 404 3rd Ave north in Minneapolis. The elevated deck will be 511 s.f. and built with the same material that the surrounding exit stairs and mechanical platforms are built with. Steel I beams and guardrails made from tube steel and is designed to match the guardrail that is currently standing just north of this site outside Bev's Wine Bar. We will also install steel screening around the existing mechanical equipment to improve the view and redirect the sound.

We are applying for a Certificate of Appropriateness which will require a public hearing and approval from the city of Minneapolis.

The applicant for this project is Adam Mitchell 404 3<sup>rd</sup> Ave north Minneapolis. I am the architect working with Adam Mitchell.

Please let me know if you require any additional information.

Thank You

**Bruce Hellier**  
**Hellier Design**

# HELLIER DESIGN

9480 Aspen Circle, Eden Prairie MN. 55347 Mobil (612) 419-3012

April 10, 2015

Council Member Jacob Frey

Jacob,

We are planning on adding an elevated deck to the rear of the Scratch Restaurant located at 404 3rd Ave north in Minneapolis. The elevated deck will be 511 s.f. and built with the same material that the surrounding exit stairs and mechanical platforms are built with. Steel I beams and guardrails made from tube steel and is designed to match the guardrail that is currently standing just north of this site outside Bev's Wine Bar. We will also install steel screening around the existing mechanical equipment to improve the view and redirect the sound.

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Thank You

**Bruce Hellier**  
**Hellier Design**

# HELLIER DESIGN

9480 Aspen Circle, Eden Prairie MN. 55347 Mobil (612) 419-3012

April 10, 2015

Downtown Minneapolis Neighborhood  
Association

Ladies and Gentlemen,

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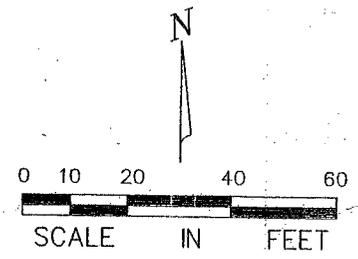
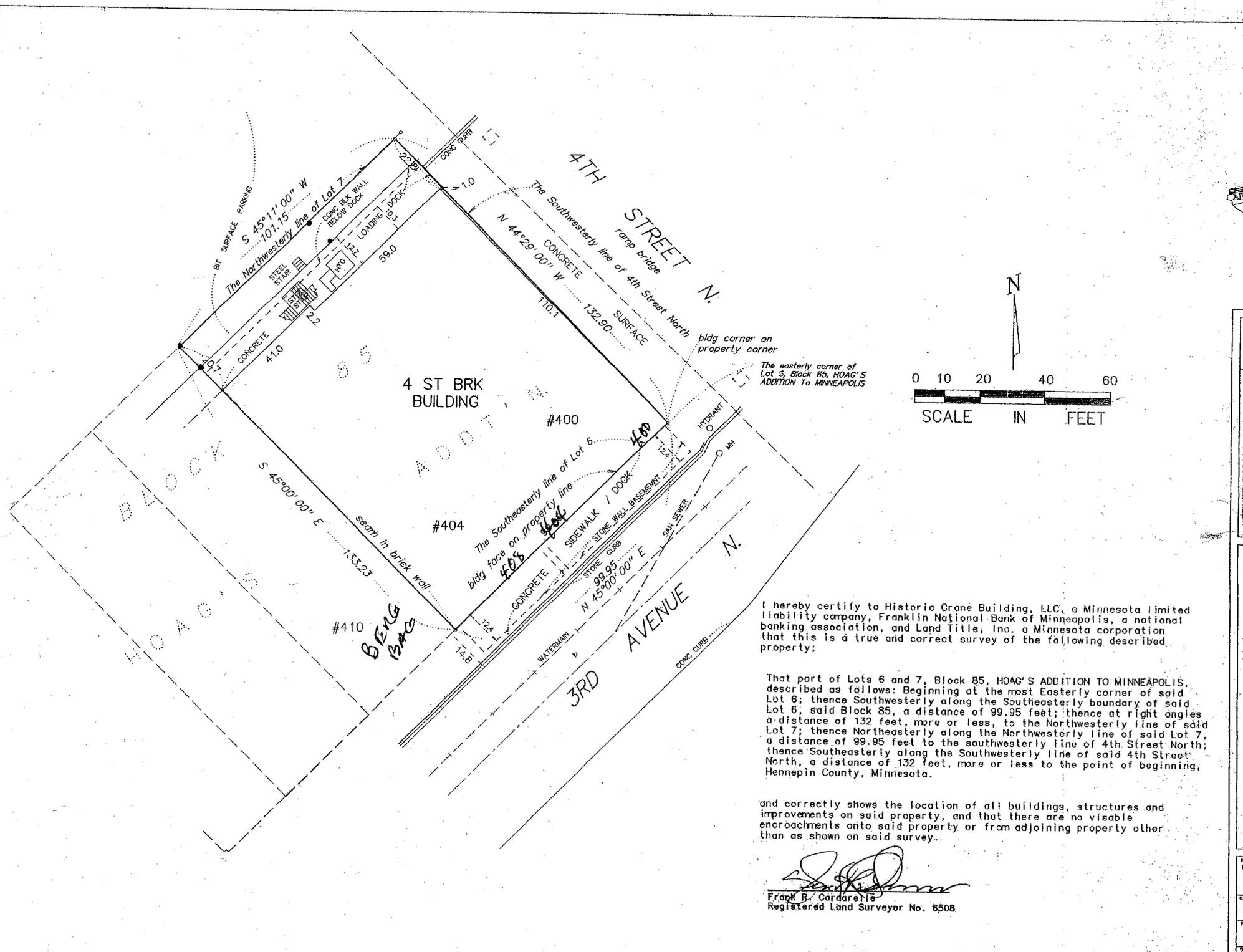
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The applicant for this project is Adam Mitchell 404 3<sup>rd</sup> Ave north Minneapolis. I am the architect working with Adam Mitchell.

Please let me know if you require any additional information.

Thank You

**Bruce Hellier**  
**Hellier Design**



I hereby certify to Historic Crane Building, LLC, a Minnesota limited liability company, Franklin National Bank of Minneapolis, a national banking association, and Land Title, Inc. a Minnesota corporation that this is a true and correct survey of the following described property;

That part of Lots 6 and 7, Block 85, HOAG'S ADDITION TO MINNEAPOLIS, described as follows: Beginning at the most Easterly corner of said Lot 6; thence Southwesterly along the Southeastery boundary of said Lot 6, said Block 85, a distance of 99.95 feet; thence at right angles a distance of 132 feet, more or less, to the Northwesternly line of said Lot 7; thence Northeastery along the Northwesternly line of said Lot 7; a distance of 99.95 feet to the southwesterly line of 4th Street North; thence Southeastery along the Southwesterly line of said 4th Street North, a distance of 132 feet, more or less to the point of beginning, Hennepin County, Minnesota.

and correctly shows the location of all buildings, structures and improvements on said property, and that there are no visible encroachments onto said property or from adjoining property other than as shown on said survey.

*Frank B. Cordarelli*  
 Frank B. Cordarelli  
 Registered Land Surveyor No. 8508

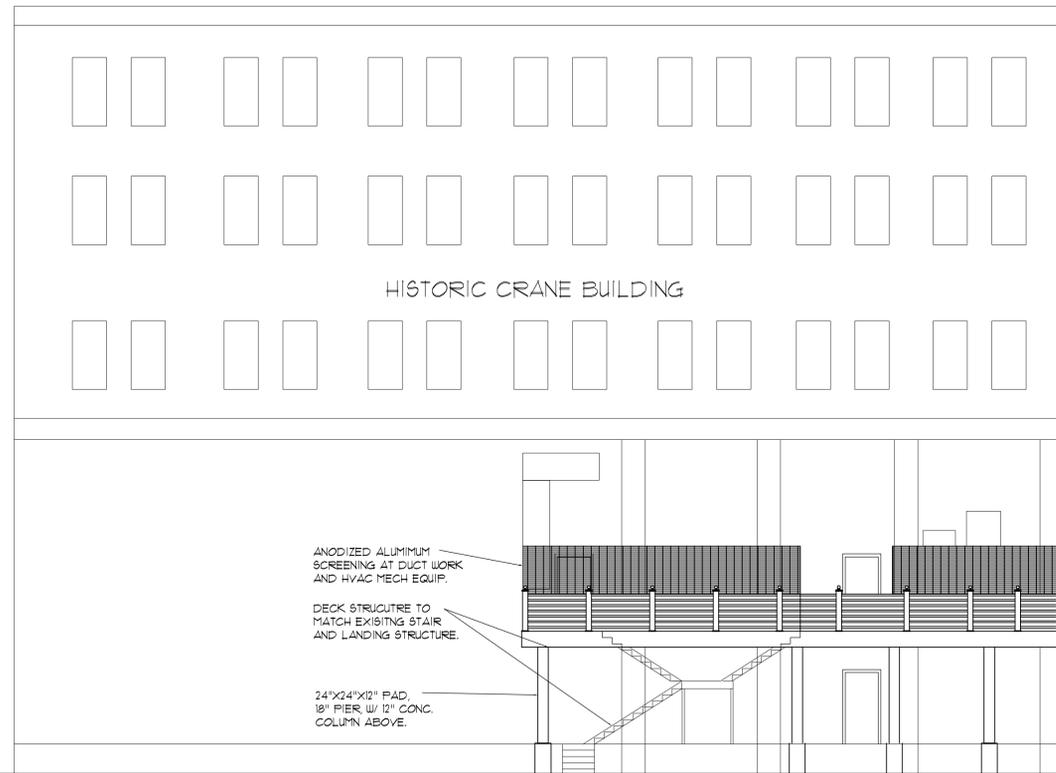
Site area = 13378 S.F. 0.30 AC

CHECKED  
 DRAWN  
 DESIGNED  
 I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY SUPERVISION AND THAT I AM A LICENSED SURVEYOR

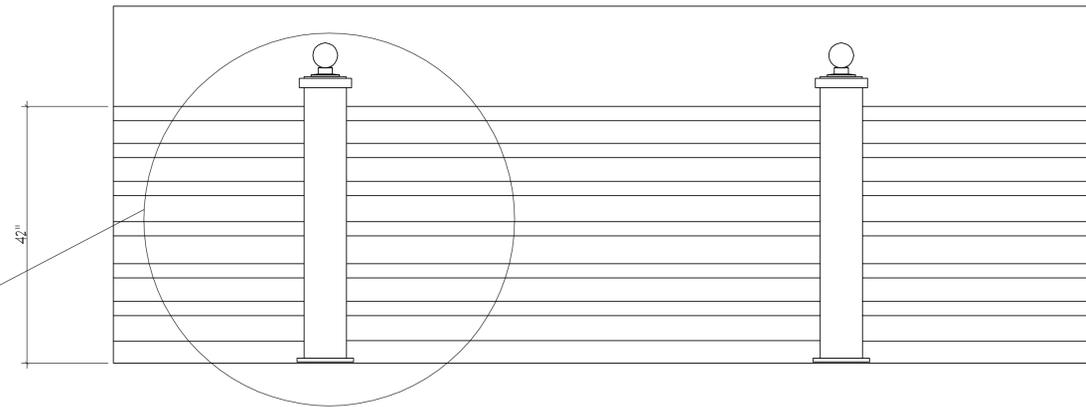
CERTIFICATE OF SURVEY

REVISIONS  
 CERTIFIED  
 DATE  
 DEC  
 PROJECT  
 SHEET NO





PAINTED STEEL RAILING SYSTEM TO MATCH EXISTING HISTORIC RAIL DESIGN ON 3RD AVE.



DETAIL OF RAIL

1  
A2  
ELEVATION OF NEW DECK



2  
A2  
SECTION AT NEW DECK

REVISIONS
1.
2.
3.
4.
5.
6.
7.
8.

WASESCHA ASSOCIATES INC.  
ARCHITECTURE

179 South Fairview Avenue  
Saint Paul, MN 55105-1506

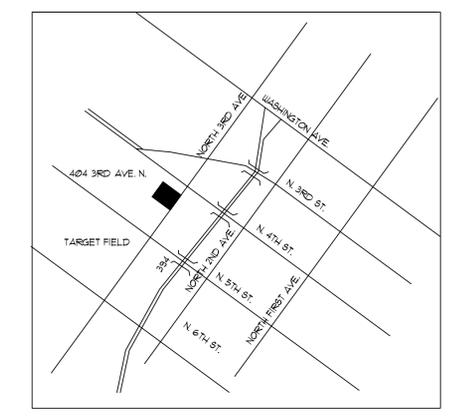
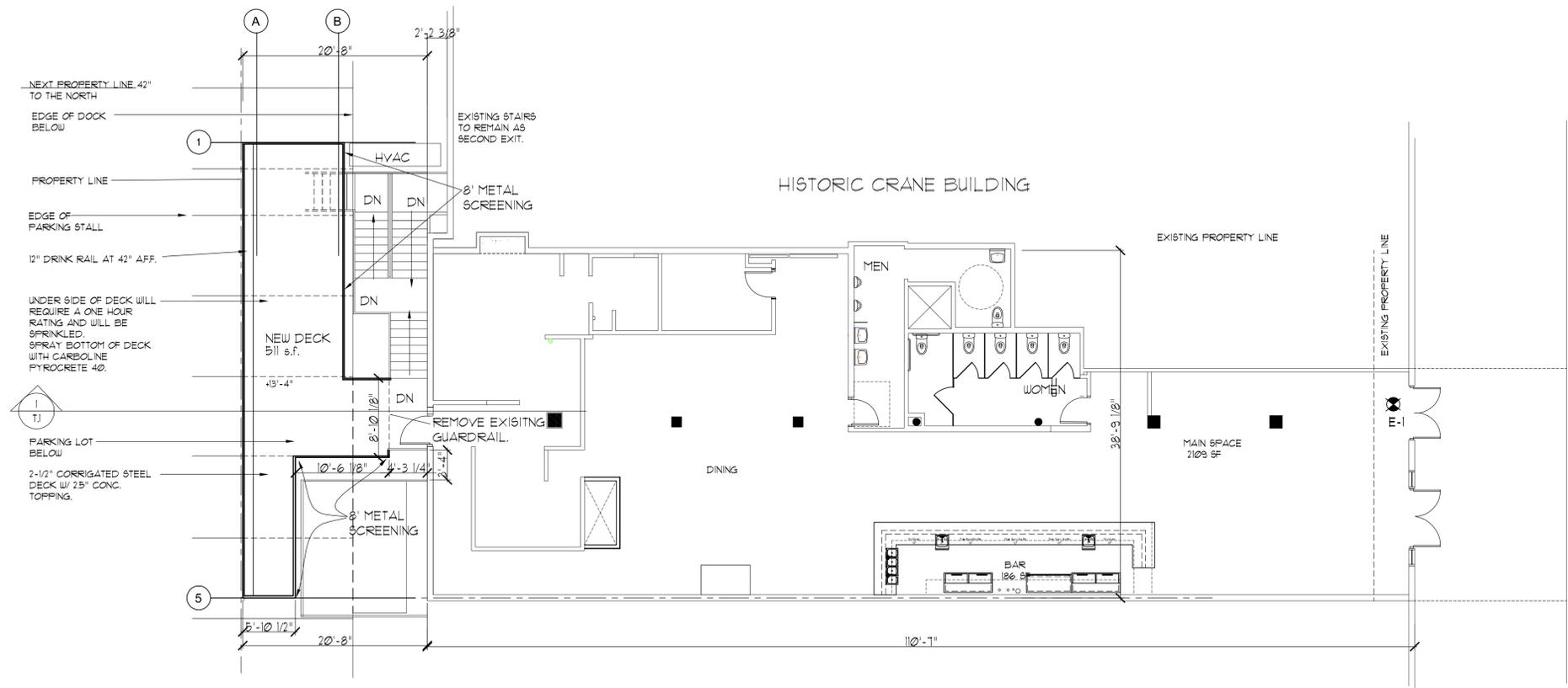
- 1. REVIEW SET 10-29-14
- 2. REVIEW SET 02-11-15
- 3. REVIEW SET 02-25-15
- 4.
- 5.

DRAWN BY: EGH  
CHECKED BY: MSU

SCRATCH BAR/RESTURANT  
DECK ADDITION

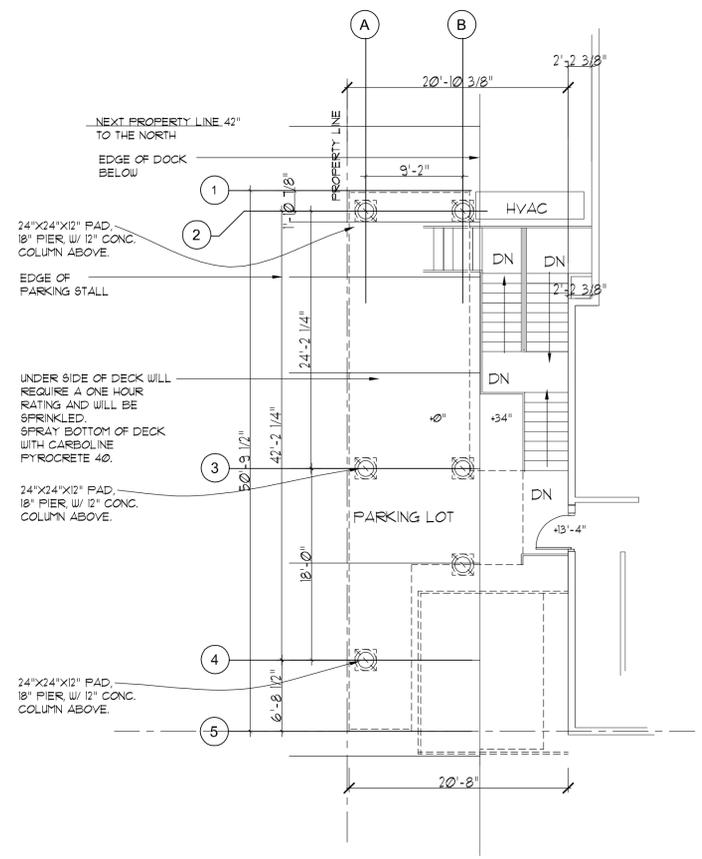
404 3RD AVE. N.  
MINNEAPOLIS, MN 55401

A.2

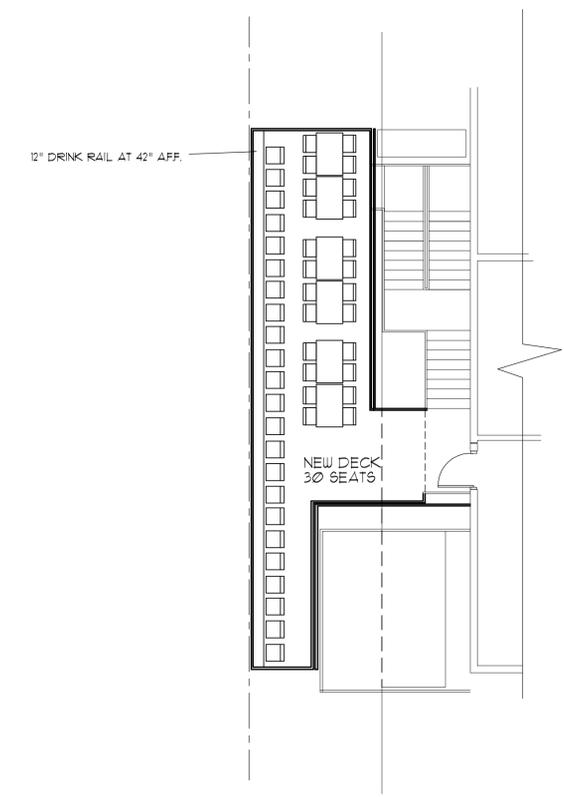
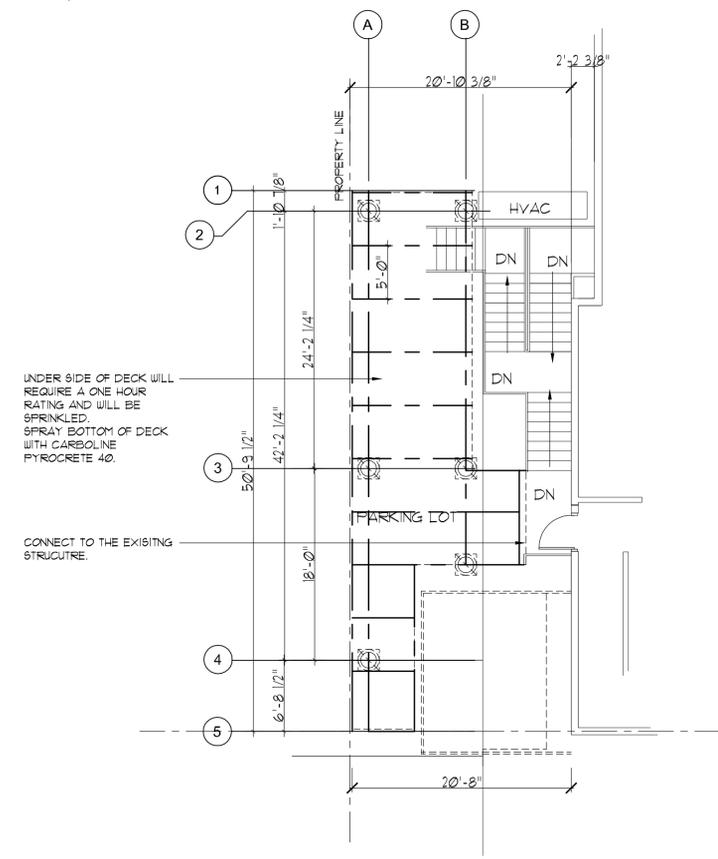


AREA MAP  
NORTH

1  
A1  
NEW DECK FLOOR PLAN DECK LEVEL



NOTE: ALL DIMENSIONS TO BE FIELD VERIFIED.



2  
A1  
NEW DECK PARKING LEVEL

3  
A1  
PRELIMINARY FRAMING PLAN

4  
A1  
SEATING

<b>WASECHA ASSOCIATES INC.</b> <b>ARCHITECTURE</b> 179 South Fairview Avenue Saint Paul, MN 55105-1506	
1. REVIEW SET 10-29-14 2. REVIEW SET 02-11-15 3. REVIEW SET 02-25-15 4. 5.	DRAWN BY: BSH CHECKED BY: MSU
SCRATCH BAR/RESTURANT DECK ADDITION 404 3RD AVE. N. MINNEAPOLIS, MN 55401	<b>A.1</b>
9397	FILENAME



511 SOUTH 7TH STREET  
 DELANO MN 55328  
 Phone: 763.972.2981  
 Fax: 763.972.2911

www.industriallouvers.com  
 ilinfo@industriallouvers.com

## MODEL 458XP

### STANDARD CONSTRUCTION

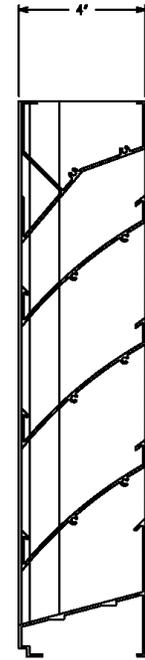
- **Material:** Extruded Aluminum 6063-T6
- **Frame:** 4" (102mm) deep, .081" (2.1mm) nominal wall thickness
- **Blades:** 4" (102mm) deep, .081" (2.1mm) nominal wall thickness
- **Blade Spacing:** 3.875" (98mm) on center
- **Screen:** 1/2" x .063" flattened expanded bird screen and/or 18 x 14 mesh charcoal insect screen.
- **Finish:** Mill

### OPTIONAL ACCESSORIES

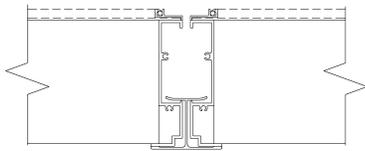
- Extended Sill Flashing
- Insulated and Non-insulated Blank-off Panels
- Flanged & Glazing Frames of various sizes
- Hinged Access Panels
- Sub-frames
- Visible Mullions
- Invisible Mullions for continuous blade appearance

### FINISHES

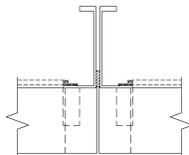
- **2 Coat Fluoropolymer:** Kynar 500 / Hylar 5000 custom colors available in 70% PVDF (AAMA 2605) or 50% PVDF (AAMA 2604) formulas.
- **3 Coat Fluoropolymer:** Kynar 500 / Hylar 5000 custom colors available in 70% PVDF (AAMA 2605) formulas.
- **Anodic Finishes:** Class I and Class II in Clear, Light/Medium/Dark Bronze, Champagne, and Black.
- **Prime Coat**
- **Mill**



Vertical Section



Visible Vertical Mullion



Invisible Vertical Mullion



Plan View

Qty	Size: Actual <input type="checkbox"/> M.O. <input type="checkbox"/>		MULLION TYPE	NO. OF SECTIONS	NOTES
	WIDTH	HEIGHT			
<input type="checkbox"/>	SILL FLASHING:				PROJECT:
<input type="checkbox"/>	SCREEN:				LOCATION:
<input type="checkbox"/>	FINISH:				ARCHITECT:
<input type="checkbox"/>	COLOR:				REPRESENTATIVE:
<input type="checkbox"/>	OTHER:				DATE:                      JOB #:

# MODEL 458XP

## SUGGESTED SPECIFICATIONS

**General:** Furnish and install where indicated on drawings 4" (102mm) Extra Performance Weather Resistant Drainable Louver Model 458XP as manufactured by Industrial Louvers, Inc., Delano, MN.

**Material:** Extruded aluminum frames and blades shall be one piece 6063-T6 alloy, designed to collect and drain water to the exterior at the sill by means of integral gutters in the blades and jamb frames. Frame shall have a material thickness of .081" (2.1mm). Fixed blades shall have a material thickness of .081" (2.1mm). Frames and blades shall be joined by stainless steel mechanical fastener, and frame will be caulked to prevent water penetration to interior wall construction.

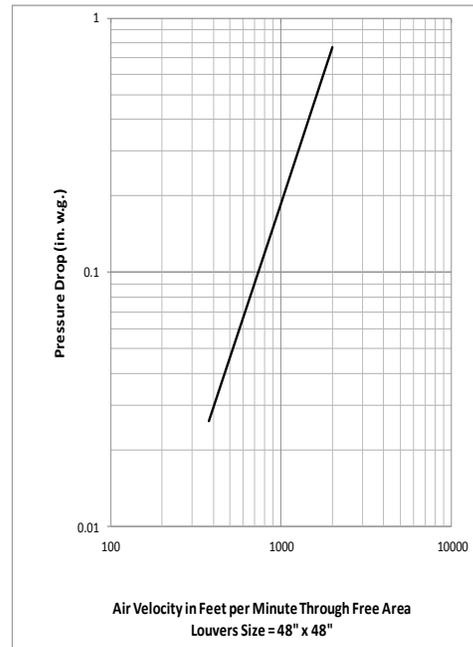
### Performance

- Free area (4' x 4' louver) = 8.21 sq. ft. (51.3%)
- Free area velocity at point of beginning water penetration (.01 oz/sq. ft.) = 1116.2 fpm
- Pressure drop @ 893.7 FPM velocity = .15" water
- Air volume @ 893.7 FPM free area velocity = 7337.27 CFM

## Free Area

Square Feet (Square Meters)						
Free Area AMCA Licensed for openings up to 72" x 120"						
For free area data for larger openings, contact factory.						
3048.0	0.44	0.96	1.48	2.00	2.52	3.04
<b>120</b>	<b>4.69</b>	<b>10.29</b>	<b>15.89</b>	<b>21.49</b>	<b>27.08</b>	<b>32.68</b>
2743.2	0.39	0.86	1.32	1.79	2.26	2.72
<b>108</b>	<b>4.21</b>	<b>9.23</b>	<b>14.25</b>	<b>19.27</b>	<b>24.29</b>	<b>29.31</b>
2438.4	0.35	0.76	1.17	1.58	2.00	2.41
<b>96</b>	<b>3.73</b>	<b>8.17</b>	<b>12.62</b>	<b>17.06</b>	<b>21.50</b>	<b>25.95</b>
2133.6	0.30	0.66	1.02	1.38	1.74	2.10
<b>84</b>	<b>3.24</b>	<b>7.11</b>	<b>10.98</b>	<b>14.85</b>	<b>18.71</b>	<b>22.58</b>
1828.8	0.26	0.56	0.87	1.17	1.48	1.79
<b>72</b>	<b>2.76</b>	<b>6.05</b>	<b>9.34</b>	<b>12.63</b>	<b>15.92</b>	<b>19.22</b>
1524	0.21	0.46	0.72	0.97	1.22	1.47
<b>60</b>	<b>2.28</b>	<b>4.99</b>	<b>7.71</b>	<b>10.42</b>	<b>13.13</b>	<b>15.85</b>
1219.2	0.17	0.37	0.56	0.76	0.96	1.16
<b>48</b>	<b>1.79</b>	<b>3.93</b>	<b>6.07</b>	<b>8.21</b>	<b>10.34</b>	<b>12.48</b>
914.4	0.12	0.27	0.41	0.56	0.70	0.85
<b>36</b>	<b>1.31</b>	<b>2.87</b>	<b>4.43</b>	<b>5.99</b>	<b>7.56</b>	<b>9.12</b>
609.6	0.06	0.14	0.21	0.28	0.36	0.43
<b>24</b>	<b>0.66</b>	<b>1.46</b>	<b>2.25</b>	<b>3.04</b>	<b>3.84</b>	<b>4.63</b>
<b>304.8</b>	0.02	0.04	0.06	0.08	0.10	0.12
<b>12</b>	<b>0.18</b>	<b>0.40</b>	<b>0.61</b>	<b>0.83</b>	<b>1.05</b>	<b>1.26</b>
H/W	304.8	609.6	914.4	1219	1524	1829
	<b>12</b>	<b>24</b>	<b>36</b>	<b>48</b>	<b>60</b>	<b>72</b>

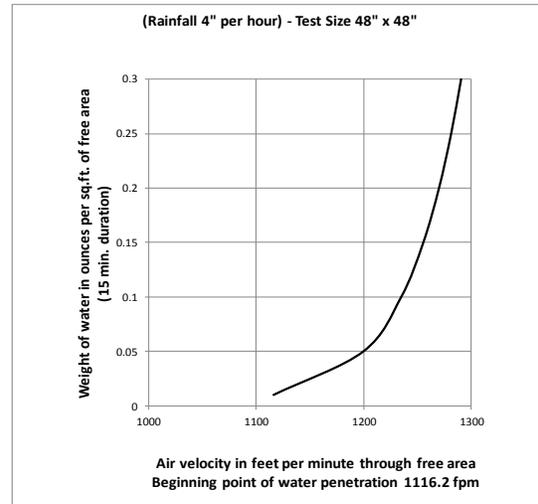
## Air Performance Chart



The AMCA Certified Ratings Seal applies to Air Capacities in the intake model only.

Data corrected to standard air density  
Tested to AMCA Figure 5.5

## Water Penetration Chart



Industrial Louvers, Inc. certifies that Model 458XP shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings.



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