

ANN ARBOR BUILDING BOARD OF APPEALS

BUILDING OFFICIAL'S STAFF REPORT

Variance Hearing for BBA16-025 at 220 South Main Street, Ann Arbor, MI 48104
(Parcel Identification Number: 09-09-29-143-002).

Benjamin Curtis
103 East Liberty Street #207
Ann Arbor, MI 48103

DESCRIPTION AND DISCUSSION

The City has received an application requesting that the Building Board of Appeals consider an exception to the 2012 Michigan Building Code described as follows:

The applicant has submitted an application for a building permit to install 4 windows in the south second story exterior wall of their building.

This building abuts the 1 story Pretzel Bell restaurant building, and per table **705.8** of the 2012 Michigan Building Code, openings are not allowed.

STAFF RECOMMENDATION

Staff recommends the following motion:

MOTION

I would not recommend approval of this exception without some form of alternate method of protection such as rated fire shutters or fire suppression water curtains as specified in Section **705.8.2**

Craig Strong
Building Official

220 MAIN LLC
103 East Liberty Street, Suite 207
Ann Arbor, Michigan 48104
info@a2curtis.com
(734) 761-6163 October 3, 2016

Mr. Larry Pickel
Construction Code Division
Code Enforcement Services
605 S. Main Street, Suite 1
Ann Arbor, MI 48104

RE: 220 S. Main Appeal

Dear Mr. Pickel:

We are owners of 220 S. Main, a three-story building. We also own the building immediately south, located at 224-226 S. Main. The 224-226 S. Main building is a one-story building which is fire-suppressed both basement and at street level. The building shares a wall with 220 S. Main, which is also sprinkled in its basement and first floor. The second and third floors of 220 S. Main are not sprinkled, though they have smoke alarms. The building is further protected with a fire and burglar alarm system with Guardian Alarm. *FIRE ESCAPE IN REAR OF BUILDING.*

We have approval from the Historic District Commission to install four evenly-spaced single-hung windows with low-e-clear glass along the western half of the south wall of the 3rd floor at 220 S. Main.

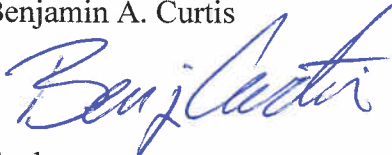
Following your July 21, 2016 letter to architect Greg Raye:

1. The fire separation distance relative to the two buildings' party wall, and the proposed windows is less than 3 feet;
2. Regarding Table 705.8 of the Michigan Building Code, the 220 building is partially sprinkled with smoke alarms as indicated above; and
3. The vertical distance from the roof of 224 S. Main to the base of the proposed 3rd floor windows at 220 S. Main is shown per the attached.

Enclosed is the quote for 1½ hour fire-rated windows from Wolverine Moore Glass, Inc. of \$19,316, a prohibitively high cost considering the alternative, which is \$4,508 for the same-sized non fire-rated windows from Wolverine, also enclosed. We now ask for a variance from the code to install the windows as proposed without a fire protection rating.

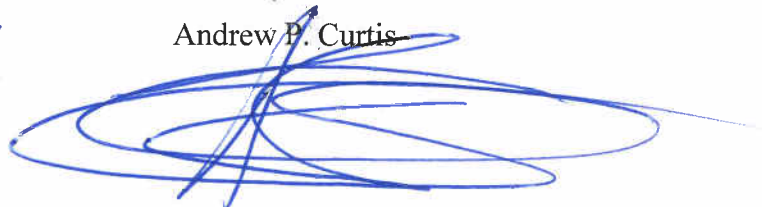
Sincerely,

Benjamin A. Curtis



Enclosures

Andrew P. Curtis



CODE ENFORCEMENT SERVICES

A division of Carlisle/Wortman Associates, Inc.
605 S. Main Street, Suite 1
Ann Arbor, Michigan 48104

Phone: 734-662-2200
Fax: 734-662-1935

July 21, 2016

Mr. Gregory Raye
13750 Waters
Chelsea, MI 48118

Re: 220 S. Main St.
Ann Arbor, MI

Dear Mr. Raye.

I have reviewed the proposed work at the above address for compliance with the current codes adopted by the State of Michigan. The review involves the 2012 Michigan Rehabilitation Code for Existing Buildings (MRCEB) and to the extent referenced in that document the 2012 Michigan Building Code (MBC); the 2012 Michigan Mechanical Code (MMC); the 2012 Michigan Plumbing Code (MPC); the 2014 Michigan Electrical Code (MEC); and the affiliated codes and standards referenced in those documents including the Michigan Uniform Energy Code and the State Accessibility standard.

Please address the following issues so that we may continue the plan review process and be able to recommend approval in an expeditious manner:

1. Please indicate the fire separation distance relative to the proposed windows.
2. Please indicate compliance with Table 705.8 of the Michigan Building Code relative to the permitted amount and fire rating of windows given the fire separation distance indicated in item 1 above.
3. Please indicate compliance with the vertical exposure provisions of section 705.8.6 of the Michigan Building Code based upon this section and in accordance with items 1 and 2 above.

Respectfully,



Larry Pickel
Construction Code Division
Code Enforcement Services

BBA16-025



City of Ann Arbor 10-7-16
PLANNING & DEVELOPMENT SERVICES — CONSTRUCTION SERVICES

Mailing: 301 E. Huron St. | P.O. Box 8647 | Ann Arbor, Michigan 48107-8647
p. 734.794.6263 | f. 734.994.8460 | building@a2gov.org

APPLICATION FOR EXCEPTION - BUILDING BOARD OF APPEALS

Section 1: Applicant Information

Name of Applicant: BENJAMIN CURTIS

Address of Applicant: 103 E. LIBERTY ST. #207

Daytime Phone: 734 761 6163 Fax: _____

Email: info@a2curtis.com

Applicant's Relationship to Property: OWNER

Section 2: Property Information

Address of Property: 220 S. Main St.

Zoning Classification: _____

Tax ID# (if known): 37-1645024

*Name of Property Owner: Benjamin CURTIS
*If different than applicant, a letter of authorization from the property owner must be provided.

Section 3: Request Information

Exception

| Chapter(s) and Section(s) from which a exception is requested: | REQUIRED dimension: | PROPOSED dimension: |
|--|--|--|
| <u>2012 Mich. Rehab. Code, Sec. 801.3;</u> | <u>at least 3' separation</u> | <u>Request</u> |
| <u>2012 MI Bldg. Code 705.8</u> | <u>between two buildings.</u> | <u>variance of the 2 buildings share wall.</u> |
| <small>Example: 2003 Building Code, Section 5:26</small> | <small>Example: 7' Ceiling Clearance</small> | <small>Example: 6'5" under landing</small> |

Give a detailed description of the work you would need this exception for (attach additional sheets if necessary)

Please see attached

Section 4: Exception Request

The City of Ann Arbor Building Board of Appeals has the powers granted by State law and Building Codes. A exception may be granted by the Building Board of Appeals only in cases involving practical difficulties or unnecessary hardships when **ALL** of the following is found **TRUE**.

Please provide a complete response to each item below. These responses, together with the required materials in Section 5 of this application, will form the basis for evaluation of the request by staff and the Building Board of Appeals.

1. The true intent of the Code or the rules governing construction have been incorrectly interpreted. TRUE

YES, there were existing cutout on interior wall for doorway to previous building next door.

2. The provisions of the Code do not apply.) TRUE. Recreating interior book cases into windows that were previously doors to the non-existent third floor building next door.

3. An equal or better form of construction is proposed. TRUE. Previous lintels and supports are still in place. remaining door/window space will be reinforced w/ pressure treated lumber, windows, and trim.

Section 5: Required Materials

The following materials are required for all EXCEPTION requests. Failure to provide these materials will result in an **incomplete application** and will delay staff review and Building Board of Appeals consideration of the request. The materials listed below must accompany the application and constitute an inseparable part of the application. All materials must be provided on 8 1/2" by 11" sheets. **If incomplete, you will be scheduled for the NEXT MEETING DATE ON THE FOLLOWING MONTH.**

- State proposed use of property, size of lot and size and type of proposed changes.
- Building floor plans showing interior rooms, including dimensions. (continued...)
- Photographs of the property and any existing buildings involved in the request.
- Any other graphic or written materials that support the request.
- Letter of Authority if being represented by someone other than the property owner.

Section 6: Acknowledgement

SIGNATURES MUST BE SIGNED IN PRESENCE OF NOTARY PUBLIC

I, the applicant, request An exception from the above named Chapter(s) and Section(s) of the Applicable City Code and/or 2009 Michigan Residential Code and/or 2012 Michigan Building Code for the stated reasons, in accordance with the materials attached hereto.

734 761 6163 _____ Benj. Curtis _____
Phone Number Signature
info@a2curtis.com _____ BENJAMIN CURTIS _____
Email Address Print Name

I, the applicant, hereby depose and say that all of the aforementioned statements, and the statements contained in the materials submitted herewith are true and correct and have received all coversheets with dates, deadlines and instructions. Applicant acknowledges that they are aware of these meeting dates and will not receive further notification of meeting dates and times. All applicants are expected to know when and where the meeting is and to appear to present their appeal in a timely fashion:

_____ Benj. Curtis _____
Signature

Further, I hereby give City of Ann Arbor Planning and Development Services unit staff and members of the Building Board of Appeals permission to access the subject property for the purpose of reviewing my exception request. As a condition of granting any exception, the property owner is also responsible for reinstating, paying fees for or acquiring new permits to inspect and final out any outstanding work at this property:

_____ Benj. Curtis _____
Signature

On this 7 day of October, 2016 before me personally appeared the above named applicant and made oath that he/she has read the foregoing application by him/her subscribed and knows the contents thereof, and that the same is true as to his/her own knowledge except as to those matters therein stated to be upon his information and belief as to those matters, he/she believes them to be true.

KAITLYN L. KUPLER
Notary Public, State of Michigan
My Commission Expires Sept. 22, 2020 _____ Kaitlyn Kupler _____
Notary Public Signature

9.22.2020 _____ Kaitlyn Kupler _____
Notary Commission Expiration Date Print Name

STAFF USE ONLY

Date Submitted: 10-7-16 Fee Paid: _____
File No.: BBA 16-025
Pre-Filing Review Person & Date: [Signature] 10-7-16
Secondary Staff Review Person & Date _____
Date of Public Hearing: _____
BBA Action: _____
OUTSTANDING PERMITS: _____



CITY OF ANN ARBOR

100 N. FIFTH AVE • ANN ARBOR, MI 48104
(734) 794-6267

Receipt Number: 2017-00021197

Project Number BBA16-025
Receipt Print Date: 10/07/2016
Address 220 S MAIN ST
Applicant BENJAMIN CURTIS
Owner BENJAMIN CURTIS
Project Description 3ft fire separation between bldg

FEES PAID

0026-033-3370-0000-4361

P&D - APPEAL FEES 15/16

| | | |
|----------------------------|-------------------------|--------|
| BBA - ALL OTHER STRUCTURES | 0026-033-3370-0000-4361 | 500.00 |
|----------------------------|-------------------------|--------|

| | |
|--|---------------|
| Total Fees for Account 0026-033-3370-0000-4361: | 500.00 |
|--|---------------|

| | |
|------------------------|---------------|
| TOTAL FEES PAID | 500.00 |
|------------------------|---------------|

DATE PAID: Friday, October 7, 2016

PAID BY: LOGOS

PAYMENT METHOD: CREDIT CARD TYPE NOT

FIRE AND SMOKE PROTECTION FEATURES

TABLE 705.8
MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON
FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION

| FIRE SEPARATION DISTANCE (feet) | DEGREE OF OPENING PROTECTION | ALLOWABLE AREA* |
|-------------------------------------|---|------------------|
| 0 to less than 3 ^{b,c} | Unprotected, Nonsprinklered (UP, NS) | Not Permitted |
| | Unprotected, Sprinklered (UP, S) ⁱ | Not Permitted |
| | Protected (P) | Not Permitted |
| 3 to less than 5 ^{d,e} | Unprotected, Nonsprinklered (UP, NS) | Not Permitted |
| | Unprotected, Sprinklered (UP, S) ⁱ | 15% |
| | Protected (P) | 15% |
| 5 to less than 10 ^{e,f,j} | Unprotected, Nonsprinklered (UP, NS) | 10% ^b |
| | Unprotected, Sprinklered (UP, S) ⁱ | 25% |
| | Protected (P) | 25% |
| 10 to less than 15 ^{e,f,g} | Unprotected, Nonsprinklered (UP, NS) | 15% ^b |
| | Unprotected, Sprinklered (UP, S) ⁱ | 45% |
| | Protected (P) | 45% |
| 15 to less than 20 ^{f,g} | Unprotected, Nonsprinklered (UP, NS) | 25% |
| | Unprotected, Sprinklered (UP, S) ⁱ | 75% |
| | Protected (P) | 75% |
| 20 to less than 25 ^{f,g} | Unprotected, Nonsprinklered (UP, NS) | 45% |
| | Unprotected, Sprinklered (UP, S) ⁱ | No Limit |
| | Protected (P) | No Limit |
| 25 to less than 30 ^{f,g} | Unprotected, Nonsprinklered (UP, NS) | 70% |
| | Unprotected, Sprinklered (UP, S) ⁱ | No Limit |
| | Protected (P) | No Limit |
| 30 or greater | Unprotected, Nonsprinklered (UP, NS) | No Limit |
| | Unprotected, Sprinklered (UP, S) ⁱ | Not Required |
| | Protected (P) | Not Required |

For SI: 1 foot = 304.8 mm.

UP, NS = Unprotected openings in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

UP, S = Unprotected openings in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

P = Openings protected with an opening protective assembly in accordance with Section 705.8.2.

a. Values indicated are the percentage of the area of the exterior wall, per story.

b. For the requirements for fire walls of buildings with differing heights, see Section 706.6.1.

c. For openings in a fire wall for buildings on the same lot, see Section 706.8.

d. The maximum percentage of unprotected and protected openings shall be 25 percent for Group R-3 occupancies.

e. Unprotected openings shall not be permitted for openings with a fire separation distance of less than 15 feet for Group H-2 and H-3 occupancies.

f. The area of unprotected and protected openings shall not be limited for Group R-3 occupancies, with a fire separation distance of 5 feet or greater.

g. The area of openings in an open parking structure with a fire separation distance of 10 feet or greater shall not be limited.

h. Includes buildings accessory to Group R-3.

i. Not applicable to Group H-1, H-2 and H-3 occupancies.

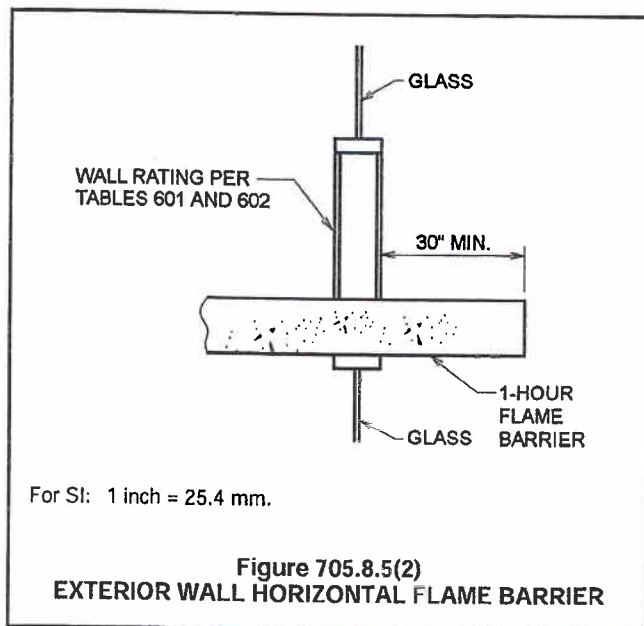
j. For special requirements for Group U occupancies, see Section 406.3.2.

should extend at least 30 inches (762 mm) above the finished floor level. This is to prevent the transfer of radiant heat to furnishings and other combustibles located in the lower portion of the room in the story above the assumed fire exposure. Horizontal flame barriers are required to extend at least 30 inches (762 mm) beyond the face of the exterior wall and have a fire-resistance rating of at least 1 hour [see Figure 705.8.5(2)].

This section requires such protection when the opening on the lower level is not fire-protection rated for $\frac{3}{4}$ hour or more. The use of glazing is one example of why this section is so specific. Wired glass, for example, has been shown to retain its integrity with limited fire exposure when exposed to a fire condition for a certain period of time. For this reason, wired glass has historically been recognized as a suitable exterior opening protective within size and mounting methods defined by its listing.

Wired glass permits a significant percentage, typically recognized as high as 50 percent, of radiant heat energy to pass through. Since the initial concern is heat radiated from the flame plume, wired glass does little to prevent ignition of combustibles in the room on the upper floor. This section permits the elimination of the unexposed surface temperature limitations prescribed by ASTM E 119 for flame barriers and vertical shields. Fire spread between floors is primarily the result of radiant heat, not conductive heat transfer. Full-scale tests have shown that only a small degree of fire resistance is required for adequate protection since radiant energy is the primary concern and glazing in the unprotected openings above the story of fire origin may break within 1 minute.

Protection is not required for buildings three stories



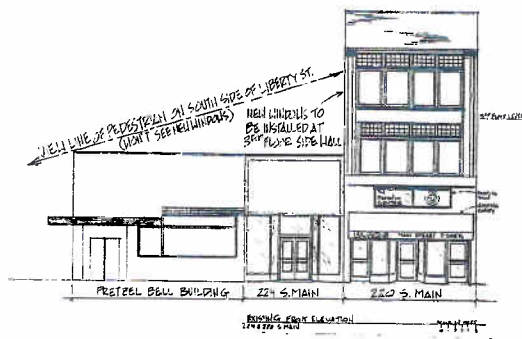
or less in height. This exception is consistent with Table 503, which permits buildings of three stories in height to be of Type IIB, IIIB and VB construction when these buildings do not require a fire-resistance rating for the floor construction.

The exception for buildings protected with an automatic sprinkler system is consistent with the code's approach to limiting fire size and, thus limiting spread of fire beyond the area or room of origin. The exception is based on the effectiveness and reliability of automatic sprinkler systems in decreasing fire size. The reference to Section 903.3.1.1 or 903.3.1.2 reinforces that the system must be a code-compliant automatic sprinkler system per NFPA 13 as modified by Section 903.3.1.1 or in accordance with NFPA 13R as modified by Section 903.3.1.2. Exception 3 acknowledges the practicality of constructing open parking structures and the need to have a significant amount of openings for natural ventilation.

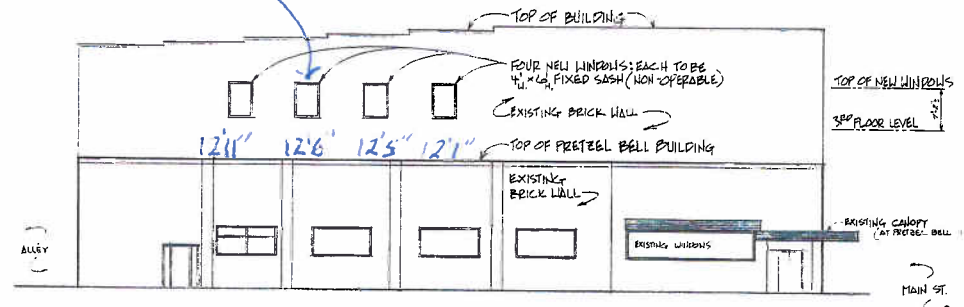
705.8.6 Vertical exposure. For buildings on the same lot, opening protectives having a *fire protection rating* of not less than $\frac{3}{4}$ hour shall be provided in every opening that is less than 15 feet (4572 mm) vertically above the roof of an adjacent building or structure based on assuming an imaginary line between them. The opening protectives are required where the *fire separation distance* between the imaginary line and the adjacent building or structure is less than 15 feet (4572 mm).

Exceptions:

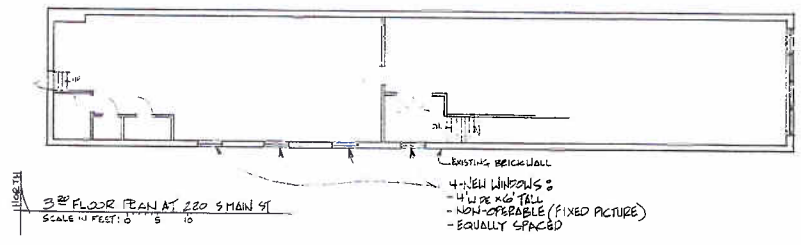
1. Opening protectives are not required where the roof assembly of the adjacent building or structure has a *fire-resistance rating* of not less than 1 hour for a minimum distance of 10 feet (3048 mm) from the *exterior wall* facing the imaginary line and the entire length and span of the supporting elements for the fire-resistance-rated roof assembly has a *fire-resistance rating* of not less than 1 hour.
 2. Buildings on the same lot and considered as portions of one building in accordance with Section 705.3 are not required to comply with Section 705.8.6.
- ❖ A fire in a building that is adjacent to a taller building can be the source of fire exposure to openings in the taller building. Although the height of a fire plume is dependent on several factors, this section requires $\frac{3}{4}$ -hour or greater opening protectives in the wall where the openings are within 15 feet vertically (4572 mm) above the roof of a building that is within a horizontal FSD of 15 feet (4572 mm) (see Figure 705.8.6). Full-scale tests have indicated that exterior flame plumes may extend higher than 16 feet (4877 mm) above a window using a fuel load of 8 pounds per square foot (psf) (39 kg/m²). Since this provision is based on a fire exposure from the roof of the lower building, it does not apply where the roof construction is 1-hour fire-resistance rated, which reduces the potential for fire exposure.



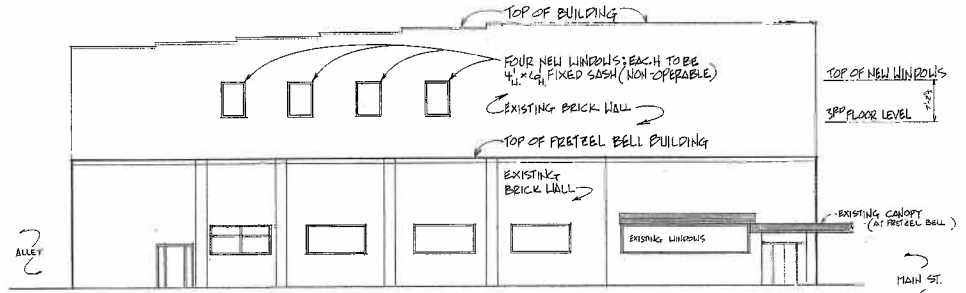
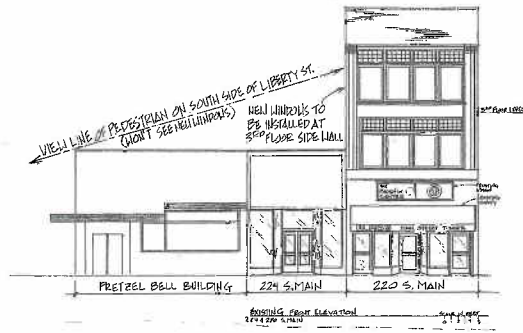
FAUX
 WINDOW



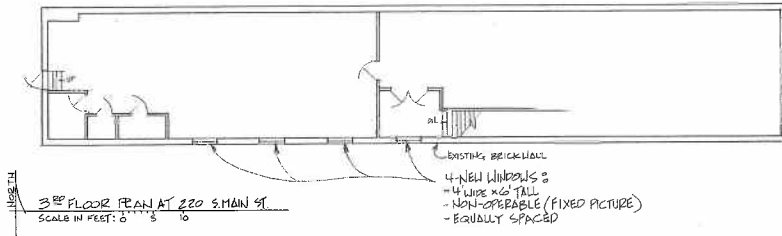
SOUTH SIDE VIEW - FROM LIBERTY STREET
 SCALE IN FEET: 0 5 10



3RD FLOOR PLAN AT 220 S MAIN ST
 SCALE IN FEET: 0 5 10



SOUTH SIDE VIEW - FROM LIBERTY STREET
SCALE IN FEET: 0 5 10



NEW 3RD FLOOR WINDOWS
AT 220 S. MAIN ST. MAIN ARBOR, MI
FOR CURTIS COMMERCIAL

PLAN
ELEVATIONS

Gregory A. Raye A.I.A. Architect
1155 W. MAIN ST. ANN ARBOR, MI 48106
734.769.1111

ISSUED:
REVISED:
REVISED:
REVISED:

DATE:
TOP 1

GR
8-19-16



1072 Baker Rd. Dexter, MI 48130
 734-426-5600 Fax 734-426-5319
 www.wmglass.com

Estimate

| Date | Estimate # |
|-----------|------------|
| 10/4/2016 | 6059 |

| Name / Address |
|--|
| A2 Curtis LLC 103 E. Liberty Ste. 207 Ann Arbor, MI 48104 |

| Ship To |
|--------------------------|
| 220 S. Main Ann Arbor |

| Qty | Description | Cost | Total |
|-----|--|------------------|--------------------|
| 4 | 90 Minute fire rated single hung windows | 4,025.00 | 16,100.00 |
| 1 | Freight | 750.00 | 750.00 |
| 1 | Labor to install | 1,500.00 | 1,500.00 |
| | | Sales Tax | \$966.00 |
| | | Total | \$19,316.00 |

Wolverine & Moore Glass reserves the right to adjust this quote after field conditions and estimated dimensions have been verified.

Customer Signature

This Estimate is Valid for 60 Days



1072 Baker Rd. Dexter, MI 48130
 734-426-5600 Fax 734-426-5319
 www.wmglass.com

Estimate

| | |
|-----------|------------|
| Date | Estimate # |
| 9/23/2016 | 6030 |

| |
|--|
| Name / Address |
| A2 Curtis LLC 103 E. Liberty Ste. 207 Ann Arbor, MI 48104 |

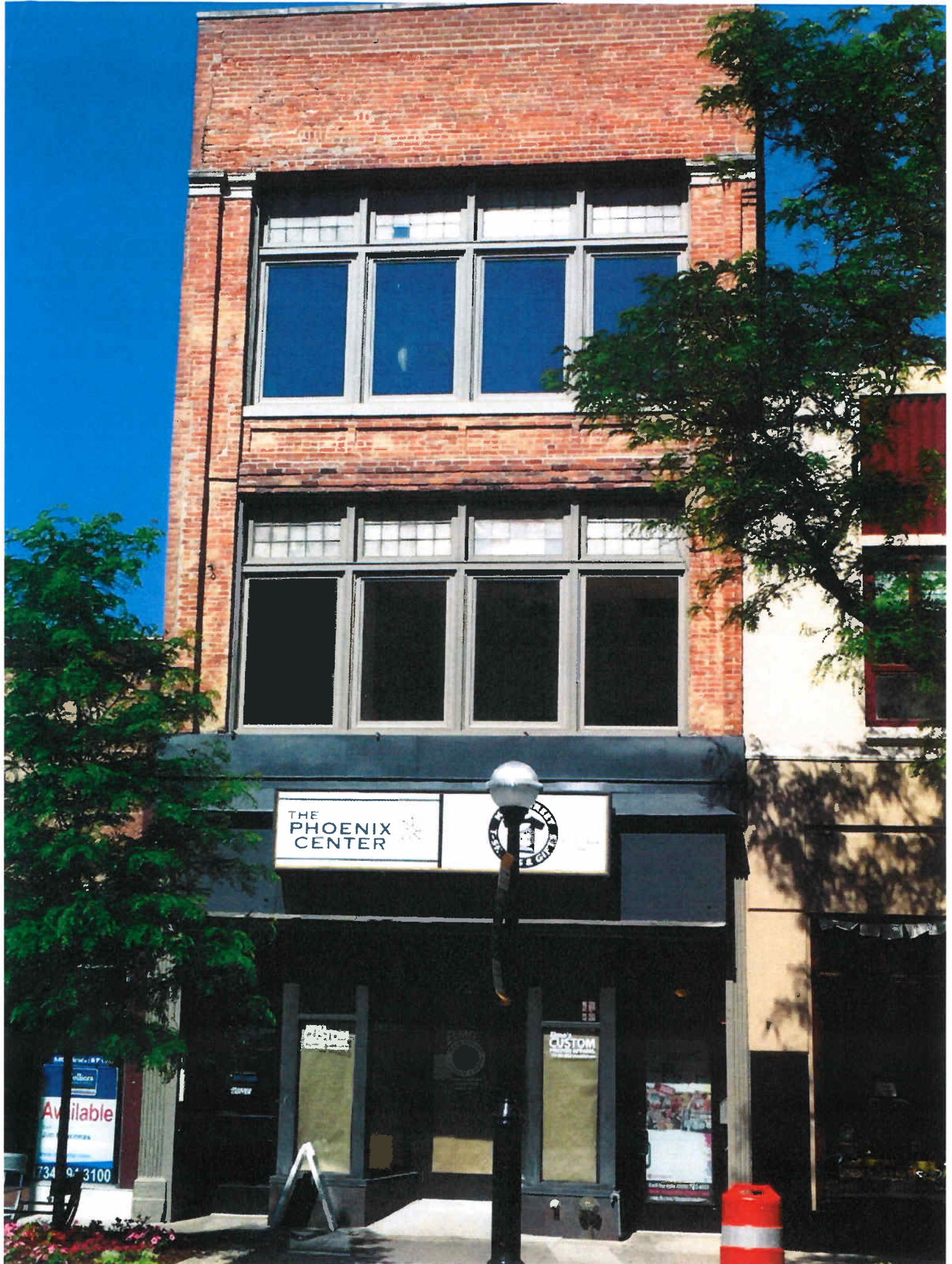
| |
|--------------------------|
| Ship To |
| 220 S. Main Ann Arbor |

| Qty | Description | Cost | Total |
|-----|--|------------------|-------------------|
| 4 | Bronze anodized single hung windows with clear insulated glass & screens | 709.50 | 2,838.00 |
| 1 | Labor to install | 1,500.00 | 1,500.00 |
| | | Sales Tax | \$170.28 |
| | | Total | \$4,508.28 |

Wolverine & Moore Glass reserves the right to adjust this quote after field conditions and estimated dimensions have been verified.

Customer Signature

This Estimate is Valid for 60 Days



THE
PHOENIX
CENTER



Available
734-923-3100

CUSTOM

