STAFF REPORT: 08-12-2020 MEETING PREPARED BY: A. DYE

APPLICATION NUMBER: 20-6791 **ADDRESS:** 869 LONGFELLOW

HISTORIC DISTRICT: BOSTON EDISON

APPLICANT: ELEANOR OAKES

PROPERTY OWNER: ELEANOR OAKES

DATE OF PROVISIONALLY COMPLETE APPLICATION: 07/27/2020

DATE OF STAFF SITE VISIT: 07/31/2020

SCOPE: REPLACE 10 WOOD 1/1 DOUBLE-HUNG WINDOWS WITH PELLA ARCHITECT

SERIES 1/1 DOUBLE-HUNG WINDOWS

EXISTING CONDITIONS

The house at 869 Longfellow, constructed in 1914, is a 2.5 story structure that is reminiscent of an American Foursquare (boxy shape, hip roof with dormers) with Classical Revival elements (Doric porch columns, brackets under the eaves) individualizing the design. The house is faced with brick on the first floor. Wood shake shingles on the second floor flare out slightly as they meet the belly band, the horizontal trim that wraps around the house and cleanly separates the two exterior siding materials. The house's minimal detailing allows the large windows, exterior wall materials, and fully extended front porch to be the dominant features of this house. All of the window openings on the public-facing sides of the house have one-over-one, double-hung windows.



HDAB Designation Photo, 1974

HDC Staff Photo, 7/31/2020

The property owners were previously issued COAs for the following projects:

November 2018 Replace non-historic

porch railing and columns with wood railing and columns to match historic

photo

April 2019 New perimeter fence May 2019 Exterior painting June 2020 New asphalt shingle

roof

PROPOSAL

The owners are currently proposing to replace 10 windows on the house. Eight on the front elevation (all those on the first and second floor) and two on the side/west elevation closest to the front of the house (first and second floor).

Repair

A repair quote from Place Restoration Works is included with this application.

\$14,920.20 Price to repair the windows, sash only (two panes of glass to replace plexiglass also included)

Average cost per window: \$1492

7919.64 Price to fabricate new wood storm windows

Average cost per window: \$791.96

\$22,839.84 Average cost per opening: \$2,284

Replacement

Pella, Architect Series, Traditional Double-Hung Window, Aluminum-Clad Exterior

\$10,750 Average cost per opening: \$1,075

Comparison of Existing vs. Replacement

The applicant did not submit dimensions of the existing and Pella window sash so a precise comparison to the window openings was not completed.

The application did include a comparison of glass area per sash for a 33" x 69" window (full frame):

Existing

Glass - 29" x 31"

Full glass area – 29" x 62"

Total frame height* – 4 inches

Total frame width** -7 inches

Replacement

Glass - 28" x 30"

Full glass area – 28" x 60"

Total frame height – 5 inches

Total frame width – 9 inches

*Horizontal frame members contributing to sash height: Top Rail, Bottom Rail, Meeting Rail

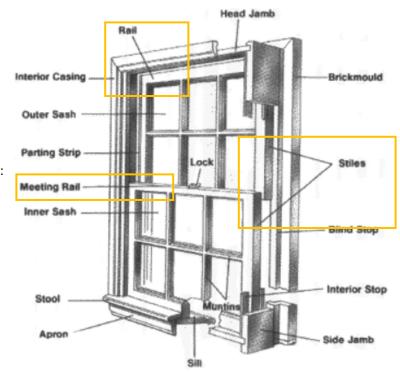
**Vertical frame members contributing to sash width: Left Stile, Right Stile

Reduction of glass width in replacement window:

1 inch = 3.44% decrease

Reduction of glass height in replacement window:

2 inches = 3.25% decrease



In addition to determining the change in glass area, staff asked the applicant to submit visual comparisons of the existing and proposed sash profiles. Staff compiled the photos on the following page.



Current Exterior Corner Profile



STAFF OBSERVATIONS AND RESEARCH

- As the windows are a character-defining feature of the house, of which its minimal architectural
 ornament is another defining feature, a significant increase in sash width/decrease in glass area will be
 very noticeable.
- While conducting the site visit, it appears a number of window sashes have wavy glass, which is a product of the fabrication method of the early 20th century: machine drawn cylinder glass. Windows we see today are made with float glass, invented in the middle of the 20th century.
- While interesting and unique, wavy glass is still a component of the window unit and help date the windows as original features. Similar to window sash made of old growth lumber, these materials are not the character-defining features. Rather, the dimensional relationship of the window components to each other, coupled with the windows openings within the entire structure, are the character-defining features.
- The visual comparison of the sash profiles of the existing and new window sash are very similar, and in staff's opinion they don't have a noticeable difference.
- While the dimensions of the existing and replacement sash were not submitted, the rough calculations based on the existing and proposed glass surface shows the physical alteration will be minimal.
- The percentage cost increase to repair the windows (not including new storms), in comparison to the installation of the new windows, is 38%.
- The percentage cost increase to repair the windows and install new storms, in comparison to the installation of the new windows, is 1.12%.

ISSUES

None

RECOMMENDATION

As HDC staff considered the economic and technical feasibility to repair the ten, one-over-one double-hung windows and fabrication of storm windows against the minimal change in dimensions and sash profile of the proposed replacement windows, it is staff's recommendation the Commission issue of a Certificate of Appropriateness for the installation of Pella, Architect Series, Traditional, Double-Hung wood windows, as proposed, as the project meets the Secretary of the Interior's Standards for Rehabilitation.

Staff requests the COA be issued with the following conditions:

• The existing brick mould will be retained; it will not be covered with coil stock.







HDC Staff Photos, 7/31/20



PART 1:

Assessment of Deterioration from Window Repair Contractor + Estimated Cost of Repair

Restoration Window Quote as Follows:

Company: Place Restoration Works (Storms provided through Allied)

The following two pages represent an assessment of the current windows and the cost to restore them from Place Restoration Works.

Cost to restore 10 front and side windows, sashes only = \$14,920.20 Cost to include storms for energy efficiency = \$7,919.64

Total Cost for 10 Windows = \$22,839.84



Quote

Date: June 24, 2020 **Valid Until:** July 24, 2020

Quote #: Customer ID: EO

Customer:

Eleanor Oakes 869 Longfellow Detroit MI 48202 908-501-5576

Quote/Project Description

*Full restoration of 20 sashes, 10 window frames inner stop to exterior blind stop *Wood sash repair as needed per initial visual inspection

*inner stool repair/replace for opening 1E, 100' allowance new inner stops
*Installed with restored original hardware, weatherstripping, all new sash cord
*Certificate of Appropriateness from Historic District Commission

Description	Line Total
Wood Window Restoration Lead safe sash removal and transport; stop to stop frame restoration to include minor	
wood repair, stripping/priming/painting of window frames; Sash restoration to include minor wood repairs, glass	
conservation stripping/priming/painting, reglazing with Sarco linseed oil putty; Reinstallation of sashes with original	
weatherstripping if existing/functional or new spring bronze type, new Samson "Red Spot" sash cord, restored	
pulleys and window hardware where existing.	\$12,600.00
Additional Carpentry as noted on initial walkthrough sash 1HU meeting rail repair, 1HL left stile repair, 1DL left	
stile dutchman repair, 1DU left stile replacement, opening 1E inner stool repair or replace, 1FU meeting rail right	
corner repair, 1FL lower rail left corner repair, 1GU meeting rail right corner, 2EL bottom rail left corner	\$975.00
New glass for 2CL to replace existing plexiglass	\$40.00
Allowance for 100' of new matching inner stop molding if needed, openings 1B, 1E, 1F, and 1G	\$200.00
Subtotal	\$13,815.00

Special Notes and Instructions

*excessive hidden damage not noted above may need to be assessed with a change order quoted as Time + Materials *client to provide paint/stain colors to match *payment schedule #1 deposit 10% to schedule, #2 -40% at start, #3 -40% at start of installation, #4 -final 10% at completion of install/punchlist.

 Subtotal
 \$13,815.00

 Project Management (8%)
 \$1,105.20

 Grand Total
 \$14,920.20

Above information is not an invoice and only an estimate of services/goods described above.

A payment schedule will be established prior to final quote.

Please confirm your acceptance of this quote by signing this document	Signature
	Print Name

Date

If you have any questions concerning this quote, contact Phil Mayo at 773.972.7712 or Kyle Vanover at 734.934.3226

Thank you!



Quote

Date: June 24, 2020 Valid Until: July 24, 2020

Quote #: Customer ID: EO

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Quote/Project Description

- *New Allied storm windows for 10 openings
- *Remove old aluminum storm windows where existing
- *Disposal of old storm windows as needed
- *Installation of new Allied storm windows

<u> *(</u>	Certificate of Appropriateness fr	om Historic District Commission	
Description			Line Total
10 qty Allied storm windows, model HOL-OP, standa	ard color, includes shipping to jo	obsite	\$5,583.00
Basic Installation for 10 storm windows on 1st and 2	nd floor		\$1,750.00
		Cultinia	\$7,000,00
Cussial Natas and Instructions		Subtotal	\$7,333.00 \$586.64
Special Notes and Instructions *Payment schedule 1/3 deposit to order, 1/3 due pri	or to shipping, balance due	Project Management (8%) Grand Total	\$7,919.64
upon completion.	,	Giana Iotai	\$1,919.04
	-	services/goods described above.	
A payment	schedule will be established prior	to final quote.	
Please confirm your acceptance of this quote by sig	ning this document Signature		
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Thank you!

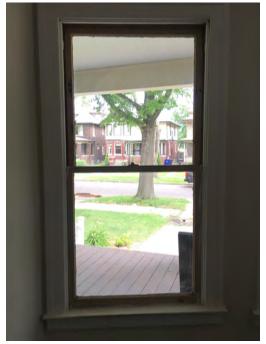
PART 2: PICTURES OF WINDOWS TO BE REPLACED

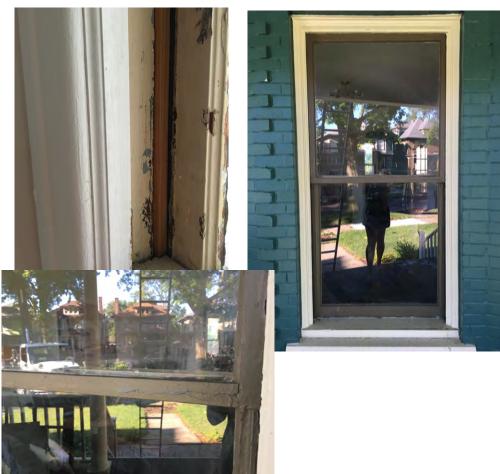
Reference Images





Window 1:





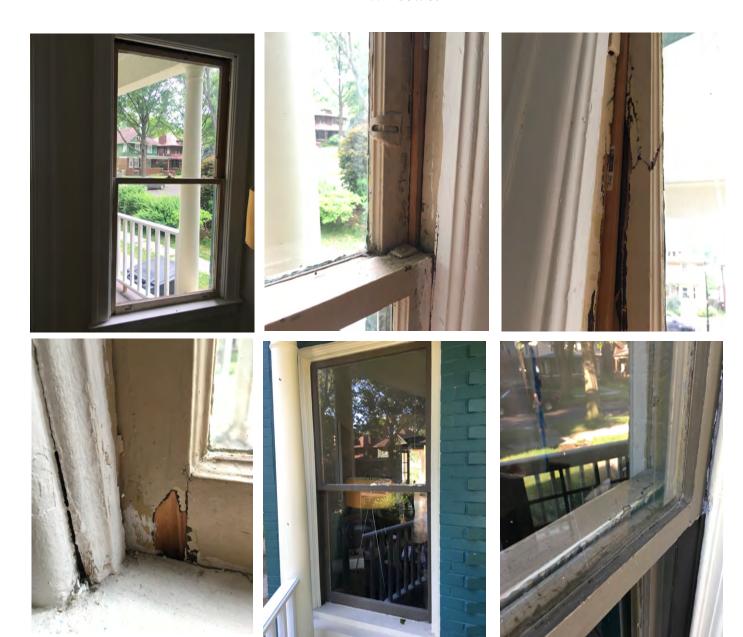
Window 2:







Window 3:



Window 4:







Window 5:









Window 6:







Window 7:







Window 8:









Window 10:







Window 9:









PART 3:

Comparison of Measurements:

Please note, only sashes are to be replaced. Original trim will remain intact.

Existing Windows:
Wood Double-Hung
Overall window size: 33" wide x 69" high
Glass pane size: 29" x 31" each

Proposed Windows:
Wood Double-Hung
Overall window size: 33" wide x 69" high
Glass pane size: 28" x 30" each





Profile Drawings + Specs: See attached pages for profile drawings and elevation views.



Special Sizes and Dimensions

Special Size Frame Dimension 1

Sash configuration	Vent-equal	Cottage	Fixed
Sash Glass Ratio Top % : Bottom %	50 : 50	40 : 60	NA
Shortest Unit	24-3/8"	42-1/4"	17"
Frame Size	(889)	(1 073)	(432)
Tallest Unit	96"	81"	71"
Frame Size	(2 438)	(2 057)	(1 803)
Unit Frame	14" to 48"	21" to 48"	17" to 59"
Width Range	(533 to 1 219)	(533 to 1 219)	(432 to 1 499)

Opening Dimensions

Clad exterior units:

Dimensions shown in standard size tables are rough opening dimensions.

Wood exterior units:

Use frame dimension plus dimensions below. This dimension includes the use of standard 1-1/8" wood subsill.

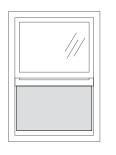
Frame	Roi	ıgh	Mas	onry
Brickmould	Width	Height	Width	Height
STD	+ 3/4"	+1-7/8"	+ 3-1/8"	+ 3-1/8"
3-1/2"	+ 3/4"	+1-7/8"	+ 6-3/8"	+ 4-3/4"

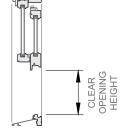
For clad and wood units with HurricaneShield® impact-resistant glass, see the product installation instructions or refer to local building code requirements.

Equal Sash Only

	Vent Units	Fixed and Transom Units
Visible Glass	Width = Frame - 5.75" Height ₂ = (Frame - 8.1875") ÷ 2	Width = Frame - 5.75" Height = Frame - 5.75"
Actual Glass	Width = Frame - 4.375" Height₂ = (Frame - 5.5") ÷ 2	Width = Frame - 4.375" Height = Frame - 4.375"
Clear Opening*	COW = Frame Width - 3.4375" COH = (Frame Height ÷ 2) - 4.4375"	-
Vent Area Ft ²	(COW x COH) ÷ 144	-







Shaded portion shows vent area.

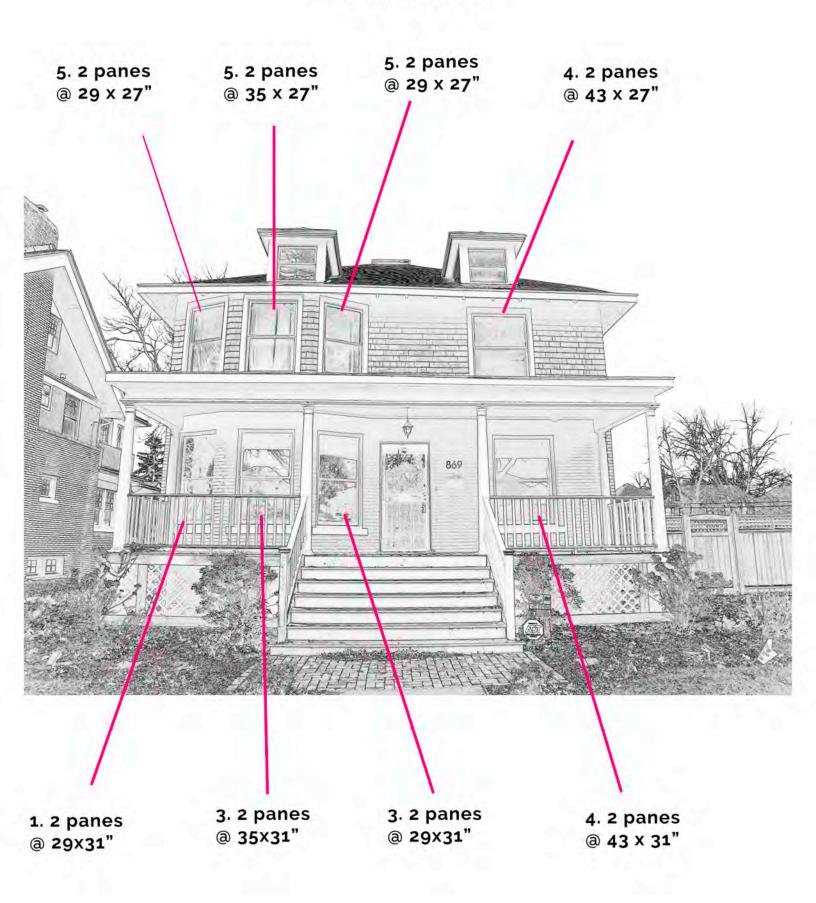
⁽¹⁾ Available within size range shown.

⁽²⁾ Per sash

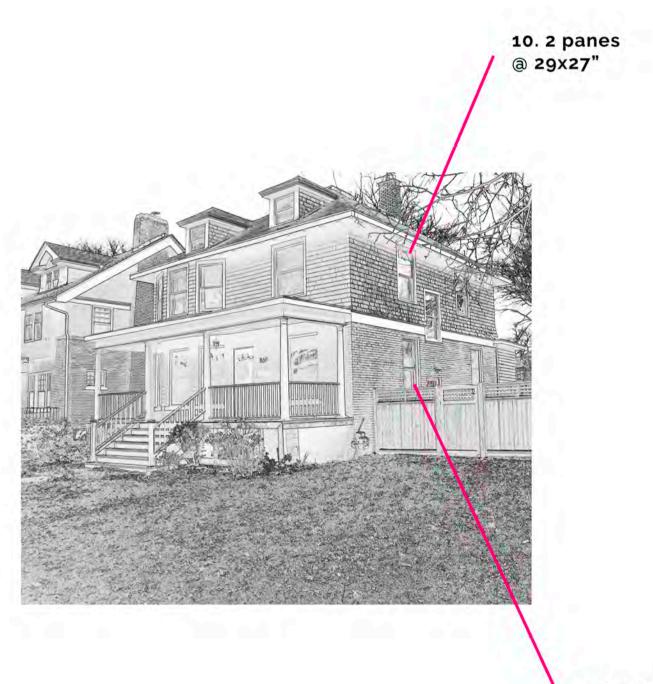
^{*} Some units with custom glazing may have limited travel.

See your local Pella sales representative for specific size information.

FRONT VIEW ELEVATION with glass sizes



SIDE VIEW ELEVATION



9. 2 panes

@ 29x31"



Window Replacements Unlimited

WindowReplacementsUnlimited.com ben@windowreplacementsunlimited.com 5172060432

QUOTE

Quote Number0192Eleanor OakesQuote Date06/17/2020869 Longfellow St.Total\$10,750.00Detroit, Mi 48202

eleanoroakes@gmail.com

ltem	Description	Unit Cost	Quantity	Line Total
Pella Replacement Windows	10 Pella Windows Furnished and Installed. 10 Architect Double Hung. Low-E Argon Glass 2020 Energy Star. Clear Pine Interior on all windows. Antique Brass Hardware.	\$10,750.00	1	\$10,750.00

Subtotal

Total

\$10,750.00

\$10,750.00

Clean up and haul away old windows Screens on all operating windows Trim and caulking as needed on exterior along with insulation around new window frames.

Trim and caulking on interior as noted.

Installation approximately 4-7 weeks from acceptance of quote. This quote is only for standard window replacement and does not include extra repair i.e. extensive water damage/rot around the old windows. No extra repair or charges will be added without new agreement.

Permit fee will be added to final payment if needed. Final payment required on date of completion.

Terms

Half Down Balance at Completion 3% added to total if paying with Credit Card Under Michigan law customer may cancel contract anytime within 3 days of acceptance.

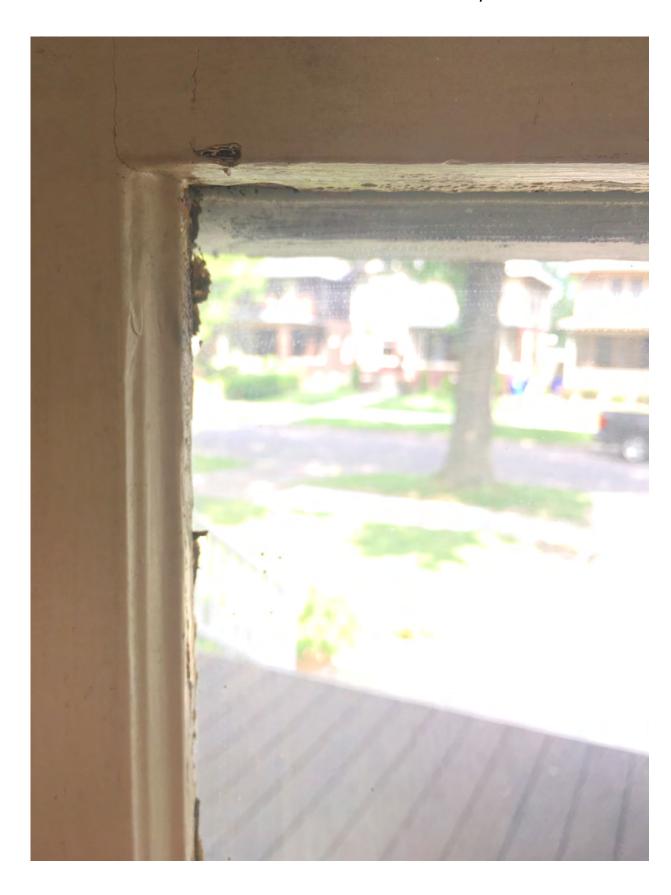
Any changes to contract must be signed off by both Window Replacements Unlimited and the customer.

Corner Profile Images 869 Longfellow St

Current Interior Corner Profile, View 1



Current Exterior Corner Profile

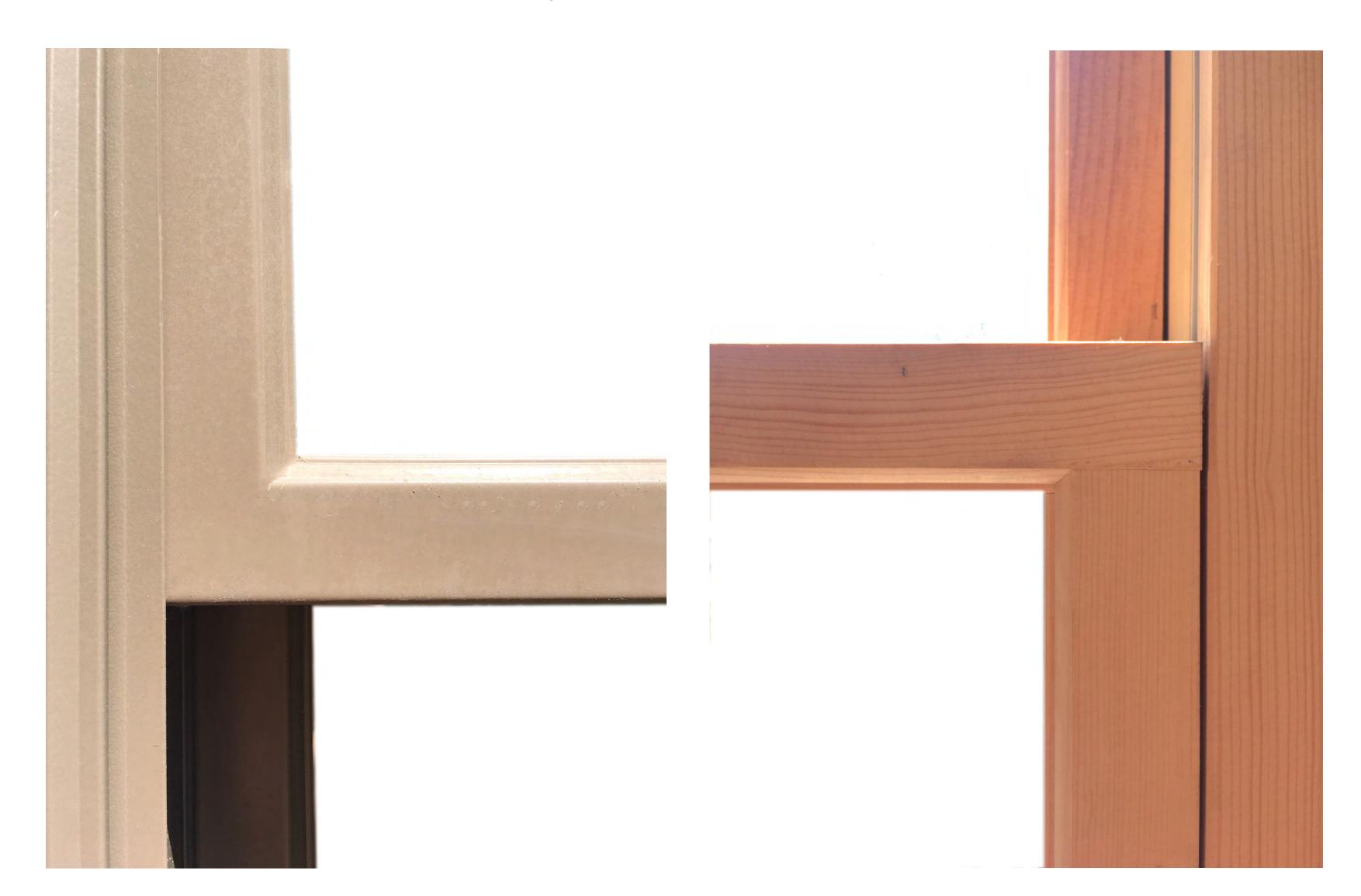






Proposed Exterior Corner Profile (color to match current trim and historic palette B:8, Grayish Brown)

Propsed Interior Corner Profile



CONDITIONS OF CURRENT WINDOWS

Current widows are painted wood, double hung, with no decorative grills. The exterior sashes are painted historic pallete color B8: Grayish Brown. They are in very bad condition, making restoration very difficut and expensive, and requiring mostly rebuilding or replacement.

Current problems include:

- Heavily rotted wood sashes requiring replacement/rebuild
 - Missing sash pieces and stops
- Plexiglass installed instead of real glass in 80% of windows
 - Separation of glass/plexi from sashes and broken panes
 - 95% of windows are painted shut
 - No energy efficiency
 - Significant health hazard as a result of lead paint

SAMPLE OF EXISTING CONDITIONS:



ROTTED WOOD



ROTTED WOOD +
GLASS SEPARATION

BROCKEN GLASS







INTERIOR VIEW: PLEXI GLASS

EXTERIOR VIEWS

CURRENT VIEWS OF HOUSE





PROPOSED PROJECT SCOPE + MATERIALS

While we received quotes to try and restore the current windows in the front rooms of the house, the repair necessary would require rebuilding many of the sashes and be an extensive restoration at a high cost that is not within our our budget. It is essential we replace these windows to make sure our house is lead safe for our family.

To make sure the house maintains its historic character, we would replace the current windows with new replicas in the same same-size, design, color and materials. We propose replacing all the described windows to keep consistency both on the interior and exterior of the home.

Description of the work to be completed:

- Replace 8 front-facing and 2 west front side of house windows with replica wood windows from Pella, Architect Series Traditional Wood Double-Hung Windows
- Windows will all match current window sizes, styles, and profiles, all will be double-hung wood windows with aluminum exterior cladding to match current trim color of the house in historic palette color B:8, Grayish Brown.



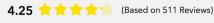
Will come with antique brass hardware.

Exterior color to match current trim, B:8 Grayish Brown





Pella® Architect Series® -**Traditional Wood Double-Hung** Window



\$\$\$-\$\$\$\$

A classic window choice, Pella Architect Series - Traditional double-hung windows have two moveable sashes for improved ventilation. Rolscreen® retractable screens roll up and down like a shade on casement windows. They disappear when you don't need them, allowing more light into your room. Complement your style with your choice of hardware, innovative grilles and a wide selection of interior stains and paints and exterior cladding colors. Backed by the best limited lifetime warranty for wood windows and patio doors, you can be sure we stand behind our products.47











PART 1:

Assessment of Deterioration from Window Repair Contractor + Estimated Cost of Repair

Restoration Window Quote as Follows:

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Total Cost for 10 Windows = \$22,839.84



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Date: June 24, 2020 **Valid Until:** July 24, 2020

Quote #: Customer ID: EO

Customer:

Eleanor Oakes 869 Longfellow Detroit MI 48202 908-501-5576

Quote/Project Description

*Full restoration of 20 sashes, 10 window frames inner stop to exterior blind stop *Wood sash repair as needed per initial visual inspection

*inner stool repair/replace for opening 1E, 100' allowance new inner stops
*Installed with restored original hardware, weatherstripping, all new sash cord
*Certificate of Appropriateness from Historic District Commission

Description	Line Total
Wood Window Restoration Lead safe sash removal and transport; stop to stop frame restoration to include minor	
wood repair, stripping/priming/painting of window frames; Sash restoration to include minor wood repairs, glass	
conservation stripping/priming/painting, reglazing with Sarco linseed oil putty; Reinstallation of sashes with original	
weatherstripping if existing/functional or new spring bronze type, new Samson "Red Spot" sash cord, restored	
pulleys and window hardware where existing.	\$12,600.00
Additional Carpentry as noted on initial walkthrough sash 1HU meeting rail repair, 1HL left stile repair, 1DL left	
stile dutchman repair, 1DU left stile replacement, opening 1E inner stool repair or replace, 1FU meeting rail right	
corner repair, 1FL lower rail left corner repair, 1GU meeting rail right corner, 2EL bottom rail left corner	\$975.00
New glass for 2CL to replace existing plexiglass	\$40.00
Allowance for 100' of new matching inner stop molding if needed, openings 1B, 1E, 1F, and 1G	\$200.00
Subtotal	\$13,815.00

Special Notes and Instructions

*excessive hidden damage not noted above may need to be assessed with a change order quoted as Time + Materials *client to provide paint/stain colors to match *payment schedule #1 deposit 10% to schedule, #2 -40% at start, #3 -40% at start of installation, #4 -final 10% at completion of install/punchlist.

 Subtotal
 \$13,815.00

 Project Management (8%)
 \$1,105.20

 Grand Total
 \$14,920.20

Above information is not an invoice and only an estimate of services/goods described above.

A payment schedule will be established prior to final quote.

Please confirm your acceptance of this quote by signing this document	Signature
	Print Name

Date

If you have any questions concerning this quote, contact Phil Mayo at 773.972.7712 or Kyle Vanover at 734.934.3226

Thank you!



Quote

Date: June 24, 2020 Valid Until: July 24, 2020

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*	Certificate of Appropriateness from H	istoric District Commission	
Description			Line Total
10 qty Allied storm windows, model HOL-OP, stand	ard color, includes shipping to jobsite		\$5,583.00
Basic Installation for 10 storm windows on 1st and 2	2nd floor		\$1,750.00
		Subtotal	\$7,333.00
Special Notes and Instructions		Project Management (8%)	\$586.64
*Payment schedule 1/3 deposit to order, 1/3 due pri	or to shipping, balance due	Grand Total	\$7,919.64
upon completion.			
Above information is not an inv	voice and only an estimate of servi	cae/noode described above	
	t schedule will be established prior to fina	=	
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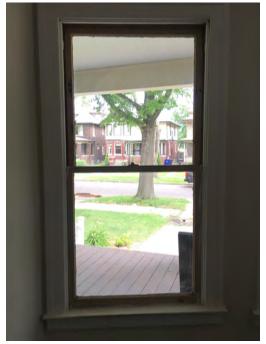
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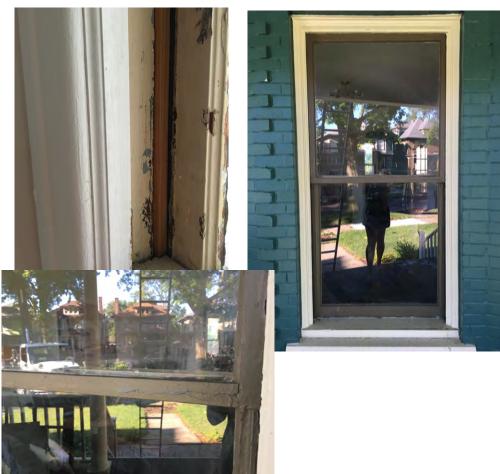
Reference Images





Window 1:





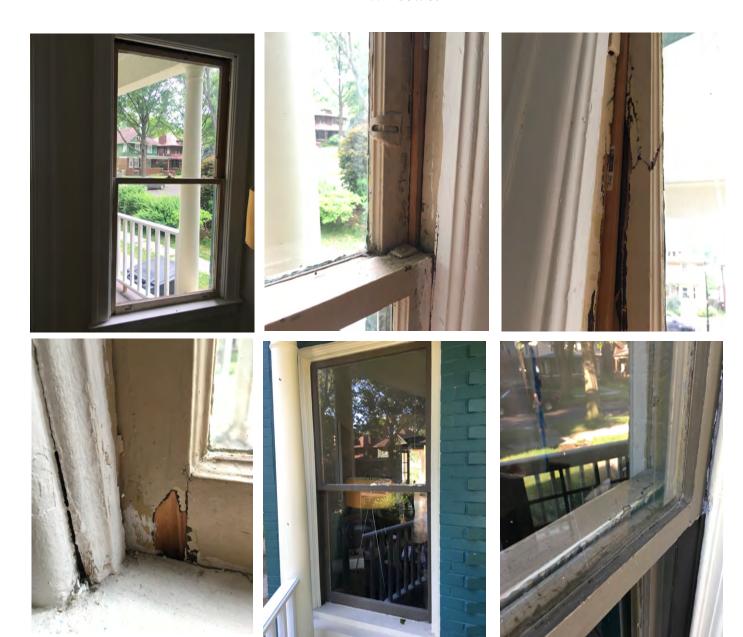
Window 2:







Window 3:



Window 4:







Window 5:









Window 6:







Window 7:







Window 8:









Window 10:







Window 9:









PART 3:

Comparison of Measurements:

Please note, only sashes are to be replaced. Original trim will remain intact.

Existing Windows:
Wood Double-Hung
Overall window size: 33" wide x 69" high
Glass pane size: 29" x 31" each

Proposed Windows:
Wood Double-Hung
Overall window size: 33" wide x 69" high
Glass pane size: 28" x 30" each





Profile Drawings + Specs: See attached pages for profile drawings and elevation views.



Special Sizes and Dimensions

Special Size Frame Dimension 1

Sash configuration	Vent-equal	Cottage	Fixed
Sash Glass Ratio Top % : Bottom %	50 : 50	40 : 60	NA
Shortest Unit	24-3/8"	42-1/4"	17"
Frame Size	(889)	(1 073)	(432)
Tallest Unit	96"	81"	71"
Frame Size	(2 438)	(2 057)	(1 803)
Unit Frame	14" to 48"	21" to 48"	17" to 59"
Width Range	(533 to 1 219)	(533 to 1 219)	(432 to 1 499)

Opening Dimensions

Clad exterior units:

Dimensions shown in standard size tables are rough opening dimensions.

Wood exterior units:

Use frame dimension plus dimensions below. This dimension includes the use of standard 1-1/8" wood subsill.

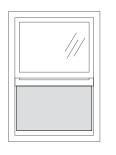
Frame	Rough		Masonry	
Brickmould	Width	Height	Width	Height
STD	+ 3/4"	+1-7/8"	+ 3-1/8"	+ 3-1/8"
3-1/2"	+ 3/4"	+1-7/8"	+ 6-3/8"	+ 4-3/4"

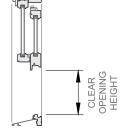
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Equal Sash Only

	Vent Units	Fixed and Transom Units	
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Actual Glass	Width = Frame - 4.375" Height ₂ = (Frame - 5.5") \div 2	Width = Frame - 4.375" Height = Frame - 4.375"	
Clear Opening*	COW = Frame Width - 3.4375" COH = (Frame Height ÷ 2) - 4.4375"	-	
Vent Area Ft ²	(COW x COH) ÷ 144	-	







Shaded portion shows vent area.

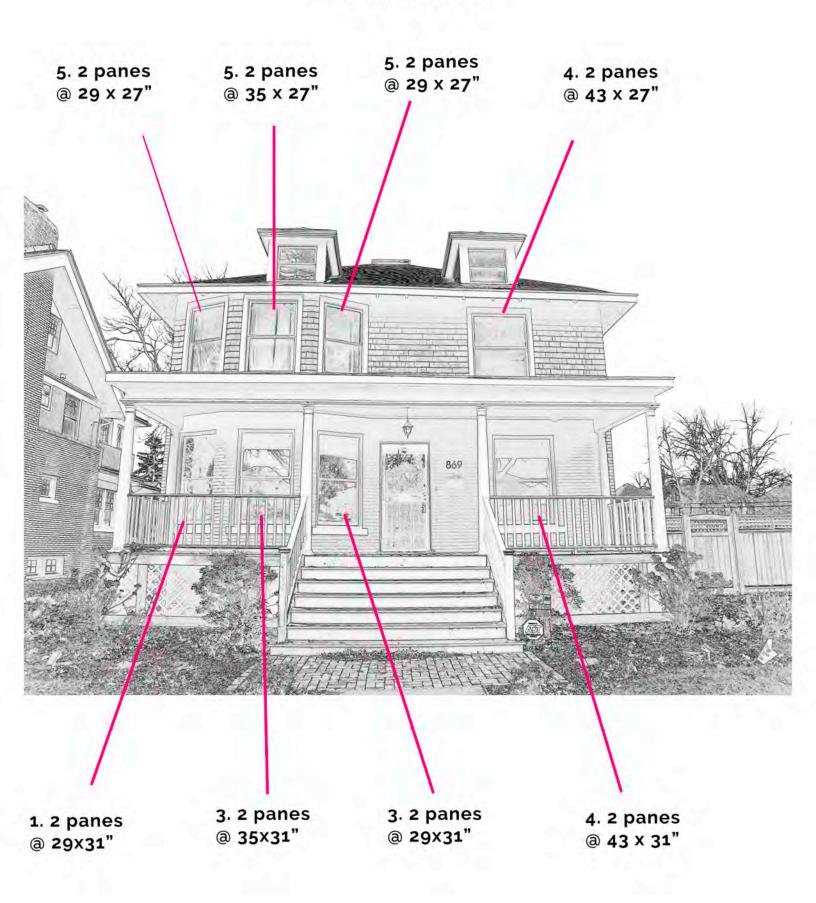
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⁽²⁾ Per sash

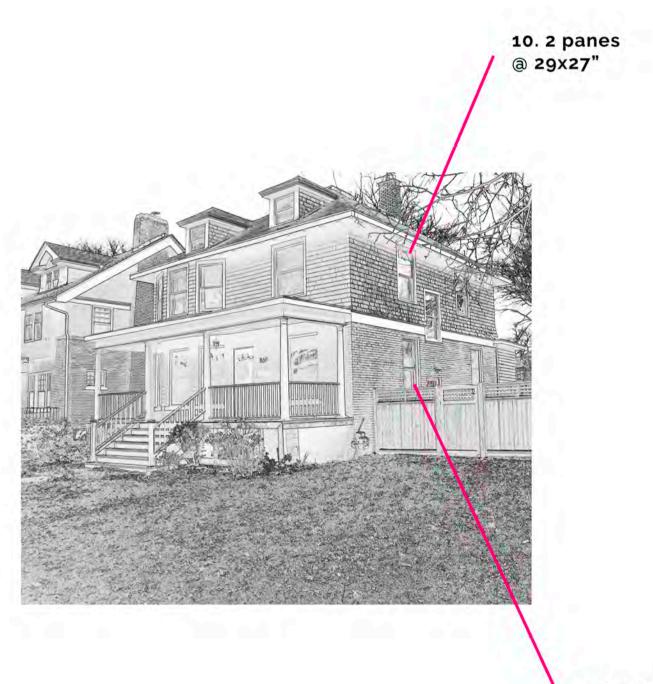
^{*} Some units with custom glazing may have limited travel.

See your local Pella sales representative for specific size information.

FRONT VIEW ELEVATION with glass sizes



SIDE VIEW ELEVATION



9. 2 panes

@ 29x31"



Window Replacements Unlimited

WindowReplacementsUnlimited.com ben@windowreplacementsunlimited.com 5172060432

QUOTE

Quote Number0192Eleanor OakesQuote Date06/17/2020869 Longfellow St.Total\$10,750.00Detroit, Mi 48202

eleanoroakes@gmail.com

ltem	Description	Unit Cost	Quantity	Line Total
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Subtotal

Total

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\$10,750.00

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Half Down Balance at Completion 3% added to total if paying with Credit Card Under Michigan law customer may cancel contract anytime within 3 days of acceptance.

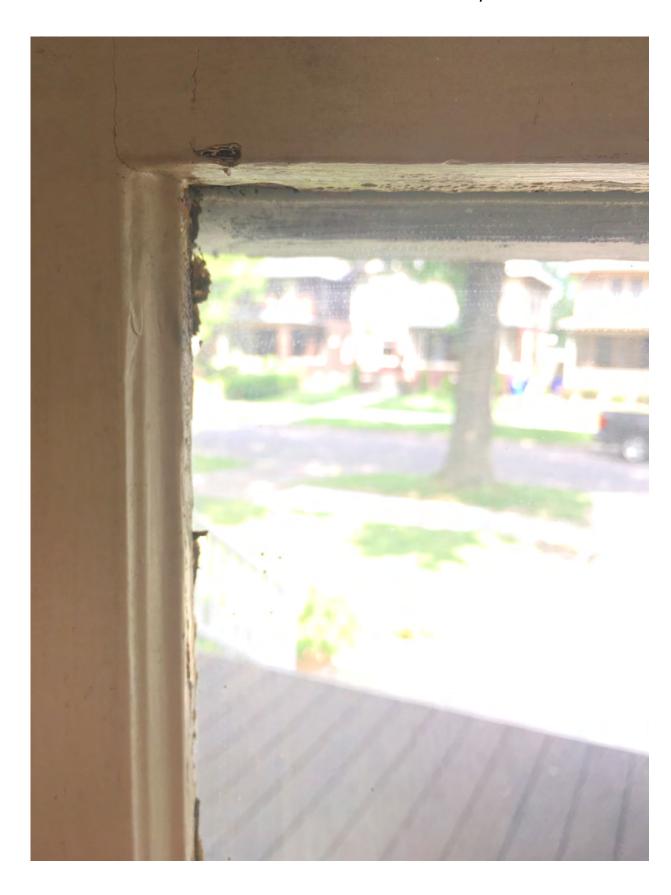
Any changes to contract must be signed off by both Window Replacements Unlimited and the customer.

Corner Profile Images 869 Longfellow St

Current Interior Corner Profile, View 1



Current Exterior Corner Profile







Proposed Exterior Corner Profile (color to match current trim and historic palette B:8, Grayish Brown)

Propsed Interior Corner Profile

