8 West Melrose
Chevy Chase M.D.

2010
MAMP

HISTORIC PRESERVATION COMMISSION

Isiah Leggett
County Executive

Thomas Jester
Chairperson

Date: 10/21/10

MEMORANDUM

TO: Carla Reid, Director
Department of Permitting Services

FROM: Anne Fothergill AF
Planner Coordinator
Historic Preservation Section-Planning Department
Maryland-National Capital Park & Planning Commission

SUBJECT: Historic Area Work Permit #548937—window and door replacement

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The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached application for a Historic Area Work Permit (HAWP) and this application was **denied** by the HPC on October 6, 2010. The HPC's Decision and Order is attached.

Applicant: Herbert W. Jacobs, Jr.
Address: 8 West Melrose Street, Chevy Chase

RETURN TO: DEPARTMENT OF PERMITTING SERVICES
255 ROCKVILLE PIKE 2nd FLOOR ROCKVILLE MD 20850
240-777-6370

DPS - #8

HISTORIC PRESERVATION COMMISSION
301/563-3400

APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Person: _____

Daytime Phone No.: _____

Tax Account No.: 00456115

Name of Property Owner: JACOBS, HERBERT W. JR. & ALTR Daytime Phone No.: _____

Address: 8 West Melrose St Chevy Chase MD 20815
Street Number City State Zip Code

Contractor: Wheaton Door & Window Phone No.: 301-949-8951

Contractor Registration No.: MHIC 125679

Agent for Owner: Sjaunna Cunningham Daytime Phone No.: 845-775-8695 Cell

LOCATION OF BUILDING/PREMISE

House Number: 8 West Street: Melrose St

Town/City: Chevy Chase MD 20815 Nearest Cross Street: Laurel Pkwy.

Lot: 4 Block: 43 Subdivision: DISTRICT 07 - SUB 009 TAX CLASS R-019.

Liber: _____ Folio: _____ Parcel: 11,115 3 pgT

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CHECK ALL APPLICABLE:

☐ Construct ☐ Extend ☐ Alter/Renovate

☐ Move ☑ Install ☐ Wreck/Raze

☐ Revision ☐ Repair ☐ Revocable

CHECK ALL APPLICABLE:

☐ A/C ☐ Slab ☐ Room Addition ☐ Porch ☐ Deck ☐ Shed

☐ Solar ☐ Fireplace ☐ Woodburning Stove ☐ Single Family

☐ Fence/Wall (complete Section 4) ☐ Other: _____

1B. Construction cost estimate: $ $48,200

1C. If this is a revision of a previously approved active permit, see Permit # _____

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTEND/ADDITIONS

2A. Type of sewage disposal: 01 ☐ WSSC 02 ☐ Septic 03 ☐ Other: _____

2B. Type of water supply: 01 ☐ WSSC 02 ☐ Well 03 ☐ Other: _____

PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL

3A. Height _____ feet _____ inches

3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:

☐ On party line/property line ☐ Entirely on land of owner ☐ On public right of way/easement

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

Signature of owner or authorized agent

9/13/10
Date

Approved: _____ For Chairperson, Historic Preservation Commission

Disapproved: ✓ Signature: _____ Date: 10/21/10

Application/Permit No.: _____ Date Filed: _____ Date Issued: _____

Edit 6/21/99

SEE REVERSE SIDE FOR INSTRUCTIONS

THE FOLLOWING ITEMS MUST BE COMPLETED AND THE REQUIRED DOCUMENTS MUST ACCOMPANY THIS APPLICATION.

1. **WRITTEN DESCRIPTION OF PROJECT**

   a. Description of existing structure(s) and environmental setting, including their historical features and significance:

   REPLACE WINDOWS WITH HISTORICALLY CORRECT, ENERGY EFFICIENT WOOD WINDOWS MADE BY TRIMARK INC. IN SAME SIZE AS EXISTING WINDOWS
   NOTE. WOULD PREFER INTERIOR 7/8 GRIDS ONLY FOR MAINTENANCE ISSUES
   REPLACE FRENCH DOOR WITH TOP GRADE FIBERGLASS DOOR-THAT IS ARCHITECTURALLY CORRECT OF A WOOD DOOR. GLASS TO BE TEMPERED TO MEET BUILDING CODE AND HAVE LOW E & ARGON

   b. General description of project and its effect on the historic resource(s), the environmental setting, and, where applicable, the historic district:

   REPLACE SIDELIGHTS WITH SAME STYLE + DIMENSION BUT IN TEMPERED DUAL GLAZED GLASS WITH LOW E ARGON

2. **SITE PLAN** - SEE ATTACHED

   Site and environmental setting, drawn to scale. You may use your plat. Your site plan must include:

   a. the scale, north arrow, and date;

   b. dimensions of all existing and proposed structures; and

   c. site features such as walkways, driveways, fences, ponds, streams, trash dumpsters, mechanical equipment, and landscaping.

3. **PLANS AND ELEVATIONS**

   You must submit 2 copies of plans and elevations in a format no larger than 11" x 17". Plans on 8 1/2" x 11" paper are preferred.

   a. ***Schematic construction plans***, with marked dimensions, indicating location, size and general type of walls, window and door openings, and other fixed features of both the existing resource(s) and the proposed work.

   b. Elevations (facades), with marked dimensions, clearly indicating proposed work in relation to existing construction and, when appropriate, context. All materials and fixtures proposed for the exterior must be noted on the elevations drawings. An existing and a proposed elevation drawing of each facade affected by the proposed work is required.

4. **MATERIALS SPECIFICATIONS**

   General description of materials and manufactured items proposed for incorporation in the work of the project. This information may be included on your design drawings. WINDOWS IN WOOD WITH EXTERNAL 7/8 CONTOURED GRIDS ON INTERIOR OF HOME.

5. **PHOTOGRAPHS** FIBERGLASS DOOR IN SAME STYLE & DIMENSIONS AS EXISTING EXTERNAL GRIDS

   a. Clearly labeled photographic prints of each façade of existing resource, including details of the affected portions. All labels should be placed on the front of photographs.

   b. Clearly label photographic prints of the resource as viewed from the public right-of-way and of the adjoining properties. All labels should be placed on the front of photographs.

6. **TREE SURVEY**

   If you are proposing construction adjacent to or within the dripline of any tree 6" or larger in diameter (at approximately 4 feet above the ground), you must file an accurate tree survey identifying the size, location, and species of each tree of at least that dimension.

7. **ADDRESSES OF ADJACENT AND CONFRONTING PROPERTY OWNERS**

   For **ALL** projects, provide an accurate list of adjacent and confronting property owners (not tenants), including names, addresses, and zip codes. This list should include the owners of all lots or parcels which adjoin the parcel in question, as well as the owner(s) of lot(s) or parcel(s) which lie directly across the street/highway from the parcel in question. You can obtain this information from the Department of Assessments and Taxation, 51 Monroe Street, Rockville, (301/279-1355).

PLEASE PRINT (IN BLUE OR BLACK INK) OR TYPE THIS INFORMATION ON THE FOLLOWING PAGE.
PLEASE STAY WITHIN THE GUIDES OF THE TEMPLATE, AS THIS WILL BE PHOTOCOPIED DIRECTLY ONTO MAILING LABELS.

HISTORIC PRESERVATION COMMISSION OF MONTGOMERY COUNTY
8787 GEORGIA AVENUE
SILVER SPRING, MARYLAND 20910
301.563.3400

HPC Case No. 35/13-10U **(Historic Area Work Permit #548937)**

Received: September 14, 2010

Public Appearance: October 6, 2010
Before the Montgomery County Historic Preservation Commission

Historic Area Work Permit Application of Herbert W. Jacobs, Jr.
8 West Melrose Street, Chevy Chase

DECISION AND ORDER

The above captioned case having come before the Historic Preservation Commission for Montgomery County, Maryland (the "Commission"), pursuant to Chapter 24A of the Montgomery County Code ("County Code"), and the Commission having considered the testimony and evidence of record, it is therefore, this 6th day of October, 2010, found, determined, and ordered as follows:

BACKGROUND

On October 6, 2010 the Commission reviewed a Historic Area Work Permit (HAWP) application, submitted by Herbert W. Jacobs, Jr. ("the Applicant"), the owner of the subject property. The Applicant proposed the removal of 45 historic double hung wood windows from all four elevations (front, rear, left, and right sides) of the historic massing and one set of wood French doors from the front (west) elevation. The Applicant proposed the installation of replacement wood windows with simulated divided lights in the same locations as the existing windows and new fiberglass doors in the location of the French doors.

FINDINGS OF FACT

Based on the evidence of record, the Commission makes the following Findings of Fact:

1. In total, this resource's windows and doors comprise a character-defining feature that contributes to the historical and architectural significance of the resource and to the character of the historic district.
2. The application includes no evidence to indicate that the windows are in a deteriorated condition.
3. Due to the nature of the lot in relationship to the street network and the location and orientation of the house on the lot, each elevation of the house – and the windows and doors located therein – is readily visible from the public right-of-way.
4. The general review criteria established for the evaluation of the Historic Area Work Permits in section 24A-8 of the County Code and in the Secretary of the Interior's rehabilitation standards require the preservation of character-defining features where practicable.

5. The resource is a Contributing Resource in the Chevy Chase Village Historic District.
6. The district-specific review criteria adopted for the evaluation of Historic Area Work Permits for resources within the Chevy Chase Village Historic District require that the Commission exercise "Moderate Scrutiny" in the evaluation of proposals to replace windows visible from the public right-of-way.
7. The district-specific review criteria adopted for Chevy Chase Village encourage the use of "compatible exterior storm windows."
8. Although "Moderate Scrutiny" standard allows the use of compatible new materials in certain circumstances, the replacement of character-defining true-divided light windows with simulated-divided light windows is not compatible and is not a treatment that would contribute to the preservation of the integrity of the resource, as is required under the definition of "Moderate Scrutiny."
9. The application of the review criteria in evaluating the evidence submitted for this proposal is consistent with the "Moderate Scrutiny" standard required by the Chevy Chase Village design criteria.
10. The Staff Report prepared for the Historic Area Work Permit Application, #548937, recommended denial of the application. The Applicant did not agree with the staff recommendation.

CONCLUSIONS OF LAW

Accordingly, based upon a full and fair consideration of the evidence, the Commission concludes that:

1. Under Chapter 24A of the Montgomery County Code, the owners of the subject property (8 West Melrose Street, Chevy Chase), located within the Chevy Chase Village Master Plan Historic District #35/13, are required to obtain a Historic Area Work Permit pursuant to the provisions of this chapter before constructing on or in any manner modifying the exterior features or environmental setting of the subject property.

2. Chapter 24A of the Montgomery County Code and Historic Preservation Commission Rules, Guidelines, and Procedures (Regulation No. 27-97) (the "Regulations") establish the process by which a property owner shall seek approval for proposed work in designated historic districts and the criteria the HPC uses in the review of Historic Area Work Permits.

3. Section 1.5 (a) of the Regulations establishes that "[t]he Commission shall be guided in their review of Historic Area Work Permit applications by: (1) The criteria in Section 24A-8; (2) The Secretary of the Interior's Standards and Guidelines for Rehabilitation; (3) Pertinent guidance in applicable master plans. . . . ; (4) Pertinent guidance in historic site or historic district-specific studies."

4. The Commission found that this proposal was inconsistent with the Secretary of the Interior's Standards and Guidelines for Rehabilitation, Standard #2 which states: "The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided."

5. The Commission found, in applying "Moderate Scrutiny" as required by the Chevy Chase Village district-specific review criteria, that the proposed window and door replacement was inconsistent with the Chevy Chase Village review criteria.

6. The Commission found that that the Applicant failed to establish that the project was consistent with Section 24A-8(b)(1) and (2), concluding that the installation of replacement windows would substantially alter the exterior features of a historic resource within an historic district and that the proposal would be incompatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located; and would be detrimental thereto or to the achievement of the purposes of this chapter.

7. The Applicant did not present sufficient evidence to persuade the Commission to find that the proposal would "enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located," as per Section 24A-8(b)(3); that any "unsafe conditions or health hazards would be remedied" as per Section 24A-8(b)(4); that "[t]he proposal is necessary in order that the owner of the subject property not be deprived of reasonable use of the property or suffer undue hardship as per Section 24A-8(b)(5); that "the general public welfare is better served by granting the permit" as per Section 24A-8(b)(6); or that the provisions of Section 24A-8(c) applied in this case.

8. The Commission found that this proposal "would be inappropriate, inconsistent with or detrimental to the preservation, enhancement or ultimate protection of the historic site or historic resource within an historic district," Section 24A-8(a).

9. The Commission voted eight-zero, with Commissioner Jester absent, in support of the motion to deny the application, consistent with Section 24A-8(a).

ORDER

The Historic Area Work Permit application submitted by Herbert Jacobs, Jr. to remove 45 windows and one set of doors from the historic massing and install replacement windows and doors in the same location is denied.

If any party is aggrieved by the decision of the Commission, pursuant to Section 24A-7(h) of the Montgomery County Code, an appeal may be filed within thirty (30) days with the Board of Appeals, which will review the Commission's decision *de novo*. The Board of Appeals has full and exclusive authority to hear and decide all appeals taken from the decision of the Commission. The Board of Appeals has the authority to affirm, modify, or reverse the order or decision of the Commission.

AF

Thomas Jester, Chairman
Montgomery County Historic Preservation Commission

10/21/10
Date

Fothergill, Anne

From: Bourke, Tom (Winchester Homes, Inc.)(Tom) [tom.bourke@whihomes.com]
Sent: Wednesday, October 06, 2010 2:25 PM
To: Fothergill, Anne; Manarolla, Kevin; Whipple, Scott; Silver, Joshua
Cc: Bob Elliott; ChCh Village file (CCV@montgomerycountymd.gov); FeldmanGS@aol.com; Jacobs - Eph's daughter (acjdoe@gmail.com); Marsh, Joan (r.marshes@gmail.com); Stephens, Betsy; Wellington, P. (ccv)
Subject: LAP comments for 8 W Melrose

The following are the comments by the LAP for items before the HPC on 10/6/10:

Case I-E
8 W Melrose St
Contributing Resource
Applicant is proposing replacement of 45 windows/doors; Staff Recommendation: disapproval.

The LAP would hope that some form of compromise should be possible with the applicant and HPC.

If we are reading the application correctly, the applicant is proposing replacement of all the older windows in the house with "simulated divided lite" windows and they would prefer the snap-in grille be on the inside. If that is indeed the case, then we can understand Staff's concerns, especially on the front of the house. The LAP feels that new windows with some form of exterior grille is appropriate on the rear of the house – where "lenient scrutiny" is allowable. A window design which is closer to the original window would be more appropriate on the front. The letter from the window supplier refers to successful installations in historic districts; so hopefully there is a way to demonstrate a window which is compatible with the historic district.
We would also like to stress to the Staff and HPC, that the Guidelines call for 'lenient' review of elevations not visible from the street, and we would hope that they can accommodate this. Numerous members of the LAP also expressed concern that we are entering an era of increasing need for energy efficient solutions, and where possible "lenient review" should allow residents to pursue this. We also have no particular concern with the replacement French doors since they are not on the front of the house and are doubtless more energy efficient.

In addition, Helene Sacks was submitted by the Chevy Chase Village Board of Managers in July as a new member of our LAP and we would appreciate the HPC approval.

Submitted on behalf of the LAP by
Tom Bourke, Chair

Ms Anne Fothergill
Montgomery County Historic Preservation Commission
Re: Property at 8 W. Melrose, Chevy Chase. Owner Herbert Jacobs

Dear Ms Fothergill:

In regard to some of your questions, yes there are 45 windows, a set of French doors and the sidelight and the transom over the door.

There are 3 windows in the living room of the house that face the side street and 4 windows in the back of the living room that face the back of the house.

There are 2 bath windows and another window in a small room that face the back of the house.

There are 5 windows in the dining room that face the side street.
There are 3 windows off the little kitchen and one in the kitchen that faces the back and side yard.

There are a total of 19 windows on the 1st floor. All the rest are on the 2nd floor.

There are 2 windows on the second floor Master Bedroom that face Melrose. These are the only windows facing the main street of Melrose. Two other windows in the Master Bedroom face the rear.

There are 2 windows over the garage that faces the side street. There are 4 windows that face the side street, 2 windows in the stairwell and 2 windows each in 2 bedrooms that face the side street. One window on the side that faces the garage.

All the stairwell windows will have tempered glass to meet code.

There are 3 bathrooms with one window each that face the rear of the house. There are 8 other windows in bedrooms and the apartment that face the rear and the far side of the house.

All of the windows will replicate the grid pattern of the existing windows. 2 over 2, 6/6, 9/9 and 4/4. The windows will have a U value of .29

We are looking to replace the existing sashes, rails and frames and leave in place the existing window jamb. We also will leave in place the existing brick mold thereby keeping the original features of the windows. The owner strongly feels that this is more in keeping with the architectural integrity of the house that installing aluminum frame storm windows over the existing windows giving a U value of.50. The NFRC tells us that for every point you drop there is a 3% saving in energy. In dropping the U value 21 points, there is an energy saving of over 60%!!

The windows will be painted wood and to all appearances replicate the existing windows. The windows are made by Trimline and they are approved by the National Park Service as Certified Rehabilitation and we use them extensively in Historic Districts.

The French doors in the front would be replaced with a high end fiberglass that is architecturally correct to wood doors. The size of the doors would be the same and the grid and light pattern would be the same and would be painted white as the existing doors. This will give the owner an R15 on the door, whereas a wood door has an R value of 1& ¾. The glass will function as a high performing energy saving window with Low E and Argon. The sidelights and the transom would be the same size and would also be direct set. The glass will be tempered to meet code, have the Low E and Argon and function as a high performing energy saving window. All appearances would remain the same.

I hope I have answered all of your questions and Mr. Jacobs and I look forward to meeting the Board next Wednesday.

Thank you so much.

Sincerely,

Sjaunna Cunningham
Wheaton Door & Window
Cell 845-775-8695

Fothergill, Anne

From: Sjaunna Garfinkel [sjaunna@gmail.com]
Sent: Tuesday, October 05, 2010 3:05 PM
To: Fothergill, Anne
Subject: Re: Herbert Jacobs Chevy Chase

Hi Anne:

Thanks for forwarding to me all that you have.

I confess to being confused. In looking through all the papers, it seem like we both have taken pictures of all the windows. I do not know what pictures I could take that would be different from what is already there.

Mr Jacobs is not looking to replace his windows for the sole reason of energy efficiency. I am sorry if that was the impression we gave in the application. So many of his windows do not open or stay open and are very loose in their frames. In view of the severe winds we have experienced this summer, he is concerned with some of the windows blowing out. Mr Jacobs does not want to caulk the sashes in the frames because he would not be able to open the windows then. That would be a hazard in case of fire. He also feels that his house looks better with just the windows than with aluminum storm windows.

Another option we can look at is repairing the frames, keeping the jambs and just replacing the sashes so the windows fit tightly and work properly. I would be virtually impossible that anyone could tell the difference from the street. Having the sash with the same grid pattern and painted white as all the rest; all appearances remain the same. If fact we have done that in DC many times. The size of the window remains the same, the material for the window remains the same, the grid pattern remains the same, the brickmold, jamb and the frame remain the same.

The sidelights around the door and the glass in the door is not tempered glass. As you know that is code and again we are not looking to change size or shape or color.

Also is the rear of the building that critical? It appears from the information that you sent that replacing the sashes is more of an option to the rear of the house.

Mr Jacobs is not looking to spend a great deal of money on just a whim. His reasons are sufficiently compelling to make just a decision.

Thank you,

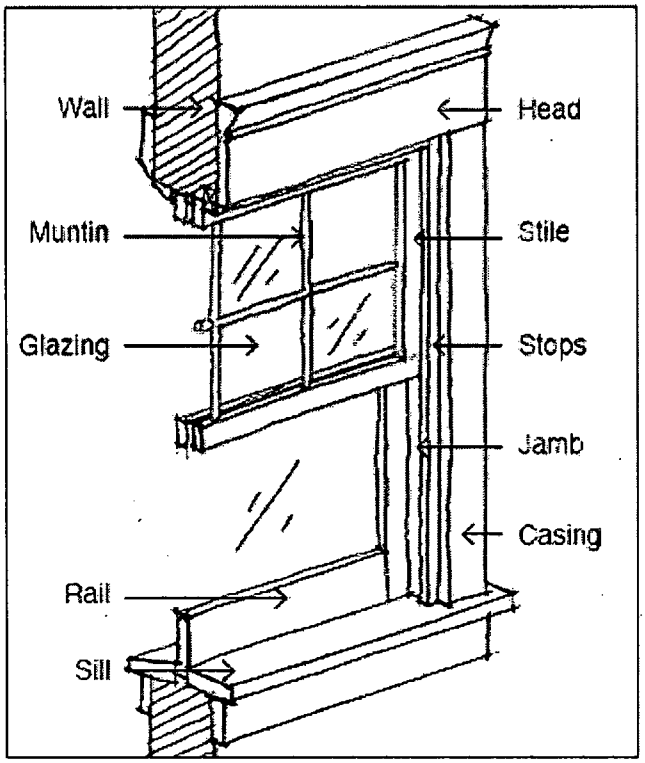
Sjaunna

On Tue, Oct 5, 2010 at 11:13 AM, Fothergill, Anne <Anne.Fothergill@mncppc-mc.org> wrote:
> Any luck getting photos of the windows? Will you be emailing them to
> me or bringing them to the meeting?
>
> Also, attached please find the staff report if you didn't get a copy
> yet. I will also be forwarding the comments from the Local Advisory
> Panel once I receive them.
>
> thanks, Anne
>
>

> -----Original Message-----
> From: sjaunna@gmail.com [mailto:sjaunna@gmail.com]
> Sent: Friday, October 01, 2010 9:17 AM
> To: Fothergill, Anne
> Subject: Re: Herbert Jacobs Chevy Chase
>
> Can I take the pictures from the inside? I don't think I can get pics
> of some parts of the rear except from inside the neighbors house.
> ------Original Message------
> From: Fothergill, Anne
> To: Sjaunna Garfinkel
> Subject: RE: Herbert Jacobs Chevy Chase
> Sent: Oct 1, 2010 9:11 AM
>
> Also, the HPC definitely might ask for photos of every window that is
> proposed for replacement so if you can email them to me that would be
> great. It was hard for me to get photos of the ones on the rear
> elevation because of the fence and the angle. If you aren't able to
> send them to me before the meeting you can bring them with you on a CD
> or jump drive.
>
> thanks, Anne
>
> -----Original Message-----
> From: Sjaunna Garfinkel [mailto:sjaunna@gmail.com]
> Sent: Thursday, September 30, 2010 3:27 PM
> To: Fothergill, Anne
> Subject: Herbert Jacobs Chevy Chase
>
> Hi Anne:
>
> Please find attached a note that I hope answers all of your questions.
> If you need pictures of each and evrey window, please let me know.
>
> Thanks so much for your attention to this matter.
>
> Sincerely,
>
> Sjaunna
> Wheaton Door & Window
> Cell 845-775-8695
>
>
>
>
> Sent on the Sprint(r) Now Network from my BlackBerry(r)
>
>

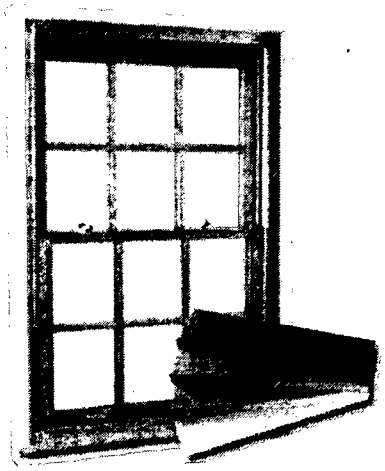
Window Sash

A window sash is a framework of operable or fixed panels or "sashes." These form a frame to hold window panes together which are often separated from one another by muntins. Reference the sketch below for a typical window sash arrangement



Typical double-hung sash window components in Montgomery County.

Clad Wood Replacement Double Hung Windows



Legends DR200 shown in optional oak interior with simulated divided lite and polished brass hardware.

All Trimline windows are made of the finest quality solid western pine ready for paint or stain and are also available in select hardwoods of oak, cherry and mahogany. All hardwoods used in the window are of actual solid stock not thin veneers or laminates.

Energy-Tight Windows for comfortable living and fuel efficiency

Choice of Jamb Style

The TrimLine DR200 is constructed with a 3 ¼" jamb for a retrofit installation into the sash pocket of existing wood window frames. Virtually identical to a vinyl window installation, the DR200 is truly a replacement window.

The TrimLine DR300 is made with a 4 9/16" jamb for replacement applications requiring complete tear-outs down to a frame or masonary opening. With a snap-in nailing fin, the DR300 is ready for new construction.

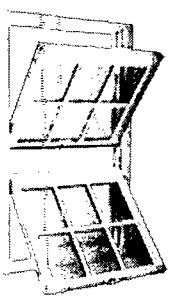
Both the DR200 and DR300 can be furnished with factory applied extension jambs making it the ideal choice of window for either replacement/remodeling or new construction.

Enjoy the beauty and warmth of wood

- The insulating qualities of wood provides a positive thermal break and can be painted or stained.
- All wood parts are produced from the finest quality kiln dried select Western Pine and are treated with a water repellent preservative. Also available in Oak, Cherry, and Mahogany
- Maintenance free aluminum clad exterior is weather resistant. Does not require painting. Available in White, Bronze, Earthtone and Beige. Custom colors are also available.
- Decorative wood bead glazing provides a positive energy tight seal for the insulating glass.
- Fully weather-stripped to insure maximum comfort and low air infiltration.
- Thermally broken sill - TrimLine combines aluminum, wood and vinyl to provide an aesthetically pleasing energy efficient sill construction.
- Matching picture window - TrimLine provides a line of picture windows that matches the profiles of the DR200 and DR300 and enables you to mull window combinations with matching sight lines.
- Choice of screens - standard half or optional full screens.
- Locks are available in bright brass, white or bronze. Two dual action cam locks are used on windows over 28" wide.

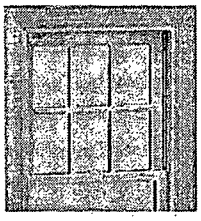
Please click here for window options
Please click here for panning options

Easy Tilt System
Unlike "ordinary" wood windows which employ awkward compression tilt systems, Trimline's unique recessed tilt latch and tilt/take-out design allows for easy removal for cleaning or finishing while providing aesthetic appeal. Tilt latch is available in white or beige color.

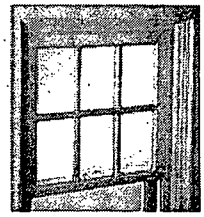


Both upper and lower sash lock in place when tilted in for safe easy cleaning or removal Locking balance shoes and non-spread pivot bars hold the tilted sash firmly in place for safer operation. Block and tackle balances never need adjustment!

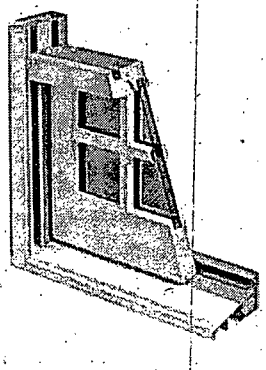
Grille Options



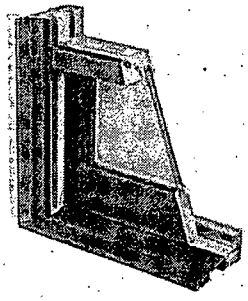
Aesthetically appealing removable wooden grilles in 5/8" or 7/8" widths that can be painted or stained or 5/8" maintenance free in-glass aluminum muntins or combination wood and aluminum are also available.



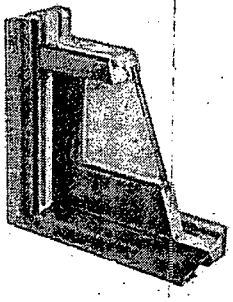
For achieving that authentic divided lite look, Simulated Divided lites with permanent 7/8" wooden interior grille and permanent exterior muntin are also available.



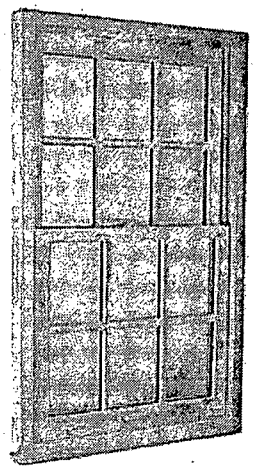
Legends Series DR200 clad replacement double hung with 3 1/4" jamb shown with applied simulated divided lite grids.



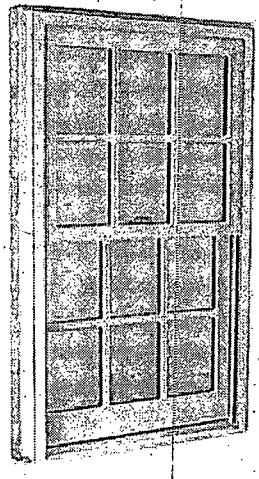
Legends Series DR300 clad double hung with 4 9/16" jamb with snap-in nailing flange for new construction.



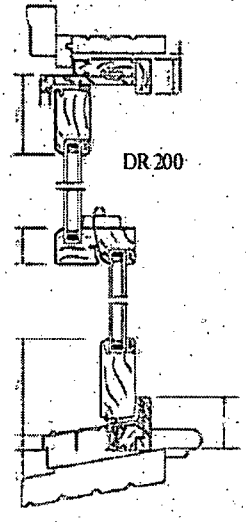
Legends Series DR300 clad 4 9/16" full jamb clad double hung available in standard sizes for new construction or custom sizes for remodeling shown in bronze clad finish.



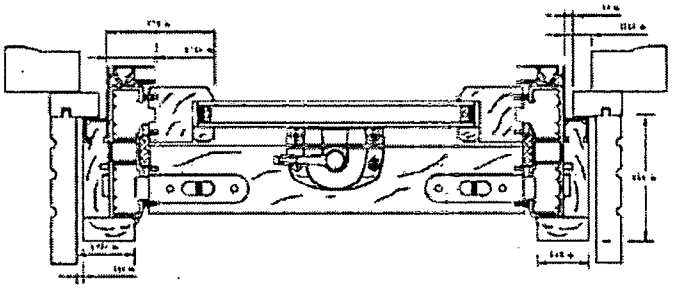
Legends Series DR200 shown with 7/8" simulated divided lite muntins in western pine, permanently applied 6/6 pattern (also available in removable style for easy cleaning)



Exterior View



DR200



Fothergill, Anne

From: Thomas Jester [tjester@quinnevans.com]
Sent: Sunday, October 03, 2010 7:42 PM
To: Whipple, Scott; Leslie Miles Topside
Cc: Fothergill, Anne
Subject: RE: Case I-E 8 West Melrose

Scott,

I reviewed application for window and door replacement at 8 West Melrose, and I concur with the staff report that the HAWP, as submitted, should be denied. Under the moderate scrutiny criteria that must be applied to this project, it would be inappropriate to remove and replace a significant character-defining feature that is not documented as "beyond repair." The criteria states that "preserving the integrity of the resource is taken into account," and I believe that this speaks directly to the requirement to retain original features such as windows.
I think staff is on the right track to possibly permit some replacements on the least visible elevations. Usually this means the rear, but I realize this property has elevations that are visible from the public right-of-way. Without seeing the slides, it hard for me to say at this point how lenient I would be on this aspect of the application, but offering something makes it easier for us to defend what we really care about preserving.

For NPS tax credit review, window replacement is permitted only after the windows are documented as beyond repair. If that initial threshold is met, the new windows must match the historic windows in appearance, design, profile, etc. Sometimes a substitute material is permitted, but not typically for residential projects where the windows are visible at close range (where material difference are more discernable).

The application does not state whether the proposed replacement window system is a window unit, or a sash replacement. If it is a new window and frame set inside the existing opening, the proportions would be drastically changed. If the proposal is for the Trimline "sash pac," it may or may not be a system that adequately matches the historic windows.
Don't be fooled by the "NPS certification" language referenced in the TrimLine Windows literature. The TrimLine windows may have been approved for a tax credit project, but that doesn't mean they are an appropriate/accurate replacement for this case or every situation. The NPS typically requires detail drawings of the existing and proposed windows (head, jamb, check rail, and muntins) to evaluate whether the replacement is a suitable match in design profiles and sightlines. I believe we should be doing the same.

Even though I am only looking at copies of the photographs submitted, I highly doubt the owner will be able to make a case that the existing historic windows are deteriorated beyond repair, and I recommend that the HPC stick to its charge of protecting the character-defining features of this property. Energy efficiency can be accomplished without replacing the windows (and much more cost effectively), and we should be swayed by false claims that the performance of the new windows will be improved greatly, if at all. Remember also that preservation is part of sustainability, and the life cycle argument points are also well directed to the applicant.

Hope this helps. Call if you want to discuss further.

Tom

Quinn Evans Architects
Thomas C. Jester, AIA, LEED AP

d 202 591 2537

-----Original Message-----
From: Whipple, Scott [mailto:Scott.Whipple@mncppc-mc.org]
Sent: Friday, October 01, 2010 11:30 AM
To: Thomas Jester; Leslie Miles Topside
Cc: Fothergill, Anne
Subject: FW: Case I-E 8 West Melrose

Tom -- If you have a chance after you receive your staff packet, can you provide me with your thoughts on the CCV window replacement application.
Specifically, let me know if you differ from the staff recommendation or have thoughts on alternative apprcaches to resolving this application.
Also, as the Applicant has now provided materials referring to NPS 'certification', I am wondering if you can address that issue -- and perhaps, NPS's approach to large, institutional rehab projects vs.
smaller, homeowner scale projects. Thanks.

-----Original Message-----
From: Fothergill, Anne
Sent: Friday, October 01, 2010 9:25 AM
Subject: Case I-E 8 West Melrose

Attached please find additional information for Case I-E (8 West Melrose) that the applicant's agent did not provide in time to be included in the staff report. You should be getting the staff report packet in the mail today and please add this document to the report for I-E.

Have a nice weekend and we will see you Wednesday evening.

thanks, Anne

-----Original Message-----
From: Sjaunna Garfinkel [mailto:sjaunna@gmail.com]
Sent: Thursday, September 30, 2010 3:27 PM
To: Fothergill, Anne
Subject: Herbert Jacobs Chevy Chase

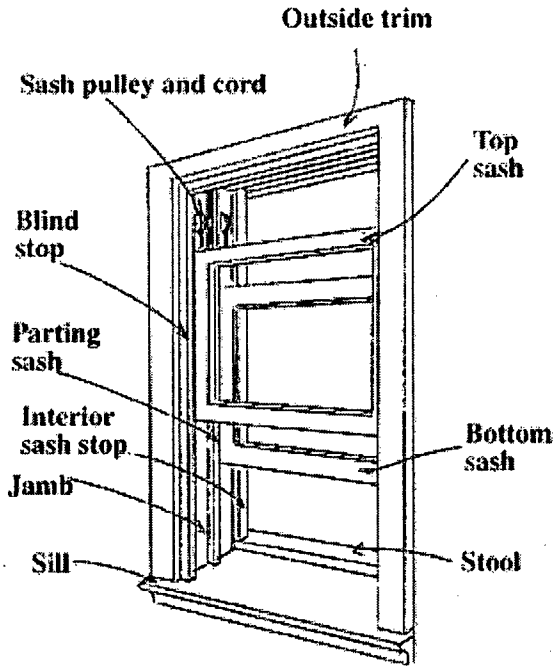
Hi Anne:

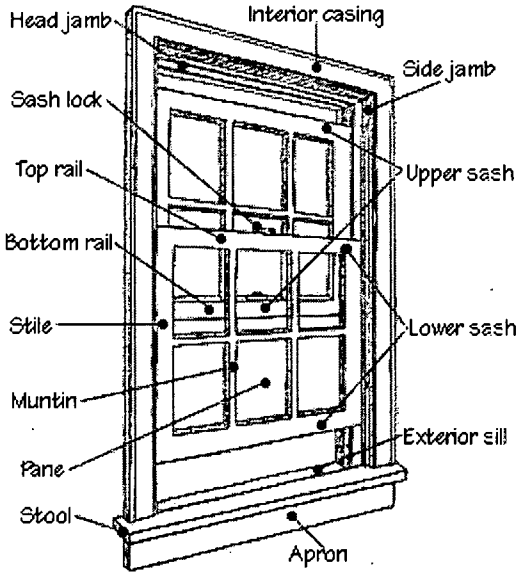
Please find attached a note that I hope answers all of your questions.
If you need pictures of each and evrey window, please let me know.

Thanks so much for your attention to this matter.

Sincerely,

Sjaunna
Wheaton Door & Window
Cell 845-775-8695


Outside trim
Sash pulley and cord
Top sash
Blind stop
Parting sash
Interior sash stop
Jamb
Sill
Bottom sash
Stool


Head jamb
Interior casing
Side jamb
Sash lock
Top rail
Upper sash
Bottom rail
Stile
Lower sash
Muntin
Exterior sill
Pane
Stool
Apron

MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION
STAFF REPORT

Address:	8 West Melrose Street, Chevy Chase	**Meeting Date:**	10/6/10
Resource:	Contributing Resource Chevy Chase Village Historic District	**Report Date:**	9/29/10
Applicant:	Herbert Jacobs Jr.	**Public Notice:**	9/22/10
Review:	HAWP	**Tax Credit:**	None
Case Number:	35/13-10U	**Staff:**	Anne Fothergill

PROPOSAL: Window and door replacement

STAFF RECOMMENDATION

Staff recommends that the HPC deny this application.

PROPERTY DESCRIPTION

SIGNIFICANCE: Contributing Resource within the Chevy Chase Village Historic District
STYLE: Craftsman
DATE: 1911

PROPOSAL

The applicant is proposing to replace 45 true divided light double hung wood windows and one set of French doors. The applicant is proposing the window replacement for increased energy efficiency not because the windows are in poor condition. Some of the windows in the house are not single pane true divided light windows and those windows are not proposed for replacement.

Specifically, the applicant is proposing to remove:

West/front elevation (facing Lenox Parkway):
10 windows on the second floor and 8 windows on the first floor
the French doors and sidelights in the arched opening at left side; this was originally an open porch

North/left side elevation (facing Melrose Street):
3 windows on the second floor

South/right side elevation (visible from Lenox Parkway):
1 window on the second floor

East/rear elevation (facing right side of adjacent house):
11 windows on the second floor and 12 windows on the first floor

The applicant is proposing to replace the windows with dual glazed simulated divided light double hung wood windows to fit in the existing openings (see Circle 17). The proposed replacement French doors are fiberglass with simulated divided lights; no additional specifications were provided for the replacement French doors.

APPLICABLE GUIDELINES

When reviewing alterations and new construction within the Chevy Chase Village Historic District several documents are to be utilized as guidelines to assist the Commission in developing their decision. These documents, incorporated in their entirety by reference herein, include the historic preservation review guidelines in the approved and adopted amendment for the *Chevy Chase Village Historic District* (*Guidelines*), *Montgomery County Code Chapter 24A* (*Chapter 24A*), and the *Secretary of the Interior's Standards for Rehabilitation (Standards).* The pertinent information in these documents is outlined below.

Chevy Chase Village Historic District

The Guidelines define a Contributing Resource as "A resource which contributes to the overall character of the district and its streetscape, but which is of secondary architectural and historical significance. A resource may be classified as contributing if it is a common or ubiquitous example of an architectural style that is important to the historic district, or if it was an outstanding resource that, while still identifiable as a specific architectural style, has lost some degree of its architectural integrity due to alterations. Contributing resources add to the overall streetscape due to their size, scale, and architectural character."

The *Guidelines* break down specific projects into three levels of review - Lenient, Moderate and Strict Scrutiny.

"Lenient Scrutiny" means that the emphasis of the review should be on issues of general massing and scale, and compatibility with the surrounding streetscape, and should allow for a very liberal interpretation of preservation rules. Most changes should be permitted unless there are major problems with massing, scale or compatibility.

"**Moderate Scrutiny**" involves a higher standard of review than "lenient scrutiny." Besides issues of massing, scale and compatibility, preserving the integrity of the resource is taken into account. Alterations should be designed so that the altered structure still contributes to the district. Use of compatible new materials, rather than the original building materials, should be permitted. Planned changes should be compatible with the structure's existing design, but should not be required to replicate its architectural style.

"**Strict Scrutiny**" means that the planned changes should be reviewed to insure that the integrity of the significant exterior architectural or landscaping features and details is not compromised. However, strict scrutiny should not be "strict in theory but fatal in fact" i.e. it does not mean that there can be no changes but simply that the proposed changes should be reviewed with extra care.

Specifically, the *Guidelines* state:

- <u>*Windows*</u> (including window replacement) should be subject to moderate scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not. For outstanding resources, they should be subject to strict scrutiny. Addition of compatible exterior storm windows should be encouraged, whether visible from the public right-of-way or not. Vinyl and aluminum windows (other than storm windows) should be discouraged. Addition of security bars should be subject to lenient scrutiny, whether visible from the public right-of-way or not.

Montgomery County Code; Chapter 24A-8:

(a) The commission shall instruct the director to deny a permit if it finds, based on the evidence and information presented to or before the commission that the alteration for which the permit is sought would be inappropriate, inconsistent with or detrimental to the preservation, enhancement or

ultimate protection of the historic site or historic resource within an historic district, and to the purposes of this chapter.

(b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to insure conformity with the purposes and requirements of this chapter, if it finds that:

(1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or

(2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or

(3) The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located; or

(4) The proposal is necessary in order that unsafe conditions or health hazards be remedied; or

(5) The proposal is necessary in order that the owner of the subject property not be deprived of reasonable use of the property or suffer undue hardship; or

(6) In balancing the interests of the public in preserving the historic site or historic resource located within an historic district, with the interests of the public from the use and benefit of the alternative proposal, the general public welfare is better served by granting the permit.

(c) It is not the intent of this chapter to limit new construction, alteration or repairs to any one period or architectural style.

(d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the historic or architectural value of surrounding historic resources or would impair the character of the historic district. (Ord. No. 9-4, § 1; Ord. No. 11-59.)

Secretary of the Interior's Standards for Rehabilitation:

2: The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

STAFF DISCUSSION

Widely adopted historic preservation best practice finds that historic windows and doors are often significant character-defining features of a structure. They help define a building's scale and provide visual interest to the composition of an individual facade. By the nature of their construction and components, they help define a structure through way they are set into the building wall, the way the windows and their surrounding casings and sash components relate to each other and the entire façade. Taken together, these elements contribute to the character of the building.

The Secretary of the Interior's *Standards for Rehabilitation* recommend:

- preserving windows—and their functional and decorative features—that are important in defining the overall historic character of the building.
- making windows weathertight by recaulking and replacing or installing weatherstripping. These actions also improve thermal efficiency.

The Secretary of the Interior's *Standards for Rehabilitation* recommend against:

- removing or radically changing windows which are important in defining the historic

character of the building so that, as a result, the character is diminished.

- changing the historic appearance of windows through the use of inappropriate designs, materials, finished, or colors which noticeably change the sash, depth of reveal, and muntin configuration; the reflectivity and color of the glazing; or the appearance of the frame
- replacing windows solely because of peeling paint, broken glass, stuck sash, and high air infiltration. These conditions, in themselves are no indication that windows are beyond repair.
- replacing historic multi-paned sash with new thermal sash utilizing false muntins.

Staff encourages applicants to consider alternative treatments prior to proposing the replacement of historic windows and doors. In certain circumstances, such as when a window or door has deteriorated beyond repair or a window is not a character-defining feature, window replacement may be warranted.

Historic windows are often thought to be energy inefficient. However, historic windows, when properly weather-stripped and caulked, may perform on par with modern, double-glazed windows with the addition of an appropriate storm window. Moreover, studies indicate that the period to recapture the initial investment on replacement windows through energy savings is longer than the warranty or average lifespan of the replacement window. Alternative approaches to energy savings, such as installation of storm windows and weather-stripping, insulation, or high-efficiency heating systems, have been found to offer a more rapid return on initial investment than window replacement. According to their web site, the U.S. Department of Energy notes that 31% of air infiltration is at floors, walls, and ceilings, 14% at fireplaces, and only 10% at windows.

In addition to the benefits of preserving character-defining features and historic building materials, there are concerns over the environmental impacts of window replacement. A historic wood window is made of higher quality old growth wood than today's wood windows and will last longer than a replacement wood window. Historic windows have embodied energy, which is the amount of energy that was used to create the windows. Preserving historic windows retains this energy, eliminates the need to produce new windows, and reduces the amount of material placed in landfills.

The Applicant has expressed a concern for energy efficiency. Staff provided the applicant with information about methods for increasing energy efficiency in historic houses. See Circles 20-43 for some of the resource materials provided to the Applicant. The applicant previously had storm windows on the house and they could be reinstalled.

Staff findings:

Staff has reviewed the application and made the following findings:

1. In total, this resource's windows and doors comprise a character-defining feature that contributes to the historic and architectural significance of the resource and to the character of the historic district.
2. The application includes no evidence to indicate that the windows are in a deteriorated condition.
3. Literature has been produced establishing that historic windows can be made energy efficient, while retaining their historical integrity, through relatively minor and cost-effective means.
4. Due to the nature of the lot in relationship to the street network and the location and orientation of the house on the lot, each elevation of the house – and the windows and doors located therein – is readily visible from the public right-of-way.
5. The general review criteria established for the evaluation of the Historic Area Work Permits in

section 24A-8 of the County Code and in the Secretary of the Interior's rehabilitation standards (see above) require the preservation of character-defining features where practicable.

6. The resource is a Contributing Resource in the Chevy Chase Village Historic District.
7. The district-specific review criteria adopted for the evaluation of Historic Area Work Permits for resources within the Chevy Chase Village Historic District require that the Commission exercise "Moderate Scrutiny" in the evaluation of proposals to replace windows visible from the public right-of-way.
8. The district-specific review criteria adopted for Chevy Chase Village encourage the use of "compatible exterior storm windows."
9. Although "Moderate Scrutiny" standard allows the use of compatible new materials in certain circumstances, the replacement of character-defining true-divided light windows with simulated-divided light windows is not compatible and is not a treatment that would contribute to the preservation of the integrity of the resource, as is required under the definition of "Moderate Scrutiny."
10. The application of the review criteria in evaluating the evidence submitted for this proposal is consistent with the "Moderate Scrutiny" standard required by the Chevy Chase Village design criteria.

Although each of the resource's elevations is visible from the public right-of-way, staff suggests that with additional evidence submitted for the record, the HPC may find, in applying the "Moderate Scrutiny" review criteria required by the Chevy Chase Village district-specific guidelines, that it is appropriate to approve the replacement of certain windows or doors in less visible locations. Additionally, the HPC may allow more flexibility to changes to the doors and sidelights in the enclosed side porch since it has already been altered from its original open porch. However, based on its review of the evidence submitted with the application and consistent with the findings above, staff recommends the denial of this application for the replacement of 45 windows and one set of French doors as submitted.

Under Chapter 24A-8(a) of the County Code, the HPC can deny an application if it finds, based on the evidence and information presented, that the proposed alteration would be inappropriate, inconsistent with or detrimental to the preservation, enhancement or ultimate protection of the historic resource within an historic district. The wholesale replacement of a contributing resource's historic windows is inconsistent with the guidelines and is inappropriate, inconsistent with and detrimental to the preservation, enhancement and ultimate protection of this historic resource and the Chevy Chase Village historic district.

STAFF RECOMMENDATION

Staff recommends that, having found the application to be inconsistent with the historic preservation review guidelines in the approved and adopted amendment for the *Chevy Chase Village Historic District* and with the *Secretary of the Interior's Standards for Rehabilitation* #2, the Commission **deny** the HAWP application consistent with Chapter 24A-8(a).

[redacted]

DPS - #8

HISTORIC PRESERVATION COMMISSION
301/563-3400

APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Person: _____

Daytime Phone No.: 301-654-1830

Tax Account No.: 00456115

Name of Property Owner: JACOBS, HERBERT W. JR. & ALTR Daytime Phone No.: _____

Address: 8 West Melrose St Chevy Chase MD 20815
Street Number City State Zip Code

Contractor: Wheaton Door & Window Phone No.: 301-949-8951

Contractor Registration No.: MHIC. 125679

Agent for Owner: Sjaunna Cunningham Daytime Phone No.: Cell 845-775-8695

LOCATION OF BUILDING/PREMISE

House Number: 8 West Street: Melrose St

Town/City: Chevy Chase MD 20815 Nearest Cross Street: Laurel Pkwy.

Lot: 4 Block: 43 Subdivision: DISTRICT 07 - SUB 009 TAX CLASS R-019.

Liber: _____ Folio: _____ Parcel: 11, 1153 pgT

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CHECK ALL APPLICABLE:

☐ Construct ☐ Extend ☐ Alter/Renovate

☐ Move ☑ Install ☐ Wreck/Raze

☐ Revision ☐ Repair ☐ Revocable

CHECK ALL APPLICABLE:

☐ A/C ☐ Slab ☐ Room Addition ☐ Porch ☐ Deck ☐ Shed

☐ Solar ☐ Fireplace ☐ Woodburning Stove ☐ Single Family

☐ Fence/Wall (complete Section 4) ☐ Other: _____

1B. Construction cost estimate: $ $48,200

1C. If this is a revision of a previously approved active permit, see Permit # _____

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTEND/ADDITIONS

2A. Type of sewage disposal: 01 ☐ WSSC 02 ☐ Septic 03 ☐ Other: _____

2B. Type of water supply: 01 ☐ WSSC 02 ☐ Well 03 ☐ Other: _____

PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL

3A. Height _____ feet _____ inches

3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:

☐ On party line/property line ☐ Entirely on land of owner ☐ On public right of way/easement

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

[signature] 9/13/10
Signature of owner or authorized agent Date

Approved: _____ For Chairperson, Historic Preservation Commission

Disapproved: _____ Signature: _____ Date: _____

Application/Permit No.: _____ Date Filed: _____ Date Issued: _____

Edit 6/21/99

SEE REVERSE SIDE FOR INSTRUCTIONS

$48,200

(6)

THE FOLLOWING ITEMS MUST BE COMPLETED AND THE REQUIRED DOCUMENTS MUST ACCOMPANY THIS APPLICATION.

1. **WRITTEN DESCRIPTION OF PROJECT**

   a. Description of existing structure(s) and environmental setting, including their historical features and significance:

   REPLACE WINDOWS WITH HISTORICALLY CORRECT, ENERGY EFFICIENT WOOD WINDOWS MADE BY TRIMARC. IN SAME SIZE AS EXISTING WINDOWS
   NOTE - WOULD PREFER INTERIOR 7/8 GRIDS ONLY FOR MAINTENANCE ISSUES
   REPLACE FRENCH DOOR WITH TOP GRADE FIBARGLASS DOOR - THAT IS ARCHETECTURALLY CORRECT OF A WOOD DOOR. GLASS TO BE TEMPERED TO MEET BUILDING CODE AND HAVE LOW E N ARGON

   b. General description of project and its effect on the historic resource(s), the environmental setting, and, where applicable, the historic district:

   REPLACE SIDELIGHTS WITH SAME STYLE + DIMENSION BUT IN TEMPERED DUAL GLAZED GLASS WITH LOW E ARGON

2. **SITE PLAN** - SEE ATTACHED

   Site and environmental setting, drawn to scale. You may use your plat. Your site plan must include:

   a. the scale, north arrow, and date;

   b. dimensions of all existing and proposed structures; and

   c. site features such as walkways, driveways, fences, ponds, streams, trash dumpsters, mechanical equipment, and landscaping.

3. **PLANS AND ELEVATIONS**

   You must submit 2 copies of plans and elevations in a format no larger than 11" x 17". Plans on 8 1/2" x 11" paper are preferred.

   a. ***Schematic construction plans***, with marked dimensions, indicating location, size and general type of walls, window and door openings, and other fixed features of both the existing resource(s) and the proposed work.

   b. Elevations (facades), with marked dimensions, clearly indicating proposed work in relation to existing construction and, when appropriate, context. All materials and fixtures proposed for the exterior must be noted on the elevations drawings. An existing and a proposed elevation drawing of each facade affected by the proposed work is required.

4. **MATERIALS SPECIFICATIONS**

   General description of materials and manufactured items proposed for incorporation in the work of the project. This information may be included on your design drawings. WINDOWS IN WOOD WITH EXTERNAL 7/8 CONTOURED GRIDS ON INTERIOR OF HOME.

5. **PHOTOGRAPHS** FIBERGLASS DOOR IN SAME STYLE + DIMENSIONS AS EXISTING EXTERNAL GRIDS

   a. Clearly labeled photographic prints of each façade of existing resource, including details of the affected portions. All labels should be placed on the front of photographs.

   b. Clearly label photographic prints of the resource as viewed from the public right-of-way and of the adjoining properties. All labels should be placed on the front of photographs.

6. **TREE SURVEY**

   If you are proposing construction adjacent to or within the dripline of any tree 6" or larger in diameter (at approximately 4 feet above the ground), you must file an accurate tree survey identifying the size, location, and species of each tree of at least that dimension.

7. **ADDRESSES OF ADJACENT AND CONFRONTING PROPERTY OWNERS**

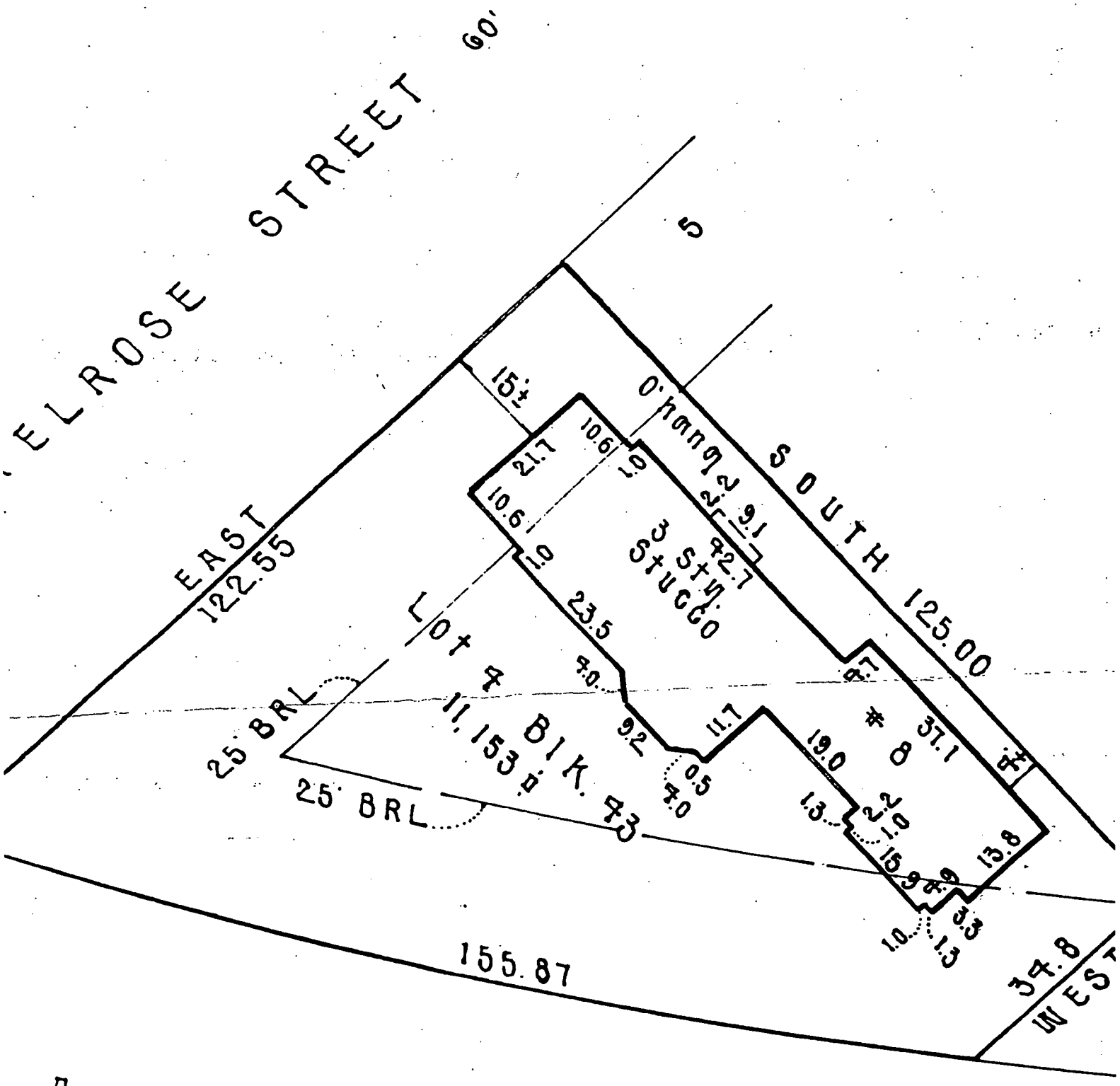
   For ALL projects, provide an accurate list of adjacent and confronting property owners (not tenants), including names, addresses, and zip codes. This list should include the owners of all lots or parcels which adjoin the parcel in question, as well as the owner(s) of lot(s) or parcel(s) which lie directly across the street/highway from the parcel in question. You can obtain this information from the Department of Assessments and Taxation, 51 Monroe Street, Rockville, (301/279-1355).

PLEASE PRINT (IN BLUE OR BLACK INK) OR TYPE THIS INFORMATION ON THE FOLLOWING PAGE.
PLEASE STAY WITHIN THE GUIDES OF THE TEMPLATE, AS THIS WILL BE PHOTOCOPIED DIRECTLY ONTO MAILING LABELS.

HAWP APPLICATION: MAILING ADDRESSES FOR NOTIFING
[Owner, Owner's Agent, Adjacent and Confronting Property Owners]

Owner's mailing address	**Owner's Agent's** mailing address
HERBERT JACOBS 8 WEST MELROSE ST Chevy Chase, MD - 20815	WHEATON DOOR - WINDOW 5640 D - SUNNYSIDE AVE Beltsville. MD - 20705
Adjacent and confronting Property Owners mailing addresses	
Nicholas Sv Lydia M - Calio 11 W. McROSE. ST Chevy Chase. MS - 20815	CARTER PERRY. 6. West McROSE ST Chevy Chase. MD - 20815
PAUL D: CAROL H. KATINAS 9 WEST McROSE ST Chevy Chase, MD 20815	WILLIAM BENNETT - ELAYNE BENNETT 4 LAUREL PK. Chevy Chase, MD - 20815
ANDREW B - ROXANNE M. STEINBERG 5 WEST LENOX ST Chevy Chase, MD 20815	RODNEY L. JANE C. JOYCE 10 LAUREL PKWY - Chevy Chase MD - 20815

for title purposes only – not to be used for determining property lines. Property corner Markers Not guarant



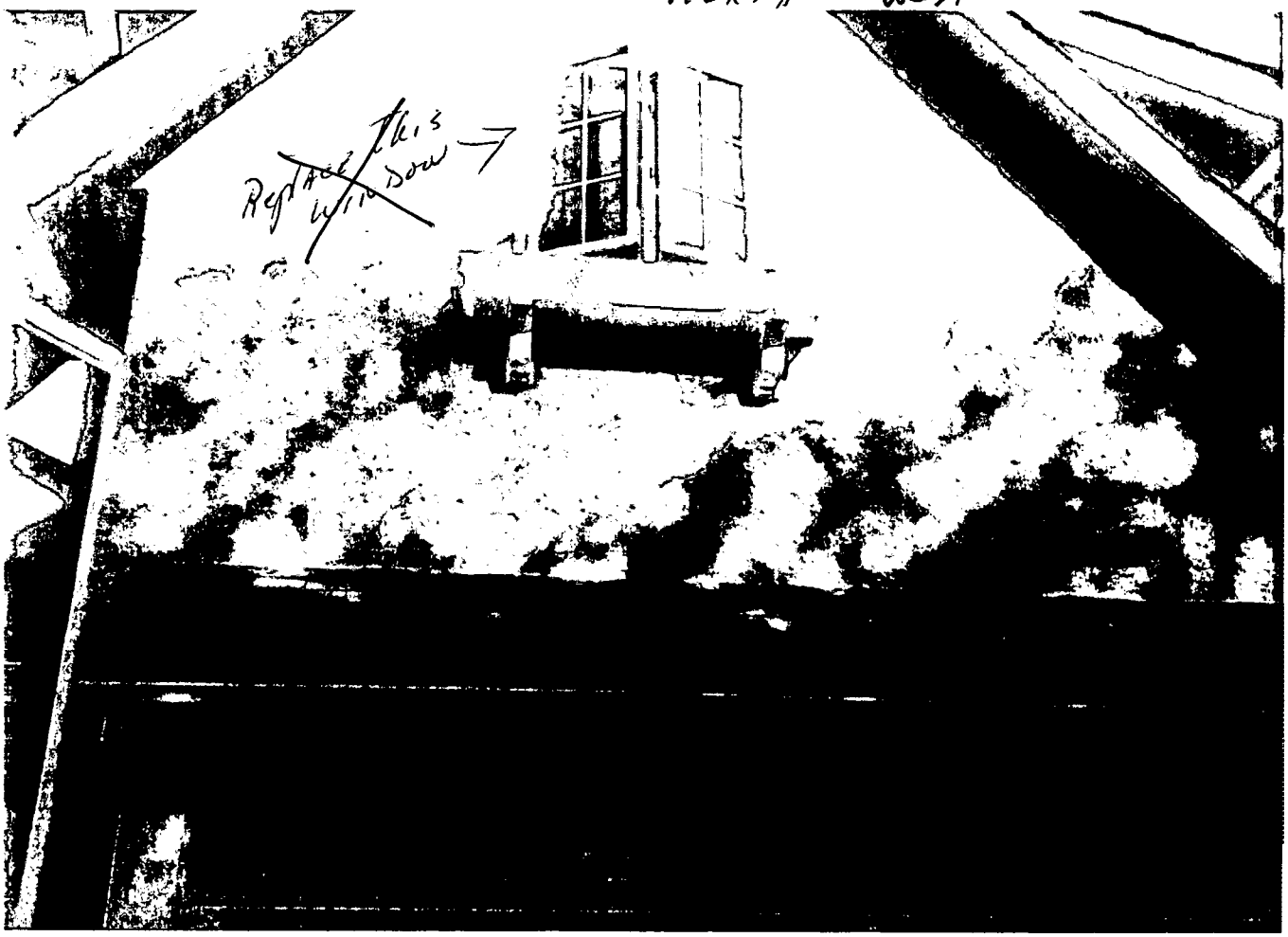
(9)

NORTH West

Replace all the windows on this elevation except 3rd story -
Grid pattern to be the same

Herbert Jacobs

~~NORTH~~ West



~~West~~ South

HERBERT JACOBS

~~NORTH~~ West

Replace FRENCH DOOR, SIDELIGHTS & TRANSOM IE WITH SAME STYLE & DIMENSIONS

HERBERT - JACOBS

~~North~~ West

Replace these windows with same grid pattern

HERBERT JACOBS

~~NORTH~~ West

Replace 2nd story windows with same grid pattern

HERBERT - JACOBS

~~EAST~~ north

MELROSE ST.

Replace these 2 windows w same grid pattern

HERBERT - JACOBS

~~South~~ east

Replace 1st & 2nd story windows

HERBERT JACOBS

TrimLine WINDOWS INCORPORATED

Energy-tight Windows for comfortable living and fuel efficiency

HOME PAGE
CORPORATE PROFILE
WHAT'S NEW
PRODUCTS
HISTORIC WOOD WINDOWS
ULTRA FIT SASH KIT
COMFORT PLUS GLASS
TEST RESULTS
BECOME A DEALER
CONTACT US

Certified Rehabilitation approved by the National Park Service

TrimLine Windows provides quality custom windows for use in historically certified rehabilitation projects.

TrimLine offers a wide variety of products including double hung, casement, and bay windows as well as round top, elliptical and other architectural window products. Custom colors in either all wood or aluminum clad exteriors and interior hardwoods of oak, cherry, and mahogany as well as standard pine, are some of our company's offerings.

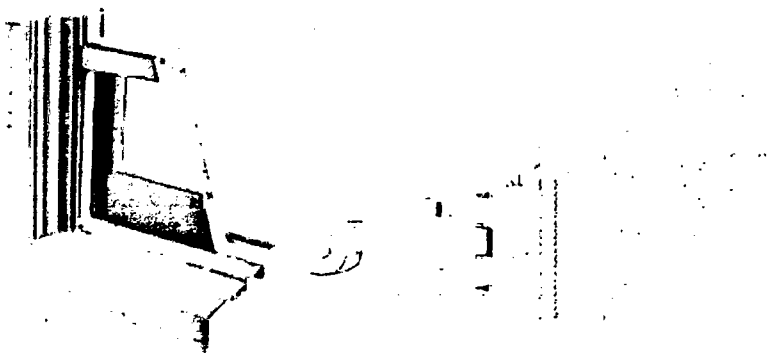
Additionally, custom panning systems, a variety of simulated divided light profiles, and replication of mullion details are some of the custom capabilities where maintenance of historical accuracy is essential.

Historic Windows features & benefits:

- Historically accurate custom panning systems
- Replication of mullion details
- Custom exterior colors
- National Park Service - Certified Rehabilitation
- Simulated divided lite systems
- Choice of hardwoods - Oak - Mahogany - Cherry
- Double Hung, Casements, Round Top, Elliptical Head. Radius casings
- Sash replacement systems
- High performance glass

Please click here for Brick Mold options.
Please click here for window options.
Please click here for Historical Project References

Panning Options



Legends Series DR300 shown in earthtone clad finish with "Colonial" style extruded aluminum panning and historic sill detail.

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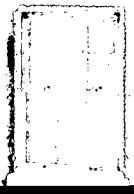

Energy-tight Windows for comfortable living and fuel efficiency

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HISTORICAL PROJECT REFERENCES

American Tobacco	Richmond, VA
Arlington High School	Arlington, VT
Chilean Embassy	Washington, DC
Endicott College	Beverly, MA
Fort Meade	Ft. Meade, MD
Gammel House	Providence, RI
Hanover Street Redevelopment	Trenton, NJ
Kensington Area Revitalization	Philadelphia, PA
Langley Air Force Base	Hampton, VA
Legendary Blue Horizon	Philadelphia, PA
Metropolitan Inn	Burlington, NJ
Naval Square	Philadelphia, PA
Neumann Senior Housing	Philadelphia, PA
New Covenant	Philadelphia, PA
Presidential Condominiums	Washington, DC
Residences at 6000 Baltimore Ave	Philadelphia, PA
Richard Bland College	Richmond, VA
Rowan Homes	Philadelphia, PA
Smith House, Philadelphia University	Philadelphia, PA
Southgate Apartments	Mt. Vernon, NY
Spring Garden Revitalization	Philadelphia, PA
Temple University	Philadelphia, PA
2101 Conn Ave. Condo's	Washington, DC
Vernon House	Philadelphia, PA
Veterans Administration Hospital	Hampton, VA
Walt Whitman Birth Place	West Hills, NY
YWCA of Trenton	Trenton, NJ

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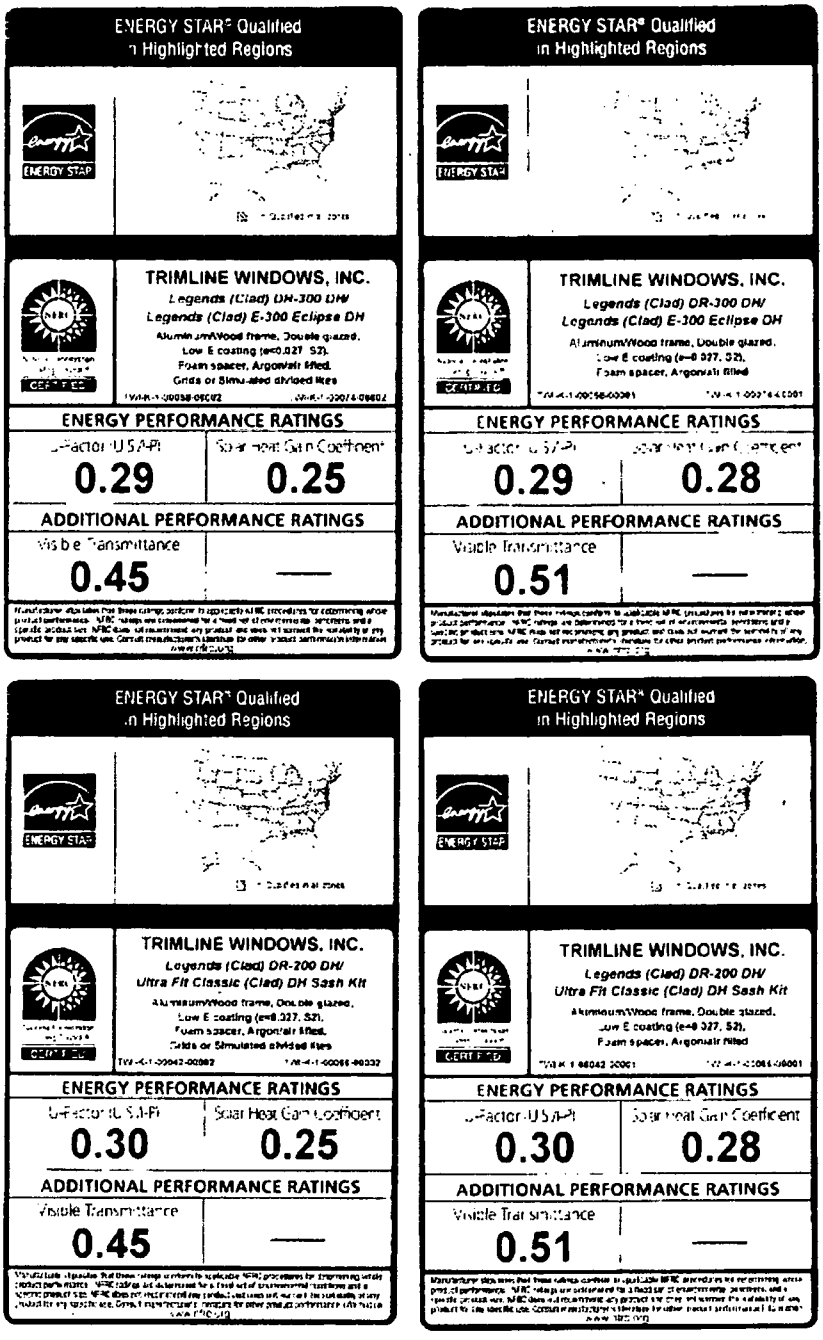

Product Performance

Casements have a .01 cfm/ft air infiltration rating at 25 mph and are rated DP 60, suitable for low rise commercial applications. Double hungs have .05 cfm/ft air infiltration rating at 25 mph and are rated DP 45, suitable for light commercial applications.

The U value for double hungs is .33 with Low E Ti-R™ and Krypton/Argon glazing. The U value for casements is .35 with Low E Ti-R™ and Krypton glazing. Thermal tests in determining U values were conducted under NFRC standards.

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Position Statement: Weatherizing Existing Windows

The National Trust for Historic Preservation applauds Congress' and President Barack Obama's efforts to create new green jobs through improving the energy efficiency of homes.

The National Trust is a strong advocate of incentives championed by Representative Peter Welch (D-VT) in Congress' climate change bills that would encourage the retrofit of older and historic buildings. However, preliminary reports suggest a retrofit program with a strong focus on incentives for window replacement. We have substantial concerns about the encouragement of replacement windows for older and historic buildings since windows can be retrofitted for greater efficiency, provide skilled employment opportunities, and are character-defining features of buildings.

It is frequently assumed that window replacement is required to substantially improve the energy efficiency of homes, but existing windows can often be weatherized to achieve efficiencies comparable to new windows. In crafting any legislation to create jobs through home weatherization, Congress and the Obama Administration must consider the important environmental and economic benefits of reusing and improving existing windows.

Consider these facts about weatherizing existing windows:

In Many Homes, Windows Are Often Not the Most Significant Source of Air Infiltration or Loss

The Department of Energy finds that only 10% of air leakage in homes is attributable to windows. In fact, in the average home, 14% of air escapes through fireplaces – more than through the windows. Upwards of 30% of air infiltrations and leakages occurs through floors, walls, and ceilings. Keeping the fireplace flue tightly shut, installing an inflatable chimney balloon, adding insulation, and caulking to seal air leaks around doors and windows can produce significant improvements in energy performance. [1]

Existing Windows Can Be Weatherized for Substantial Energy Savings

Studies demonstrate that properly weatherized windows with storm units can reduce heat loss through windows by 50%, a substantial energy savings.

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Studies also suggest that when windows are properly weatherized and include an exterior or interior storm unit, existing windows can achieve energy savings comparable to or even better than new windows. [2]

Replacement Windows Are Often an Irresponsible Environmental Choice

The manufacturing of replacement windows – such as those made of aluminum and vinyl – often requires considerable energy and produces toxic byproducts. The environmental impacts of producing these materials must be weighed against efficiency improvements offered by new windows. [3]
Life cycle assessment studies conducted in the U.K. and Norway indicate that, over a building's life cycle, the overall environmental impact of retrofitting existing windows may be smaller than those associated with the manufacturing of new windows. [4]
Replacement windows typically fail 10-20 years after installation, and usually after the warranty period has ended. Once replacement windows fail, they cannot be repaired and typically end up in already-overcrowded landfills. New windows are then required, and the wasteful cycle of disposal and replacement continues. Unlike the vast majority of replacement windows, components of historic windows can be repaired, thus extending the life cycle of the entire window unit. Furthermore, historic windows are generally constructed of old growth wood, which is far more durable than modern wood from new growth sources. [5]

Retrofits of Existing Windows Creates More Jobs than New Window Installation

For every $1 million spent in a construction project, five more jobs are created in the rehabilitation of an existing building compared to new construction. Quite simply, rehabilitation activities are more labor intensive than new construction, in which a significant portion of costs go to materials. The same is true for the rehabilitation and weatherization of existing windows, which

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requires more investment in labor than materials.
The labor required to retrofit windows is local. Dollars spent on window repair stay in local economies, creating a more powerful economic stimulus. [6]

Replacement Windows Don't Make Economic Sense

On average, replacing windows with new, higher-quality replacement windows saves about $50 per month in residential heating or cooling bills. The average window installation costs around $12,000 (the average home has between 24 and 30 windows, replaced at an average of $500-$1,000 each). If a homeowner heats a house six months a year on average, the savings are about $300 a year. At this rate, it would take 40 years to even begin to recoup in energy savings the amount spent on the new windows. Even if a federal subsidy covered half of the cost of window installation, it could still take 20 years for the average homeowner to recover the cost.
At a time when many Americans are struggling financially, the most economically and environmentally responsible choice is often the weatherization of existing windows, including the installation of a storm window. A more energy- and cost- effective approach is to focus on air sealing and insulation. [7]

[1] U.S. Department of Energy, Energy Saver Tips.

[2] Mattison, DePaola, and Arasteh – What Should I do About My Windows – www.homeenergy.org, July/August 2002; Klems, Joseph H. – Measured Winter Performance of Storm Windows (2002); Wood, Bordass, and Baker – Research into the Thermal Performance of Traditional Windows: Timber Sash Windows.

[3] Thorton – Environmental Impacts of Polyvinyl Chloride Building Materials (2002); Sedovic and Gotthelf – What Replacment Windows Can't Replace: The Real Cost of Removing Historic Windows – APT Bulletin: Journal of Preservation Technology, 36(4):2005.

[4] Asif, Davidson, Muneer – Life Cycle of Window Materials: A Comparative Assessment; Cluver – Still No Substitute – Period Homes, November 2006, Volume 7, Number 6, pp. 12-14.

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Enhancing Energy Efficiency in Historic Buildings

by Nick Gromicko and Rob London

As the cost of energy rises, resource supplies become precious and the public becomes increasingly aware of environmental dangers associated with the burning of fossil fuels, home energy efficiency has become more than a fringe concern. Homeowners worldwide are currently enhancing their homes' energy efficiency, although owners of historic homes have met some unique challenges: How do you introduce new architectural elements into an old home without interfering with its original design? As luck would have it, this concern is somewhat balanced by energy-saving qualities already present in many historic homes that reduce the need for alterations. This article details the ways that historic homes are inherently energy-efficient, and offers ways that such assets can be further improved.

Historic buildings are often more energy-efficient than modern construction. In fact, studies have shown that buildings constructed before 1940 require less energy consumption for heating and cooling than houses built during the subsequent 35 years. Before electricity was available, homes capitalized on natural sources of lighting, heating and ventilation because the house itself – not electric lights and heaters – was all that protected occupants from the elements. Some specific elements of older buildings that contribute to their excellent energy efficiency are as follows:

- thick, heat-retaining masonry walls made from stone or brick;
- exterior balconies, porches, wide roof overhangs, rooftop ventilators, clerestories, skylights, awnings and shade trees were all used in homes built in warmer climates;
- windows often include exterior shutters, interior Venetian blinds, curtains and drapes which make them more energy-efficient than modern windows;
- exterior walls were often painted light colors to reflect the hot summer sun, resulting in cooler interior living spaces;
  and
- windows were only installed where they could effectively allow for lighting and ventilation. Modern architecture, by contrast, relies on more windows than are necessary as a stylistic measure, with a reduced R-value as an unfortunate side effect.

Retrofit dangers to avoid in historic buildings:

- avoid waterproofing old masonry. Waterproof coatings will trap moisture against the masonry, potentially causing deterioration during the freezing cycle;
- damage to or removal of historic architectural elements. Replacing solid, historic materials or

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components, such as natural wood with substitutes made of plywood or plastics, have short lifespans under certain conditions;

- exposing occupants to toxins, such as lead dust and asbestos. Older homes were built before much was known about the health effects of certain chemicals, some of which might become airborne during the retrofit process. Be sure to ask your InterNACHI inspector about concerns during your next inspection;
- introducing materials that may damage existing components. Certain cellulose insulations use ammonium or aluminum sulfate as a fire retardant, which may react with moisture in the air to form sulfuric acid and damage metals (including plumbing and wiring), building stones, brick and wood; and
- retrofits that violate rules imposed by committees overseeing historic districts. In some areas, even exterior paint color must be approved.
- removing historic windows and other components, adding aluminum siding, or installing dropped ceilings in interior spaces.

Retrofits in Historic Buildings

The following retrofits are often used in historic buildings to make them more energy-efficient:

- Add insulation to crawlspaces. This feat may be significantly more cumbersome than adding attic insulation because crawlspaces are often excessively moist. If insulation is added to moist areas of the house, care should be taken to ventilate the area, perhaps with the assistance of an exhaust fan.
- Add weatherstripping to doors and windows. A common problem in historic buildings is leaky windows and doors, which can be mitigated by caulking open cracks and joints. Be sure to only use appropriate colors that do not interfere with the historic character of the house. Also, do not seal the building so much that moisture cannot escape the building.
- Add insulation to the attic. This process is often easier than adding insulation in other areas, such as in walls, and is hugely energy saving. The most common insulation materials include cellulose, mineral wool, fiberglass, and vermiculite.
- Add storm windows. Rather than removing historic windows, supplement them with storm windows that reduce thermal transmission and do not affect the historic character of the building. Storm windows can be painted if their colors are inappropriate. Care should be taken during installation to avoid damage to the historic window frames. Storm windows will be effective regardless of whether they are installed on the interior or exterior of the original frame, although this decision will have consequences; interior storm windows may cause the historic windows to become excessively cold, causing moisture to condense, resulting in peeling paint and deteriorated wood. If the storm windows are installed on the exterior, however, they may interfere with the building's image.
- Replace incandescent light bulbs with compact fluorescent light (CFL) bulbs. This change is a good idea in any home regardless of its age, but it is especially helpful in older homes because it disturbs none of the home's character.
- Replace old appliances. Old buildings often have old appliances, which should be replaced with Energy Star®-rated appliances.
- Add a shade tree. A tree can be an effective barrier against the sun during the summer months, and it increases the natural, historic appeal of an old house. A deciduous tree is best because it will lose its leaves in the winter and allow sunlight to enter the house when it is most needed. The tree should be placed at a safe distance from the house to avoid damage to the

foundation and falling limbs during a windstorm.

- Install storm doors in cold climates, although they are often not cost-effective in warmer climates. Historic doors usually require little alteration, especially if they are solid wood and in good condition, or if they are critical to the historic appearance of the house.
- Vestibules are architectural features that reduce heat loss by creating an additional airspace while the exterior door is open. They are often not, however, cost-effective as an add-on due to their high price of installation. Also, they are not likely to mesh with the appearance of historic buildings.
- Replace windows. This should be done only when the historic windows are damaged to the point where repair is impractical. The new windows should be selected to match the style of the building. As mentioned earlier, the addition of storm windows is an effective, minimally invasive way to reduce utility costs.

In summary, historic homes possess qualities that make them inherently energy-efficient while simultaneously resistant to retrofits that would enhance energy savings. Homeowners should thus take care while altering their old homes, but also grateful for the hardwired efficiency they have inherited from previous generations.

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Get an Audit...the Good Kind

So what can you do to weatherize? For starters, consider a whole-house approach.

When you weatherize a home, you are equipping it with everything it needs to be more energy efficient. Focusing on just windows will not solve the problem. Instead, most heat loss in a building goes through the roof and other gaps in the walls and foundation. Identify these problem areas by conducting an energy audit. Local utilities and state energy agencies now frequently offer audits – for free or at minimal cost – to help homeowners target leaks and identify cost-effective options for sealing them. If the primary source of heat loss is air leaking through an attic hatch or a poorly-fitted fireplace damper, replacing your windows is not going to help and could actually cost you thousands more.

Weatherizing a home does not have to cost a lot of money to be effective. There are plenty of low-cost projects that can be done to save energy, including:

Sealing cracks, holes, and gaps, especially around windows, doors, and other areas with high potential for heat loss.
Checking for proper ventilation to unconditioned spaces to protect from the effects of condensation.
Repairing older windows and doors with new glazing, including installing storm windows where appropriate.
Ensuring water is properly draining away from a building through gutters and downspouts, combined with foundation waterproofing and drains.

A thorough energy audit is step one in achieving better energy efficiency at home. Haven't ever put your house to the test? Not sure what exactly to expect? Get the low-down from the people who know best – home energy auditors themselves!


David W. Malone
1st Choice Energy


Amanda Evans
Advanced Home Analysts


Tom Schlotter
Allied Home Inspections


Kris Simonich
Pro Energy Consultants


Jason Acosta
EnergyLogic


John Porterfield
eZing, Inc.

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Installing insulation, where appropriate, around ducts, pipes, and water heaters, as well as near the foundation and sill.

Maintaining water-tight roofing and siding.

Want to dig deeper? Visit our Whole House Resource Bank for links to some of the best weatherization information and materials available online. From insightful blogs and articles by the experts, to checklists and how-to's, you'll find it all here.

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Submitted by leigh at: June 3, 2010

local utility companies have free programs but we don't qualify. our house is 180 years old and we had very high winter bills, very reasonable summer bills. we have not had success finding someone in kentucky/ohio/indiana that will do an audit...any ideas how to find them?

Submitted by Karen at: January 21, 2010

Have an older home and would like folks who can do it instead of do it yourself. Thanks

Submitted by Chuck at: October 30, 2009

Good stuff

Submitted by Mike at: September 18, 2009

The important thing about home energy audits is that they should be accurate and actionable. We've put together a short video highlighting some of the key elements to look for. http://greenhomesamerica.wordpress.com/2009/09/16/home-energy-audit-video/ Best, Mike

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Roofing

Take to the Roof

Roofs can be a major source of heat loss. Get on top by starting on yours as a first line of defense against the elements.

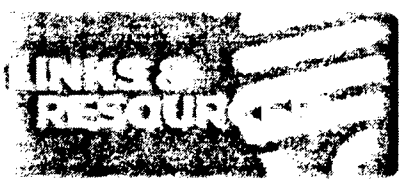
Where to start?

Your roof might not seem like a logical place to begin as you think about ways to weatherize your older or historic home. However, the roof is ground zero for providing a weather-tight defense against the elements – keeping water out – and central in any strategy for weatherization and increasing energy efficiency. With an estimated 30% of heat loss occurring through walls, ceiling, and floors, it makes good sense for building owners to focus on their roof to ensure that it is doing the best possible job.

However, roofs are also one of the most important character-defining features of older and historic homes and buildings. Therefore, the way you maintain, repair, and/or replace your roof matters, from the type of roofing shingles you choose to the installation of solar panels.

Of course, your roof is only one part of the equation, though often a major source for heat loss through the attic and other locations. Diagnosing whether or not your roof is performing well – in terms of energy efficiency – can be done through a comprehensive energy audit.

The following frequently asked questions are intended to not only inform and inspire, but demonstrate ways to properly care for the roof on your older building.



Start with the Roof: A Guide for Keeping Weather Tight

Directory of Roofing Links & Resources

Been there, done that? Tell us about it! Share your home improvement stories.

How important is a weather tight roof?

Does roofing offer an opportunity to go green?

Want to dig deeper? Visit our Whole House Resource Bank for links to some of the best weatherization information and materials available online. From insightful blogs and articles by the experts, to checklists and how-to's, you'll find it all here.

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Historic Windows & Energy Efficiency

By Sarah Donahue Wolff

Across the country, owners of old houses are being encouraged to remove their original windows and replace them with new energy-efficient models. Manufacturers of new window technologies advertise that old windows are inefficient, causing houses to leak energy and contributing to excessive heating and cooling bills, and to deterioration of the planet's environment. Replacing historic windows is touted as the "green" choice.

In reality, historic windows can be the "greener" choice. Environmentally conscious historic homeowners can keep their historic windows and improve energy efficiency at the same time.

- When the entire life of the window is considered and embodied energy calculated, retaining and repairing historic windows is environmentally preferable to replacing them.

- Homeowners can make relatively simple repairs to increase old windows' energy efficiency, and storm-window systems can further improve energy efficiency while protecting and retaining the historic character of the home.

Beyond Energy Efficiency: Sustainability

Energy loss occurs in homes through many conduits: attics, basements, doors, even cracks in the walls. Windows account for only 10% for energy loss in a typical home, perhaps even less in North Carolina's mild climate, less than attics, floors and doors. Improvements in window efficiency, unless there are gaping holes, will only incrementally improve a home's overall energy efficiency.

Green principles include more than just energy efficiency. When evaluating historic windows, we should consider the environmental and financial consequences of the window's entire life cycle.

One important consideration is "embodied energy," the energy that has already been expended in creating and installing the existing window. Keith Haberern, an engineer in New Jersey, estimates that new windows consume approximately 2.3 million BTUs just in production. To recover this environmental cost alone would require four years of energy payback. Haberern's estimate does not include the energy required for the extraction of the raw materials used in the windows or for their installation, shipping, etc. These costs further extend the energy payback. Furthermore, many new windows are made from vinyl, a nonrenewable, petroleum-based product.

And what happens to a window after it has been replaced? Most replaced windows end up in landfills, certainly not a "green solution."

Replacement windows themselves have a short useful life. Countless historic windows have been in use for more than a hundred years. New windows are expected to have useful lives ranging from two (as listed in some manufacturers' warranties) to twenty years, depending on their quality. Either the seal between the panes of glass breaks, reducing their insulation capacity and creating an ideal environment for mildew and other forms of mold, or the vinyl casing cracks, fades and discolors.

In a either case you'll have to replace your new replacement windows before they have even half-paid

for themselves in energy savings. Haberern estimates the payback time needed to recover the financial investment in a new window is 41.5 years. Generously assuming a useful life of 20 years, new windows are not in use nearly long enough for homeowners to recover their cost.

New Life for Old Windows: Improving Efficiency

Many repairs can be made to historic windows to improve their energy efficiency. Window restoration expert David Hoggard of Double Hung Historic Window Restoration in Greensboro argues that no historic window is beyond repair. Simple changes include

1. Making sure windows are properly sealed, caulked and installed.
2. Adding storm window systems, either inside or outside the existing window.

These changes improve a home's energy efficiency while maintaining its historic character.

Maintenance

Many of the energy leaks found in old windows are a result of poor maintenance. Most were designed to be double hung. A system of weights and ropes allows the top and bottom sections of the window to move independently. Over time, the weights and ropes may sag, resulting in gaps between the sash and the casing. These gaps cause energy loss. Repairing the double-hung mechanism allows the windows to close tight. Proper caulking and sealing around the window casing can also reduce energy loss.

Another solution is to affix the upper sash, remove the weight system and insulate the cavity where the weights had hung. This relatively simple repair retains the character of the window and increases its efficiency.

Storm Windows

Attaching storm windows is another historically accurate way to increase the efficiency of original windows. Historic windows used in combination with storm windows have been shown to have even better insulating properties than double-pane windows, an R value of 1.79 compared to 1.72 for new windows. Exterior storm windows can also provide protection for the historic window and can be designed to minimize their aesthetic impact.

Homeowners have many options when choosing storm windows. The cost of installation depends on many house-specific factors including the region and location of the house, the size and number of windows, their accessibility (first floor? second floor? attic?), the labor required, and the degree to which the windows must be customized to fit a particular space

Interior Storm Windows
Interior storm-window systems differ in material (vinyl, wood) and operation. Some are designed to open and close; others remain attached. Although interior storm windows increase the energy efficiency of the historic window system, they don't protect it from the elements. Moisture can also be trapped between the windows. However, interior storm windows do not obscure the look of the window from the outside, and they are removable.

Aluminum Triple-Track Exterior Storm Windows
Triple-track systems attach to the outside window frame and have two window sash and a screen which move along separate tracks, providing protection while allowing ventilation. They are readily available in a variety of sizes and colors. On the basis of balancing cost, ease and effectiveness, this system is recommended by the National Park Service. Exterior storms can reduce the visual beauty of the historic windows, though some new profiles minimize their impact.

Replacement Traditional Storm/Screen System
New storm/screen systems hang from small hooks on the exterior frame of the window. The system consists of two parts: 1) a storm window with glass in a wood frame and 2) a similar frame with screen instead of glass. The storm windows can be designed to remain closed or to open and close. The wood sash can be painted to blend with the exterior design of the house. This traditional system requires more maintenance than modern storm windows. The storms and screens must be changed manually with the seasons, and homeowners cannot easily switch between storms and screens.

Owners of historic homes have many ways to improve energy efficiency and reduce their impact on the environment. Despite advertising claims, window replacement is not the best way to improve the efficiency of historic windows. Repairing, insulating and adding storm windows are economically viable options for conserving both historic and environmental resources.

Sarah Donahue Wolff received her Masters of Regional Planning degree at the University of North Carolina Chapel Hill in 2007. She now works for Self-Help, a community development financial institution in Durham and spends her free time revitalizing her own historic home. This article was adapted from "Historic Windows and Energy Efficiency," which appeared in *North Carolina Preservation magazine*, fall 2007.

Learn more!

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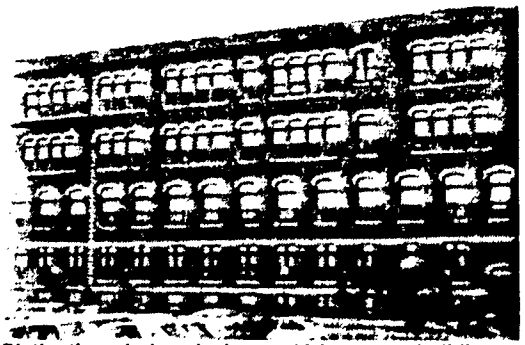


Distinctive window design on 19th century building.

Technology and prevailing architectural styles have shaped the history of windows in the United States starting in the 17th century with wooden casement windows with tiny glass panes seated in lead cames. From the transitional single-hung sash in the early 1700s to the true double-hung sash later in the same century, these early wooden windows were characterized by the small panes, wide muntins, and the way in which decorative trim was used on both the exterior and interior of the window.

As the sash thickness increased by the turn of the century, muntins took on a thinner appearance as they narrowed in width but increased in thickness according to the size of the window and design practices. Regional traditions continued to have an impact on the prevailing window design such as with the long-term use of "french windows" in areas of the deep South.

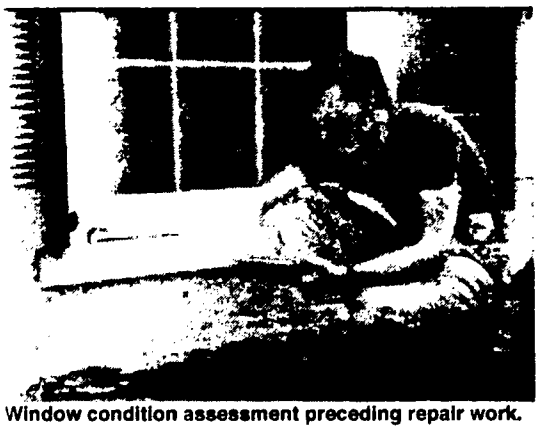
Changes in technology led to the possibility of larger glass panes so that by the mid-19th century, two-over-two lights were common; the manufacturing of plate glass in the United States allowed for dramatic use of large sheets of glass in commercial and office buildings by the late 19th century. With mass-produced windows, mail order distribution, and changing architectural styles, it was possible to obtain a wide range of window designs and light patterns in sash.

Delicate muntins and multi-pane sash on early 19th c. row houses.

Popular versions of Arts and Crafts houses constructed in the early 20th century frequently utilized smaller lights in the upper sash set in groups or pairs and saw the re-emergence of casement windows. In the early 20th century, the desire for fireproof building construction in dense urban areas contributed to the growth of a thriving steel window industry along with a market for hollow metal and metal clad wooden windows.

As one of the few parts of a building serving as both an interior and exterior feature, windows are nearly always an important part of the historic character of a building. In most buildings, windows also comprise a considerable amount of the historic fabric of the wall plane and thus are deserving of special consideration in a rehabilitation project.

ecommended.....



Window condition assessment preceding repair work.

Identifying, retaining, and preserving windows--and their functional and decorative features--that are important in defining the overall historic character of the building.

Such features can include frames, sash, muntins, glazing, sills, heads, hoodmolds, panelled or decorated jambs and moldings, and interior and exterior shutters and blinds.

Conducting an indepth survey of the conditions of existing windows early n rehabilitation planning so that repair and upgrading methods and possible replacement options can be fully explored.

ot recommended.....

Removing or radically changing windows which are important in defining the historic character of the building so that, as a result, the character is diminished.

Changing the number, location, size or glazing pattern of windows, through cutting new openings, blocking-in windows, and installing replacement sash that do not fit the historic window opening.

Changing the historic appearance of windows through the use of inappropriate designs, materials, finishes, or colors which noticeably change the sash, depth of reveal, and muntin configuration; the reflectivity and color of the glazing; or the appearance of the frame.

Obscuring historic window trim with metal or other material.

Stripping windows of historic material such as wood, cast iron, and bronze.

Replacing windows solely because of peeling paint, broken glass, stuck sash, and high air infiltration. These conditions, in themselves, are no indication that windows are beyond repair.

Windows **.....Protect and Maintain**

ecommended.....

Protecting and maintaining the wood and architectural metal which comprise the window frame, sash, muntins, and surrounds through appropriate surface treatments such as cleaning, rust removal, limited paint removal, and re-application of protective coating systems.

Making windows weathertight by re-caulking and replacing or installing

weatherstripping. These actions also improve thermal efficiency.

Evaluating the overall condition of materials to determine whether more than protection and maintenance are required, i.e. if repairs to windows and window features will be required.

Newly painted double-hung wood windows.

Not recommended.....

Failing to provide adequate protection of materials on a cyclical basis so that deterioration of the window results.

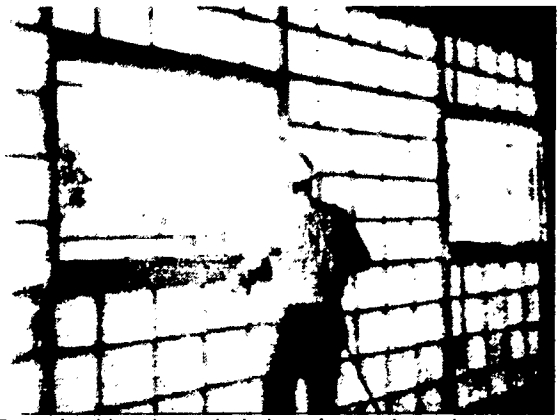
Retrofitting or replacing windows rather than maintaining the sash, frame, and glazing.

Failing to undertake adequate measures to assure the protection of historic windows.

Windows **.....Repair**

Recommended.....

Repairing window frames and sash by patching, splicing, consolidating or otherwise reinforcing.



Preparing historic steel windows for repairs and refinishing.

Such repair may also include replacement in kind--or with compatible substitute material--of those parts that are either extensively deteriorated or are missing when there are surviving prototypes such as architraves, hoodmolds, sash, sills, and interior or exterior shutters and blinds.

Not recommended.....

Replacing an entire window when repair of materials and limited replacement of

:eteriorated or missing parts are approoriate.

Failing to reuse serviceable window hardware such as brass sash lifts and sash ocks.

Using substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the window or that is physically or chemically incompatible.

Windows **.....Replace**

ecommended.....

Replacing in kind an entire window that is too deteriorated to repair using the same sash and pane configuration and other design details. If using the same kind of material is not technically or economically feasible when replacing windows deteriorated beyond repair, then a compatible substitute material may be considered.

Deteriorated lower window sash shown prior to its replacement in kind.

Lower window sash replaced, based on physical documentation.

For example, on certain types of large buildings, particularly high-rises, aluminum windows may be a suitable replacement for historic wooden sash provided wooden replacement are not practical and the design detail of the historic windows can be matched.

Historic color duplication, custom contour panning, incorporation of either an integral muntin or 5/8" deep trapezoidal exterior muntin grids, where applicable, retention of the same glass to frame ratio, matching of the historic reveal, and duplication of the frame width, depth, and such existing decorative details as arched tops should all be components in aluminum replacements for use on historic buildings.

t recommended.....

Removing a character-defining window that is unrepairable and blocking it in; or placing it with a new window that does not convey the same visual appearance.

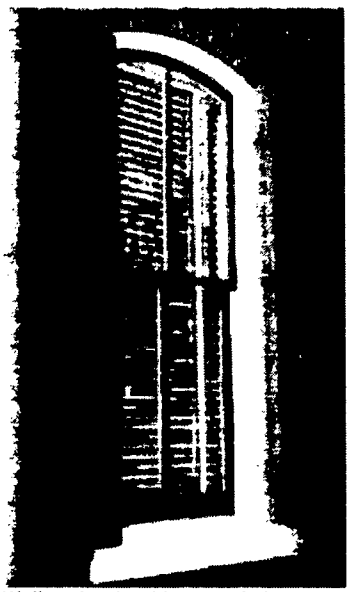
Design for Missing Historic Features

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of rehabilitation projects and should only be considered after the preservation concerns listed above have been addressed.

(34)

Energy Efficiency ....Windows

Recommended.....



Well-maintained louvered shutters allow for ventilation and privacy.

Utilizing the inherent energy conserving features of a building by maintaining windows and louvered blinds in good operable condition for natural ventilation.

Improving thermal efficiency with weatherstripping, storm windows, caulking, interior shades, and if historically appropriate, blinds and awnings.

Installing interior storm windows with air-tight gaskets, ventilating holes, and/or removable clips to insure proper maintenance and to avoid condensation damage to historic windows.

Installing exterior storm windows which do not damage or obscure the windows and frames.

Storm doors added on inside of historic doors.

Not recommended.....

Removing historic shading devices rather than keeping them in an operable condition.

Replacing historic multi-paned sash with new thermal sash utilizing false muntins.

Installing interior storm windows that allow moisture to accumulate and damage the window.

Installing new exterior storm windows which are inappropriate in size or color.

Replacing windows or transoms with fixed thermal glazing or permitting windows and transoms to remain

NATIONAL TRUST FOR HISTORIC PRESERVATION

HISTORIC WOOD WINDOWS

A tip sheet from the National Trust for Historic Preservation

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This tip sheet on historic wood windows was developed as part of the National Trust for Historic Preservation's Sustainability Initiative.

About the Initiative:
Historic preservation can - and should - be an important component of any effort to promote sustainable development. The conservation and improvement of our existing built resources, including re-use of historic and older buildings, greening the existing building stock, and reinvestment in older and historic communities, is crucial to combating climate change.

Learn more about Preservation and Sustainability on the web:
www.preservationnation.org/issues/sustainability

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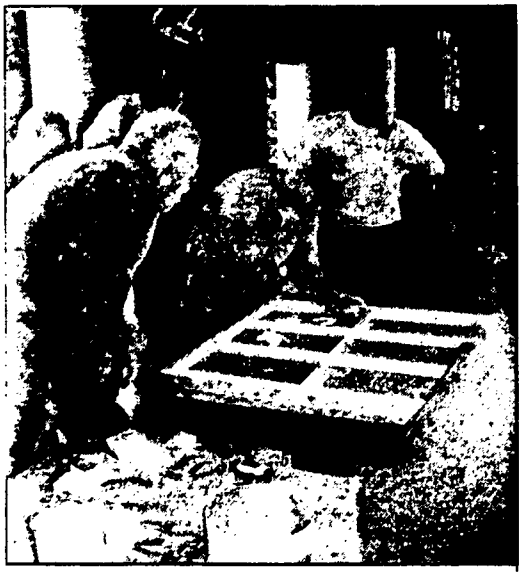
Introduction

There is an epidemic spreading across the country. In the name of energy efficiency and environmental responsibility, replacement window manufacturers are convincing people to replace their historic wood windows. The result is the rapid erosion of a building's character, the waste of a historic resource, and a potential net *loss* in energy conservation. Typically replacement windows are vinyl, aluminum, or a composite with wood, and none will last as long as the original window. Repairing, rather than replacing, wood windows is most likely to be the "greener option" and a more sustainable building practice.

Research shows that most traditionally designed wood-frame buildings lose more heat through the roof and un-insulated walls than through the windows.[1] A historic wood window, properly maintained and fitted with a storm window, can be just as energy efficient as a new window.[2] Replacing a historic single-pane window also may not save you much money in the long run. While the exact figure will vary depending on the type of window installed and whether or not a storm window is used, studies have found that it could take 100 years or more for a replacement window to pay for itself in energy savings.[3] According to information published in a recent *Old House Journal* article, it could take 240 years to recoup the cost of replacing a single-pane window-storm window combination with a low-e glass double-pane thermal replacement window.[4] Also, a historic wood window can easily last more than 100 years, while a new window may not last 25.

Not every wood window can be repaired and there are situations where replacement is appropriate. However, many historic wood windows can and should be repaired, especially if the windows were manufactured before about 1940. Wood windows made before this time were constructed with individual parts, each of which can be repaired or replaced. The wood itself is denser and of higher quality than what is grown today, and it is generally more rot- and warp-resistant than modern wood.



Historic windows are among the most important elements of a building. Simple repairs and routine maintenance coupled with storm windows make for energy efficiency that in most cases matches, if not exceeds, the efficiency of replacement windows. Workshops throughout the region have taught building owners easy ways to care for their historic windows. At the Woodlawn Museum in Ellsworth, ME, a grant from the National Trust for Historic Preservation helped fund a window repair workshop. *Photo courtesy of the Woodlawn Museum*

These are just some of the practical reasons to repair rather than replace historic wood windows. In addition, repairing the historic window helps maintain a building's authenticity. Once original material is removed from a building, it is gone forever. There are many more benefits to repairing your wood windows, so keep reading.

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1. Rypkema (2006); James *et al* (1996); Klems (2002). 2. James *et al* (1996); Klems (2002). 3. Sedovic (2005); *e.g.* research by Keith Heberern, calculations available at www.historichomeworks.com/hhw/education/windowshandout/windowenergyanalysis.pdf. 4. "Let the Numbers Convince You: Do the Math." Old House Journal 35 no. 5 (September/October 2007).

Wood Window Basics

Using this 12-over-12, double-hung wood window as our example, here are the basic terms used for wood window parts. This window is called 12-over-12 because there are 12 panes of glass in each sash. Both sashes are moveable so it is called double-hung. If only the bottom sash moves, it is called single-hung.

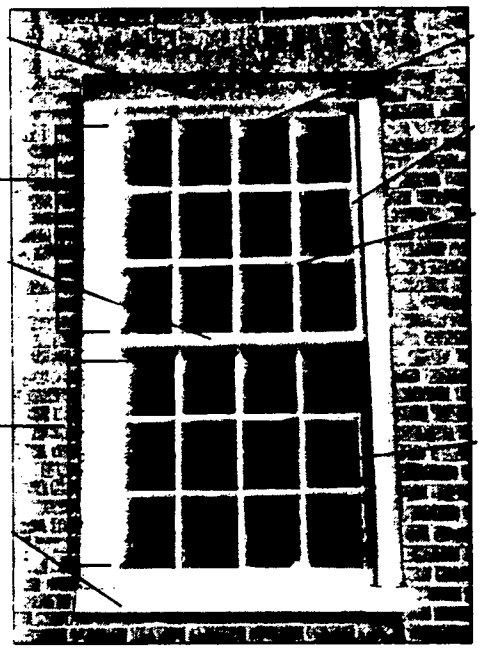
Jamb (the wood that frames the window opening)

Top Sash (upper section of window, may slide down to open)

Meeting Rail or **Check Rail** (the rail where the two sash come together)

Bottom Sash (lower section of window, typically slides up to open)

Sill (exterior, horizontal piece at the bottom of the window frame, commonly wood, stone, or brick)
Stool (interior shelf-like board at the bottom of a window against which the bottom rail of the sash rests)



A c. 1846 wood window in the former Robbins and Lawrence Armory, now the American Precision Museum in Windsor, VT.

Rail (horizontal part of sash)

Stile (vertical part of sash)

Muntin (horizontal, vertical, diagonal, or curved pieces that frame and provide mounting surface for the lights) The shape, or profile, of the muntin provides a clue to the window's age.[1]

Light/lite/pane (glass, held in place by glazing putty and metal glazing points)

1. Garvin (2002).

My Windows Are Old and Drafty, Why Shouldn't I Buy New Ones?

1. More heat is typically lost though your roof and un-insulated walls than through your windows. Adding just 3 and 1/2 inches of insulation in your attic can save more energy than replacing your windows.[1]
2. **Replacement windows are called "replacement" for a reason.** Manufacturers often offer lifetime warrantees for their windows. What they don't make clear is that 30% of the time, a replacement window will be replaced within 10 years.[1]
3. **Replacement windows that contain vinyl or PVC are toxic to produce and create toxic by-products.** Installing these in your house is not a 'green' approach.[2]
4. **If your wood windows are 60 years old or older, chances are that the wood they are made of is old growth**—dense and durable wood that is now scarce. Even high-quality new wood windows, except for mahogany, won't last as long as historic wood windows.
5. Studies have demonstrated that **a historic wood window, properly maintained, weatherstripped and with a storm window, can be just as energy efficient as a new window.**[2]
6. According to studies, **it can take 240 years to recoup enough money in energy savings to pay back the cost of installing replacement windows.**[3]
7. **Each year, Americans demolish 200,000 buildings. That is 124 million tons of debris, or enough waste to construct a wall 30 feet high and 30 feet thick around the entire U.S. coastline.**[4] Every window that goes into the dump is adding to this problem.
8. With a little bit of practice, **it can be easy—and inexpensive—to repair and maintain your wood windows.**[5]
9. Not a DIY-er? There are people near you who can do it for you. **Hiring a skilled tradesperson to repair your windows fuels the local economy and provides jobs.**[1]
10. **Historic wood windows are an important part of what gives your older building its character.**

1. Rypkema (2006). 2. Sedovic (2005). 3. *e.g.* Calculations by Keith Heberern available at www.historichomeworks.com/hhw/education/windowshandout/windowenergyanalysis.pdf. 4. Hadley (2006). 5. *e.g.* www.historichomeworks.com

Basic Maintenance

There are many good, practical books and magazine articles to guide a handy person in the basic maintenance of wood windows. Several publications are listed in the references section of this tip sheet. To get you started, here are some of the keys to many years—and generations—of life with older wood windows.

1. Keep the exterior surfaces painted, including the glazing putty. Paint protects the wood and putty from water and extends their service life. Be especially attentive to horizontal surfaces where water may collect.

2. Glazing putty will eventually dry out and is meant to be periodically replaced. You can do spot repairs initially, but eventually it will be easier to re-glaze the whole sash.

3. Keep movable surfaces, such as the inside jamb, free of paint build-up so that the sash can slide freely.

4. If your sashes are hung with cord, keep the rope free of paint. This will improve the window's operability. Cord will eventually dry out and break but can be replaced. When replacing the cord you can also re-hang the weights so that the sash will be balanced.

Winter Tips

Most of the heat transfer occurs around the perimeter of the sash rather than through the glass. So the tighter the seal around the window and between the upper and lower sash, the more energy efficient the window will be. Here are some tips to help you save on your heating bills.

Check the lock. Most people think the sash lock is primarily for security. It does help with security, but the lock's most important job is to ensure that the meeting rails are held tightly together. A tight fit greatly reduces air infiltration.

Weather stripping—add it or renew it. Adding weather stripping to your window can increase the window's efficiency by as much as 50%. It's an inexpensive way to boost your window's efficiency. There are many different kinds from which to choose. Refer to the articles listed at the end of this tip sheet. The staff at your local hardware store should also be able to assist you.

Storm windows—use them! There are many styles from which to choose, including storms that can be fitted on the interior of the window. Many studies have shown that a wood window in good condition fitted with a storm window can be just as energy efficient as the more expensive replacement window. Due to the thermal exchange properties of wood, there is also a growing interest in traditional wood-framed storm windows as they transfer less heat than metal-framed storms.

Condensation. If you find condensation on the inside of your primary window, cold air leaking through the storm window is likely the culprit. If the condensation is forming on the inside surface of the storm window, warm air from the building interior is leaking in around the primary window. When warm and cold air are present on opposite sides of glass, condensation forms (think of a cold glass of lemonade on a hot day). When condensation forms on your window glass, water can collect on the horizontal wood parts of the rails, muntins, and sill, which can lead to paint failure and rot. To reduce condensation, you need to limit the amount of leaking air. Add or replace weather stripping, make sure the sash are meeting properly and that the sash lock is tight, and check the seal around the exterior of the storm window and caulk if necessary. When caulking around the perimeter of exterior storms it is important to leave weep holes at the bottom so that any condensation or infiltration that does occur can drain out.

What About Lead?

If your windows retain paint that was applied prior to 1978, chances are there is lead paint on them. Just because there may be lead paint on the windows does not mean they are unsafe or that they need to be replaced. There are steps you can take to protect yourself and others if you suspect lead paint may be present. **Before beginning work, consult your local or state ordinance to determine the legal method for handling and disposing of lead paint in your area.**

- Children and pregnant women should not be allowed in the work area.
- Do not smoke or eat or drink in the area you are working in and wash your hands and face before doing so.
- Wear disposable gloves and eye protection.
- Use a respirator if there is friable paint, or if you are scraping or sanding paint.
- Use a wet sanding technique to minimize dust.
- Vacuum using a HEPA filter.
- Wash your work clothes separately from your household laundry. You can also wear a tyvek suit to protect your clothes. Take it, and your shoes, off before you leave your work area.
- Place tarps under your work surface to collect loose paint. Seal off the work space from other rooms and from HVAC systems. Cover any furniture and other items in the work area with

(Continued on page 4)

Lead continued

6 mil plastic taped to the floor.

- Eating a nutritious diet rich in iron and calcium will reduce the amount of lead absorbed by your body if any does happen to be ingested.
- For more tips on how to work lead-safe, see "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" available at www.hud.gov/offices/lead/training/LBPguide.pdf and the National Park Service Brief #37, "Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing" at www.nps.gov/history/hps/TPS/briefs/brief37.htm.
- John Leeke's website www.historichomeworks.com also has practical tips on lead-safer work practices.

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Additional Help

With nearly half of greenhouse gas emissions attributed to the construction and operation of buildings, older and historic buildings are central to our efforts to address climate change. The **National Trust for Historic Preservation's Sustainability Initiative** promotes the reuse of existing buildings, reinvestment in existing communities, and green retrofit of older and historic buildings to help lower carbon emissions. For more information visit www.preservationnation.org.

Additional help may be available from your **State Historic Preservation Office** (SHPO). Find your SHPO at www.ncshpo.org/. Private **statewide and local preservation groups** serve as the network centers and representatives of local preservation activities within their states. The nine **Regional and Field Offices of the National Trust for Historic Preservation** (NTHP) bring the programs and services of the NTHP to preservationists within their regions. Find your nearest NTHP Regional Office and state and local preservation organizations at www.preservationnation.org/about-us/partners/statewide-local-partners/partners.html

Why Should I Repair or Restore my Old Wood Windows?

- **Because you value a quality product!** Old wood windows were constructed of durable, old-growth lumber and will outlast replacement windows by decades.

- **Because you think a warranty should be more than 20 years!** Most replacement models only come with a 15 to 20 year warranty. By the time the warranty expires, your replacement model will likely need to be replaced again (hence the term "replacement window"). Your old wood windows will last up to 10 times longer!

- **Because it makes economic sense!** Although a complete restoration may cost more than a cheap replacement model, consider the life cycles involved: The cheap replacement model will likely have to be replaced again in 15 years while your restored wood window will last up to 10 times longer. Which makes more economic sense? Simply adding a storm window will have a payback period of less than 10 years; the payback period for replacement windows can be up to 200 years!

- **Because you believe in being "green!"** An old wood window is an extremely sustainable product; the same can't be said for a replacement window. The technologies marketed by replacement manufacturers – insulating glass, tilting mechanisms, spring balance systems – often fail or break within the lifetime of their warranty. Don't forget the toxic and hazardous production of vinyl and landfill waste created by window replacement. Your old wood windows are easily repaired and will last a long, long time.

- **Because you really can save on energy costs!** Numerous studies have revealed that a properly restored, weatherstripped wood window coupled with a quality storm window will be just as energy efficient as a double-glazed replacement window.

- **Because your windows fit your house!** Care was taken to match the size and style of window to your house. With proper weatherstripping they can be made to fit and seal even better.

- **Because you can get tax credits!** Tax credits *are* available for storm windows; more information is available from Energy Star: http://www.energystar.gov/index.cfm?c=tax_credits.tx_index. Remember, storm windows have been around for over 100 years and are meant to protect your windows from the elements in addition to reducing air infiltration.

- **Because window restoration is doable!** If your existing windows have been neglected and will not function properly, they can be repaired. With a complete restoration, you will be amazed how well your windows will operate. All that's needed is a good carpenter or window restoration specialist, careful planning, and some patience.

For more information on the benefits of window restoration, including energy studies and research articles, please visit our website at www.uga.edu/napc, or email us at napc@uga.edu.

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The Myth: "It is more expensive to restore an old wood window than to replace it."

The cost of restoring a historic wood window obviously varies due to many factors, and there is no guarantee that restoring a window will be cheaper than replacing it. Studies have shown, however, that the payback period for new replacement windows can take decades. In that span of time, it is likely that these windows will have to be replaced again, since most replacement windows only have a lifespan of 20 years. Historic wood windows that have lasted 100 years will last another 100 years if properly restored and maintained. Therefore, the payback period of a restored wood window equates to a much better bargain.

The Myth: "Old wood windows have lead paint and should be discarded"

While any house built before 1978 might contain lead paint, it is possible to remove lead paint from historic sash without posing serious health hazards. Local municipalities often have guidelines for safe and effective de-leading, including windows, but it needs to be done by a professional. An experienced contractor or window restoration specialist should be able to identify unstable lead paint (the most hazardous condition) and treat it appropriately. Oftentimes, stable lead paint can be encapsulated with lead-free paint to comply with state laws. With proper precautions and safety measures, historic wood windows with lead paint can be remedied. For more information on lead paint hazards in historic buildings, refer to *Preservation Brief 37: Appropriate Methods of Reducing Lead-Paint Hazards in Historic Housing* from the National Park Service: http://www.nps.gov/history/hps/TPS/briefs/brief37.htm

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10 Reasons to Repair Your Old Windows

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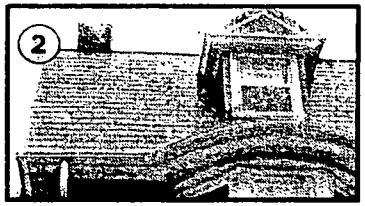

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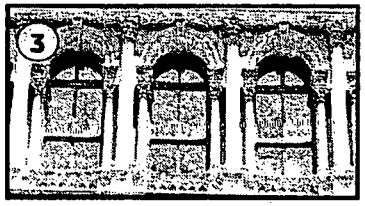

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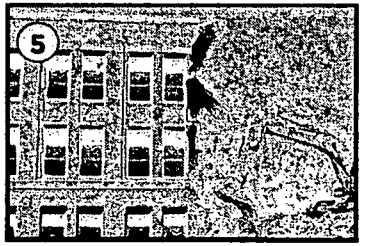

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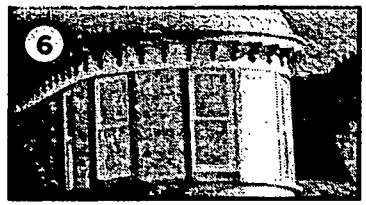

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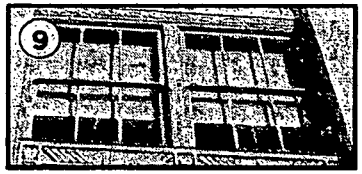

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Not a DIY-er? There are people near you who can do it for you. **Hiring a skilled tradesperson to repair your windows fuels the local economy and provides jobs.** *Rypkema, 2006*

For more information...

www.PreservationNation.org

2h

I want to get started now. Are there any easy, low-cost ways to make my home's original windows more energy efficient?

A Of course there are! Making the windows of your older or historic home more energy efficient does not have to break the bank.

Here are four easy tips to get you started:

Caulk around the window opening on the exterior.

Caulk around the window trim on the inside.

Add weather stripping to the window sash. There are many types of weather stripping to suit various window types, budgets, and needs.

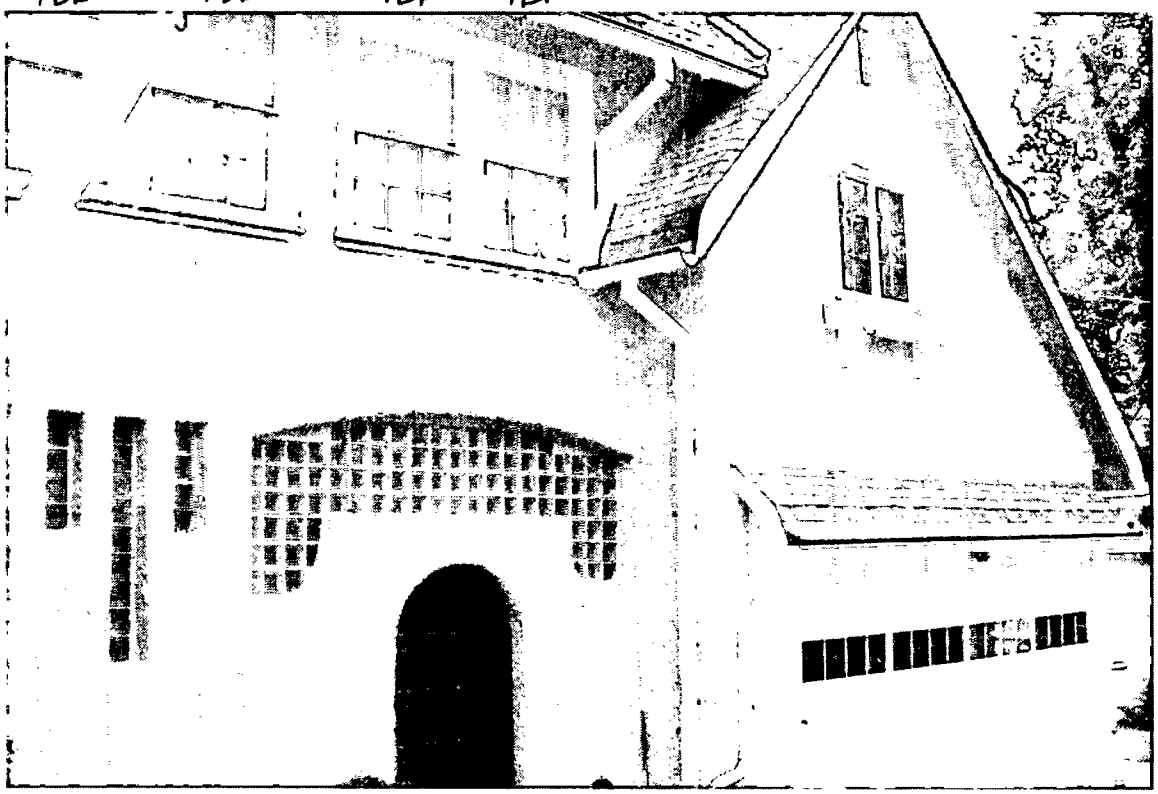
Use a storm window or thermal panel.

43

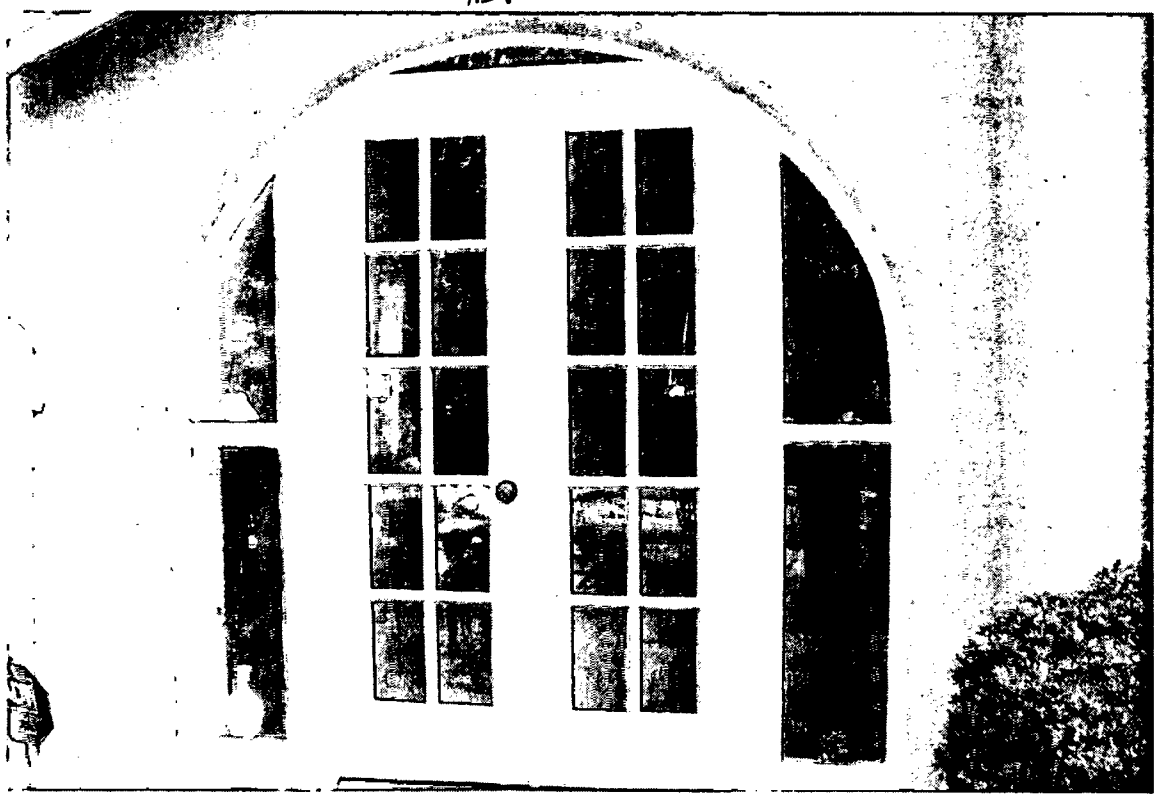
8 west Melrose

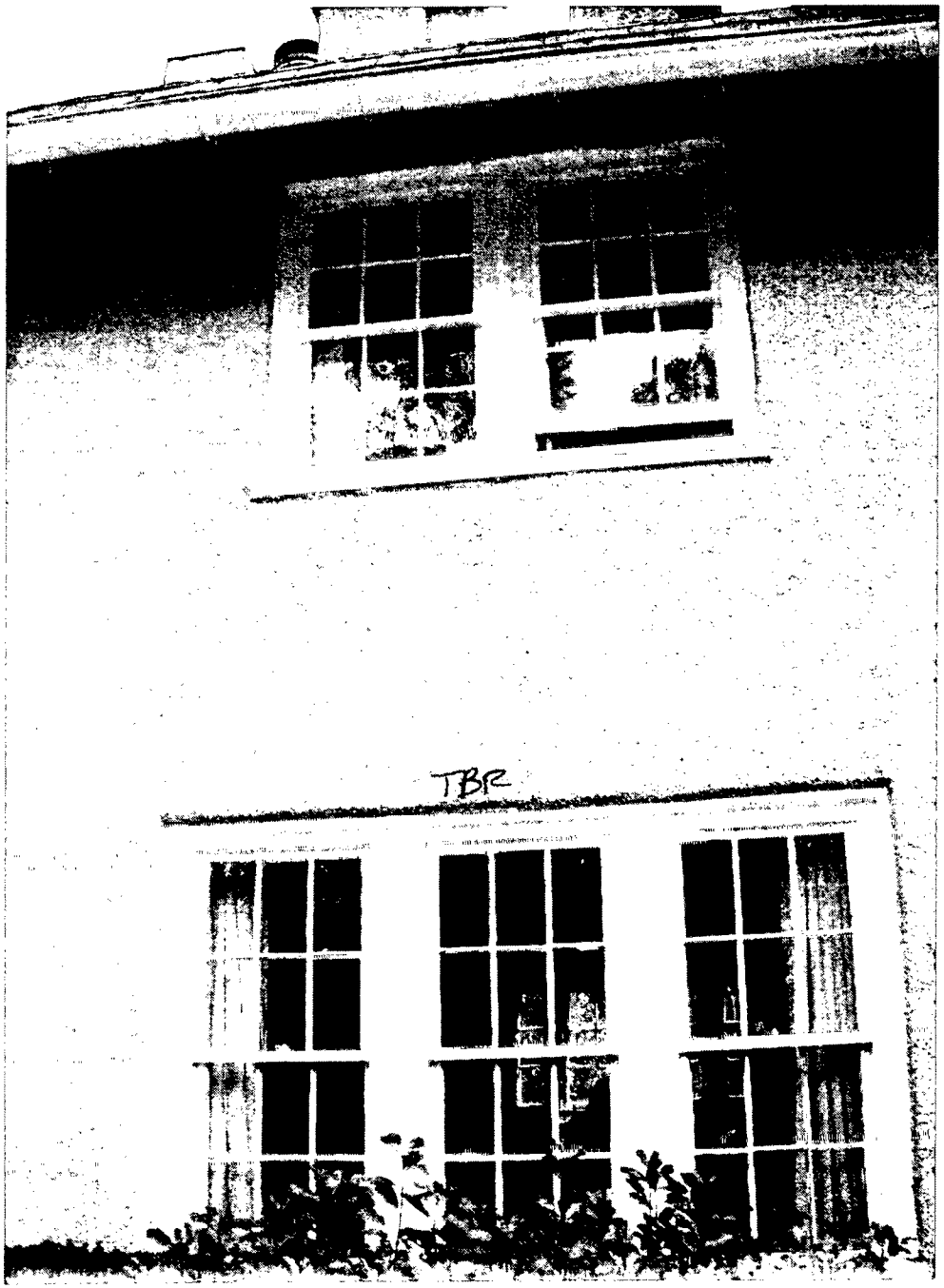
facing west - view from Lenox Parkway

TBR TBR TBR TBR

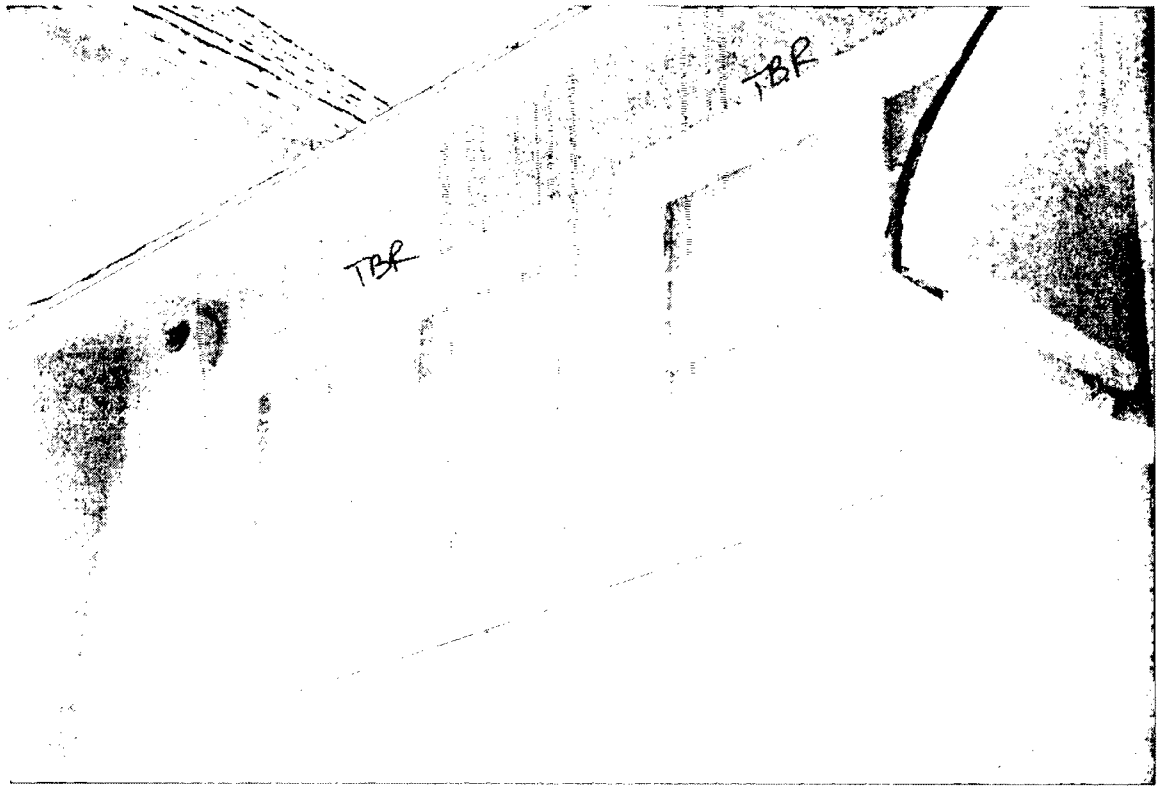


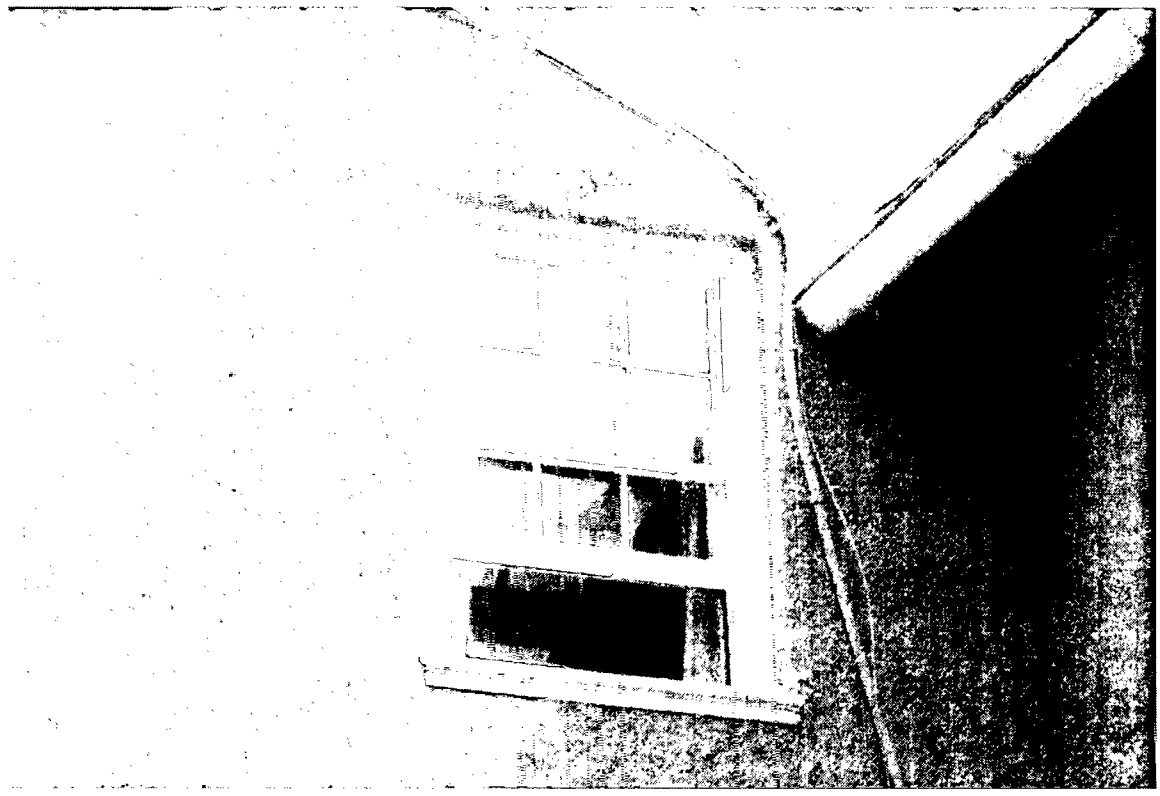
TBR





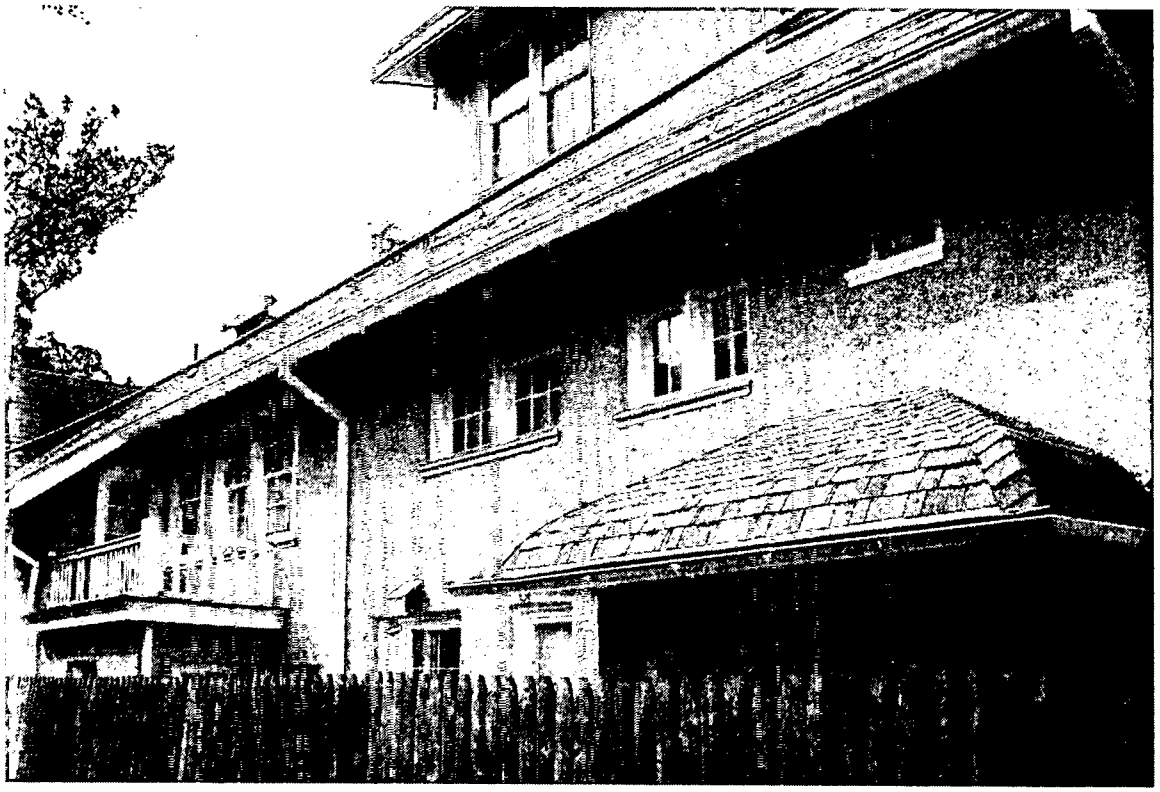
47


TBR
TBR



rear and left side

rear



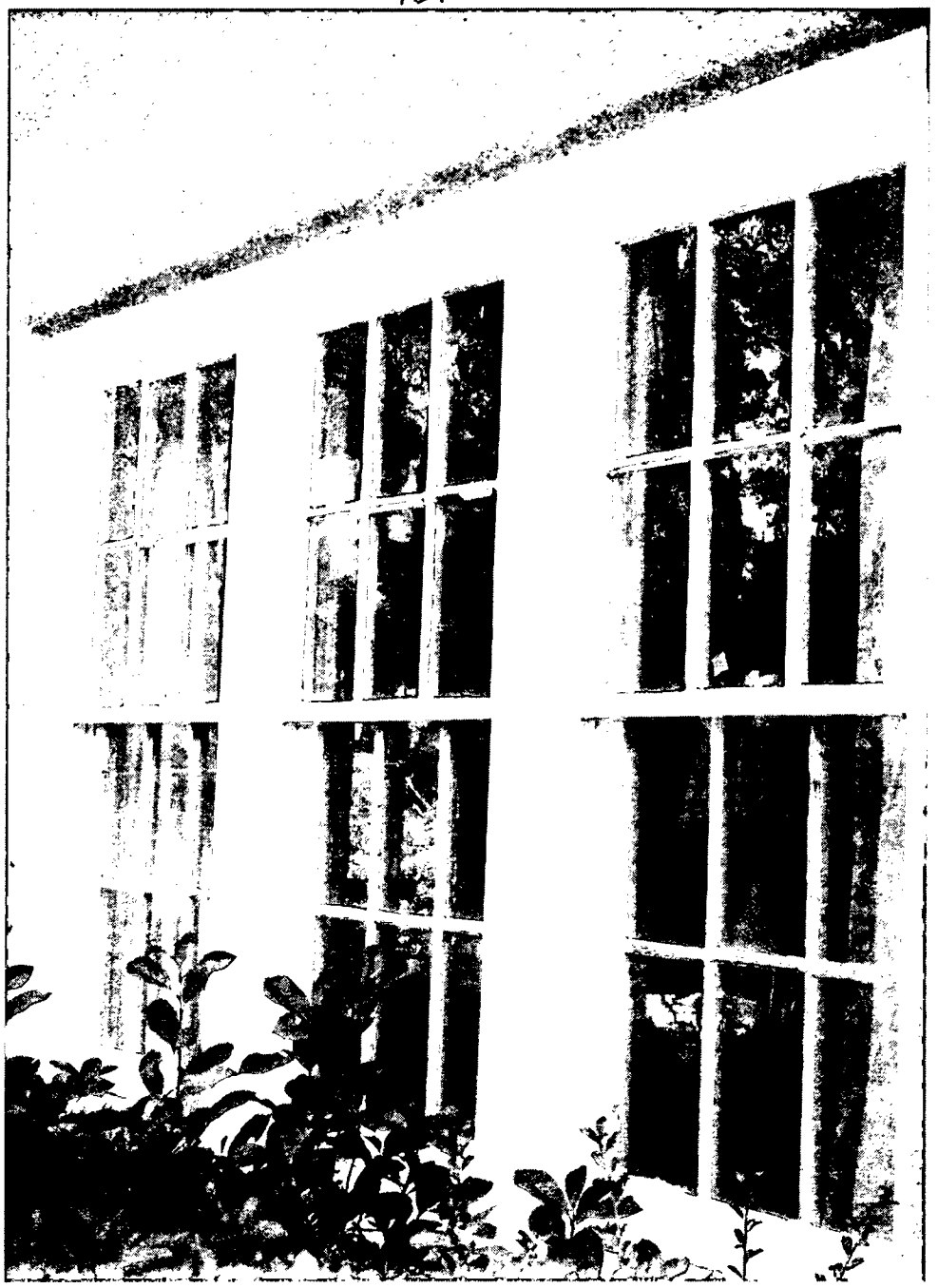
1st and 2nd floor TBR (double hungs)

left

front

TBR

TBR



51

rear

2nd floor
TBR

NORTH

REPLACE ALL THE WINDOWS ON THIS ELEVATION
except 3rd STORY -
GRID PATTERN TO BE THE SAME

west facing lenox

45

HERBERT JACOBS

NORTH

Replace these windows with same grid pattern

West

Herbert Jacobs

NORTH west above garage

WEST bath West

HERBERT JACOBS

garage

NORTH

Replace 2nd story windows with same grid pattern

west facing Lenox

HERBERT JACOBS

South East

Replace 1st & 2nd story windows

to old porch facing Melrose

HERBERT JACOBS

- was a porch

EAST North

MELROSE ST.

Replace these 2 windows w same grid pattern

HERBERT JACOBS

NORTH

Replace FRENCH DOOR, SIDELIGHTS & TRANSOM IE WITH SAME STYLE & DIMENSIONS

enclosed porch
west side

HERBERT JACOBS