Docket Item #4
BAR #2018-00453

BAR Meeting
November 7, 2018

ISSUE: Alterations

APPLICANT: The Unit Owners Association of Potowmack Crossing Condominium

LOCATION: 1600-1734 West Abingdon Drive

ZONE: RC / Residential

STAFF RECOMMENDATION

Staff recommends approval of the application with the following conditions:

1. Proposed replacement windows must meet all requirements outlined in the Alexandria Replacement Window and Door Performance Specifications; and
2. Each unit owner must obtain a BAR Administrative Approval and building permit prior to installation of any replacement windows.

GENERAL NOTES TO THE APPLICANT

1. ISSUANCE OF CERTIFICATES OF APPROPRIATENESS AND PERMITS TO DEMOLISH: Applicants must obtain a stamped copy of the Certificate of Appropriateness or Permit to Demolish PRIOR to applying for a building permit. Contact BAR Staff, Room 2100, City Hall, 703-746-3833, or preservation@alexandriava.gov for further information.

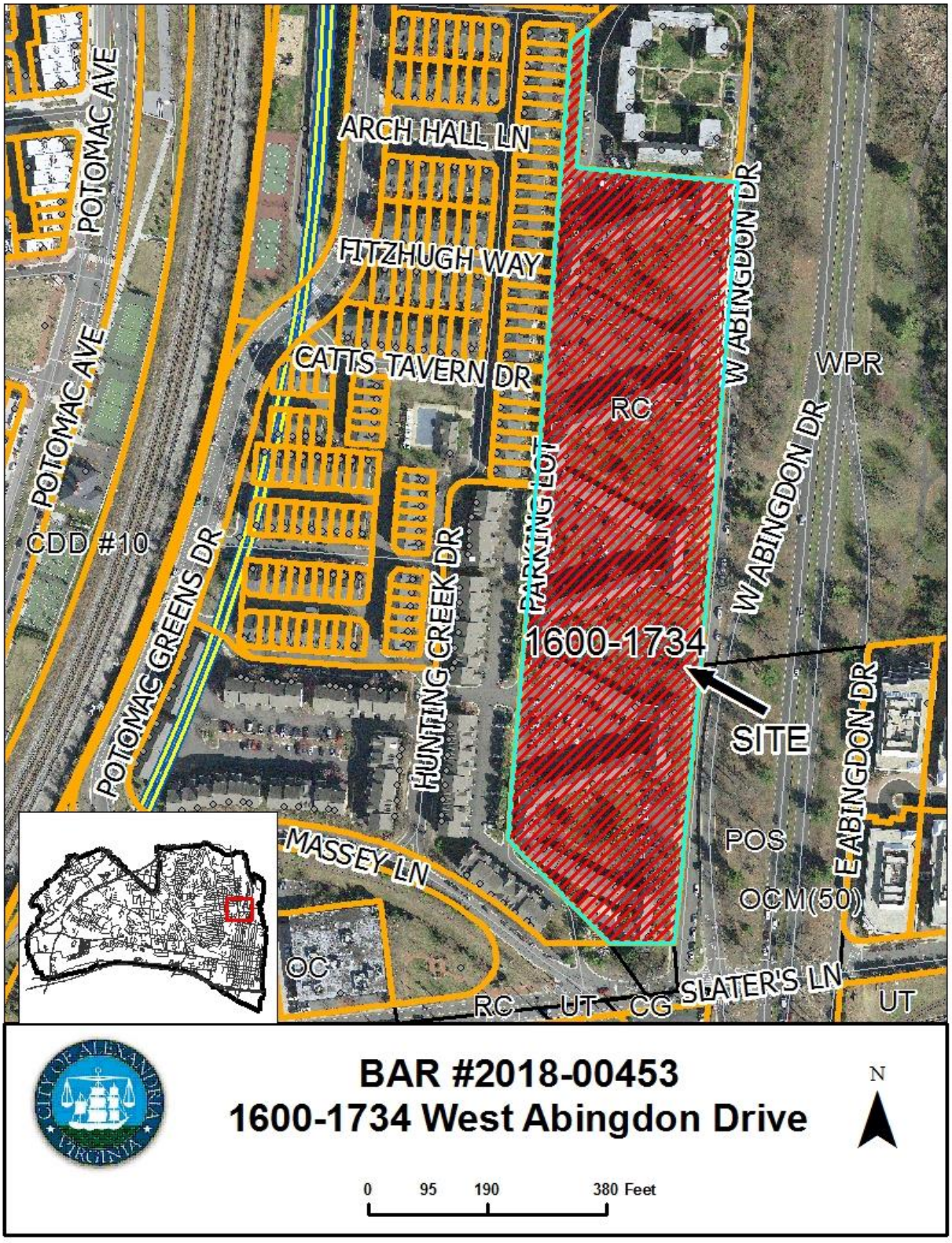
2. APPEAL OF DECISION: In accordance with the Zoning Ordinance, if the Board of Architectural Review denies or approves an application in whole or in part, the applicant or opponent may appeal the Board's decision to City Council on or before 14 days after the decision of the Board.

3. COMPLIANCE WITH BAR POLICIES: All materials must comply with the BAR's adopted policies unless otherwise specifically approved.

4. BUILDING PERMITS: Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Building and Fire Code Administration (including signs). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-746-4200 for further information.

5. EXPIRATION OF APPROVALS NOTE: In accordance with Sections 10-106(B) and 10-206(B) of the Zoning Ordinance, any official Board of Architectural Review approval will expire 12 months from the date of issuance if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.

6. HISTORIC PROPERTY TAX CREDITS: Applicants performing extensive, certified rehabilitations of historic properties may separately be eligible for state and/or federal tax credits. Consult with the Virginia Department of Historic Resources (VDHR) prior to initiating any work to determine whether the proposed project may qualify for such credits.


POTOMAC AVE
ARCH HALL LN
FITZHUGH WAY
CATTS TAVERN DR
POTOMAC AVE
CDD #10
POTOMAC GREENS DR
HUNTING CREEK DR
PARKINGTON
RC
W ABINGDON DR
WPR
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1600-1734
SITE
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POS
OCM(50)
MASSEY LN
OC
RC
UT
CG
SLATER'S LN
UT
BAR #2018-00453
1600-1734 West Abingdon Drive
N
0
95
190
380 Feet

I. ISSUE

The applicant is requesting a Certificate of Appropriateness to remove the existing aluminum-clad double-hung windows and install replacement fiberglass windows to match the existing multilight light configuration.

II. HISTORY

The apartment complex, originally known as the Abingdon Apartments, was constructed between **1942 and 1945**. It was one of many garden apartment type complexes constructed in Alexandria beginning in 1939 and continuing through the war years as the city sought to accommodate the growing population resulting from the buildup in governmental and defense industry employment. The southern, and somewhat later, northern end of Washington Street became the focus of apartment complex development. The northern end of town where the Abingdon was constructed had been characterized by undeveloped land and miscellaneous industrial operations, but rapidly developed into a locus of garden style apartment complexes, including Bashford Hall Apartments (402-418 Bashford Lane, 1942-1943), Harbor Terrace Apartments (1301-1417 East Abingdon Drive and 509-607 Bashford Lane, 1943-1944), Locharbor Gardens Apartments (500-614 Bashford Lane, 1939-1940) and Mason Hall Apartments (1420 West Abingdon Drive, 1949). Alexandria's garden apartments were almost always designed in the Colonial Revival style and many took the names of historic sites in the area. Thus Abingdon, with its red brick, Colonial style door surrounds and cupolas was named for the Abingdon, the 18th century Alexander-Custis Plantation located along the George Washington Memorial Parkway on the grounds of the Reagan National Airport.

The complex was converted from apartments to condominiums in the mid-1980s, at which time it assumed the name Potowmack Crossing. The BAR approved a series of alterations in 1985, including site improvements, signage, installation of new windows, new entry doors and exterior light fixtures (BAR Case #s 85-155, 8/14/1985; 85-54, 5/1/85; 85-139, 7/10/1985). In 1999, the BAR approved the current freestanding sign at the south end of the complex (BAR Case #98-00041, 4/16/1999). In 2007, the BAR approved an application to replace all existing doors and door surrounds, sills, exterior light fixtures and intercom panels (BAR 2007-0094, 6/6/2007).

In 2008, the BAR approved replacement windows in a composite material (Fibrex) in a different light configuration, that would more closely match the original steel casement windows, with a number of conditions (See *Attachment 3* for BAR2010-00229, 9/1/2010).

III. ANALYSIS

Staff supports the proposed request for replacement multilight double-hung fiberglass windows finding them to be appropriate and consistent with the Design Guidelines. The Design Guidelines note that "windows are a principal character-defining feature of a building and serve both functional and aesthetic purposes." Additionally, the Guidelines continue to state "changes to windows can have a dramatic impact on the historic appearance of a structure" cautioning that inappropriate window styles or light configurations can have a negative impact on a building. At Potowmack Crossing, a classic example of the Colonial Revival garden apartment complex, the original design included steel-sash multi-light fixed/casement windows, injecting a modern material into a historically-inspired architectural style. Over the years, the many steel-sash

windows installed in early to mid-20th-century buildings throughout the city have been replaced. When the applicant first consulted with staff in 2009-2010, the applicant was interested in using a modern material that allowed the existing double hung windows to return to the same light configuration and operation of casements and fixed transoms that the original steel sash windows had offered. Both staff and the BAR were very supportive of the request, finding it appropriate to restore the original design appearance. Also, at that time, the applicant requested a then relatively new fiberglass composite material (Fibrex). Prior to adoption of the BAR's Window Policy, a modern material such as Fiberex had to be approved by the BAR at a hearing.

Over the past eight years, as the BAR has continued to refine and revise the Window Policy, it has become standard practice to allow for the administrative approval of high-quality, simulated-divided light windows in a range of durable materials (aluminum-clad, fiberglass, and non-vinyl composite) on buildings constructed after 1934, provided that certain performance specifications are satisfied. Therefore, staff has no objection to the use of fiberglass windows, provided all performance specifications outlined in the Window Policy are met, but could not administratively approve the proposed windows in this case because they are counter to the BAR's prior approval of a different window style and operation.

Nationally accepted preservation practice recommends that replacement elements should return to the original condition or design, unless a later alteration has become a character-defining element, marking the evolution of a building and achieved significance in its own right. In the past, while the BAR has stated a strong preference for returning to the light configuration and operation of the original steel sash windows, the BAR has also found other historically appropriate configurations to be appropriate. When the applicant previously proposed a casement configuration in 2010, it was a similar light configuration to the original, though the manufacturer did not offer an exact replication of the original steel-sash casement light configuration (there were no transoms and the lights had a slightly different proportion). Therefore, staff supports replacement of the existing double hung windows with similar double-hung multilight windows, noting that six-over-six and four-over-four windows are historically appropriate to the Colonial Revival style generally used at Potowmack Crossing. As a practical matter, each unit owner in this condominium complex is responsible for replacing their own windows based on need. A return to the original steel sash window design on random units over a long period of time would create a patchwork of different window designs on this very large building for decades.

Finally, because each condo owner is responsible for replacing their own windows, each unit owner must submit a separate BAR Administrative Approval application and filing fee as well as obtain a building permit for any window replacement request.

STAFF

Catherine K. Miliaras, Principal Planner, Planning & Zoning
Al Cox, FAIA, Historic Preservation Manager, Planning & Zoning

IV. CITY DEPARTMENT COMMENTS

Legend: C- code requirement R- recommendation S- suggestion F- finding

Zoning
C-1 Proposed replacement windows comply with zoning.

Code Administration
A building permit, plan review and inspections are required prior to the start of construction

Transportation and Environmental Services

R-1 The building permit must be approved and issued prior to the issuance of any permit for demolition, if a separate demolition permit is required. (T&ES)

R-2 Applicant shall be responsible for repairs to the adjacent city right-of-way if damaged during construction activity. (T&ES)

R-3 No permanent structure may be constructed over any existing private and/or public utility easements. It is the responsibility of the applicant to identify any and all existing easements on the plan. (T&ES)

F-1 Previously reviewed under BAR2010-00229. (T&ES)

F-2 After review of the information provided, an approved grading plan is not required at this time. Please note that if any changes are made to the plan it is suggested that T&ES be included in the review. (T&ES)

F-3 If the alley located at the rear of the parcel is to be used at any point of the construction process the following will be required:
For a Public Alley - The applicant shall contact T&ES, Construction Permitting & Inspections at (703) 746-4035 to discuss any permits and accommodation requirements that will be required.
For a Private Alley - The applicant must provide proof, in the form of an affidavit at a minimum, from owner of the alley granting permission of use. (T&ES)

C-1 The applicant shall comply with the City of Alexandria's Solid Waste Control, Title 5, Chapter 1, which sets forth the requirements for the recycling of materials (Sec. 5-1-99). (T&ES)

C-2 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)

C-3 Roof, surface and sub-surface drains be connected to the public storm sewer system, if available, by continuous underground pipe. Where storm sewer is not available applicant must provide a design to mitigate impact of stormwater drainage onto adjacent properties and to the satisfaction of the Director of Transportation & Environmental Services. (Sec.5-

6-224) (T&ES)

C-4 All secondary utilities serving this site shall be placed underground. (Sec. 5-3-3) (T&ES)

C-5 Any work within the right-of-way requires a separate permit from T&ES. (Sec. 5-2) (T&ES)

C-6 All improvements to the city right-of-way such as curbing, sidewalk, driveway aprons, etc. must be city standard design. (Sec. 5-2-1) (T&ES)

V. ATTACHMENTS

1 – Supplemental Materials
2 – Application for BAR 2018-00453: 1600 West Abingdon Drive
3 – BAR2010-00229 Staff Report with Board Action

BAR Case # _____

ADDRESS OF PROJECT: 1600 - 1734 W. Abingdon Dr

TAX MAP AND PARCEL: 035.04-0A-0C **ZONING:** RC

APPLICATION FOR: *(Please check all that apply)*

☐ CERTIFICATE OF APPROPRIATENESS

☐ PERMIT TO MOVE, REMOVE, ENCAPSULATE OR DEMOLISH
(Required if more than 25 square feet of a structure is to be demolished/impacted)

☐ WAIVER OF VISION CLEARANCE REQUIREMENT and/or YARD REQUIREMENTS IN A VISION CLEARANCE AREA (Section 7-802, Alexandria 1992 Zoning Ordinance)

☐ WAIVER OF ROOFTOP HVAC SCREENING REQUIREMENT
(Section 6-403(B)(3), Alexandria 1992 Zoning Ordinance)

Applicant: ☐ Property Owner ☒ Business *(Please provide business name & contact person)*

Name: P.B.S. Inc. t/a The Window Man

Address: 3853-A Pickett Rd

City: Fairfax State: VA Zip: 22031

Phone: 703-978-9888 E-mail: tom@thewindowman.com

Authorized Agent *(if applicable)*: ☐ Attorney ☐ Architect ☐ _____

Name: _____ Phone: _____

E-mail: _____

Legal Property Owner:

Name: The Unit Owners association of Potowmack Crossing Condominium

Address: 1600 W. Abingdon Dr

City: Alexandria State: VA Zip: 22314

Phone: _____ E-mail: _____

☐ **Yes** ☐ **No** Is there an historic preservation easement on this property?
☐ **Yes** ☐ **No** If yes, has the easement holder agreed to the proposed alterations?
☒ **Yes** ☐ **No** Is there a homeowner's association for this property?
☒ **Yes** ☐ **No** If yes, has the homeowner's association approved the proposed alterations?

If you answered yes to any of the above, please attach a copy of the letter approving the project.

BAR Case # _____

Additions & New Construction: *Drawings must be to scale and should not exceed 11" x 17" unless approved by staff. All plans must be folded and collated into 3 complete 8 1/2" x 11" sets. Additional copies may be requested by staff for large-scale development projects or projects fronting Washington Street. Check N/A if an item in this section does not apply to your project.*

	N/A	
☐	☐	Scaled survey plat showing dimensions of lot and location of existing building and other structures on the lot, location of proposed structure or addition, dimensions of existing structure(s), proposed addition or new construction, and all exterior, ground and roof mounted equipment.
☐	☐	FAR & Open Space calculation form.
☐	☐	Clear and labeled photographs of the site, surrounding properties and existing structures, if applicable.
☐	☐	Existing elevations must be scaled and include dimensions.
☐	☐	Proposed elevations must be scaled and include dimensions. Include the relationship to adjacent structures in plan and elevations.
☐	☐	Materials and colors to be used must be specified and delineated on the drawings. Actual samples may be provided or required.
☐	☐	Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
☐	☐	For development site plan projects, a model showing mass relationships to adjacent properties and structures.

Signs & Awnings: *One sign per building under one square foot does not require BAR approval unless illuminated. All other signs including window signs require BAR approval. Check N/A if an item in this section does not apply to your project.*

	N/A	
☐	☐	Linear feet of building: Front: _____ Secondary front (if corner lot): _____.
☐	☐	Square feet of existing signs to remain: _____.
☐	☐	Photograph of building showing existing conditions.
☐	☐	Dimensioned drawings of proposed sign identifying materials, color, lettering style and text.
☐	☐	Location of sign (show exact location on building including the height above sidewalk).
☐	☐	Means of attachment (drawing or manufacturer's cut sheet of bracket if applicable).
☐	☐	Description of lighting (if applicable). Include manufacturer's cut sheet for any new lighting fixtures and information detailing how it will be attached to the building's facade.

Alterations: *Check N/A if an item in this section does not apply to your project.*

	N/A	
☐	☐	Clear and labeled photographs of the site, especially the area being impacted by the alterations, all sides of the building and any pertinent details.
☐	☐	Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
☐	☐	Drawings accurately representing the changes to the proposed structure, including materials and overall dimensions. Drawings must be to scale.
☐	☒	An official survey plat showing the proposed locations of HVAC units, fences, and sheds.
☐	☐	Historic elevations or photographs should accompany any request to return a structure to an earlier appearance.

BAR Case # _____

NATURE OF PROPOSED WORK: *Please check all that apply*

- ☐ NEW CONSTRUCTION
- ☐ EXTERIOR ALTERATION: *Please check all that apply.*
  - ☐ awning
  - ☐ doors
  - ☐ lighting
  - ☐ fence, gate or garden wall
  - ☒ windows
  - ☐ pergola/trellis
  - ☐ HVAC equipment
  - ☐ siding
  - ☐ painting unpainted masonry
  - ☐ shutters
  - ☐ shed
  - ☐ other _____
- ☐ ADDITION
- ☐ DEMOLITION/ENCAPSULATION
- ☐ SIGNAGE

DESCRIPTION OF PROPOSED WORK: *Please describe the proposed work in detail (Additional pages may be attached).*

Remove existing aluminum windows and replace with Marvin fiberglass Infinity windows.

SUBMITTAL REQUIREMENTS:

Items listed below comprise the **minimum supporting materials** for BAR applications. Staff may request additional information during application review. Please refer to the relevant section of the *Design Guidelines* for further information on appropriate treatments.

Applicants must use the checklist below to ensure the application is complete. Include all information and material that are necessary to thoroughly describe the project. Incomplete applications will delay the docketing of the application for review. Pre-application meetings are required for all proposed additions. All applicants are encouraged to meet with staff prior to submission of a completed application.

Electronic copies of submission materials should be submitted whenever possible.

Demolition/Encapsulation : *All applicants requesting 25 square feet or more of demolition/encapsulation must complete this section. Check N/A if an item in this section does not apply to your project.*

	N/A	
☐	☐	Survey plat showing the extent of the proposed demolition/encapsulation.
☐	☐	Existing elevation drawings clearly showing all elements proposed for demolition/encapsulation.
☐	☐	Clear and labeled photographs of all elevations of the building if the entire structure is proposed to be demolished.
☐	☐	Description of the reason for demolition/encapsulation.
☐	☐	Description of the alternatives to demolition/encapsulation and why such alternatives are not considered feasible.

BAR Case # _____

ALL APPLICATIONS: *Please read and check that you have read and understand the following items:*

☒ I have submitted a filing fee with this application. (Checks should be made payable to the City of Alexandria. Please contact staff for assistance in determining the appropriate fee.)

☒ I understand the notice requirements and will return a copy of the three respective notice forms to BAR staff at least five days prior to the hearing. If I am unsure to whom I should send notice I will contact Planning and Zoning staff for assistance in identifying adjacent parcels.

☒ I, the applicant, or an authorized representative will be present at the public hearing.

☒ I understand that any revisions to this initial application submission (including applications deferred for restudy) must be accompanied by the BAR Supplemental form and 3 sets of revised materials.

The undersigned hereby attests that all of the information herein provided including the site plan, building elevations, prospective drawings of the project, and written descriptive information are true, correct and accurate. The undersigned further understands that, should such information be found incorrect, any action taken by the Board based on such information may be invalidated. The undersigned also hereby grants the City of Alexandria permission to post placard notice as required by Article XI, Division A, Section 11-301(B) of the 1992 Alexandria City Zoning Ordinance, on the property which is the subject of this application. The undersigned also hereby authorizes the City staff and members of the BAR to inspect this site as necessary in the course of research and evaluating the application. The applicant, if other than the property owner, also attests that he/she has obtained permission from the property owner to make this application.

APPLICANT OR AUTHORIZED AGENT:

Signature: _____

Printed Name: Tom Patterson

Date: 10/5/18

OWNERSHIP AND DISCLOSURE STATEMENT
Use additional sheets if necessary

1. Applicant. State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. Tom Patterson	8200 Cub Den Ct Clifton, VA 20124	100
2.		
3.		

2. Property. State the name, address and percent of ownership of any person or entity owning an interest in the property located at 1600 W. Abingdon Dr (address), unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal ~~or~~ equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. NA		
2. 1600 W. Abingdon association of Potomac Crossing Condo		
3.		

3. Business or Financial Relationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose **any** business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1. Tom Patterson	none	none
2.		
3.		

NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.

As the applicant or the applicant's authorized agent, I hereby attest to the best of my ability that the information provided above is true and correct.

10/9/18 Tom Patterson

Date Printed Name Signature

Section 08 54 13
Infinity Double Hung Window

Part 1 General

1.1 Section Includes

A. Ultrex® double hung and related double hung stationary window complete with hardware, glazing, weather strip, insect screen, grilles-between-the-glass, simulated divided lites, standard or specified anchors, trim, attachments, and accessories

1.2 Related Sections

A. Section 01 33 23 – Submittal Procedures: Shop Drawings, Product Data and Samples

B. Section 01 62 00 – Product Options

C. Section 01 65 00 – Product Delivery

D. Section 01 66 00 – Product Storage and Handling Requirements

E. Section 01 71 00 – Examination and Preparation

F. Section 01 73 00 - Execution

G. Section 01 74 00 – Cleaning and Waste Management

H. Section 01 76 00 – Protecting Installed Construction

I. Section 06 22 00 – Millwork: Wood trim other than furnished by window manufacturer

J. Section 07 92 00 – Joint Sealants: Sill sealant and perimeter caulking

K. Section 09 90 00 – Paints and Coatings: Paint and stain other than factory-applied finish

1.3 References

A. American Society for Testing and Materials (ASTM):

1. C1036: Standard Specification for Flat Glass.

2. E90-09: Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.

3. E 283: Standard Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors.

4. E 330: Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Door by Uniform Static Air Pressure Difference.

5. E 547: Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential.

6. E 2190: Standard Specification for Insulating Glass Unit Performance Evaluation.

7. E 2068: Standard Test Method to Determine the Operating and Breakaway Forces of Sliding Windows and Doors.

8. F2090-17: Standard Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms.

B. Insulating Glass Manufacturer's Alliance/Insulating Glass Certification Council (IGMA/IGCC)

C. American Architectural Manufacturer's Association/Window and Door Manufacturer's Association/Canadian Standards Association (AAMA/WDMA/CSA):

1. AAMA/WDMA/CSA 101/I.S.2/A440-11: NAFS - North American Fenestration Standard/Specification for windows, doors, and skylights

2. AAMA/WDMA/CSA 101/I.S.2/A440-08: NAFS - North American Fenestration Standard/Specification for windows, doors, and skylights.

3. AAMA/WDMA/CSA 101/I.S.2/A440-05: Standard/Specification for windows and unit skylights.

D. Window and Door Manufacturer's Association (WDMA): Hallmark Certification Program.

E. American Architectural Manufacturer's Association (AAMA): 624-10: Voluntary Specification, Performance Requirements and Test Procedures for Organic Coatings on Fiber Reinforced Thermoset Profiles.

F. National Fenestration Rating Council (NFRC):

1. 100: Procedures for Determining Fenestration Product U-factors

2. 200: Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence

1.4 System Description

A. Design and Performance Requirements:

Product	Air Tested to psf	Water Tested to psf	Design Pressure (DP)	Certification Rating	Max Overall Width		Max Overall Height	
					in	mm	in	mm
Infinity Double Hung	1.57	3.76	25	LC-PG25-H	54	(1372)	85	(2159)
Infinity Double Hung	1.57	4.6	30	LC-PG30-H	48	(1219)	96	(2438)
Infinity Double Hung Picture	1.57	4.5	30	LC-PG30-FW	72	(1829)	72	(1829)
	1.57	4.5	30	LC-PG30-FW	60	(1524)	75	(1905)
	1.57	4.5	25	LC-PG25-FW	75	(1905)	75	(1905)

1.5 Submittals

A. Shop Drawings: Submit shop drawings under provision of Section 01 33 23.

B. Product Data: Submit catalog data under provision of Section 01 33 23.

C. Samples:

1. Submit corner section under provision of section 01 33 23.

2. Include glazing system, quality of construction, and specified finish.

D. Quality Control Submittals: Certificates: submit manufacturer's certification indicating compliance with specified performance and design requirement under provision of section 01 33 23.

1.6 Quality Assurance

A. Code Requirements: consult local code for IBC [International Building Code] and IRC [International Residential Code] adoption year and pertinent revisions for information on:

1. Egress, emergency escape and rescue requirements

2. Basement window requirements

3. Windows fall prevention and/or window opening control device requirements.

1.7 Delivery

A. Comply with provisions of Section 01 65 00

B. Deliver in original packaging and protect from weather

1.8 Storage and Handling

A. Store window units in an upright position in a clean and dry storage area above ground to protect from weather under provision of Section 01 66 00.

1.9 Warranty

A. Windows shall be warranted to be free from defects in manufacturing, materials, and workmanship for a period of ten (10) years from purchase date.

B. Insulating glass shall be warranted against visible obstruction through the glass caused by a failure of the insulating glass air seal for a period of twenty (20) years from the date of the original purchase.

Part 2 Products

2.1 Manufactured Units

A. Description: Factory-assembled Ultrex® Infinity Double Hung windows and related stationary units as manufactured by Infinity Windows & Doors, Roanoke, Virginia

2.2 Frame Description

A. Ultrex®, a fiberglass reinforced pultrusion

B. Exterior and Interior 0.075 inch (2 mm) thick

C. Frame thickness: 31/32 inch (25 mm) head jamb, 31/32 inch (25 mm) composite side jamb, 25/32 inches (20 mm) sill, flat bottom sill with 8 degree bevel

D. Frame width: 2 7/8 inches (73mm)

2.3 Sash Description

A. Ultrex®, a fiberglass reinforced pultrusion. Interior 0.075 inch (2mm) thick

B. Composite sash thickness: 1-3/8 inches (35mm) overall

C. Sash exterior Ultrex®, an advanced glass fiber reinforced material, 0.075 inch (2mm) thick

D. Cottage Style: top sash ratio between 1/3 and 1/2

E. Oriel Style: top sash ratio between 1/2 and 2/3

F. Operable sash tilt to interior for cleaning or removal

2.4 Glazing

A. Select quality complying with ASTM C 1036. Insulating glass SIGMA/IGCC when tested in accordance with ASTM E 2190. STC/OITC ratings are tested to the stated performance level in accordance with ASTM E 90-09.

B. Glazing Method: 11/16 inch (17 mm) Insulating glass, altitude adjusted

C. Glass Type: Low E1, Low E2, Low E3, Low E3/ERS with Air or Argon Gas, Tempered, Tempered Obscure, Obscure, Laminate

D. Decorative glass options include Glue Chip, Rain, Reed, Narrow Reed, Frost

1. Decorative glass is not available with Low E1, Low E3/ERS· STC/OITC, or Laminate

2. Rain, Reed, and Narrow Reed not available with SDL

3. SDL available with Frost, annealed or tempered glass

4. SDL available with Glue Chip, tempered glass required

E. Glazing Seal: Silicone bedding on interior; silicone bedding on exterior

F. Glazing Options: STC/OITC upgrade, Laminate upgrade

2.5 Finish

A. Exterior: Ultrex with a cross-head extruded acrylic organic coating system. Meets AAMA 624-10 requirements.

1. Exterior Colors: Stone White, Sierra, Pebble Gray, Bronze, Cashmere, Bahama Brown, Ebony

B. Interior: Ultrex with a cross-head extruded acrylic organic coating system. Meets AAMA 624-10 and 00022716 requirements.

1. Interior Color: Stone White or Sierra. Optional stainable non-wood interior wrap: EverWood™

2.6 Hardware

A. Balance system: Coil spring block and tackle with nylon cord and fiber filled nylon clutch

B. Lock: zinc die-cast lock and keeper

1. Color: White, Satin Taupe, Sierra, Brass, Satin Nickel, Oil Rubbed Bronze, Antique Brass, Brushed Chrome

2. Extended sizes – two locks and keepers

C. Lift:

1. Color: White, Satin Taupe, Sierra, Brass, Satin Nickel, Oil Rubbed Bronze, Antique Brass, Brushed Chrome

2. Extended sizes – two lifts

D. Sash Hanger: fixed upper sash only

1. Color: White, Beige

E. Factory Installed Window Opening Control Device for operating units per ASTM F2090-17: A system consisting of an acetal lever housed in an acetal shell on each stile of the top sash.

1. Available on all sizes

2. Color: White, Beige

2.7 Weather Strip

A. Jamb: Foam filled bulb with flexible TPE skin, to match interior color

B. Parting Stop: PVC with flexible hinged wand seal to match interior color

C. Bottom Sash: Beige, "V" shaped profile, vinyl foam filled with flexible TPE skin

D. Checkrail: Beige, PVC with flexible hinged wand seal

E. Stationary Units: Continuous foam weather strip at perimeter of sash.

1. Color: Gray

2.8 Insect Screen

A. Roll formed aluminum full screen. Half screen optional.

1. Factory-installed (removable)

B. Screen cloth:

1. Standard screen mesh material: 18 by 16 mesh: Charcoal Fiberglass

2. Optional screen mesh material: 20 by 20 mesh: Charcoal High Transparency Fiberglass

C. Frame Color: Stone White, Sierra, Pebble Gray, Bronze, Cashmere, Bahama Brown, Ebony

1. Spring loaded pins

2.9 Simulated Divides Lites (SDL):

A. 7/8" (22mm) or 1 1/8" (29mm) wide with internal aluminum spacer bars

B. Interior bar: ABS (Acrylonitrile Butadiene Styrene) or CPVC (Cellular Polyvinyl Chloride), finish to match interior color

C. Exterior bar: Ultrex, finish to match exterior color

D. Lite Cuts or Patterns:

1. Rectangle

2. Cottage Style/Oriel Style

3. Prairie cut

4. Check rail

7. Paint and Stain Instructions (EverWood™ only)

B. Installation Accessories: Package of installation hardware for Picture/Transom units consisting of:

1. Twelve #8 x2" Torx® truss head installation screws
2. EverWood™ test strip (EverWood™ only)
3. Paint and Stain Instruction (EverWood™ only)

C. Sill Installation Filler

1. 108" lengths

D. Interior Frame, Installation and Mulling Accessories:

1. Interior frame cover
2. Jamb extension adaptor
3. 5/8" sheetrock receiver
4. Jamb extension material
5. Nailing fin
6. Nailing fin drip cap
7. Nailing fin corner gaskets
8. Exterior mull cover
9. Mulling pin
10. Interior mull clip
11. Interior mull clip cover
12. Shipping bracket assembly
13. Mulling bracket
14. Mull tape – one-side

E. Exterior Casing:

1. Optional factory or field-applied, fiberglass reinforced ABS, Brick Mould Casing (BMC)
   a. Color: Stone White, Sierra, Pebble Gray, Bronze, Cashmere, Ebony, or Bahama Brown
2. Optional factory or field-applied, fiberglass reinforced ABS, Flush Fin Casing

2.10 SDL Simulated Rail (picture unit only)

A. 2-11/32" (30mm) wide with internal aluminum spacer bars

B. Interior bar: ABS (Acrylonitrile Butadiene Styrene) or cPVC (Cellular Polyvinyl Chloride), finish to match interior color

C. Exterior bar: Ultrex, finish to match exterior color

D. Lite Cuts or Patterns: Horizontal simulated rail in standard center or customer specified location with 7/8" (22mm) or 1 1/8" (29mm) wide bar above, below or both in patterns of:

1. Equal Rectangle
2. Prairie cut

2.11 Grilles-Between-the–Glass (GBG)

A. 23/32" (18mm) or 1" (25mm) contoured aluminum bar

B. Exterior Finish: Stone White, Sierra, Pebble Gray, Bronze, Cashmere, Bahama Brown, Ebony

C. Interior Finish: Stone White, Satin Taupe, Sierra, Bronze

D. Lite Cuts or Patterns:

1. Equal Rectangle Lite
2. Prairie cut
3. Cottage / Oriel
4. Check rail

E. GBG's are not available with dual 4.7mm glass panes

2.12 Accessories and Trim

A. Installation Accessories: Package of installation hardware for operable units consisting of:

1. Six #8 x 2" Torx® truss head installation screws
2. Six jamb hole plugs
3. One sash lift (two sash lifts on extended sizes)
4. Two #7 x ¾" Phillips flat head screws (for sash lift) (Four screws on extended sizes)
5. Keeper pile weather strip (EverWood™ only) (two weather strip on extended sizes)
6. EverWood™ test strip (EverWood™) only)

a. Color: Stone White, Sierra, Pebble Gray, Bronze, Cashmere, Ebony, or Bahama Brown

F. ½" Mull Reinforcement

1. ½" Mull Reinforcement
2. ½" Interior Mull Cover
3. ½" Exterior Mull Cover

G. Panning Accessories

1. Fiberglass reinforced ABS
   a. Profile: Frame Expander
   b. Color: Stone White, Sierra, Pebble Gray, Bronze, Cashmere, Bahama Brown, Ebony
2. Aluminum Extrusions:
   a. Coil panning
   b. Finish: High solids polyester
   c. Color: Stone White, Sierra, Pebble Gray, Bronze, Cashmere, Ebony or Bahama Brown

Part 3 Execution

3.1 Examination

A. Verification of Condition: Before installation, verify openings are plumb, square and of proper dimensions as required in Section 01 71 00. Report frame defects or unsuitable conditions to the General Contractor before proceeding.

B. Acceptance of Condition: Beginning installation confirms acceptance of existing conditions.

3.2 Installation

A. Comply with Section 01 73 00.

B. Assemble and install window/door unit(s) according to manufacturer's instruction and reviewed shop drawing.

C. Install sealant and related backing materials at perimeter of unit or assembly in accordance with Section 07 92 00 Joint Sealants.

D. Install accessory items as required.

3.3 Field Quality Control

A. Remove visible labels and adhesive residue according to manufacturer's instruction.

B. Unless otherwise specified, air leakage resistance tests shall be conducted at a uniform static pressure of 75 Pa (~1.57 psf). The maximum allowable rate of air leakage shall not exceed 2.3 L/sm^2 (~0.45 cfm/ft^2).

C. Unless otherwise specified, water penetration resistance testing shall be conducted per AAMA 502 and ASTM E1105 at 2/3 of the fenestration products design pressure (DP) rating using "Procedure B" – cyclic static air pressure difference. Water penetration shall be defined in accordance with the test method(s) applied.

3.4 Cleaning

A. Remove visible labels and adhesive residue according to manufacturer's instruction.

B. Leave windows and glass in a clean condition. Final cleaning as required in Section 01 74 00.

3.5 Protecting Installed Construction

A. Comply with Section 07 76 00.

B. Protect windows from damage by chemicals, solvents, paint or other construction operations that may cause damage.

End of Section


1716
1716
VXK-5278

1710


1712

Pair of Infinity Fiberglass windows that would be installed

Docket Item # 6
BAR CASE #2010-0229

BAR Meeting
September 1, 2010

ISSUE: Alterations

APPLICANT: Potowmack Crossing Condominium

LOCATION: 1600 West Abingdon Drive

ZONE: RC / Residential

BOARD ACTION: Approved, as amended, 6-0, with the following conditions on September 1, 2010:

1. That the applicant use full frame replacement windows rather than insert or pocket replacements;
2. That the windows and doors may be double glazed, simulated divided light with fixed interior and exterior muntins and dark spacer bars;
3. That the glazing on the glass be tint free;
4. That the applicant submit full specifications (shop drawings) for each of the four window types prior to BAR Staff sign-off of any individual unit;
5. That the original bulls-eye and octagonal windows be retained;
6. That the Condominium Association/Property Management Company install the approved replacement windows for common areas (including stairwells) within three years of approval;
7. That condominium owners submit an application and fee for administrative approval and receive approval from the Condominium Association and BAR Staff prior to installation at individual condo units or of each construction phase; and
8. This approval is contingent upon Staff conducting a field inspection after the first unit's installation to make a determination that it meets the Board's standards for a high-quality window and installation.

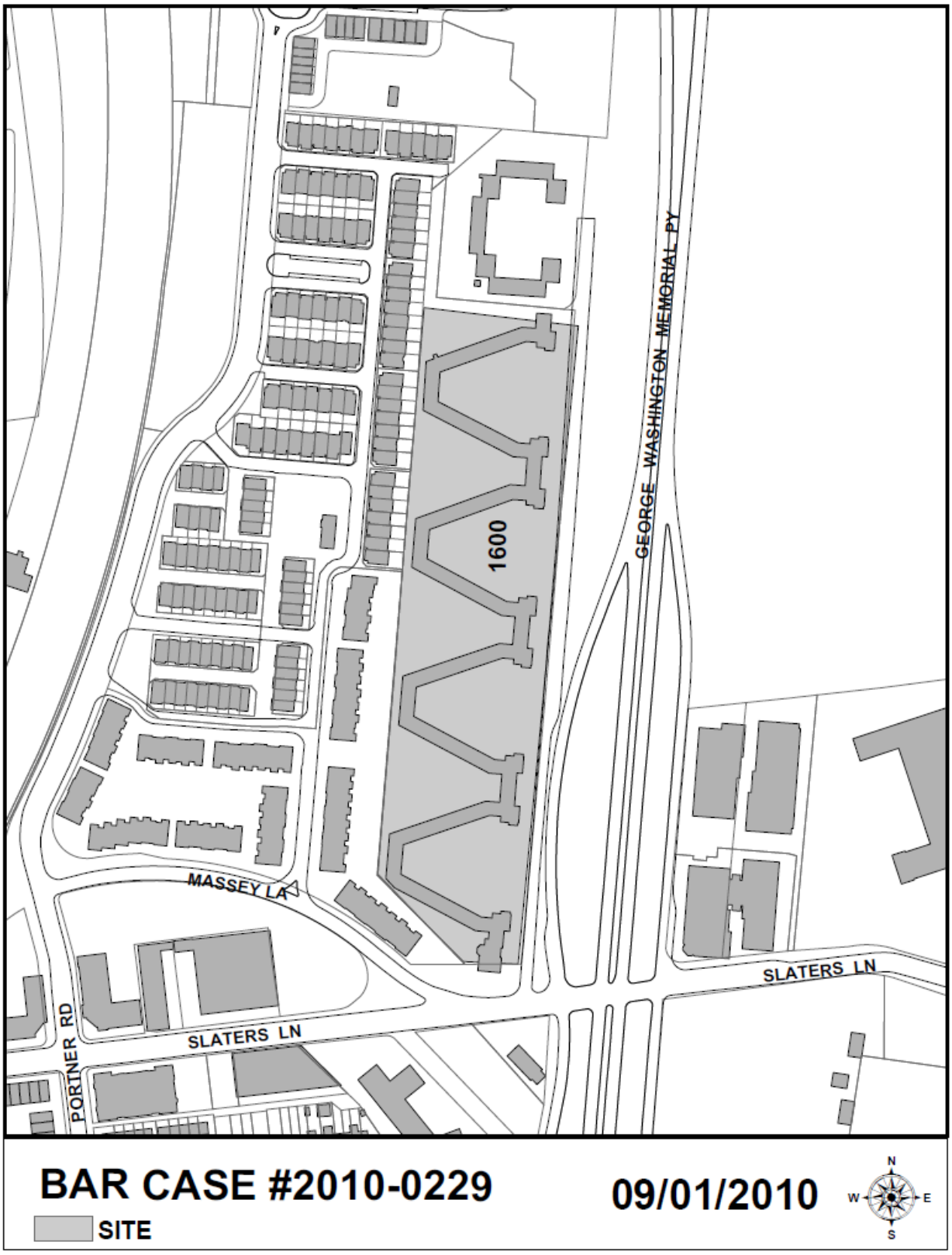
STAFF RECOMMENDATION: Staff recommends approval of the comprehensive application for replacement windows at Potowmack Crossing with the following conditions:

1. That the applicant use full frame replacement windows rather than insert or pocket replacements;
2. That the windows and doors may be double glazed, simulated divided light with fixed interior and exterior muntins and dark spacer bars;
3. That the glazing on the glass be tint free;

4. That the applicant submit full specifications (shop drawings) for each of the four window types prior to BAR Staff sign-off of any individual unit;
5. That the original bulls-eye and octagonal windows be retained;
6. That the Condominium Association/Property Management Company install the approved replacement windows for common areas (including stairwells) within three years of approval;
7. That condominium owners submit an application and fee for administrative approval and receive approval from the Condominium Association and BAR Staff prior to installation at individual condo units or of each construction phase; and
8. This approval is contingent upon Staff conducting a field inspection after the first unit's installation to make a determination that it meets the Board's standards for a high-quality window and installation.

**EXPIRATION OF APPROVALS NOTE: In accordance with Sections 10-106(B) and 10-206(B) of the Zoning Ordinance, any official Board of Architectural Review approval will expire 12 months from the date of issuance if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.

**BUILDING PERMIT NOTE: Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Building and Fire Code Administration (including signs). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-838-4360 for further information.


1600
GEORGE WASHINGTON MEMORIAL PY
MASSEY LA
SLATERS LN
SLATERS LN
PORTNER RD
BAR CASE #2010-0229
09/01/2010
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I. ISSUE

The applicant is requesting approval of a Certificate of Appropriateness for a blanket approval of replacement windows at the Potowmack Crossing condominium complex. The applicant is requesting removal of the existing aluminum windows and to replace them with casement windows that more closely match the appearance of the original steel casement windows. The proposed replacement windows will be made of Fibrex, a synthetic material made of 40% reclaimed wood fiber combined with a thermoplastic polymer. According to the Andersen representative, Fibrex can be painted. Fibrex has a stiffness that is more stable and rigid than vinyl but less rigid than wood. This product can also have narrower sash and frames, due its composition, and thus more closely match the frame and muntin profile of the original steel sash windows. Staff notes that this application is for blanket approval but the windows will be replaced by individual unit owners over time. If approved, the proposed window will be the only type allowed for replacement at Potowmack Crossing in the future.

II. HISTORY

The apartment complex, originally known as the Abingdon Apartments, was constructed between 1942 and 1945. It was one of many garden apartment type complexes constructed in Alexandria beginning in 1939 and continuing through the war years as the city sought to accommodate the growing population resulting from the buildup in governmental and defense industry employment. The southern, and somewhat later, northern end of Washington Street became the focus of apartment complex development. The northern end of town where the Abingdon was constructed had been characterized by undeveloped land and miscellaneous industrial concerns, but rapidly developed into a locus of garden style apartment complexes, including Bashford Hall Apartments (402-418 Bashford Lane, 1942-1943), Harbor Terrace Apartments (1301-1417 East Abingdon Drive and 509-607 Bashford Lane, 1943-1944), Locharbor Gardens Apartments (500-614 Bashford Lane, 1939-1940) and Mason Hall Apartments (1420 West Abingdon Drive, 1949). Alexandria's garden apartments were almost always designed in the Colonial Revival style and many took the names of historic sites in the area. Thus Abingdon, with its red brick, Colonial style door surrounds and cupolas was named for the Abingdon, the 18th century Alexander-Custis Plantation located along the George Washington Memorial Parkway on the grounds of the Reagan National Airport.

The complex was converted from apartments to condominiums in the mid-1980s, at which time it assumed the name Potowmack Crossing. The Board approved a series of alterations in 1985, including site improvements, signage, installation of new windows, new entry doors and exterior light fixtures (BAR Case #s 85-155, 8/14/1985; 85-54, 5/1/85; 85-139, 7/10/1985). In 1999, the Board approved the current freestanding sign at the south end of the complex (BAR Case #98-00041, 4/16/1999). In 2007, the Board approved an application to replace all existing doors and door surrounds, sills, exterior light fixtures and intercom panels (BAR 2007-0094, 6/6/2007).

III. ANALYSIS

The proposed alterations comply with zoning ordinance requirements.

The property manager and BAR Staff have received many inquiries from individual condo owners about replacement windows at this property because the existing aluminum windows are failing.

Staff has met with the property manager, acting on behalf of the Potowmack Crossing Condominium Association, to determine an appropriate window replacement. It was determined that a blanket approval for a new window plan for the entire complex was most appropriate.

The applicant has provided historic photograph documentation showing the steel sash casement windows that were installed when the building was originally constructed. As the photographs illustrate, the original windows were a combination of multi-light casement and fixed steel sash, with a multi-light transom. The complex had four window types: two of differing sizes that featured two paired casements with two fixed windows, a pair of French casements and a single casement. The black and white photographs show that the original windows were light or off-white in color.

Figure 1. Historic photograph, circa 1942.

Steel windows became available in the 1890s but were used primarily for commercial applications until after WWI, when the thin frames suited the visual design objectives of the Art Deco, Streamline Moderne and International Style buildings. Ease of production and shipping made these windows popular for residential uses, and especially multifamily buildings, through WWII, when cheaper, non-corroding aluminum windows became more popular. (Park, Sharon. NPS Preservation Brief

#13, 1984) In Alexandria, steel sash windows were used in some of the rowhouses of the Fagleson Addition in northwest Old Town and in numerous vernacular International Style apartment buildings in Parker-Gray and along the GW Parkway. The use of these industrial character, mass produced windows with no frame or visible lintel in an otherwise Colonial Revival style building is an odd mixture of International and Colonial style features which was used only during this brief period between the world wars. While still available and aesthetically desirable, steel sash are, unfortunately, extremely expensive today and they are among the least energy efficient windows available.

By 1985, the steel sash windows in Potomack Crossing had deteriorated significantly and the Board approved the wholesale replacement of windows at this complex. The 1985 replacement windows were white, six-over-six, double-hung, aluminum windows with sandwich muntins. The replacement windows significantly altered the architectural character of the complex.

The *Design Guidelines* recommend that: "…replacement windows should be appropriate to the historic period of the architectural style of the building". The *Guidelines* note that "…metal casement windows are only appropriate for buildings dating from the late 1940s or early-1950s."

Generally, Staff is reluctant to recommend approval of a synthetic or composite material on a building unless it is new construction. Further, in the circumstances where a synthetic or composite material is acceptable and has been approved, the Board has always required that the synthetic material be of highest quality. However, as more and more synthetic/composite materials are introduced and refined, Staff finds it necessary to evaluate each one on a case-by-case basis, noting that the Board has found the use of synthetic/composite materials appropriate in some circumstances.

In this particular example, Staff notes that the proposed replacement windows, while introducing a new composite material, will more closely resemble the visual and operating characteristics of the original sash and light configuration. The use of a composite material such as Fibrex, in this case, will allow for a narrower muntin profile which will more closely approximate the width of the original steel sash frame and muntins. Although the window is not proposed to be an exact replication, as there will be no transom feature, the proposed window will visually be much more in keeping with the architectural character. Further, Staff notes that other replacement window materials which are frequently approved as replacement for steel sash, such as aluminum-clad wood, are no more appropriate in this circumstance than a composite material. In fact, the use of a composite material permits a narrower profile and the ability to reconstruct a more historically accurate appearance. While this particular composite material has only been commercially available since 1991, the Andersen Window Company has been in business throughout the United States since 1903. Staff is, therefore, comfortable that the proposed windows meet the Board's general criteria for use of durable, high quality products in the historic district. However, recognizing that this product has not been used in the district before, Staff recommends that after the first windows are installed, that BAR Staff conduct an inspection in the field to make a determination that the new windows do in fact meet the Board's high standards. If Staff finds that once installed, these replacement windows are not appropriate, then the applicant will be required to return to the Board for a more appropriate replacement window.

While the proximity to the George Washington Memorial Parkway demands a high standard, Staff notes that these buildings are set sufficiently back from the Parkway, the majority of the buildings are sited at an angle, so that few windows are rarely seen in full elevation, and a significant tree canopy obscures the complex throughout much of the year. Therefore, Staff supports the use of Fibrex replacement windows in this case.

Anticipating that wholesale window replacement in this complex may take several years, Staff recommends that as each condominium owner elects to replace the windows in an individual unit, the owner must submit an application and fee for administrative approval to BAR Staff. The administrative application process will follow standard BAR administrative approval procedures. The owner will be required to submit specification of the proposed replacement windows. In addition, the applicant will be required to submit a form indicating the Condominium Association or property manager's approval, standard for any BAR application. Although the building will have several different window types for a period of years, Staff strongly supports the present efforts of the condominium owners to remove the inappropriate double hung aluminum windows and install windows which are much closer to the original style and design intent.

STAFF:
Catherine Miliaras, Historic Preservation Planner, Planning & Zoning
Al Cox, FAIA, Historic Preservation Manager, Planning & Zoning

IV. CITY DEPARTMENT COMMENTS

Legend: C - code requirement R - recommendation S - suggestion F- finding

Code Enforcement:
F- Per the Deputy Building Official, the new windows will not be required to meet the egress requirements of the current building code because neither the original windows, nor the 1985 replacement windows met these requirements.

Historic Alexandria:
No comments received.

VI. IMAGES

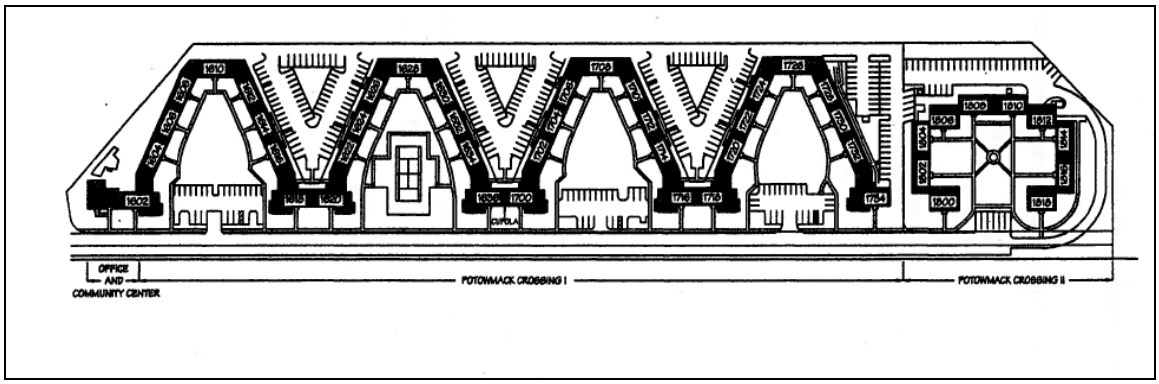

Figure 2. Site plan of buildings in Potowmack Crossing.

Figure 3. Historic photograph, circa 1942.

Figure 4. Historic Photograph, circa 1942.

Figure 5. Historic photograph, circa 1942.

Figure 6. Detail of historic photograph, circa 1942

Figure 7. Existing conditions.

Figure 8. Proposed replacement windows.

Figure 9. Existing conditions.

Figure 10. Proposed replacement windows.