MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION
STAFF REPORT

Address: 10933 Montrose Avenue, Garrett Park       Meeting Date: 2/24/2021
Resource: Contributing Resource                   Report Date: 2/10/2021
( Garrett Park Historic District)                  Public Notice: 2/3/2021
Applicant: Doug Mader, Architect                   Tax Credit: N/A
Review: HAWP                                        Staff: Michael Kyne
Permit Number: 941301

PROPOSAL: Building alteration

STAFF RECOMMENDATION

Staff recommends that the HPC approve the HAWP application.

ARCHITECTURAL DESCRIPTION

SIGNIFICANCE: Contributing Resource within the Garrett Park Historic District
DATE: 1922

Fig. 1: Subject property.
BACKGROUND

The applicant previously appeared before the Commission for preliminary consultations at the July 29, 2020, September 9, 2020, and October 14, 2020 HPC meetings.1

PROPOSAL

The applicant proposes building additions and alterations at the subject property.

APPLICABLE GUIDELINES

When reviewing alterations and new construction within the Garrett Park Historic District several documents are to be utilized as guidelines to assist the Commission in developing their decision. These documents include the Comprehensive Amendment to the North Bethesda-Garrett Park Master Plan (1992), 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.

Comprehensive Amendment to the North Bethesda-Garrett Park Master Plan (1992)

Contributing Resource: 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.

Montgomery County Code; Chapter 24A

(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 ensure conformity with the purposes and requirements of this chapter, if it finds that:

1 Link to July 29, 2020 HPC meeting audio/video transcript: http://mncppc.granicus.com/MediaPlayer.php?publish_id=fc70ce7d-d290-11ea-b5c3-0050569183fa
Link to October 19, 2020 HPC meeting audio/video transcript: http://mncppc.granicus.com/MediaPlayer.php?publish_id=1411ee9e-12f9-11eb-80dd-0050569183fa
(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 1 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

The Secretary of the Interior defines rehabilitation as “the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features, which convey its historical, cultural, or architectural values.” The Standards are as follows:

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8. Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

**STAFF DISCUSSION**

At the October 19, 2020 HPC meeting, the Commission expressed the following:

- The majority was supportive of the revised proposal.
  - The majority found the option with no additional mini gables appropriate (the shed roof option), as this option allowed the original gable to maintain its prominence.
  - One Commissioner remained opposed to any front porch addition.
- The majority was supportive as the rear addition with increased length.
  - One Commissioner stated that the applicants should be careful adding too much additional space to the addition and make sure the rear addition is detailed correctly/not too box-like.

The applicant has returned with the following revisions:

- The applicants propose the front porch addition with shed roof.
- The proposed rear addition has been revised, with a double gable roof in place of the previously proposed hipped roof.
  - The fenestration of the proposed rear addition has also been revised. Of note, the proposed windows on the lower and upper levels of the north (left, as viewed from the public right-of-way of Montrose Avenue) elevation are no longer aligned, as the lower level windows have been shifted to accommodate a newly proposed powder room on the lower level.

Staff supports the applicant’s proposal, as revised. Although the original front porch has been previously enclosed, the proposed front porch addition with shed roof allows the form and massing of the original front porch to remain prominent. Additionally, an open front porch is generally consistent with the
character of historic Chevy houses and with the adjacent and confronting houses in the Garrett Park Historic District. The proposal also responds to the Commission’s recommendations at the October 19, 2020 preliminary consultation, and staff finds that the proposal will not remove or alter character-defining features of the subject property and/or streetscape, in accordance with Standards #2 and #9. Furthermore, the proposed rear addition can be removed in the future, leaving the essential form and integrity of the historic property and its environment unimpaired, per Standard #10.

Staff notes that the Garrett Park Historic Preservation Committee (GPHPC) supported the applicant’s proposal in their letter dated July 28, 2020, finding that “with the proposed front addition the subject property will continue to contribute to the character of the historic district and streetscape, and that the proposed front addition will enhance historic character-defining features of the subject property and/or its surrounding streetscape by respectfully evoking the original design of the house. The Committee also finds the additions to be compatible with the massing, size, scale, and architectural features of the original house.” The GPHPC has not provided specific comments regarding the revised proposal.

After full and fair consideration of the applicant’s submission staff finds the proposal as being consistent with the Criteria for Issuance in Chapter 24A-(b) 1 and 2, having found the proposal is consistent with the Secretary of the Interior’s Standards for Rehabilitation #2, #9, and #10 outlined above.

STAFF RECOMMENDATION:

Staff recommends that the Commission approve the HAWP application under the Criteria for Issuance in Chapter 24A-8(b), (1), (2) & (d) having found that the proposal will not substantially alter the exterior features of the historic resource and is compatible in character with the district and the purposes of Chapter 24A;

and with the Secretary of the Interior’s Standards for Rehabilitation #2, #9, and #10;

and with the general condition that the applicant shall present permit drawings, if applicable, to Historic Preservation Commission (HPC) staff for review and stamping prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that final project design details, not specifically delineated by the Commission, shall be approved by HPC staff or brought back to the Commission as a revised HAWP application at staff’s discretion;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make any alterations to the approved plans.

Once the work is completed the applicant will contact the staff person assigned to this application at 301-563-3400 or michael.kyne@montgomeryplanning.org to schedule a follow-up site visit.
HISTORIC PRESERVATION COMMISSION
301/563-3400

APPLICATION FOR
HISTORIC AREA WORK PERMIT

Contact Email: dmaderaia@aol.com
Contact Person: Doug Mader, AIA
Daytime Phone No: (301) 466-1378

Tax Account No: 00005939

Name of Property Owner: Ajay Bhatt & Reena Adv
Daytime Phone No: (301) 996-4044

Address: 10933 Montrose Ave an Garrett Park, MD 20896

Contractor: T.B.D.

Agent for Owner: 
Daytime Phone No: 

LOCATION OF BUILDING/PREISES

House Number: 10933
Street: Montrose Ave
Town/City: Garrett Park Nearest Cross Street: Clermont Ave
Lot: 12 Block: 97 Subdivision: Town of Garrett Park

PART ONE: TYPE OF PERMITION, ACTIVITY AND USE

1A. CHECK ALL APPLICABLE:
- [ ] Construct
- [ ] Extend
- [x] Alter/Remodel
- [ ] A/C
- [ ] Slab
- [ ] Room Addition
- [ ] Porch
- [ ] Deck
- [ ] Shed
- [ ] Move
- [ ] Install
- [ ] Wreck/Raze
- [ ] Solar
- [ ] Fireplace
- [ ] Woodburning Stove
- [ ] Single Family
- [ ] Revision
- [ ] Repair
- [ ] Revocable
- [ ] Fence/Wall (complete Section 4)
- [ ] Other: 

1B. Construction cost estimate: $160,000

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

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTENSIONS

2A. Type of sewage disposal:
- [x] WSSC
- [ ] Septic
- [ ] Other:

2B. Type of water supply:
- [x] WSSC
- [ ] Well
- [ ] Other:

PART THREE: COMPLETE ONLY FOR FENCES/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

______________________________
Date

Approved: 
For Chairperson, Historic Preservation Commission

Disapproved: 
Signature: 
Date:

Application/Permit No: 
Date Filed: 
Date Issued:

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:
      Historic structure is a modified "Chevy House" 
      on a winding street in Garrett Park, neighboring 
      many other Chevy houses. East end of property 
      (backyard) abuts "Percyine Woods," a rustic 
      park owned by the town. 
      Many years ago a rear addition was built and 
      the original Front Porch enclosed to expand the Living Room.
   b. General description of project and its effect on the historic resource(s), the environmental setting, and, where applicable, the historic district:
      Proposed project is 1) Front Porch & Vestibule and 
      2) rear Dining Room Extension. We'll enhance the 
      historic district by giving back to this house the essential Front Porch. 
      Rear addition has little affect on historic district.

2. SITE PLAN
   See attached ddl page.
   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
   See attached pages dd2-8
   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
   See Design Development drawings
   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.

5. PHOTOGRAPHS
   See attached 3 pages of 7 photos.
   a. Clearly labeled photographic prints of each facade 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
   No trees near proposed work.
   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.

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.
<table>
<thead>
<tr>
<th>Owner’s mailing address</th>
<th>Owner’s Agent’s mailing address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ajay Bhatt</td>
<td>Douglas Mader, AIA</td>
</tr>
<tr>
<td>10933 Montrose Ave</td>
<td>11307 Rokeby Ave, Box 187</td>
</tr>
<tr>
<td>Garrett Park, MD 20896</td>
<td>Garrett Park, MD 20896</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adjacent and confronting Property Owners mailing addresses</th>
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</thead>
<tbody>
<tr>
<td>Robert Freer</td>
</tr>
<tr>
<td>10934 Montrose Ave</td>
</tr>
<tr>
<td>Garrett Park, MD 20896</td>
</tr>
<tr>
<td>Robert Sanchez ! Irma Alba</td>
</tr>
<tr>
<td>10935 Montrose Ave</td>
</tr>
<tr>
<td>Garrett Park, MD 20896</td>
</tr>
<tr>
<td>Frank ! Suzanne GREFSHEIM</td>
</tr>
<tr>
<td>Box 175</td>
</tr>
<tr>
<td>10934 Clermont Ave</td>
</tr>
<tr>
<td>Garrett Park, MD 20896</td>
</tr>
</tbody>
</table>
10933 Montrose Avenue, Garrett Park, MD

Material Specifications:
Front exterior materials must be acceptable to Historic Preservation Commission.

Front Addition: Generally painted wood; no Late 20th Century materials.
Wall Siding: Painted wood clapboard siding
Window: Reuse existing painted wood double hung window & Shutters
Front Door: Painted wood glazed door.
Shutters: New painted wood shutters for front door (Optional).
Porch Floor: Painted wood (fir, tongue & groove) flooring.
Porch Ceiling: Painted or stained fir tongue & groove bead-board
Posts: Painted wood trim on 6x6 pressured treated wood posts
Porch trim: Painted wood.
Front Walk: Concrete to tie into existing. Optional Brick to Montrose steps.

Rear Addition: Generally 21st Century materials.
Windows: Clad wood casement windows, Andersen 400 or similar.
Siding: Painted fiber-cement clapboard siding, 7-inch exposure.
Decking: Composite decking, Trex or similar
Deck & Post Trim: PVC trim, Azek or similar.
Railing & Guard: To be determined
Soffit over Deck: Painted or stained fir tongue & groove bead-board

Throughout: Generally match existing.
Roofing: Architectural grade asphalt shingles to match existing.
Fascia: Painted wood trim to match existing
Gutters: White aluminum gutters and downspouts; match existing.

Interior: Generally match existing.
Flooring: Tile in Entry, Hardwood in Dining Room Extension.
Walls & Ceilings: Painted drywall.
Door & Trim: Match existing.
Bench Built-in: Painted wood.
Lighting Fixtures: Confirm with homeowners
10933 Montrose Avenue, Garrett Park, MD
10933 Montrose Avenue, Garrett Park, MD

10933 Montrose Avenue, Garrett Park, MD. Right Side Views
10933 Montrose Avenue, Garrett Park, MD

10933 Montrose Avenue, Garrett Park, MD. Rear and Left Views
### PRESCRIPTIVE WORKSHEET (R-Values)

**Applicant Name**: Reena Advani & Ajay Bhatt  
**Date**: 1/19/21

**Building Address**: 10933 Montrose Avenue, Garrett Park, MD 20896  
**Permit (A/P)#**:  

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>REQUIRED</th>
<th>PROVIDED</th>
<th>ASSEMBLY DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>WINDOWS/DOORS GLAZED FENESTRATION</td>
<td></td>
<td></td>
<td>Anderson Casement 400 Series, Low E4, or similar</td>
</tr>
<tr>
<td><strong>MAX. U-FACTOR</strong></td>
<td>0.32</td>
<td>0.31</td>
<td></td>
</tr>
<tr>
<td><strong>MAX. SHGC</strong></td>
<td>0.55</td>
<td>0.30</td>
<td></td>
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<tr>
<td>SKYLIGHTS</td>
<td></td>
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<td><strong>MAX. U-FACTOR</strong></td>
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<td>N/A</td>
<td>N/A</td>
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<tr>
<td><strong>MAX. SHGC</strong></td>
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<td>N/A</td>
<td></td>
</tr>
<tr>
<td>CEILINGS</td>
<td></td>
<td></td>
<td>BLOWN-IN OR FIBERGLASS BATT</td>
</tr>
<tr>
<td>WALLS (wood framing)</td>
<td>R-49</td>
<td>R-49</td>
<td></td>
</tr>
<tr>
<td><strong>MINIMUM R-VALUE</strong></td>
<td>R-20 or 13+5</td>
<td>R-20</td>
<td>FIBERGLASS BATT - 2x6 WALLS</td>
</tr>
<tr>
<td>MASS WALLS</td>
<td><strong>R-8/13</strong></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>BASEMENT WALLS</td>
<td><strong>R-10/13</strong></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>FLOORS</td>
<td>R-19</td>
<td>R-19</td>
<td>FIBERGLASS BATT</td>
</tr>
<tr>
<td>SLAB PERIMETER R-value, depth</td>
<td>R-19, 2 ft</td>
<td>R-10, 2ft</td>
<td>2&quot; RIGID POLYSTYRENE (N/A)</td>
</tr>
<tr>
<td>CRAWL SPACE WALLS</td>
<td><strong>R-10/13</strong></td>
<td>R-13</td>
<td>FIBERGLASS BATT - 2x4 FURRING</td>
</tr>
</tbody>
</table>

*The first R-value applies to continuous insulation, the second to framing cavity insulation. "10/13 means R-10 continuous insulation sheathing on the interior or exterior of the home or R-13 cavity insulation on the interior of the basement wall."

**The second R-value applies when more than half the insulation is on the interior of the mass wall. Insulation material used in layers, such as framing cavity insulation and insulating sheathing, shall be summed to compute the component R-value.

☐ Thermally Isolated Sunroom, Check box if applicable.
- Minimum Ceiling R-Value of Sunroom (R-19)
- Minimum Wall R-Value (R-13)
- New wall(s) separating a sunroom from conditioned space shall meet the building thermal envelope requirements.

I hereby certify that the building design represented in the attached construction documents has been designed to meet or exceed the requirements of:


**Douglas Mader**  
Builder/Designer/Contractor

**Douglas Mader, AIA**  
Company Name

**1/19/21**  
Date

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1 Section R103.3.1 "Documents shall be endorsed and stamped "Reviewed for Code Compliance." Section R103.3.3 provides provision for Phased Approval. "The code official shall have the authority to issue a permit for the construction of part of an energy conservation system before the construction documents for the entire system have been submitted or approved, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this code. The holders of such permit shall proceed at their own risk without assurance that the permit for the entire energy conservation system will be granted."
SECTION 08 52 00.03
WOOD DOUBLE-HUNG TILT WINDOWS

MANUFACTURER
Weather Shield Mfg., Inc.
One Weather Shield Plaza
P.O. Box 309
Medford, WI 54451-0309
Phone: 1-800-538-8836
Fax: 1-800-390-1225
E-mail: archservices@weathershield.com

WINDOW SPECIFICATION FOR 10933 MONTROSE AVENUE, GARRETT PARK, MD

PART 1 GENERAL

1.1 SECTION INCLUDES
A. Weather Shield Wood Double-Hung Tilt Windows with Hardware.
B. Glazing.
C. Accessories.

1.2 RELATED SECTIONS
A. Section 01 33 00 - Submittal Procedures.
B. Section 01 65 00 - Product Delivery Requirements.
C. Section 01 66 00 - Product Storage and Handling Requirements.
D. Section 06 10 00 - Rough Carpentry.
E. Section 06 20 00 - Finish Carpentry.
F. Section 07 90 00 - Joint Protection.
G. Section 08 80 00 - Glazing.
H. Section 09 90 00 - Painting and Coating.

1.3 REFERENCES
A. American Society for Testing and Materials (ASTM):
B. American Architectural Manufacturers Association/Window and Door Manufacturers Association/Canadian Standards Association (AAMA/WDMA/CSA):
C. Window and Door Manufacturers Association (WDMA):
   1. WDMA I.S.2 – Hallmark Certification Program.
   2. WDMA 4-05 - Industry Standard for Water Repellent Preservative Non-Pressure Treatment for Millwork.

E. National Fenestration Rating Council (NFRC):
   4. ENERGY STAR® Compliant Models available.

F. Insulating Glass Certification Council (IGCC).

G. Safety glass tested in accordance with ANSI Z97.1.

H. Screen Manufacturers Association (SMA):

1.4 PERFORMANCE REQUIREMENTS

A. Design and performance requirements:
   1. Double-hung tilt windows shall be Hallmark certified in compliance with ANSI/AAMA/NWWDA 101/I.S.2/A440-08:
   2. Vertical mull, mulled and applied rating: Manufacturer’s standard testing.
   3. Air infiltration shall not exceed 0.30 cfm/ft² (1.5 L/s•m²) when tested at 1.57 psf [75 Pa] according to ASTM E283.
   4. No water penetration when tested at the following pressure according to ASTM E547:
   5. Manufacturer’s standard testing.
   6. Double-hung tilt windows must withstand the following positive/negative structural test pressure without damage when tested according to ASTM E330:
   7. Manufacturer’s standard testing.
   8. Double-hung tilt windows must pass a forced entry resistance test of at least Grade 10 to meet requirements set forth in ASTM F588.

8.5 SUBMITTAL PROCEDURES

A. Shop drawings: submit shop drawings according to Section 01 33 23 – Shop Drawings, Product Data and Samples.

B. Product data: submit manufacturer’s product catalog data and installation guides.

C. Samples: submit samples including the following:
   1. Corner cutaway: submit corner cutaway, including glazing system, quality of construction and specified exterior/interior finishes.
   2. Exterior: submit color samples of exterior color finishes.
   3. Hardware: submit samples indicating typical hardware finishes.

D. Quality control reporting: submit manufacturer’s test results reported by independent laboratory indicating compliance with specified performance and design requirements, as listed in 1.4 Performance Requirements, according to Section 01 33 26 – Source Quality Control Reporting.
1.6 QUALITY ASSURANCE

A. Single source responsibility: except for hardware mechanisms, weather strip and aluminum extrusions, the window manufacturer is responsible for fabrication of all components and materials including treatment of wood with acceptable wood preservatives, millwork of sash and frame members, assembly of most insulating glass and manufacture of all sash and frames.

B. Regulatory requirements:
   1. Emergency escape and rescue: comply with requirements for sleeping units of the 2018 IRC International Residential Code.

1.7 PRODUCT DELIVERY REQUIREMENTS

A. Comply with the product delivery requirements specified in Section 01 65 00 - Product Delivery Requirements.

1.8 PRODUCT STORAGE AND HANDLING REQUIREMENTS

A. Comply with the requirements for storage and handling of products as specified in Section 01 66 00 – Product Storage and Handling Requirements.

B. Store units in a dry location, off the ground, under cover, protected from weather and construction activities.

1.9 WARRANTIES

A. Workmanship and materials: 20-year limited warranty.

B. Wood rot: 10-year warranty.

C. Insulating glass: 20-year warranty.

PART 2 PRODUCTS

2.1 MANUFACTURED UNITS

A. Weather Shield® series 610 Wood Double-Hung Tilt Windows as manufactured by Weather Shield Mfg., Inc. of Medford, Wisconsin.

2.2 WOOD DOUBLE-HUNG TILT WINDOW MATERIALS

A. Frame:
   1. Exterior frame members milled from pine, kiln dried to a moisture content of 6-12% at the time of fabrication and treated with a water-repellent preservative. The frame includes solid one-piece jambs and applied inside sash stops at sides and sill. Frame corners shall be square cut, rabbeted at head, dadoed at sill, chemically and mechanically fastened.
   2. Interior frame materials to be milled from standard pine, kiln dried to a moisture content of 6-12% at the time of fabrication and treated with a water-repellent preservative.
   3. Frame thickness shall be 1-1/16" [27mm] head, 5/8" [16mm] side jambs and 1-3/16" [30mm] sill.
   4. Frame shall have standard jamb depth of 4-9/16" [116mm].
   5. Frame shall have 2" [51mm] brick mould factory applied to head and side jambs; sill shall have 1-1/16" [27mm] sill nose. Sill shall include .045" [1.1mm] tan vinyl sill riser that interlocks into .070" [1.8mm] white extruded aluminum sill cover.
B. Sash:
1. Exterior sash materials to be milled from pine, kiln dried to a moisture content of 6-12% at the time of fabrication and treated with a water-repellent preservative. Sash corners shall be mortised, tenoned and mechanically fastened.
2. Interior sash materials to be milled from standard pine, kiln dried to a moisture content of 6-12% at the time of fabrication and treated with a water-repellent preservative.
3. Two finger lift routs shall be routed in the bottom rail of the bottom sash. Option: no finger lift routs.
4. Top sash top rail shall be 3" [76mm] wide; bottom sash bottom rail shall be 3" [76mm] wide; stiles for both sash shall be 1-1/2" [38mm] wide.
5. Putty profile sash shall be 1-5/8" [41mm] thick; top and bottom check rails shall be 1-3/4" [44mm] thick.
6. Top and bottom sash must tilt in from the inside for cleaning purposes without removal of screens.

C. Finish:
2. Interior finish: standard clear treated pine.

D. Glazing: select quality complying with ASTM C1036. Insulating glass IGCC certified to performance level CBA when tested in accordance with ASTM E2190.
1. Glazing method: Insulated glass consisting of two lites of clear standard annealed glass.
2. Glass type:
   Low E 272 sputter coat applied on number two surface
3. Insulated glass airspace:
   Air (standard)
4. Insulated glass shall be sealed with a
   a. Standard black warm-edge spacer system with integrated edge seal and foil laminate moisture vapor barrier.
5. Glass shall be silicone glazed at sash exterior to allow re-glazing from the interior with standard colonial glazing bead. Back side of glazing bead to be finished black.

E. Hardware:
1. Self-contained block and tackle balance system housed in foam-backed rigid vinyl jamb liner. Jamb liner shall be standard beige vinyl extruded by window manufacturer. Block and tackle balance housing colors must match jamb liner.
2. High-pressure zinc die-cast tilt pins and mortised, semi-recessed lock mechanism mechanically fastened, factory applied. Two zinc die-cast flush-mounted tilt latches factory applied. Top sash tilt latch finish is gold-tone. Bottom sash tilt latch finish matches sash lock finish.
3. Sash locks shall be zinc die cast, surface mounted at bottom sash check rail and factory applied. Two sash locks are factory applied to all units over 28" [711mm] nominal glass width. Sash lock/keeper finishes: standard gold-tone/beige.

F. Weather stripping:
1. Flexible beige vinyl-wrapped, foam-filled leaf weather strip at head.
2. Two vertical beige pile weather strips with cloth fin on each vinyl jamb liner.
3. White pile weather strip with cloth fin at bottom sash check rail.
4. Flexible beige vinyl bulb and beige vinyl-wrapped, foam-filled leaf weather strip at bottom of bottom rail.

G. Screens:
1. Full screen consisting of .019" [0.5mm] thick formed aluminum frames with baked-on acrylic coating, injection molded vinyl corner keys, standard 20x20 high-visibility vinyl-coated charcoal fiberglass mesh.
2. Frame finish: matches exterior frame/sash.
H. High-performance option:
   1. High-performance top sash pivot pin.

I. Simulated divided lites:
   1. Exterior and interior wood muntins adhered to glass with double-coated acrylic foam tape:
      b. Standard Colonial profile interior simulated divided lite bar.
   3. Pattern: rectangular configuration as shown on drawings.
   4. Finish: matches exterior/interior sash finish (with the exception of knotty pine).

2.3 ACCESSORIES AND TRIM

A. Interior installation clips shipped loose (standard). 5-1/2” (140mm).

B. Exterior wood casings standard factory applied 3-1/2” Franklin casing Color to match exterior frame.

C. Interior trim styles: none, contractor will provide interior trim.

PART 3 EXECUTION

3.1 INSTALLATION

A. Install windows according to manufacturer’s instructions and reviewed shop drawings to ensure proper installation and operation.

B. Install window unit plumb, level and square with no distortion of frame members.

C. Fill perimeter frame to wall opening cavity with batt insulation. Do not use expansive foam insulation.

D. Apply approved sealant in accordance with Section 07 90 00 – Joint Protection.

E. Do not puncture prefinished exterior. Refer to installation instructions for complete installation recommendations.

3.2 ADJUSTING AND CLEANING

A. Adjust operating sash and hardware to provide tight fit at contact points and at the weather stripping for smooth operation.

B. Remove excess sealant materials and visible labels from glass. Clean glass surfaces promptly after installation.

C. Initiate and maintain all protection and other precautions required to ensure windows are in acceptable condition at time of substantial completion.

END OF SECTION