# METROPOLITAN GOVERNMENT OF NASHVIELE AND DAVIDSON COUNTY

Metropolitan Historic Zoning Commission Sunnyside in Sevier Park 3000 Granny White Pike Nashville, Tennessee 37204 Telephone: (615) 862-7970

#### STAFF RECOMMENDATION 1223 Villa Place February 17, 2021

Application: New Construction—Addition; Demolition—Outbuilding

District: Edgehill Neighborhood Conservation Zoning Overlay

**Council District:** 17 **Base Zoning:** RS5

Map and Parcel Number: 10408024500

**Applicant:** Ron Grover

Project Lead: Melissa Sajid, Melissa.sajid@nashville.gov

**Description of Project:** Application is to construct an addition and to demolish an existing carport.

**Recommendation Summary:** Staff recommends approval of the project with the following conditions:

- 1. Staff approve the final details, dimensions and materials of trim, side porch elements, and window details prior to purchase and installation;
- 2. Siding shall have a maximum reveal of five inches (5"); and,
- 3. The HVAC shall be located behind the house or on either side, beyond the mid-point of the house, and utility meters shall be located on the side of the building, within 5' of the front corner. Alternative mechanical and utility locations must be approved prior to an administrative sign-off on building permit(s).

With these conditions, staff finds that the project meets Section III of the *Edgehill Neighborhood Conservation Zoning Overlay: Handbook and Design Guidelines.* 

#### Attachments

A: PhotographsB: Site PlanC: Elevations

Vicinity Map:



**Aerial Map:** 



#### **Applicable Design Guidelines:**

#### III. NEW CONSTRUCTION-INFILL

#### A. Height

1. The height of the foundation wall, porch roof(s), and main roof(s) of a new building shall be compatible, by not contrasting greatly, with those of surrounding historic buildings. The majority of the historic context is one and one and one-half stories with a small number of two-story buildings, primarily following the American-foursquare form.

#### **B.** Scale

1. The size of a new building and its mass in relation to open spaces shall be compatible, by not contrasting greatly, with surrounding historic buildings.

#### C. Setback and Rhythm of Spacing

- 1. The setback from front and side yard property lines established by adjacent historic buildings should be maintained. Generally, a dominant rhythm along a street is established by uniform lot and building width. Infill buildings should maintain that rhythm.
- 2. The Commission has the ability to determine appropriate building setbacks of the required underlying base zoning for new construction, additions and outbuildings (See ordinance no. 17.40.410).

Appropriate setbacks will be determined based on:

- · The existing setback of the contributing primary buildings and outbuildings found in the immediate vicinity:
- · Setbacks of like structures historically found on the site as determined by historic maps, site plans or photographs;
- · Shape of lot;
- $\cdot \textit{ Alley access or lack thereof;}\\$
- · Proximity of adjoining structures; and
- · Property lines.

Appropriate height limitations will be based on:

- · Heights of historic buildings in the immediate vicinity
- $\cdot \textit{Existing or planned slope and grade}$
- 3. In most cases, an infill duplex for property that is zoned for duplexes should be one building as seen historically in order to maintain the rhythm of the street. Detached infill duplexes are only appropriate as Detached Accessory Dwelling Unit, where zoning allows.

#### D. Materials, Texture, Details, and Material Color

- 1. The materials, texture, details, and material color of a new building's public facades shall be visually compatible, by not contrasting greatly, with surrounding historic buildings. Primary cladding should be brick, stone or stucco.
- 2. Appropriate secondary cladding materials include stone, brick, stucco, lap siding, board-and-batten and half-timbering. When different materials are used, it is most appropriate to have the change happen at floor lines.
  - a. Additional appropriate materials include: pre-cast stone for foundations, composite materials for trim and decking, and asphalt shingle for roofing.

- · Lap siding, should be smooth and not stamped or embossed and have a maximum of a 5" reveal.
- · Shingle siding, when used as an accent material, should exhibit a straight-line course pattern and exhibit a maximum exposure of seven inches (7"). · Stone, brick, concrete or stucco foundations should be of a compatible color and texture to historic foundations.
- · Stone or brick foundations should be of a compatible color and texture to historic foundations.
- · Foundation lines should be visually distinct from the predominant exterior wall material. This is typically accomplished with a change in material.
- · Clapboard sided chimneys are not appropriate. Masonry or stucco is appropriate for chimneys.
- · Texture and tooling of mortar on new construction should be similar to historic examples.
- · Generally front doors should be 1/2 to full-light. Faux leaded glass is inappropriate.
- · Asphalt shingle is an appropriate roof material for most buildings. Metal and tile are not appropriate roofing materials.

Generally, roofing should NOT have: strong simulated shadows in the granule colors which results in a rough, pitted appearance; strongly variegated colors; colors that are too light (e.g.: tan, white, light green); wavy or deep color/texture used to simulate split shake shingles or slate; excessive flared form in the shingle tabs; or uneven or sculpted bottom edges that emphasize tab width or edges, unless matching the original roof or a dominant historic example.

b. In a propriate materials include vinyl and a luminum, T-1-11-type building panels, "permastone", and E.F.I.S. Stud wall lumber and embossed wood grain are prohibited.

#### E. Roof Shape

- 1. The roof(s) of a new building shall be visually compatible, by not contrasting greatly, with the roof shape, orientation, and pitch of surrounding historic buildings. Common roof forms in the neighborhood include side, front and cross gabled, hipped and pyramidal. Typically roof pitches are between 6/12 and 12/12. Roof pitches for porch roofs are typically less steep, approximately in the 3-4/12 range.
- 2. Small projecting and recessed roof dormers are typical throughout the district. Wall dormers are only appropriate on the rear.

#### F. Orientation

- 1. The orientation of a new building's front facade shall be visually consistent with surrounding historic buildings.
- 2. Primary entrances are an important component of most of the historic buildings in the neighborhood and include gabled, hipped and shed roof partial—or full-width porches attached to the main body of the house. Infill duplexes shall have one or two doors facing the street, as seen on historic duplexes. In the case of corner lots, an entrance facing the side street is possible as long as it is designed to look like a secondary entrance.
- 3. Porches should be a minimum of 6' deep, have porch racks that are 1'-3' tall and have posts that include bases and capitals.
- 4. Generally, lots should not have more than 1 curb cut. Shared driveways should be a single lane. Sometimes this may be a complished with a single lane curb cut that widens to a double lane deeper into the lot. Generally, new driveways should be no more than 12' wide from the street to

the rear of the home. Front yard parking areas or driveways which end at the front of the house are not consistent with the character of the historic neighborhoods.

#### G. Proportion and Rhythm of Openings

- 1. The relationship of width to height of windows and doors, and the rhythm of solids (walls) to voids (door and window openings) in a new building shall be compatible, by not contrasting greatly, with surrounding historic buildings.
- 2. Window openings on the primary street-related or front façade of new construction should be representative of the window patterns of similarly massed historic structures within the district. In most cases, every 8-13 horizontal feet of flat wall surface should have an opening (window or door) of at least 4 square feet. More leniencies can be given to minimally visible side or rear walls.
- 3. Double-hung and casement windows should generally exhibit a height to width ratio of at least 2:1. Windows on upper floors should not be taller than windows on the main floor since historically first floors have higher ceilings than upper floors and so windows were typically taller on the first floor.
- 4. Single-light sashes are appropriate for new construction. If using multi-light sashes, muntins should be fully simulated and bonded to the glass, and exhibit an interior bar, exterior bar, as well as a spacer between glass panes.
- 5. Four inch (nominal) casings are required around doors, windows and vents on non-masonry buildings. Trim should be thick enough to extend beyond the clapboard. Double or triple windows should have a 4" to 6" mullion in between. Brick molding is required around doors, windows and vents within masonry walls but is not a ppropriate on non-masonry buildings.

#### H. Utilities

- 1. Utility connections such as gas meters, electric meters, phone, cable, and HVAC condenser units should be located so as to minimize their visibility from the street.
- 2. Generally, utility connections should be placed no closer to the street than the mid-point of the structure. Power lines should be placed underground if they are carried from the street and not from the rear or an alley.

#### I. Public Spaces

- 1. Landscaping, sidewalks, signage, lighting, street furniture and other work undertaken in public spaces by any individual, group or a gency shall be presented to the MHZC for review of compatibility with the character of the district.
- 2. Generally, mailboxes should be attached to the front wall of the house or a porch post. In most cases, street-side mailboxes are inappropriate.

#### J: White-Way Commercial Corner

- 1. The White Way Commercial Corner consists of 1200-1207 Villa Place. New construction at this historic development is not appropriate unless to replace a building. Demolition of historic buildings should meet the design guidelines for demolition.
- 2. Signage and building illumination is not reviewed by the MHZC.

#### V. NEW CONSTRUCTION-ADDITION

(Also see section III.)

#### A. Addition: Design

1. Contemporary designs for additions to existing properties are not discouraged when such additions do not destroy significant historical, architectural, or cultural material; and when such design is compatible, by not contrasting greatly, with the size, scale, color, material, and character of the property, neighborhood, or environment.

#### **B.** Addition: Location

- 1. Generally, an addition should be situated at the rear of a building in such a way that it will not disturb either front or side facades. Additions should be physically distinguished from the historic building and generally fit within the shadow line of the existing building.
  - a. Connections to additions should, as much as possible, use existing window and door openings rather than remove significant amounts of rear wall material.
  - b. Generally rear additions should inset one foot, for each story, from the side wall.
- 2. When a lot width exceeds 60 feet or the standard lot width on the block, it may be appropriate to add a side addition to a historic structure.
  - a. The addition should sit back from the face of the historic structure (at or beyond the midpoint of the building) and should be subservient in height, width and massing to the historic structure
  - b. Side additions should be narrower than half of the historic building width and exhibit a height of at least 2' shorter than the historic building.
  - c. To deemphasize a side addition, the roofing form should generally be a hip or side-gable roof form.
- 3. The creation of an addition through enclosure of a front porch is not appropriate. The creation of an addition through the enclosure of a side porch may be appropriate if the addition is constructed in such a way that original form and openings on the porch remain visible and undisturbed.
- 4. A new addition should be constructed in such a manner that if the addition were to be removed in the future, the essential form and integrity of the original structure would be unimpaired. Connections should, as much as possible, use existing window and door openings rather than remove significant a mounts of rear wall material.

#### C. Addition: Massing

- 1. In order to a ssure than an addition has achieved proper scale, the rear addition should generally be shorter and thinner than the existing building. Exceptions may be made when unusual constraints make these parameters unreasonable, such as an extreme grade change or an atypical lot parcel shape or size. In these cases, an addition may rise above <u>or</u> extend wider than the existing building; however, generally the addition should not be higher <u>and</u> extend wider.
  - a. When an addition needs to be taller:

Whenever possible, additions should not be taller than the historic building; however, when a taller addition is the only option, additions to single story structures may rise as high as 4' above ridge of the existing building at a distance of 40' from the front edge of the existing building. In this instance, the side walls and roof of the addition must sit in as is typical for all additions. The portion of the roof that can be seen should have a hipped, side gable or clipped gable roof to help decrease the visual mass of the addition.

b. When an addition needs to be wider:

Rear additions that are wider than an existing historic building may be appropriate when the building is narrower than 30', the building is shifted to one side of the lot, or the lot is greater

than 60' in width. In these instances, a structural alcove or channel must separate the existing building from the new addition. The structural alcove should sit in a minimum of 1' and be at least twice as long as it is deep.

A rear addition that is wider should not wrap the rear corner. It should only extend from the addition itself and not the historic building.

- 2. No matter its use, an addition should not be larger than the existing house, not including non-historic additions, in order to achieve compatibility in scale. This will allow for the retention of small and medium size homes in the neighborhood. The diversity of housing type and size is a character defining feature of the historic districts.
- 3. Additions which are essentially a house-behind-a-house with a long narrow connector are not appropriate, as the form does not exist historically. Short or minimal connections that do not require the removal of the entire back wall of a historic building are preferred.
- 4. When an addition ties into the existing roof, it should be at least 6" below the existing ridge.
- 5. Ridge raises are most a ppropriate for one-story, side-gable buildings, (without clipped gables) and that require more finished height in the attic. A ridge raise is generally not appropriate for low sloped roofs, such as those found on ranch forms. The purpose of a ridge raise is to allow for conditioned space in the attic and to discourage large rear or side additions. The raised portion must sit in a minimum of 2' from each side wall and can be raised no more than 2' of total vertical height within the same plane as the front roof slope.
- 6. Foundation walls should sit in from the existing foundation at the back edge of the existing structure by one foot for each story or half story.
- 7. The height of the addition's roof and eaves must be less than or equal to the existing structure.
- 8. Visually evident roof slopes should match the roof slopes of the existing structure, and roof planes should sit in accordingly for rear additions.

#### D. Addition: Roof Additions (Dormers, Skylights & Solar Panels)

- 1. Dormer additions are appropriate for some historic buildings as they are a traditional way of adding ventilation and light to upper stories. The addition of a dormer that would require the removal of historic features such as an existing dormer, chimneys, cupolas or decorative feature is not appropriate.
  - a. Rear dormers should be inset from the side walls of the building by a minimum of 2'. The top of a rear dormer may attach just below the ridge (at least 6") of the main roof or lower.
  - b. Front and side dormers should be compatible with the scale and design of the building. Generally, appropriate scale and design can be accomplished with the following:
    - New dormers should be similar in design and scale to an existing dormer on the building. If there are no existing dormers, new dormers should be similar in design and scale to a historic dormer on another historic building that is similar in style and massing.
    - The number of dormers and their location and size should be appropriate to the style and design of the building. Sometimes the width of roof dormers relate to the openings below. The symmetry or lack of symmetry within a building design should be used as a guide when placing dormers.
    - · Dormers should not be added to secondary roof planes.
    - · Eave depth on a dormer should not exceed the eave depth on the main roof.
    - · The roof form of the dormer should match the roof form of the building or be a ppropriate for

- the style.
- · The roof pitch of the dormer should generally match the roof pitch of the building.
- The ridge of a side dormer should be at least 2' below the ridge of the existing building; the cheeks should be inset at least 2' from the wall below or a djacent valley; and the front wall of the gable should setback a minimum of 2' from the wall below. (These minimum insets will likely be greater than 2' when following the guidelines for appropriate scale.)
- · Dormers should generally be fully glazed and aprons below the window should be minimal.
- The exterior material cladding of side domers should match the primary or secondary material of the main building.
- 1. Skylights should not be located on the front-facing slope of the roof. Skylights should be flat (no bubble lenses) with a low profile (no more than six inches tall) and only be installed behind the midpoint of the building).
- 2. Solar panels should be located at the rear of the building, unless this location does not provide enough sunlight. Solar panels should generally not be located towards the front of a historic building unless this is the only workable location.
- **E.** A new addition should be constructed in such a manner that if the addition were to be removed in the future, the essential form and integrity of the original structure would be unimpaired. Connections should, as much as possible, use existing window and door openings rather than remove significant amounts of rear wall material.
- **F.** Additions should follow the guidelines for new construction.
- **G.** White-Way Commercial Corner
  - 1. The White Way Commercial Corner consists of 1200-1207 Villa Place. Rooftop additions are generally not appropriate.

#### VI. DEMOLITION

#### A. PRINCIPLE

The demolition of a building, or major portion of a building, which contributes historically or architecturally to the character and significance of the district is not appropriate and should be avoided.

#### **B. GUIDELINES**

#### 1. Demolition is not appropriate

- a. if a building, or major portion of a building, is of such architectural or historical interest and value that its removal would be detrimental to the public interest; or
- b. if a building, or major portion of a building, is of such old or unusual or uncommon design and materials that it could not be reproduced or be reproduced without great difficulty and expense.

#### 2. Demolition is appropriate

- a. if a building, or major portion of a building, has irretrievably lost its architectural and historical integrity and significance and its removal will result in a more historically appropriate visual effect on the district;
- b. if a building, or major portion of a building, does not contribute to the historical and

- architectural character and significance of the district and its removal will result in a more historically appropriate visual effect on the district; or
- c. if the denial of the demolition will result in an economic hardship on the applicant as determined by the MHZC in accordance with section 17.40.420 (Historic Zoning Regulations), Metropolitan Comprehensive Zoning Ordinance.

**Background:** The house located at 1223 Villa Place is a c. 1934 Tudor revival that contributes to the historic character of the Edgehill neighborhood (Figure 1). In November 2020, staff issued a preservation permit to demolish an existing outbuilding in the rear yard.



Figure 1. 1223 Villa Place.

**Analysis and Findings:** The application is to construct a single-story rear addition that attaches to an existing rear addition that was constructed prior to the overlay. The plan also includes demolition of an existing carport.

<u>Demolition</u>: The project includes removal of an existing carport located in the rear yard (Figure 2). The carport does not appear on the 1957 Sanborn map (Figure 3).



Figure 2. Carport to be demolished. The outbuilding shown near the rear property line here was demolished in December 2020.

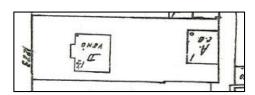


Figure 3. 1957 Sanborn map.

Given the carport's later date of construction and location in the rear yard, staff finds that its demolition meets Section V.B.2 for appropriate demolition and does not meet section V.B.1 for inappropriate demolition.

<u>Height & Scale</u>: The proposed rear addition is one-story and does not more than double the existing footprint or extend taller or wider than the historic house. As proposed, the addition adds approximately eight hundred sixty square feet (860 sq. ft.) to the existing footprint of one thousand, one hundred, seventy-four square feet (1174 sq. ft.). The screened porch component is inset one foot (1') from the side wall of the historic house for the full depth of the addition. The other part of the addition is inset one foot (1') from the 2005 addition and goes back approximately eight feet (8') before matching the width of house. Since the addition is single-story, staff finds the proposed insets to meet the design guidelines.

Staff finds that the project's height and scale meet Sections III.A. and III.B. of the Edgehill design guidelines.

<u>Location & Removability</u>: The location of the addition at the rear of the existing building is in accordance with the design guidelines. The addition's change in materials, inset, separate roof form, and lower height help to distinguish it from the historic house and read as an addition to the house. At the same time, its scale, materials, roof form, and fenestration pattern are all compatible with the historic character of the existing house. The addition is designed so that if the addition were to be removed in the future, the historic character of the house would still be intact.

Staff finds that the proposed addition meets Sections IV.A and IV.F. of the Edgehill design guidelines.

<u>Design</u>: The screened porch addition has simple design typical for a screened porch, and the rear addition incorporates a roof form and eave height similar to the historic house. Staff finds the design of the addition to be compatible with the historic.

Staff finds that the proposed addition meets Section IV.B., IV.C., and IV. G. of the Edgehill design guidelines.

<u>Setback & Rhythm of Spacing:</u> The project meets all base zoning setbacks. The addition is located approximately seven feet, six inches (7'-6") from the left property line, eleven feet (11') from the right property line, and twenty feet (20') from the rear property line.

Staff finds that the project's setback and rhythm of spacing meet Section III.C. of the Edgehill design guidelines.

Materials:

lateriais.	Dwamagasl	Calam/Tarytary	A	Do ourino -
	Proposed	Color/Texture/ Make/Manufact urer	Approved Previously or Typical of Neighborhood	Requires Additional Review
Foundation	Concrete Block	Split Face	Yes	No
Cladding	Cement fiberboard lap siding	Smooth	Yes	No
Roof	Asphalt shingles	Match house	Yes	No
Side Porch Roof	Standing seam	Copper	Yes	No
Trim	Not indicated	Needs final review	Unknown	Yes
Side Porch Floor/steps	Not indicated	Needs final review	Unknown	Yes
Side Porch Post and Railing	Not indicated	Needs final review	Unknown	Yes
Windows	Brosco	All wood; needs final approval of muntin details	Yes	Yes
Side/rear doors	Screened porch door	Pressure treated wood/metal screen	Yes	No

With staff approval of the final details and dimensions of the trim, windows, and side porch elements, staff finds that the project's materials meet Section III.D. of the Edgehill design guidelines.

Roof form: The new addition ties into the 2005 addition with a side-gable roof form with a 14/12 pitch and transitions into a shorter hipped roof portion with a 4/12 pitch. The screen porch addition ties into the historic house with a 1/12 pitch shed roof form.

Staff finds that the project's roof form meets Section III.E. of the Edgehill design guidelines.

<u>Proportion and Rhythm of Openings</u>: No changes to the window and door openings on the existing house were indicated on the plans. The windows on the proposed addition are either square or vertically oriented. Given the location of the addition in relation to the 2005 addition, staff finds the window proportions to be appropriate. There are no large expanses of wall space on the new addition without a window or door opening.

Staff finds the project's proportion and rhythm of openings meet Section III.G. of the Edgehill design guidelines.

Appurtenances & Utilities: No changes to the site's appurtenances were indicated on the drawings. The location of the HVAC and other utilities was also not noted. Staff asks that the HVAC be located on the rear façade, or on a side façade beyond the midpoint of the house.

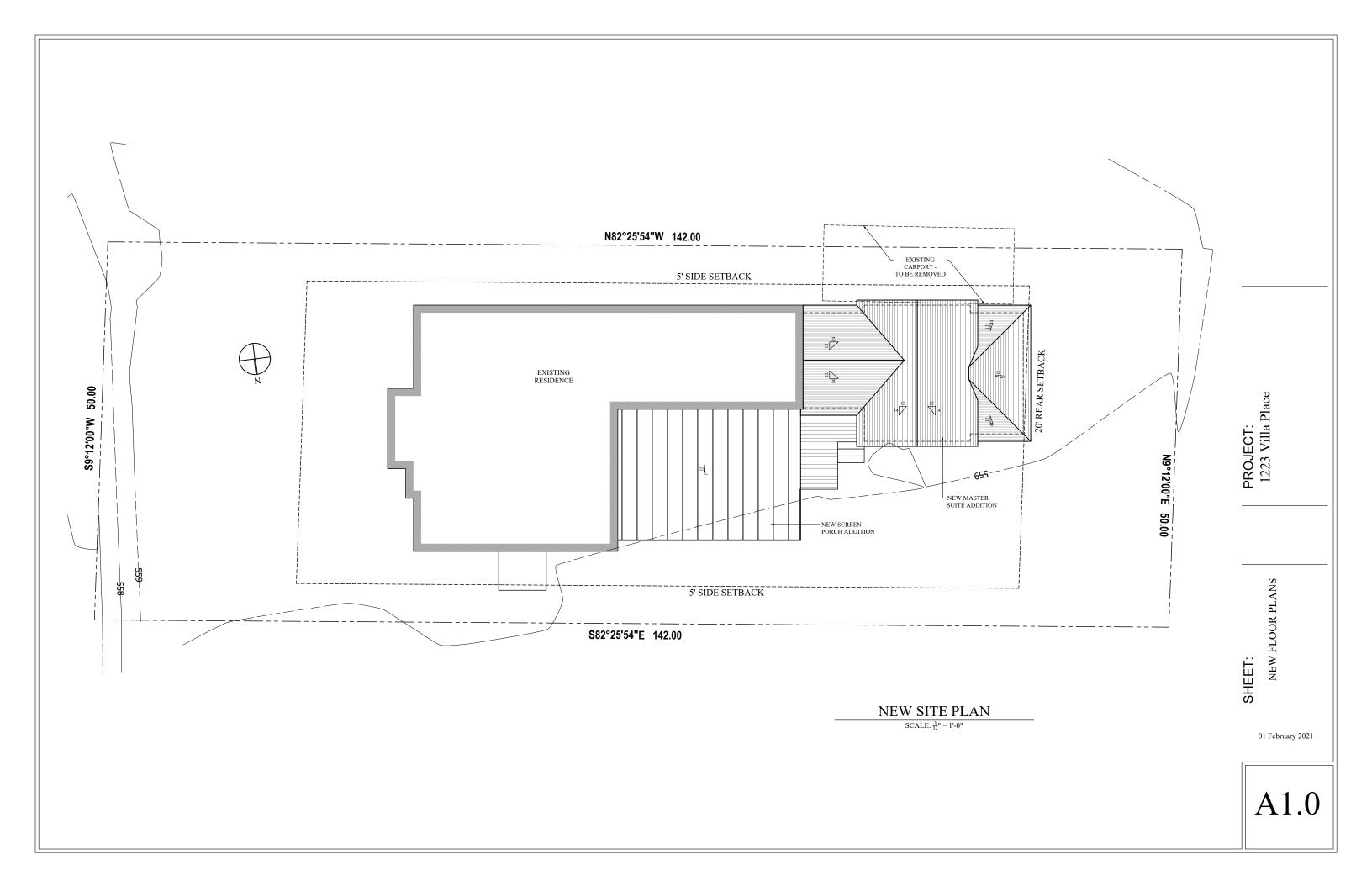
Staff finds the project's appurtenances and utilities to meet Section III.I. of the Edgehill design guidelines.

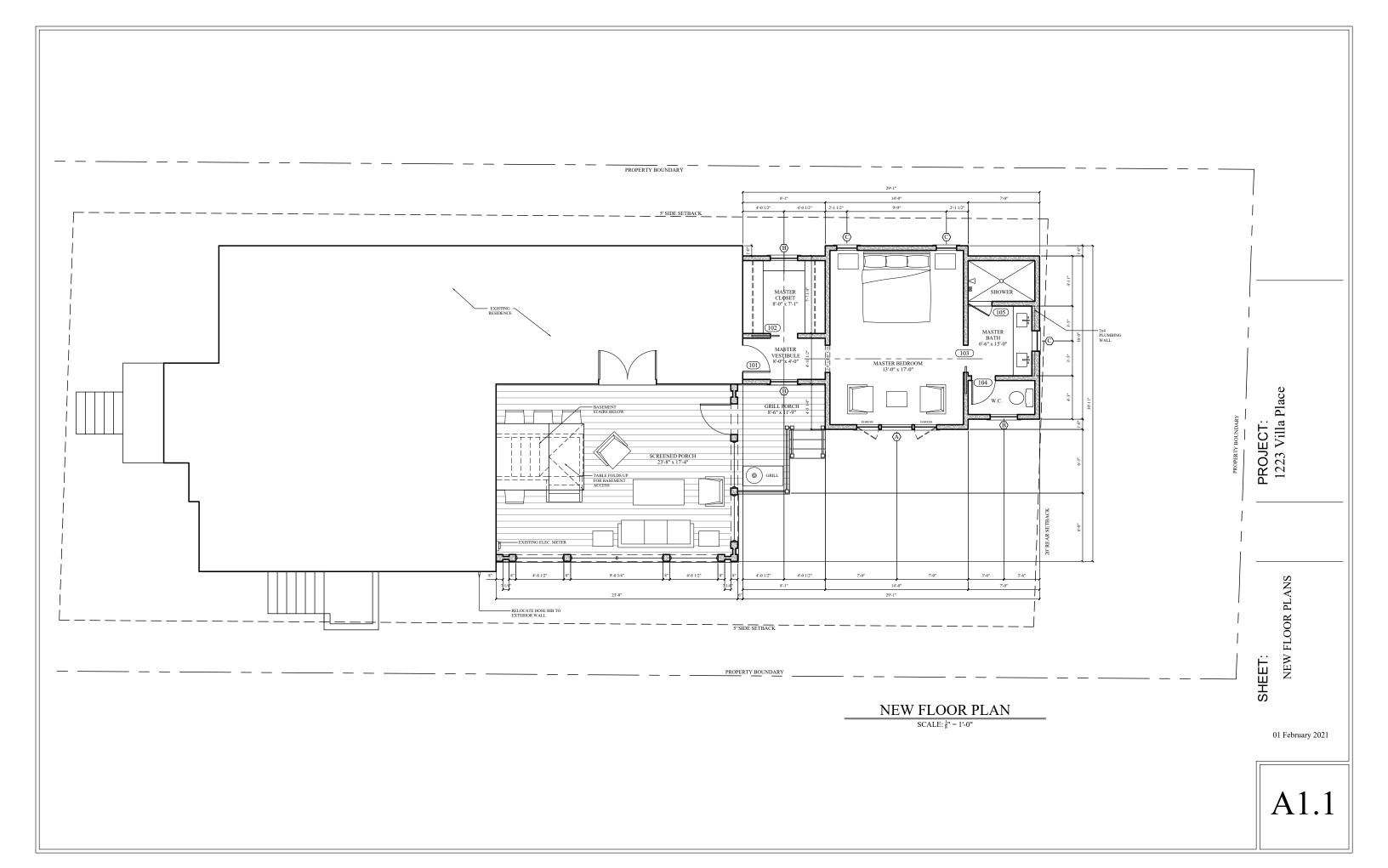
**Recommendation:** Staff recommends approval of the project with the following conditions:

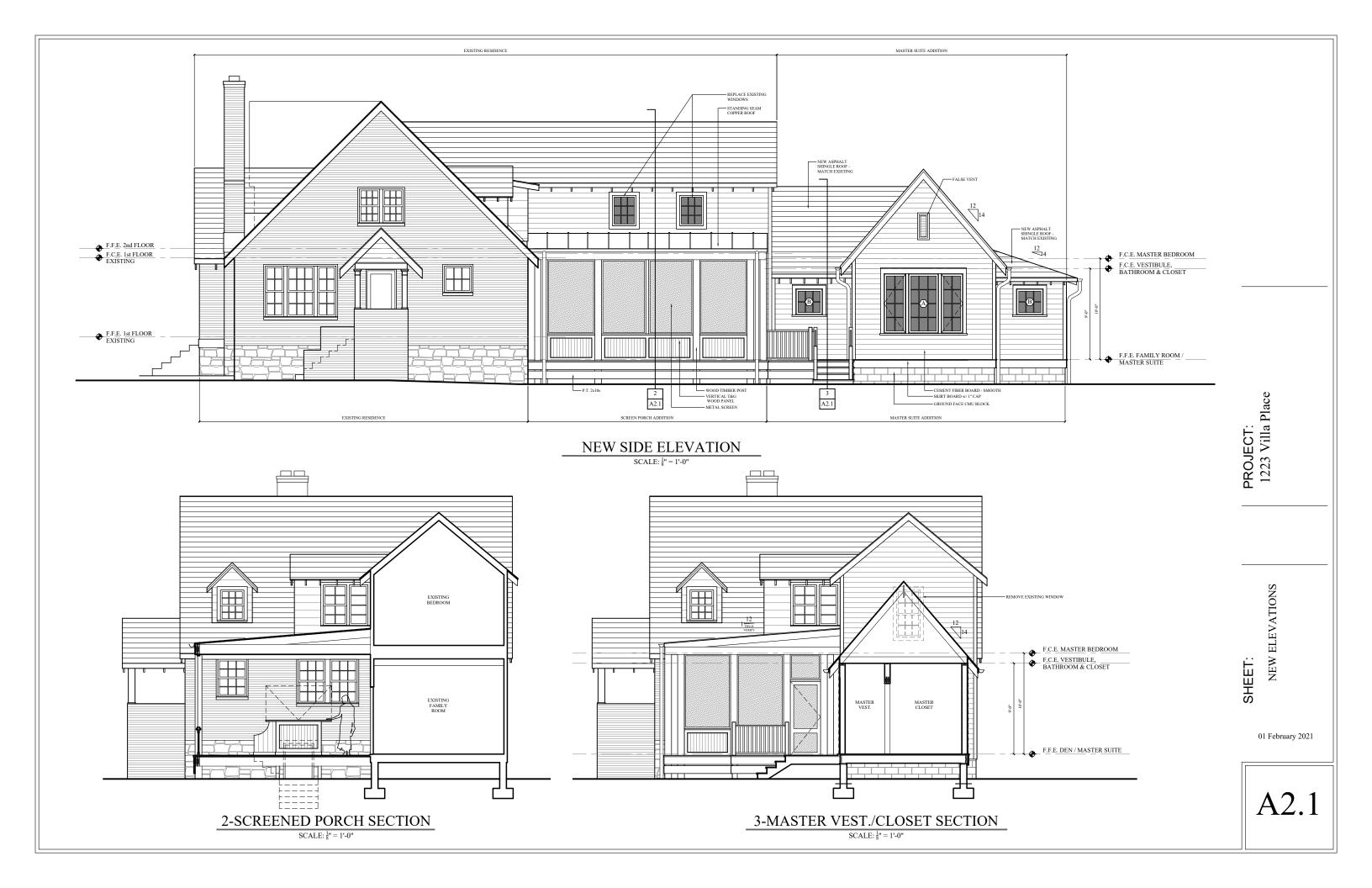
- 1. Staff approve the final details, dimensions and materials of trim, side porch elements, and window details prior to purchase and installation;
- 2. Siding shall have a maximum reveal of five inches (5"); and
- 3. The HVAC shall be located behind the house or on either side, beyond the mid-point of the house, and utility meters shall be located on the side of the building, within 5' of the front corner. Alternative mechanical and utility locations must be approved prior to an administrative sign-off on building permit(s).

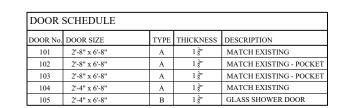
With these conditions, staff finds that the project meets Section III of the *Edgehill Neighborhood Conservation Zoning Overlay: Handbook and Design Guidelines*.

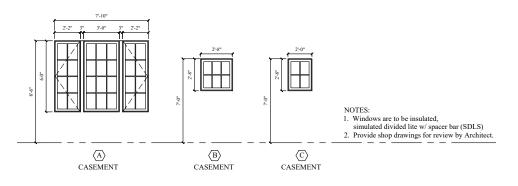














#### NEW REAR ELEVATION

SCALE: ½" = 1'-0"



SCALE:  $\frac{1}{8}$ " = 1'-0"

A2.2

01 February 2021

NEW ELEVATIONS

SHEET:

PROJECT: 1223 Villa Place

- 1. Replacement windows: Existing 2005 House Double Hung Brosco Double Hung, Single Pane, 6 over 6 all wood Windows. Replacement window size is 2 foot 9 inches, (33 inches) wide by 3 foot 9 inches, (45 inches) high.
  - New windows: Bedroom/Bath Addition Double Hung Brosco Double Hung, Single Pane, 3 over 3, 6 over 6, 9 over 9, all wood Windows, sizes will very. Attachment 2.
- 2. Replacement Doors (existing 2005 House access to Screened Porch Addition): Mahogany (naturally sealed) size 6/0 x 6/8 double door. Attachment 3.
- Pitched Roof: Bedroom/Bath addition CertainTeed Landmark Max Def Georgetown Grey. Attachment 4.
- Low Slope Roof: Screened Porch Addition Standing Seam Copper
   16 ounce (24 Gauge) (0.22" thickness). Attachment 5.

## **Attachment 1**

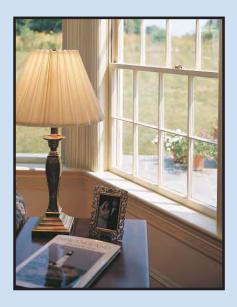


# **Attachment 2**





# Turn Your Dreams into Reality with BROSCO Window Units.



#### Windows that Fit Northeast Lifestyles.

The Northeast's unique architectural styles and harsh climate demand windows that are quality built, energy efficient and fit the charm and character of the traditional home. From colonials and capes to a traditional saltbox home design, BROSCO Window Units offer classic styling that will satisfy the most discriminating tastes.

#### Preferred by Architects and Builders.

Whether it's new construction or a renovation project, BROSCO Window Units are preferred by architects and builders for maximum design flexibility and proven performance. From architecturally correct, putty glazed Authentic Divided Light windows that replicate historic building aesthetics to Low "E" Insulating Glass units with matching transoms, BROSCO has what you need. And BROSCO Window Units feature primed composite exterior frames that can be finished to create endless color combinations. Available as traditional wood sash or new composite sash which increases durability while reducing future maintenance.



**Building Our Futures Together** 





BROSCO Window Units are designed to fit the needs of any new construction or renovation project. Choose our energy efficient Low "E" Insulating Glass to reduce winter heat loss and summer heat gain. These units are available as standard 1/1 lights with optional interior wood grilles, contoured Grilles Between the Glass, or as Simulated Divided Lights featuring interior and exterior 7/8" wide bars with a spacer bar between the glass panes. Low "E" Insulating Glass is available in our treated and primed exterior (clear pine interior) wood sash, and also in a durable low-maintenance totally primed composite sash.

When traditional design elements are more the concern than energy efficiencies, BROSCO offers authentic single pane glass, putty-glazed windows. Original New England design narrow muntin bars and hand puttied glass panes in a variety of configurations are the hallmarks of these traditionally styled SSB windows. When energy concerns factor into the specification, the performance is enhanced with the addition of a Low-E panel to the sash.

#### Windows with a Written Warranty

We back every BROSCO Window with our exclusive BROSCO Window Written Warranty. This limited warranty includes ten years coverage against manufacturing defects on all glass and one year protection on all other window component parts. A complete copy of the BROSCO Window Warranty is available from your local retailer.



#### **LOW "E" INSULATING GLASS**



- 1/1 LIGHT
- COTTAGE STYLE
- STATIONARY PICTURE WINDOWS
- 1 LIGHT TRANSOMS

Windows shown with optional interior wood grilles, grille between the glass or simulated divided light patterns.

#### Window Specifications

FRAME – Standard Jamb Depth of 4-9/16" features Laminated-Veneered-Lumber sides and clear pine head jamb. All exposed exterior frame parts are manufactured from highly durable, low-maintenance Composite Materials; including the Blind Stop, Sill and standard Brickmould Casing. The clear pine inside sill stop is dadoed to receive a stool cap or "picture-framed" casing. A weatherstripped head parting stop is color matched to the vinyl jamb liner\* with integral Tilt 'n Clean, Block & Tackle balances.

SILL – Composite two piece Sill & Sill Connector system provides a continuous sill nose across Combined Windows as well as allowing for the addition of the optional Historic Sill Nosing.

SASH – All sash are 1-3/8" thick and feature a 3/4" Low-E Insulating Glass with Argon gas for increased performance. Sash are weatherstripped at top, bottom and the interlocking check rails. Treated Wood Sash with clear pine interiors and primed exteriors, as well as durable low maintenance Composite Sash are standard offerings. Design requirements are addressed with the offering of interior wood grilles, contoured Grilles Between the Glass or Simulated Divided Lights with internal spacer bars. Windows are secured by a stylish white or brass cam sash lock.

\*Specify White or Beige



#### 1/1 LIGHT

Roug	jh Openi	ng	1'-10"	2'-0"	2'-2"	2'-3"	2'-6"	2'-9"	2'-10"	3'-0"	3'-2"	3'-6"
<b>≠</b>	Sash Op	ening	1'-7 <sup>5</sup> /8"	1'-9 <sup>5</sup> /8"	1'-11 <sup>5</sup> /8"	2'-0 5/8"	2'-3 5/8"	2'-6 5/8"	2'-7 5/8"	2'-9 5/8"	2'-11 <sup>5</sup> /8"	3'-3 <sup>5</sup> /8"
		Glass	16"	18"	20"	21"	24"	27"	28"	30"	32"	36"
<u> </u>	•	Size										
2'-9"	2'-5"	12"	16" x 12"	18" x 12"	20" x 12"	21" x 12"	24" x 12"	27" x 12"	28" x 12"	30" x 12"	32" x 12"	36" x 12"
3'-1"	2'-9"	14"	16" x 14"	18" x 14"	20" x 14"	21" x 14"	24" x 14"	27" x 14"	28" x 14"	30" x 14"	32" x 14"	36" x 14"
3'-5"	3'-1"	16"	16" x 16"	18" x 16"	20" x 16"	21" x 16"	24" x 16"	27" x 16"	28" x 16"	30" x 16"	32" x 16"	36" x 16"
3'-9"	3'-5"	18"	16" x 18"	18" x 18"	20" x 18"	21" x 18"	24" x 18"	27" x 18"	28" x 18"	30" x 18"	32" x 18"	36" x 18"
4'-1"	3'-9"	20"	16" x 20"	18" x 20"	20" x 20"	21" x 20"	24" x 20"	27" x 20"	28" x 20"	30" x 20"	32" x 20"	36" x 20"
4'-5"	4'-1"	22"	16" x 22"	18" x 22"	20" x 22"	21" x 22"	24" x 22"	27" x 22"	28" x 22"	30" x 22"	32" x 22"	36" x 22"
4'-9"	4'-5"	24"	16" x 24"	18" x 24"	20" x 24"	21" x 24"	24" x 24"	27" x 24"	28" x 24"	30" x 24"	32" x 24"	36" x 24"
5'-1"	4'-9"	26"	16" x 26"	18" x 26"	20" x 26"	21" x 26"	24" x 26"	27" x 26"	28" x 26"	30" x 26"	32" x 26"	36" x 26"
5'-3"	4'-11"	27"	16" x 27"	18" x 27"	20" x 27"	21" x 27"	24" x 27"	27" x 27"	28" x 27"	30" x 27"	32" x 27"	36" x 27"
5'-5"	5'-1"	28"	16" x 28"	18" x 28"	20" x 28"	21" x 28"	24" x 28"	27" x 28"	28" x 28"	30" x 28"	32" x 28"	36" x 28"
5'-9"	5'-5"	30"	16" x 30"	18" x 30"	20" x 30"	21" x 30"	24" x 30"	27" x 30"	28" x 30"	30" x 30"	32" x 30"	36" x 30"
6'-1"	5'-9"	32"	16" x 32"	18" x 32"	20" x 32"	21" x 32"	24" x 32"	27" x 32"	28" x 32"	30" x 32"	32" x 32"	36" x 32"

#### **COTTAGE STYLE** (Unevenly Divided)

R	ough	Openi	ng	2'-3"	2'-3"	2'-6"	2'-6"	2'-6"	2'-10"
	<b>≠</b>	Sash O	pening	2'-0 5/8"	2'-0 5/8"	2'-35/8"	2'-3 5/8"	2'-3 5/8"	2'-7 5/8"
		7	kGlass Size	21"	21"	24"	24"	24"	28"
			Light Size ➤	7" x 8"	7" x 8"	6" x 8"	8" x 10"	8" x 10"	7" x 9"
_1	/	<b>V</b>	<b>\</b>	6/9 Light	9/6 Light	8/12 Light	6/9 Light	9/6 Light	8/12 Light
4'-	1"	3'-9"	16"/24"	_	_	24" x 16"/24"	_	_	_
4'-	6"	4'-2"	18"/27", 27"/18"	21" x 18"/27"	21" x 27"/18"	_	_	_	28" x 18"/27"
4'-	11"	4'-7"	20"/30", 30"/20"	_	_	_	24" x 20"/30"	24" x 30"/20"	_

#### STATIONARY PICTURE WINDOWS

Rough	Rough Opening		3'-6"	3'-10 <sup>3</sup> /8"	4'-6 <sup>3</sup> /8"	5'-2 ³/ <sub>8</sub> "	5'-10 ³/8"
<b>≠</b>	Sash Ope	ening	3'-3 <sup>5</sup> /8"	3'-8"	4'-4"	5'-0"	5'-8"
	★Gla	ass Size	36"	40 3/8"	48 3/8"	56 <sup>3</sup> /8"	64 3/8"
		•	16 Light	16 Light	20 Light	24 Light	32 Light
3'-5"	3'-1"	32 3/4"	3'-3 <sup>5</sup> / <sub>8</sub> " x 3'-1"	3'-8" x 3'-1"	4'-4" x 3'-1"	5'-0" x 3'-1"	5'-8" x 3'-1"
4'-1"	3'-9"	40 3/4"	3'-3 <sup>5</sup> / <sub>8</sub> " x 3'-9"	3'-8" x 3'-9"	4'-4" x 3'-9"	5'-0" x 3'-9"	5'-8" x 3'-9"
4'-5"	4'-1"	44 3/4"	3'-3 <sup>5</sup> / <sub>8</sub> " x 4'-1"	3'-8" x 4'-1"	4'-4" x 4'-1"	5'-0" x 4'-1"	5'-8" x 4'-1"
4'-9"	4'-5"	48 3/4"	3'-3 <sup>5</sup> / <sub>8</sub> " x 4'-5"	3'-8" x 4'-5"	4'-4" x 4'-5"	5'-0" x 4'-5"	5'-8" x 4'-5"
5'-1"	4'-9"	52 <sup>3</sup> / <sub>4</sub> "	3'-3 <sup>5</sup> / <sub>8</sub> " x 4'-9"	3'-8" x 4'-9"	4'-4" x 4'-9"	5'-0" x 4'-9"	5'-8" x 4'-9"

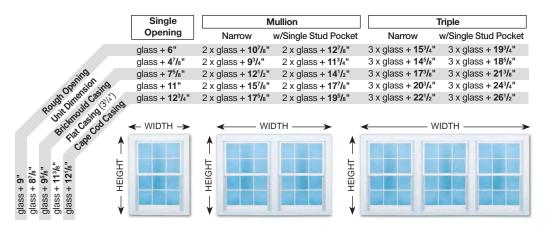
Windows shown with optional Wood Grille, GBG or SDL patterns.

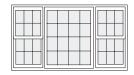
- ★ Glass sizes are approximate.
- ≠ Actual sash size = sash opening width minus 19/16", height 3/16".



#### **COMBINED WINDOWS** Mullions ~ Triples ~ Quads ~ Quints

Whether joining like size units or assembling a Picture Window with Flankers, BROSCO assembles units in multiple configurations based on your design requirements. Units can be joined in a jamb to jamb assembly, or spaced to allow for a stud pocket. In either case, the composite sill nosing is the unifying frame member that ties the unit together giving the finished appearance of one single large combined unit.





# SINGLE FIXED UNITS

Any size lower sash can be installed in a stationary frame, with all of the features of a standard Picture Window, with sill and casing details to match, in essence, creating a "mini-picture window" to fill your design needs.

For Rough Openings & Unit Dimensions, refer to page 11.

#### 1 LIGHT RECTANGULAR TRANSOMS

Transom Rough Opening	2'-2"	2'-6"	2'-9"	2'-10"	3'-0"
★Glass Size	20"	24"	27"	28"	30"
Varies †	20" x 20"	24" x 20"	27" x 20"	28" x 20"	30" x 20"

To arrive at <b>HEIGHT</b> of opening add 9" to overall glass height.  To arrive at <b>WIDTH</b> of opening, figure as follows (overall glass plus):						
Single	6"					
Mullion - Narrow	2 x glass + 10-7/8"					
Mullion - w/Single Stud Pocket	2 x glass + 12-7/8"					
Triple - Narrow	3 x glass + 15-3/4"					
Triple - w/Single Stud Pocket	3 x glass + 19-3/4"					

To Calculate Rough Opening

Windows shown with optional Wood Grille, GBG or SDL patterns.

<sup>†</sup> Combined Transom/Double-Hung rough opening height formula: Transom glass height **plus** Double-Hung glass height **plus** 13<sup>1</sup>/<sub>4</sub>"

#### **AUTHENTIC DIVIDED LIGHT**



- 2/1 LIGHT
- 2/2 LIGHT HORIZONTAL
- 2/2 LIGHT VERTICAL
- 3/3 LIGHT
- 4/4 LIGHT
- 6/1 LIGHT
- 6/6 LIGHT
- 8/8 LIGHT
- 9/9 LIGHT
- 12/12 LIGHT
- COTTAGE STYLE

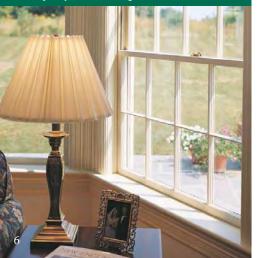
#### Window Specifications

FRAME – Standard Jamb Depth of 4-9/16" features Laminated-Veneered-Lumber sides and clear pine head jamb. All exposed exterior frame parts are manufactured from highly durable, low-maintenance Composite Materials; including the Blind Stop, Sill and standard Brickmould Casing. The clear pine inside sill stop is dadoed to receive a stool cap or "picture-framed" casing. A weatherstripped head parting stop is color matched to the vinyl jamb liner\* with integral Tilt 'n Clean, Block & Tackle balances.

SILL – Composite two piece Sill & Sill Connector system provides a continuous sill nose across Combined Windows as well as allowing for the addition of the optional Historic Sill Nosing.

**SASH** – All sash are 1-3/8" thick glazed with single pane glass, hand puttied into a primed exterior, clear pine interior treated wood sash. All divided light sash feature a traditional narrow muntin bar measuring 5/8" wide. Enhanced thermal performance is achieved with the addition of a Low-E Energy panel available for all layouts except 1/1.

\*Specify White or Beige



#### Traditional Putty Glazed Single Pane Glass

#### 6/6 LIGHT

Rough	Rough Opening		2'-0"	2'-3"	2'-6"	2'-9"	3'-0"	3'-6"
<b>≠</b>	Sash Op	ening	1'-9 5/8"	2'-0 <sup>5</sup> /8"	2'-3 5/8"	2'-6 <sup>5</sup> /8"	2'-9 5/8"	3'-3 5/8"
	*(	Glass Size	6"	7"	8"	9"	10"	12"
	<b>↓</b>	<b>\</b>						
3'-1"	2'-9"	7"	_	_	8" x 7"	9" x 7"	_	
3'-5"	3'-1"	8"	6" x 8"	_	8" x 8"	9" x 8"	10" x 8"	_
3'-9"	3'-5"	9"	_	7" x 9"	8" x 9"	9" x 9"	10" x 9"	_
4'-1"	3'-9"	10"	_	_	8" x 10"	9" x 10"	10" x 10"	_
4'-5"	4'-1"	11"	_	_	8" x 11"	9" x 11"	10" x 11"	_
4'-9"	4'-5"	12"	_	_	8" x 12"	9" x 12"	10" x 12"	_
5'-1"	4'-9"	13"	_	_	8" x 13"	9" x 13"	10" x 13"	_
5'-5"	5'-1"	14"	_	_	_	9" x 14"	10" x 14"	_
5'-9"	5'-5"	15"	_	_	_	9" x 15"	10" x 15"	12" x 15"
6'-1"	5'-9"	16"	_	_	_	_	10" x 16"	

#### 2/2 LIGHT VERTICAL

Rough Opening		2'-3"	2'-6"	2'-9"	2'-10"	3'-0"	3'-2"	
≠ {	Sash Op	ening	2'-0 <sup>5</sup> /8"	2'-3 <sup>5</sup> /8"	2'-6 <sup>5</sup> /8"	2'-7 <sup>5</sup> /8"	2'-9 <sup>5</sup> /8"	2'-11 <sup>5</sup> /8"
	<b>★</b> G	ilass Size	101/2"	12"	131/2"	14"	15"	16"
<b>\</b>	<b>\</b>	<b>\</b>						
3'-9"	3'-5"	18"	10 <sup>1</sup> / <sub>2</sub> " x 18"	_	_	_	_	_
4'-1"	3'-9"	20"	_	12" x 20"	13 <sup>1</sup> / <sub>2</sub> " x 20"	_	_	_
4'-5"	4'-1"	22"	_	_	13 <sup>1</sup> / <sub>2</sub> " x 22"	_	_	_
4'-6"	4'-2"	221/2"	10 <sup>1</sup> / <sub>2</sub> " x 22 <sup>1</sup> / <sub>2</sub> "	_	_	_	_	_
4'-9"	4'-5"	24"	_	12" x 24"	13 <sup>1</sup> / <sub>2</sub> " x 24"	14" x 24"	15" x 24"	_
4'-11"	4'-7"	25"	_	12" x 25"	_	_	_	_
5'-1"	4'-9"	26"	_	_	13 <sup>1</sup> / <sub>2</sub> " x 26"	14" x 26"	15" x 26"	_
5'-5"	5'-1"	28"	_	_	13 <sup>1</sup> / <sub>2</sub> " x 28"	14" x 28"	15" x 28"	_
5'-9"	5'-5"	30"	_	_	13 <sup>1</sup> / <sub>2</sub> " x 30"	14" x 30"	15" x 30"	16" x 30"
6'-1"	5'-9"	32"	_	_	_	_	15" x 32"	16" x 32"

#### **3/3 LIGHT**

R	ougl	ı Openi	2'-9"	
	<b>≠</b>	Sash O <sub>l</sub>	2'-6 5/8"	
		*	Blass Size	9"
_	,	<b>\</b>	<b>\</b>	
2'	-9"	2'-5"	12"	9" x 12"

SINGLE THICK GLASS ONLY  1/1 LIGHT							
Roug	h Openi	ng	1'-10"	2'-6"	2'-9"		
7	Sash O	pening	1'-7 <sup>5</sup> /8"	2'-3 5/8"	2'-6 <sup>5</sup> /8"		
	★G	lass Size	16"	24"	27"		
<b>\</b>	<b>\</b>						
3'-5"	3'-1"	16"	16" x 16"	24" x 16"	_		
4'-1"	3'-9"	20"	_	24" x 20"	_		
4'-9"	4'-5"	24"	_	24" x 24"	27" x 24"		

- ★ Glass sizes are approximate.
- ≠ Actual sash size = sash opening width minus 19/16", height 3/16".

#### **2/1 LIGHT**

Rougi	ı Openi	ng	2'-6"	2'-9"	2'-10"	3'-0"
<b>≠</b>	≠ Sash Opening		2'-3 5/8"	2'-6 5/8"	2'-7 5/8"	2'-9 5/8"
	*0	lass Size	24"	27"	28"	30"
	<b>\</b>					
4'-9"	4'-5"	24"	24" x 24"	27" x 24"	_	_
5'-1"	4'-9"	26"	_	27" x 26"	_	_
5'-5"	5'-1"	28"	_	27" x 28"	28" x 28"	30" x 28"
5'-9"	5'-5"	30"	_	_	_	30" x 30"

#### 2/2 LIGHT HORIZONTAL

F	Rougl	ı Openi	ng	2'-6"	2'-9"
	×	Sash O	pening	2'-3 <sup>5</sup> /8"	2'-6 <sup>5</sup> /8"
		*0	Blass Size	24"	27"
		•	<b>\</b>		
3	'-5"	3'-1"	8"	24" x 8"	27" x 8"
4	'-1"	3'-9"	10"	24" x 10"	27" x 10"

#### **4/4 LIGHT**

Rough	ı Openi	1'-10"	
<b>≠</b>	Sash O	pening	1'-7 <sup>5</sup> /8"
	*	Blass Size	8"
<u> </u>			
3'-5"	3'-1"	8"	8" x 8"
4'-1"	3'-9"	10"	8" x 10"
4'-5"	4'-1"	11"	8" x 11"
4'-9"	4'-9" 4'-5"		8" x 12"

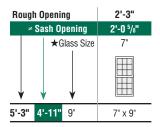
#### **6/1 LIGHT**

Rough	openi	2'-9"	
*	Sash O	pening	2'-6 <sup>5</sup> /8"
	*	Blass Size	27"
<b>\</b>	<b>\</b>		
4'-1"	3'-9"	20"	27" x 20"
4'-5"	4'-1"	22"	27" x 22"
4'-9"	4'-5"	24"	27" x 24"
<b>5'-1" 4'-9"</b> 26"		26"	27" x 26"
5'-5"	<b>5'-5" 5'-1</b> 28"		27" x 28"

#### **8/8 LIGHT**

Rough Opening			2'-6"	2'-10"	3'-2"	3'-6"
	≠ Sash O	pening	2'-3 5/8"	2'-7 5/8"	2'-11 5/8"	3'-3 5/8"
	*	Glass Size	6"	7"	8"	9"
<b>\</b>		<b>\</b>				
3'-{	5" 3'-1"	8"	6" x 8"	_	8" x 8"	_
3'-9	9" 3'-5"	9"	_	7" x 9"	_	_
4'-	1" 3'-9"	10"	_	_	8" x 10"	_
4'-	5" 4'-1"	11"	_	_	8" x 11"	9" x 11"
4'-9	9" 4'-5"	12"	_	_	8" x 12"	9" x 12"

#### **9/9 LIGHT**



#### **12/12 LIGHT**

Rough Opening			2'-6"	2'-10"	3'-2"
<b>≠</b>	Sash O	pening	2'-3 <sup>5</sup> /8"	2'-7 <sup>5</sup> /8"	2'-11 <sup>5</sup> /8"
	<b>★</b> G	ilass Size	6"	7"	8"
<b>\</b>	•	•			
4'-9"	4'-5"	8"	6" x 8"	_	_
5'-3"	4'-11"	9"	_	7" x 9"	_
5'-9"	5'-5"	10"	_		8" x 10"

#### **COTTAGE STYLE** (Unevenly Divided)

Rough Opening		2'-3"	2'-3"	2'-6"	2'-6"	2'-6"	2'-10"	2'-10"
<b>*</b>	Sash Openir	ig 2'-0 <sup>5</sup> /8"	2'-0 5/8"	2'-35/8"	2'-35/8"	2'-3 5/8"	2'-7 <sup>5</sup> /8"	2'-7 <sup>5</sup> /8"
	★Glass	Size 7"	7"	8"	8"	6"	7"	7"
		6/9 Light	9/6 Light	6/9 Light	9/6 Light	8/12 Light	8/12 Light	12/8 Light
4'-1"	3'-9" 8"	_	_	_	_	6" x 8"	_	_
4'-6"	<b>4'-2"</b> 9"	7" x 9"	7" x 9"	_	_	_	7" x 9"	7" x 9"
4'-11"	<b>4'-7"</b> 10'	_	_	8" x 10"	8" x 10"	_	_	_

# Low "E" Energy Panel Tilt 'n Clean Unit — BROSCO's Low "E" Energy Panel is available on most single thick glass (SSB) units to provide better energy efficiency.

<sup>★</sup> Glass sizes are approximate.

 $<sup>\</sup>neq$  Actual sash size = sash opening width minus 19/16", height  $^{3}$ /16".

#### **AUTHENTIC DIVIDED LIGHT**



- STATIONARY PICTURE WINDOWS
- 3 LIGHT TRANSOM
- 4 LIGHT TRANSOM
- 6 LIGHT TRANSOM

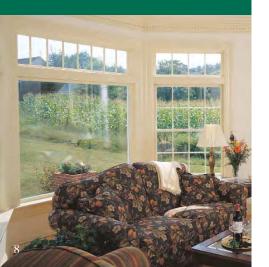
#### Window Specifications

FRAME – Standard Jamb Depth of 4-9/16" features Laminated-Veneered-Lumber sides and clear pine head jamb. All exposed exterior frame parts are manufactured from highly durable, low-maintenance Composite Materials; including the Blind Stop, Sill and standard Brickmould Casing. The clear pine inside sill stop is dadoed to receive a stool cap or "picture-framed" casing. A weatherstripped head parting stop is color matched to the vinyl jamb liner\* with integral Tilt 'n Clean, Block & Tackle balances.

SILL – Composite two piece Sill & Sill Connector system provides a continuous sill nose across Combined Windows as well as allowing for the addition of the optional Historic Sill Nosing.

**SASH** – All sash are 1-3/8" thick glazed with single pane glass, hand puttied into a primed exterior, clear pine interior treated wood sash. All divided light sash feature a traditional narrow muntin bar measuring 5/8" wide. Enhanced thermal performance is achieved with the addition of a Low-E Energy panel available for all layouts except 1/1.

\*Specify White or Beige



#### Traditional Putty Glazed Single Pane Glass

#### STATIONARY PICTURE WINDOWS

Rough Opening				3'-6"	3'-10 <sup>3</sup> /8"	4'-6 3/8"	5'-2 <sup>3</sup> /8"	5'-10 <sup>3</sup> /8"
Sa	ash Ope	ning		3'-3 <sup>5</sup> /8"	3'-8"	4'-4"	5'-0"	5'-8"
	*(	Glass Size		36"	40 3/8"	48 3/8"	56 <sup>3</sup> /8"	63 3/8"
		Ligh	t Size	9"	10"	9 5/8"	9 3/8"	8"
$\forall$	$\downarrow$	$\forall$	<b>V</b>	16 Light	16 Light	20 Light	24 Light	32 Light
3'-5"	3'-1"	32 3/4"	8"	_	3'-8" x 3'-1"	4'-4" x 3'-1"	_	_
4'-1"	3'-9"	40 3/4"	10"	_	3'-8" x 3'-9"	4'-4" x 3'-9"	5'-0" x 3'-9"	5'-8" x 3'-9"
4'-5"	4'-1"	44 3/4"	11"	3'-3 <sup>5</sup> / <sub>8</sub> " x 4'-1"	3'-8" x 4'-1"	4'-4" x 4'-1"	5'-0" x 4'-1"	5'-8" x 4'-1"
4'-9"	4'-5"	48 3/4"	12"	3'-3 <sup>5</sup> / <sub>8</sub> " x 4'-5"	3'-8" x 4'-5"	4'-4" x 4'-5"	5'-0" x 4'-5"	5'-8" x 4'-5"
6'-1"	4'-9"	52 3/4"	13"	_	3'-8" x 4'-9"	4'-4" x 4'-9"	5'-0" x 4'-9"	5'-8" x 4'-9"

Low "E" Panel not available on Picture Units.

#### 3 LIGHT TRANSOM

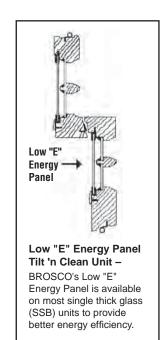
TRANSOM Rough Opening	2'-0"	2'-3"	2'-6"	2'-9"	3'-0"
★Glass Size	6"	7"	8"	9"	10"
Varies † 8"	6" x 8"	_	_	_	_
9"	_	7" x 9"	_	_	
10"	_	_	8" x 10"	9" x 10"	10" x 10"

#### **4 LIGHT TRANSOM**

TRANSOM Rough Oper	ning	2'-6"	2'-10"	3'-2"	3'-6"
★GI	ass Size	6"	7"	8"	9"
Varies †	8"	6" x 8"	_	_	_
	9"	_	7" x 9"	_	_
	10"	_	_	8" x 10"	_
	12"	_	_	_	9" x 12"

#### **6 LIGHT TRANSOM**

TRANSOM Rough Opening	2'-3"	2'-6"	2'-9"	3'-0"
★Glass Size	7"	8"	9"	10"
Varies † 9"	7" x 9"	8" x 9"	9" x 9"	10" x 9"



Glass sizes noted under each illustration indicates Double-Hung size to be used with corresponding Transom.

Stationary Windows can be used as a "stand alone" unit. For Rough Openings & Unit Dimensions, refer to page 11.

- † Combined Transom/Double-Hung rough opening height formula: Overall transom glass height plus overall Double-Hung glass height plus 13<sup>1</sup>/<sub>4</sub>".
- ★ Glass sizes are approximate.
- $\neq$  Actual sash size = sash opening width minus  $1^9/_{16}$ ", height  $^3/_{16}$ ".



# **Modular Sized Replacement Sash**

#### **1/1 LIGHT**

Sash O	pening	1'-8"	2'-0"	2'-4"	2'-6"	2'-8"	3'-0"	3'-4"
★GI	ass Size	16"	20"	24"	26"	28"	32"	36"
•	<b>↓</b>							
2'-10"	14"	_	2'-0" x 2'-10"	2'-4" x 2'-10"	_	2'-8" x 2'-10"	_	_
3'-2"	16"	_	2'-0" x 3'-2"	2'-4" x 3'-2"	2'-6" x 3'-2"	2'-8" x 3'-2"	3'-0" x 3'-2"	_
3'-10"	20"	1'-8" x 3'-10"	2'-0" x 3'-10"	2'-4" x 3'-10"	2'-6" x 3'-10"	2'-8" x 3'-10"	3'-0" x 3'-10"	_
4'-2"	22"	1'-8" x 4'-2"	2'-0" x 4'-2"	2'-4" x 4'-2"	2'-6" x 4'-2"	2'-8" x 4'-2"	3'-0" x 4'-2"	3'-4" x 4'-2"
4'-6"	24"	1'-8" x 4'-6"	2'-0" x 4'-6"	2'-4" x 4'-6"	2'-6" x 4'-6"	2'-8" x 4'-6"	3'-0" x 4'-6"	3'-4" x 4'-6"
4'-10"	26"	_	_	2'-4" x 4'-10"	2'-6" x 4'-10"	2'-8" x 4'-10"	_	_
5'-2"	28"	_	_	_	_	2'-8" x 5'-2"	3'-0" x 5'-2"	_

#### PICTURE WINDOWS

Sash 0	pening	3'-4"	4'-0"	4'-4"	5'-0"	5'-8"
G	ilass Size	36 <sup>3</sup> /8"	44 3/8"	48 3/8"	56 <sup>3</sup> /8"	64 <sup>3</sup> /8"
•	<b>↓</b>					
3'-10"	41 3/4"	3'-4" x 3'-10"	_	4'-4" x 3'-10"	_	_
4'-2"	45 <sup>3</sup> / <sub>4</sub> "	3'-4" x 4'-2"	4'-0" x 4'-2"	4'-4" x 4'-2"	5'-0" x 4'-2"	5'-8" x 4'-2"
4'-6"	49 3/4"	3'-4" x 4'-6"	4'-0" x 4'-6"	4'-4" x 4'-6"	5'-0" x 4'-6"	5'-8" x 4'-6"

#### **LOW "E" INSULATING GLASS**

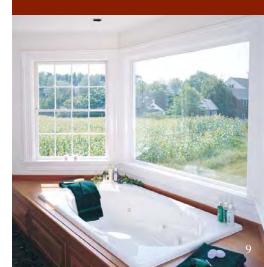
# Double-Hung Window Modular Sash

- 1/1 LIGHT
- PICTURE WINDOWS

BROSCO "Modular Sash" with Low-E Insulating Glass and Argon Gas are ideal for replacing old, worn, inefficient Modular Sized single pane glass sash. Durable, mortise and tenon construction is the standard for these preservative treated, primed exterior, 1-3/8" thick wood sash. These sash have a square edge plough and are pre-fit to pair with our Tilt 'n Clean, Block and Tackle Balances for replacement applications.

Picture Sash are also available in "Modular" sizes, featuring the same high quality 3/4" thick, Argon Filled Insulating Glass with Low-E coating as the BROSCO Modular Double-Hung sash.

BROSCO windows available with safety glazing options as needed.





#### DOUBLE-HUNG REPLACEMENT SASH KITS



BROSCO's Replacement Sash Kits are ideal for double hung windows with worn out sash that do not operate smoothly, will not seal tight, have been painted shut, or are simply old and worn out. As long as the frame is solid and in good condition, the sash can be replaced without disturbing the frame or the original trim. Our Replacement Sash Kit includes a set of Low-E Insulated Glass sash with tilt hardware applied, Block and Tackle balances and a weatherstripped head parting stop. All the windows shown in this brochure

are available in a variety of glazing options designed to meet your replacement needs.

#### **EXTERIOR WINDOW CASINGS**



Composite Brickmould Casing (Standard)



Composite Flat Casing 1<sup>1</sup>/<sub>16</sub>" x 3<sup>3</sup>/<sub>4</sub>"



Composite Cape Cod Flat Casing



Primed Flat Casing 1<sup>1</sup>/<sub>16</sub>" x 5<sup>1</sup>/<sub>4</sub>"



Clear Cedar Sill and Flat Casing 1<sup>1</sup>/<sub>16</sub>" x 3<sup>3</sup>/<sub>4</sub>"

#### **LONG SILL HORNS**

Up to 12" Sill Horns.



On NO CASING orders, 3<sup>3</sup>/<sub>4</sub>" horns will be used unless otherwise specified.

Performance Grade Rating:
Performance Grade Rating:
Water & Air Infiltration, Structural (DP)
up to

PG 55\*

	NFRC	Rating
Low-E Argon Insulating Glass Sash	U-Value	SHGC♦
- Wood 1/1 Layout	0.29	0.30
- Wood with "SDL" Bars and Spacer	0.29	0.27
- Composite 1/1 Layout	0.29	0.29
- Composite with "SDL" Bars and Spacer	0.29	0.26
- Composite with "GBG"	0.29	0.26
Authentic Divided Light Sash	U-Value	SHGC+
- Wood SSB Glass	_	_
- Wood SSB Glass w/Low-E Energy Panel	0.42	0.48

- ♦ Solar Heat Gain Coefficient.
- \* PG Ratings can vary by size/type window.

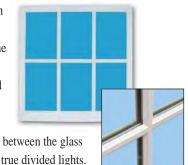
#### GRILLES BETWEEN THE GLASS

Our Grilles Between the Glass option features white, contoured aluminum grilles located between the panes of Low-E Insulating glass. The contoured grille bar creates the look of traditional detailing without sacrificing energy efficiency and offers ease of cleaning.



#### SIMULATED DIVIDED LIGHT

The Simulated Divided Light option is an authentically designed bar system applied to the interior and the exterior of the glass which creates the look of a traditional true divided light window while maintaining the energy performance of our Low-E



Insulating glass. An internal spacer between the glass panels further simulates the look of true divided lights.

#### LOW-E ENERGY PANEL

Low-E stands for low emissivity. It is a coating applied to the glass to reduce ultraviolet transmission and the transmission of radiated heat.

Low-E Energy Panel can be used with Authentic Divided Light Windows to achieve maximum energy efficiency.



#### WOOD GRILLES



#### **EXTENSION JAMBS**

69/16" wall (applied or KD).



#### LARSON STORM WINDOWS



Energy efficient Storm Windows with a Limited Lifetime Warranty help to cut energy costs up to 60%.

#### **INSECT SCREEN**



Removable, exterior mounted white aluminum full screen with PVC reinforced corners and charcoal colored fiberglass mesh.

# COMPOSITE SILL NOSING CONNECTORS





Optional "Historic" sill nosing connector is 1<sup>3</sup>/<sub>4</sub>" thick.

#### **CELLAR SASH**



Primed or Clear Pine 11/8" Cellar Sash available in various light layouts.

#### SINGLE STATIONARY UNITS

Set-up Stationary Windows to be used as a "stand alone" unit. Use any bottom sash or Cellar Sash to create a Stationary Window that will let in natural light and complement any Double-Hung window.



Shown with Flat Casing



Shown with Brickmould Casing

#### **Rough Openings & Unit Dimensions** Double-Hung Sash Cellar Sash Stationary Window Unit Width Height Width Height Rough Opening = Glass plus 6" 65/16" 63/16" 5<sup>5</sup>/8" Unit Dimension = Glass plus 47/8" 53/16" 47/8" Brickmould Casing = Glass plus 75/8" 75/16" 75/8" 77/16" Flat Casing 33/4" = Glass plus 87/8" 93/16" 11" 11" 1011/16" Flat Casing 51/4" = Glass plus 14" 103/8" 14" Flat Casing 41/2" = Glass plus 915/16" 12<sup>3</sup>/<sub>4</sub>" 97/16" 123/4"



# Our Commitment

Since 1890, the BROSCO name has represented our commitment to quality, value and service.

We believe in providing low-maintenance, environmentally friendly, energy efficient millwork products; engineered for our rugged Northeast weather and our regional architectural preferences. We are proud to extend this tradition with every product we distribute.

#### Available at:

### **Building Our Futures Together**

www.brosco.com

# **Attachment 3**

#### SOLD BY: SOLD TO:

VINMI1 Vintage Millworks, Inc P. O. Box 40070 Nashville, TN 37204 Ph: (615)244-8044 | Fx:

(615)244-5847

Customer	
Quote	
QUOTE DATE	

Good Thru	
11/8/2020	

QUOTE NAME	QUOTE NUMBER	CUSTOMER PO#	PRODUCTION DAYS	PRINTED BY	CREATED BY
Ron Grover	10228		21	gunthers	gunthers

#### **Customer Comments:**

Line #	Description		Unit Price	Qty	Ext. Price
100-1	*MAH DOOR UNIT*, *Koetter Interior Stile & Rail, Square Top Double				\$2,074.25
	Pre-Hung Door*	•			,
	1-3/4" x 6' 0" Double x 6' 8" (35 7/8" x 79" Per Leaf)			=11	
	KW Mahogany, Poplar Core (Standard)				2
	G06011, B2G, 341, 1" Raised Panel, Clear Glass, Pre-Fit & Beveled	1/8"	20		
	Width & Height Inswing		73.88°		
					Loft Handing

Left Handing

4-9/16" Primed Finger Joint Double Rabbeted-2040-G-Stop w/Sweep & Weatherstrip, Left Hand Active w/ T-Astragal

#### \*Bore\*

2-1/8"(Standard) Double Bore, 2-3/8"(Standard) Backset, 1" x 2 1/4 Edge-Route w/ Radius Corners, 2 1/4" Full Lip Strike, Radius Corner 1" x 2 1/4" No Lip, Radius Corner Deadbolt Strike

#### \*Hardware\*

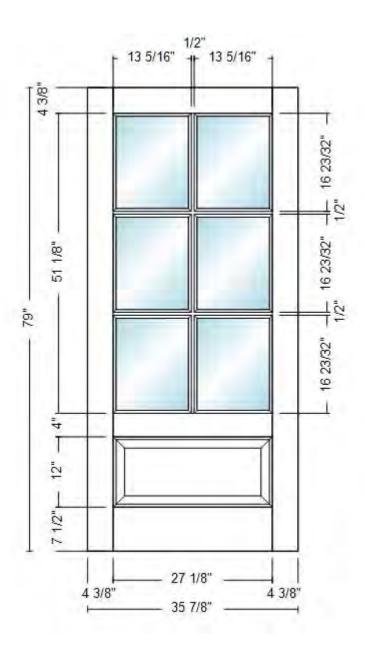
4" X 4", Oil Rubbed Bronze Finish, Square Corner, Plain Bearing, Commercial Hinge, HIN ASC4.0-US10B

Bronze/Oak inswing adjustable sill Extended Head Bolt, Extended Foot Bolt, T-Astragal

<sup>\*</sup>Jamb\*

QUOTE NAME	QUOTE NUMBER	CUSTOMER PO#	PRODUCTION DAYS	PRINTED BY	CREATED BY
Ron Grover	10228		21	gunthers	gunthers
<b>Customer Comments:</b>					

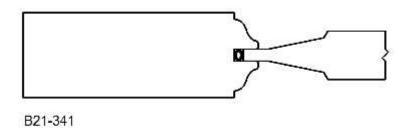
100

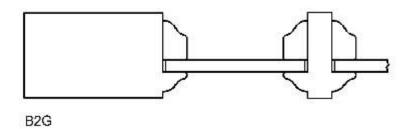


G06011

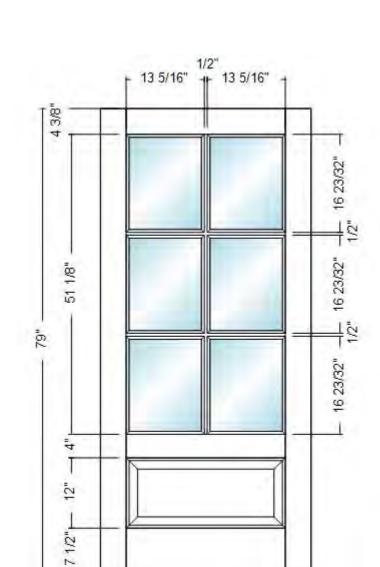
QUOTE NAME	QUOTE NUMBER	CUSTOMER PO#	PRODUCTION DAYS	PRINTED BY	CREATED BY
Ron Grover	10228		21	gunthers	gunthers
<b>Customer Comments:</b>					

100





QUOTE NAME	QUOTE NUMBER	CUSTOMER PO#	PRODUCTION DAYS	PRINTED BY	CREATED BY
Ron Grover	10228		21	gunthers	gunthers
<b>Customer Comments:</b>					



35 7/8"

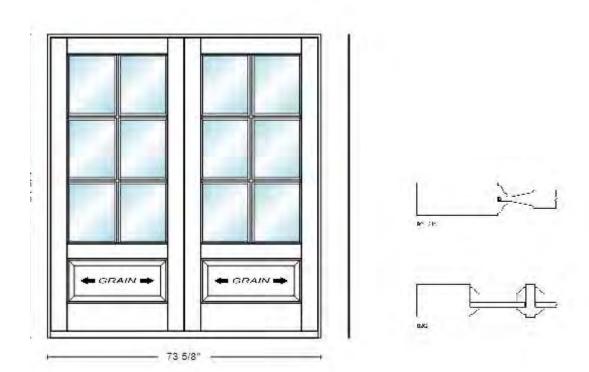
4 3/8"

4 3/8"

QUOTE NAME	QUOTE NUMBER	CUSTOMER PO#	PRODUCTION DAYS	PRINTED BY	CREATED BY
Ron Grover	10228		21	gunthers	gunthers
<b>Customer Comments:</b>					

QUOTE NAME	QUOTE NUMBER	CUSTOMER PO#	PRODUCTION DAYS	PRINTED BY	CREATED BY
Ron Grover	10228		21	gunthers	gunthers
<b>Customer Comments:</b>					

100



QUOTE NAME	QUOTE NUMBER	CUSTOMER PO#	PRODUCTION DAYS	PRINTED BY	CREATED BY
Ron Grover	10228		21	gunthers	gunthers
<b>Customer Comments:</b>					

All prices are based on quantity and are subject to change if quantity ordered differs from quantity quoted. All price totals are approximate and may vary with actual quantities shipped.

SUB-TOTAL:	\$2074.25
SALES TAX:	\$191.87
TOTAL:	\$2266.12

Lead times quoted are typical production days, but may be longer and are subject to change without notice. Lead time cannot begin until all information needed to process the order has been collected and approved. Order acceptance and actual delivery date will be determined at the time of order entry.

Non-stock items are non-cancelable 24 hours after receipt of purchase order.

CUSTOMER SIGNATURE\_\_\_\_\_\_DATE\_\_\_\_\_

We appreciate the opportunity to provide you with this quote!

# **Attachment 4**



# LANDMARK® SERIES SHINGLES

Featuring
StreakFighter® &
NailTrak® Technology







# Trust Your Home to Landmark®

Few things in this world are as precious as the place that you call home. It is much more than just a house. It's the foundation from which you build your life. That's why having a roof that gives your home long-lasting curb appeal and protection from the elements is so important. At CertainTeed, our benchmark for success is our customers' total peace of mind. And we wouldn't have it any other way.

Our dedication to making the highestquality roofing systems continues to earn the respect of top building professionals. And our product portfolio offers the widest variety of design and color options in the industry. It's no wonder that more than a million homeowners across North America choose CertainTeed each year.

And the job doesn't stop once the roof goes on. Every CertainTeed product is backed by our industry-leading manufacturer's warranty, allowing you to rest confidently and comfortably for years to come.



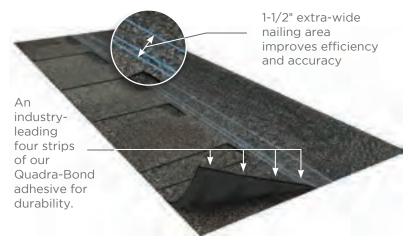




# NAILTAK Shingle Technology

#### The bond that holds it together.

For more than a decade. NailTrak has improved shingle installation by providing a nailing area three times wider than that of a typical laminate shingle. This increases efficiency and accuracy in installation, providing homeowners greater peace of mind. Landmark® shingles also feature our specially-formulated Quadra-Bond® adhesive. providing industry-leading resistance to delamination. Together, our NailTrak and Quadra-Bond technologies deliver the strength and durability that allow your roof to stand the test of time.





#### The ultimate in stain protection.

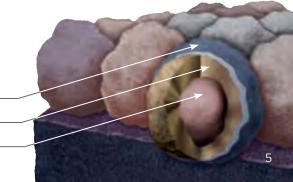
Those streaks you see on other roofs in your neighborhood? That's algae, and it's a common eyesore on roofing throughout North America. CertainTeed's StreakFighter technology uses the power of science to repel algae before it can take hold and spread. StreakFighter's granular blend includes naturally algae-resistant copper. helping your roof maintain its curb appeal and look beautiful for years to come.



Ceramic coating

Copper layer

Mineral core







Landmark, shown in Silver Bir

# The Trusted Classic

## LANDMARK®

Owning a Landmark roof brings peace of mind. Landmark's heavy weight and exceptional reliability make it a 'Best Buy' by a leading Consumer Magazine.



- Dual-layered for extra dimensionality and protection from the elements
- Offers the widest array of colors in the industry
- Independently certified as meeting the highest quality standards for roofing

# LANDMARK® COLOR PALETTE













Cottage Red

Georgetown Gray







Moire Black

Pewterwood

Driftwood

Resawn Shake



Charcoal Black



Cobblestone Gray



Colonial Slate



**Granite Gray** 



Heather Blend



Hunter Green



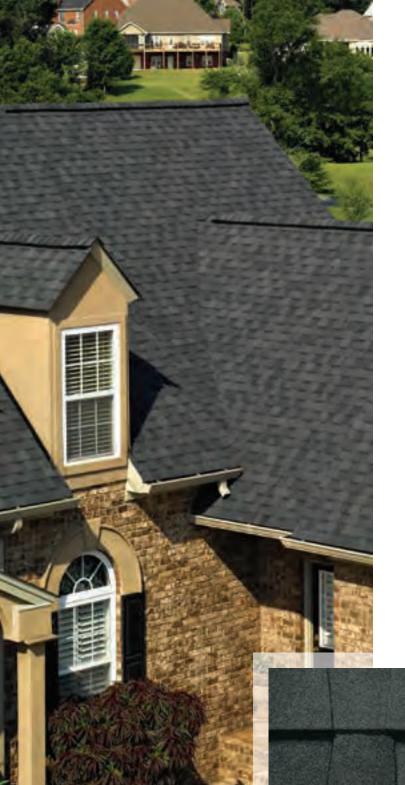
Silver Birch



Weathered Wood







Landmark PRO, shown in Max Def Moire Black

# The Expert's Choice

# LANDMARK® PRO

A refined union of vision and value, our PRO line leads its class in optimal performance and variety of color.

- Engineered to meet professional contractors' exacting specifications
- Available in a wide selection of eye-catching Max Def colors
- Outweighs standard laminates to provide greater protection from the elements

Max Def Moire Black

# LANDMARK® PRO COLOR PALETTE





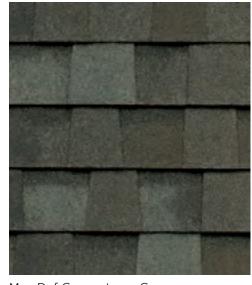
Max Def Birchwood



Max Def Burnt Sienna



Max Def Driftwood



Max Def Georgetown Gray



Max Def Granite Gray



Max Def Pewterwood



Max Def Resawn Shake



Max Def Shenandoah



Max Def Charcoal Black



Max Def Cobblestone Gray



Max Def Colonial Slate



Max Def Heather Blend



Max Def Hunter Green



Max Def Moire Black



Max Def Weathered Wood



Silver Birch

#### MAX DEF COLORS

Look deeper. With Max Def, a new dimension is added to shingles with a richer mixture of surface granules. You get a brighter, more vibrant, more dramatic appearance and depth of color. And the natural beauty of your roof shines through.





Landmark Premium, shown in Max Def Weathered Wood

# Top Shelf

# LANDMARK® PREMIUM

A sophisticated look, brilliantly executed. Our Premium line is engineered to protect, enhance and endure.

- Outclasses ordinary roofing in both appearance and performance
- Tough two-piece laminated fiberglass-based construction
- Features Max Def colors for a deeper, richer mixture of surface granules

See next page for full color palette.

Max Def Weathered Wood

# LANDMARK® PREMIUM COLOR PALETTE



Max Def Burnt Sienna



Max Def Cobblestone Gray



Max Def Colonial Slate



Max Def Driftwood



Max Def Georgetown Gray



Max Def Moire Black



Max Def Pewterwood



Max Def Weathered Wood

#### MAX DEF COLORS

Look deeper. With Max Def, a new dimension is added to shingles with a richer mixture of surface granules. You get a brighter, more vibrant, more dramatic appearance and depth of color. And the natural beauty of your roof shines through.

# Strength with Style

### LANDMARK®

- Dual-layer durability
- 228 lbs. per square
- Industry-best lifetime limited warranty
- 10-year StreakFighter® algae-resistance warranty
   STREAKFighter®

## LANDMARK® PRO

- Dual-layer, high performance
- 250 lbs. per square
- Max Def color palette
- Industry-best lifetime limited warranty
- 15-year StreakFighter® algae-resistance warranty
   STREAKFighter®

# LANDMARK® PREMIUM

- Dual-layer, high performance
- 300 lbs. per square
- Max Def color palette
- Industry-best lifetime limited warranty
- 15-year StreakFighter® algae-resistance warranty
   STREAKFighter



#### LANDMARK SERIES

#### **SPECIFICATIONS**

- Two-piece laminated fiberglass-based construction
- Classic shades and dimensional appearance of natural wood or slate

For U.S. building code compliance, see product specification sheets.

CertainTeed products are tested to ensure the highest quality and comply with the following industry standards:

#### Fire Resistance:

- UL Class A
- UL certified to meet ASTM D3018 Type 1

#### Wind Resistance:

- UL certified to meet ASTM D3018 Type 1
- ASTM D3161 Class F

#### Tear Resistance:

- UL certified to meet ASTM D3462
- CSA standard A123.5

#### Wind Driven Rain Resistance:

 Miami-Dade Product Control Acceptance: Please reference www.certainteed.com to determine approved products by manufacturing location.

#### **Quality Standards:**

• ICC-ES-ESR-1389 & ESR-3537

#### WARRANTY

- Lifetime limited transferable warranty against manufacturing defects on residential applications
- 50-year limited transferable warranty against manufacturing defects on group-owned or commercial applications
- StreakFighter® algae-resistance warranty (10-year Landmark, 15-year Landmark PRO and Premium)
- 10-year SureStart™ protection
- 15-year 110 mph wind-resistance warranty
- Wind warranty upgrade to 130 mph available.
   CertainTeed starter and CertainTeed hip and ridge required

See actual warranty for specific details and limitations.

# The ColorView® Visualizer: Design your Dream Home with the Click of a Mouse

CertainTeed created the ColorView tool to help homeowners bring their creative vison to reality.

Just look through a photo library of homes to choose one that looks most like your own. Then click on the roof to easily switch designs and see what CertainTeed product looks best. You can choose from hundreds of different roofing design and color combinations, and even add roof accents in different colors. All before anyone raises a hammer.

Want to visualize different roofing styles on your own home? You can upload photos to ColorView and have them digitally masked by one of our design professionals, or use DIY mode to upload and mask your own photos.

Plus, you can print or share your ColorView photos with family and friends to get their feedback. Visit **colorview.certainteed.com** and get started.







# Add a Little Accent to Your Roof

The visually impactful choice for capping the hips and ridges of your roof, CertainTeed's Cedar Crest® accessory shingles will complement or match any shingle in the Landmark Series. For a low-profile hip and ridge look, CertainTeed also offers Shadow Ridge® accessory shingles.





# Integrity Roof System™

A COMPLETE APPROACH TO LONG LASTING BEAUTY AND PERFORMANCE

With as much care as you take in selecting the right contractor, choosing the right roof system is equally as important. A CertainTeed Integrity Roof System combines key elements that help ensure you have a well-built roof for long-lasting performance.

## 1. Waterproofing Underlayment

The first step in your defense against the elements. Self-adhering underlayment is installed at vulnerable areas of your roof to help prevent leaks from wind-driven rain and ice dams.

# 2. Water-Resistant Underlayment

Provides a protective layer over the roof deck and acts as a secondary barrier against leaks.

# Starter Shingles

Starter Shingles are the first course of shingles that are installed and designed to work in tandem with the roof shingles above for optimal shingle sealing and performance.

## 4. Shingles

Choose from a variety of Good-Better-Best styles to complement any roof design and fit your budget.

# 5. Hip & Ridge Caps

Available in numerous profiles, these accessories are used on the roof's hip and ridge lines for a distinctive finishing touch to your new roof.

#### 6. Ventilation

A roof that breathes is shown to perform better and last longer. Ridge Vents, in combination with Intake Vents, allow air to flow on the underside of your roof deck, keeping the attic cooler in the summer and drier in the winter.



learn more at:

certainteed.com/roofing



Integrity Roof System

#### **CertainTeed Corporation**

ROOFING • SIDING • TRIM • DECKING • RAILING • FENCE • GYPSUM • CEILINGS • INSULATION

20 Moores Road Malvern, PA 19355 Professional: 800-233-8990 Consumer: 800-782-8777 certainteed.com

# **Attachment 5**









