

HISTORIC AND DESIGN REVIEW COMMISSION

April 06, 2022

HDRC CASE NO: 2022-161
ADDRESS: 2160 W SUMMIT AVE
LEGAL DESCRIPTION: NCB 6826 BLK 0 LOT 16 E 40 OF 17
ZONING: R-6, H
CITY COUNCIL DIST.: 7
DISTRICT: Monticello Park Historic District
APPLICANT: Sarah Manzke/MANZKE SARAH SILVER & MARC D
OWNER: MANZKE SARAH SILVER & MARC D
TYPE OF WORK: Exterior alterations, window and door replacement
APPLICATION RECEIVED: March 08, 2022
60-DAY REVIEW: Not applicable due to City Council Emergency Orders
CASE MANAGER: Rachel Rettaliata
REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to:

1. Remove the rear, alley-facing roof parapet on the addition to improve drainage.
2. Replace the metal-clad patio doors on the rear elevation.
3. Replace the steel casement windows on the rear elevation.

APPLICABLE CITATIONS:

Historic Design Guidelines, Chapter 2, Exterior Maintenance and Alterations

1. Materials: Woodwork

A. MAINTENANCE (PRESERVATION)

- i. *Inspections*—Conduct semi-annual inspections of all exterior wood elements to verify condition and determine maintenance needs.
- ii. *Cleaning*—Clean exterior surfaces annually with mild household cleaners and water. Avoid using high pressure power washing and any abrasive cleaning or stripping methods that can damage the historic wood siding and detailing.
- iii. *Paint preparation*—Remove peeling, flaking, or failing paint surfaces from historic woodwork using the gentlest means possible to protect the integrity of the historic wood surface. Acceptable methods for paint removal include scraping and sanding, thermal removal, and when necessary, mild chemical strippers. Sand blasting and water blasting should never be used to remove paint from any surface. Sand only to the next sound level of paint, not all the way to the wood, and address any moisture and deterioration issues before repainting.
- iv. *Repainting*—Paint once the surface is clean and dry using a paint type that will adhere to the surface properly. See *General Paint Type Recommendations* in Preservation Brief #10 listed under Additional Resources for more information.
- v. *Repair*—Repair deteriorated areas or refasten loose elements with an exterior wood filler, epoxy, or glue.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

- i. *Facade materials*—Avoid removing materials that are in good condition or that can be repaired in place. Consider exposing original wood siding if it is currently covered with vinyl or aluminum siding, stucco, or other materials that have not achieved historic significance.
- ii. *Materials*—Use in-kind materials when possible or materials similar in size, scale, and character when exterior woodwork is beyond repair. Ensure replacement siding is installed to match the original pattern, including exposures. Do not introduce modern materials that can accelerate and hide deterioration of historic materials. Hardiboard and other cementitious materials are not recommended.
- iii. *Replacement elements*—Replace wood elements in-kind as a replacement for existing wood siding, matching in profile, dimensions, material, and finish, when beyond repair.

2. Materials: Masonry and Stucco

A. MAINTENANCE (PRESERVATION)

- i. *Paint*—Avoid painting historically unpainted surfaces. Exceptions may be made for severely deteriorated material where other consolidation or stabilization methods are not appropriate. When painting is acceptable, utilize a water permeable paint to avoid trapping water within the masonry.
 - ii. *Clear area*—Keep the area where masonry or stucco meets the ground clear of water, moisture, and vegetation.
 - iii. *Vegetation*—Avoid allowing ivy or other vegetation to grow on masonry or stucco walls, as it may loosen mortar and stucco and increase trapped moisture.
 - iv. *Cleaning*—Use the gentlest means possible to clean masonry and stucco when needed, as improper cleaning can damage the surface. Avoid the use of any abrasive, strong chemical, sandblasting, or high-pressure cleaning method.
- B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)
- i. *Patching*—Repair masonry or stucco by patching or replacing it with in-kind materials whenever possible. Utilize similar materials that are compatible with the original in terms of composition, texture, application technique, color, and detail, when in-kind replacement is not possible. EIFS is not an appropriate patching or replacement material for stucco.
 - ii. *Repointing*—The removal of old or deteriorated mortar should be done carefully by a professional to ensure that masonry units are not damaged in the process. Use mortar that matches the original in color, profile, and composition when repointing. Incompatible mortar can exceed the strength of historic masonry and results in deterioration. Ensure that the new joint matches the profile of the old joint when viewed in section. It is recommended that a test panel is prepared to ensure the mortar is the right strength and color.
 - iii. *Removing paint*—Take care when removing paint from masonry as the paint may be providing a protectant layer or hiding modifications to the building. Use the gentlest means possible, such as alkaline poultice cleaners and strippers, to remove paint from masonry.
 - iv. *Removing stucco*—Remove stucco from masonry surfaces where it is historically inappropriate. Prepare a test panel to ensure that underlying masonry has not been irreversibly damaged before proceeding.

3. Materials: Roofs

A. MAINTENANCE (PRESERVATION)

- i. *Regular maintenance and cleaning*—Avoid the build-up of accumulated dirt and retained moisture. This can lead to the growth of moss and other vegetation, which can lead to roof damage. Check roof surface for breaks or holes and flashing for open seams and repair as needed.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

- i. *Roof replacement*—Consider roof replacement when more than 25-30 percent of the roof area is damaged or 25-30 percent of the roof tiles (slate, clay tile, or cement) or shingles are missing or damaged.
- ii. *Roof form*—Preserve the original shape, line, pitch, and overhang of historic roofs when replacement is necessary.
- iii. *Roof features*—Preserve and repair distinctive roof features such as cornices, parapets, dormers, open eaves with exposed rafters and decorative or plain rafter tails, flared eaves or decorative purlins, and brackets with shaped ends.
- iv. *Materials: sloped roofs*—Replace roofing materials in-kind whenever possible when the roof must be replaced. Retain and re-use historic materials when large-scale replacement of roof materials other than asphalt shingles is required (e.g., slate or clay tiles). Salvaged materials should be re-used on roof forms that are most visible from the public right-of-way. Match new roofing materials to the original materials in terms of their scale, color, texture, profile, and style, or select materials consistent with the building style, when in-kind replacement is not possible.
- v. *Materials: flat roofs*—Allow use of contemporary roofing materials on flat or gently sloping roofs not visible from the public right-of-way.
- vi. *Materials: metal roofs*—Use metal roofs on structures that historically had a metal roof or where a metal roof is appropriate for the style or construction period. Refer to Checklist for Metal Roofs on page 10 for desired metal roof specifications when considering a new metal roof. New metal roofs that adhere to these guidelines can be approved administratively as long as documentation can be provided that shows that the home has historically had a metal roof.
- vii. *Roof vents*—Maintain existing historic roof vents. When deteriorated beyond repair, replace roof vents in-kind or with one similar in design and material to those historically used when in-kind replacement is not possible.

4. Materials: Metal

A. MAINTENANCE (PRESERVATION)

- i. *Cleaning*—Use the gentlest means possible when cleaning metal features to avoid damaging the historic finish. Prepare a test panel to determine appropriate cleaning methods before proceeding. Use a wire brush to remove corrosion or paint build up on hard metals like wrought iron, steel, and cast iron.
- ii. *Repair*—Repair metal features using methods appropriate to the specific type of metal.
- iii. *Paint*—Avoid painting metals that were historically exposed such as copper and bronze.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

- i. *Replacement*—Replace missing or significantly damaged metal features in-kind or with a substitute compatible in size, form, material, and general appearance to the historical feature when in-kind replacement is not possible.
- ii. *Rust*—Select replacement anchors of stainless steel to limit rust and associated expansion that can cause cracking of the surrounding material such as wood or masonry. Insert anchors into the mortar joints of masonry buildings.
- iii. *New metal features*—Add metal features based on accurate evidence of the original, such as photographs. Base the design on the architectural style of the building and historic patterns if no such evidence exists.

5. Architectural Features: Lighting

A. MAINTENANCE (PRESERVATION)

- i. *Lighting*—Preserve historic light fixtures in place and maintain through regular cleaning and repair as needed.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

- i. *Rewiring*—Consider rewiring historic fixtures as necessary to extend their lifespan.
- ii. *Replacement lighting*—Replace missing or severely damaged historic light fixtures in-kind or with fixtures that match the original in appearance and materials when in-kind replacement is not feasible. Fit replacement fixtures to the existing mounting location.
- iii. *New light fixtures*—Avoid damage to the historic building when installing necessary new light fixtures, ensuring they may be removed in the future with little or no damage to the building. Place new light fixtures and those not historically present in locations that do not distract from the façade of the building while still directing light where needed. New light fixtures should be unobtrusive in design and should not rust or stain the building.

6. Architectural Features: Doors, Windows, and Screens

A. MAINTENANCE (PRESERVATION)

- i. *Openings*—Preserve existing window and door openings. Avoid enlarging or diminishing to fit stock sizes or air conditioning units. Avoid filling in historic door or window openings. Avoid creating new primary entrances or window openings on the primary façade or where visible from the public right-of-way.
- ii. *Doors*—Preserve historic doors including hardware, fanlights, sidelights, pilasters, and entablatures.
- iii. *Windows*—Preserve historic windows. When glass is broken, the color and clarity of replacement glass should match the original historic glass.
- iv. *Screens and shutters*—Preserve historic window screens and shutters.
- v. *Storm windows*—Install full-view storm windows on the interior of windows for improved energy efficiency. Storm window may be installed on the exterior so long as the visual impact is minimal and original architectural details are not obscured.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

- i. *Doors*—Replace doors, hardware, fanlight, sidelights, pilasters, and entablatures in-kind when possible and when deteriorated beyond repair. When in-kind replacement is not feasible, ensure features match the size, material, and profile of the historic element.
- ii. *New entrances*—Ensure that new entrances, when necessary to comply with other regulations, are compatible in size, scale, shape, proportion, material, and massing with historic entrances.
- iii. *Glazed area*—Avoid installing interior floors or suspended ceilings that block the glazed area of historic windows.
- iv. *Window design*—Install new windows to match the historic or existing windows in terms of size, type, configuration, material, form, appearance, and detail when original windows are deteriorated beyond repair.
- v. *Muntins*—Use the exterior muntin pattern, profile, and size appropriate for the historic building when replacement windows are necessary. Do not use internal muntins sandwiched between layers of glass.
- vi. *Replacement glass*—Use clear glass when replacement glass is necessary. Do not use tinted glass, reflective glass, opaque glass, and other non-traditional glass types unless it was used historically. When established by the architectural style of the building, patterned, leaded, or colored glass can be used.
- vii. *Non-historic windows*—Replace non-historic incompatible windows with windows that are typical of the architectural style of the building.
- viii. *Security bars*—Install security bars only on the interior of windows and doors.
- ix. *Screens*—Utilize wood screen window frames matching in profile, size, and design of those historically found when the existing screens are deteriorated beyond repair. Ensure that the tint of replacement screens closely matches the original screens or those used historically.

x. *Shutters*—Incorporate shutters only where they existed historically and where appropriate to the architectural style of the house. Shutters should match the height and width of the opening and be mounted to be operational or appear to be operational. Do not mount shutters directly onto any historic wall material.

7. Architectural Features: Porches, Balconies, and Porte-Cocheres

A. MAINTENANCE (PRESERVATION)

i. *Existing porches, balconies, and porte-cocheres*—Preserve porches, balconies, and porte-cocheres. Do not add new porches, balconies, or porte-cocheres where not historically present.

ii. *Balusters*—Preserve existing balusters. When replacement is necessary, replace in-kind when possible or with balusters that match the originals in terms of materials, spacing, profile, dimension, finish, and height of the railing.

iii. *Floors*—Preserve original wood or concrete porch floors. Do not cover original porch floors of wood or concrete with carpet, tile, or other materials unless they were used historically.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

i. *Front porches*—Refrain from enclosing front porches. Approved screen panels should be simple in design as to not change the character of the structure or the historic fabric.

ii. *Side and rear porches*—Refrain from enclosing side and rear porches, particularly when connected to the main porch or balcony. Original architectural details should not be obscured by any screening or enclosure materials. Alterations to side and rear porches should result in a space that functions, and is visually interpreted as, a porch.

iii. *Replacement*—Replace in-kind porches, balconies, porte-cocheres, and related elements, such as ceilings, floors, and columns, when such features are deteriorated beyond repair. When in-kind replacement is not feasible, the design should be compatible in scale, massing, and detail while materials should match in color, texture, dimensions, and finish.

iv. *Adding elements*—Design replacement elements, such as stairs, to be simple so as to not distract from the historic character of the building. Do not add new elements and details that create a false historic appearance.

v. *Reconstruction*—Reconstruct porches, balconies, and porte-cocheres based on accurate evidence of the original, such as photographs. If no such evidence exists, the design should be based on the architectural style of the building and historic patterns.

8. Architectural Features: Foundations

A. MAINTENANCE (PRESERVATION)

i. *Details*—Preserve the height, proportion, exposure, form, and details of a foundation such as decorative vents, grilles, and lattice work.

ii. *Ventilation*—Ensure foundations are vented to control moisture underneath the dwelling, preventing deterioration.

iii. *Drainage*—Ensure downspouts are directed away and soil is sloped away from the foundation to avoid moisture collection near the foundation.

iv. *Repair*—Inspect foundations regularly for sufficient drainage and ventilation, keeping it clear of vegetation. Also inspect for deteriorated materials such as limestone and repair accordingly. Refer to maintenance and alteration of applicable materials, for additional guidelines.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

i. *Replacement features*—Ensure that features such as decorative vents and grilles and lattice panels are replaced in-kind when deteriorated beyond repair. When in-kind replacement is not possible, use features matching in size, material, and design. Replacement skirting should consist of durable, proven materials, and should either match the existing siding or be applied to have minimal visual impact.

ii. *Alternative materials*—Cedar piers may be replaced with concrete piers if they are deteriorated beyond repair.

iii. *Shoring*—Provide proper support of the structure while the foundation is rebuilt or repaired.

iv. *New utilities*—Avoid placing new utility and mechanical connections through the foundation along the primary façade or where visible from the public right-of-way.

9. Outbuildings, Including Garages

A. MAINTENANCE (PRESERVATION)

i. *Existing outbuildings*—Preserve existing historic outbuildings where they remain.

ii. *Materials*—Repair outbuildings and their distinctive features in-kind. When new materials are needed, they should match existing materials in color, durability, and texture. Refer to maintenance and alteration of applicable materials above, for additional guidelines.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

- i. *Garage doors*—Ensure that replacement garage doors are compatible with those found on historic garages in the district (e.g., wood paneled) as well as with the principal structure. When not visible from the public right-of-way, modern paneled garage doors may be acceptable.
- ii. *Replacement*—Replace historic outbuildings only if they are beyond repair. In-kind replacement is preferred; however, when it is not possible, ensure that they are reconstructed in the same location using similar scale, proportion, color, and materials as the original historic structure.
- iii. *Reconstruction*—Reconstruct outbuildings based on accurate evidence of the original, such as photographs. If no such evidence exists, the design should be based on the architectural style of the primary building and historic patterns in the district. Add permanent foundations to existing outbuildings where foundations did not historically exist only as a last resort.

11. Canopies and Awnings

A. MAINTENANCE (PRESERVATION)

- i. *Existing canopies and awnings*—Preserve existing historic awnings and canopies through regular cleaning and periodic inspections of the support system to ensure they are secure.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

- i. *Replacement canopies and awnings*—Replace canopies and awnings in-kind whenever possible.
- ii. *New canopies and awnings*—Add canopies and awnings based on accurate evidence of the original, such as photographs. If no such evidence exists, the design of new canopies and awnings should be based on the architectural style of the building and be proportionate in shape and size to the scale of the building façade to which they will be attached. See UDC Section 35-609(j).
- iii. *Lighting*—Do not internally illuminate awnings; however, lighting may be concealed in an awning to provide illumination to sidewalks or storefronts.
- iv. *Awning materials*—Use fire-resistant canvas awnings that are striped or solid in a color that is appropriate to the period of the building.
- v. *Building features*—Avoid obscuring building features such as arched transom windows with new canopies or awnings.
- vi. *Support structure*—Support awnings with metal or wood frames, matching the historic support system whenever possible. Minimize damage to historic materials when anchoring the support system. For example, anchors should be inserted into mortar rather than brick. Ensure that the support structure is integrated into the structure of the building as to avoid stress on the structural stability of the façade.

12. Increasing Energy Efficiency

A. MAINTENANCE (PRESERVATION)

- i. *Historic elements*—Preserve elements of historic buildings that are energy efficient including awnings, porches, recessed entryways, overhangs, operable windows, and shutters.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

- i. *Weatherization*—Apply caulking and weather stripping to historic windows and doors to make them weather tight.
- ii. *Thermal performance*—Improve thermal performance of windows, fanlights, and sidelights by applying UV film or new glazing that reduces heat gain from sunlight on south and west facing facades only if the historic character can be maintained. Do not use reflective or tinted films.
- iii. *Windows*—Restore original windows to working order. Install compatible and energy-efficient replacement windows when existing windows are deteriorated beyond repair. Replacement windows must match the appearance, materials, size, design, proportion, and profile of the original historic windows.
- iv. *Reopening*—Consider reopening an original opening that is presently blocked to add natural light and ventilation.
- v. *Insulation*—Insulate unfinished spaces with appropriate insulation ensuring proper ventilation, such as attics, basements, and crawl spaces.
- vi. *Shutters*—Reinstall functional shutters and awnings with elements similar in size and character where they existed historically.
- vii. *Storm windows*—Install full-view storm windows on the interior of windows for improved energy efficiency.
- viii. *Cool roofs*—Do not install white or —cool roofs when visible from the public right-of-way. White roofs are permitted on flat roofs and must be concealed with a parapet.

ix. *Roof vents*—Add roof vents for ventilation of attic heat. Locate new roof vents on rear roof pitches, out of view of the public right-of-way.

x. *Green Roofs*—Install green roofs when they are appropriate for historic commercial structures.

FINDINGS:

- a. The primary structure located at 2160 W Summit is a 2-story, single-family residence constructed circa 1920. The structure first appears on the 1938 Sanborn Map. The home features a composition shingle cross hip roof with wide overhanging eaves, a prominent front façade chimney with decorative features, painting brick cladding, six-over-six and divided lite windows. The structure features a rear balcony addition that does not appear on the 1951 Sanborn Map. The property is contributing to the Monticello Park Historic District.
- b. **SITE VISIT** – Staff performed a site visit on March 30, 2022, and observed the following conditions: paint peeling or chipping, cracked or missing glazing, and rusted hardware. The windows are currently inoperable and have been modified to accommodate air conditioning units. The existing windows and doors on the rear elevation are not original to the structure and the window opening framing shows evidence of previous modifications.
- c. **PARAPET REMOVAL** – The applicant has proposed to remove the parapets and railing on the rear balcony to improve drainage. The rear addition and balcony do not appear on the 1951 Sanborn Map and are not original to the structure. The applicant has expressed that water pools on the flat-roof balcony and causes water damage and leaks on the interior of the structure. Guideline 7.A.i for Exterior Maintenance and Alterations states that porches, balconies, and porte-cochères should be preserved. Do not add new porches, balconies, or porte-cochères where not historically present. As the balcony is not original to the primary structure, staff finds the modification consistent with the Guidelines.
- d. **DOOR REPLACEMENT** – The applicant has proposed to replace the metal-clad patio doors on the rear elevation. The existing doors are not original to the structure and exhibit deterioration and delamination. The bottom portion of the door has had to be reinforced and do not meet properly. Guideline 6.A.ii for Exterior Maintenance and Alterations states that historic doors including hardware, fanlights, sidelights, pilasters, and entablatures should be preserved. Staff finds that the existing doors are not historic or original to the structure and that in-kind replacement is appropriate.
- e. **WINDOW REPLACEMENT: EXISTING CONDITION** – The applicant has proposed to replace two (2) sets of steel casement windows with Pella Lifestyle Series aluminum-clad wood windows. Guideline 6.A.iii for Exterior Maintenance and Alterations states that historic windows should be preserved. Per finding b, staff observed during the site visit that the windows were inoperable and were not original to the structure. Staff finds that replacement of the existing rear steel casement windows is appropriate but finds that the replacement windows should match the existing window configuration.
- f. **WINDOW REPLACEMENT: REPLACEMENT PRODUCT** – The applicant has proposed to replace two (2) sets of steel casement windows on the rear elevation addition. The applicant has proposed to install Pella Lifestyle Series aluminum-clad wood windows in a fixed-over-awning window configuration. Guideline 6.B.iv. for Exterior Maintenance and Alterations states that new windows should be installed to match the historic or existing windows in terms of size, type, configuration, material, form, appearance, and detail when original windows are deteriorated beyond repair. Staff finds that the existing windows are not original to the structure and fully wood or aluminum-clad wood would better match the historic windows on the primary structure. The replacement windows should match the existing casement window configuration.
- g. **ADMINISTRATIVE APPROVAL** – The applicant has proposed to perform in-kind repairs to stabilize and repaint the exterior brick, to replace the roof on the rear balcony, and to reconstruct the existing landing and stairs to match existing and to meet the leveled foundation. This scope of work is eligible for administrative approval and does not require review by the HDRC.

RECOMMENDATION:

Item 1, staff recommends approval of the rear balcony modification based on finding c.

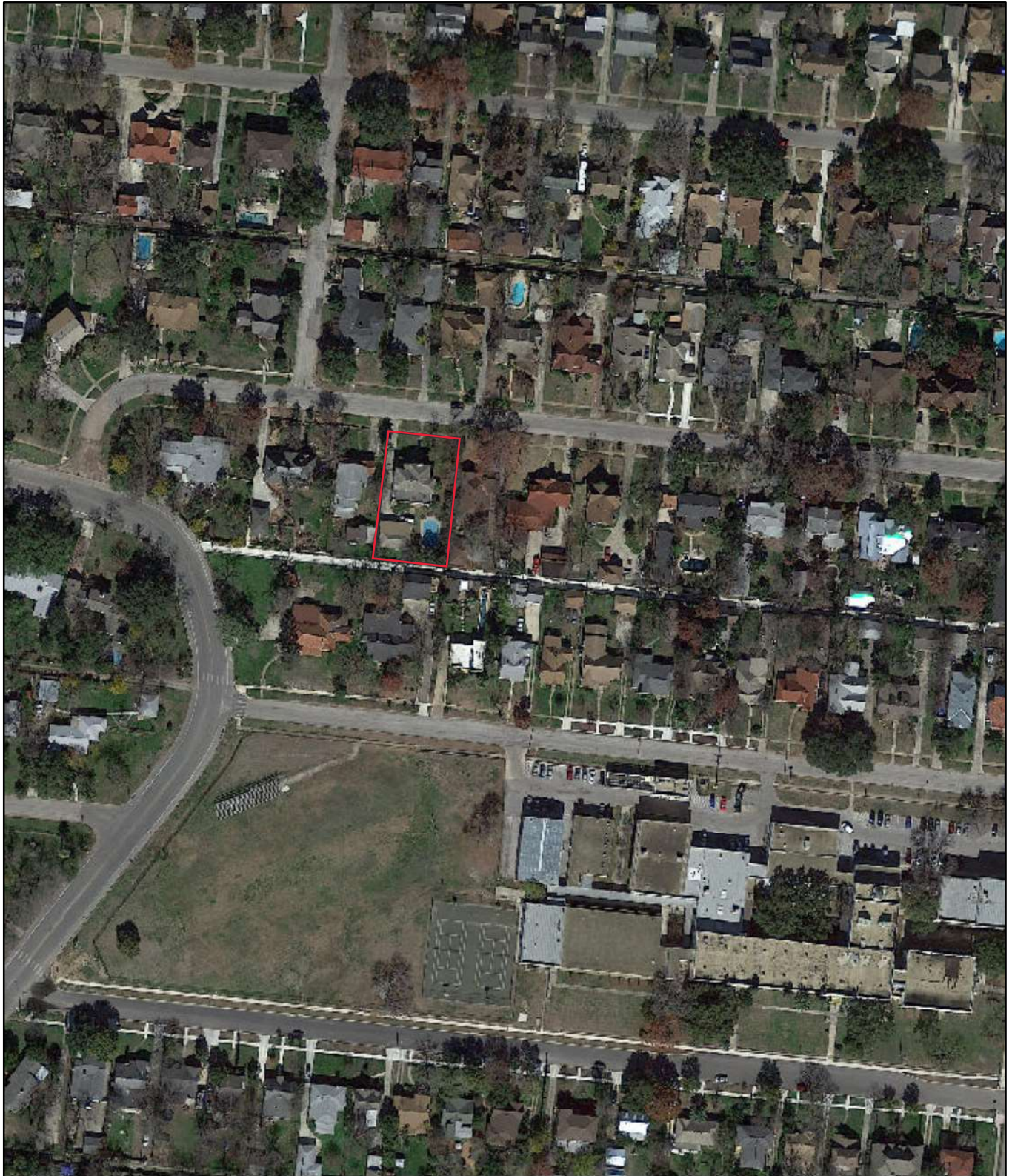
Item 2, staff recommends approval of the door replacement based on finding d.

Item 3, staff recommends approval of the rear addition window replacement based on findings e through f with the following stipulation:

- i. That the applicant installs fully wood or aluminum-clad wood windows that match the existing window configuration. The windows should feature an inset of two (2) inches within facades and should feature

profiles that are found historically within the immediate vicinity. White manufacturer's color is not allowed, and color selection must be presented to staff. There should be a minimum of two inches in depth between the front face of the window trim and the front face of the top window sash. This must be accomplished by recessing the window sufficiently within the opening or with the installation of additional window trim to add thickness. Window trim must feature traditional dimensions and architecturally appropriate sill detail. Window track components must be painted to match the window trim or concealed by a wood window screen set within the opening. Final window specifications must be submitted to staff for review and approval prior to the issuance of a Certificate of Appropriateness.

City of San Antonio One Stop



— User drawn lines

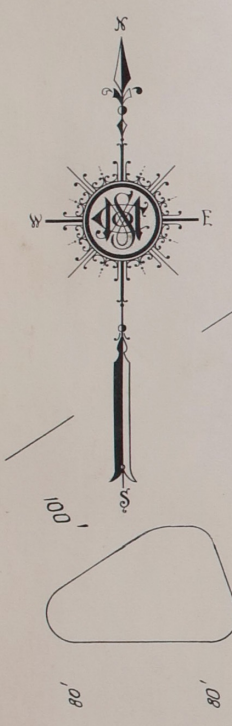
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541

ADDL SHEET

DEC. 1934

THOMAS JEFFERSON HIGH SCHOOL GROUNDS



541

TEX...041

ADDL SHEET
DEC. 1934

THOMAS JEFFERSON HIGH SCHOOL GROUNDS

548

525

MARY LOUISE DR.

FURR DR.

DONALDSON AV.

W. GRAMERCY PL.

W. KINGS HWY

W. SUMMIT AV.

W. MULBERRY AV.

KAMPMANN BLVD.

KAMPMANN BLVD.

KAMPMANN BLVD.

560

546



550

100'

100'

0'

SCALE 100 FT TO ONE INCH



NORTHEAST STREET PERSPECTIVE



NORTH STREET PERSPECTIVE



NORTHWEST STREET PERSPECTIVE



SOUTH BACKYARD (ALLEY) PERSPECTIVE

SCOPE OF WORK:

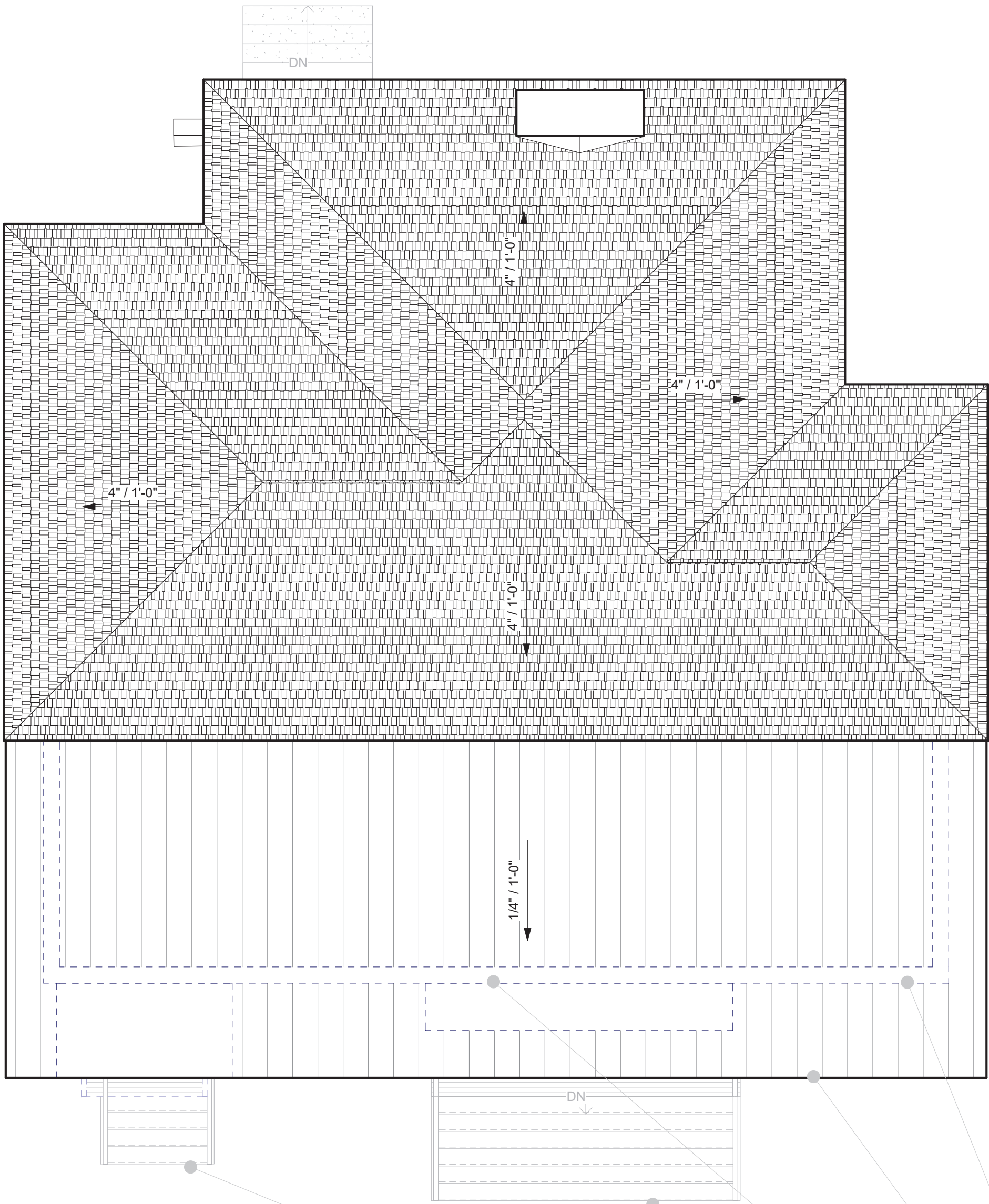
AFTER PURCHASING 2160 WEST SUMMIT IN THE WINTER OF 2017, THE HOME OWNER INVESTED IN A NEW SHINGLE ROOF FOR THE ORIGINAL ROOF AND NEW SINGLE PLY TPO ROOF FOR THE 1957 ADDITION. IN THE FOLLOWING YEARS, THE OWNER HAS EXPERIENCED REPEATED WATER INFILTRATION AND DAMAGE TO INTERIOR FINISHES. THE PRIMARY CAUSES OF THESE LEAKS ARE CRACKS IN THE EXTERIOR MASONRY AND INADEQUATE DRAINAGE FROM THE POORLY CONSTRUCTED LOW SLOPE ROOF.

THE OWNER HAS STABILIZED THE PIER AND BEAM FOUNDATION WITH PUSH PIERS TO PROVIDE A STABLE BASE FOR MASONRY REPAIR. THE OWNER SEEKS APPROVAL FOR IN-KIND REPAIRS AND REPOINTING OF EXTERIOR BRICK. ADDITIONALLY, THE 1957 ADDITION WAS DESIGNED WITH A PERIMETER PARAPET WITH ONLY TWO SMALL SCUPPERS FOR DRAINAGE. THE EXISTING ADDITION ROOF REGULARLY PONDS AND LEAKS TO THE INTERIOR DESPITE THE ROOF REPLACEMENT IN 2018.

WHILE THE MASONS ARE ON SITE FOR NECESSARY REPAIRS, THE OWNER SEEKS TO DEMOLISH THE ALLEY-FACING, NON-ORIGINAL PARAPET TO ALLOW THE ADDITION ROOF TO ADEQUATELY SHED WATER. ADDITIONALLY, THE SOUTH-FACING PORCH ROOFS ARE FRAMED THROUGH THE MASONRY VENEER, AND PORCH SETTLEMENT HAS CAUSED THESE CANOPIES TO ACT AS LEVERS, DISPLACING THE BRICK ABOVE. THE PROPOSED REROOF WILL PROTECT THE INTERIOR, ELIMINATE STRUCTURAL FLAWS, AND MORE ACCURATELY REFLECT THE PERIOD CHARACTER OF THE ORIGINAL HOME.

CONSIDERING THE 1957 CONSTRUCTION OF THE SOUTH-ALLEY-FACING ADDITION, THE DOORS AND WINDOWS DO NOT MATCH THE CHARACTER OF THE ORIGINAL HOME. THE CASEMENT WINDOWS ARE CONSTRUCTED OF STEEL, AND HAVE VOIDS FOR WINDOW-UNIT STYLE AIR CONDITIONING UNITS. THE GLAZING IS CRACKED AND FAILING, AND THE WINDOWS ARE NON-OPERABLE. THE PATIO DOORS ARE METAL-CLAD UNITS WITH PLASTIC MULLIONS THAT DO NOT MATCH THE ORIGINAL CHARACTER OF THE HOME. THE DOORS ARE ROTTING AND THE METAL CLADDING IS DELAMINATED FROM THE DOOR CORE. ADDITIONALLY, THE HOME OWNER SUFFERED A BURGLARY WITH THE POINT OF ENTRY THROUGH THESE PATIO DOORS LEAVING THEM FURTHER DAMAGED.

THE OWNER SEEKS TO REPLACE THE SOUTH-ALLEY-FACING DOORS AND WINDOWS TO IMPROVE THE APPEARANCE, FUNCTION, PERFORMANCE, AND CHARACTER OF THE HOME. THIS EFFORT WILL INCLUDE REBUILDING THE EXISTING LANDINGS AND STAIRS FROM FINISH FLOOR HEIGHT TO GRADE. THE EXISTING LANDINGS WERE CONSTRUCTED WITH INSUFFICIENT STRUCTURE AND HAVE FAILED, RESULTING IN UNSAFE ACCESS IN AND OUT OF THE HOME.



② ROOF
3/16" = 1'-0"



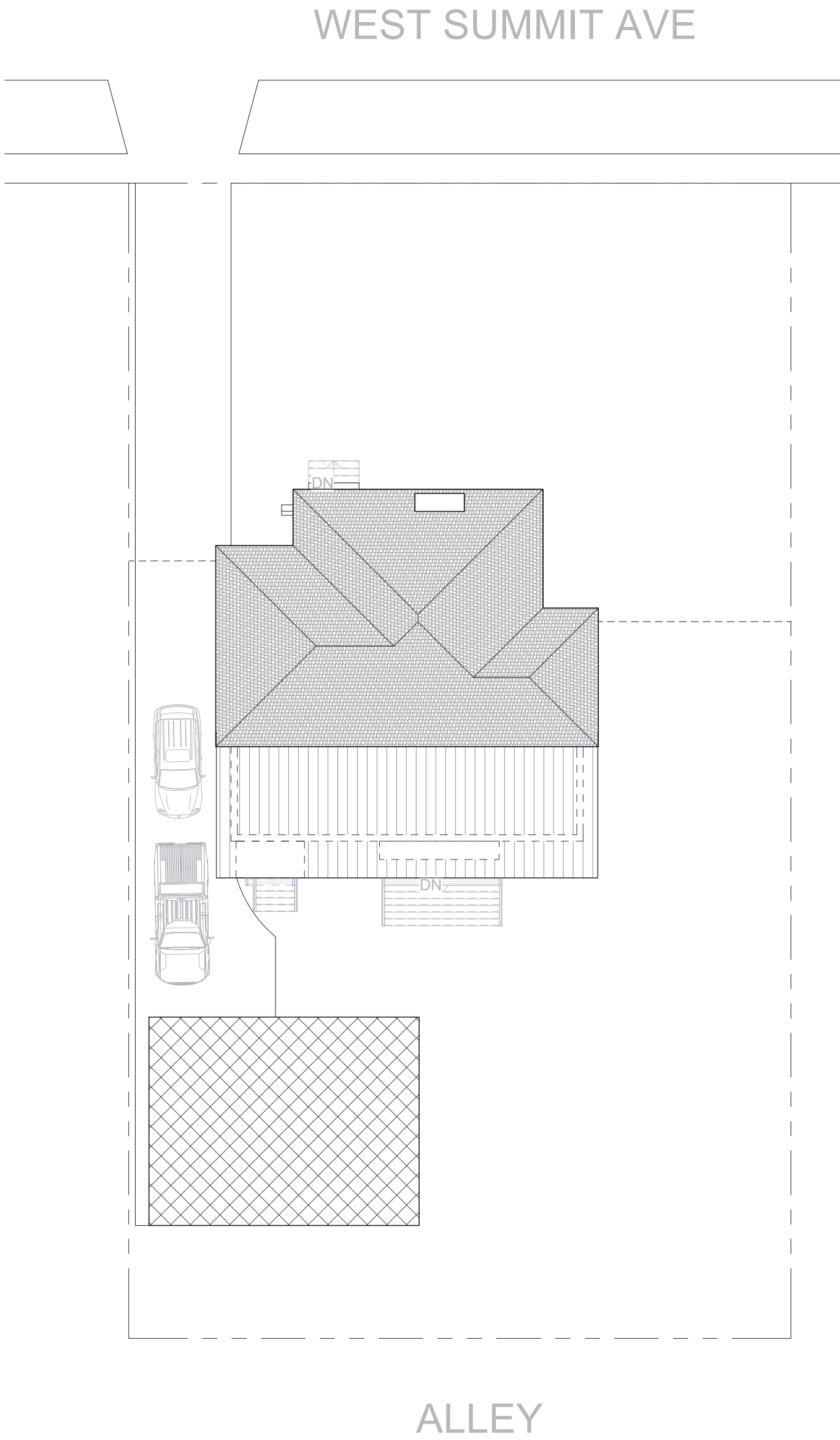
0' 5' 10' 20'

REMOVE INSUFFICIENT SCUPPERS

REROOF 1/4" ON 12"

DEMO PARAPET & LEAKING ROOFING

REBUILD STAIRS & LANDINGS



① Site
1/16" = 1'-0"



0' 8' 16' 32'

2160 WEST SUMMIT AVE
SAN ANTONIO, TX 78201



TYPICAL MASONRY CRACKS



SPALLED WEST PARAPET

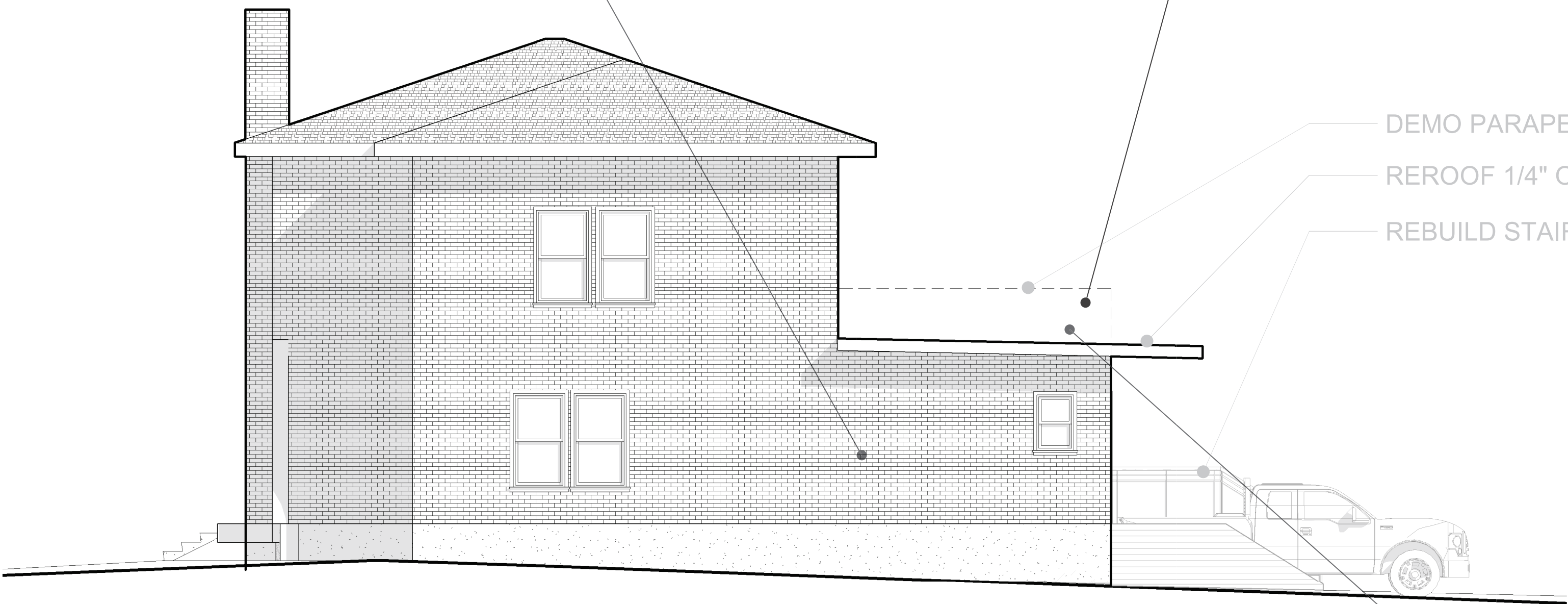


DISPLACED BRICK OVER CANOPY



BRICK DETERIORATION & CRACKING

2160 WEST SUMMIT AVE
SAN ANTONIO, TX 78201



② West
3/16" = 1'-0"



① East
3/16" = 1'-0"



PONDING AT SCUPPER



SKY-FACING MASONRY CRACKING



TYPICAL PONDING DUE TO INSUFFICIENT SLOPE



PONDING THROUGHOUT ROOF AREA



BRICK DISPLACEMENT @ CANOPY



FAILED STEEL CASEMENT



TYPICAL INTERIOR INFILTRATION & CONDENSATION



ROTTEN DOOR LEAF



DISPLACED BRICK



② South
3/16" = 1'-0"

2160 WEST SUMMIT AVE
SAN ANTONIO, TX 78201

- REPLACE EXISTING PATIO DOORS
- REPLACE EXISTING STEEL CASEMENTS
- REBUILD STAIRS & LANDINGS



① North
3/16" = 1'-0"



SOUTH ALLEY ELEVATION



STEEL CASEMENT W/ AC INFILL



METAL CLAD PATIO DOORS



TYPICAL MASONRY CRACKING @ NORTHEAST































Pella® Lifestyle Series

Clad/Wood



#1 performing wood window and patio door for the combination of energy, sound and value.¹

Triple-pane casement



Dual-pane casement



- **Performance redefined**

You don't have to compromise on any aspect of performance. Available performance solutions offer an unbeatable combination of energy efficiency, sound control and value.¹

- **ENERGY STAR® certified²**

Pella products offer energy-efficient options that will meet or exceed ENERGY STAR guidelines in all 50 states. Pella Lifestyle Series products with triple-pane glass have been awarded ENERGY STAR Most Efficient Mark in 2022.

- **Enhanced sound control**

Our patented, triple-pane design with Advanced Low-E glass allows for mixed glass thickness for enhanced sound dampening resulting in an average 52% noise reduction versus single-pane windows.³

- **Popular features and options**

Low-maintenance aluminum-clad exteriors. Factory prefinish with a choice of several paints and stains, or choose primed or unfinished. Several grille types and patterns and high-transparency screens are also available.

- **Intentional design for improved durability**

Intentional jamb/sill design helps seal the end grain of the wood and elevates it off the rough opening, reducing the potential for moisture.

- **Durable 3-way corner joint**

Three-way corner joints are made up of mortise-and-tenon, metal fasteners and commercial adhesive for added strength and durability.

- **Low-maintenance exteriors**

Aluminum-clad exteriors with EnduraClad® finish resists fading and chalking. It is applied in an overlapping fashion for exceptional protection.

- **Exclusive wood protection**

Pella's exclusive EnduraGuard® wood protection is applied after the pieces have been cut and milled, but prior to final assembly. It provides advanced protection against the effects of moisture, decay, stains from mold and mildew – as well as termite damage.

- **Best limited lifetime warranty⁴**

Pella Lifestyle Series products are covered by the best limited lifetime warranty in the industry for wood windows and patio doors.⁴

- **Testing beyond requirements**

At Pella, our products are tested beyond requirements to help ensure they have long-lasting performance and reduce call-backs for you.

Available in these window and patio door styles:⁵



Special shape windows also available.

^{1,2,3,4,5} See back cover for disclosures.

Product Specifications

Window & Patio Door Styles	Min. Width	Min. Height	Max. Width	Max. Height	Performance Class & Grade	Performance Values		
						U-Factor	SHGC	STC
Awning Dual-pane vent	21"	17"	59"	59"	LC30	0.25-0.35	0.19-0.51	25-28
Awning Triple-pane vent	21"	17"	59"	59"	LC25-CW50	0.12-0.19	0.24-0.56	31-37
Casement Dual-pane vent	17"	17"	35"	73"	LC30-LC50	0.25-0.35	0.19-0.51	25-31
Casement Triple-pane vent	17"	17"	35"	73"	R20-CW50	0.20-0.25	0.17-0.46	31-37
Fixed Casement Dual-pane	17"	17"	73"	73"	LC30-LC50	0.23-0.50	0.19-0.66	29-32
Fixed Casement Triple-pane	17"	17"	73"	73"	R20-CW50	0.19-0.24	0.17-0.46	33-37
Double-Hung Dual-pane vent	21"	35"	41.5"	77"	LC30-LC50	0.19-0.66	0.20-0.56	27-31
Hinged Patio Door Dual-pane single door	30"	80"	38"	96"	LC50	0.25-0.29	0.18-0.48	31
Hinged Patio Door Triple-pane single door	30"	80"	38"	96"	LC55	0.22-0.26	0.14-0.38	34-36
Hinged Patio Door Dual-pane double door	60"	80"	75"	96"	LC50	0.25-0.29	0.18-0.48	30-32
Hinged Patio Door Triple-pane double door	50"	80"	75"	96"	LC55	0.22-0.26	0.14-0.38	34-36
Sliding Patio Door Dual-pane single-door fixed (O)	31"	80"	49"	96"	CW50	0.24-0.33	0.18-0.51	27
Sliding Patio Door Triple-pane single-door fixed (O)	31"	80"	49"	96"	CW60	0.21-0.27	0.17-0.45	33-36
Sliding Patio Door Dual-pane double-door vent (OX or XO)	60"	80"	96"	96"	R20-LC50	0.24-0.33	0.18-0.51	29-32
Sliding Patio Door Triple-pane double-door vent (OX or XO)	60"	80"	96"	96"	R25-LC60	0.21-0.27	0.17-0.45	33-36

Window sizes available in 1/4" increments
Special sizes available in triple-pane patio doors. For more information regarding performance, visit [pella.com/performance](#). For more information regarding frame and installation types, visit [installpella.com](#).

Window Hardware

Essential Collection

Select from popular designs and finishes to suit every style.



Fold-away Crank

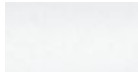


Cam-Action Lock

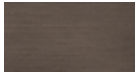
Finishes:



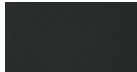
Champagne



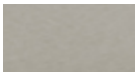
White



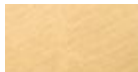
Brown



Matte Black



Satin Nickel



Satin Brass

Patio Door Hardware

Essential Collection

Elevate your style and transform a home with elegant selections.

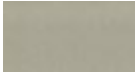


Hinged Patio Door Handle

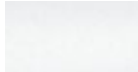


Sliding Patio Door Handle

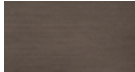
Finishes:



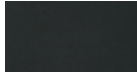
Champagne



White



Brown



Matte Black



Satin Nickel

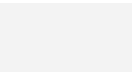


Satin Brass

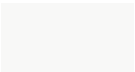
Colors

Prefinished Pine Interior Colors

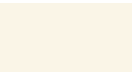
We can prefinish pine in your choice of several paint and stain colors. Unfinished or primed and ready-to-paint are also available.



White



Bright White



Linen White



Golden Oak Stain



Early American Stain



Provincial Stain



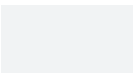
Black Stain

Aluminum-Clad Exterior Colors

Our low-maintenance EnduraClad® exterior finish resists fading and helps protect windows and patio doors for years. Seacoast EnduraClad protective finish for coastal projects with high salt exposure is also available.



Black



White



Brown



Fossil



Iron Ore



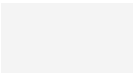
Portobello



Putty



Almond



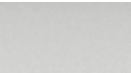
Classic White



Brick Red



Hartford Green



Wolf Gray

Integrated Blinds⁶

Raise blinds up for an unobstructed view or tilt to let in just the right amount of light. Our best integrated and accessible blinds are available manual or motorized with Pella® Insynctive® technology.



White



Poplar White



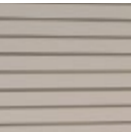
Bisque



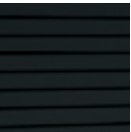
Storm



Golden



Mocha



Black

Integrated Shades⁶

Our best integrated fabric shades feature a white exterior fabric for a uniform look from the street. Integrated and accessible shades are available manual or motorized with Pella Insynctive technology.

Light-Filtering:



White



Silver

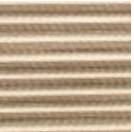


Maize

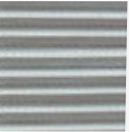
Room-Darkening:



Cotton



Bamboo



Ash

Haven't landed on the final blind or shade color selection? No problem. With our patented triple-pane design, you and your customer can make those decisions later in the schedule. Our triple-pane products come with all of the hardware to add a blind or shade straight from the factory or at a later time in the building or remodeling process.

Added Peace of Mind

Integrated Security Sensors

Integrated wireless security sensors maintain aesthetics, streamline security installation and ensure no warranty loss is caused by post-installation drilling. Sensors can be monitored via the free Pella® Insynctive® App and are compatible with major security panel systems.⁷ For more information, go to [connectpella.com](#).

^{4,7} See back cover for disclosures.

Performance Packages

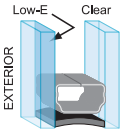
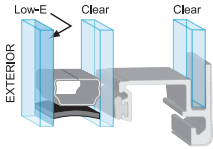
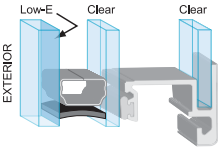
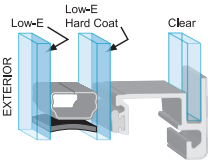
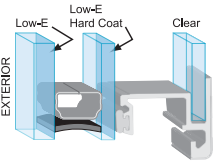
To make things easier, we've created performance packages.

Performance solutions offer an unbeatable combination of energy efficiency, sound control and value.¹ Create room-by-room solutions with the upgraded triple-pane glass design.

All values below are averages compared with single-pane windows.



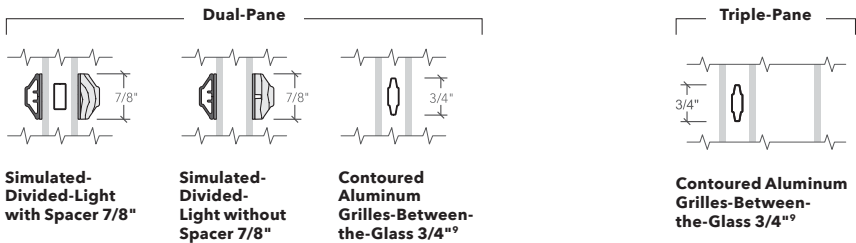
Pella® Lifestyle Series offers products awarded ENERGY STAR® Most Efficient for 2022.²

Base	Performance	Sound Control	Energy Efficiency	Ultimate Performance
				
Advanced Low-E	Advanced Low-E SunDefense Low-E or NaturalSun Low-E	Advanced Low-E Sound-reduction glazing	AdvancedComfort	AdvancedComfort Sound-reduction glazing
Two panes of insulating, energy-efficient glass and our most popular features and options.	A triple-pane glass design for a combination of both improved energy efficiency and sound performance.	Triple-pane glass design featuring mixed glass thicknesses for enhanced sound dampening.	A triple-pane glass design with upgraded AdvancedComfort Low-E glass for enhanced energy efficiency.	A triple-pane glass design featuring mixed glass thicknesses with upgraded AdvancedComfort Low-E glass for enhanced energy efficiency.

Patented triple-pane glass design gives flexibility to add integrated blinds or shades without impacting performance.

Grilles

Choose the look of true divided light, removable roomside grilles or make cleaning easier by selecting grilles-between-the-glass.



The Best Limited Lifetime Warranty in the Industry

We know your reputation matters and you stake your reputation on quality, dependable products. That's why we have the best limited lifetime warranty in the industry for wood windows and patio doors.⁴

¹ Performance solutions require upgrades to triple-pane, AdvancedComfort Low-E and mixed glass thickness. Based on comparing product quotes and published STC/OITC and U-Factor ratings of leading national wood window and patio door brands.

² Some Pella products may not meet ENERGY STAR certification in Canada. For more information, contact your local Pella sales representative or go to nrcan.gc.ca/energy/products/categories/fenestration/13739.

³ Reduction in sound based on OITC ratings of Pella Lifestyle Series windows with respective performance package compared to a single-pane wood or vinyl window with an OITC of 19. Calculated by using the sound transmission loss values in the 80 to 4000 Hz range as measured in accordance with ASTM E-90(09). Actual results may vary.

⁴ Based on comparing written limited warranties of leading national wood window and wood patio door brands. See written limited warranty for details, including exceptions and limitations, at pella.com/warranty.

⁵ Double-hung windows available in dual-pane only.

⁶ Available with triple-pane products only.

⁷ Requires the Insynctive App on a smart device, an Insynctive Bridge and a wireless home router with internet connection.

⁸ Window energy efficiency calculated in a computer simulation using RESFEN 6.0 default parameters for a 2000 sq. foot new construction single-story home when Pella Lifestyle Series windows with the respective performance package are compared to a single-pane wood or vinyl window. The energy efficiency and actual savings will vary by location. The average window energy efficiency is based on a national average of 94 modeled cities across the country and weighting based on population. For more details see pella.com/methodology.

⁹ Appearance of exterior grille color may vary depending on the Low-E insulating glass selection.

Pella® Lifestyle Series Casement

Aluminum EnduraClad® Exterior

Detailed Product Descriptions

Frame

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are clear pine.
- Exterior surfaces are clad with aluminum.
- Components are assembled with screws, staples and concealed corner locks.
- Overall frame depth is 5" (127 mm) for a wall depth of 3-11/16" (94 mm).
- Optional factory-applied jamb extensions available between 3-13/16" (97) and 9-3/16" (233).
- Optional factory-installed fold-out installation fins with flexible fin corners.
- Optional factory-applied EnduraClad® exterior trim.

Sash

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are clear pine.
- Exterior surfaces are clad with aluminum, lap-jointed and sealed.
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is [1-3/4" (45 mm) dual-pane] [2-3/16" (55mm) triple-pane, (2-1/4" (57 mm) including hinged glass panel)].

Weatherstripping

- Dual weatherstripping.
 - Flexible santoprene material compressed between frame and sash for positive seal on all four sides.
 - Secondary thermoplastic vulcanizate (TPV) weatherstrip between edge of sash and frame [Dual-Pane: leaf-type on the vertical sides and bottom side, and Santoprene® bulb-type weatherstrip on the top side] [Triple-Pane: leaf-type on all four sides].

Glazing System

- Quality float glass complying with ASTM C 1036.
- High altitude glazing available.
- Silicone-glazed 11/16" [obscure] dual-seal insulating glass [[annealed] [tempered]] [[Advanced Low-E] [SunDefense™ Low-E] [AdvancedComfort Low-E] [NaturalSun Low-E] with argon].

-or-

- Triple-Pane Glazing System:
 - Exterior silicone-glazed 11/16" [obscure] dual-seal insulating glass, [[annealed] [tempered]] [[Advanced Low-E] [SunDefense™ Low-E] [AdvancedComfort Low-E] [NaturalSun Low-E] with argon].
 - Interior hinged glass panel set in a [veneered fiberglass composite] [aluminum (advanced comfort)] frame finished to match interior (aluminum frames are veneered for stain finishes), fitted to sash with continuous gasket seal, clear [annealed] [tempered] glass.
 - Airspace between insulating glass and hinge glass panel is 1-1/32".

Exterior

- Exterior aluminum surfaces are finished with EnduraClad® protective finish, in a multi-step, baked-on finish.
- Finish color [Standard [Black] [White] [Brown] [Fossil]] [Feature [Iron Ore] Wolf gray] [Classic White] [Almond] [Portobello] [Putty] [Brick Red] [Hartford Green]].

Interior

- [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [White] [Linen White] [Bright White] [stain₁]].

Hardware

- Roto operator assembly
 - Steel worm gear sash operator with hardened gears.
 - Operator base to be zinc die cast with painted finish.
 - Operator linkage, hinge slide, and hinge arms are stainless steel.
 - Exposed fasteners are stainless steel.
 - Hardware will exceed 1,000 hours salt spray exposure per ASTM B 117.
- Innovative Locking System — A single handle locking system which operates positive-acting arms that reach out and pull the sash into a locked position: one operating lock installed on units with lock-side frame dimension [Dual-pane ≤ 29"] [Triple-pane ≤ 41"], two unison operating locks are installed on units with lock-side frame dimension [Dual pane > 29"] [Triple-pane > 41"].
- Standard Integrated fold-away crank and lock handle finish is [baked enamel [Champagne] [White] [Brown] [Matte Black]] [Satin Brass] [Satin Nickel].

Optional Products

Grilles

- Simulated-Divided-Light [with optional spacer] (Dual-pane glazing)
 - 7/8" Grilles permanently bonded to the interior and exterior of glass.
 - Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom – Equally Divided].
 - Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [White] [Linen White] [Bright White] [stain₁]].
 - Exterior color to match the exterior cladding color.
- Simulated-Divided-Light with Grilles-Between-the-Glass (Triple-pane glazing)
 - 3/4" Grilles permanently bonded to the exterior of glass.
 - Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom – Equally Divided].
 - Exterior color to match the exterior cladding color.
 - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
 - Interior color is [White] [Ivory] [Tan₃] [Brickstone₃] [Black] [Putty₃] [Brown] [Harvest] [Cordovan].
– or –
- Grilles-Between-the-Glass₂
 - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
 - Patterns are [Traditional] [9-Lite Prairie] [Top Row] [Cross] [Custom – Equally Divided].
 - Interior color is [White] [Ivory] [Tan₃] [Brickstone₃] [Black] [Putty₃] [Brown] [Fossil] [Harvest] [Cordovan].
 - Exterior color [matched to the exterior cladding color] [White]₄.

Flat Insect Screen

- InView™ Screens
 - Vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in aluminum frame fitted to inside of window, supplied complete with all necessary hardware.
 - Screen frame finish is baked enamel, [Champagne] [White] [Brown] [Black].
– or –
- Rolscreen® Soft-close Retractable Screen
 - InView™ Screen cloth, self-storing, rolling, black vinyl-coated 18/18 mesh fiberglass screen cloth complying with ASTM D 3656 and the performance requirements of SMA 1201 mounted behind overhead cover.
 - Cover finish is [factory prefinished paint₁] [pine veneer wrapped over extruded aluminum with factory prefinished stain₁].
 - Guides are aluminum extrusion with [pine veneer wrapped over extruded aluminum with factory prefinished stain₁] [factory prefinished paint₁].

Integrated Between-the-Glass Window Fashions (Triple-Pane glazing only)₁

- Slimshade® Blinds
 - 15 mm aluminum slat, bottom-up blinds with polyester cord ladder
 - Installed in sash between double glazing and interior hinged glass panel.
 - Operated with cordless operator or motorized with Insynctive® technology.
– or –
- Cellular Fabric Shades
 - 11/16" width, bottom-up shades with hidden polyester cord, spun bond Polyethylene Terephthalate (PET) cellular fabric.
 - Installed in sash between double glazing and interior hinged glass panel.
 - Operated with cordless operator or motorized with Insynctive® technology.

Hardware

- Optional factory applied limited opening hardware available for vent units in stainless steel; nominal 3" opening.
- Optional window opening control device available for field installation. Device allows window to open less than 4" with normal operation, with a release mechanism that allows the sash to open completely. Complies with ASTM F2090-17.

Sensors

- Optional factory installed integrated security sensors available in vent units.

- (1) Contact your local Pella sales representative for current designs and color options.
- (2) Available on units glazed with Low-E insulated glass with argon, and obscure insulated glass.
- (3) Tan, brickstone and putty Interior GBG colors are available only with matching interior and exterior colors.
- (4) Appearance of exterior grille color will vary depending on Low-E coating on glass.

Pella® Lifestyle Series Sliding Patio Door

Aluminum EnduraClad® Exterior

Detailed Product Descriptions

Frame

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are clear pine.
- Exterior surfaces are clad with aluminum at the head and jams.
- Components are assembled with screws, staples and concealed corner locks.
- Solid extruded aluminum sill. Finish is Black with [oak] [black composite capped (Model 4 only)] wood insert at threshold.
- Factory-installed fold-out installation fins with flexible fin corners.
- Fin position accommodates standard 4-9/16" (116 mm) wall depths.
- Frame depth is 5-7/8" (149 mm) for a wall depth of 4-9/16" (116 mm)
- Optional factory-applied jamb extensions available between 4-9/16" (116 mm) and 7-3/16" (183 mm) wall depths.
- Optional factory-applied EnduraClad® exterior trim.

Door Panels

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are veneered with clear pine with no visible fastener holes.
- Exterior surfaces are clad with aluminum.
- Panel rails are three-ply construction, randomly finger-jointed blocks laminated with water-resistant glue and pine-veneered on both sides.
- Corners are urethane-sealed and secured with metal fasteners and structural adhesive.
- Panel thickness is [Dual-pane, Model 3: 1-7/8" (48 mm)] [Dual-pane, Model 4: 2-1/16" (52 mm)] [Triple-Pane: 2-1/16" (52 mm)].
- Vent panels have [Dual-pane: two adjustable permanently-sealed electroplated steel ball-bearing rollers with organic coating] [Triple-pane: two adjustable ABEC 5 sealed electroplated steel ball-bearing rollers with organic coating], set on stainless steel track, standard.
– or –
- Two adjustable corrosion-resistant stainless steel ball-bearing rollers; out-of-unit option.

Weatherstripping

- Dual-pane glazing:
 - Model 3: Dual extruded polypropylene TPE bulb at head, jamb, sill and vent panel interlocker.
 - Model 4: Tri-durometer extruded polypropylene TPE bulb at head, jamb, sill and vent panel interlocker. Bristle rainscreen along bottom of panel
- Triple-Pane glazing:
 - Tri-durometer extruded polymer with bulb at head, jamb, sill and vent panel interlocker. Bristle rainscreen along bottom of panel.

Glazing System

- Quality fully-tempered float glass complying with ASTM C 1048.
- High altitude insulating glass is available.
- Dual-Pane Glazing System:

- Silicone-glazed 3/4" [obscure] dual-seal insulating glass [[Advanced Low-E] [SunDefense™ Low-E] [AdvancedComfort Low-E] [NaturalSun Low-E] with argon].

– or –

- Triple-Pane Glazing System:
 - Exterior dual-seal insulating glass, Polyurethane Reactive Hotmelt (PUR)-glazed [[Advanced Low-E] [SunDefense™ Low-E] [AdvancedComfort Low-E] [NaturalSun Low-E] with argon]] [Obscure].
 - Interior hinged clear tempered glass panel set in a [veneered (for stain finishes)] aluminum frame, fitted to door panel with continuous gasket seal.
 - Airspace between insulating glass and hinged glass panel is 1-1/32".

Exterior

- Aluminum clad exteriors shall be finished with EnduraClad® protective finish, in a multi-step, baked-on finish.
- Finish color color [Standard [Black] [White] [Brown] [Fossil]] [Feature [Iron Ore] Wolf gray] [Classic White] [Almond] [Portobello] [Putty] [Brick Red] [Hartford Green]].

Interior

- [[Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [White] [Linen White] [Bright White] [stain₁]].

Hardware

- Interior handle and thumb lock finish is [baked enamel [Champagne] [White] [Brown] [Matte Black]] [Satin Brass] [Satin Nickel].
- Exterior handle finish is baked enamel, color to match door cladding.
- Optional keylock with Schlage® configured C-K keyway pinlock cylinder
- Multiple point lock hardware is electroplated steel with stainless steel strikes.
- The foot bolt has a Black finish.
- Screen handle finish is [Champagne] [White] [Brown] [Black].

Optional Products

Grilles

- Simulated-Divided-Light [with optional spacer] (Dual-pane glazing)
 - 7/8" Grilles permanently bonded to the interior and exterior of glass.
 - Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom – Equally Divided].
 - Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [White] [Linen White] [Bright White] [stain₁]].
 - Exterior color to match the exterior cladding color.
 - Available only on units glazed with Low-E insulated glass with argon.
- Simulated-Divided-Light with Grilles-Between-the-Glass (Triple-pane glazing)
 - 3/4" Grilles permanently bonded to the exterior of glass.
 - Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom – Equally Divided].
 - Exterior color to match the exterior cladding color.
 - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
 - Interior color is [White] [Ivory] [Tan₂] [Brickstone₂] [Black] [Putty₂] [Brown] [Harvest] [Cordovan].
 - Available only on units glazed with Low-E insulated glass with argon.

– or –

- Grilles-Between-the-Glass₃
 - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
 - Patterns are [Traditional] [9-Lite Prairie] [Top Row] [Custom – Equally Divided].
 - Interior color is [White] [Ivory] [Tan₂] [Brickstone₂] [Black] [Putty₂] [Brown] [Harvest] [Cordovan].

- Exterior color [matched to the exterior cladding color] [Black] [White].

Screens

• InView™ Screens

- Vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in aluminum frame fitted to inside of door, supplied complete with all necessary hardware.
- Screen assembly is top-hung on two adjustable nylon rollers installed on room side of door panels.
- Screen frame finish is [White interior/exterior] [Wood interior [factory primed] [factory stain matched₁] [unfinished ready for site finishing] color matched exterior].

– or –

• Rolscreen® Retractable Screen

- Self-storing, rolling, black vinyl-coated 18/16 mesh fiberglass screen cloth complying with ASTM D 3656 and SMA 1201 mounted behind an extruded aluminum cover.
- Cover finish is [factory prefinished paint] [pine veneer wrapped over extruded aluminum with factory prefinished stain₁] to match interior finish.
- Available on two- and three-panel sliding patio doors.

Integrated Between-the-Glass Window Fashions (Triple-Pane glazing only)₁

• Slimshade® Blinds

- 15 mm aluminum slat, bottom-up blinds with polyester cord ladder
- Installed in sash between double glazing and interior hinged glass panel.
- Operated with cordless operator or motorized with Insynctive® technology.

– or –

• Cellular Fabric Shades

- 11/16" width, bottom-up shades with hidden polyester cord, spun bond Polyethylene Terephthalate (PET) cellular fabric.
- Installed in sash between double glazing and interior hinged glass panel.
- Operated with cordless operator or motorized with Insynctive® technology.

Sensors

- Optional factory installed integrated security sensors available in vent units.

(1) Contact your local Pella sales representative for current designs and color options.

(2) Tan, Brickstone and Putty Interior GBG colors are available in single-tone to match exterior cladding. Other interior colors are also available with Tan or Brown exterior.

(3) Appearance of exterior grille color will vary depending on Low-E coating on glass.