HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Karen Burditt
Chair

Date: 5/16/2025

MEMORANDUM

TO: Rabbiah Sabbakhan
Department of Permitting Services
FROM: Laura DiPasquale
Historic Preservation Section
Maryland-National Capital Park & Planning Commission
SUBJECT: Historic Area Work Permit #1109665 – Partial demolition and construction of new rear addition, fenestration alterations, roof replacement, and site wall construction

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The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached application for a Historic Area Work Permit (HAWP). This application was **approved with three (3) conditions** at the May 14, 2025 HPC meeting:

1. The new windows must have smooth and painted trim and sills.
2. The existing replacement windows on the main block are not eligible to be replaced in-kind, and must be reviewed under a new HAWP when they are replaced in the future. New replacement windows must be restored to their original two-over-two appearance and be constructed from wood or an appropriate clad substitute that more closely approximate the appearance and materials of the previous windows.
3. The vinyl siding on the main block is not eligible to be replaced in-kind and must be reviewed under a new HAWP when it is replaced in the future, unless the underlying original wood siding is to be restored or replaced in-kind.

The HPC staff has reviewed and stamped the attached submission materials.

THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERENCE TO THE ABOVE APPROVED HAWP CONDITIONS AND MAY REQUIRE APPROVAL BY DPS OR ANOTHER LOCAL OFFICE BEFORE WORK CAN BEGIN.

Applicant: Katharine Blackman and Peter Martel; Richard Kirby, Architect.
Address: 19735 White Ground Road, Boyds

This HAWP approval is subject to the general condition that the applicant will obtain all other applicable Montgomery County or local government agency permits. After the issuance of these permits, the applicant must contact this Historic Preservation Office if any changes to the approved plan are made. Once work is complete, the applicant will contact Laura DiPasquale at 301-495-2167 or laura.dipasquale@montgomeryplanning.org to schedule a follow-up site visit.

Description of Property: Please describe the building and surrounding environment. Include information on significant structures, landscape features, or other significant features of the property:

This rural Circa 1880's two-story wood-frame Gothic Revival residence features a reverse gable roof facing White Ground Road with main gable ridge line parallel to the road and bookended by brick chimneys. Subsequently constructed rear additions have both one and two-story forms of non-significant character. An open porch spans the front elevation with turned posts and decorative post / beam brackets. A raised planting area adjacent to the front porch steps is supported by pressure treated wood. Exterior finishes include deteriorating ribbed metal roofing, double-five vinyl siding, painted wood trim, and 1/1 double hung aluminum replacement windows.

The 1.1 acre site of mostly lawn is surrounded on all sides by land owned by the Prysbyterian Church with lawn to the east then woods to the south and west. The church building itself is over 500' away. The ground slopes toward the residence with attempts by previous occupants to address drainage concerns with a pressure treated wood retaining wall that encroaches on the church property. Also employed was a partially raised foundation wall to protect the existing floor framing as the finish floor at the rear of the residence is close to the existing grade with minimal slope for drainage.

Description of Work Proposed: Please give an overview of the work to be undertaken:

The original main 1880's portion is to remain "As-Is" except for the in kind replacement of the ribbed metal roofing. The existing rear addition is to be partially removed and/or enveloped within the proposed two-story addition with expansion limits at 3.5' to the south and 6.2' to the west. There are no trees to be impacted by this scope. The new addition top plate and truss heel height is to be raised so that the overhangs may match the drip line of the original house, as well as its soffit / frieze height and the space between the frieze and top of the window trim. The new addition is to also receive in kind metal roofing, James Hardie fiber cement siding, and Andersen Series 200 1/1 double hung windows. Two (2) 6 x 6 pressure treated retaining walls (approx 18" to 24" high), raised foundation protection, and adequate postive drainage are proposed for the rear of the residence with the existing retaining wall encroachment on the adjacent property to be eliminated.

REVIEWED
By Laura DiPasquale at 4:28 pm, May 16, 2025

APPROVED
Montgomery County
Historic Preservation Commission

Karen Burdette

Work Item 1: Existing & New Roof	
Description of Current Condition: Aged, deteriorating ribbed metal with multiple coats of paint.	Proposed Work: Remove and replace with Central States Panel Loc Plus prefinished ribbed metal roofing on main house and new addition.

Work Item 2: New Addition	
Description of Current Condition: One and Two-Story Rear Addition over crawl space and slab-on-grade. Conditions not adequate to protect against drainage area above the residence. Non-compliant well location and oil tank eyesore.	Proposed Work: Partially remove and envelop rear addition with new footprint for a two-story addition. The existing rear crawl space is to be maintained. Raise rear foundation wall for grade protection, add two wood retaining walls, and provide positive drainage behind the house. Relocate well and eliminate oil tank with new hvac system.

Work Item 3: Concrete Stoop	
Description of Current Condition: Side entry off asphalt driveway.	Proposed Work: Relocate side entry and pour new concrete stoop.

REVIEWED
By Laura DiPasquale at 4:29 pm, May 16, 2025

APPROVED

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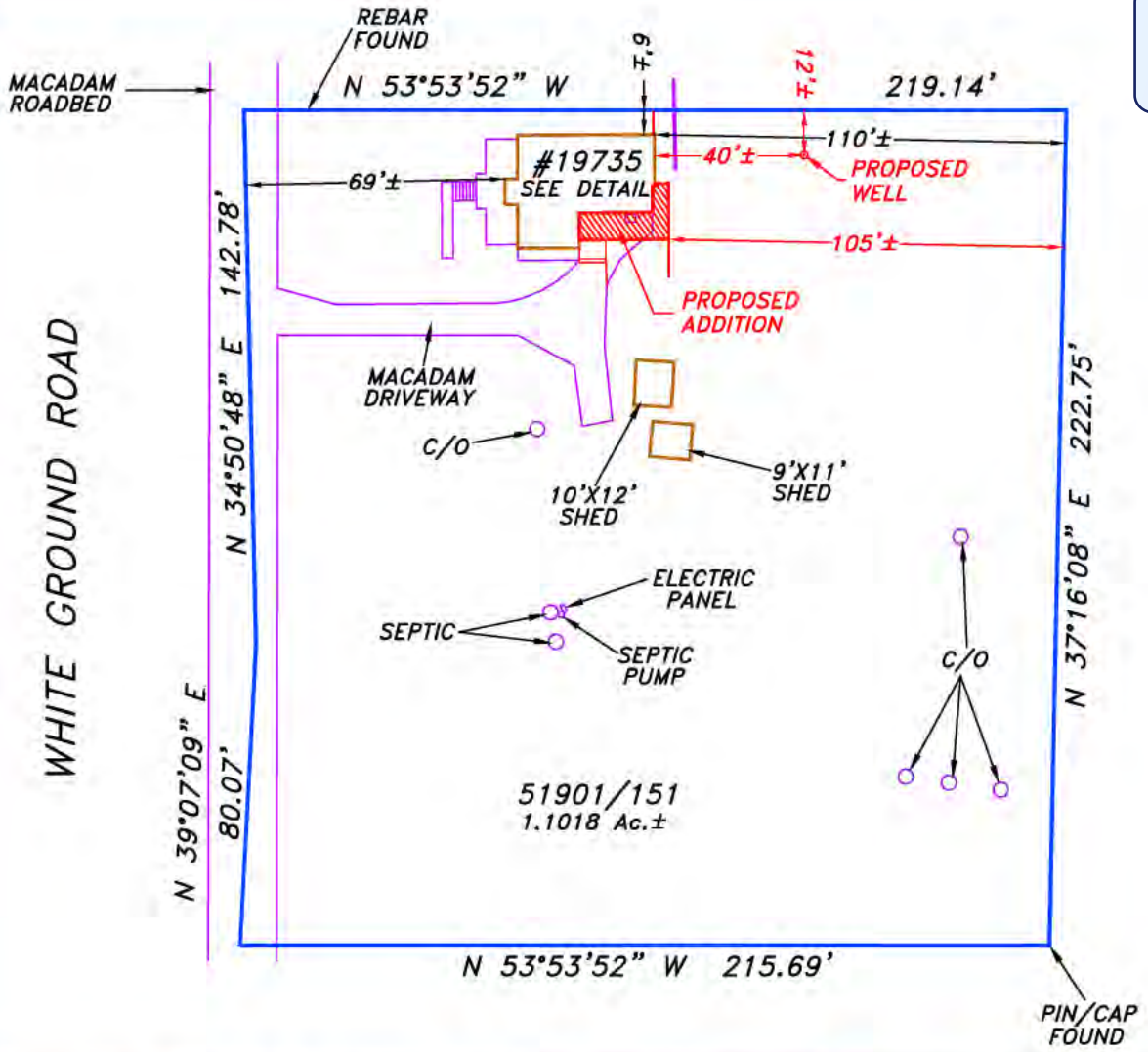

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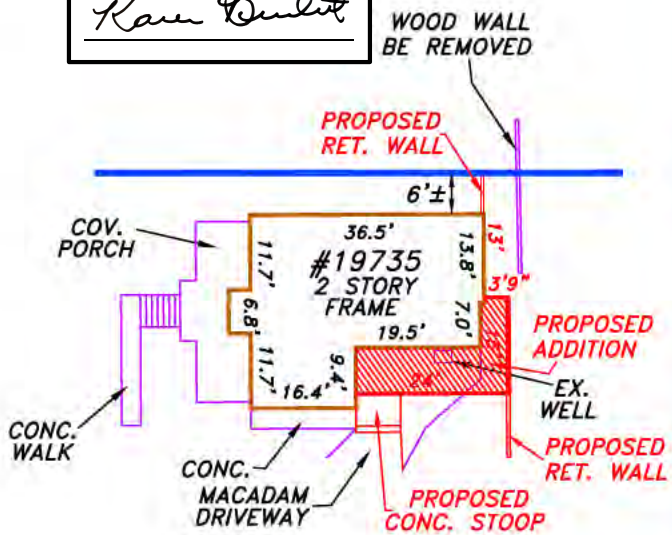
Montgomery County
Historic Preservation Commission



HOUSE DETAIL
SCALE 1"=30'

REVISED 3/19/2025 AS PER CLIENTS COMMENTS.
REVISED 3/18/2025 ONLY SO FAR AS TO ADD PROPOSED IMPROVEMENTS.

The purpose of this drawing is to locate, describe, and represent the positions of buildings and substantial improvements affecting the property shown hereon, being known as:
19735 White Ground Road
as described in a deed
recorded among the Land Records of Montgomery County, Maryland in Liber 51901 , folio 151

This is to certify that I either personally prepared or was in responsible charge over the preparation of this drawing and the surveying work reflected in it, all set forth in Regulation .12 of Chapter 09.13.06 of the Code of Maryland Annotated Regulations.

This is page one of a two page document. The advice found on the affixed page is an integral part of this drawing, and is not valid without all pages.

STATE OF MARYLAND
JAMES C. HUDGINS
No. 96
REGISTERED
PROPERTY LINE SURVEYOR

James Carl Hudgins
Property Line Surveyor #96
Expiration Date: 3/11/2026

SITE PLAN
19735 WHITE GROUND ROAD
6th ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

NTT Associates, Inc.
16205 Old Frederick Rd.
Mt. Airy, Maryland 21771
Phone: (410) 442-2031
Fax: (410) 442-1315
www.nttsurveyors.com

Scale:	1"= 50'
Date:	2/26/2025
Field By:	RMS/KSW
Drawn By:	RMS
File No.:	MISC 16952 A
Page No.:	1 of 2

APPROVED

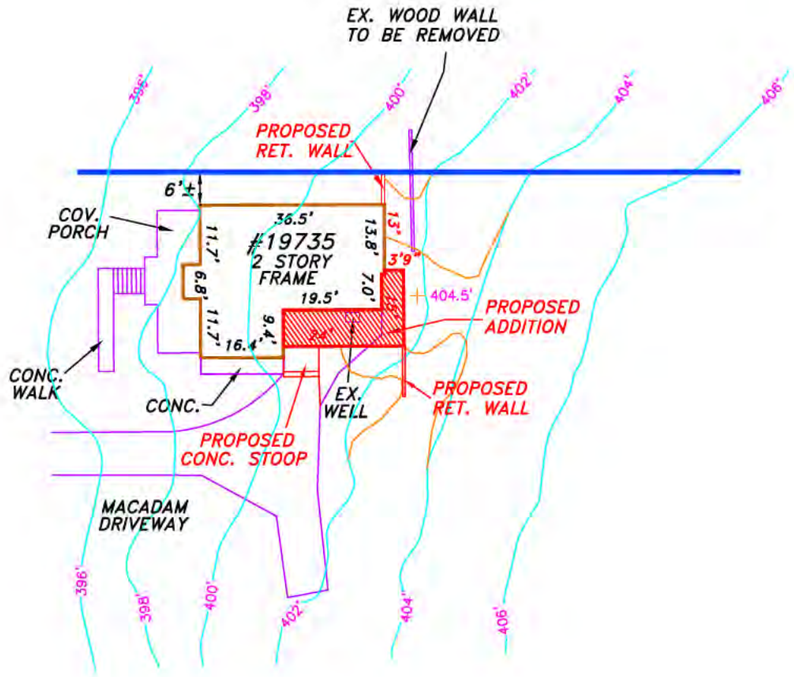
Montgomery County

Historic Preservation Commission

Karen Burdette

REVIEWED

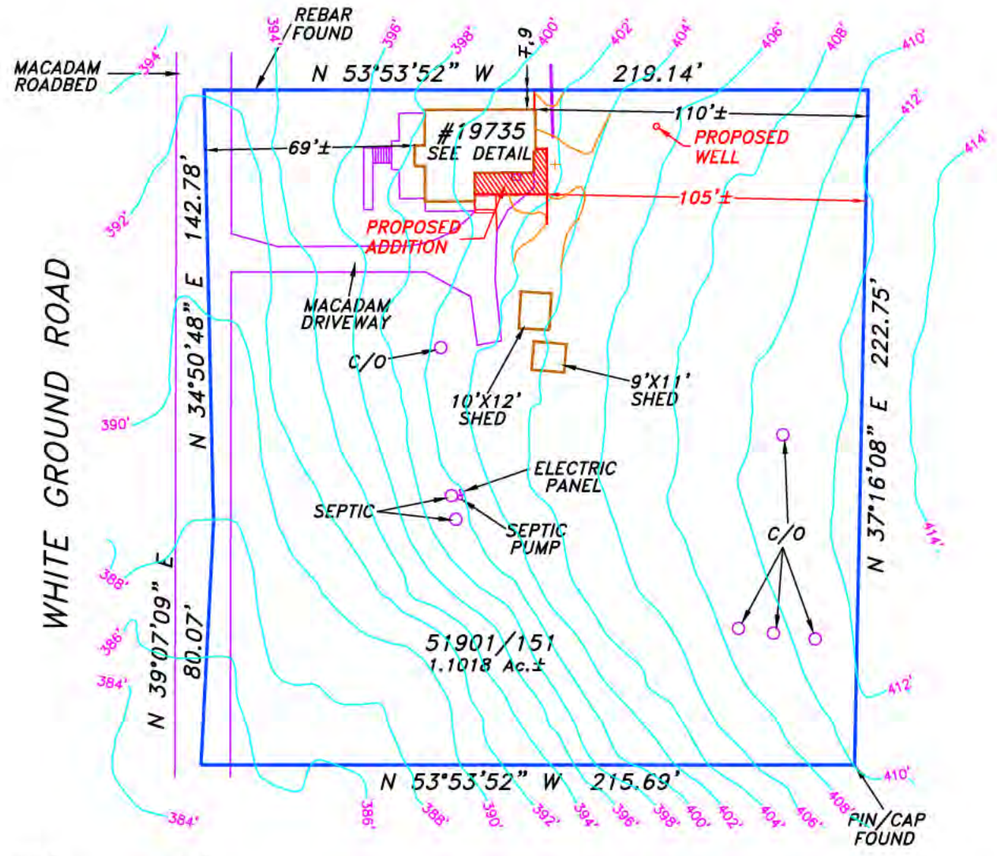
By Laura DiPasquale at 4:29 pm, May 16, 2025



HOUSE DETAIL

SCALE 1"=30'

0' 30' 60' 90'



0' 50' 100' 150'

REVISED 3/19/2025 AS PER CLIENTS COMMENTS.

JOB SPECIFIC NOTES:

1) The description in deed 51901/151 failed to mathematically close by 5'±. The property outline and area shown hereon were derived from a Boundary Survey performed by Cloverlea Land Surveys Inc., dated February 23, 2016, provided by client.
2) The Contours and Elevations shown hereon were derived from MNCPPC GIS data and not based on a field run Topographical Survey.
3) The accuracy of the distances shown from any structure to any apparent property line is 2'±.
4) This drawing does not represent a Boundary Survey. Any property markers labeled hereon are not guaranteed by NTT Associates, Inc.
5) The Subject Property is shown in Zone X on the FIRM Map of Montgomery County, Maryland on Community Panel Number 24031C0165 D, effective 9/29/2006.

The purpose of this drawing is to locate, describe, and represent the existing and proposed contours in relation to the buildings affecting the property shown hereon, being known as:
19735 White Ground Road
as described in a deed recorded among the Land Records of Montgomery County, Maryland in Liber 51901, folio 151.

See Job Specific Note Number 1

This is to certify that I either personally prepared or was in responsible charge over the preparation of this drawing and the surveying work reflected in it, all set forth in Regulation .12 of Chapter 09.13.06 of the Code of Maryland Annotated Regulations.

STATE OF MARYLAND
JAMES C. HUDGINS
No. 96
REGISTERED
PROPERTY LINE SURVEYOR

James Carl Hudgins
Property Line Surveyor #96
Expiration Date: 3/11/2026

GRADING PLAN

19735 WHITE GROUND ROAD
6th ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

NTT Associates, Inc.
16205 Old Frederick Rd.
Mt. Airy, Maryland 21771
Phone: (410) 442-2031
Fax: (410) 442-1315
www.nttsurveyors.com

Scale:	1"= 50'
Date:	2/26/2025
Field By:	RMS/KSW
Drawn By:	RMS
File No.:	MISC 16952 B
Page No.:	1 of 1

GENERAL NOTES

1) Contractor shall verify all dimensions and conditions prior to start and notify of discrepancies.
2) All concrete to be 150 pcf and 3500 psi air entrained.
3) All CMU shall be load bearing units conforming to ASTM C90-70 for hollow units w/truss-type bed reinforcing @ 16" vertical spacing. Install #4 rebar in grout filled cells @ 32" oc.
4) Footings shall be 24" x 8" w/(3) #4 Rebar continuous (UNO).
5) Provide foundation waterproofing per IRC 2018 Section R-406.
6) Drainage controls per IRC 208 Sections R-401.3; R-405 and M.C. Ex Ord
7) Basement foundation walls per IECC 2018 Section R-402.2.9.
8) Provide passive radon gas controls for the new addition per IRC Appendix F.
9) Rafters, joists, and studs shall be #2 HF / SPF with min Fb 1000 & ME 1500.
10) Provide double jacks under headers 4'- 0" to 5'-11" and triple jacks for 6' or longer.
11) Exit and stair illumination per IRC 2018 Section R-311.7.9.
12) Graspable handrails per IRC 2018 Section 311.7.8.
13) Guardrails per IRC 2018 Section R-312.1.
14) Attic roof ventilation per IRC 2018 Section R-806.
15) Window fall protection per IRC 2018 Section R-312.2.
16) Tempered safety glazing per IRC 201 Section R-308.
17) New addition windows shall be Andersen Series 200 Double Hung.
18) New main stair shall conform with IRC 2018 Section R-311.7.5. Stair manufacturer shall field verify dimensions prior to fabrication.
19) Combo carbon monoxide and smoke alarms per IRC 2018 Section R-314.
20) Install fire blocking and draft stopping per IRC 2018 R-302.11
21) All new interior walls and ceiling repairs are to be covered with ½" gypsum board, screwed, glued, and finished per manufacturer's recommendations. Durock or equal shall be used in tub and shower areas.
22) Existing heart pine flooring to be preserved. Install 5" random length #2 red oak t & g flooring in the new bedroom, kitchen, and den areas.

BLACKMAN – MARTEL RESIDENCE
19735 White Ground Road, Boyds
Montgomery County, Maryland

PROJECT DESCRIPTION

The project scope for this 1880's residence in the R-200 Zone includes partial demolition as follows: remove rear roof structure / chimney, second floor walls & second floor joists, first floor kitchen cabinets, and the existing one story rear entry, laundry, bath, and the floor structure below these spaces. A new two-story rear addition is proposed with no trees to be impacted by the work. The replacement of the existing stairs with a code-compliant stairs is proposed along with new mechanical, electrical, and plumbing systems. The roof of the existing main house is to be replaced in kind with ribbed metal, and the new addition shall receive this same material. The new addition is to also receive James Hardie Fiber Cement siding and Andersen Series 200 double hung windows. The existing well is to be abandoned and a new well is to be drilled. The oil tank is to be eliminated with the new hvac system. This project is subject to Historic Area Work Permit approval.

CODE / DESIGN CRITERIA

Work shall conform to the 2018 ICC International Residential Code; 2018 International Energy Conservation Code; 2018 International Mechanical Code; NFPA 70 National Electric Code; and all applicable local amendments:

Roof Load – 30 PSF Live, 10 PSF Dead
Ground Snow Load – 35 PSF
Attic Load – 20 PSF Live, 10 PSF Dead
Second Floor Live Load – 30 PSF Live, 15 PSF Dead
First Floor Live Load – 40 PSF Live, 15 PSF Dead
Seismic Design Category B
Wind Speed – 115 MPH
Assumed Soil Bearing – 1500 psf
Frost Protection – 30 Inches

FLOOR AREA TABULATION

Ex. Basement	175
Ex. Crawl Space	498
Ex. First Floor	809
Ex. Second Floor	773
Ex. Attic	495
Total	2,750 SF
Proposed Crawl Space	341
Proposed First Floor	205
Proposed Second Floor	341
TOTAL	887 SF
Existing	2,750
Proposed	987
Total	3,737 SF
Existing Habitable Space	1128
25% Habitable Space Factor	282
Maximum Habitable Space	1410
Habitable Space Provided	1410 SF

REVIEWED
By Laura DiPasquale at 4:29 pm, May 16, 2025

APPROVED
Montgomery County
Historic Preservation Commission

DRAWING INDEX

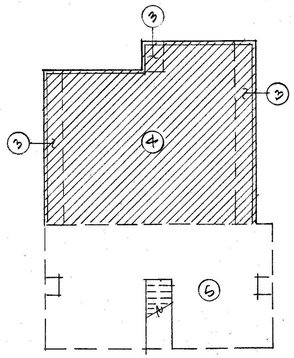
Housing Art
28716 Greenbriery Drive
Gaithersburg, MD 20882
301-370-0660

REAR ADDITION & RENOVATIONS
Blackman – Martel Residence
19735 White Ground Road, Boyds, MD 20841

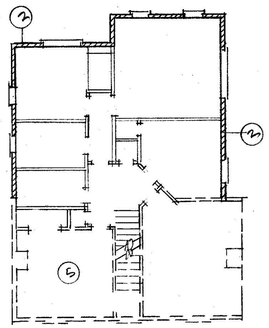
COVER SHEET & NOTES

April 14, 2025

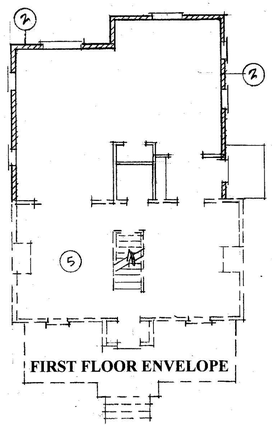
001



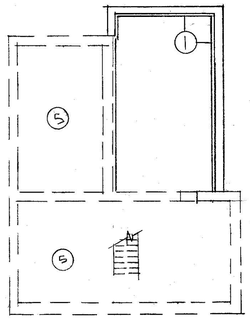
ATTIC ENVELOPE



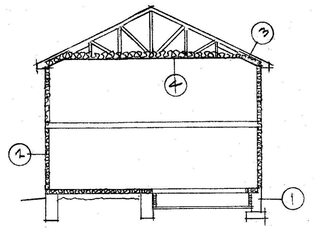
SECOND FLOOR ENVELOPE



FIRST FLOOR ENVELOPE



CRAWL SPACE ENVELOPE



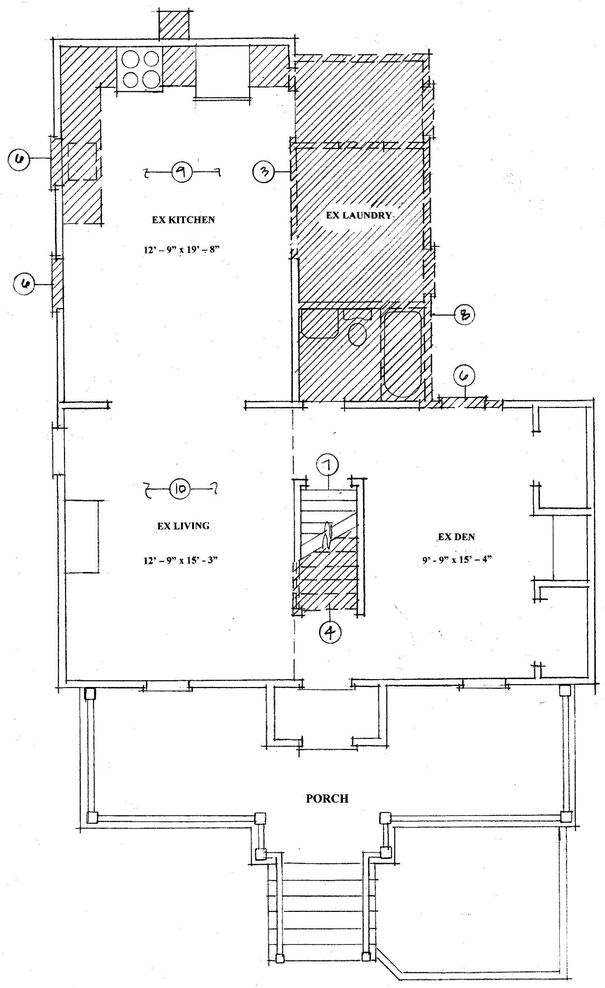
THERMAL SECTION

THERMAL ENVELOPE NOTES

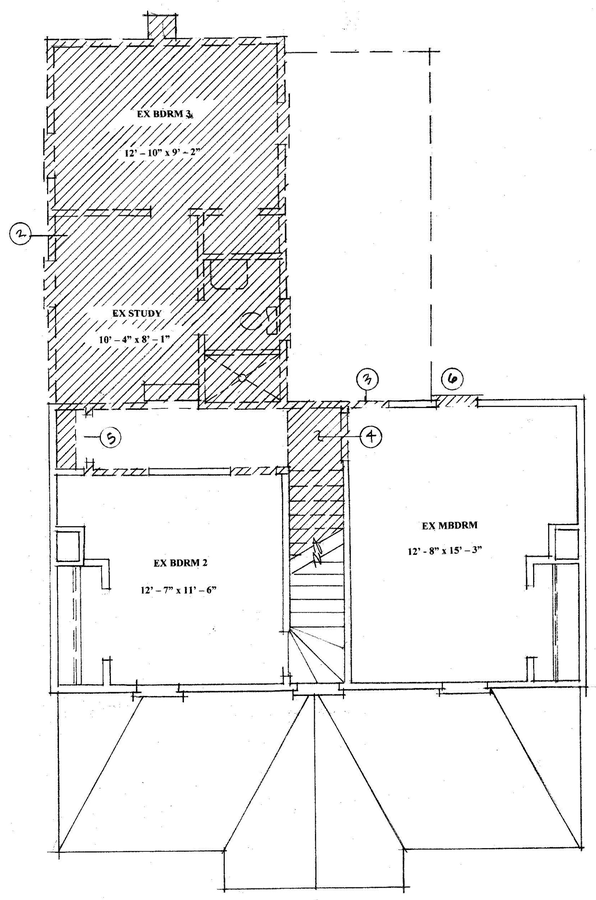
1) R-11 FSK CONTINUOUS INSULATION / NEW CONDITIONED CRAWL SPACE
2) R-21 KRAFT FACE GLASS FIBER BATTS
3) R-38 KRAFT FACE GLASS FIBER BATTS / 1" AIR BAFFLE & VENTILATED EAVE
4) R-49 KRAFT FACE GLASS FIBER BATTS
5) EXISTING INSULATION TO REMAIN

REVIEWED
By Laura DiPasquale at 4:29 pm, May 16, 2025

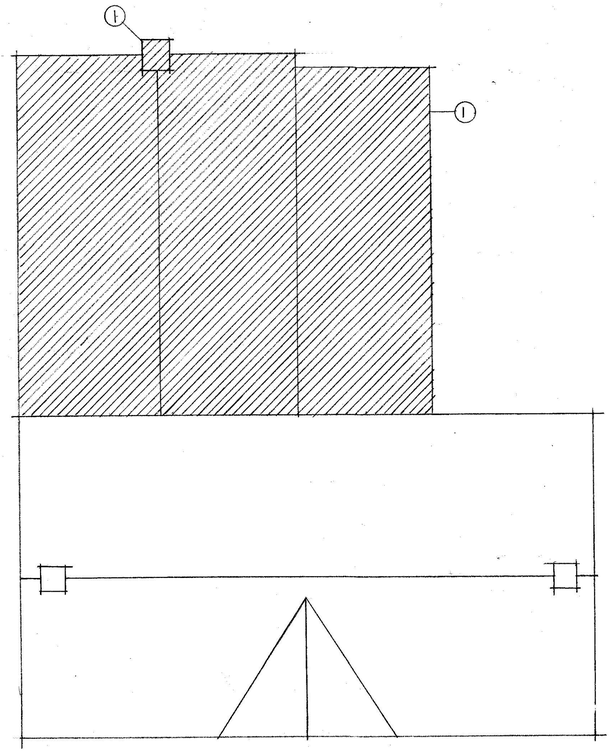
APPROVED
Montgomery County
Historic Preservation Commission



FIRST FLOOR DEMOLITON



SECOND FLOOR DEMOLTION



ROOF DEMOLTION

DEMOLITION NOTES

1) REMOVE EXISTING ROOF STRUCTURE & CHIMNEY
2) REMOVE WALLS & FLOOR JOISTS
3) PARTIALLY REMOVE EXISTING BEARING WALL
4) REMOVE EXISTING STAIRS & LANDING
5) REMOVE EXISTING CLOSET
6) REMOVE EXISTING WINDOW
7) EXISTING BASEMENT STAIRS TO REMAIN
8) REMOVE EXISTING TILE, BATH, & FLOOR STRUCTURE
9) REMOVE TILE & SUBFLOOR / INSPECT CRAWL SPACE
10) REMOVE DROPPED CEILING & RELOCATE WIRES

Housing Art
28716 Greenberry Drive
Gaithersburg, MD 20882
301-370-0660

REAR ADDITION & RENOVATIONS
Blackman – Martel Residence
19735 White Ground Road, Boyds, MD 20841

DEMO & THERMAL PLANS

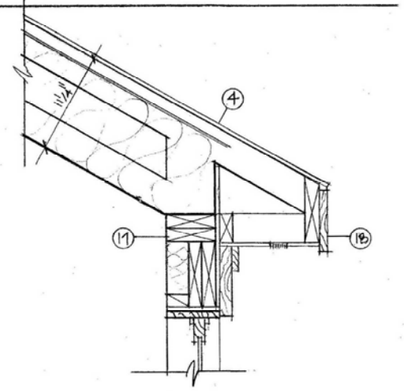
April 14, 2025

Scale: ¼" = 1'-0"

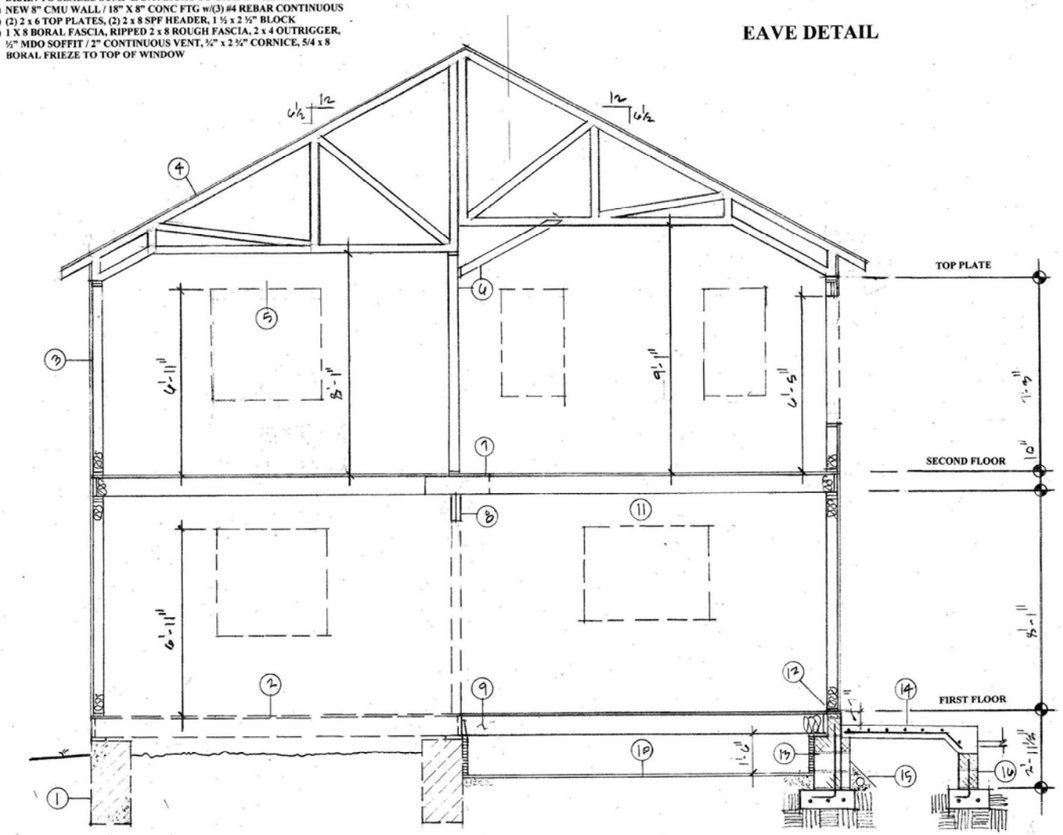
A001

SECTION B-B & EAVE DETAIL NOTES

1) EX STONE FOUNDATION TO REMAIN
2) EX 2 x 10's @ 16" oc, INSULATION, & CRAWL SPACE / (REMOVE SUBFLOOR TO INSPECT & ACCOMMODATE NEW HVAC RUNS)
3) FIBER CEMENT SIDING, HOUSE WRAP, 7/16" OSB SHEATHING, 2 x 6 @ 16" oc STUDS, R-21 KF INSULATION, ½" GYPSUM BOARD
4) CENTRAL STATES PANEL LOC PLUS, VENTED RIDGE CAP SYSTEM, PSU 30 HIGH TEMP ICE GUARD, ½" OSB w/CLIPS, ENGINEERED TRUSSES @ 24" oc, R38 INSULATION w/EAVE BAFFLE, R49 INSULATION (FLAT CEILING AREAS) AND ½" GYPSUM BOARD
5) (2) 2 x 8 #2 SPF SECOND FLOOR WINDOW HEADERS (TYP)
6) 2 x 4 SPF @ 16" OC INTERIOR NON-BEARING WALL & NON-STRUCTURAL SLOPED OUTRIGGER TO MATCH TRUSS BOTTOM CHORD BEYOND
7) ¾" ADVANTECH SUBFLOOR & 2 x 10 #2 HF JOISTS @ 16 oc
8) (2) 1 ¾" x 11 7/8" 2.0E GP LAM LVL w/(3) 2x4 BEARING / (2) SIMPSON LCE4 POST CAPS / BLOCK CONTINUOUS TO EXISTING FOUNDATION
9) ¾" ADVANTECH SUBFLOOR & 2 x 10 #2 HF JOISTS @ 16 oc w/SIMPSON LUS210 JOIST HANGERS (VERIFY CONDITION OF EXISTING BAND JOIST)
10) 2" CONC SLAB, 6 MIL POLY, 4" WASHED GRAVEL
11) (2) 2 x 10 #2 HF FIRST FLOOR WINDOW HEADERS (TYP)
12) INSTALL ½" x 12" J-BOLTS MAX 6' oc / ONE FOOT OFF CORNERS w/PT 2 x 6 SILL PLATE / FOAM SEALER UNDER WALL PLATES
13) NEW 12" CMU WALL ON 24" x 8" CONC FTG w/(3) #4 REBAR CONTINUOUS & FOUR INCH CMU STOOP SUPPORT (SEE GENERAL NOTES FOR TYPICAL CMU WALL REINFORCEMENT)
14) WASHED GRAVEL BACKFILL UNDER NEW 6" CONCRETE STOOP w/#4 REBAR 12" oc EACH WAY / SLOPE 2% TO DRAIN
15) 4" DIA EXT DRAINTILE, WASHED GRAVEL BED, FILTER CLOTH / DRAIN TO SEALED SUMP & DAYLIGHT TO GRADE WHERE POSSIBLE
16) NEW 8" CMU WALL / 18" X 8" CONC FTG w/(3) #4 REBAR CONTINUOUS
17) (2) 2 x 6 TOP PLATES, (2) 2 x 8 SPF HEADER, 1 ½ x 2 ½" BLOCK
18) 1 X 8 BORAL FASCIA, RIPPED 2 x 8 ROUGH FASCIA, 2 x 4 OUTRIGGER, ½" MDO SOFFIT / 2" CONTINUOUS VENT, ½" x 2 ½" CORNICE, 5/4 x 8 BORAL FRIEZE TO TOP OF WINDOW



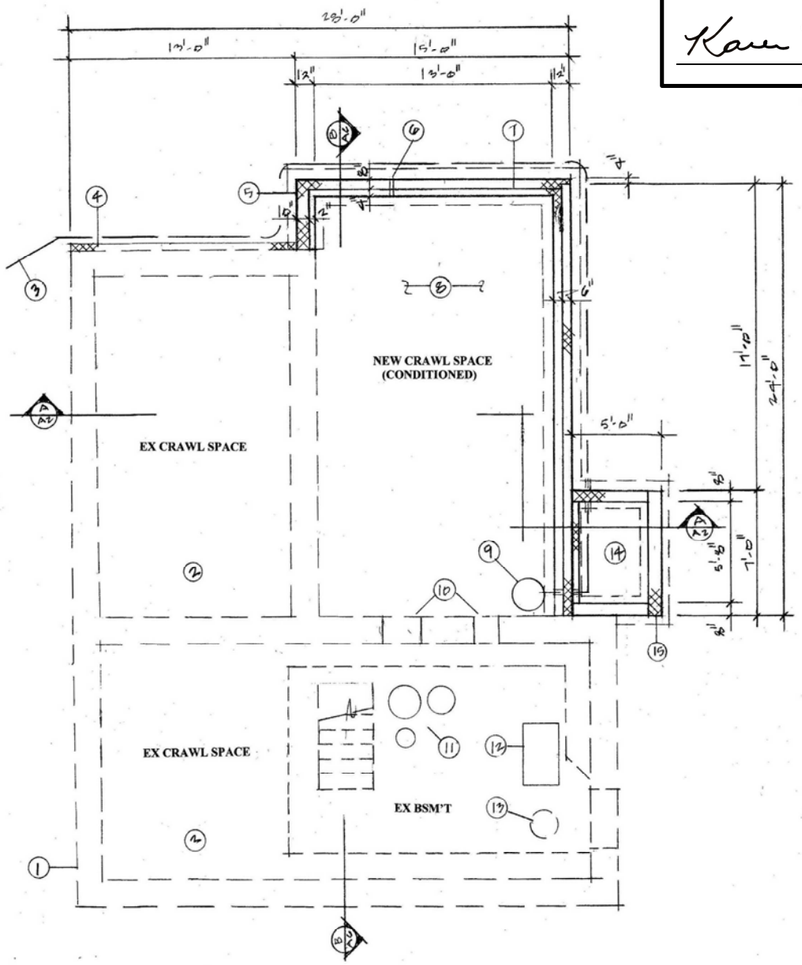
EAVE DETAIL



SECTION A – A

REVIEWED
By Laura DiPasquale at 4:30 pm, May 16, 2025

APPROVED
Montgomery County
Historic Preservation Commission



FOUNDATION PLAN

FOUNDATION NOTES

1) EX STONE FOUNDATION TO REMAIN
2) EX INSULATED CRAWL SPACE TO REMAIN
3) 4" DIA EXT DRAINTILE, WASHED GRAVEL BED, FILTER CLOTH AND DRAIN TO SEALED SUMP & TO DAYLIGHT
4) EXTEND EXISTING 4" CMU TWO COURSES, ADD 2" CAP BLOCK / FLASH / PARGE / WATERPROOF / PAINT EXPOSED AREA
5) NEW 12" CMU WALL / 24" x 8" CONC FTG w/(3) #4 REBAR CONTINUOUS (SEE GENERAL NOTES FOR WALL REINFORCEMENT)
6) PROVIDE 2" DIA PVC WATER LINE SLEEVE @ BOTTOM OF WALL
7) INSTALL ½" x 12" J-BOLTS MAX 6' oc / ONE FOOT CORNER
8) 2" CONC SLAB, 6 MIL POLY, 4" WASHED GRAVEL
9) SUMP CROCK w/RADON VENT THRU ROOF
10) INSTALL 24" x 16" CRAWL SPACE ACCESS PANEL / PROVIDE 16" x 12" HVAC SUPPLY OPENING / AVOID LOAD POINTS FROM ABOVE
11) HWH, PRESSURE TANK, & TREATMENT
12) NEW ZONE 1 HEAT PUMP SYSTEM AIR HANDLER
13) EXISTING SUMP CROCK TO REMAIN
14) NEW 6" CONCRETE STOOP w/#4 REBAR 12" OC EACH WAY
15) NEW 8" CMU WALL / 18" X 8" CONC FTG w/(3) #4 REBAR CONTINUOUS

Housing Art
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Gaithersburg, MD 20882
301-370-0660

REAR ADDITION & RENOVATIONS
Blackman – Martel Residence
19735 White Ground Road, Boyds, MD 20841

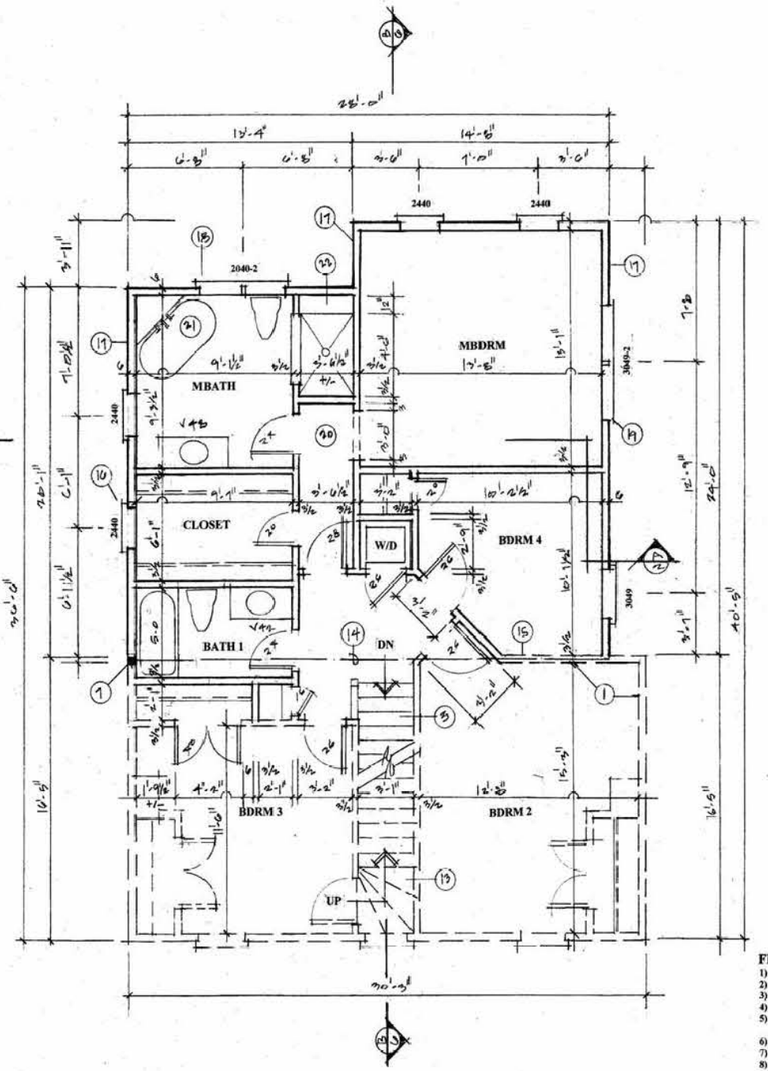
FOUNDATION & SECTION A-A

APRIL 14, 2025
Scale: ¼" & 3/8"

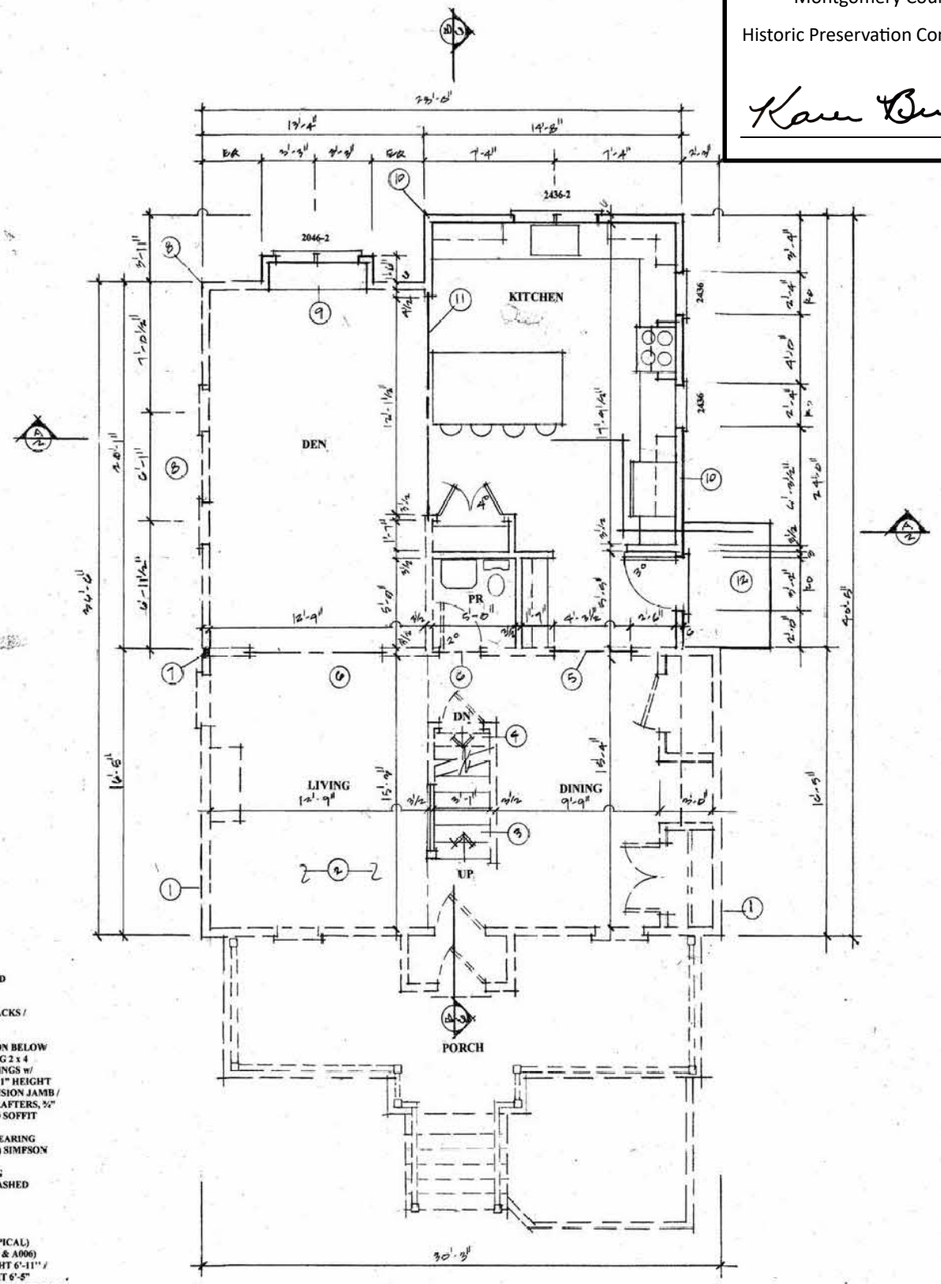
A002

REVIEWED
By Laura DiPasquale at 4:30 pm, May 16, 2025

APPROVED
Montgomery County
Historic Preservation Commission



SECOND FLOOR PLAN



FIRST FLOOR PLAN

FLOOR PLAN NOTES

1) EXISTING WALLS TO REMAIN
2) REMOVE DROPPED CEILING / ADD ½" GYP BD
3) NEW 14 RISE CODE-COMPLIANT STAIRS
4) EXISTING BASEMENT STAIRS TO REMAIN
5) NEW (2) 2 x 12 #2 HF HEADER w/(2) 2 x 4 SPF JACKS / BLOCK SOLID TO FOUNDATION BELOW
6) EXISTING DROPPED BEAM TO REMAIN
7) 3 ½" x 3 ½" PSL CONTINUOUS TO FOUNDATION BELOW
8) ADD 2 x 6 #2 SPF STUDS @ 16" OC TO EXISTING 2 x 4 FRAMED WALL & ADD NEW WINDOW OPENINGS w/ (2) 2 x 10 #2 HF FIRST FLOOR HEADERS @ 6'-11" HEIGHT
9) WINDOW BUMPOUT: (2) LYRS ½" OSB EXTENSION JAMB / SHEATHING w/2 x 4 FRAMING, 2 x 6 @ 16" oc RAFTERS, ¾" MDF SEAT / 2" RIGID INSULATION & ½" MDO SOFFIT
10) NEW 2 x 6 @ 16" SPF FRAMED WALLS
11) (2) 1 ½" x 11 7/8" 2.0E GP LAM LVL w/(3) 2 x 4 BEARING CONTINUOUS TO FOUNDATION BELOW & (2) SIMPSON LCE4 POST CAPS EACH END
12) NEW CONCRETE STOOP / SAWCUT EXISTING ASPHALT DRIVE / BACKFILL OVERDIG w/WASHED GRAVEL & 1" FLAGSTONE FLUSH APRON
13) EXISTING ATTIC STAIRS TO REMAIN
14) LINE OF NEW GIRDER TRUSS ABOVE
15) GIRDER TRUSS UNIFORM LOAD BEARING
16) (2) 2 x 8 #2 HF SECOND FLOOR HEADERS (TYPICAL)
17) 7'-3" TOP PLATE HEIGHT (VARIES / SEE A002 & A006)
18) SECOND FLOOR REAR WALL HEADER HEIGHT 6'-11" /
19) SECOND FLOOR SIDE WALL HEADER HEIGHT 6'-5"
20) 34" x 80" CASED OPENING / CENTER BATH DOOR BEYOND
21) 30" x 60" CLAWFOOT SOAKER w/ TILE SHELF @ 40" AFF / PROVIDE R-23 WALL INSULATION & 16"x16" ACCESS PANEL BEHIND TUB
22) 12" DEEP SHOWER BENCH @ 18" AFF / INSTALL 48" x 72" SLIDING TEMPERED GLASS SHOWER DOOR

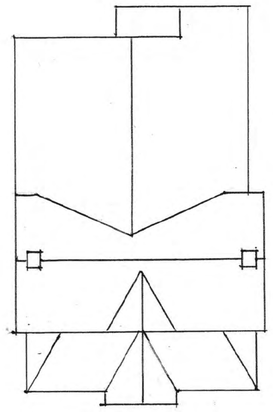
Housing Art
28716 Greenberry Drive
Gaithersburg, MD 20882
301-370-0660

REAR ADDITION & RENOVATIONS
Blackman – Martel Residence
19735 White Ground Road, Boyds, MD 20841

FIRST & SECOND FLOOR PLANS

March 19, 2025
Scale: ¼" = 1'-0"

A003



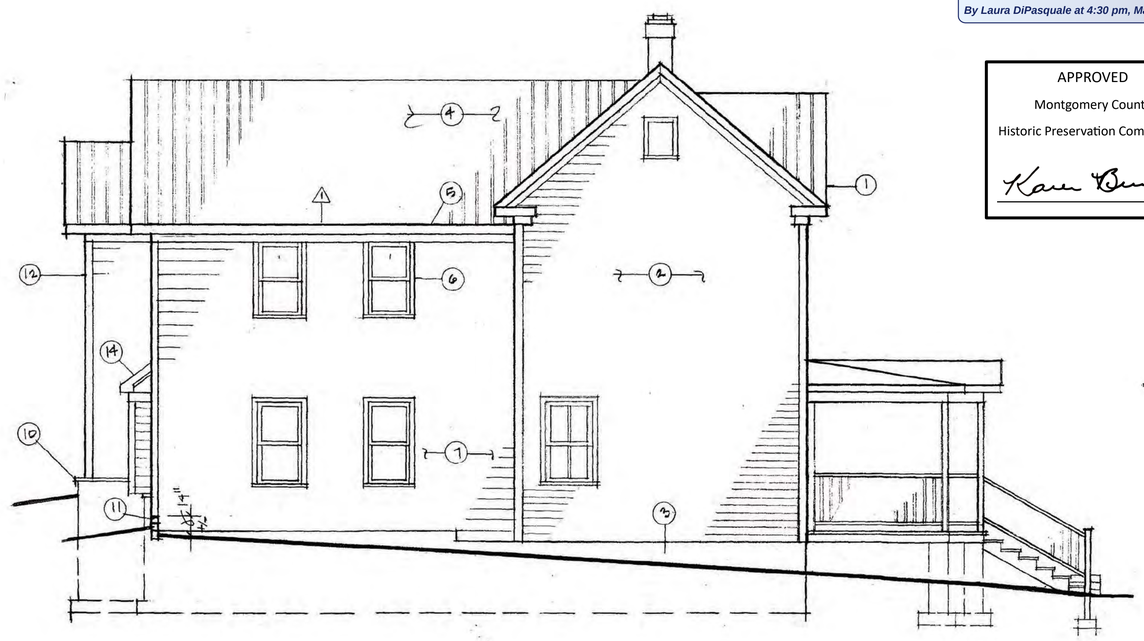
PROPOSED ROOF PLAN
(DROPPED DRIP LINE)

ELEVATION NOTES

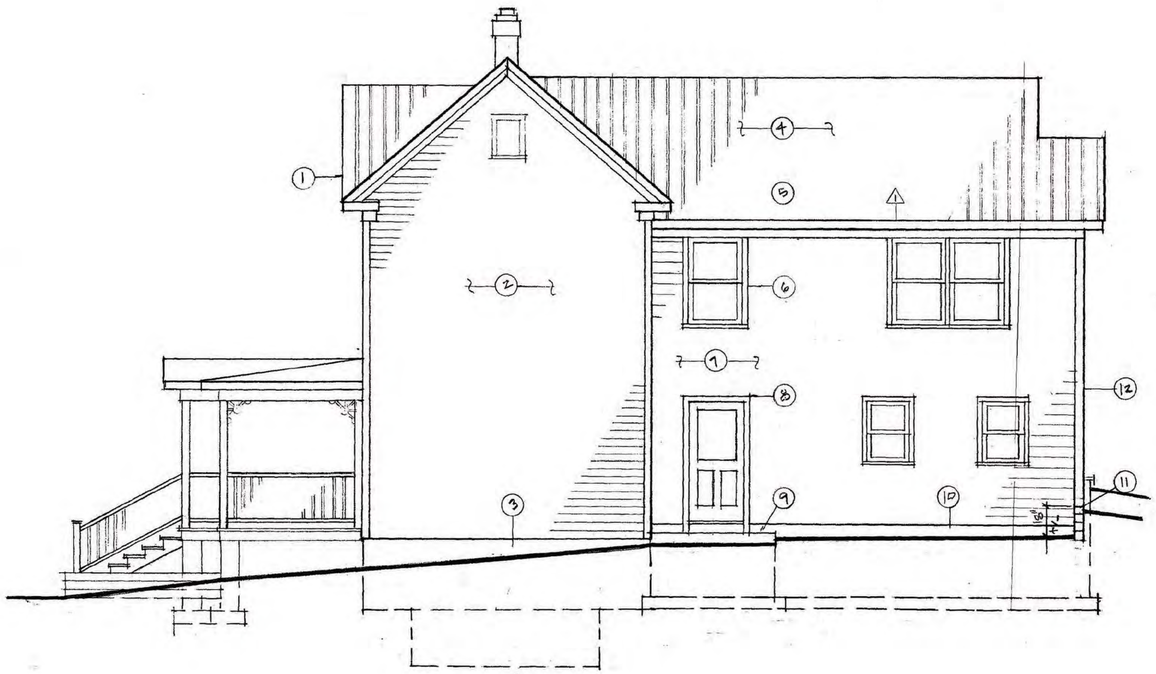
1) REPLACE EXISTING ORIGINAL RIBBED METAL ROOFING w/CENTRAL STATES PANEL-LOC PLUS RIBBED METAL ROOFING
2) EXISTING DOUBLE FIVE VINYL SIDING AND MAIN HOUSE EXTERIOR TRIM TO REMAIN
3) EXISTING STONE FOUNDATION TO REMAIN
4) INSTALL CENTRAL STATES PANEL-LOC PLUS RIBBED METAL ROOFING
5) EAVES: 1 X 8 BORAL FASCIA, ½" MDO SOFFIT, 2" CONTINUOUS VENT, ¼" x 2 ¾" BORAL CORNICE, 5/4 x 8 BORAL FRIEZE (SEE DETAIL – SHEET A006)
6) ANDERSEN SERIES 200 DOUBLE HUNG ONE OVER ONE WINDOWS, 3 ½" CASING, STANDARD SILL
7) JAMES HARDIE FIBER CEMENT SIDING (7" EXPOSURE)
8) 5/4 x 4 BORAL SIDE DOOR TRIM
9) NEW 5' x 7' CONCRETE LANDING / SLOPE TO DRAIN
10) NEW PARGED, WATERPROOFED & PAINTED CONCRETE BLOCK / 24" x 8" CONCRETE FOOTING 30" (MIN) BELOW FROST
11) 6 x 6 PRESSURE TREATED RETAINING WALL (STEP w/GRADE)
12) 5/4 x 6 & 5/4 x 4 BORAL CORNER TRIM
13) RAKES: 1 X 8 BORAL FASCIA, ½" MDO SOFFIT, 5/4 x 4 BORAL CORNICE (12" OVERHANG – TYPICAL)
14) BAY WINDOW BUMPOUT: CENTRAL STATES PANEL-LOC PLUS RIBBED METAL ROOFING, 1 x 6 BORAL FASCIA, ½" MDO SOFFIT (6" DEEP), RIPPED 5/4 x 10 BORAL CORNER TRIM FRONT / 5/4 x 4 BORAL SIDE RETURNS AND ½" MDO SEAT

REVIEWED
By Laura DiPasquale at 4:30 pm, May 16, 2025

APPROVED
Montgomery County
Historic Preservation Commission



LEFT SIDE ELEVATION



RIGHT SIDE ELEVATION

REAR ELEVATION

4/14/25 HPC ROOF REVISIONS

Housing Art
28716 Greenberry Drive
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REAR ADDITION & RENOVATIONS
Blackman – Martel Residence
19735 White Ground Road, Boyds, MD 20841

ELEVATIONS

March 19, 2025
Scale: ¼" = 1'- 0"

A004

REVIEWED
By Laura DiPasquale at 4:30 pm, May 16, 2025

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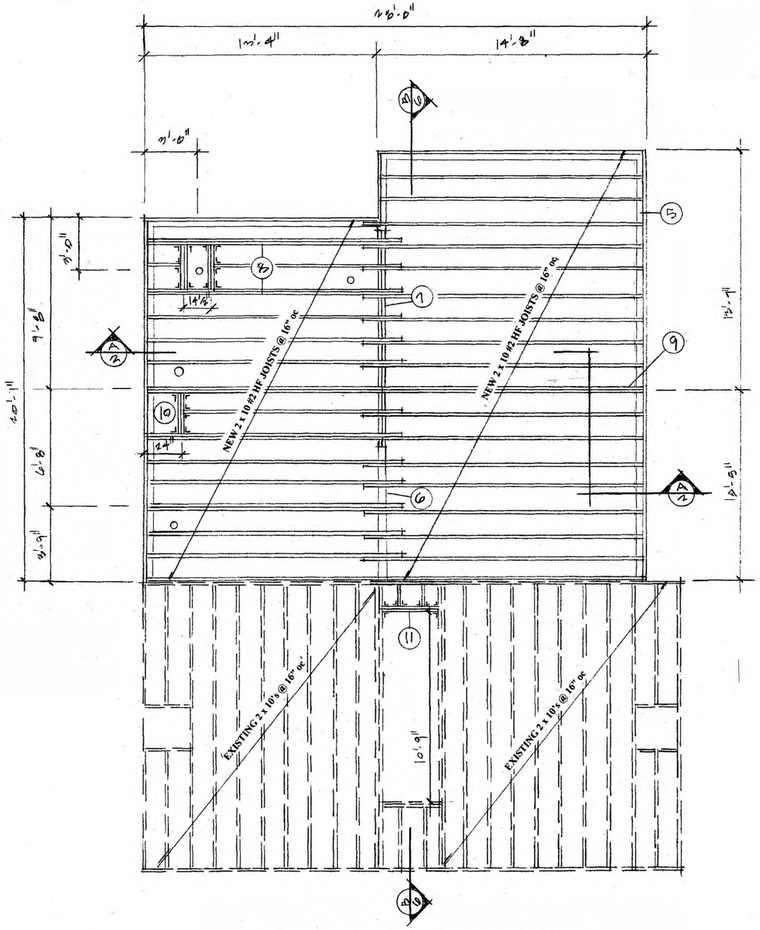
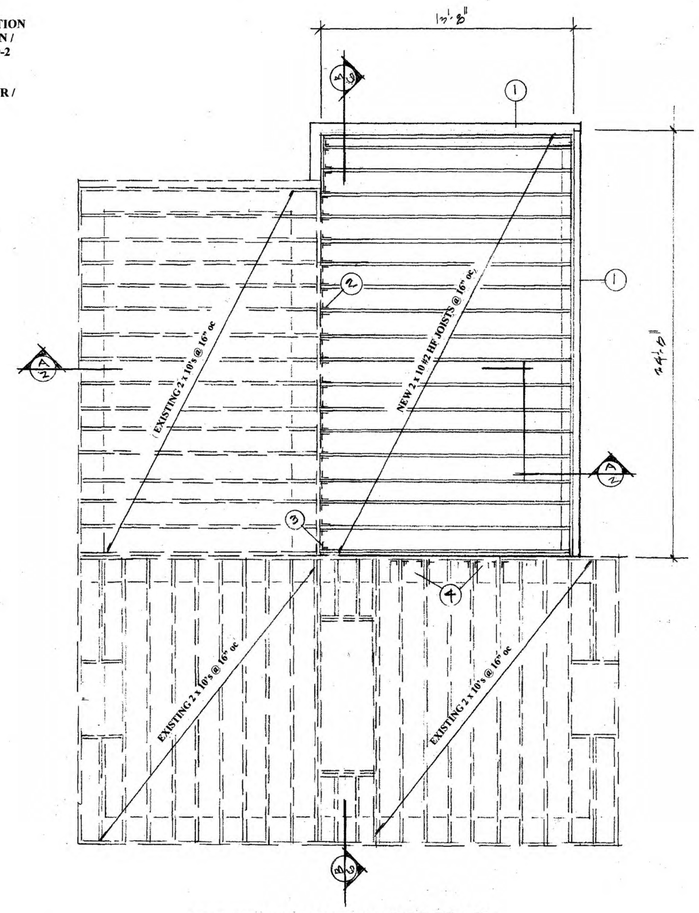
Montgomery County
Historic Preservation Commission

FLOOR FRAMING NOTES

1) NEW CMU RAISED FOUNDATION GRADE PROTECTION / 2 x 10 BAND JOIST / 2 x 4 PT PLATE & ½" x 12" J-Bolts MAX 6' oc / ONE FOOT OFF EACH CORNER
2) SIMPSON LSU210 JOIST HANGERS / ATTACH TO EXISTING BAND (REPAIR / REPLACE BAND AS REQUIRED)
3) SIMPSON L70 REINFORCING ANGLE
4) (2) 2 x 10 DOUBLE JOIST / HANG EX JOISTS OVER CRAWL SPACE ACCESS & HVAC OPENINGS w/SIMPSON LU210R-18
5) 2 x 6 @ 16" OC FRAMED BEARING WALLS BELOW
6) EXISTING 2 x 4 @ 16" OC FRAMED BEARING WALL /
7) INSTALL (2) 1 ¾" x 11 7/8" 2.0E GP LAM LVL & 4 ½" CONTINUOUS BEARING LOAD PATH TO EXISTING FOUNDATION
8) INSTALL DOUBLE JOISTS FOR CLAWFOOT TUB & DRAIN / ADD DBL 2 x 10 HEADERS / SIMPSON LSU210 AND LSU210-2
9) DOUBLE JOISTS UNDER PARALLEL PARTITIONS
10) FRAME CHASE FOR POSSIBLE FUTURE STOVE PIPE
11) EXPAND EXISTING STAIRWELL / ADD DBL 2 x 10 HEADER / SIMPSON LSU210 AND LSU210-2



SECOND FLOOR FRAMING PLAN



FIRST FLOOR FRAMING PLAN

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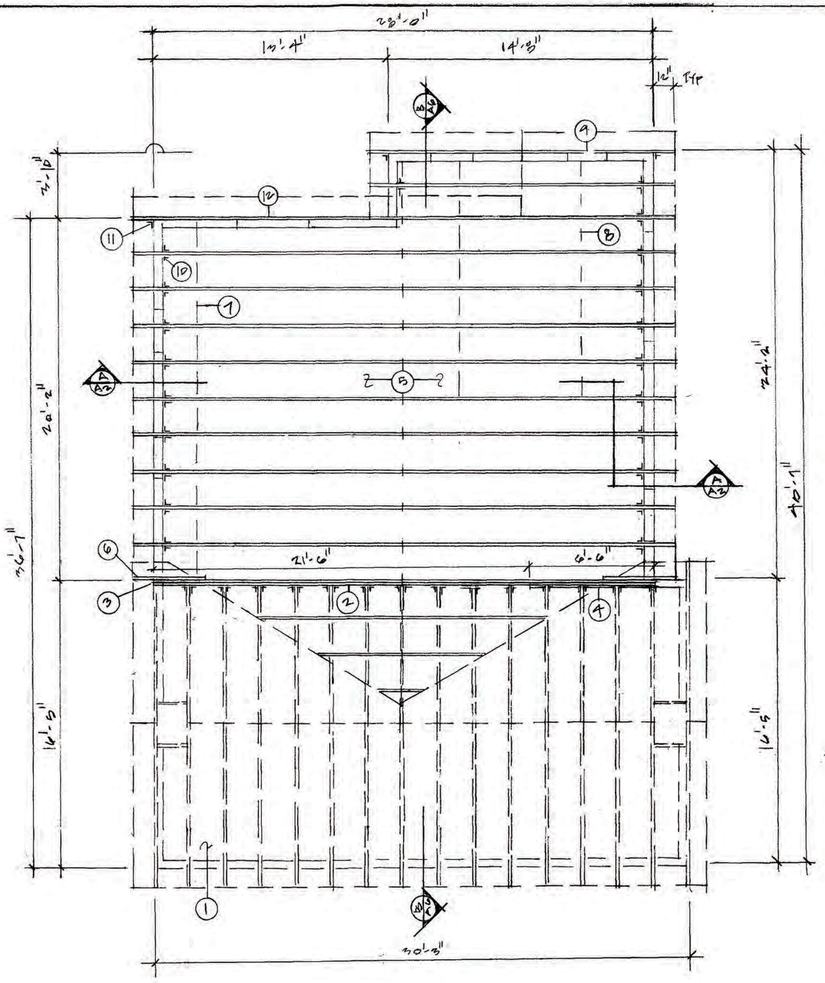
FLOOR FRAMING PLANS

April 14, 2025

SCALE: 1/4"= 1'0"

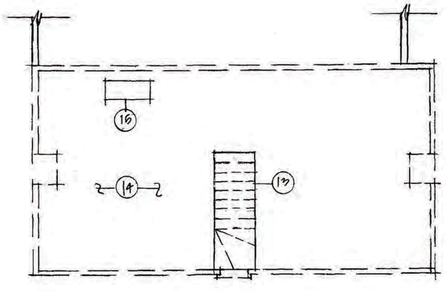
A005



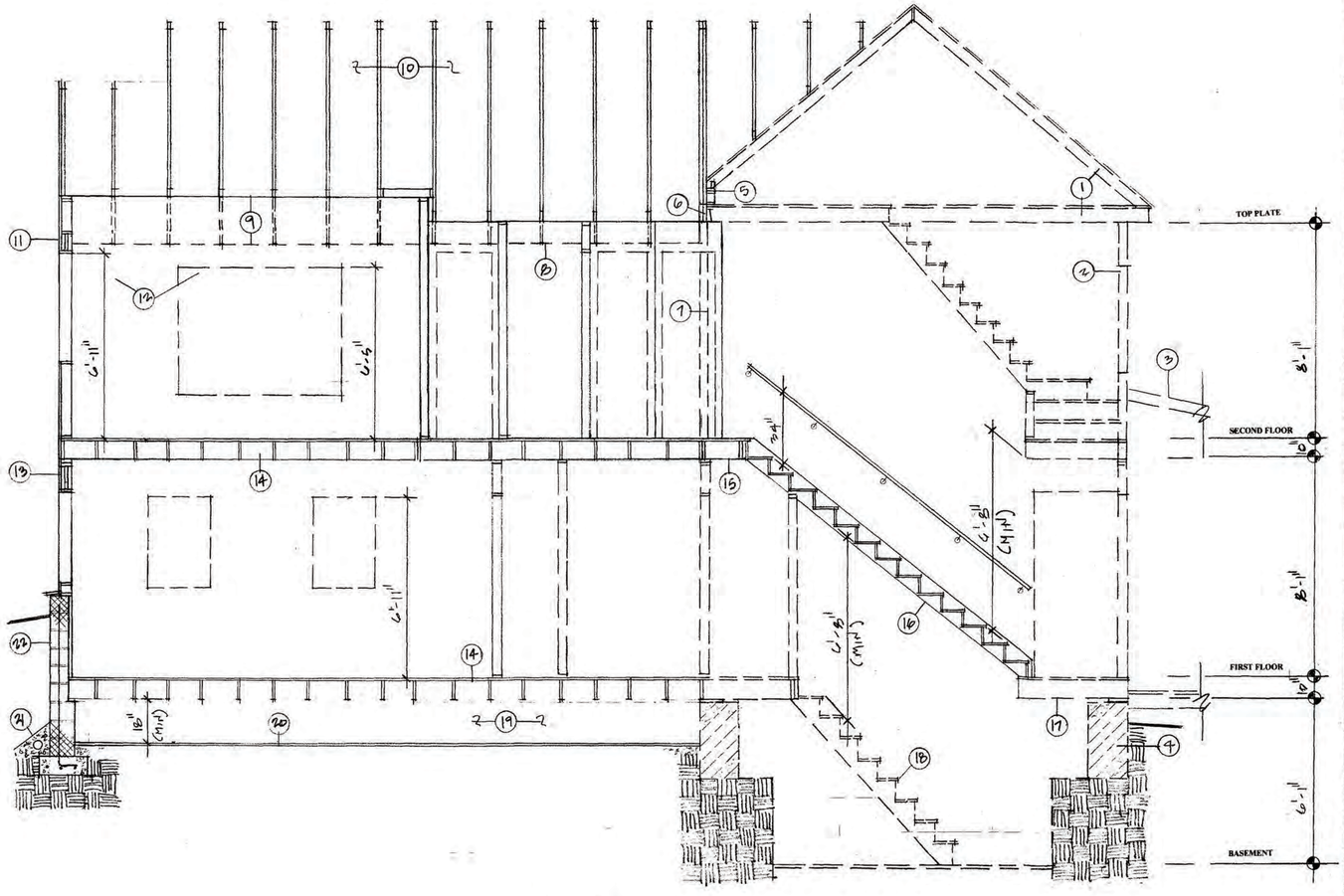
ROOF FRAMING & ATTIC PLAN NOTES

1) EXISTING 2 x 6 ROOF RAFTERS @ 24" OC / EXISTING 2 x 8 ATTIC FLOOR JOISTS @ 16" OC / EXISTING 2 x 4 @ 16" OC BEARING WALLS
2) GIRDER TRUSS w/SIMPSON LU28R-18 JOIST HANGERS
3) 3 ½" x 3 ½" PSL w/(2) SIMPSON LCE4 POST CAPS & (2) SIMPSON HTT5 TENSION TIES with 5/8" DIA TENSION ROD (PROVIDE CONT LOAD PATH PER IRC REQUIREMENTS)
4) GIRDER TRUSS UNIFORM LOAD DISTRIBUTION ON EXISTING BEARING WALL
5) ENGINEERED ROOF TRUSSES @ 24" OC w/VALLEY SET
6) 2 x 6 OUTRIGGER BELOW EXISTING EAVE
7) 7' – 3" PLATE HEIGHT / SLOPE TO 8'-1" BOTTOM CHORD
8) 7' – 3" PLATE HEIGHT / SLOPE TO 9'-1" BOTTOM CHORD
9) (2) 2 x 8 #2 SPF SECOND FLOOR WINDOW HEADERS (TYPICAL)
10) SIMPSON H1 HURRICANCE TIE
11) SIMPSON H2.5 HURRICANE TIE
12) SECOND FLOOR REAR WALL HEADER HEIGHT 6'-11" / SECOND FLOOR SIDE WALL HEADER HEIGHT 6'-5"
13) EXISTING ATTIC STAIR TO REMAIN
14) PRESERVE EXISTING FLOOR INSULATION
15) NEW ZONE 2 AIR HANDLER

ROOF FRAMING PLAN



EXISTING ATTIC PLAN



SECTION B – B

SECTION B-B NOTES

1) EXISTING 2 x 6 ROOF RAFTERS @ 24" OC / EXISTING 2 x 8 ATTIC FLOOR JOISTS @ 16" OC
2) EXISTING 2 x 4 @ 16" OC BEARING WALL
3) EXISTING FRONT PORCH STRUCTURE TO REMAIN
4) EX STONE FOUNDATION & DUG OUT TO REMAIN
5) NEW 2 x 4 BEARING WALL w/SIMPSON H3 RAFTER TIES
6) ENGINEERED GIRDER TRUSS w/SIMPSON LU28R-18
7) EXISTING BEARING WALL BEYOND w/ UNIFORM GIRDER TRUSS LOAD DISTRIBUTION
8) 7' – 3" PLATE HEIGHT / SLOPE TO 8'-1" BOTTOM CHORD
9) 7' – 3" PLATE HEIGHT / SLOPE TO 9'-1" BOTTOM CHORD
10) ENGINEERED ROOF TRUSSES @ 24" OC w/VALLEY SET
11) (2) 2 x 8 #2 SPF SECOND FLOOR WINDOW HEADERS (TYPICAL)
12) SECOND FLOOR REAR WALL HEADER HEIGHT 6'-11" / SECOND FLOOR SIDE WALL HEADER HEIGHT 6'-5"/ FIRST FLOOR HEADER HEIGHT 6'-11"
13) (2) 2 x 10 #2 HF FIRST FLOOR WINDOW HEADERS (TYPICAL)
14) ½" T & G ADVANTECH & 2 x 10 #2 HF JOISTS @ 16" OC
15) CUT BACK / HEADER OFF EX JOISTS FOR NEW STAIR
16) NEW STAIR w/(14) 7 11/16" RISERS & (13) 11" TREADS / MAINTAIN 6'-8" STAIR HEAD HEIGHT TYPICAL / PROVIDE CONTINUOUS WALL RAIL @ 34" OFF NOSINGS
17) EXISTING 2 x 10 @ 16 OC JOISTS (TYPICAL)
18) EXISTING ATTIC AND BASEMENT STAIRS REMAIN
19) NEW CONDITIONED CRAWL SPACE w/24" x 16" ACCESS
20) 2" CONC SLAB, 6 MIL POLY, 4" WASHED GRAVEL
21) 4" DIA EXT DRAINTILE, WASHED GRAVEL BED, FILTER CLOTH AND DRAIN TO SEALED SUMP & DAYLIGHT
22) 24" x 8" CONC FTG w/(3) #4 REBAR CONTINUOUS & 12"/8" CMU WALL w/2" CAP BLOCK (SEE GENERAL NOTES FOR WALL REINFORCEMENT)

REVIEWED
By Laura DiPasquale at 4:30 pm, May 16, 2025

APPROVED
Montgomery County
Historic Preservation Commission

Housing Art
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REAR ADDITION & RENOVATIONS
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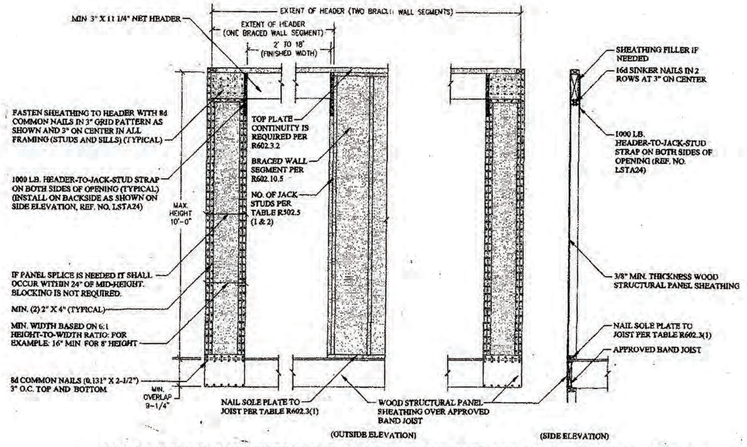
ROOF FRAMING & SECTION B - B

APRIL 14, 2025

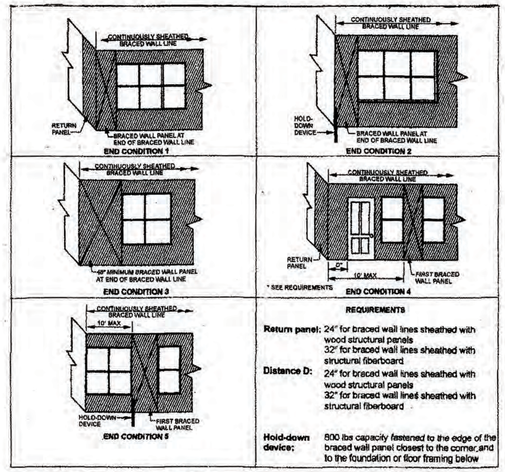
SCALE: 3/16", ¼", 3/8"

A006



NARROW WALL OVER RAISED WOOD FLOOR OR SECOND FLOOR- WOOD STRUCTURAL PANEL OVERLAP OPTION

SCALE: 1/2"= 1'-0"

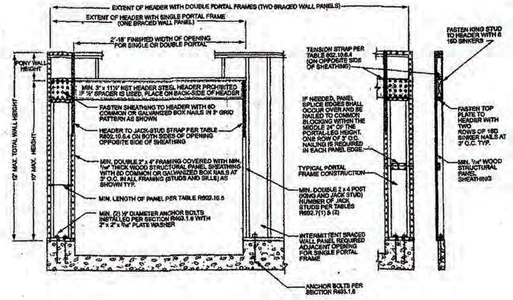


For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound = 4.45 N.

FIGURE R602.10.7
END CONDITIONS FOR BRACED WALL LINES WITH CONTINUOUS SHEATHING

TABLE 7: FASTENING SCHEDULE

METHOD	CONNECTION CRITERIA a	
	FASTENERS	SPACING
LIB	WOOD: 2- 8d COMMON NAILS OR 3- 6d (2 1/2" LONG X 0.113" DIA.) NAILS	WOOD: PER STUD AND TOP AND BOTTOM PLATES
	METAL: PER MANUFACTURER	METAL: PER MANUFACTURER
WSP, CS-WSP, CS-G	-6/4" THICKNESS: 6d (2" LONG X 0.113" DIA.) COMMON NAILS	6" ED GES
	-7/16" THICKNESS : 8d FOR (2 1/2" LONG X 0.131" DIA.) COMMON NAILS	12" FIELD
SFB, CS-SFB	-1/2" THICKNESS: 1 1/2" LONG X 0.12 DIA. COMMON NAILS	3" EDGES
	-25/32" THICKNESS : 1 3/4" LONG X 0.12" DIA. GALVANIZED ROOFING NAILS OR 8d COMMON (2 1/2" LONG X 0.131 DIA.) NAILS	6" FIELD
GB	-TYPE W OR S SCREWS -OTHER FASTENER TYPES ARE ACCEPTABLE. SEE THE 2009 VIRGINIA RESIDENTIAL CODE	7" EDGES (INCLUDING TOP AND BOTTOM PLATES) 7" FIELD
PFH, PFG, CS-PF	SEE CORRESPONDING FIGURES FOR THE FASTENING REQUIREMENTS OF EACH PORTAL FRAME METHOD.	



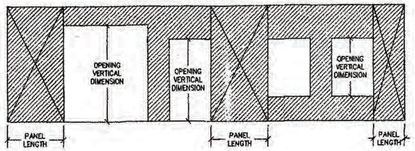
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.3
METHOD PFG—PORTAL FRAME AT GARAGE DOOR OPENINGS IN SEISMIC DESIGN CATEGORIES A, B AND C

PANEL LENGTHS

LENGTH OF SOLID PANEL AT CORNER				
8-FOOT WALL HEIGHT	9-FOOT WALL HEIGHT	10-FOOT WALL HEIGHT	11-FOOT WALL HEIGHT	12-FOOT WALL HEIGHT
16	18	20	24	30
1/6 RATIO	1/6 RATIO	1/6 RATIO	12/6 RATIO	12/6 RATIO

NOTES:
NARROW WALL BRACING TO BE INSTALLED WITHIN 12'-6" OF EACH CORNER.
3/8" OR 1/2" EXTERIOR SHEATHING IS TO BE INSTALLED AND NAILED TO EACH STUD AT 16" ON CENTER; GYPSUM BOARD WITH MINIMUM 1/2" THICKNESS IS TO BE PLACED ON STUDS SPACED A MAXIMUM OF 24" ON CENTER AND FASTENED AT 7" ON CENTER.
EACH BRACED WALL PANEL SHALL BE AT LEAST 48" IN LENGTH, COVERING A MINIMUM OF OF THREE STUD SPACES WHERE STUDS ARE SPACED 16" ON CENTER.



BRACED WALL PANELS WOTJ METHODS CS-WSP AND CS-SFB

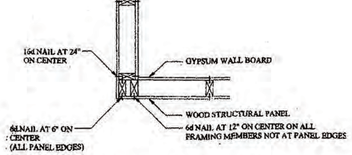
BLOCKING

A BRACED WALL PANEL IS NOT REQUIRED TO BE CONSTRUCTED WITH ONE SHEET OF OSB, PLYWOOD, FIBERBOARD OR GYPSUM BOARD. VERTICAL AND HORIZONTAL JOINTS ARE PERMITTED. ALL JOINTS MUST BE FASTENED USING EDGE NAILING PER TABLE 7.

VERTICAL JOINTS MUST OCCUR AT A STUD. IN THE CASE OF PANELIZED CONSTRUCTION, VERTICAL JOINTS ARE PERMITTED AT DOUBLE STUDS OF ADJOINING PANELS. THE DOUBLE STUDS MUST BE FASTENED TOGETHER WITH TWO ROWS OF 16d BOX NAILS (3" LONG X 0.126 INCH DIAMETER) AT 16" ON CENTER.

ALL HORIZONTAL JOINTS MUST HAVE 2X BLOCKING. THE LOCATION OF THE HORIZONTAL JOINT FOR PORTAL FRAMES MUST OCCUR WITHIN 24" OF THE PANEL'S MID-HEIGHT; HOWEVER, FOR ALL OTHER METHODS, HORIZONTAL JOINTS MAY OCCUR ANYWHERE ALONG THE HEIGHT OF THE BRACED WALL PANEL.

HORIZONTAL BLOCKING IS NOT REQUIRED WHEN THE AMOUNT OF BRACING PROVIDED IN A BWL IS AT LEAST DOUBLE THAT REQUIRED BY TABLE 1 OR, FOR METHOD GB ONLY, THE SHEETS OF GYPSUM BOARD ARE APPLIED HORIZONTALLY.



NOTE:
CONNECTION CRITERIA: 6d COMMON NAILS AT 6" SPACING (PANEL EDGES) AND AT 12" SPACING (INTERMEDIATE SUPPORTS)

EXTERIOR OUTSIDE CORNER FRAMING DETAIL

SCALE: 1"= 1'-0"

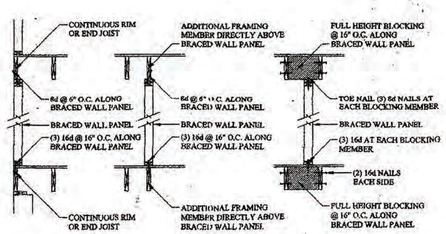


FIGURE 25: BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING

FLOOR/CEILING FRAMING CONNECTIONS

WHERE FRAMING IS PERPENDICULAR TO A BRACED WALL PANEL, A RIM JOIST OR BLOCKING MUST BE PROVIDED ALONG THE LENGTH OF THE BRACED WALL PANEL AS SHOWN IN FIGURE 24. WHERE FRAMING IS PARALLEL TO A BRACED WALL PANEL, A TRIM JOIST, FRAMING MEMBER OR BLOCKING MUST BE PROVIDED ALONG THE LENGTH OF THE BRACED WALL PANEL AS SHOWN IN FIGURE 25.

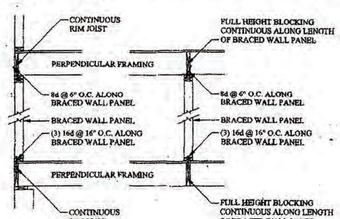
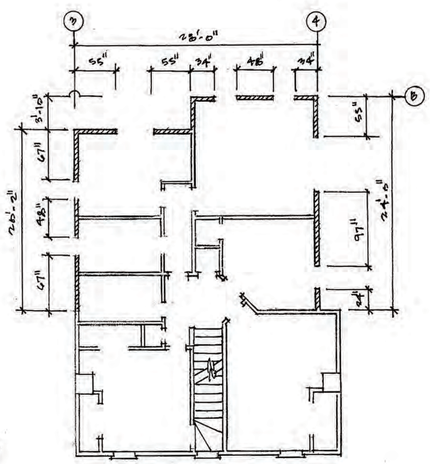


FIGURE 24: BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING

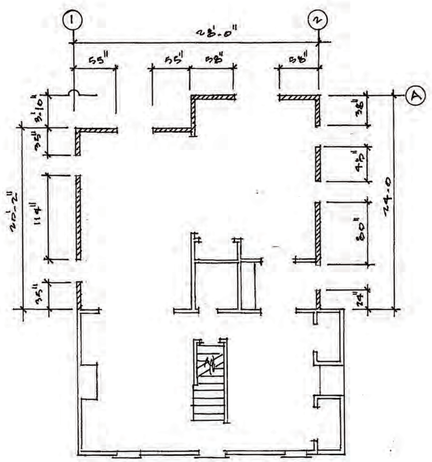
WALL BRACING TABULATION

WALL	METHOD	LENGTH (feet)	MIN REQ'D (feet)	ADJUSTMENT FACTOR	REQ'D LENGTH (inches)	ACT LENGTH (inches)	END CONDITION/S
BW-A	CS-WSP	28	8.4	0.9	91	226	1, 3
BW-1	CS-WSP	20.1	6.6	0.9	71	182	1, 4
BW-2	CS-WSP	24	7.8	0.9	84	190	1,4
BW-B	CS-WSP	28	4.9	0.9	53	226	1,3,4
BW-3	CS-WSP	20.1	3.5	0.9	38	182	3
BW-4	CS-WSP	24	4.2	0.9	45	175	3,4

NOTE: USE 6/12 FASTENER SPACING



SECOND FLOOR BRACING



FIRST FLOOR BRACING

REVIEWED
By Laura DiPasquale at 4:30 pm, May 16, 2025

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REAR ADDITION & RENOVATIONS
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WALL BRACING DETAILS

APRIL 14, 2024

SCALE: 1/8"= 1'0"

A007

Panel-Loc Plus™

Wall and Roof Panel

Superior *durability* with an attractive appearance

Panel-Loc Plus gives residential, agricultural, and light commercial projects the protection of steel with an attractive appearance. It features an extra striation on top of the rib to give it superior durability and protection against extreme weather. Panel-Loc Plus is available in 3 qualities: Standard, Prime, and Ultra.

- Engineered with a Siphon Groove to minimize leaks.
- Wide fastening surface for easy application.
- Unique lap groove hides the overlap giving a smooth, clean appearance.

REVIEWED

By Laura DiPasquale at 4:30 pm, May 16, 2025

RECOMMENDED 2½:12 PITCH AND ABOVE	29 OR 26 GAUGE	36" OVERALL COVERAGE	¾" MAXIMUM RIB HEIGHT

APPROVED

Montgomery County

Historic Preservation Commission

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CE FLYR_PLP_240412

Choose CentralGuard® for the best protection and a lifetime warranty.

CentralGuard is our specific combination of everything that goes into making the highest-quality metal panels. Available on our Prime and Ultra panels, the CentralGuard name is a guarantee that you have the best protection and a lifetime paint warranty.

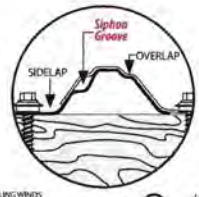
Choose CentralGuard for the perfect balance of fade protection, rust blocking, and dent resistance.

	STANDARD	OUR BEST SELLER! PRIME CentralGuard	ULTRA CentralGuard
FADE PROTECTION			
Paint Warranty	40-YEAR	LIFETIME	LIFETIME
Paint Thickness	THICK .90 mil	THICKER 1.0 mil	THICKER 1.0 mil
Fade Warranty	30-YEAR	30-YEAR	30-YEAR
Fade Protection	✓	✓✓	✓✓
RUST BLOCKING			
Advanced Rust Blocking	–	✓	✓
Perforation Warranty	–	50-YEAR	50-YEAR
Substrate Thickness	1.12 mil	1.60 mil	1.60 mil
DENT RESISTANCE			
Advanced Dent Resistance	–	✓	✓✓
Steel Thickness	THIN	THICK	THICKEST
Steel Gauge	29 ga	29 ga.	26 ga.

Panel-Loc Plus features UL2218 approval for impact resistance and may qualify for a homeowners insurance discount. See your local insurance agent for qualifications.

Siphon Groove

Panel-Loc Plus has two vertical edges, the overlap and the sidelap. The sidelap edge has a specific bend in the last major rib, called a siphon groove. When the overlap edge is installed on top of the sidelap edge, it creates an air gap that prevents water from wicking under the panel. Panels should be installed with the overlap facing away from the prevailing wind.



Find more information at
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MINIMUM SPECIFICATIONS
FOR ULTRA AND PRIME PAINTED PANELS

GAUGE
Ultra 26 ga. | Prime 29 ga.

STEEL THICKNESS
Ultra 0.0185" | Prime 0.0150"

PAINT THICKNESS
Top coat paint: .70 mil
Top coat primer: .30 mil
Bottom coat backer: .35 mil
Bottom coat primer: .35 mil

TOTAL THICKNESS
Ultra 0.0202" | Prime 0.0167"

RUST PROTECTANT SUBSTRATE
Galvalume® AZ50

STEEL STRENGTH
80,000 PSI min

PAINT SYSTEM
SMP

WARRANTY
Lifetime limited paint adhesion
30-yr. chalk and fade
50-yr. Galvalume perforation

TESTING & APPROVALS

TESTING

TAS 100-95	Wind Driven Rain Test
TAS 125-03	Uplift Resistance Test, 29 ga. Prime only
ASTM-E455	Diaphragm Shear Standard Test, 26 ga.
ASTM-E455	Diaphragm Shear Standard Test, 29 ga.

APPROVALS

UL2218	UL Approval, Impact Resistance, Class 4
UL580	UL Approval, Uplift Resistance, Class 90
UL790	UL Approval, Fire Resistance, Class A
RC-325	Texas Windstorm Approval, 29 ga. Over Wood Purlins
RC-326	Texas Windstorm Approval, 29 ga. Over Decking
FL14026	Florida Approval, Roof Panel Over 15/32" Plywood

REVIEWED
By Laura DiPasquale at 4:30 pm, May 16, 2025

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Historic Preservation Commission

Karen Burditt

insite.™
Building design. Streamlined.

FEBRUARY 2024

JamesHardie

Hardie® Plank Lap Siding

Submittal Form 01

Submitted to: .....

Project Name: .....

Submitted by: .....

Date: .....

☐ HZ5® Product Zone ☐ HZ10® Product Zone

Product Width: ☐ 5-1/4in ☐ 6-1/4in ☐ 7-1/4in ☑ 8in ☐ 8-1/4in ☐ 9-1/4in ☐ 12in

Product Finish: ☐ Primed ☑ ColorPlus® Technology

Product Texture: ☑ Smooth ☐ Select Cedarmill® ☐ Colonial Roughsawn® ☐ Colonial Smooth® ☐ Rustic Cedar

Hardie® Plank Lap Siding

Specification Sheet 01

DIVISION: 07 00 00 THERMAL AND MOISTURE PROTECTION | SECTION: 07 46 46 FIBER CEMENT SIDING

HARDIE® PLANK LAP SIDING

Manufacturer

James Hardie Building Products, Inc.

The products are manufactured at the following locations, with quality control inspections by ICC-ES:

- Cleburne, Texas
- Plant City, Florida
- Reno, Nevada
- Waxahachie, Texas
- Prattville, Alabama
- Peru, Illinois
- Pulaski, Virginia
- Tacoma, Washington
- Fontana, California
- Summerville, South Carolina

Compliance with the following codes

- 2006 thru 2021 International Building Code (IBC)
- 2006 thru 2021 International Residential Code (IRC)

For more information about other compliances and applicable uses, refer to ICC-ES ESR-2290

Features

- Noncombustible
- Dimensionally Stable
- Resists damage from pests
- Weather Resistant-Engineered for Climate®
- Impact resistant
- Sustainable

Use

Hardie® fib… as exterior wall covering.
The produc… 1403.9 and IRC Section R703.10.
The produc… may be used on exterior walls of buildings of Type I, II, III and IV
constructio…

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By Laura DiPasquale at 4:30 pm, May 16, 2025

Description

Hardie® Plank lap siding is a single-faced, cellulose fiber-reinforced cement (fiber-cement) product. Hardie® Plank lap siding complies with ASTM C1186, as Grade II, Type A; has a flame-spread index of 0 and a smoke-developed index of 5 when tested in accordance with ASTM E84; and is classified as noncombustible when tested in accordance with ASTM E136.

Available Sizes

Product	Width (in)	Length	Thickness (in)
Hardie® Plank lap siding*	5-1/4, 6-1/4, 7-1/4, 8, 8-1/4, 9-1/4, 12	12 feet	5/16

** HZ5: 9-1/4, 12 only available primed HZ10: 5-1/4, 9-1/4, 12 only available primed.*

Weight2.31 lbs. per square foot

Texture & Finish

Hardie® Plank lap siding comes in a variety of textures and finishes. The product is available in smooth or wood grain texture. Additional textures are available on a regional basis. Finish options are primed for field paint, or factory finished with ColorPlus® Technology. Color availability varies by region.

Engineered for Climate®

Hardie® Plank lap siding is engineered for performance to specific weather conditions by climate zones as identified by the following map.

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Performance Properties

	General Property	Test Method	Unit or Characteristic	Requirement	Result
PHYSICAL ATTRIBUTES	Dimensional Tolerances	ASTM C1185	Length	± 0.5% or ± 1/4 in	Pass
			Width	± 0.5% or ± 1/4 in	
			Thickness	± 0.04 in	
			Squareness	Δ in diagonals ≤ 1/32 in/ft of sheet length. Opposite sheet sides shall not vary in length by more than 1/32 in/ft	
			Edge Straightness	≤ 1/32 in/ft of length	
	Density, lb/ft³	ASTM C1185		As reported	83
	Water Absorption, % by mass	ASTM C1185		As reported	36
	Water Tightness	ASTM C1185	Physical Observations	No drop formation	Pass
	Flexural Strength	ASTM C1185	Wet conditioned, psi	>1015 psi	Pass
			Equilibrium conditioned, psi	>1450 psi	
THERMAL	Thermal Conductivity	ASTM C177	(BTU/(hr·ft·°F))/inch	As reported	2.07
	Actual Thermal Conductivity		(K_{eff})		6.62
	Thermal Resistance		R=1/ K_{eff}		0.48
	Actual Thermal Resistance		(R)		0.15
DURABILITY	Warm Water Resistance	ASTM C1185	Physical Observations	No visible cracks or structural alteration	Pass
	Heat/Rain Resistance	ASTM C1185	Physical Observations	No visible cracks or structural alteration	Pass
	Freeze/Thaw Resistance	ASTM C1185	Physical Observations	No visible cracks or structural alteration	Pass
			Mass Loss, %	≤ 3.0%	
			Freeze/Thaw, % strength retention	≥ 80%	
	UV Accelerated Weathering Test	ASTM G23	Physical Observations	No cracking, checking, or crazing	Pass
FIRE CHARACTERISTICS	Surface Burning Characteristics	ASTM E84	Flame Spread Index (FSI)		0
			Smoke Developed Index (SDI)		≤ 5
			Fuel Contributed		0
			NFPA Class		A
			Uniform Building Code Class	As reported	1
			International Building Code® class		A
	Noncombustibility	ASTM E136	Noncombustible	Pass/fail	Pass
	Fire Resistance Rated Construction	ASTM E119	Fire Resistance Rating	1-hour	Note 1

Note 1: listed on Warnock Hersey and ESR 2290

Installation

Install Hardie® Plank lap siding in accordance with:

- Hardie® Plank lap siding installation instructions
- ICC-ES ESR 2290
- Requirements of authorities having jurisdiction

Sustainable Design Contribution

- Regionally sourced content- varies by project location
- Avoidance of certain chemicals or Red List Compliance

Detailed product information for LEED projects, or other state or regional sustainability programs is available through James Hardie Technical Services.

Storage and Handling

Store flat and keep dry and covered prior to installation.

Technical Services

Contact James Hardie Technical Services online at JamesHardie.com, or by phone at (800)426-4051

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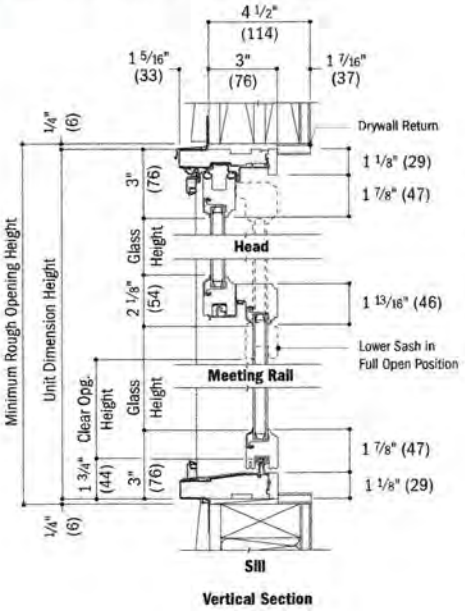
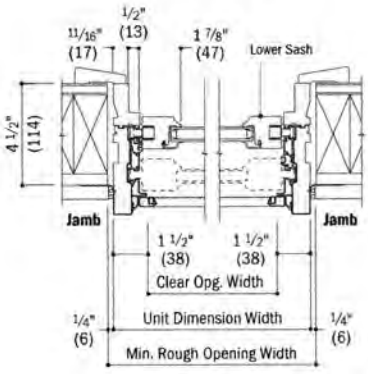
200 SERIES TILT-WASH DOUBLE-HUNG WINDOWS

ANDERSEN WINDOWS & DOORS

Tilt-Wash Double-Hung Window Details
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

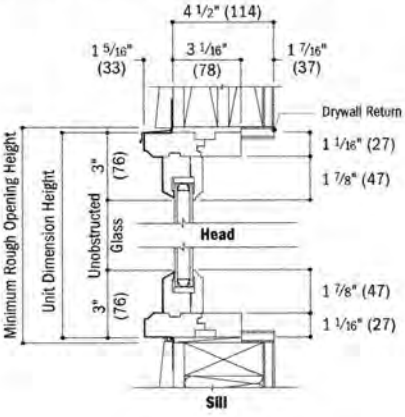


Vertical Section

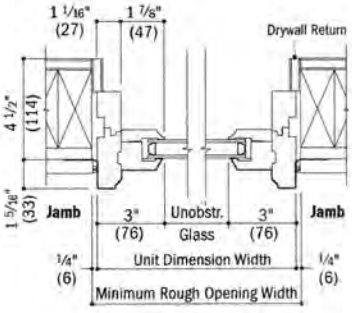


Horizontal Section

Tilt-Wash Picture/Transom Window Details
Scale 1 1/2" (38) = 1'-0" (305) – 1:8



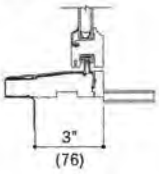
Vertical Section



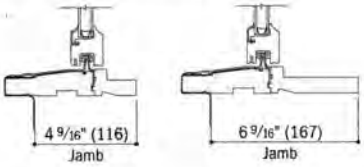
Horizontal Section

Extension Jamb Details
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

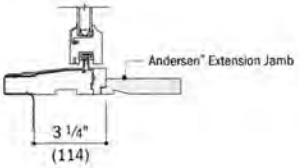
Jamb for Drywall Return



Factory-Applied Extension Jambs

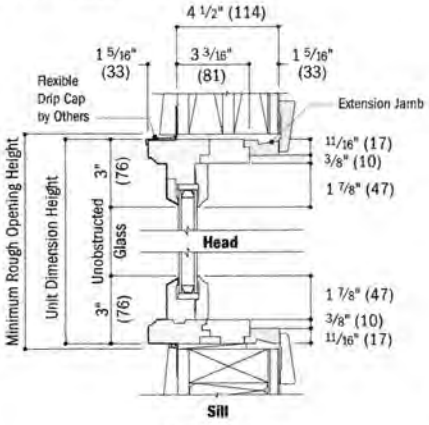


Field-Applied Extension Jamb



** NOTE:
PAINTED BORAL WINDOW TRIM (3.5-4") TO BE SUBSTITUTED FOR ANDERSEN FIBREX CASINGS

Tilt-Wash Half Circle Window Detail
Scale 1 1/2" (38) = 1'-0" (305) – 1:8



Vertical Section

- Light-colored areas are parts included with windo
- **Minimum rough openings may need to be incr**
- Details are for illustration only and are not inten at andersenwindows.com.
- Dimensions in parentheses are in millimeters.

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By Laura DiPasquale at 4:30 pm, May 16, 2025

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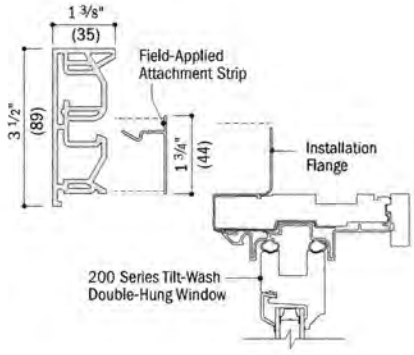
200 SERIES EXTERIOR TRIM

ANDERSEN WINDOWS & DOORS

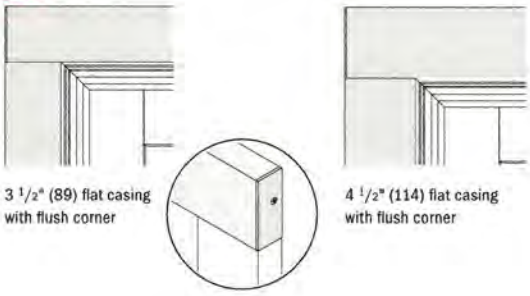
Window and Patio Door Attachment

Field-Applied Attachment Strip

A field-applied attachment strip fastens to the framing through the window or patio door installation flange and flashing tape with screws. Exterior trim connects securely to the field-applied attachment strip. Follow window and patio door installation guides for flashing instructions.



3 1/2" and 4 1/2" Flat Casings



3 1/2" (89) flat casing with flush corner

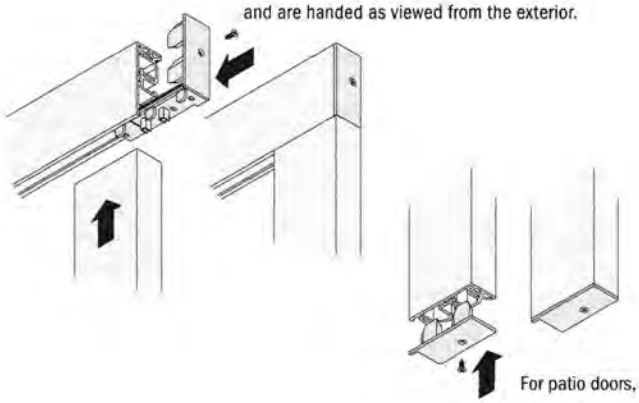
4 1/2" (114) flat casing with flush corner

Formula for dimension of window/door plus exterior trim:

Add 4 1/4" (108) per side for 4 1/2" (114) flat casing

Add 3 1/4" (83) per side for 3 1/2" (89) flat casing

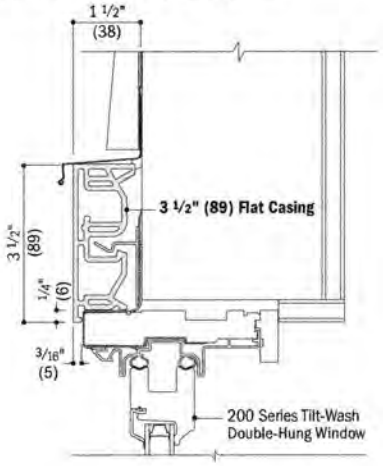
End caps are used at the corners for flat casing and are handed as viewed from the exterior.



For patio doors, end caps are used at the sill.

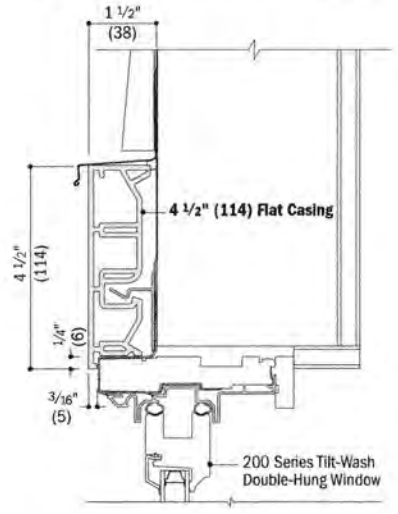
Trim Details

Scale 3" (76) = 1'-0" (305) – 1:4



Vertical Section

200 Series Tilt-Wash Double-Hung Window with 3 1/2" (89) Flat Casing



Vertical Section

200 Series Tilt-Wash Double-Hung Window with 4 1/2" (114) Flat Casing

- Dimensions in parentheses are in millimeters.
- Typical trim combinations shown. Additional combinations may also be used. Some restrictions apply. For more information, contact your Andersen supplier.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

TruExterior®
Siding & Trim

"BORAL"

TRIM

REVIEWED
By Laura DiPasquale at 4:31 pm, May 16, 2025

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The Freedom To Create **Your Custom Look**

TruExterior offers you the versatility to create virtually any custom look that you want for your homes. With the ability to cut, miter and route TruExterior Trim, you can shape your perfect profile and know your trim will outlast traditional wood.

- Better workability compared to wood, fiber cement or engineered wood trim
- ls with standard woodworking tools
- methods
- No edge sealing of cuts required

- Pre-primed and ready to paint any color
- Available in 16' lengths

Technical Data

TruExterior Trim – Product Data Sheet

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Content

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5/8 Trim Sizes		1X Trim Sizes		5/4 Trim Sizes		2X Trim Sizes	
Nominal	Actual	Nominal	Actual	Nominal	Actual	Nominal	Actual
						2 x 2	1-1/2" x 1-1/2"
		1 x 3	3/4" x 2-1/2"	5/4 x 3	1" x 2-1/2"		
5/8 x 4	5/8" x 3-1/2"	1 x 4	3/4" x 3-1/2"	5/4 x 4	1" x 3-1/2"	2 x 4	1-1/2" x 3-1/2"
		1 x 5	3/4" x 4-1/2"	5/4 x 5	1" x 4-1/2"		
5/8 x 6	5/8" x 5-1/2"	1 x 6	3/4" x 5-1/2"	5/4 x 6	1" x 5-1/2"	2 x 6	1-1/2" x 5-1/2"
5/8 x 8	5/8" x 7-1/4"	1 x 8	3/4" x 7-1/4"	5/4 x 8	1" x 7-1/4"	2 x 8	1-1/2" x 7-1/4"
5/8 x 10	5/8" x 9-1/4	1 x 10	3/4" x 9-1/4"	5/4 x 10	1" x 9-1/4"	2 x 10	1-1/2" x 9-1/4"
5/8 x 12	5/8" x 11-1/4"	1 x 12	3/4" x 11-1/4"	5/4 x 12	1" x 11-1/4"	2 x 12	1-1/2" x 11-1/4"

TruExterior® Siding & Trim

TRIM PRODUCT DATA SHEET

1. Certificates and Listings

a. **Cal Fire (WUI):** CA SFM 12-7A-1 Listing No. 8140-2134:0101
b. **Pre-consumer Recycled Content:** SCS Global Certification—Minimum 70%

2. Properties

a. **Density:** ASTM C 1185, 40-50 lb_f/ft^3
b. **Flexural Strength:** ASTM C 1185, > 1600 psi
c. **Coefficent of Linear Expansion:** ASTM D 6341, < 0.000014 in / (in*oF)
d. **Impact Resistance:** ASTM D 6110, > 50 in.

3. Performance

a. **Fungi Rot:** AWPA E10, Brown Rot–Negligible Loss, White Rot–Negligible Loss
b. **Termite Resistance:** AWPA E1, > 9.0
c. **Water Absorption:** ASTM D 570, < 1.5%
d. **Flame Spread:** ASTM E 84, < 200

4. Manufacturing Tolerences

a. **Width:** ± 1/16 in.
b. **Thickness:** ± 1/16 in.
c. **Length:** +2.0 / -0.0 in.

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Westlake Royal Building Products™
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SIDING & ACCESSORIES
TRIM & MOULDINGS
ROOFING
STONE
WINDOWS
OUTDOOR LIVING