

#### HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Robert K. Sutton Chairman

Date: February 23, 2022

#### **MEMORANDUM**

TO: Mitra Pedoeem

Department of Permitting Services

FROM: Dan Bruechert

Historic Preservation Section

Maryland-National Capital Park & Planning Commission Historic Area

SUBJECT: Work Permit # 978014 - Fenestration alteration and Porch Enclosure

The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached application for a Historic Area Work Permit (HAWP). This application was **Approved** by historic preservation staff.

The HPC staff has reviewed and stamped the attached construction drawings.

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: Adam Diamond

Address: 12 Valley View Ave., Takoma Park

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 Dan Bruechert at 301.563.3400 or <a href="mailto:dan.bruechert@montgomeryplanning.org">dan.bruechert@montgomeryplanning.org</a> to schedule a follow-up site visit.



# THE DIAMOND RESIDENCE

# 12 VALLEY VIEW AVE TAKOMA PARK MD 20912

# **PROJECT INFO:**

**SCOPE OF WORK AREA SF:** BSMT: 318.77, 1ST: 157.62

**GFA:** EX: 1856.60 PROP: 2172.54 NUMBER OF STORIES ABOVE GRADE:

EXISTING: 1 1/2 STORIES PROPOSED: 1 1/2 STORIES

**BASEMENT: YES** 1ST FL: YES ATTIC FL: YES

**EXISTING BLDG HT** = 28.7' PROPOSED = 28.7'

STRUCTURAL FRAMING SYSTEM: WOOD STUDS AT WALLS ABOVE GRADE, CMU AT FOUNDATION/BEARING WALLS (8" THK, 8' HT)

**USE GROUP**: R-3 **ZONE**: R-3

**LOT**: 59

**LOT SIZE**: 5,144 SF **SPRINKLERED:** NO

**SMOKE DETECTORS:** HARDWIRED

GAS FUEL: YES (CO DETECTORS PROVIDED)

FIRE RATING: 0

**EXISTING UNITS:** 1 **PROPOSED UNITS: 1** 

**CONSTRUCTION TYPE:** V-A

**INSULATION:** 

EXT. WALLS: R20 INT + R5 CONT EXT

FLOOR: R30 **CEILING**: R49

# **LOCAL DESIGN LOAD CRITIA**

WIND SPEED: 115 MPH FROST DEPTH: 30in.

**EARTHQUAKE**: AT SHORT PERIODS / 0.16 AT 1 SEC PERIOD / .053

**SEISMIC DESIGN**: B

**WEATHERING FOR CONCRETE**: SEVERE

**TERMITE**: MODERATE TO HEAVY **DECAY**: SLIGHT TO MODERATE ICE SHEILD UNDERLAYMENT: YES

**FLOOD HAZARDS**: 3/5/1990 WINTER DESIGN: 15 D/F; 9 D/C

AIR FREEZING: LESS THAN 1500 D/F; 815 D/F

MEAN ANNUAL TEMP: 50 D/F; 10 D/F

# **LOCATION MAP**



## **BUILDING CODES**

2018 International Building Code ER 31-19

Chapter 8 County Building Code

2018 International Building Code

2018 International Existing Building Code

Maryland Accessibility Code

2015 NFPA Fire Code

2015 NFPA 101 Life Safety Code

2012 International Green Construction Code

2015 IBC Amendments

2018 International Energy Conservation Code (IECC)

2018 International Mechanical Code (IMC)

Montgomery County Code Chapter 8 (Mechanical)

Montgomery County Code Chapter 17 (Electrical)

NFPA 70 (National Electric Code)

Chapter 35 of IBC-2018 Referenced Standards

# **SCOPE OF WORK**

- 1. CONVERT/ENCLOSE EXISTING SCREEN PORCH AT REAR OF **PROPERTY**
- 2. REDESIGN EXISTING KITCHEN LAYOUT AND INCORPORATE WITH SCREEN PORCH ENCLOSURE (INTERIOR ALTERATIONS)
- 3. GARAGE CONVERSION INTO LIVING SPACE

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A2.1 EXISTING AND PROPOSED FRONT ELEVATION

A2.2 PROPOSED REAR, LEFT, RIGHT ELEVATIONS

A3.1 **SCHEDULES** 

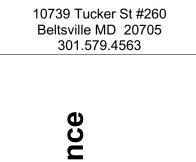
A3.3 ASSEMBLY DETAILS S0.1 STRUCTURAL NOTES

S1.1 STRUCTURAL PLANS AND DETAILS

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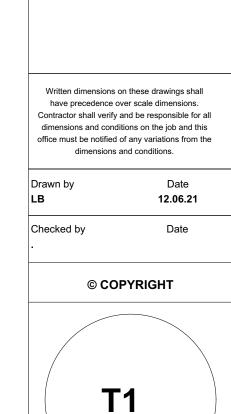
M1.2 PARTIAL MECHANICAL PLANS

E1.1 ELECTRICAL NOTES, ELECTRICAL PLANS

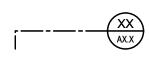








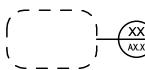
SECTION CALLOUT



**DETAIL CALLOUT** SHEET NUMBER



**ELEVATION CALLOUT** SHEET NUMBER



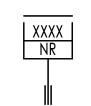


INTERIOR ELEVATION SHEET NUMBER



FIRE RATING

WALL TYPE DESIGNATION



FLOOR/ROOF ASSEMBLY FIRE RATING



FLOOR HEIGHT IDENTIFIER

SPOT ELEVATION



i 1ST FLOOR

KEYNOTE



**REVISION INDICATOR** 

APPROVED Montgomery County **Historic Preservation Commission** 

**REVIEWED** By Dan.Bruechert at 3:26 pm, Feb 23, 2022

BBREVIA	TIONS	
<u>.</u> В	Anchor Bolt	<u>Н</u> Н
DD	Addendrum	HDW
DJ	Adjacent	HDR
FF	Above Finished Floor	HOR
GGR	Aggregate	HP
LUM	Aluminum	HR
LT	Alternate	HT
NOD	Anodized	HWD
PPROX RCH	Approximate Architectural	
КСП	Architectural	<u> </u>
<b>\</b>		IBC ID
LK'G	Blocking	INDC
.M.	Bench Mark	INSU
D	Board	
F	Backface	J
L	Building Line	
LDG	Beam	Κ
M	Bearing	
RG	Building Restriction Line	L
RL	Bottom	LDGF
TM TMN	Between	LG
TWN		LOC
		LP
, 	0	LSL
EM ID	Cement	LT
IP J	Cast In Place Control Joint	LWC
J NJT	CONSTuction Joint	
L	Center Line	М
LG	Ceiling	
LR	Clear	MAN MAS
MU	Concrete Masonry Unit	MATI
OL	Column	MAX
ONC	Concrete	MDO
ONN	Connection	MDF
ONST	CONSTuction	MEC
ONT	Continuous	MEM
OORD	Coordinate	MEP
ORR R	Corrugated	MFG
SK	Cold Rolled Countersunk	MIL
TD	Centered	MIN
TR	Center	MISC MO
	3	MOD
)		MTL
	Depth	
TLS	Details	N
TL	Detail	N/A
IA	Diameter	NEC
IM	Dimension	NIC
L	Dead Load	NOM
N C	Down	NTS
S WGS	Down Spout	NWC
WLS	Drawings Dowels	
	20010	0
		OA
A	Each	OC
J	Expansion Joint	OD
L	Elevation	O.D.
LEV	Elevation	OBN
MBDMT	Embedment	OPN( OPP
os	Edge of Slab	OPP
POXY'D	Epoxyed	Р
Q	Equal	<u>-</u>
QUIP	Equipment	PERF P.L.
W	Each Wat	P.L. PL
XIST XP BLT	Existing  Expansion Bolt	PLYV
XP BL I	Expansion Bolt Exterior	PR
Λ1 TR	Existing to remain	PREF
IIX	-Moding to romain	PREF
		PSF
	Flace Desire	PSI
DNI DNI	Floor Drain	PT
DN F	Foundation Finish Floor	PTD
F HC	Finish Floor Fire Hose Cabinet	P.T.
IN	Finish	
LR	Floor	R
.R.	Fire Rated	R
т.	Foot	RAD

**PREFAB** 

**PREP** 

RCP

**REBAR** 

**REFURB** 

REINF

**RELOC** 

REQD

RFVC

RO

REF

FT

FTG

FV

GΑ

GB

GEN

GI

GLS

GMU

GND

GYP BD

GR

GALV

Foot

Footing

Gauge

Galvanized

General

Glass

Ground

Grade

Grade Beam

Galvanized Iron

Gypsum Board

Glazed Masonry Unit

Galvinized Sheet Metal

Field Verify

Prefabricated

Pounds per Square Foot Pounds per Square Inch

Pressured Treated

Reflected Ceiling Plan

Prepare

Point

Riser

Radius

Roof Drain

Reference

Refurbish

Require

Cabinet

Reinforcing

Relocate/Relocated

Recessed Fire Valve

Rough Opening

Painted

High Hardware HDR Header **HORIZ** Horizontal High Point Height **HWD** Hardwood International Building Code Inside Diameter INDO Information INSUL LDGR Ledger Long LOC Location Low Point Laminated Strand Lumber Lightweight Concrete LWC **MANUF** Manufacturer MAS Masonry **MATL** MAX Maximum MDO Medium Density Overlay MDF Medium Density Fiber MECH Mechanical MEMB Membrane MEP Mechanical, Electircal and Plumbing MFG Manufacturer Thickness Minimum Miscellaneous MO Masonry Opening MOD Modified MTL NEC Necessary Not in Contract NOM Nominal NTS Not to Scale **NWC** Normal Weight Concrete Over All On Center Outside Diam. O.D. **Overflow Drain** Opposite Hand **OPNG** Opening OPP Opposite **PERF** Perforated P.L. **Property Line** Plate **PLYWD** Plywood Pair

S.A.B. Sound Attenuation Board SCHED Schedule SECT Section Square Feet SHT'G Sheating SIM Similar SISTER'D Sistered Structural Opening SOG Slab on Grade **SPEC** Specification SQ SSquare S.S. Stainless Steel SSF Solid Surface STAGGER'D Staggered STD Standard STIDD Stiffener STIR Stirrup Sound Transmission Class STC STL STRUCT Structural SYM Symmetrical SYS System Tread TAPER'D Tapered Towel Bar T&B Top and Bottom T&G Tongue and Groove THK Thick THRU Through TJI'S Trus Joist I Joist TO Top of TOB Top of Beam TOC Top of Concrete **TOCB** Top of Curb TOG Top of Footing

TOM Top of Mullion TOS Top of Slab TOSTL Top of Steel Toilet Paper Holder Towel Ring Top of Wall TYP Typical Under Counter Underground U.L. Underwriters Laboratory U.N.O. Unless Noted Otherwise Unprotected, Non Sprinklered UP, NS

VAR Varies **VERT** Vertical V.I.F. Verify In Field

With W/O Without Width Waterproof(ing) Wood Wide Flange Wind Load Work Point Work Point Point of Origin WP1 Work Point - Numbered W.R. Weather/Water Resistant Welded Wire Fabric

#### **GENERAL NOTES**

- ALL WORK IS TO BE DONE IN CONFORMANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
- 2. CONTRACTOR SHALL CONFORM TO ALL O.S.H.A. REQUIREMENTS
- 3. CONTRACTOR TO VISIT SITE AND COMPLETELY FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS PRIOR TO EXECUTION OF ANY CONSTRUCTION, CONTACT DESIGNER PRIOR TO EXECUTING ANY WORK IN QUESTION.
- 4. CHECK ALL DIMENSIONS ON JOB AND FULLY VERIFY PRIOR TO EXECUTION. ALL WORK TO BE FULLY EXECUTED IN ACCORDANCE WITH ALL GOVERNING CODES AND REGULATIONS. ALL ELEVATIONS GIVEN ARE APPROXIMATE AND ARE GIVEN FOR "RELATIONAL" PURPOSES. CONTRACTOR SHALL ESTABLISH EXACT LEVELS PRIOR TO START OF WORK AND NOTIFY DESIGNER OF ANY SIGNIFICANT DISCREPANCIES. CONTRACTOR TO PROVIDE SHOP DRAWINGS, COLOR SCHEDULES AND SELECTIONS FOR APPROVAL BY DESIGNER PRIOR TO EXECUTION.
- DEMOLITION: TO BE PROVIDED BY CONTRACTOR AS REQUIRED. COMPLETELY REMOVE ALL TRASH FROM SITE. 6. UTILITIES: COORDINATE AND PROVIDE AS PER DRAWINGS.
- 7. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS/ VENDOR DATA SUBMITTAL SCHEDULE TO DESIGNER FOR REVIEW AND APPROVAL WITHIN THIRTY (30) DAYS FROM COMMENCEMENT OF WORK. SUBMIT TWO (2) COPIES TO
- 8. CONTRACTOR SHALL NOT SCALE DRAWINGS AND DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS SHALL BE REPORTED TO DESIGNER FOR CLARIFICATION PRIOR TO COMMENCEMENT OF WORK
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INCLUSION OF ALL WORK NECESSARY FOR A COMPLETE INSTALLATION WHETHER SUCH WORK IS OR IS NOT INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
- 10. ALL MANUFACTURED ITEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 11. WARRANTIES, GUARANTEES AND MANUFACTURER'S INSTRUCTIONS ON EQUIPMENT FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE GIVEN TO THE OCCUPANT.
- 12. CONTRACTOR SHALL PROVIDE PROTECTION ON A DAILY BASIS FOR ALL WORK THAT PENETRATES THE EXISTING ROOF
- MATERIAL. CONTRACTOR MAY COVER ALL WORK UNTIL WATER/WEATHER PROOF UNTIL COMPLETION OF CONSTRUCTION.
- 13. ALL WOOD FRAMING EXPOSED TO THE WEATHER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA 14. IN AREAS WHERE THE DRAWINGS DO NOT ADDRESS METHODOLOGY, THE CONTRACTOR SHALL BE BOUND TO PERFORM IN
- STRICT COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. 15. IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS, THEIR
- CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE SHOWN OR NOTED. 16. THE DESIGNER WILL NOT BE RESPONSIBLE FOR AND WILL NOT HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE
- WORK. THE DESIGNER WILL NOT BE RESPONSIBLE FOR THE FAILURE OF THE CLIENT OR HIS CONTRACTORS, SUBCONTRACTORS, OR ANYONE PERFORMING ANY OF THE WORK, TO CARRY OUT THE WORK IN ACCORDANCE WITH THE APPROVED CONTRACT DOCUMENTS.
- 17. All CONCRETE DETAILS AND CONSTRUCTION ARE TO COMPLY WITH LATEST A.C.I. CODE AND LOCAL CODES
- 18. APPROVAL OF THESE DRAWINGS BY GOVERNING AUTHORITIES DOES NOT RELEASE THE CONTRACTOR FROM COMPLYING WITH ALL APPLICABLE CODES AND STANDARDS.
- 19. ALL NOTES ON THIS DRAWING APPLY FOR THE ENTIRE PROJECT WHETHER OR NOT REPEATED ON OTHER DRAWINGS.
- 20. WHERE NEW WORK IS TO BE DONE. CARE SHALL BE TAKEN TO PROTECT ALL EXISTING ADJACENT SURFACES AND AREAS FROM DAMAGE. ANY AREAS DAMAGED DURING CONSTRUCTION OR DEMOLITION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE CLIENT. THIS APPLIES PARTICULARLY TO ADJACENT SPACES, ROOF, AND OTHER EXTERIOR AREAS AND SURFACES.
- 21. THE OWNER WILL CONSIDER FORMAL REQUESTS FROM THE CONTRACTOR FOR SUBSTITUTION OF PRODUCTS, MATERIAL OR MANUFACTURERS. THESE REQUESTS SHALL ACCOMPANY BUT NOT BE INCLUDED IN THE BASE BID ON THE SPECIFIED BID DUE DATE. SUBMIT TWO (2) COPIES OF REQUEST FOR SUBSTITUTION.
- 22. ONLY NEW, FIRST CLASS MATERIALS WILL BE USED (EXCEPT AS NOTED). ALL WORK AND EQUIPMENT SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE EXCEPT FOR MANUFACTURER'S GUARANTEES WHICH MAY BE LONGER.
- 23. ALL GYPSUM BOARD SHALL BE TAPED, SPACKLED AND SANDED SMOOTH PRIOR TO FINISHING, METAL BEADING SHALL BE USED ON ALL OUTSIDE CORNERS WHERE APPLICABLE.
- 24. THE GENERAL CONTRACTOR SHALL BEAR FULL RESPONSIBILITY AND COSTS FOR THE FOLLOWING:
- A. PERMITS, LICENSES, INSPECTIONS AND FEES (ALL IMPACT FEES).
- B. TEMPORARY POWER AND UTILITIES.
- C. TRASH REMOVAL. D. LIABILITY AND WORKMEN'S COMPENSATION INSURANCE, ETC.
- E. AND OTHER ITEMS INDICATED IN SPECIFICATIONS.
- F. SHORING
- 25. ALL PENETRATIONS THROUGH EXISTING ROOF SHALL BE SEALED IN PITCH POCKETS AT PIPING, CONDUIT, ETC.; FLASH DUCTS AND CRUBS.
- 26. REMOVAL, DISPOSAL, ALTERATION AND RELOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT, CONDUITS, PIPES AND DUCTS ARE INCLUDED IN THE WORK.

### **FOUNDATION NOTES**

- 1. THE CONTRACTOR SHALL FIELD ASSES AND DETERMINE THE METHOD FOR EXCAVATION, SHORING AND FORMING NEW FOOTINGS AND FOUNDATION WALLS.
- 2. THE EXCAVATION CONTRACTOR WILL USE ALL NECESSARY PRECAUTIONS WHEN EXCAVATINGAT OR NEAR EXISTING BUILDING FOUNDATIONS/ TREES/ ETC.



Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the

dimensions and conditions

Checked by

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12.06.21

#### **GENERAL DEMOLITION NOTES**

A. CONTRACTOR TO VERIFY IN FIELD EXISTING CONDITIONS. ANY DEFIATION FROM THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER/ENGINEER IMMEDIATELY. B. BUILDING AND SITE WILL BE CONTINUED OPERATIONS DURING DEMOLITION AND REMODELING PHASES.

C. THE DEMOLITION PLAN AND EXISTING CONDITIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND INCLUDE IN THEIR BID. ITEMS WHICH ARE INTENDED TO BE REMOVED, RELOCATED, OR SALVAGED ARE SHOWN AS DIAGONAL LINES. ALL OTHER ITEMS ARE INTENDED TO REMAIN IN PLACE.

D. COORDINATE DEMOLITION AND REPAIRS, PROVIDE TEMPORARY ROOFING AS REQUIRED. DO NOT LEAVE ANY AREAS EXPOSED TO ELEMENTS, WITHOUT TEMPORARY ROOFING. E. DEMOLITION SHALL INCLUDE, BUT IS NOT LIMITED TO, THE TIMES IDENTIFIED. THE CONTRACTOR SHALL COORDINATE ALLREQUIRED RENOVATION AND NEW CONSTRUCTION WITH THE EXISTING BUILDING TO IDENTIFY THE TOTAL EXTENT OF THE DEMOLITION REQUIRED AND AS LISTED HERE-IN.

F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL EXISTING BUILDING COMPONENTS, MATERIALS, EQUIPMENT, AND APPURTENANCES AS REQUIRED TO BUILD, ERECT, INSTALL, OR ACCOMODATE ALL NEW CONSTRUCTION, WITH THE CONTRACTING OFFICE HAVING FIRST RIGHT OF REFUSAL ON ALL REMOVED ITEMS. G. ITEMS NOTED TO BE REMOVED AND SALVAGED OR REINSTALLED SHALL BE CAREFULLY REMOVED BY THE CONTRACTOR WITHOUT DAMAGE AND STORED OR REINSTALLED ON THE SITE AS DIRECTED. REMOVED AND SALVAGED ITEMS SHALL REMAIN THE PROPERTY OF THE OWNER. H. IN THE EVENT THE CONTRACTOR ENCOUNTERS ON THE SITE MATERIAL REASONABLE BELIEVED TO BE ASBESTOS, LEAD-BASED PAINT, OR ANY HAZARDOUS MATERIAL WHICH HAS NOT BEEN RENDERED HARMLESS, THE CONTRACTOR SHALL IMMEDIATELY REPORT THE CONDITION TO THE OWNER AND PROPER ABATEMENT SHALL BE DONE. I. THE CONTRACTOR IS RESPONSIBLE FOR THE ERECTION, MAINTENANCE AND REMOVAL OF ALL

APPROVED

**Montgomery County** 

**Historic Preservation Commission** 

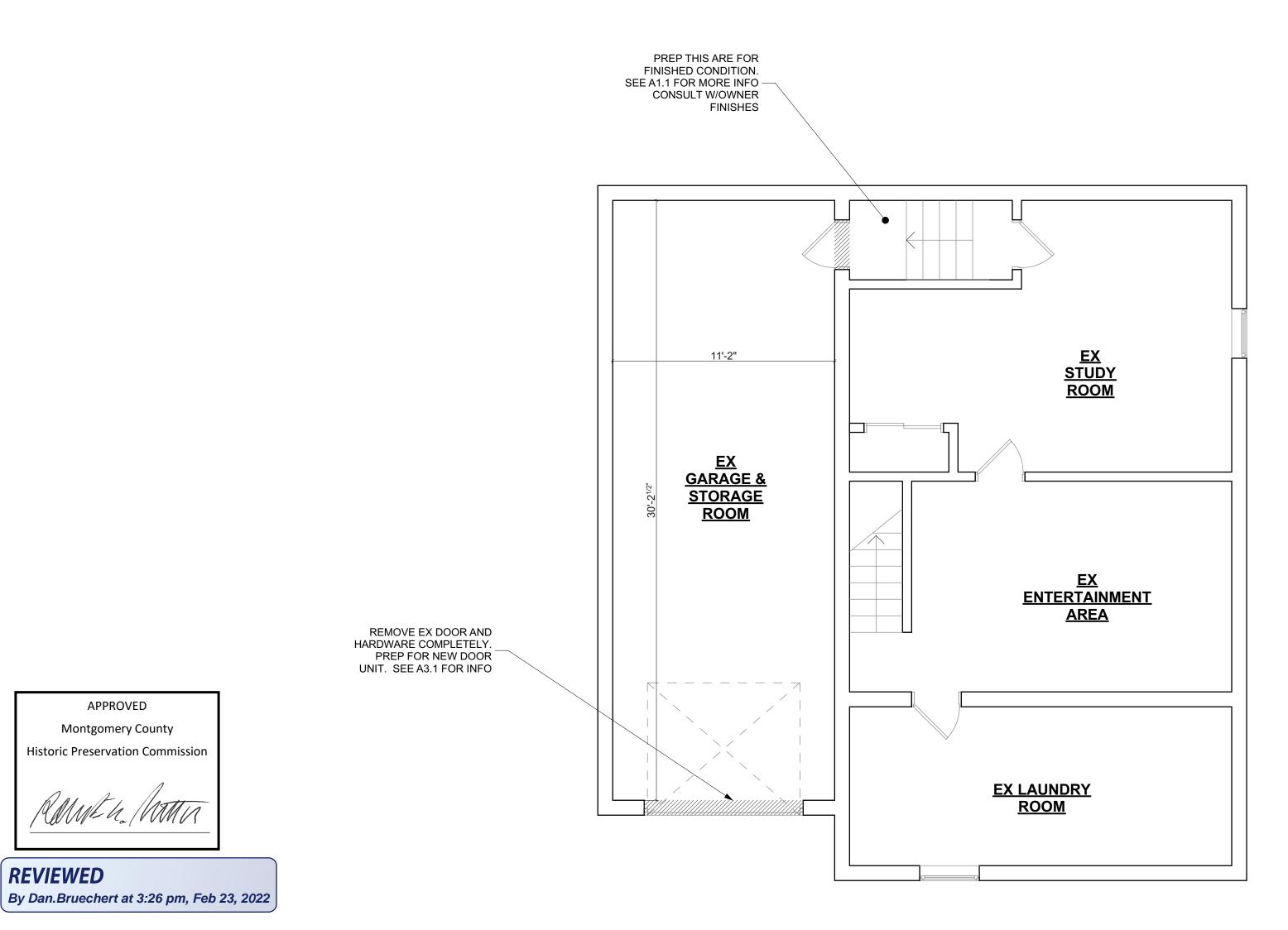
REVIEWED

CONSTRUCTION ASSISTANCE DEVICES SUCH AS SCAFFOLDING AND BARRIERS.

#### **DEMOLITION LEGEND**

ITEMS TO BE COMPLETELY DEMOLISHED

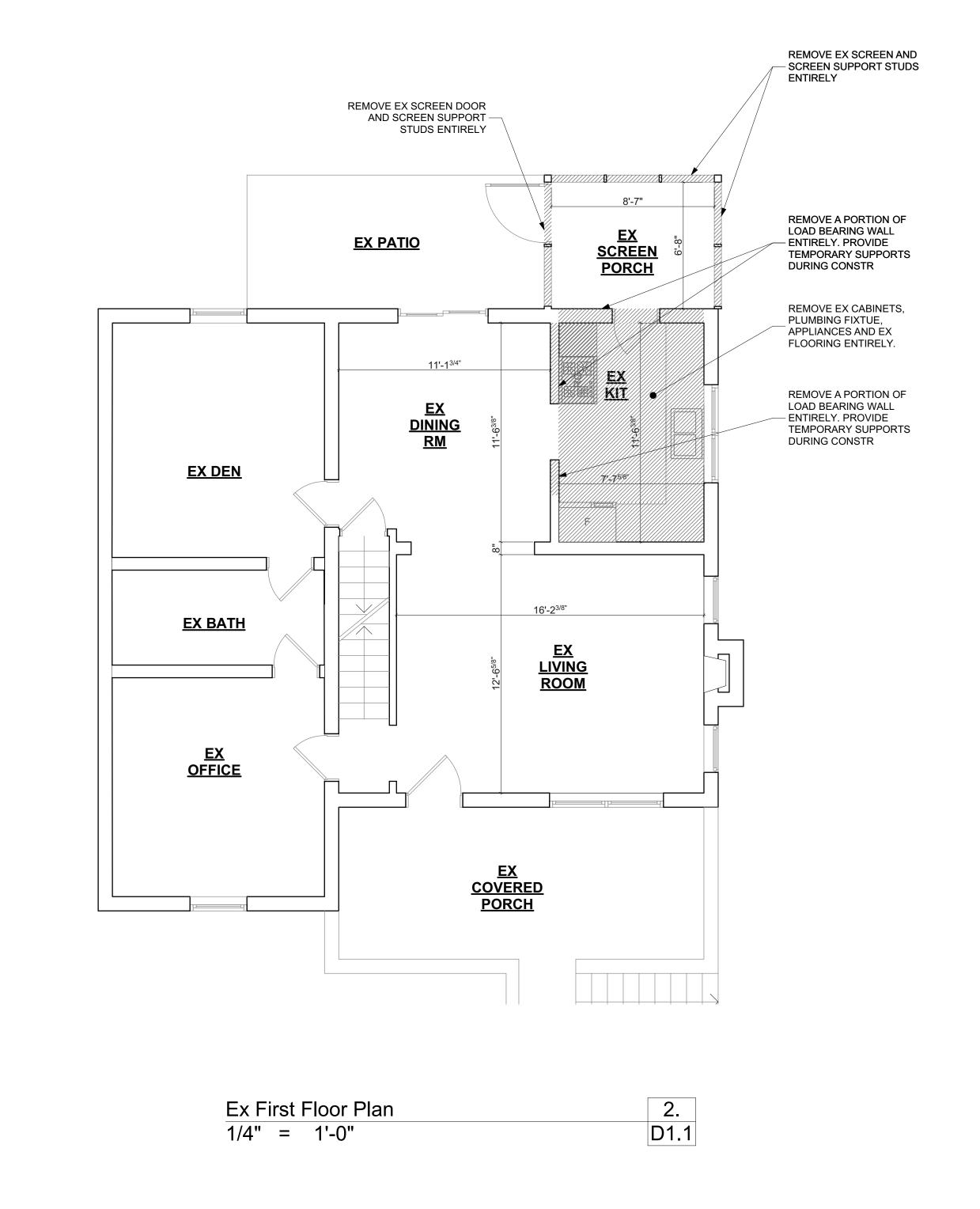
ITEMS TO REMAIN AS IS



Ex Basement Floor Plan

D1.1

1/4" = 1'-0"





Diamond

Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the 12.06.21

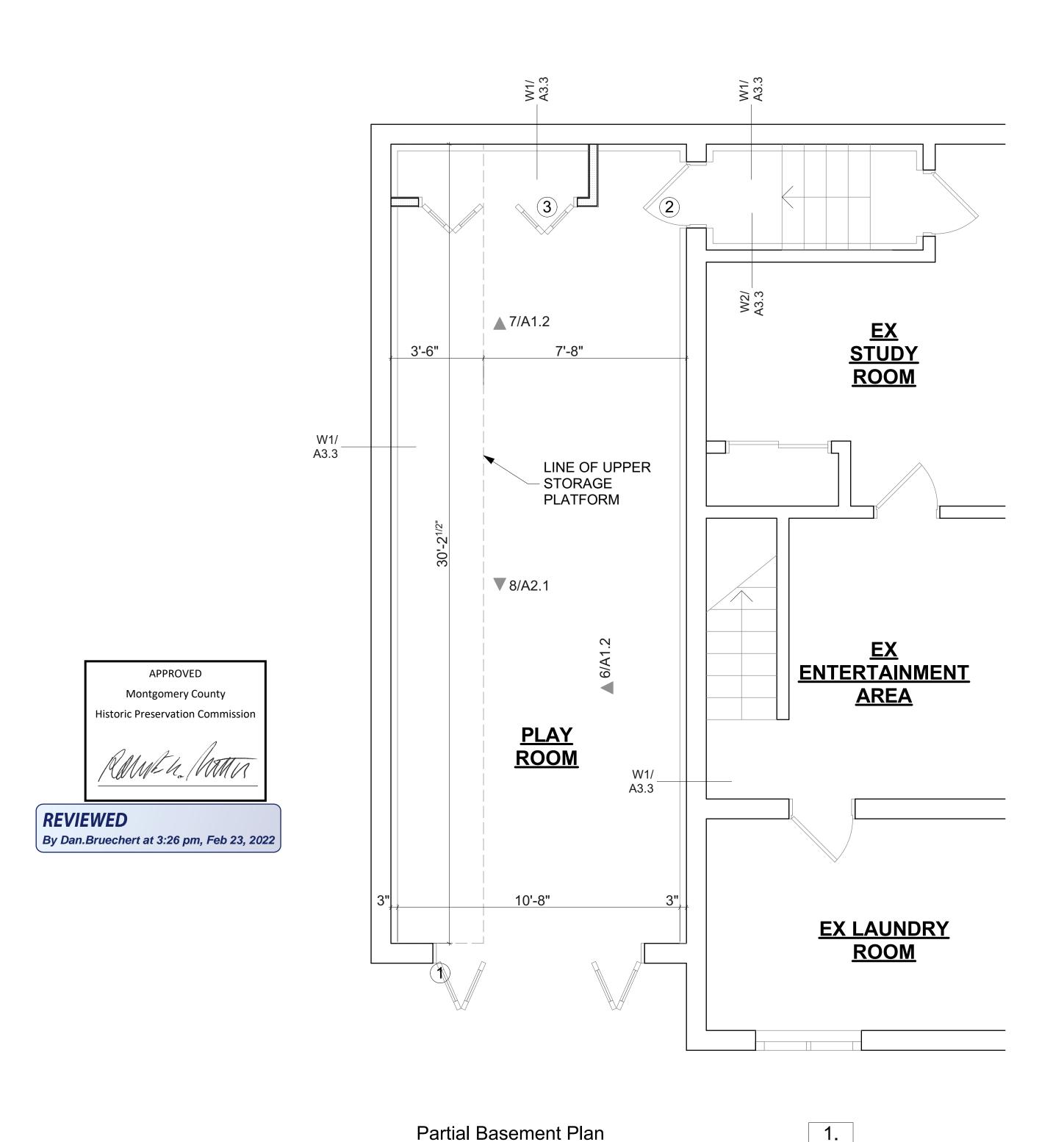
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D1.1

#### **GENERAL NOTES:**

- 1. STUD MEASUREMENTS ARE FROM UNFINISHED MATERIAL TO UNFINISHED MATERIAL.
- 2. COORDINATE ALL FINISH MATERIALS AND ALL FINAL PRODUCTS WITH OWNER.
- 3. ALL MEASUREMENTS NEED TO BE VERIFIED IN FIELD.
- 4. UNLESS OTHERWISE NOTED, ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR CONDITIONS ELSEWHERE
- 5. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE DRAWINGS AND OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER BEFORE PROCEEDING WITH ANY WORK INVOLVED
- 6. THE CONTRACTOR SHALL VERIFY ALL JOB SITE CONDITIONS AND RELATED DIMENSIONS PRIOR TO CONSTRUCTION
- 7. COMPLIANCE WITH CODES AND ORDINANCES GOVERNING THE WORK SHALL BE MADE AND ENFORCED BY THE GENERAL CONTRACTOR
- 8. MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION OF MATERIALS SHALL BE **FOLLOWED**
- 9. NO WORK OR ORDERING OF MATERIAL MAY BE STARTED UNTIL ALL DIMENSIONS AND
- MEASUREMENTS WHICH MAY BE FOUND INDICATED ON DRAWINGS HAVE BEEN VERIFIED.

- 10. NO PLANS SHALL BE SCALED; DIMENSIONS SHALL BE USED
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTION AND MISALIGNMENT ACCORDING TO APPLICABLE CODES AND STANDARDS
- 12. THE CONTRACTOR SHALL REPAIR AND RESTORE TO ITS ORIGINAL CONDITION ALL WORK AND ITEMS DAMAGED AS A RESULT OF BUILDING OPERATIONS AND SHALL LEAVE THE WORK COMPLETED TO THE TRUE INTENT OF THE DRAWINGS AND SPECIFICATIONS AND THE SATISFACTION OF THE DESIGNER AND OWNER.
- 13. ANY DISTURBANCE OR DAMAGE TO THE EXISTING BUILDING OR UTILITIES RESULTING EITHER DIRECTLY OR INDIRECTLY FROM THE OPERATION OF THESE DRAWINGS SHALL BE PROMPTLY REPAIRED, RESTORED OR REPLACED TO THE SATISFACTION OF THE DESIGNER AT NO ADDITIONAL COST TO THE OWNER
- 14. ALL TRANSITIONS OF NEW WORK TO EXISTING (WALLS, FLOORS AND CEILINGS) WORK SHALL BE CAREFULLY EXECUTED. EXISTING CONSTRUCTION SHALL BE REPAIRED AS NEEDED AND PATCHED TO MATCH FINISHES OF ADJACENT SURFACES



3/8" = 1'-0"

A1.1

AND PLUMBING DRAWINGS FOR ALL NECESSARY OPENINGS AND PENETRATIONS THROUGH WALLS, CEILINGS AND FLOORS EXISTING WALL TO REMAIN 16. ALL EXPOSED PIPES, CONDUITS OR DUCTS IN FINISHED AREAS, WHETHER SHOWN NEW PARTION WALL ON DRAWINGS OR NOT, SHALL BE FURRED OUT WITH GYP BD 17. ALL PLUMBING, ELECTRICAL AND MECHANICAL WORK WHICH SHALL BE ABANDONED FOR PROPOSED CONSTRUCTION WORK SHALL BE CUT BACK, REROUTED, CAPPED AND SAFED OFF 18. ALL MATERIALS AND CONSTRUCTION TO BE INCORPORATED IN THE WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE ASTM SPECIFICATIONS APPLICABLE AND SHALL CONFORM TO THE STANDARDS AND RECOMMENDATIONS OF THE VARIOUS TRADE INSTITUTES (A.C.I., A.I.S.C., ETC) **EXT WALL** 2X4'S 16" OC W/ TYVEK ON 1/2" SHTG & FOAM INSUL BTWN STUDS = R-20 DOG HATCH. SEE SPECS FOR MORE INFO 8'-4<sup>7/8</sup>" **1/2 WALL** 4'-6<sup>1/2</sup>" 4'-6<sup>1/2</sup>" 2X4'S 16" OC W/ 1/2" GYP **BD EA SIDE** 3/A1.2 **EX PATIO** 1'-6" 6" 4'-0<sup>3/8</sup>" A3.3 W3/ A3.3 FURR WALL AT - THIS LOCATION TO BE LEVEL W/EX 10'-8<sup>3/8</sup>" 2'-0" EX KIT **DINING** 4/A1.2 16'-2<sup>3/8</sup>" LIVING ROOM EX COVERED <u>PORCH</u> Partial First Floor Plan 2. 3/8" = 1'-0" A1.1

15. THE CONTRACTOR SHALL COORDINATE THE WORK WITH MECHANICAL, ELECTRICAL,

**WALL LEGEND** 

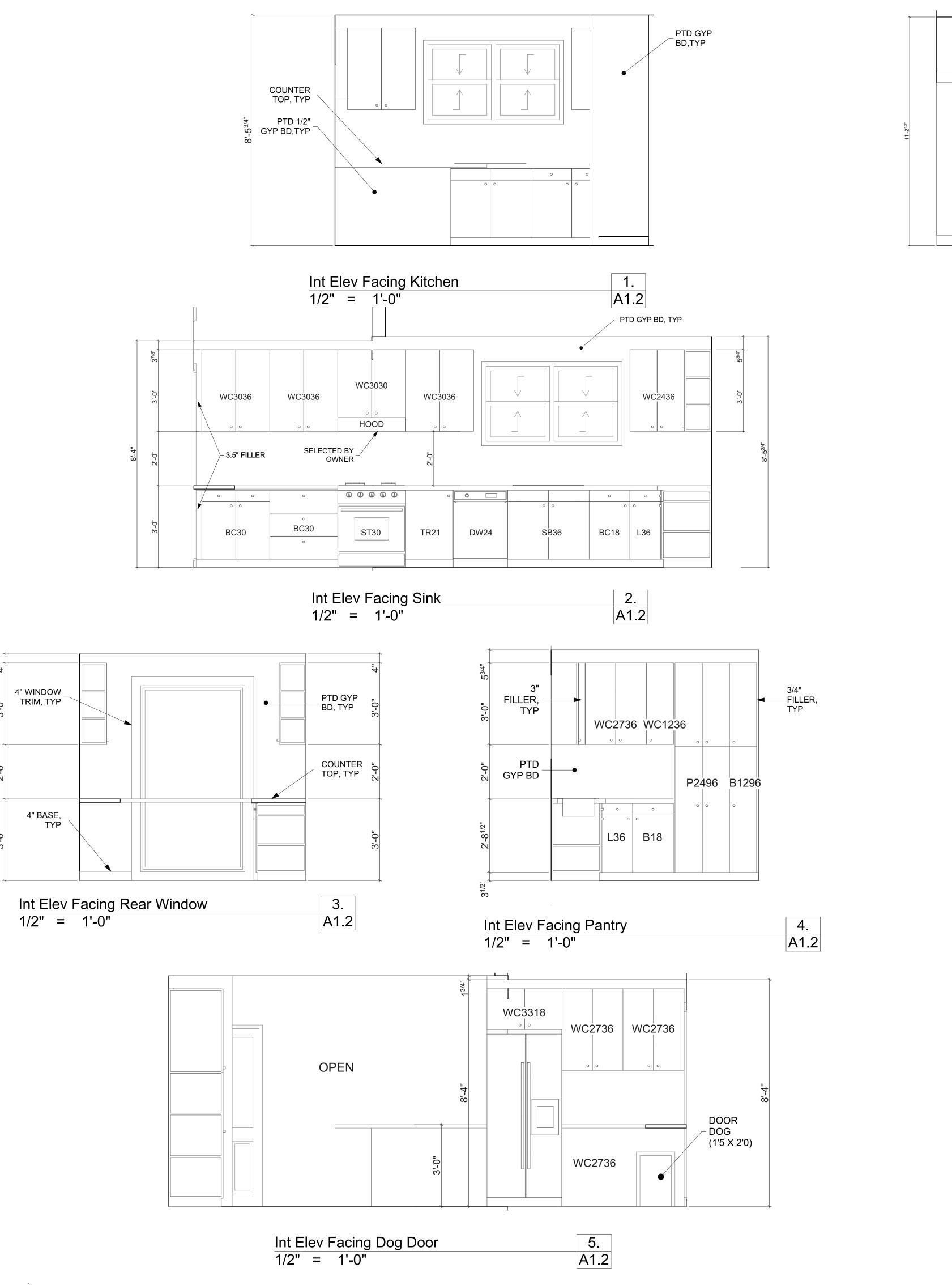
CREATIVE IDEAS FOR YOUR LIVING SPACES 10739 Tucker St #260 Beltsville MD 20705 301.579.4563

Diamond

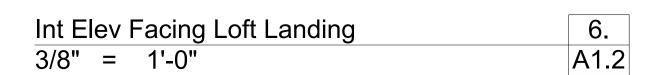
have precedence over scale dimensions. Contractor shall verify and be responsible for all

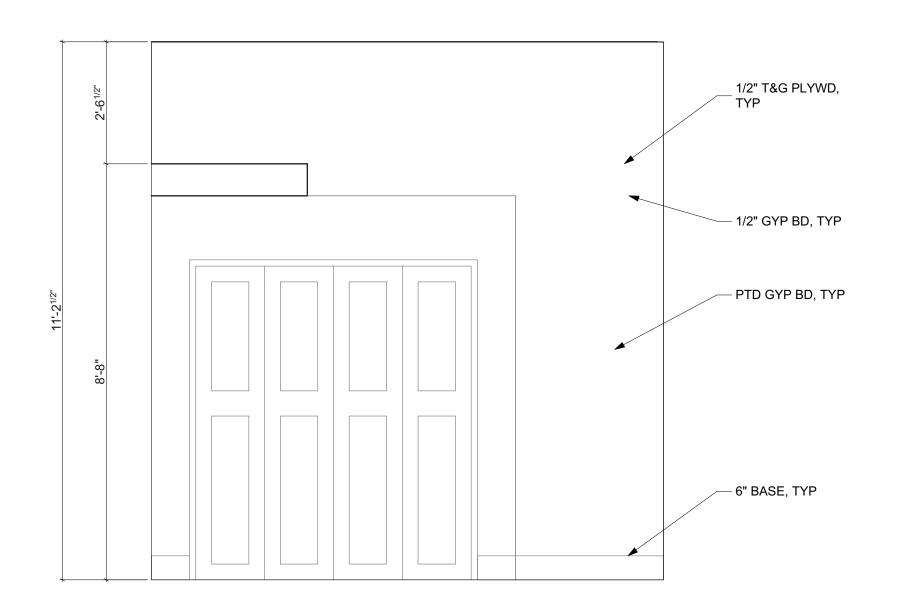
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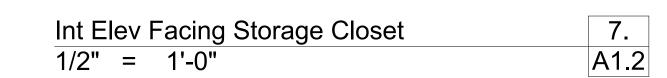
**A1.1** 

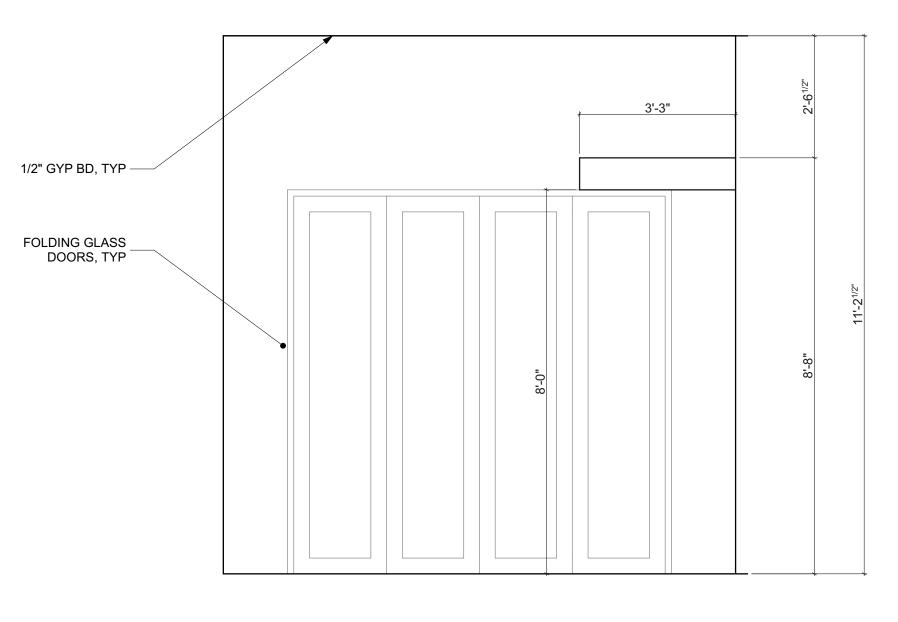


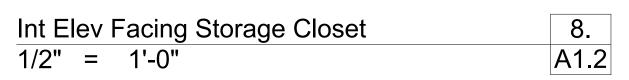














REVIEWED

By Dan.Bruechert at 3:26 pm, Feb 23, 2022

OPEATIVE IDEAS FOR YOUR LIVING SPACES

10739 Tucker St #260

Beltsville MD 20705

301.579.4563

Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

nterior Elevations

Written dimensions on these drawings shall have precedence over scale dimensions.

Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

Drawn by Date

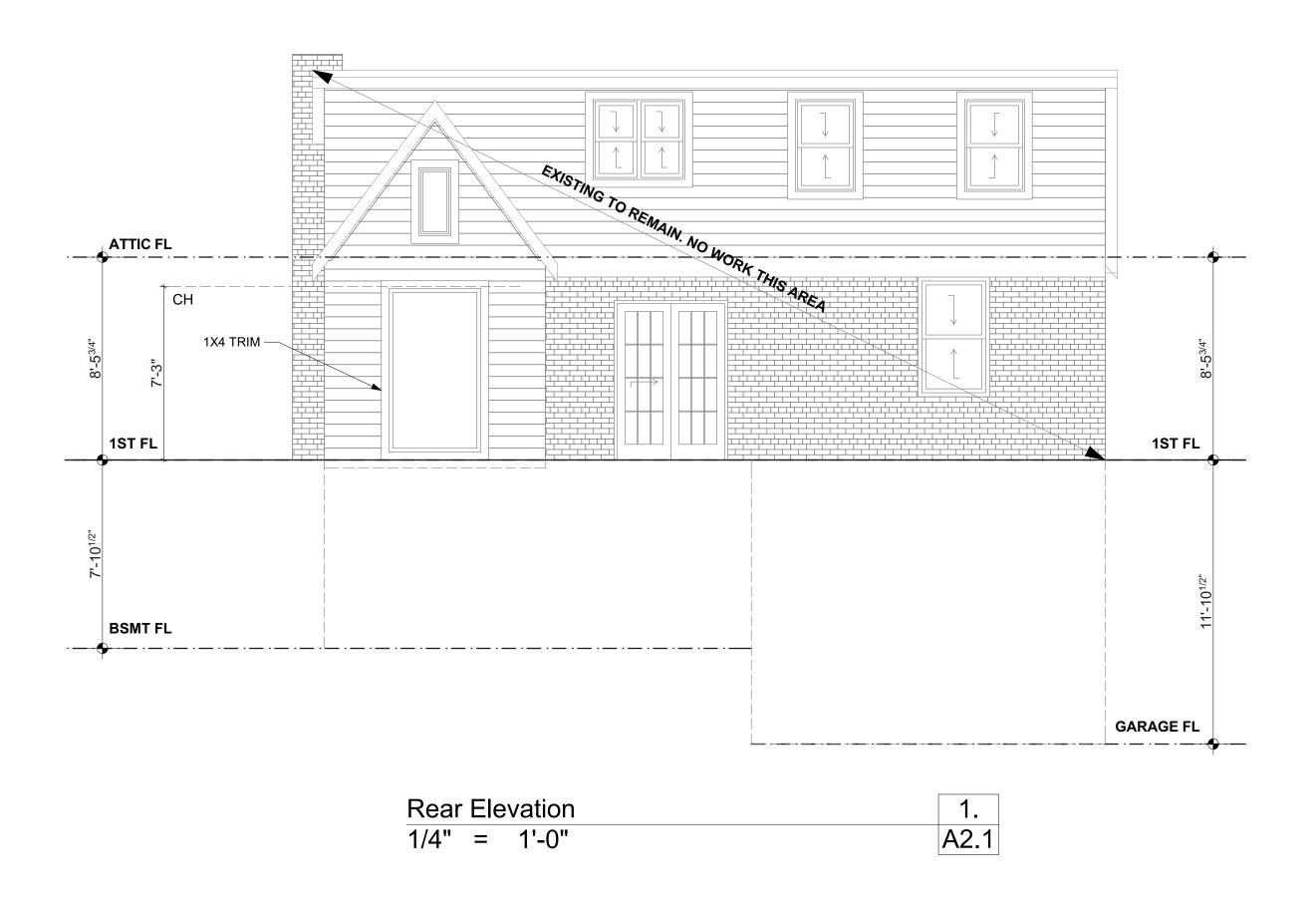
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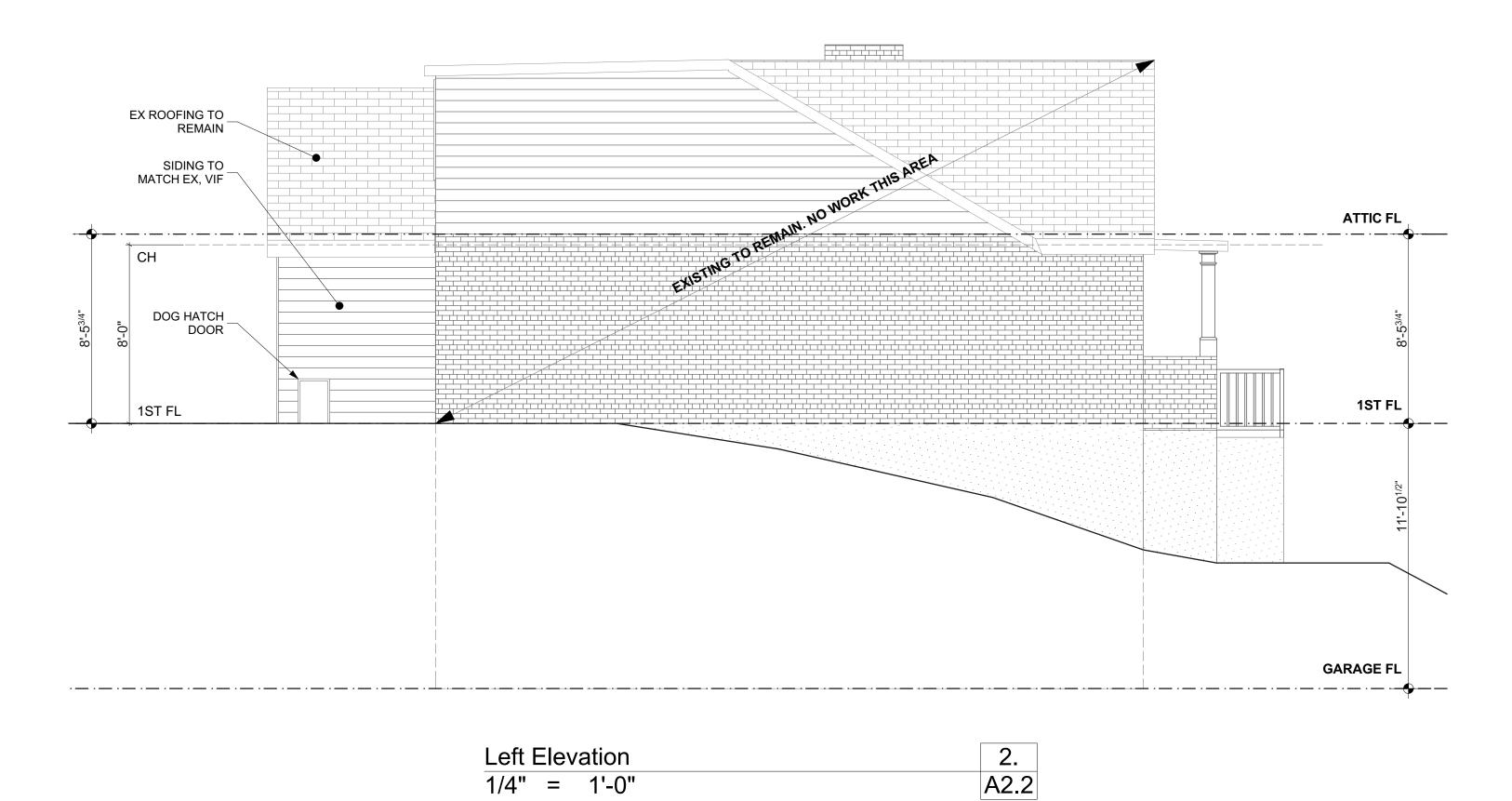
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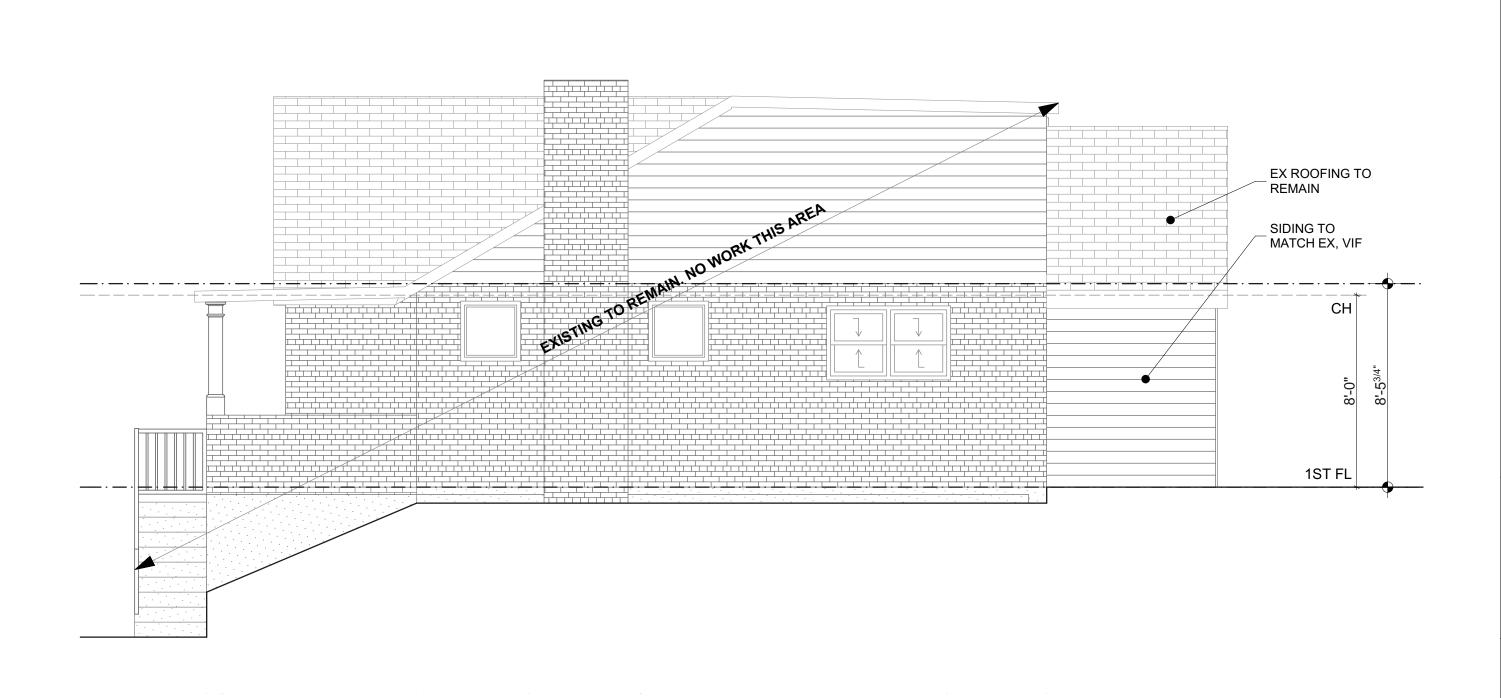
Montgomery County

Historic Preservation Commission

REVIEWED

By Dan.Bruechert at 3:27 pm, Feb 23, 2022





Right Elevation 3. 1/4" = 1'-0" A2.2

CREATIVE IDEAS FOR YOUR LIVING SPACES

10739 Tucker St #260

Beltsville MD 20705

301.579.4563

amond Kesidence 2 VALLEY VIEW AVE (OMA PARK MD 20912

Elevation, Left Elevation, Rear Elevation

Written dimensions on these drawings shall have precedence over scale dimensions.
Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

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A2.2

NO WORK TO THIS AREA

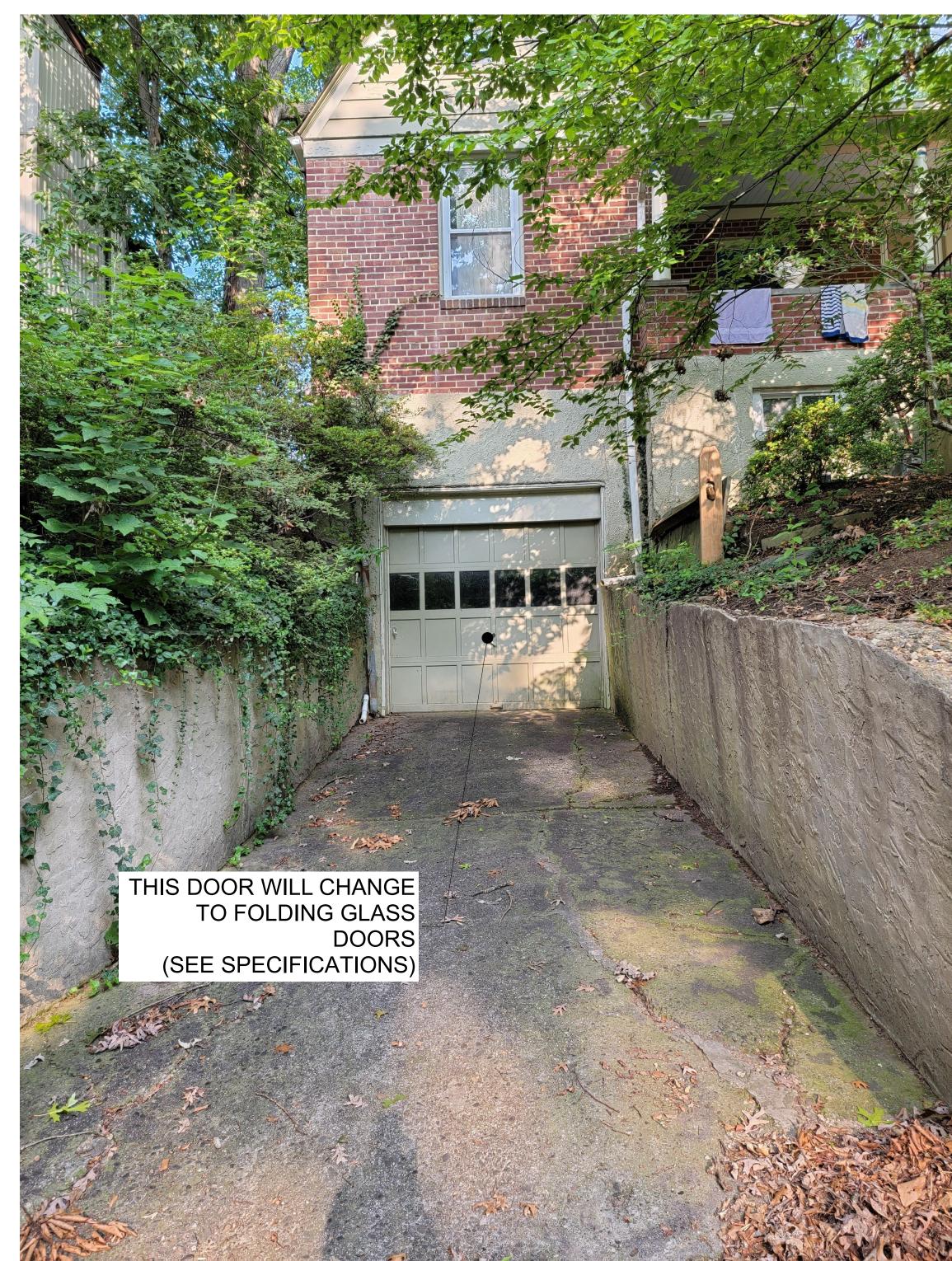




**EXISTING FRONT IMAGE** 



**EXISTING REAR IMAGE** 



10739 Tucker St #260 Beltsville MD 20705 301.579.4563

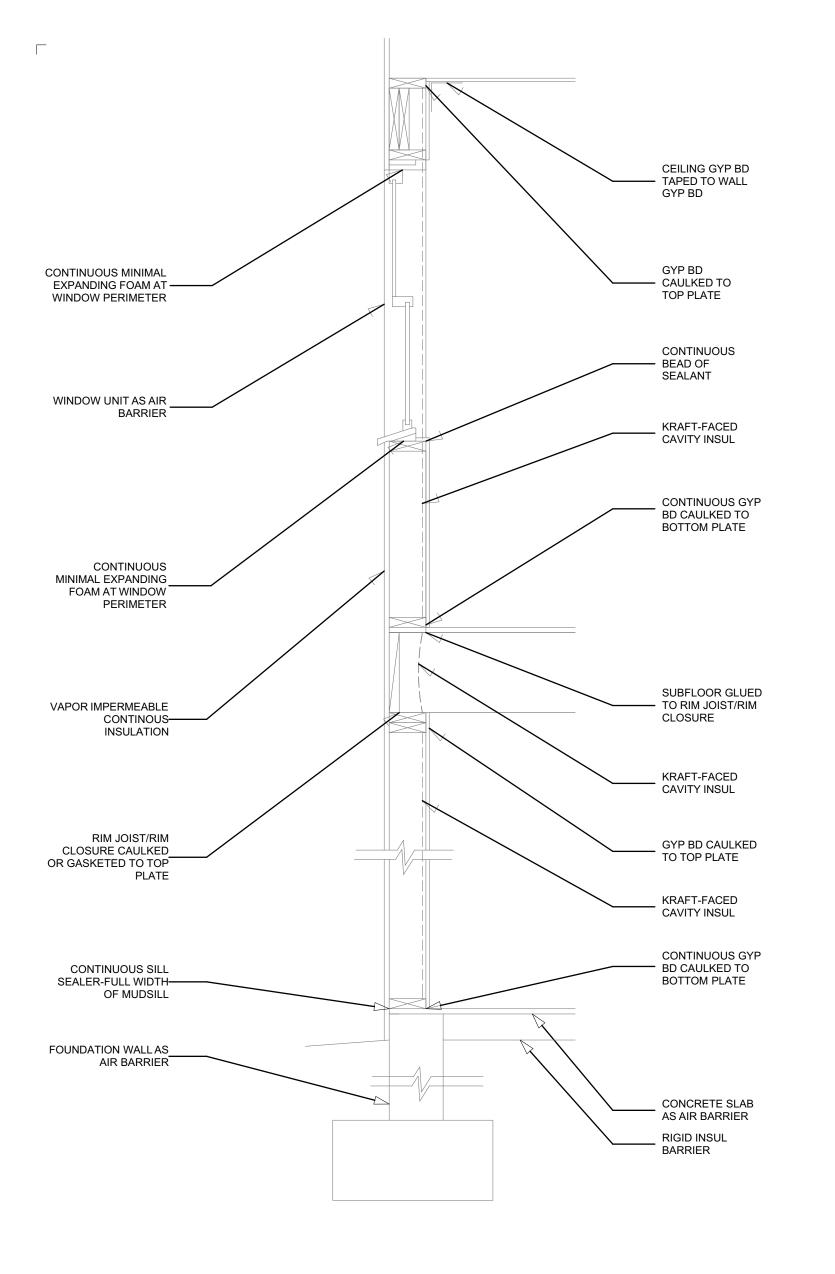
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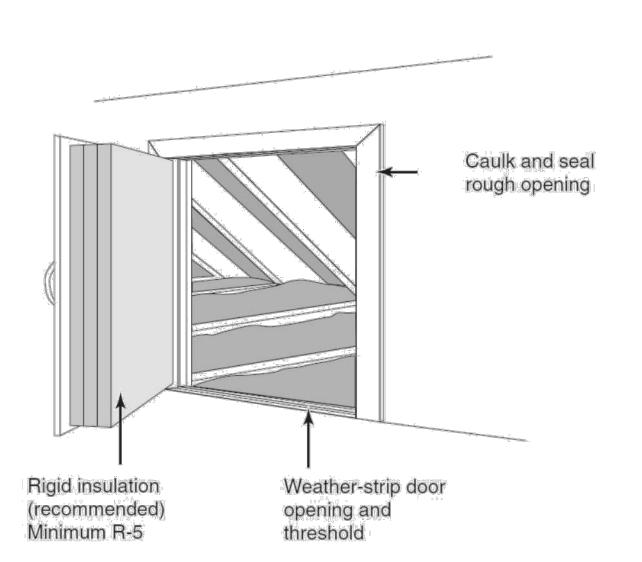
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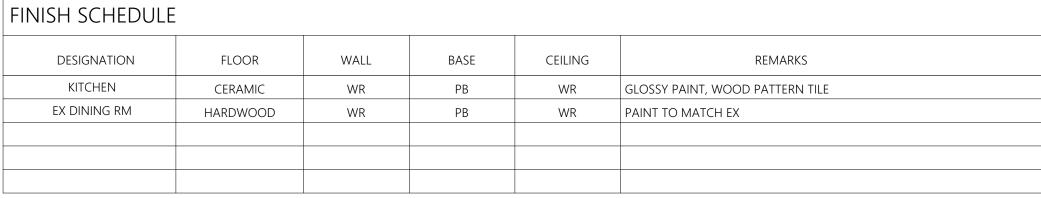
THIS AREA TO BE **ENCLOSED AND** INCORPORATED INTO KITCHEN ALTERATIONS



# BUILDING ENVELOPE SECTION (AIR BARRIER) 1. GRAPHICAL PURPOSES ONLY



ATTIC HATCH DOOR DETAIL



EX - PAINTED EXPOSED JOIST PDW - PAINTED DRYWALL WR - WATER RESISTANT GYP BD

PB - PAINTED BASEBOARD

WINDOW SCHEDULE							
		CAT. NO.	U-FACTOR	FRA	AME	TYPE	INFORMATION
SYM.	QTY.			W	Н		
Α	1		.30	4-6	7-6	FIXED PICTURE	TEMPERED GLASS UNIT

1. WINDOWS SPECIFIED ARE BY: CONSULT W/OWNERS 2. WINDOWS ARE: ALUM, LOW "E" COATING W/ARGON GAS UNLESS OTHERWISE NOTED 3. PROVIDE ALL THE NECESSARY HARDWARE, WEATHER STRIPPING, TRIM PIECES, ETC. 4. PROVIDE SCREENS FOR ALL OPERABLE WINDOWS. COLOR TO BE SELECTED BY OWNER.

5. REFER TO PLANS AND ELEVATIONS FOR WINDOW LOCATIONS. VERIFY SIZES AND QUANTITES. 6. APPLY FOAM BACKER ROD AND CAULK TO EXTERIOR PERIMITER OF TRIM AT SIDING JOINT.

### DOOR SCHEDULE

DOOR				FRAME		DETAIL	S					
DOOR NO	TYPE	HGT	WIDTH	THICK	MATERIAL	FINISH/ COLOR	MATERIAL	FINISH/ COLOR	HEAD	JAMB	QT.Y	REMARKS
1		8'-0"	8'-0"	13/4"	WD/GLS	PAINTED	WOOD	PAINTED			1	EXTERIOR DOOR
2		6'-8"	2'-6"	1 <sup>3</sup> / <sub>8</sub> "	WOOD	PAINTED	WOOD	PAINTED			1	INTERIOR SWING DOOR
3		6'-8"	6'-0"	1 <sup>3</sup> / <sub>8</sub> "	WOOD	PAINTED	WOOD	PAINTED			1	INTERIOR BIFOLD DOOR
						•		1	•		•	

- 1. Check drawings for swing directions and locations.
- 2. All door hardware "TO BE SELECTED BY OWNER" unless otherwised noted 3. Exterior doors are by "Weathershield". Verify with manufacturer prior to install

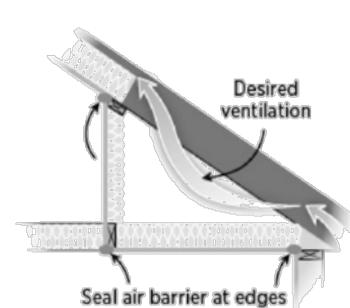
**TABLE R303.1.3(1)** 

4. Shop drawings to be submitted to Designer for approval. 5. Rated doors to have compatible equal rated frames.

DEFAULT GLAZED FENESTRATION <i>U</i> -FACTORS					
FRAME TYPE	SINGLE	DOUBLE	SKYLIGHT		
THAME THE	PANE	PANE	Single	Double	
Metal	1.20	0.80	2.00	1.30	
Metal with Thermal Break	1.10	0.65	1.90	1.10	
Nonmetal or Metal Clad	0.95	0.55	1.75	1.05	
Glazed Block		0.	60		

#### **TABLE R303.1.3(2)**

DEFAULT DOOR U-FACTORS			
DOOR TYPE	<i>U</i> -FACTOR		
Uninsulated Metal	1.20		
Insulated Metal	0.60		
Wood	0.50		
Insulated, nonmetal edge, max 45% glazing, any glazing double pane	0.35		



a baffle shall be installed adjacent to soffit and eave vents. Baffles shall maintain an opening equal or greater than the size of the vent. The baffle shall extend over the top of the attic insulation. The baffle shall be permitted to be any solid material.

Figure 5. Insulate and air seal the kneewall itself, as shown, or along the By Dan.Bruechert at 3:27 pm, Feb 23, 2022 roof line (Source: DOE 2000a).

Montgomery County Historic Preservation Commission

APPROVED

REVIEWED

**BUILDING ENVELOPE DETAIL: AT** ROOF/EAVE/SOFFIT

TABLE R402.4.1.1 AIR BARRIER AND INSULATION INSTALLATION				
COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA		
General requirements	A continuous six-sided air barrier shall be installed in the building envelope.  The exterior thermal envelope contains a continuous air barrier.  Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material. All ceiling, wall, floor and slab insulation shall achieve Grade I installation per the RESNET Standards or, alternatively, Grade II for surfaces that contain a layer of continuous, air impermeable insulation > R5.		
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed.  Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.		
Walls	The junction of the foundation and sill plate shall be sealed.  The junction of the top plate and the top of exterior walls shall be sealed.  Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of not less than R-3 per inch.  Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.		
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed. Doors adjacent to unconditioned space or ambient conditions shall be made substantially air-tight with weather stripping or equivalent gasket.	Continuous exterior insulation shall continue over window and door headers.  Skylight and window chases through unconditioned attic space must be insulated to exterior wall values per table 402.1.2.		
Rim joists	Rim joists shall include continuous air barrier.	Rim joists shall be insulated per Table 402.1.2.		
Floors (including above garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.		
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace walls.		
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.	Duct shafts or chases next to exterior or unconditioned space shall be insulated.		
Narrow cavities		Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.		
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	Walls next to unconditioned garage space shall be insulated.		
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the drywall.	Recessed light fixtures installed in the building thermal envelope shall be air tight and IC rated.		
Plumbing and wiring	Seal any plumbing or wiring that penetrates the building envelope.	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.		
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.		
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.			
Common wall separating dwelling units	Air barrier is installed in common wall between dwelling units.			
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor or drywall.			
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.			
Fireplace	An air barrier shall be installed on fireplace walls.			

An air barrier shall be installed on fireplace walls. a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

### **TABLE R402.1.2**

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT <sup>a</sup>				
Fenestration U-Factor <sup>b</sup> 0.30 U-Factor				
Skylight <sup>b</sup> U-Factor	0.55 <i>U</i> -Factor			
Glazed Fenestration SHGC <sup>b</sup>	0.40 Solar Heat Gain Coefficient (SHGC)			
Ceiling	R-49			
	R-19 in cavity + R-5 continuous on the exterior,			
Wood Frame Wall and Rim Joists	<b>or</b> R-13 in cavity + R-10 continuous on the exterior,			
	or R-15 continuous			
Mass Wall <sup>c</sup>	R-15 continuous on the exterior,			
Wass Wan	or R-20 continuous on the interior			
Frame Floor	R-25 + R-5 continuous			
Elevated Slab R-15 continuous				
	R-19 cavity + R-5 continuous on the exterior,			
<b>Basement Wall</b>	<b>or</b> R-13 in cavity + R-10 continuous on the exterior,			
	or R-15 continuous			
Slab on Grade <sup>d</sup>	R-10 perimeter insulation for a depth of 2 ft.			
	R-19 cavity + R-5 continuous on the exterior,			
Conditioned Crawlspace Wall	<b>or</b> R-13 in cavity + R-10 continuous on the exterior,			
	or R-15 continuous			

For SI: 1 foot = 304.8 mm.

- a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed *R*-value of the insulation shall not be less than the *R*-value specified in the table.
- b. The fenestration *U*-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
- c. The second *R*-value applies when more than half the insulation is on the interior of the mass wall. d. R-5 shall be added to the required slab edge *R*-values for heated slab.

# TABLE R402.4.1.2 MAXIMUM ALLOWED AIR LEAKAGE RATES

	MAXIMUM ALLOWED AIR LEARAGE RATES						
		Level 3 Alteration affecting 80% or more of the aggregate work of the building (Gut Rehabilitation)					
Single family detached, two family attached (duplex), townhouses, flats	3 ACH50	3 ACH50					
3 6	.30 CFM50/SF enclosure area of each unit or 3 ACH50	.30 CFM50/SF enclosure area of each unit or 3 ACH50					

OREATIVE IDEAS FOR YOUR LIVING SPACES 10739 Tucker St #260 Beltsville MD 20705 301.579.4563

Diamond 12 VALLEY VIE TAKOMA PARK

Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this

12.06.21

office must be notified of any variations from the dimensions and conditions.

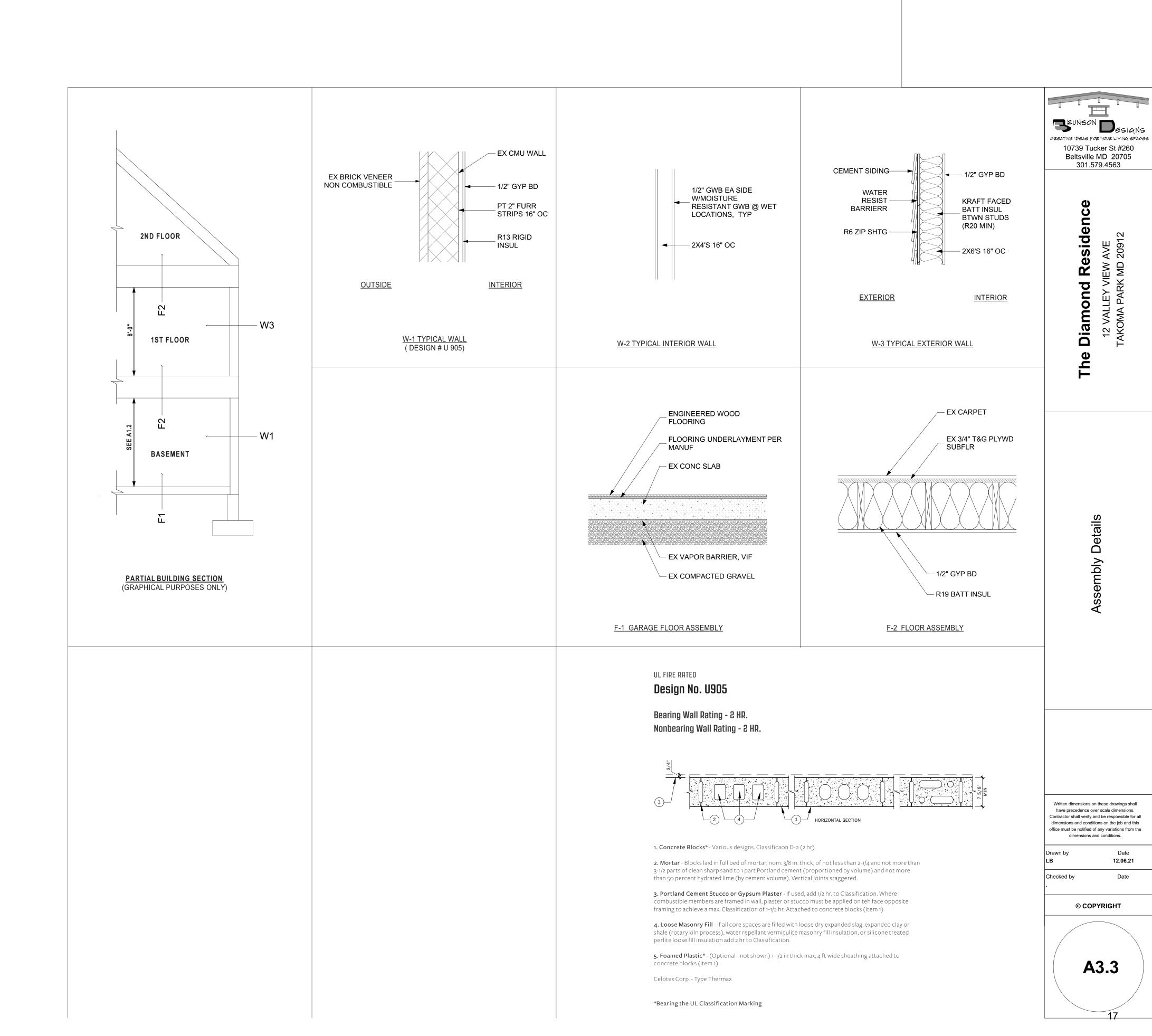
APPROVED

Montgomery County

Historic Preservation Commission

REVIEWED

By Dan.Bruechert at 3:27 pm, Feb 23, 2022



A) DESIGN LOADS FOR NEW WORK 1) FLOOR LIVE LOADS

> A) BEDROOM = 30 PSF = 40 PSF B) LIVING AREAS C) UNHABITABLE ATTICS WITHOUT STORAGE = 10 PSF

ROOF SNOW LOAD

A) Pg = 30 PSF

B) Pf = 18.9 ;MIN PER DCMR = 30 PSF

D) UNHABITABLE ATTICS WITHOUT STORAGE

C) EXPOSURE = B

D) Ce = 0.9E) I = 1.0

F) Ct = 1.0

G) IN ADDITION TO THE FLAT ROOF SNOW LOAD STATED ABOVE, A SNOWLOAD PROVISION FOR DRAFTING SNOW AND SLOPED ROOF HAS BEEN PROVIDED IN ACCORDANCE WITH THE

= 20 PSF

REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE 2017, SECTION 1608.7

WIND LOAD

A) BASIC WIND SPEED (3-SECOND GUST), V = 115 MPH = 1.0

B) IMPORTANCE FACTOR C) EXPOSURE = B

D) BUILDING CATEGORY = ||

ENGINEER PRIOR TO THE IMPOSTION OF SUCH LOADS.

- 4) BRACED WALL PANEL CONSTRUCTION: WSP AND CS-WSP CONTINUOUS SHEATING STRUCTURAL WOOD PANEL PER THE REQUIREMENTS OF THE 2017 INTERNATIONAL RESIDENTIAL CODE SECTION R602.10
- IMPOSED CONSTRUCTION LOADS IN EXCESS OF STATED DESIGN LOADS MUST BE APPROVED BY THE STRUCTURAL
- 6) THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL RESIDENTIAL CODE/2017

#### B) GENERAL

- 1) THE GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL DETERMINE THE SCOPE OF THE STRUCTURAL WORK FROM THE CONTRACT DOCUMENTS TAKEN AS A WHOLE. THE STRUCTURAL DRAWINGS SHALL NOT BE CONSIDERED SEPARATE FOR PURPOSES OF BIDDING THE STRUCTURAL WORK. DUE CONSIDERATION SHALL BE GIVEN TO THE OTHER STRUCTURAL WORK OR WORK RELATED TO THE STRUCTURE, INCLUDING NECESSARY COORDINATION DESCRIBED OR IMPLIED BY THE ARCHITECTURAL, ELECTRIC, PLUMBING AND MECHANICAL DRAWINGS.
- 2) SCALES NOTED ON THE DRAWINGS ARE FOR GENERAL INFORMATION ONLY. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED BY DIRECT SCALING OF THE DRAWING.
- 3) DETAILS, SECTIONS AND NOTES SHOWN ON THESE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR CONDITIONS ELSEWHERE UNLESS OTHERWISE SHOWN OR NOTED.
- 4) THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL RESULTING REVISIONS TO THE STRUCTUAL SYSTEM AS A RESULT OF ACCEPTANCE OF CONTRACTOR PROPOSED ALTERNATIVES OR
- 5) THE GENERAL CONTRACTOR (OR CONSTRUCTION MANAGER) SHALL SUBMIT SHOP DRAWINGS FOR ALL

STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS FOR APPROVAL. THE STRUCTURAL ENGINEER WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT IF THE GENERAL CONTRACTOR FAILS TO OBTAIN APPROVAL OF THE SHOP DRAWINGS. SHOP DRAWINGS ARE REVIEWED AS A CONVENIENCE TO THE GENERAL CONTRACTOR AND ARE NOT A CONTRACT DOCUMENT. THE

GENERAL CONTRACTOR SHALL STATE ON THE SHOP DRAWINGS THAT CONTRACT DOCUMENT REQUIREMENTS HAVE BEEN MET AND THAT ALL DIMENSIONS, CONDITIONS AND QUANTITIES HAVE BEEN REVIEWED AND VERIFIED AS SHOWN AND/OR CORRECTED ON THE SHOP DRAWINGS.

- 6) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY BRACING AND SHORING, AS REQUIRED, TO ENSURE VERTICAL AND LATERAL STABILITY OF THE ENTIRE STRUCTURE OR PORTION THEREOF DURING CONSTRUCTION
- 7) ANY REQUIRED TEMPORARY SHORING SHALL BE IN CONFORMANCE WITH OSHA REGULATIONS. UNBRACED EXCAVATIONS SHALL BE SLOPED NO GREATER THAN (1.5) HORIZONTAL TO (1) VERTICAL
- 8) TEMPORARY BRACING SHALL BE PROVIDED FOR ALL WALLS SUBJECT TO UNBALANCED BACKFILL. BRACE WALL PLUMB UNTIL STABILIZING ELEMENT ABOVE IS IN PLACE.
- 9) ALL WALLS ARE DESIGNED AS LATERALLY BRACED BY THE FLOOR SYSTEMS. CONTRACTOR SHALL ENSURE THAT WALLS ARE ADEQUATELY BRACED DURING CONSTRUCTION.
- 10) INFORMATION SHOWN REGARDING EXISTING CONDITIONS HAS BEEN OBTAINED BY LIMITED VISUAL OBSERVATIONS. AREAS NOT VISIBLE HAVE BEEN ASSUMED TYPICAL WITH OBSERVED EXISTING CONDITIONS.
- 11.) THE CONTRACTOR SHALL MEASURE AND PROVIDE ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AT THE JOB SITE PRIOR TO CONSTRUCTION AND THE SUBMISSION OF SHOP DRAWINGS AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES. VERIFICATIONS AND NOTIFICATION SHALL PROCEED PRIOR TO THE START OF WORK SO THAT ANY NECESSARY CHANGES CAN BE MADE WITHOUT DELAYING THE PROJECT SCHEDULE.

### C) DEMOLITION

1) ALL WORK SHALL BE IN GENERAL COMPLIANCE WITH THE INTERNATIONAL RESIDENTIAL CODE/2017

SHORING SHALL BE IN CONFORMANCE WITH OSHA REGULATIONS.

- 2) FURNISH ALL LABOR AND MATERIAL NECESSARY TO PERFORM THE DEMOLITION WORK IN A COMPLETED MANNER SUCH THAT NEW WORK CAN BE INSTALLED WITH MINIMUM PREPARATION.
- 3) CONTRACTOR SHALL INCLUDE IN THE SCOPE OF WORK ALL ASPECTS OF REQUIRED DEMOLITION, SHORING OF EXISTING STRUCTURE, STAGING THE REPAIR TASKS AND SCHEDULING THE WORK IN A MANNER APPROVED BY THE BUILDING MANAGEMENT, CLEAN UP AFTER
- PORTIONS OF WORK ARE PERFORMED AND CLEAN UP AFTER THE ENTIRE REPAIR IS COMPLETED. 4) CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING REQUIRED FOR DEMOLITION OPERATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF AND PROCEDURES FOR THE REQUIRED TEMPORARY SHORING. TEMPORARY
- 5) THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT DAMAGE OF THE EXISTING STRUCTURE. IN THE EVENT OF DAMAGE, CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND CONTRACT THE STUCTURAL ENGINEER FOR ASSESSMENT OF THE DAMAGE.
- 6) SCHEDULE ALL WORK IN A CAREFUL MANNER WITH ALL NECESSARY CONSIDERATION FOR THE HOME OWNER. ANY DAMAGE TO PERSON OR PROPERTY AS A RESULT OF DEMOLITION AND RELATED WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

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STEEL LINTEL SCHEDULE					
DPENING	SIZE	REMARK			
UP TO 4-FT.	L3 X 3-1/2 X 1/4	LLH			
4-FT. TO 5'-6"	L4 X 3-1/2 X 5/16	LLV			
5′-7″ TD 7′-6″	L5 X 3-1/2 X 5/16	LLV			
7'-7" TD 9'-0"	L6 X 3-1/2 X 5/16	LLV			
9'-1" TD 9'-6"	L7 X 4 X 3/8	LLV			
A Partie					

LLH = LDNG LEG HDRIZDNTAL

LLV = LONG LEG VERTICAL

MIN, 6 IN. BEARING REQUIRED AT EACH END OF LINTEL. BRICK/WALL ANCHORS SHALL BE 16 IN, AT FIRST COURSE ABOVE LINTEL.

VERTICAL LEG OF LINTEL SHALL BE TIGHT TO BACK FACE OF BRICK WITH NO GAPS.

#### **D) FOUNDATION AND SLAB ON GRADE**

- 1) ESTIMATED ALLOWABLE SOIL BEARING PRESSURE FOR SHALLOW FOOTINGS IS 1500 PSF. BEARING CAPACITY SHALL BE FIELD DETERMINED BY A LICENSED GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF CONCRETE. SHOULD UNSUIT ABLEMATERIAL BE ENCOUNTERED, FOOTING SHALL BE OVEREXCAVATEDAND REPLACED WITH LEAN CONCRETE, F'c = 2000 PSI. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE MINIMUM OF 2 FEET 6 INCHES BELOW EXTERIOR GRADE, UNLESS NOTED OTHERWISE.
- 2) THE FOUNDATION FOR THE STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING LATERAL EARTH PRESSURES: b) WALLS SUPPORTED TOP AND BOTTOM = 35 PCF
- 3) ALL FOOTING EXCAVATIONS SHALL BE INSPECTGED BY THE BUILDING OFFICIAL PRIOR TO THE PLACING OF ANY CONCRETE. THE BUILDING OFFICIAL SHALL BE GIVEN NOTICE FOR THIS OBSERVATION.
- 4) TOP OF FOOTINGS SHALL EXTEND TO ELEVATIONS SHOWN. SHOULD UNSUITABLE MATERIAL BE ENCOUNTERED, FOOTING SHALL BE OVEREXCAVATEDAND REPLACED WITH LEAN CONCRETE, F'c = 2000 PSI.
- 5) EXCAVATIONS FOR SPREAD FOOTINGS AND/OR CONTINUOUS FOOTINGS SHALL BE CLEANED AND HAND TAMPED TO A UNIFORM SURFACE.
- 6) WALLS RETAINING EARTH BACKFILL HAVE BEEN DESIGNED FOR IN SERVICE LOADS ONLY. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING DURING CONSTRUCTION. THE SHORING SHALL NOT BE REMOVED UNTIL THE SUPPORTING ELEMENTS ARE IN PLACE. THE CONCRETE IN THE WALLS AND SUPPORTING ELEMENTS HAS ATTAINED THE SPECIFIED 28 DAY COMPRESSIVE STRENGTH (Fc') AND COMPACTION OF THE BACKFILL HAS BEEN COMPLETED.
- SLAB ON GRADE SHALL BE UNDERLAID BY A MINIMUM OF 4 INCHES OF GRANULAR MATERIAL HAVING A MAXIMUM AGGREGATE SIZE OF 1.5 INCHED AND NOT MORE THAN 10% OF MATERIAL PASSING THROUGH A NO. 4 SIEVE. PRIOR TO PLACING THE GRANULAR MATERIAL THE FLOOR SUBGRADE SHALL BE PROPERLY COMPACTED, PROOFROLLED, FREE OF STANDING WATER, MUD, ORGANIC MATERIAL AND FROZEN SOIL BEFORE PLACEMENT OF THE CONCRETE, A VAPOR BARRIER SHALL BE PLACED ON TOP OF THE GRANULAR MATERIAL

- 1) UNDERPINNING ACTIVITES SHOULD ONLY BE CARRIED OUT BY A SPECIALTY CONTRACTOR WITH MORE THAN FIVE YEARS PROGRESSIVE EXPERIENVE WITH UNDERINNING.
- 2) ALL EXCAVATION MUST BE HAND DUG IN STRICT CONFORMANCE TO THE SEQUENCE STATED HERE IN. THE EXCAVATION SHALL BE INSPECTED BEFORE FINAL TRIMMING IS CARRIED OUT.
- 3) EXCAVATION: THE CONTRACTOR SHALL EXCAVATE ONLY THE 4'-0" SEGMENT OF THE WALL TO BE UNDERPINNED IN CONFORMANCE WITH THE SEQUENCE OF CONSTRUCTION.
- 4) UNDERPINING OF THE EXISTING BUILDING WALLS SHALL BE OF CONCRETE HAVING A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. UNDERPINNING SHALL BE CONTINOUS ALONG THE WALLS AND BEAR ON UNDISTURBED EARTH. BEARING MATERIAL SHALL BE APPROVED BY REGISTERED GEOTECHNICAL ENGINEER PRIOR TO CONCRETE PLACEMENT, EXISTING WALLS SHALL BE ADEQUATELY BRACED AND SUPPORTED UNTIL NEW FOUNDATION IS IN PLACE.
- 5) SEQUENCE OF CONSTRUCTION: INSTALL UNDERPINNING UNITS AS FOLLOES; INSTALL ALL "A" UNIT BEFORE PROCEESING WITH "C" UNITS, UNITS "E", UNITS "B" AND UNITS "D" AS LAID OUT ON PLAN. FOLLOW THE SEQUENCE IN A CONTINUOUS CYCLICAL PATTERN. ADJACENT UNITS SHALL NOT BE PLACED WITHIN 4 DAYS OF EACH OTHER. ALLOW 24 HOURS CURING PRIOR TO PLACING 2" DRY PACKING NON SHRINK TO EXISTING WORK. EACH UNIT TO BE MAXIMUM SPAN OF 4'-0", UNLESS NOTED OTHERWISE
- UNDERPINNING OF MORE THAN 4'-0" HIGH WALL SECTION SHALL BE DESIGNED AS A REINFORCED CONCRETE WALL EXTENSION. IIF THE UNDERPINNING SECTION IS MORE 4;-0"; DRILL AN EPOXY GROUT 2#4 DOWEL BARS INTO EXISTING WALL AND FOOTING. PROVIDE A LAP SLIVE OF 24" BETWEEN THE DOWL BAR AND REBAR FOR THE NEW UNDERPINNED WALL SECTION.
- 7) THE CONTRACTOR SHALL ENSURE THAT ALL REQUIRED WALL BRACING SUSTEM ARE IN PLACE AND INTACT AT TIME OF EXCAVATION UNTIL LOAD TRANSFER TO NEWLY PLACED AND CURED FOOTING. THE FLOOR JOIST SHALL BE IN PLACE PROVIDING REQUIRED WALL BRACING THROUGH DIAPHRAGM ACTION. THE UNBRACED LENGTH OF ANY WALL SHALL NOT EXCEED 8 LINEAR FEET,
- 8) THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD. DIMENSIONS DEPRICTED ON THE PLANS ARE BASED ON THE ARCHITECTURAL DRAWINGS AND/OR LIMITED SITE VISIT CONDUCTED BY ENGINEER.
- CONTRACTOR SHALL CONSULT WITH ADJACENT PROPERTY OWNER (S) PRIOR TO COMENCEMENT OF UNDERPINNING ACTIVITIES. CONTRACTOR SHALL DOCUMENT THE EXISTING CONDITION OF THE SHARED PARTY WALL (S) BY TAKING PHOTOGRAPHS PRIOR TO STARTING EXCAVATION. CONTRACTOR SHALL TAKE ADDTIIONAL PHOTOGRAPHS AT MIDWAY POINT IN THE UNDERPINNING CONSTRUCTION AND ANOTHER SET OF PHOTOGRAPHS UPON COMPLETION. THESE PHOTOGRAPHS SHALL DOCUMENT THE CONDITION OF THE WALL (S) FROM THE ADJACENT PROPERTY (IES) AND WITHIN THE PROPERTY BEING RENOVATED.

#### G) CAST-IN-PLACE CONCRETE

- 1) ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301, ACI318 AND ACI 302.
- 2) CAST IN PLACE CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH F'c AS FOLLOWS: a) SLAB-ON-GRADE AND FOOTINGS = 3000 PSI
- CEMENT SHALL COMPLY WITH A STM C150, TYPE I OR TYPE II.
- THE USE OF FLY ASH/OR GROUND GRANULATED BLAST-FURNANCE SLAG IS NOT PERMITTED.
- CONCRETE SLUMP SHALL 4 INCHES +/-1 INCH.
- ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE A MINIMUM AIR ENTRAINMENT OF 6% +/-1.5%
- CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCEMENT BARS SHALL NOT BE TACK WELDED. WELDED. HEATED OR CUT UNLESS INDICATED ONTHE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER
- 8.) PROVIDED WELDED WIRE FABRIC 6 X6 W1.4X W1.4 IN ALL SLAB ON GRADE. ALL WRE FABRIC SHALL CONFORM TO ASTM .A185. ALL MESH EDGES SHALL LAP A MINIMUM OF 2 SQUARES.
- 9) MINIMUM CONCRETE COVER BETWEEN FACE OF REINFORCING BAR AND FACE OF CONCRETE SHALL BE AS FOLLOWS:
- a) CONCRETE CAST AGAINST EARTH b) FORMED CONCRETE EXPOSED TO WEATHER OR EARTH = 2"
- 10) DETAILING OF CONCRETE REINFORCEMENT BARS AND ACCESSORIES SHALL CONFORM TO THE RECOMMEDATIONS OF ACI 315 'DETAILS AND DETAILING OF CONCRETE REINFORCEMENT AND ACI SP-68 'DETAILING MANUAL'. PLACING OF REINFORCING BARS SHALL CONFORM TO THE RECOMMENDATIONS OF ACI 315R 'MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES" AND CRSI **'MANUAL OF STANDARD PRACTICE"**
- 11) REINFORCEMENT DESIGNATED AS "CONTINUOUS" SHALL LAP 36 BAR DIAMETERS AT SPLICES UNLESS NOTED OTHERWISE.

### H) STRUCTURAL STEEL

- 1) STRUCTURAL STEEL ROLLED SHAPES AND PLATES SHALL CONFORM TO ASTM A36.
- 2) ALL PIPE COLUMNS SHALL CONFORM TO ASTM A53 TYPES E OR S, GRADE B, STANDARD PIPE TO BE UNLESS NOTED OTHERWISE.
- ALL ANCHOR BOLTS SHALL BE ASTM A307 UNLESS OTHERWISE NOTED. ALL WORK SHALL COMPLY WITH THE AISC ASD (NINTH EDITION) CODE "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"
- EXCEPT THAT PARAGRAPH 4.2.1 SHALL BE DELETED. 5) STRUCTURAL STEEL SHOP DRAWINGS SHALL BE SUPERVISED BY A PROFESSIONAL ENGINEER REGISTERED IN THE DISTRICT OF COLUMBIA
- AND SHALL INCLUDE DETAILS OF CUTS, CONNECTIONS, HOLES, AND OTHER PERTINENT DATA INDICATE WELDS BY STANDARD AWS 2.1 SYMBOLS SHOWING SIZE, LENGTH AND TYPE OF EACH WELD, SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.
- 6) NO FABRICATIONS SHALL PROCEED PRIOR TO SHOP DRAWINGS APPROVAL 7) NO OPENINGS IN BEAMS OR COLUMNS ARE PERMITTED WITHOUT ENGINEER'S WRITTEN APPROVAL.
- 8) SPLICING OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED ON THE CONTRACT DOCUMENTS IF PROHIBITED WITHOUT PRIOR
- APPROVAL OF THE STRUCTURAL ENGINEER AS TO LOCATION, TYPE OF SPLICE AND CONNECTION TO BE MADE. 9) THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY MISFABRICATED STRUCTURAL STEEL PRIOR TO ERECTION OF SAME.
- 10) ONE 1.5 MIL COAT OF SHOP PAINT SHALL BE APPLIED TO ALL STRUCTURAL STEEL WITH THE EXCEPTION OF AREAS TO BE WELDED.
- 11) STRUCTURAL STEEL CAST INTO OR IN CONTACT WITH CONCRETE SHALL NOT BE PAINTED. 12) PROVIDE A MINIMUM BEARING LENGTH OF 6 INCHES FOR ALL BEAMS SUPPORTED ON MASONRY.
- 13) PROVIDE STANDARD AISC ANGLE WALL ANCHORS FOR STEEL BEAMS SUPPORTED IN MASONRY POCKETS.
- 14) GROUT SHALL BE NON-SHRINKABLE, NON-METALLIC CONFORMING TO ASTM C827, AND SHALL HAVE A SPECIFIED COMPRESSIVE STRENGTH AT 28 DAYS
- OF 5000 PSI. PREGROUTING OF BASE PLATES WILL NOT BE PERMITTED.

HEADER SPAN & NUMBER JACK STUDS						
SIZE	SPAN (FT-IN)	NO. JACK STUDS				
2-2X4	3-1	1				
2-2X6	4-6	1				
2-2X8	5-9	1				
2-2X10	7-0	2				
2-2X12	8-1	2				
3-2X8	7-2	1				
3-2X10	8-9	1				
3-2X12	10-2	2				
4-2X8	9-0	1				
4-2X10	10-1	1				
4-2X12	11-9	1				

ND, DF FULL-HEIGHT STUDS @ EA.	END OF HEADER IN EXTERIOR WALL		
HEADER SPAN (FT.)	MAX. STUD SPACING (16 IN.)		
LESS THAN/EQUAL TO 3	1 STUD		
4	2 STUDS		
8	3 STUDS		
12	5 STUDS		
16	6 STUDS		



Professional Certification. I hereby certify that these documents

were prepared or approved by me, and that I am a duly licensed

professional engineer under the laws of the State of Maryland,

License No. 30167, Expiration Date: 5/17/2022.

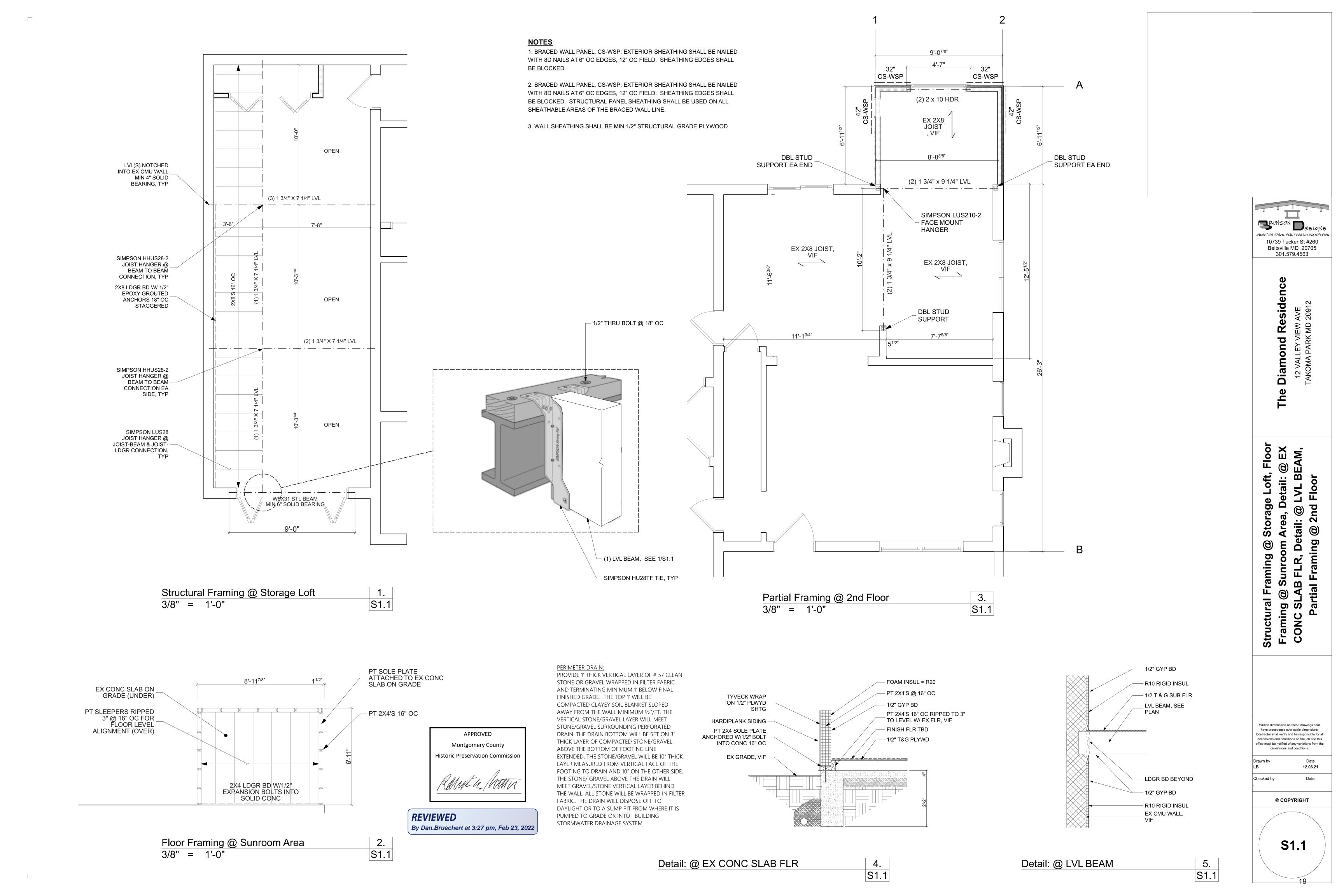
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Contractor shall verify and be responsible for al limensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions

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B. FURNISH AND INSTALL ALL LABOR, MATERIAL, AND EQUIPMENT AND SERVICES NECESSARY FOR COMPLETE AND SAFE INSTALLATION OF THE MECHANICAL SYSTEM(S) INDICATED ON THE DRAWINGS AND NOTED IN THE SPECIFICATIONS HEREINAFTER.

C. MECHANICAL DRAWINGS ARE CONSIDERED DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK AND SYSTEMS. REFER TO ARCHITECTURAL DRAWINGS TO VERIFY LOCATION OF EQUIPMENT, ETC. CONTRACTOR SHALL EXAMINE ALL DRAWINGS RELATED TO THIS AND OTHER TRADES, AND SHALL BE FULLY INFORMED AS TO THE EXTENT OF THIS CONTRACT AND INCLUDED WORK ON PLANS IN OTHER TRADES.

D. QUALITY OF MATERIALS SHALL BE NEW, BEST OF THEIR RESPECTIVE KIND, FREE FROM DEFECTS AND LISTED BY ARI OR APPROPRIATE TESTING AGENCY.

E. SUBMIT THREE (3) COPIES OF SHOP DRAWINGS FOR ALL NEW EQUIPMENT AND MATERIALS. OBTAIN APPROVAL BEFORE EQUIPMENT IS ORDERED, BUILT, OR INSTALLED.

F. PERFORM TESTS AS NOTED AND/OR REQUIRED, IN PRESENCE OF THE OWNER'S REPRESENTATIVE. PROVIDE ALL REQUIRED LABOR AND REPAIR OR REPLACE DEFECTIVE WORK AS DIRECTED.

G. THE CONTRACTOR AGREES THAT HE AND HIS SUBCONTRACTORS WILL PROVIDE AND MAINTAIN A SAFE PLACE TO WORK AND WILL COMPLY WITH ALL LAWS AND REGULATIONS OF ANY GOVERNMENTAL AUTHORITIES HAVING JURISDICTION THEREOF. THE CONTRACTOR AGREES TO HOLD HARMLESS, THE ENGINEER AND OWNER FROM ANY LIABILITY, LOSS, DAMAGE OR EXPENSE, ARISING FROM A FAILURE OR ALLEGED FAILURE ON THE PART OF THE CONTRACTOR, OR SUBCONTRACTORS TO PROVIDE AND MAINTAIN A SAFE PLACE TO WORK OR TO COMPLY WITH LAWS AND REGULATIONS OF GOVERNMENTAL AUTHORITIES HAVING JURISDICTION THEREOF.

H. THE CONTRACTOR SHALL SUPPLY TO THE OWNER RELEVANT DRAWINGS, MANUALS AND A WRITTEN NARRATIVE OF SYSTEMS OPERATION AS A CONDITION OF COMPLETION OF WORK AND PRIOR TO FINAL PAYMENT.

### II. DUCT, PIPE, & EQUIPMENT INSTALLATION NOTES

FURNISH AND INSTALL NEW DUCTWORK AS SHOWN ON THE DRAWINGS (DIMENSIONS SHOWN ARE CLEAR INSIDE DIMENSION OF DUCT). ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH THE 1985 EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE (SDCS), THE ASHRAE GUIDE AND DATA "HANDBOOK OF FUNDAMENTALS" (LATEST EDITION) AND NFPA 90A "STANDARD FOR THE INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS" (LATEST EDITION). DUCTWORK SHALL BE SUITABLE FOR PRESSURES UP TO 2" WG AT VELOCITIES UP TO 2500 FPM.

PROVIDE REQUIRED SUPPORTS AND HANGERS FOR DUCTWORK, PIPING AND EQUIPMENT, SUCH THAT LOADING WILL NOT EXCEED ALLOWABLE LOADING OF STRUCTURE. SUBMITTAL OF A BID SHALL BE DEEMED A REPRESENTATION THAT THE CONTRACTOR SUBMITTING SUCH BID HAS ASCERTAINED ALLOWABLE LOADINGS AND HAS INCLUDED IN HIS ESTIMATES, THE COSTS ASSOCIATED IN FURNISHING REQUIRED SUPPORTS. ALL DUCTWORK, PIPING AND EQUIPMENT SUPPORTS SHALL BE INDEPENDENT OF THE CEILING SUPPORT SYSTEM.

CAREFULLY CHECK THE DOCUMENTS TO ASCERTAIN THE REQUIREMENTS OF ANY MATERIALS OR EQUIPMENT BEING FURNISHED OR FURNISHED AND INSTALLED AND PROVIDE THE PROPER INSTALLATION OR CONNECTIONS INCLUDING CONTROLS.

PROVIDE 1" ACOUSTIC LINING IN THE MAIN SA & RA DUCTS TO 10 FT OF THE AIR HANDLER.

INSTALL EXTERNAL DUCTWRAP INSULATION WITH VAPOR BARRIER ON ALL SUPPLY AND RETURN DUCT THAT IS NOT LINED AS SHOWN IN INUSLATION SCHEDULE.

PROVIDE AND INSTALL FLEX CONNECTIONS BETWEEN ALL AIR HANDLERS / AIR FANS AND THE DUCT WORK.

REFRIGERANT PIPES SHALL BE COPPER TYPE-L FOR REFRIGERATION APPLICATIONS. CONNECTIONS SHALL BE EITHER COMPRESSION OR SWEAT TYPE. INSULATE REFRIGERANT SUCTION WITH RUBATEX R-1800RS, ARMSTRONG TYPE II OR APPROVED EQUAL CLOSED CELL INSULATION SIZED IN ACCORDANCE WITH MANUFACTURES RECOMMENDATION. SEAL ALL BUTT JOINTS USING THE MANUFACTURER'S RECOMMENDED ADHESIVE. THE INSULATION, WHERE EXPOSED TO THE OUTDOORS, SHALL BE FINISHED WITH TWO COATS OF MANUFACTURER'S FINISH COATING, VINYL-LACQUER COATING OR APPROVED EQUAL.

CONDENSATE PIPING SHALL BE PVC OR COPPER TYPE L.

FURNISH AND INSTALL PREMOLDED FIBERGLASS PIPE INSULATION/VAPOR BARRIER ON ALL PIPING LISTED BELOW.

<u>PIPING TYPE</u> A/C CONDENSATE INSULATION THICKNESS

VOLUME DAMPERS: PROVIDE ADJUSTABLE DAMPERS AT ALL DUCTWORK JUNCTIONS ON LOW PRESSURE SUPPLY DUCTWORK.

FLEXIBLE DUCT: FLEX DUCT SHALL BE INSULATED TYPE CLASSIFIED AS CLASS 1 AIR DUCT IN ACCORDANCE WITH UL 7181, MAXIMUM 10 FEET IN LENGTH. PROVIDE SPIN-IN DUCT TAP WITH VOLUME DAMPER FOR EACH FLEX DUCT. PROVIDE RIGID ROUND DUCT ON LENGTH OF RUNS OVER 10 FEET.

COORDINATION: COORDINATE WITH OTHER DISCIPLINES (INCLUDING PLUMBING, ELECTRICAL, CIVIL/SITE, STRUCTURAL, AND ARCHITECTURAL) FOR AVAILABLE SPACE, SEQUENCE OF INSTALLATION, AND INSTALLATION REQUIREMENTS PRIOR TO COMMENCING CONSTRUCTION, ADVISE THE ARCHITECT OF ANY CHANGES IN THE CONTRACT DOCUMENTS THAT MAY BE REQUIRED FOR WORK COMPLETION. VERIFY ADEQUATE CLEARANCES REGARDING DUCTWORK, PLUMBING, HVAC PIPING, AND ELECTRICAL PRIOR TO FABRICATION.

SIZES: WHEN PIPE OR DUCT SIZE IS NOT INDICATED, SIZE THAT SECTION EQUAL TO THE ADJACENT UPSTREAM SIZE, UNLESS OTHERWISE APPROVED BY THE THE ENGINEER, DUCT RUNOUTS SHALL BE MINIMALLY SIZED ACCORDING TO NECK SIZE OF THE RESPECTIVE DIFFUSER.

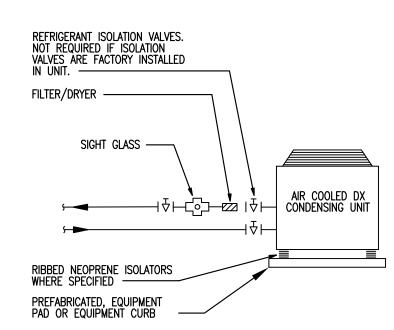
CONTRACTOR SHALL INSPECT ALL DUCT WORK, FITTINGS, INSULATION AND VAPOR BARRIER FOR DEFECTS OR LEAKAGE AND SEAL, CAP, REINSULATE, AND TAPE OVER AS REQUIRED TO PROVIDE REASONABLY WELL SEALED DUCT SYSTEM WITH APPROPRIATE INSULATION AND VAPOR BARRIER.

ALL PRESSURIZED PIPING SHALL BE LEAK TESTED PRIOR TO ENCLOSURE OR COVER-UP. PIPING SHALL BE LEAK TESTED FOR 24 HOURS UNDER A HYDROSTATIC PRESSURE OF 150% OF THE SYSTEM DESIGN WORKING PRESSURE. CARE SHALL BE TAKEN TO PROTECT ANY EQUIPMENT WHICH MAY BE DAMAGED BY HYDROSTATIC TESTING.

ALL SYSTEMS AND EQUIPMENT INSTALLED ON THE PROJECT SHALL BE BALANCED AND/OR ADJUSTED TO PROVIDE PROPER OPERATION OR FUNCTION IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, AND MANUFACTURER'S RECOMMENDATIONS. ALL TEMPERATURE CONTROL, AIR AND WATER BALANCING SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR. ALL TEST AND BALANCE RESULTS SHALL BE DOCUMENTED WITH A COPY SUBMITTED TO THE OWNER FOR RECORD.

### MECHANICAL ABBREVIATIONS AND SYMBOLS

-			····
AHU	AIR HANDLING UNIT	×	SUPPLY AIR DIFFUSER
AMB	AMBIENT	_ Ø	RETURN AIR OR EXHAUST GRILL
BLDG BTU	BUILDING BRITISH THERMAL UNIT		FLEXIBLE DUCT
CFM	CUBIC FEET PER MINUTE	7 🔾	FLEXIBLE DOCT
DIA	DIAMETER		FLEXIBLE DUCT CONNECTION
DIFF DN	DIFFUSER DOWN		SUPPLY OR OUTSIDE AIR DUCT UP
DWG EA	DRAWING EXHAUST AIR		SUPPLY OR OUTSIDE AIR DUCT DOWN
EF	EXHAUST FAN		RETURN, OR EXHAUST AIR DUCT UP
EWH	ELECTRIC WALL HEATER		
EX	EXISTING		RETURN OR EXHAUST AIR DUCT DOWN
EA F	EXHAUST AIR FAHRENHEIT, FAN		
FLEX	FLEXIBLE	<u>(1)—</u>	DRAWING NOTE REFERENCE
FT	FOOT, FEET		MECHANICAL EQUIPMENT REFERENCE, 'a'
HP	HORSE POWER	ap	MECHANICAL EQUIPMENT REFERENCE, 'a' DENOTES TYPE, 'b' DENOTES NUMBER
HTG HVAC	HEATING HEATING, VENTILATING, AND AIR	(a) b	AIR DISTRIBUTION DEVICE REFERENCE, 'a'
111710	CONDITIONING		DENOTES TYPE, 'b' DENOTES CFM,
HZ	HERTZ	,	'c/d' DENOTES NECK SIZE
IN	INCH	$\langle \overline{\mathtt{D}} \rangle$	DUCT SMOKE DETECTOR
KW MAX	KILOWATT MAXIMUM		
MBH	THOUSANDS OF BTU'S		VOLUME DAMPER
MECH	MECHANICAL	4	SPIN-IN FITTING
NTS	NOT TO SCALE	M—	MOTORIZED CONTROL DAMPER
OA OE RA	OUTSIDE AIR OPEN END RETURN		
PH	PHASE	(T)	THERMOSTAT OR ROOM TEMPERATURE SENSOR
RA	RETURN AIR	-	
RPM	REVOLUTIONS PER MINUTE	(CDS)	CO2 SENSOR
SA SP	SUPPLY AIR STATIC PRESSURE		
TFR	TRANSFER AIR		CONNECT TO EXISTING
TEF	TOILET EXHAUST FAN		GONNEOT TO EXISTING
TOT	TOTAL		
TSTAT TYP	THERMOSTAT TYPICAL	ZZ	EXISTING DUCT
VD	VOLUME DAMPER		
W .	WATT, WIDTH	4	NEW DUCT
W/	WITH		
W/O	WITHOUT		



TYPICAL CONDENSING UNIT PIPING DETAIL

		CDEVIELE	$\triangle \land \triangle \vdash$	THICKNECC	$\Lambda$ $\Lambda$ $\square$	
- 170,000		$\Delta PF(AFIFI)$	(¬A(¬F	I HILLKINF >>	AINL	REINFORCEMENT
	001101110011011		0/10 L	1111011111	/ 11 Y D	INCHAI ON OCIMEIA

	SHEET	TRANSVERSE REINFORCING (1)						
DIMENSION		MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINT &/OR INTERMEDIATE REINFORCING	AT JOINTS					
OF LONGEST SIDE (INCHES)	METAL GAUGE (ALL FOUR SIDES)		MIN H (INCHES)	DRIVE SLIP PLAIN S SLIP	HEMMED S SLIP	PLAIN S SLIP H	REINFORCED BAR SLIP	
UP THRU 12	26	NONE REQUIRED	1	26	26	26	24	
13–18	24	NONE REQUIRED	1	24	24	24	24	
19-30	24	1"x1"x1/8" @ 60"	1	_	24	24	24	
31–36	22	1"x1"x1/8" @ 60"	1	_	_	22	22	

(1) TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED.

(2) LONGITUDINAL JOINTS TO BE PITTSBURG OR SNAP LOCK TYPE.

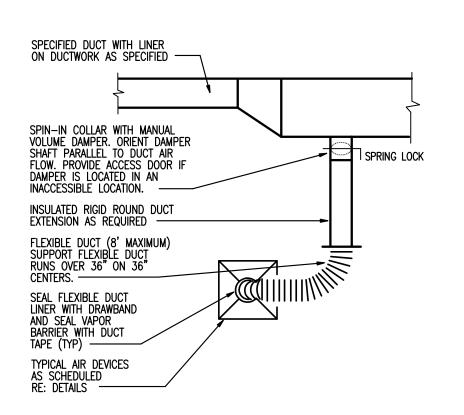
## -CONTINUOUS ROD ON ALL DUCT OVER 12" DIA AND ON ALL DUCT e' wg and above REGULATOR RE: TYPICAL ELEVATION OF TYPICAL RECTANGULAR DUCT DAMPER ── 318" REGULATOR RE: TYP DETAIL ─112' REGULATOR RE: TYP DETAIL - 318" CDS ROD ⋒<del>▋</del>⋿⋿⋛⋿⋿**⋛** 16 GA BLADE 118" CLEARANCE ALL ROD END BEARING. PROVIDE OUTSIDE END BEARING

TYPICAL RECTANGULAR DUCT DAMPER SINGLE BLADE BALANCING DAMPERS MAY BE USED IN ROUND DUCT AND IN RECTANGULAR DUCT UP TO A MAXIMUM DUCT SIZE OF 12' H imes 48' W

DUCT MOUNTED SINGLE

AT PRESSURE UP TO 2"WG. PROVIDE INSIDE ROD

BEARING AT PRESSURES 3'VG AND ABOVE (TYP)





EXTERIOR DESIGN C	ONDITIONS
CONDITION	VALUE
WINTER DESIGN DRY-BULB (*F)	10
SUMMER DESIGN DRY-BULB (*F)	95
SUMMER DESIGN WET-BULB (*F)	76
DEGREE DAY HEATING	4500
DEGREE DAY COOLING	1200
	·

1. DESIGN VALUES INDICATED ARE GENERALLY ACCEPTABLE

NORTHEN VIRGINIA AND WASHINGTON DC AREA.					
DUCT INSULATION SCHEDULE					
SERVICE	LOCATION	MINIMUM R-VALUE			
SUPPLY AIR	UNCONDITIONED	8			
RETURN AIR	ATTIC OR	6			
TRANSFER AIR	OUTSIDE OF	6			
OUTDOOR AIR	BUILDING	6			
SUPPLY AIR	UNCONDITIONED	6			
RETURN AIR	SPACES INCLUDING	3.5			
TRANSFER AIR	BASEMENTS, CRAWL SPACES,	3.5			
OUTDOOR AIR	GARAGES AND ABOVE CEILINGS	3.5			
UUTDUUK AIK   GAKAGES AND ABUVE CEILINGS   5.5					

VALUES ARE BASED ON 2012 IECC REQUIREMENTS, 4500 HEATING DEGREE DAY TYPICAL FOR NORTHERN VIRGINIA, AND WASHINGTON DC AREA AND GENERAL GOOD PRACTICE.

2. UNCONDITIONED SPACES REFERS TO SPACES THAT SEPARATE CONDITIONED SPACE FROM OUTSIDE I.E. VENTILATED CRAWL SPACES; FRAMED CAVITIES WITHIN EXTERIOR WALLS; OR CEILING ASSEMBLIES SEPARATING CONDITIONED FLOOR SPACE FROM UNCONDITIONED ATTIC.

3. WHERE REQUIRED AS SPECIFIED IN NOTES OR DRAWINGS DUCT LINER SHALL BE INSTALL OF EQUAL VALUE TO REQUIRED INSULATION R-VALUE OR SO THAT THE COMBINED R-VALUE OF DUCT LINER PLUS INSULATION MEETS OR EXCEEDS VALUES INDICATED ABOVE.

#### NOTES:

1. METALLIC FLEXIBLE DUCTWORK SHALL BE ATTACHED USING A MIN OF THREE #8 SHEET METAL SCREWS EQUALLY SPACEL AROUND THE DUCTWORK CIRCUMFERENCE. DUTWORK LARGER THAN 12" SHALL HAVE A MIN OF FIVE #8 SHEET METAL SCREWS. SCREWS SHALL BE LOCATED AT LEAST 1" FROM THE DUCTWORK END.

2. NON-METALLIC FLEXIBLE DUCTWORK SHALL BE SECURED TO THE SLEEVE OR COLLAR USING A DRAW BAND. IF THE DUCTWORK COLLAR EXCEEDS 12", THE DRAW BAND MUST BE POSITIONED BEHIND A BEAD ON THE METAL COLLAR.

3. INSULATION AND VAPOR BARRIERS PRESENT ON THE FACTORY-FABRICATED DUCTWORK SHALL BE FITTED OVER THE CORE CONNECTION AND SHALL BE SUPPLEMETALLY SECURED WITH A DRAW BAND.

4. FLEXIBLE DUCTWORK SEALING SHALL BE A CLASS 'B' SEAL FOR LOW PRESSURE DUCTWORK.

6. FLEXIBLE DUCTWORK SHALL BE A MAX OF 8'-0" IN LENTH AND SHALL NOT BE USED AS AN ELBOW

5. SUPPORT SYSTEM SHALL NOT DAMAGE OR CAUSE OUT OF ROUND SHAPE

7. MECHANICAL SYSTEM PIPING CAPABLE OF CARRYING FLUIDS ABOVE 105 °F (41 °C) OR BELOW 55 °F (13 °C) SHALL BE INSULATED TO A MIN OF R-3

8. PIPING INSULATION EXPOSED TO THE WEATHER SHALL BE PROTECTED FROM DAMAGE, INCLUDING THAT CAUSED BY SUNLIGHT, MOISTURE, EQUIPMENT MAINTENANCE, AND WIND, AND SHALL PROVIDE SHIELDING FROM THE SOLAR RADIATION

THAT CAN CAUSE DEGRADATION OF THE MATERIAL. ADHVESIVE TAPE SHALL NOT BE PERMITTED. 9. INSULATION FOR HOT WATER PIPE WITH A MINIMUM THERMAL RESISTANCE (R-VALUE) OF R-3 SHALL BE APPLIED TO THE

FOLLOWING: 1. PIPING LARGER THAN 3/4-INCH NOMINAL DIAMETER.

GIVEN IN TABLE 403.4.2.

2. PIPING SERVING MORE THAN ONE DWELLING UNIT. 3. PIPING FROM THE WATER HEATER TO KITCHEN OUTLETS

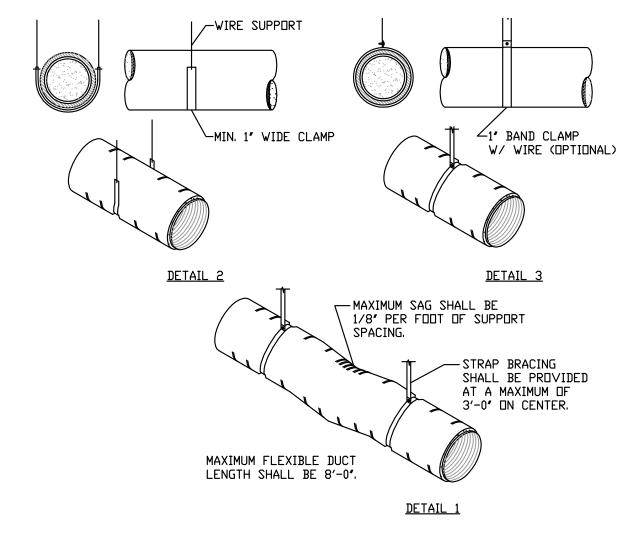
4. PIPING LOCATED OUTSIDE THE CONDITIONED SPACE.

5. PIPING FROM THE WATER HEATER TO A DISTRIBUTION MANIFOLD.

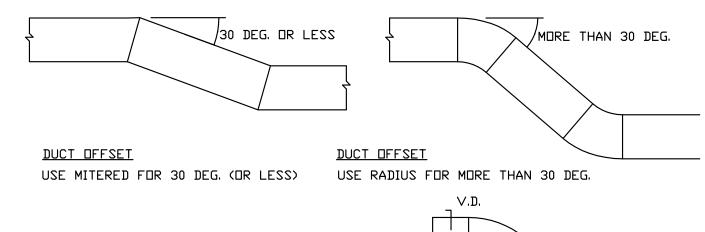
6. PIPING LOCATED UNDER A FLOOR SLAB. 7. BURIED PIPING.

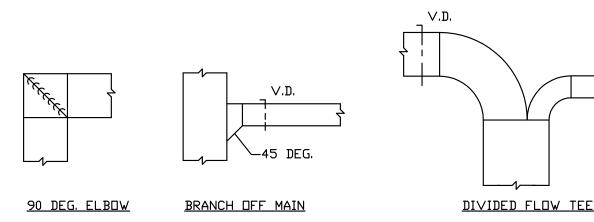
8. SUPPLY AND RETURN PIPING IN RECIRCULATION SYSTEMS OTHER THAN DEMAND RECIRCULATION 9. PIPING WITH RUN LENGTHS GREATER THAN THE MAXIMUM RUN LENGTHS FOR THE NOMINAL PIPE DIAMETER

ALL REMAINING PIPING SHALL BE INSULATED TO AT LEAST R-3 OR MEET THE RUN LENGTH REQUIREMENTS OF TABLE R403.4.2.













REVIEWED By Dan.Bruechert at 3:27 pm, Feb 23, 2022



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Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

12.06.21 Date Checked by

#### NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2017 INTERNATIONAL FUEL GAS
  CODE, REGULATIONS OF LOCAL AUTHORITIES HAVING JURISDICTION AND THE OWNERS INSURANCE
  UNDERWRITER.
- 2. FURNISH AND INSTALLALL LABOR, MATERIAL, AND EQUIPMENT AND SERVICES NECESSARY FOR COMPLETE AND SAFE INSTALLATION OF THE PLUMBING SYSTEM(S) INDICATED ON THE DRAWINGS AND NOTED IN THE SPECIFICATIONS HEREINAFTER.
- 3. OBTAIN AND PAYFOR ALL INSPECTIONS, LICENSES, PERMITS AND APPROVALS REQUIRED BY GOVERNING AUTHORITIES AND INSTALL ALL WORK IN COMPLIANCE THEREOF.
- 4. THESE DRAWINGS ARE CONSIDERED DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK AND SYSTEMS. ALL PIPING AND SYSTEMS SHOWN SCHEMATIC. IT IS NOT POSSIBLE TO INDICATE EVERY OFFSET, ELBOW, UNION, VALVE, TRAP, ACCESS PANEL, ETC. THAT IS REQUIRED FOR A PROPER WORKING SYSTEM. NO ADDITIONAL COST WILL BE ALLOWED FOR FITTINGS THAT ARE REQUIRED TO INSTALL THE ENTIRE GAS SYSTEM IN THE SPACE PROVIDED AND NECESSARY FOR A COMPLETE WORKING SYSTEM.
- 5. REFER TO ARCHITECTURAL DRAWINGS TO VERIFY LOCATION OF EQUIPMENT, ETC.
- 6. CONTRACTOR SHALL EXAMINE ALL DRAWINGS RELATED TO THIS AND OTHER TRADES, AND SHALL BE FULLY INFORMED AS TO THE EXTENT OF THIS CONTRACT AND OVERALL INCLUDED WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR TRADE COORDINATION AND SHALL COMMUNICATE ADEQUATELY WITH ALL OTHER DISCIPLINES AS REQUIRED TO MAKE CLEARANCE ALLOWANCES AS REQUIRED BY ALL TRADES TO AVOID INTERFERENCE OF DISCIPLINES.
- 7. THE CONTRACTOR SHALL CONNECT ALL ITEMS OF EQUIPMENT FURNISHED BY OTHERS AND UNDER OTHER SECTIONS OF THE SPECIFICATIONS, CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO COMPLETE THE GAS INSTALLATION.
- 8. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES, ETC. PROVIDE UNIONS FOR ALL PIPING CONNECTIONS TO EQUIPMENT. ALL EXPOSED PIPING AND FITTINGS SHALL BE CHROME PLATED.
- 9. QUALITY OF MATERIALS SHALL BE NEW, BEST OF THEIR RESPECTIVE KIND, FREE FROM DEFECTS..
- 10. PROVIDE ALL REQUIRED LABOR AND MATERIAL. REPAIR OR REPLACE DEFECTIVE WORK AS DIRECTED.
- 11. ALL VALVES AND ACCESSORIES SERVING EQUIPMENT SHALL BE INSTALLED TO ALLOW PROPER SERVICING AND/OR REMOVAL WITHOUT DISCONNECTING ALL PIPING AND ACCESSORIES.
- 12. INSTALLATION OF EQUIPMENT, PIPING, WIRING, ETC., SHALL BE DONE IN NEAT AND WORKMANLIKE MANNER AND SHALL CONFORM TO THE LATEST TRADE PRACTICES. WATER PIPING AND SANITARY DRAIN LINES SHALL BE RUN CONCEALED IN WALL ABOVE CEILING OR BENEATH FLOOR WHEREVER, POSSIBLE. EACH FIXTURE SHALL BE COMPLETE WITH ALL TRIM, ANGLE STOPS, ESCUTCHEONS, TRAPS AND TAIL PIECES. ALL EXPOSED TRIM SHALL BE CHROME PLATED. ALL FIXTURES SHALL BE PROPERLY SUPPORTED AND INSTALLED. ATTACHMENTS SHALL BE OF STRONG AND DURABLE NATURE.
- 13. CONNECTION OF DISSIMILAR PIPING MATERIALS SHALL BE MADE BY MEANS OF DI-ELECTRIC FITTINGS.
- 14. NATURAL GAS PIPING, 3" AND SMALLER, INTENDED FOR OPERATION AT PRESSURES LESS THAN 5 PSIG SHALL BE ASTM A53, SCHEDULE 40, BLACK STEEL JOINED BY CLASS 150 SOCKET WELD FITTINGS EXCEPT THAT CLASS 150, BANDED, BLACK MALLEABLE IRON, THREADED FITTINGS MAYBE USED AT VALVES AND EQUIPMENT CONNECTION. PROVIDE CONDENSATION TRAPS WITH REMOVABLE CAPS AT ALL EQUIPMENT CONNECTIONS.
- 15. NATURAL GAS PIPING: SCHEDULE 40 BLACK STEEL PIPE (ASTM A53) WITH 150 PSI FITTINGS AND WELDED JOINTS.
- 16. BUILDING WILL BE TESTED FOR COMBUSTION APPLIANCE COMPLIANCE IN ACCORDANCE WITH THE IECC 2015, APPENDIX RB. COMBUSTION APPLIANCE ZONE (CAZ) SHALL BE TESTED FOR SPILLAGE, ACCEPTABLE DRAFT AND CARBON MONOXIDE CO. EXCEPTIONS:
- 1. POWER-VENTED EQUIPMENT AND APPLICANCES
- 2. FIREPLACES AND STOVES COMPLYING WITH SECTION R402.4.2 AND SECTION R1006 OF IRC 2017
- 17. HEATED WATER CIRCULATION SYSTEMS SHALL BE PROVIDED WITH A CIRCULATION PUMP. THE SYSTEM RETURN PIPE SHALL BE A DEDICATED RETURN PIPE OR A COLD WATER SUPPLY PIPE. GRAVITY AND THERMOSYPHON CIRCULATION SYSTEMS SHALL BE PROHIBITED. CONTROLS FOR CIRCULATING HOT WATER SYSTEM PUMPS SHALL START THE PUMP BASED ON THE IDENTIFICATION OF A DEMAND FOR HOT WATER WITHIN THE OCCUPANCY. THE CONTROLS SHALL AUTOMATICALLY TURN OFF THE PUMP WHEN THE WATER IN THE CIRCULATION LOOP IS AT THE DESIRED TEMPERATURE AND WHEN THERE IS NO DEMAND FOR HOT WATER.
- 18. A WATER DISTRIBUTION SYSTEM HAVING ONE OR MORE RECIRCULATION PUMPS THAT PUMP WATER FROM A HEATED WATER SUPPLY PIPE BACK TO THE HEATED WATER SOURCE THROUGH A COLD WATER SUPPLY PIPE SHALL BE A DEMAND RECIRCULATION WATER SYSTEM. PUMPS SHALL HAVE CONTROLS THAT COMPLY WITH BOTH OF THE
- FOLLOWING:

  1. THE CONTROL SHALL START THE PUMP UPON RECEIVING A
- SIGNAL FROM THE ACTION OF A USER OF A FIXTURE OR APPLIANCE, SENSING THE PRESENCE OF A USER OF A FIXTURE OR SENSING THE FLOW OF HOT OR TEMPERED WATER TO A FIXTURE FITTING OR APPLIANCE.

  2. THE CONTROL SHALL LIMIT THE TEMPERATURE OF THE WATER ENTERING THE COLD WATER PIPING TO 104°F (40°C)
- 19. ALL REFRIGERATORS, FREEZERS, DISHWASHERS, CLOTHES WASHERS, AND CEILING FANS MUST BE ENERGY STAR QUALIFIED, AND WATER HEATER(S) SHALL MEET THE MINIMUM EFFICIENCY REQUIREMENTS OF TABLE R405.5
- 20. BUILDINGS SHALL MEET THE MINIMUM AIR LEAKAGE REQUIREMENTS OF TABLE R405.4 AND INSTALL A HEAT OR ENERGY RECOVERY VENTILATION SYSTEM.

APPROVED

Montgomery County

Historic Preservation Commission

REVIEWED

By Dan.Bruechert at 3:27 pm, Feb 23, 2022

#### FREE SPACE REQUIRED AROUND OUTDOOR UNIT

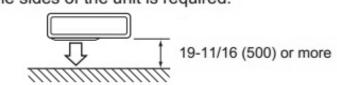
1. Obstacles above

When there is no obstacle in front and on the sides of the unit, it is allowed to install the unit where an obstacle is above the unit only if the space shown in the figure is provided.

3-15/16 (100) or more

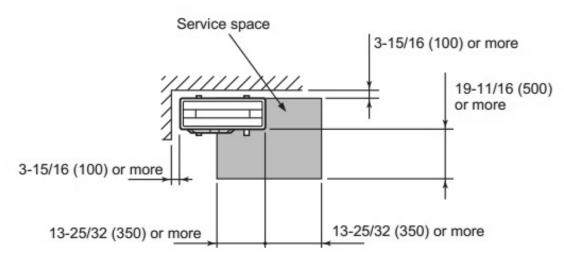
3. Obstacles in front (blowing) only

When there is an obstacle in front of the unit as shown in the figure, open space above, behind, and on the sides of the unit is required.



5. Service space

Provide space for service and maintenance as shown in the figure.



2. Front (blowing) side open -

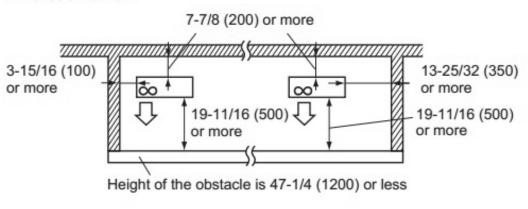
As long as space indicated in the figure is provided, it is allowed to install the unit where obstacles are behind and on the sides of the unit. (No obstacle above the unit)

3-15/16 (100) or more

13-25/32 (350) or more

#### 4. Obstacles in front, behind and on side(s)

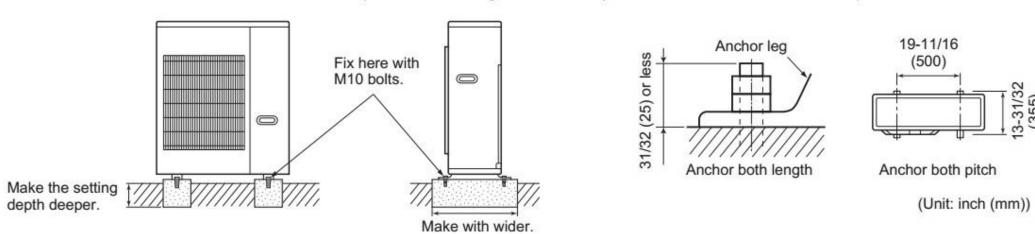
- When installing the unit in an area that is enclosed with walls such as a verandah, be sure to have enough space as shown below.
   In this case, the air conditioning capacity and power consumption might deteriorate.
- When installing two or more units, do not install the units in front or behind each other.



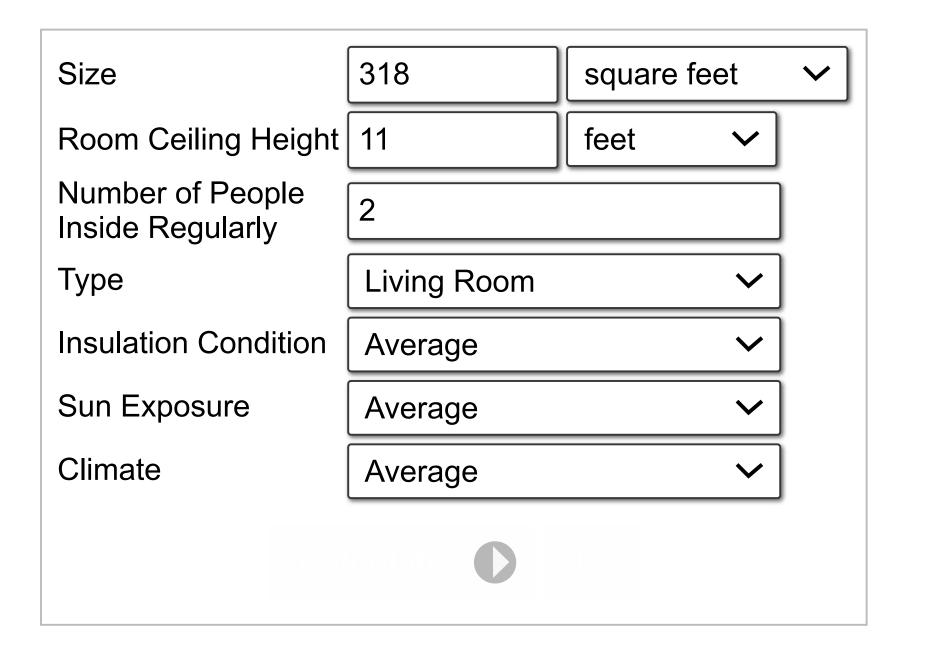
(Unit: inch (mm))

#### 2-1. INSTALLING THE UNIT

- Be sure to fix the unit's legs with bolts when installing it.
- Be sure to install the unit firmly to ensure that it does not fall by an earthquake or a gust.
- Refer to the figure in the right for concrete foundation.
- Do not use the drain socket and the drain caps in the cold region. Drain may freeze and it makes the fan stop.



# 12,642 BTU or 3,705 Watts or 1.1 Ton



#### **MECHANICAL LEGEND**

REGISTER

THERMOSTAT

OUTDOOR CONDENSER UNIT

CREATIVE IDEAS FOR YOUR LIVING SPACES

10739 Tucker St #260

Beltsville MD 20705

301.579.4563

Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Mechanical Notes & Details

Written dimensions on these drawings shall have precedence over scale dimensions.

Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

Drawn by Date LB 12.06.21



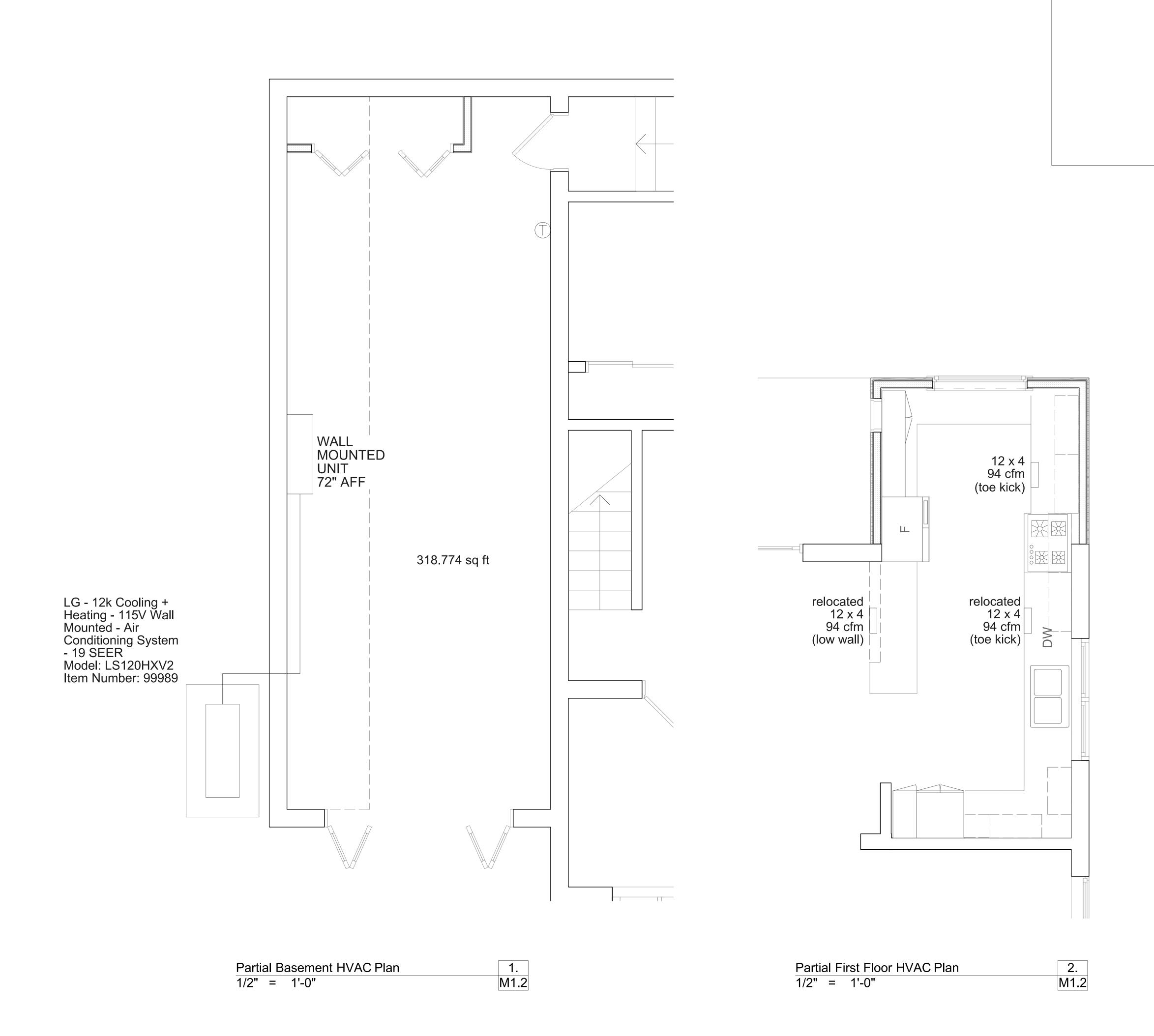
#### **MECHANICAL NOTES:**

- 1. THE DRAWINGS CONVEY THE GENERAL INTENT OF THE DESIGN. CONTRACTOR SHALL EXAMINE THE SIDE AND ALL DRAWINGS BEFORE PROCEEDING WITH THE LAYOUT AND INSTALLATION OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR ASCERTAINING THE EXISTING CONDITIONS, LOCATIONS, RUNS, SIZES, MATERIALS, SLOPES, ETC.
- 2. ARRANGE THE WORK ESSENTIALLY AS SHOWN, EXACT LAYOUT TO BE MADE ON THE JOB TO SUIT ACTUAL CONDITIONS. CONFER AND COOPERATE WITH OTHER TRADES ON THE JOS SO ALL WORK WILL BE INSTALLED IN PROPER RELATIONSHIP. PRECISE LOCATION OF PARTS TO COORINDATE WITH OTHER WORK IS THE RESPONSIBILITY OF THE CONTTRACTOR
- 3. TOILET EXHAUST FANS WITH A RATED FLOOR/CEILING ASSMEMBLY SHALL BE WALL MOUNTED OR UNDER CEILING MOUNTED AND SHALL HAVE A FIRE DAMPER INSTALLED IN THE DISCHARGE DUCT AT EACH PENETRATION OF A RATED FLOOR/CEILING/WALL ASSEMBLY
- 4. ENSURE THAT TOILET ROOM DOORS ARE UNDERCUT ONE INCH TO ALLOW FOR MAKEUP AIR FOR THE EXHAUST.
- 5. FIRE DAMPERS SHALL BE INSTALLED AT ALL DUCT PENETRATIONS OF FIRE RATED WALLS. FIRE DAMPERS ARE NOT REQUIRED AT PENTRATIONS OF FLOORS FOR DUCTING ENCLOSED IN FIRE RATED CHASES
- 6. ALL FIRE DAMPERS SHALL BE ACCESSIBLE. PROVIDE ACCESS DOORS IN DUCTS AND ADJACENT FINISHES AS NEEDED.
- 7. THE CONDENSING UNIT SHALL BE INSTALLED ON PRECAST CONCRETE OR COMPOSITION PAD SUPPLIED BY THE MECHANICAL CONSTRACTOR.
- 8. CONSULT WITH HVAC UNIT MANUFACTURER FOR INSTALLATION REQUIREMENTS PRIOR TO INSTALL.
- 9. PROGRAMMABLE THERMOSTAT. WHERE THE PRIMARY HEATING SYSTEM IS A FORCED-AIR FURNACE, AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE TO MAINTAIN DIFFERENT TEMPERATURE SET POINTS AT DIFFERENT TIMES OF THE DAY. THIS THERMOSTAT SHALL INCLUDE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F (13°C) OR UP TO 85°F (29°C). THE THERMOSTAT SHALL INITIALLY BE PROGRAMMED WITH A HEATING TEMPERATURE SET POINT NO HIGHER THAN 70°F (21°C) AND A COOLING TEMPERATURE SET POINT NO LOWER THAN 78°F (26°C).
- 10. THIS PROJECT IS REQUIRED TO SUBMIT AT FINAL INSPECTION A DUCT LEAKAGE TEST SHOWING A PASSING RATING OF <= 8 CFM PER 100 SQUARE FEET CONDITIONED FLOOR AREA AT A PRESSURE OF 25 PASCAL. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL UPON
- 11. SEALING. DUCT SEALING DUCTS, AIR HANDLERS, AND FILTER BOXES SEALED PER IRC/IMC AND TESTED - ROUGH-IN OR POST-CONSTRUCTION TESTING MUST DEMONSTRATE ≤ 4 CFM/100 SF, OR 4% CFA25. SEALED AIR HANDLER -MANUFACTURER'S DESIGNATION OF (MAX) 2% OF DESIGN AIRFLOW RATE
- 12. AUTOMATIC DAMPERS ARE INSTALLED IN ALL AIR INTAKES AND EXHAUSTS VENTS PER IMC AND IRC CODE

TESTING NOTES

1.A duct leakage test showing a passing rating of <= 8 CFM per 100 square feet conditioned floor area at a Pressure of 25 Pascal. A written report of the results of the test shall be signed by the party conducting the test and provided to the code





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Plan, Plan

have precedence over scale dimensions. Contractor shall verify and be responsible for all

office must be notified of any variations from the

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M1.2

12.06.21

- APPLICABLE CODES AND STANDARDS: PERFORM ALL WORK IN ACCORDANCE TO THE FOLLOWING CODES AND STANDARDS: A. INTERNATIONAL BUILDING CODE 2017.
- B. NATIONAL ELECTRICAL CODE 2017. C. INTERNATIONAL ENERGY CODE 2017.
- D. NATIONAL FIRE PROTECTION AGENCY (NFPA 72).
- ELECTRICAL CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL ELECTRICAL EQUIPMENT WITH THE ARCHITECTURAL DRAWINGS.
- 3. ALL WORK SHALL BE ACCOMPLISHED WITHIN THE INTENT OF THE BASE BUILDING DRAWINGS AND GENERAL SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION BETWEEN ALL TRADES PRIOR TO INSTALLATION. REPORT ANY DISCREPANCIES BETWEEN THE EXISTING EQUIPMENT AS INSTALLED AND INFORMATION AS SHOWN ON THE DRAWINGS, AS WELL AS NEW EQUIPMENT AS SPECIFIED W/ EQUIPMENT AS TO BE INSTALLED.
- CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID AND CONSTRUCTION TO VERIFY ALL EXISTING CONDITIONS, TELECOM AND UTILITY SERVICE. NO ADDITIONAL COST WILL BE ALLOWED AFTER THE BID.
- EXISTING BASE BUILDING ELECTRICAL SYSTEMS ARE TO REMAIN EXCEPT WHERE MODIFICATIONS ARE REQUIRED AND AS SHOWN ON PLANS. MAINTAIN CONTINUITY OF EXISTING CIRCUITS.
- 7. ALL ELECTRICAL EQUIPMENT INCLUDING BUT NOT LIMITED TO CONDUIT, WIRE, BOXES, FITTINGS, SHALL BE NEW U.O.N. AND SHALL MEET NEMA STANDARD AND BEAR THE U.L. LABEL.
- THE CONTRACTOR SHALL RESTORE ALL AREAS AND SYSTEMS DISTURBED BY HIS WORK TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER.
- 9. ALL WORK AND MATERIAL SHALL BE GUARANTEED FREE FROM DEFECTS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR, INCLUDING ALL REUSED EXISTING ELECTRICAL EQUIPMENT.
- 10. CIRCUIT CONTINUITY SHALL BE MAINTAINED FOR EXISTING ELECTRICAL EQUIPMENT TO REMAIN AND/OR BE RELOCATED.
- 11. CONDUIT RUNS ARE SHOWN SCHEMATICALLY, BUILDING CONDITIONS WILL DETERMINE THE ACTUAL CONDUITS RUN. CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
- 12. COLOR CODE AND IDENTIFY ALL WIRES IN PULL BOXES AND PANELS.
- 13. ITEMS TO BE REMOVED: UNLESS OTHERWISE NOTED, CONTRACTOR SHALL PERFORM THE FOLLOWING:
- A. IF THE CONDUIT SERVING THE ITEM IS CONCEALED, THE CONTRACTOR SHALL REMOVE ALL CONDUCTORS, CUT CONDUIT BACK TO BELOW GRADE, FLOOR, OR ABOVE CEILING, AND PATCH TO
- B. IF THE CONDUIT SERVING THE ITEM IS EXPOSED, THE CONTRACTOR SHALL REMOVE CONDUIT AND CONDUCTORS BACK TO SOURCE.
- 14. ITEMS TO BE RELOCATED: UNLESS OTHERWISE NOTED, CONTRACTOR SHALL PERFORMED THE FOLLOWING:
- A. IF THE CONDUIT SERVING THE ITEM OR FEEDING OTHER ITEMS IS CONCEALED, THE CONTRACTOR SHALL REMOVE ALL CONDUCTORS. CUT CONDUIT BACK TO BELOW GRADE, FLOOR, OR CEILING, AND RE-FEED THESE ITEMS WITH NEW CONDUIT AND WIRE AS SHOWN ON THE DRAWING
- B. IF THE CONDUIT SERVING THE ITEMS IS EXPOSED, THE CONTRACTOR SHALL REROUTE CONDUIT AND CONDUCTORS WHERE POSSIBLE OR RUN NEW CONDUIT AND CONDUCTORS AS MAY BE REQUIRED. C. IF AN ITEM IS TO BE REPLACED, THE CONTRACTOR SHALL
- RECONNECT ALL EXISTING CONNECTIONS.
- 15. EXACT LOCATION, MOUNTING HEIGHT, AND TYPE OF TERMINATION FROM DETERMINED FROM ARCHITECTURAL DRAWINGS, SHOP DRAWINGS, EQUIPMENT CUTS OR DETAILS BEFORE CONDUIT ROUGH-IN.
- 16. PROVIDE SINGLE COMMON COVER PLATE IN ALL AREAS WHERE DEVICES ARE GANGED MORE THAN TWO IN GROUP TOGETHER.
- 17. THE CONTRACTOR SHALL NOT CORE DRILL CONCRETE SLABS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE STRUCTURAL ENGINEERS AND THE BUILDING ENGINEERS.
- 18. CONTRACTOR TO SCAN PROPOSED CORE DRILL LOCATIONS WITH GPR DEVICE TO PREVENT CUTTING THROUGH CONCEALED RE-BARS AND/OR CONDUIT IN SOLID CONCRETE FLOOR SLAB.
- 20. PROVIDE DISCONNECT SWITCHES/STARTERS IF NOT FURNISHED INTEGRAL WITH THE MECHANICAL EQUIPMENT. SIZE DISCONNECT SWITCH/STARTER AS RECOMMENDED BY EQUIPMENT MANUFACTURER.
- 21. FIELD VERIFY EXISTING FIRE ALARM CONTROL PANEL. IF REQUIRED PROVIDE ACCESSORIES TO ACCOMMODATE NEW DEVICES.
- 22. CONTRACTOR SHALL VERIFY ALL EQUIPMENT REQUIREMENTS BEFORE INSTALLING CONDUIT OR CONDUCTORS FROM POWER SOURCE TO
- 23. ALL WIRE SIZES ARE BASED ON COPPER CONDUCTORS.
- 24. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR PROPER FUNCTION OF THE SYSTEM.
- 25. ALL WIRING SHALL BE INSTALLED IN CONDUIT. CONDUCTORS SHALL BE TYPE THHN OR THWN. MINIMUM WIRE SIZE SHALL BE #12 AWG. MINIMUM CONDUIT SIZE SHALL BE 3/4". THE USE OF TYPE AC CABLE IS PERMISSIBLE.
- 26. PANELBOARDS: PANELBOARDS SHALL BE INDICATED ON SCHEDULE, WITH BOLT-ON, BRANCH CIRCUIT BREAKERS AND COPPER BUSS OR MATCH BASE BUILDING DISTRIBUTION EQUIPMENT.
- 27. WALL PLATES:
- A. MATERIAL FOR FINISHED SPACES: SMOOTH, HIGH-IMPACT
- B. MATERIAL FOR UNFINISHED SPACES: SMOOTH, HIGH-IMPACT THERMOPLASTIC.
- C. MATERIAL FOR DAMP LOCATIONS: THERMOPLASTIC WITH SPRING-LOADED LIFT COVER, AND LISTED AND LABELED FOR USE IN "WET LOCATIONS." D. FINISH AS SELECTED BY ARCHITECT.
- 28. CONTRACTOR TO PROVIDE FURNISHED AS-BUILT DRAWINGS AND BUILDING OWNER'S MANUALS FOR ALL ELECTRIC POWER SYSTEM FOR RECORD.
- 29. INTERRUPTION OF EXISTING ELECTRIC SERVICE: NOTIFY THE BUILDING ENGINEERS OR OWNER AT LEAST 5 DAYS IN ADVANCE OF PROPOSED CUT-OFF ELECTRICAL SERVICE TO THE BUILDING.

### ELECTRICAL NOTES

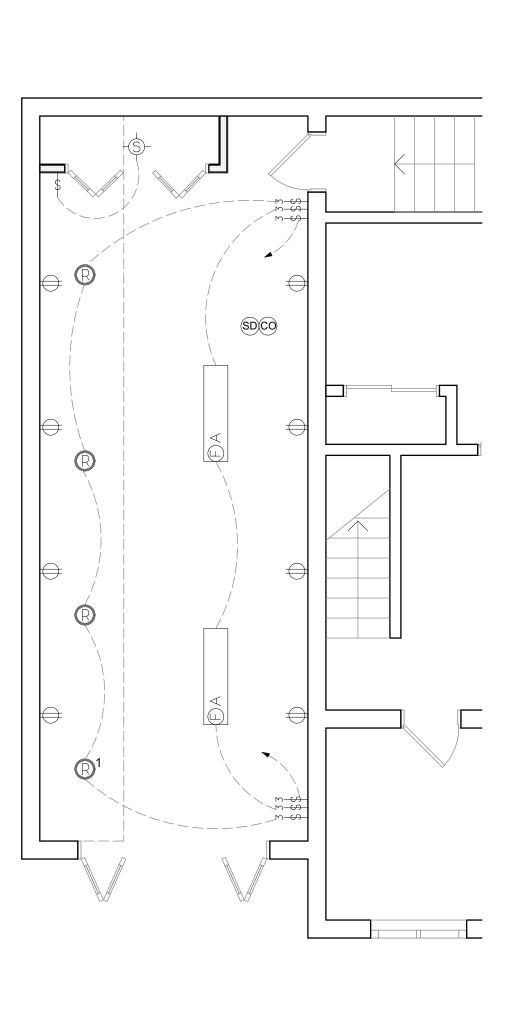
- INSTALLATION OF ALL WIRING AND CONDUITS SHALL CONFORM WITH LATEST EDITION OF THE NATIONAL ELECTRICAL CODE INCLUDING NFPA 96 AND LOCAL
- CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY, AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS. EXPOSED CONDUITS SHALL BE INSTALLED PARALLEL TO THE BEAMS AND WALLS.
- PROVIDE ALL REQUIRED PULL BOXES AND JUNCTION BOXES FOR INSTALLATION OF THE WIRING IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS THOUGH THE BOXES MAY NOT BE INDICATED ON THE DRAWINGS.
- THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUITS ARE BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION SHALL BE COORDINATED PRIOR TO COMMENCEMENT OF WORK.
- PROVIDE ALL NECESSARY COMPONENTS REQUIRED FOR MAKING FINAL CONNECTIONS OF ALL EQUIPMENT INSTALLED OR MODIFIED AS PART OF THIS CONTRACT.
- DRAWINGS ARE DIAGRAMMATIC. ACTUAL LOCATION OF EQUIPMENT TO BE DETERMINED IN THE FIELD. NEW EQUIPMENT SHALL FIT INTO EXISTING AVAILABLE SPACE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE EQUIPMENT WHICH MEETS THE SPACE REQUIREMENT. RELOCATION OF EQUIPMENT TO FIT INTO EXISTING AVAILABLE SPACE SHALL BE ACCOMPLISHED AT NO ADDITIONAL COST TO THE OWNER.
- ELECTRICAL REQUIREMENTS FOR MECHANICAL EQUIPMENT ARE BASED ON EQUIPMENT SPECIFIED. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL SHOP DRAWINGS PRIOR TO ORDERING AND INSTALLING EQUIPMENT.
- WHERE ELECTRICAL INSTALLATIONS DEPEND UPON WORK OF OTHER TRADES, THE ELECTRICAL CONTRACTOR SHALL ENSURE THAT NECESSARY INSTRUCTIONS, TEMPLATES, MATERIALS, ETC. ARE PROVIDED AND SUPERVISE THE WORK OF THE OTHER TRADES FOR QUALITY AND CODE COMPLIANCE.
- OPENINGS AND PASSAGE OF CONDUITS OR WIREWAYS THROUGH FLOOR SLABS AND FIRE RATED WALLS OR PARTITIONS SHALL BE PROVIDED WITH UL LISTED FIRE RATED SLEEVING SYSTEMS AS MANUFACTURED BY PROSET SYSTEMS INC., OR APPROVED EQUAL.
- 10. ALL JUNCTION AND PULL BOXES SHALL BE LABELED WITH THEIR VOLTAGE AND USAGE.
- 11. CUT AND PATCH SLABS, CEILING, ROOF, FLOOR, WALL, ETC. AND OTHER SURFACES AS NECESSARY TO ACCOMPLISH CONSTRUCTION WORK UNDER THIS
- 12. APPROXIMATE LOCATIONS ARE SHOWN FOR ALL CONDUITS AND CONDUIT PENETRATIONS. CONTRACTOR SHALL VERIFY LOCATION FOR ALL CONDUITS AND CONDUIT PENETRATIONS. ADJUST LOCATIONS AS REQUIRED.
- 13. MINIMUM WIRE SIZE SHALL BE #12 UON. MINIMUM CONDUIT SIZE SHALL BE 3/4"
- 14. PROVIDE U.L APPROVED FIRE-STOPPING SYSTEM TO ALL RECESSED ELECTRICAL BOXES, PANEL, ETC. IN FIRE RATED WALLS AND CEILINGS.
- 15. PROVIDE U.L APPROVED FIRE-STOPPING SYSTEM TO ALL CONDUITS, CABLES, WIRING, SLEEVES, ETC. PENETRATION THROUGH FIRE RATED WALLS, CEILINGS AND FLOORS.
- 16. NOT LESS THAN 85% OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS OR NOT LESS THAN 85% OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH EFFICACY LAMPS. HIGH EFFICACY LAMPS ARE EITHER LED, COMPACT FLUORESCENT LAMPS (CFLs), T-8 OR SMALLER DIAMETER LINEAR FLUORESCENT LAMPS, OR LAMPS WITH A MIN EFFICACY OF
  - 1. 60 LUMENS PER WATT FOR LAMPS OVER 40 WATTS 2. 50 LUMENS PER WATT FOR LAMPS OVER 15 WATTS TO 40 WATTS 3. 40 LUMENS PER WATT FOR LAMPS 15 WATTS OR LESS

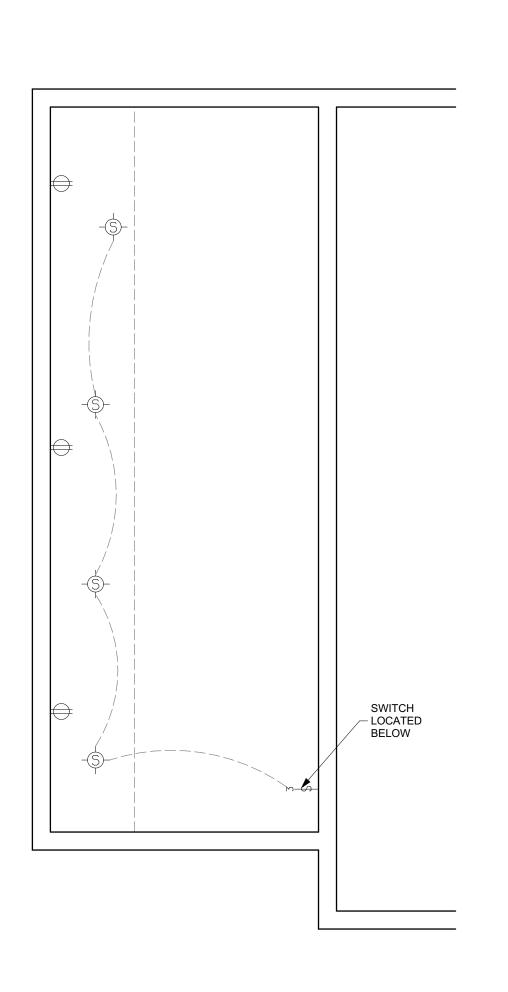
APPROVED Montgomery County Historic Preservation Commission

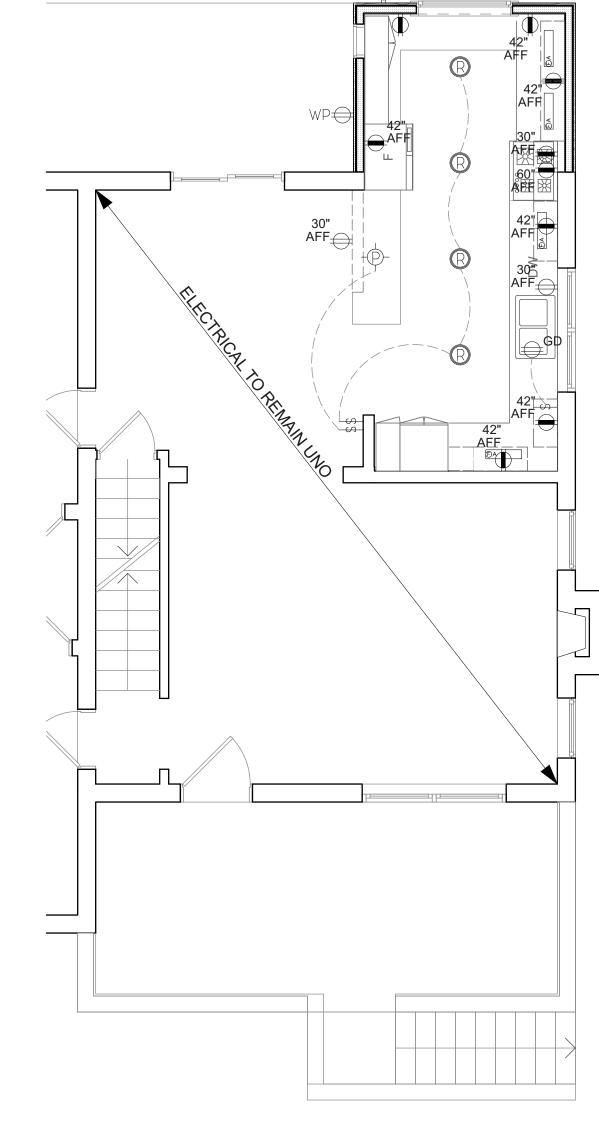
**REVIEWED** By Dan.Bruechert at 3:27 pm, Feb 23, 2022

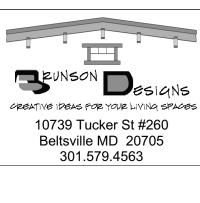
## **ELECTRICAL SCHEDULE** LED SUSPENSION LIGHT UNDER CABINET FLOURESCENT LIGHT SURFACE LIGHT PENDANT LIGHT RECESSED CAN LIGHT RECEPTACLE DUPLEX OUTLET INSTALL AFCI OUTLETS PER NEC GFI RECEPTACLE **DUPLEX OUTLET** RECEPTACLE DUPLEX WATERPROOF SWITCH DIMMER SWITCH 3-WAY SWITCH 4-WAY SWITCH SMOKE DETECTOR-HARDWIRED, INTERCONNECTED, BATTERY BACKUP CARBON MONOXIDE ALARM TELEPHONE

CABLE TELEVISION RECEPTACLE









B 

Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions 12.06.21

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Partial First Floor Electrical Plan 3. E1.1

Partial Bsmt Elect Plan @ Garage Level | 1. 1/4" = 1'-0"

Partial Bsmt Elect Plan @ Garage Loft | 2.

1/4" = 1'-0"