



HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Jeffrey Hains
Chair

September 11, 2026

TO: Rabbiah Sabbakhan
Department of Permitting Services
FROM: Laura DiPasquale
Historic Preservation Section
Maryland-National Capital Park & Planning Commission
SUBJECT: Historic Area Work Permit #1167956 – Vent, mechanical equipment, and railing installation

The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached applications for a Historic Area Work Permit (HAWP). This application was **approved** at the September 9, 2026 HPC meeting.

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: 7042-7044 Carroll Avenue LLC (Bestudio, LLC, Agent)
Address: 7042 Carroll Avenue, 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 Laura DiPasquale at 301-495-2167 or laura.dipasquale@montgomeryplanning.org to schedule a follow-up site visit.





FOR STAFF ONLY:
HAWP# _____
DATE ASSIGNED _____

APPLICATION FOR HISTORIC AREA WORK PERMIT

HISTORIC PRESERVATION COMMISSION
301.563.3400

APPLICANT:

Name: 7042-7044 CARROLL AVE LLC
Address: 6900 Wisconsin Ave, Ste 30874
Daytime Phone: 202-431-8021

E-mail: yonisb@gmail.com
City: Bethesda Zip: 20824
Tax Account No.: 01057466

AGENT/CONTACT (if applicable):

Name: bestudio, LLC
Address: 5039 FULTON ST NW
Daytime Phone: 202-236-4513

E-mail: michael@bestudio.co
City: WDC Zip: 20016
Contractor Registration No.: 17134

LOCATION OF BUILDING/PREMISE: MIHP # of Historic Property _____

Is the Property Located within an Historic District? X Yes/District Name TAKOMA PARK
____ No/Individual Site Name _____

Is there an Historic Preservation/Land Trust/Environmental Easement on the Property? If YES, include a map of the easement, and documentation from the Easement Holder supporting this application.

Are other Planning and/or Hearing Examiner Approvals /Reviews Required as part of this Application? (Conditional Use, Variance, Record Plat, etc.?) If YES, include information on these reviews as supplemental information.

Building Number: 7042 Street: CARROLL AVE
Town/City: TAKOMA PARK Nearest Cross Street: TULIP AVE
Lot: P24 Block: 6 Subdivision: _____ Parcel: _____

TYPE OF WORK PROPOSED: See the checklist on Page 4 to verify that all supporting items for proposed work are submitted with this application. Incomplete Applications will not be accepted for review. Check all that apply:

- | | | |
|---|--|--|
| ☐ New Construction | ☐ Deck/Porch | ☐ Shed/Garage/Accessory Structure |
| ☐ Addition | ☐ Fence | ☐ Solar |
| ☐ Demolition | ☐ Hardscape/Landscape | ☐ Tree removal/planting |
| ☐ Grading/Excavation | ☐ Roof | ☐ Window/Door |
| | | ☒ Other: <u>ROOF TOP EQUIPMENT</u> |

I hereby certify that I have the authority to make the foregoing application, that the application is correct and accurate and that the construction will comply with plans reviewed and approved by all necessary agencies and hereby acknowledge and accept this to be a condition for the issuance of this permit.



Signature of owner or authorized agent

08/06/2026

Date

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

The subject property is located at 1044 Carroll Avenue in Takoma Park, Montgomery County, Maryland, and is identified as Lot 24, Block 6 of the Lipscomb & Earnest, Trustees' Addition to Takoma Park. The lot encompasses approximately 4,765 square feet and fronts on Carroll Avenue, which has a 50-foot right-of-way.

The structure on the property is a mixed-use, building consisting of two distinct volumes. The volume to the east contains dwelling units, with a frame porch at the front entry and a hip roof with dormers. The volume to the west, which is the subject of this application, most recently housed a clothing store and contains a large storefront window on both the first and second floor with a flat roof. The first floor of the structure extends beyond the second floor depth, with a lower flat roof towards the rear yard.

The property features landscape plantings along the brick front walkway and is set back appropriately from Carroll Avenue. A concrete driveway provides vehicular access.

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

Tenant fit-out of an existing retail space for conversion to a beauty salon. Scope includes relocation of existing plumbing fixtures to provide an accessible bathroom, installation of new HVAC equipment, plumbing fixtures, and electrical distribution to serve new salon equipment, construction of new partitions, and replacement of floor and wall finishes.

REVIEWED

By Laura DiPasquale at 11:43 am, Sep 11, 2026

APPROVED

Montgomery County

Historic Preservation Commission

A handwritten signature in black ink, appearing to be 'JH', is written over a horizontal line.

Work Item 1: _____

Description of Current Condition:

Lower flat roof towards the rear yard not visible from the public way

Proposed Work:

Installation of a 400 CFM utility set exhaust fan on the roof for salon exhaust and a 6" diameter gooseneck discharge for a bathroom exhaust fan, along with a metal railing across the low part of the roof for fall protection.

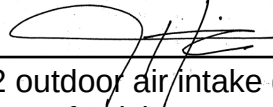
REVIEWED

By Laura DiPasquale at 11:43 am, Sep 11, 2026

APPROVED

Montgomery County

Historic Preservation Commission



Description of Current Condition:

Existing roof top equipment on higher flat roof not visible from the public way

Proposed Work:

New 12x12 outdoor air intake gooseneck wire mesh screen on top of existing return air duct.

Work Item 3: _____

Description of Current Condition:

Proposed Work:



PHOTOGRAPH - EXISTING STOREFRONT

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED
By Laura DiPasquale at 11:43 am, Sep 11, 2026

bestudio
ARCHITECTURE
242 10th St NE WDC | T: 202-670-2739

LIBER DESIGN, Inc.
Mechanical - Electrical - Plumbing Engineering
22960 Shaw Road, Suite 620
Sterling, Virginia 20166
571.291.4012 ph
www.calliberdesigninc.com

PROJECT DESCRIPTION	TENANT FIT-OUT OF AN EXISTING RETAIL SPACE FOR CONVERSION TO A BEAUTY SALON. SCOPE INCLUDES RELOCATION OF EXISTING PLUMBING FIXTURES TO PROVIDE AN ACCESSIBLE BATHROOM, INSTALLATION OF NEW HVAC EQUIPMENT, PLUMBING FIXTURES, AND ELECTRICAL DISTRIBUTION TO SERVE NEW SALON EQUIPMENT, CONSTRUCTION OF NEW PARTITIONS, AND REPLACEMENT OF FLOOR AND WALL FINISHES.				
JURISDICTIONAL INFORMATION	BUILDING ADDRESS	7042 CARROLL AVE, TAKOMA PARK, MD 20912			
	PARCEL, LOT, BLOCK	N/A, P24 , 6			
	ZONE	NR-0.75 H-50			
	JURISDICTION	MONTGOMERY COUNTY, MD			
	HISTORIC DISTRICT	TAKOMA PARK			
	APPLICABLE CODE	ACCESSIBILITY	COMAR 09.12.53, ADAAG & FHAG	COMMERCIAL FUEL GAS	ICC INTERNATIONAL FUEL GAS CODE/2021
		COMMERCIAL BUILDING	ICC INTERNATIONAL BUILDING CODE/2021 ICC INTERNATIONAL EXISTING BUILDING CODE/2021 MBRC MARYLAND BUILDING REHABILITATION CODE	COMMERCIAL MECHANICAL	ICC INTERNATIONAL MECHANICAL CODE/2021
		GREEN BUILDING	IgCC 2012 GREEN BUILDING CODE		
		ENERGY CONSERVATION	ICC ENERGY CONSERVATION CODE/2021	COMMERCIAL ELECTRICAL	NFPA 70 NATIONAL ELECTRICAL CODE/2017
		FIRE & LIFE SAFETY	NFPA 1 & 101/2021	FIRE ALARM	NFPA 72/2019
			PLUMBING & GAS	WSSC PLUMBING & FUEL GAS CODE	
	COMMERCIAL SPRINKLER	NFPA 13R/2019, NFPA 13/2019			

DRAWING INDEX				
Sheet No	Sheet Name	Revisions		
		Latest	Description	Date
GENERAL				
G000	COVER			
G001	LIFE SAFETY PLANS			
2				
DEMOLITION				
D100	DEMOLITION FLOOR PLANS			
1				
ARCHITECTURAL				
A000	GENERAL NOTES			
A100	FLOOR & REFLECTED CEILING PLANS			
2				
MECHANICAL				
M001	MECHANICAL NOTES AND SPECIFICATIONS			
M002	MECHANICAL SCHEDULES AND DETAILS			
M101	MECHANICAL PLANS			
3				
PLUMBING				
P001	PLUMBING NOTES AND SPECIFICATIONS			
P002	PLUMBING PLANS			
2				
ELECTRICAL				
E001	ELECTRICAL NOTES AND SPECIFICATIONS			
E002	ELECTRICAL RISER AND SCHEDULES			
E101	FIRST FLOOR ELECTRICAL PLANS			
E102	SECOND FLOOR ELECTRICAL PLANS			

HIFOXY BEAUTY

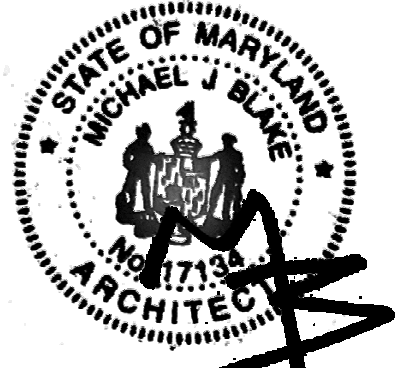
FOXY GROUP LLC

7042 CARROLL AVE
TAKOMA PARK, MD 20912

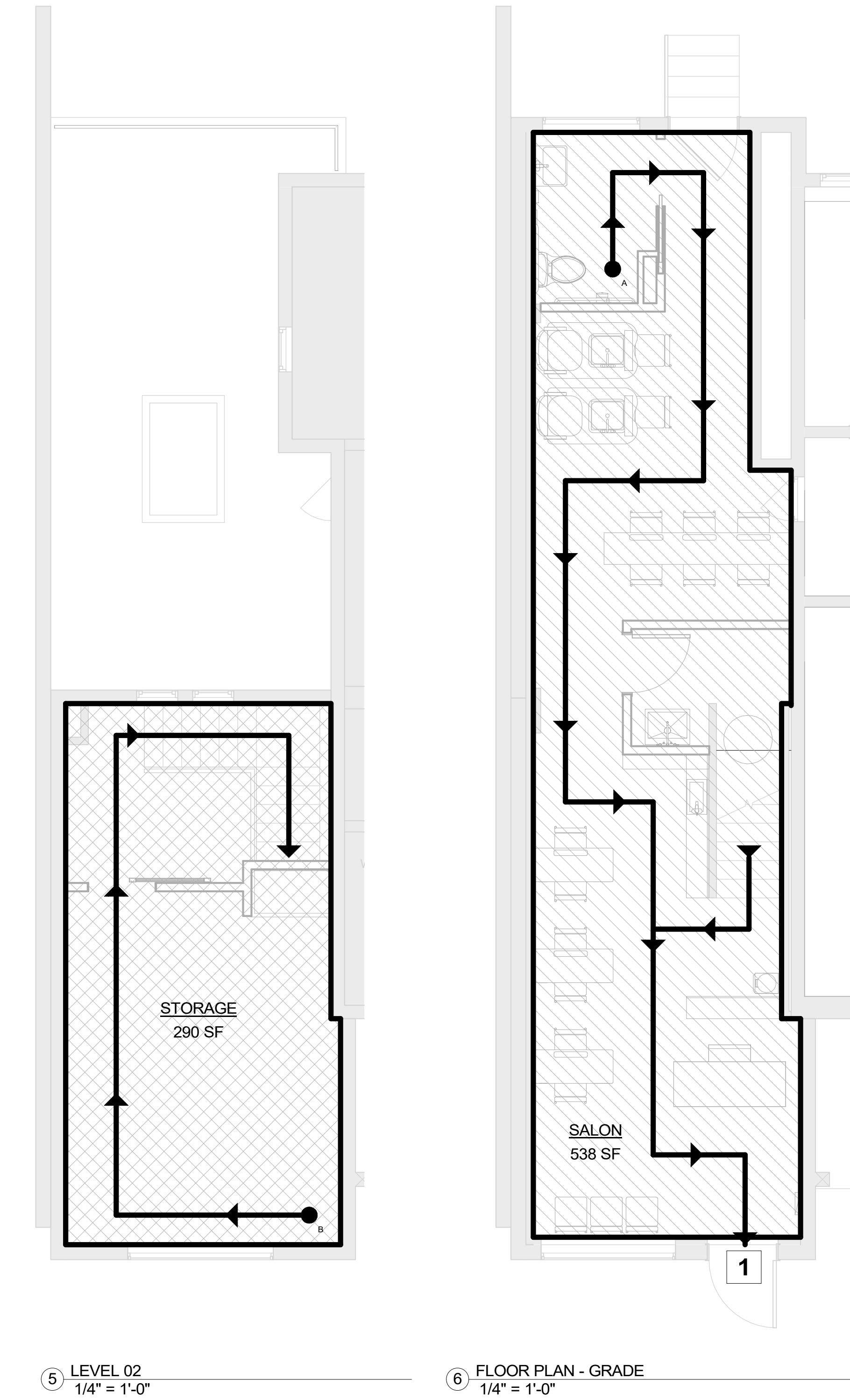
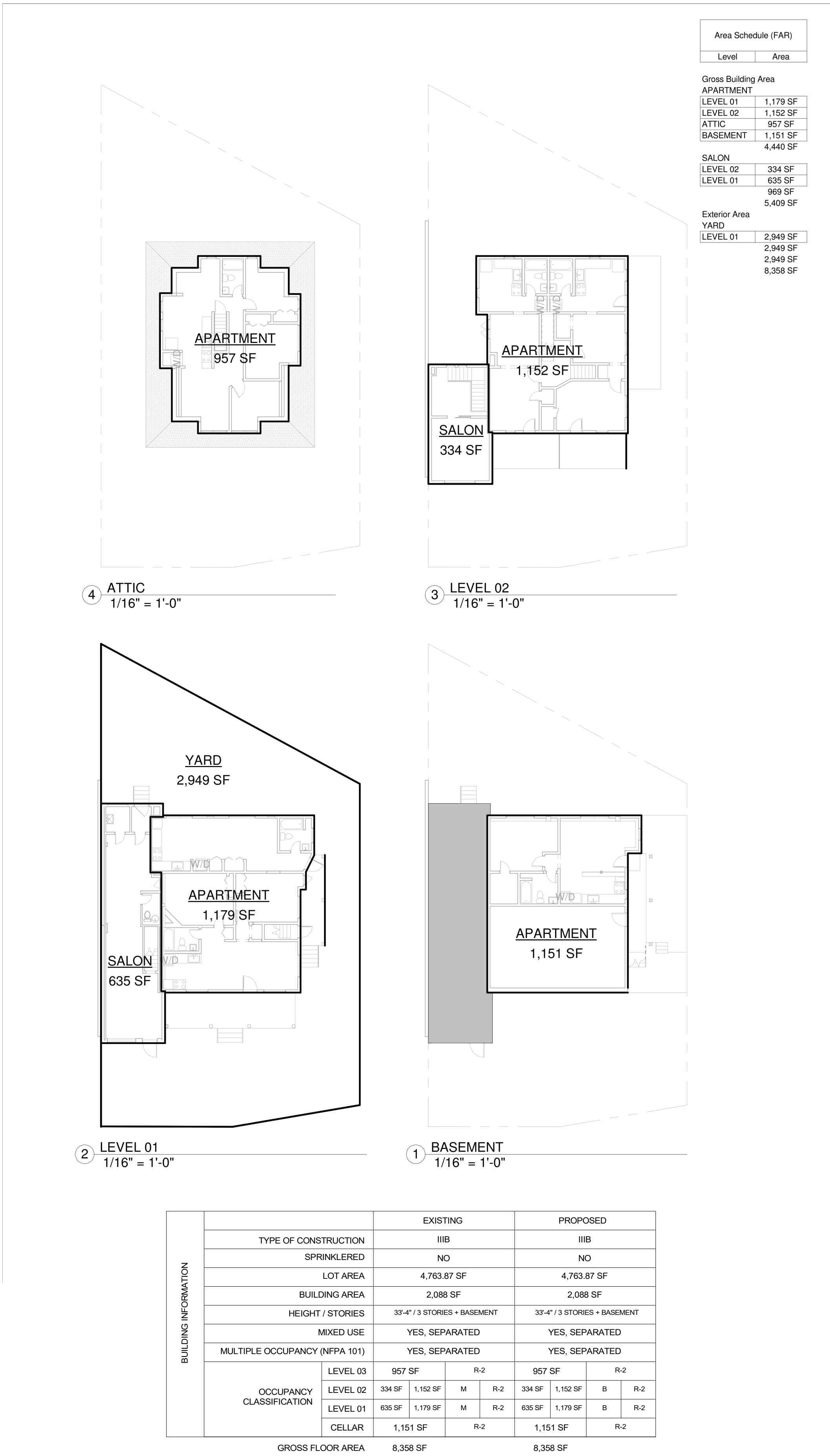
ISSUED FOR PERMIT

16 JUNE 2026

REVISION SCHEDULE		
NO	DATE	DESCRIPTION
06/17/2026	ISSUED FOR PERMIT	



I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 17134, expiration date 12/10/2026



OCCUPANCY SCHEDULE								
Space		Area	Type	Occupant Load Factor	Occupant Load			
Name	Function of Space				Occupants	Fixed Seating	Occupant Load	
GRADE								
SALON	Concentrated Business	538 SF	Gross	50	11	0	11	
LEVEL 02								
STORAGE	Business areas	290 SF	Gross	100	3	0	3	
		828 SF						
						14		

EGRESS ANALYSIS	REMOTE POINT ID	OCCUPANCY	OCCUPANT LOAD	EXIT ID	EXIT ACCESS TRAVEL DISTANCE	COMMON PATH OF TRAVEL
	A	CONCENTRATED BUSINESS	11	1	70'	N/A 1 EXIT REQUIRED
	B	BUSINESS	3	1	69'	N/A 1 EXIT REQUIRED

EXIT DISCHARGE DOOR	OCCUPANT LOAD = 14	REQUIRED	PROVIDED
	NUMBER OF EXITS	1	1
	DOOR WIDTH (2 PER OCC)	2.8" (34" MIN)	34"

PLUMBING FIXTURE ANALYSIS	OCCUPANCY		WATER CLOSETS				LAVATORIES				DRINKING FOUNTAIN		SERVICE SINK
	USE	LOAD	RATIO	MALE	RATIO	FEMALE	RATIO	MALE	RATIO	FEMALE	RATIO	DF	
	B		1/25 FOR FIRST 50, 1/50 FOR REMAINDER	.28	1/25 FOR FIRST 50, 1/50 FOR REMAINDER	.28	1/40 FOR FIRST 80, 1/80 FOR REMAINDER	.18	1/40 FOR FIRST 80, 1/80 FOR REMAINDER	.18	1/100	.07	
	SUBTOTALS			.28		.28		.28		.28		.07	
	REQUIRED TOTAL			1*		1*		1*		1*		1**	

* PER MD PLUMBING CODE 403.2 SEPARATE FACILITIES. SEPARATE TOILET FACILITIES SHALL NOT BE REQUIRED IN TENANT SPACES WITH A TOTAL OCCUPANT LOAD OF 15 OR FEWER
** PER MD PLUMBING CODE 410.2 DRINKING FOUNTAINS SHALL NOT BE REQUIRED FOR AN OCCUPANT LOAD OF 15 OR FEWER

- LIFE SAFETY LEGEND

PROPERTY LINE

1 HR RATED WALL ASSEMBLY

1 HR RATED FLOOR/CEILING ASSEMBLY

2 HR RATED ASSEMBLY

3 HR RATED ASSEMBLY

EXIT ACCESS PATH

PRIMARY EGRESS PATH

SECONDARY EGRESS PATH

REMOTE POINT

POINT OF DECISION

#

EXIT
- OCCUPANCY LEGEND

B BUSINESS

BC CONCENTRATED BUSINESS

APPROVED

Montgomery County

Historic Preservation Commission

REVIEWED

By Laura DiPasquale at 11:43 am, Sep 11, 2026

HIFOXY BEAUTY

7042 CARROLL AVE
TAKOMA PARK, MD 20912

bestudio
ARCHITECTURE
242 10th St NE WDC | T: 202-670-2739

REVISION SCHEDULE

NO	DATE	DESCRIPTION
	06/17/2026	ISSUED FOR PERMIT

STATE OF MARYLAND

MICHAEL J. BLAKE

ARCHITECT

17134

I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 17134, expiration date 12/10/2026

0' 2'

8'

14'

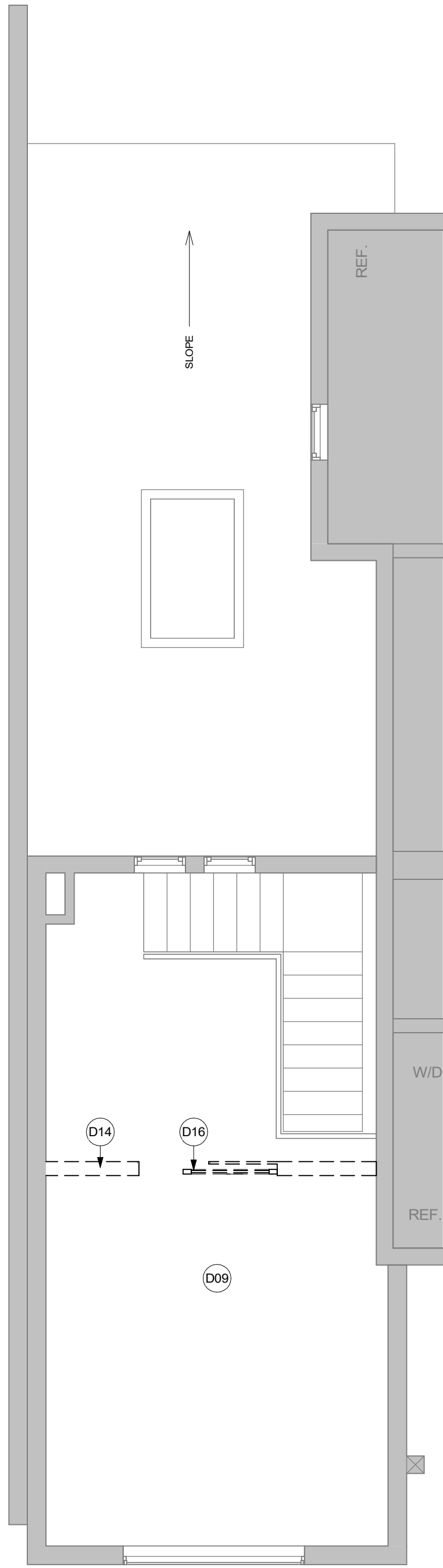
SCALE: As indicated

GRAPHIC SCALE SHOWN FOR REFERENCE ONLY - DO NOT SCALE OFF OF DRAWINGS

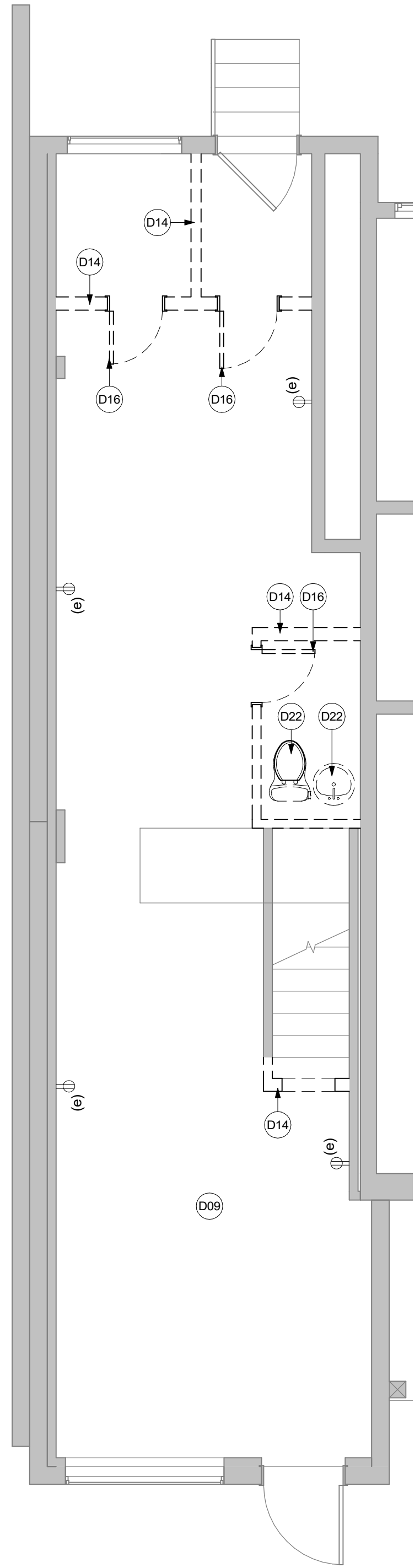
LIFE SAFETY PLANS

G001

©2022 bestudio, LLC



② FLOOR PLAN - LEVEL 02
1/4" = 1'-0"



① FLOOR PLAN - LEVEL 01
1/4" = 1'-0"

SHEET NOTES

- D09 DEMO FINISH FLOOR & PREPARE SUBSTRATE FOR NEW INSTALLATION
- D14 DEMO INTERIOR PARTITION
- D16 DEMO DOOR, FRAME & HARDWARE
- D22 REMOVE PLUMBING FIXTURE & CAP PIPING - COORDINATE SALVAGE/REUSE WITH OWNER

GENERAL NOTES - DEMOLITION

- 01 GC TO VERIFY PRESENCE OF ASBESTOS AND/OR LEAD PAINT - ABATE AS REQUIRED
- 02 PROTECT ALL EXISTING FINISHES TO REMAIN
- 03 IF DEMOLITION IS PERFORMED IN EXCESS OF THAT REQUIRED, RESTORE EFFECTED AREAS AT NO COST TO THE OWNER
- 04 REMOVE FROM SITE DAILY AND LEGALLY DISPOSE OF REFUSE, DEBRIS, RUBBISH
- 05 REMOVE ABANDONED HVAC EQUIPMENT, INCLUDING DUCT WORK
- 06 SEE MEP DRAWINGS FOR ADDITIONAL DEMOLITION NOTES



REVIEWED
By Laura DiPasquale at 11:43 am, Sep 11, 2026

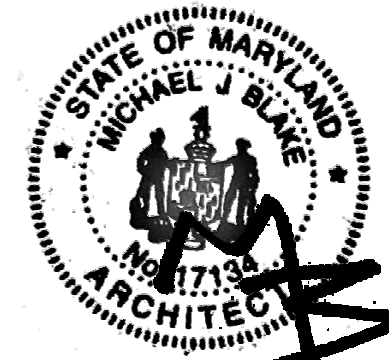
HIFOXY BEAUTY

7042 CARROLL AVE
TAKOMA PARK, MD 20912

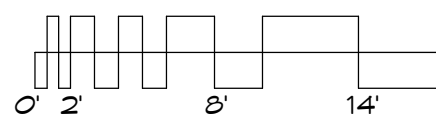
bestudio
ARCHITECTURE
242 10th St NE WDC | T: 202-670-2739

REVISION SCHEDULE

NO	DATE	DESCRIPTION
06/17/2026	ISSUED FOR PERMIT	



I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 17134, expiration date 12/10/2026



SCALE: 1/4" = 1'-0"

GRAPHIC SCALE SHOWN FOR REFERENCE ONLY - DO NOT SCALE OFF OF DRAWINGS

DEMOLITION FLOOR PLANS

D100

30 NEW WATER COOLER
34 NEW RTU - SEE MECHANICAL
37 BALLASTED METAL GUARD RAIL TO RESIST A LINEAR LOAD OF 50#/LF AND A CONCENTRATED LOAD OF 200# - SHALL BE CONSTRUCTED TO PREVENT THE PASSAGE OF A SPHERE 21" IN DIAMETER, AND SHALL EXTEND 30" BEYOND EACH END OF EQUIPMENT WITHIN 10' OF ROOF EDGE



By Laura DiPasquale at 11:43 am, Sep 11, 2026

7042 CARROLL AVE
TAKOMA PARK, MD 20912

bestudio
ARCHITECTURE
242 10th St NE WDC | T: 202-670-2739

F01	MANICURE TABLE	NOVA	1 STATION
F02	MANICURE TABLE	NOVA	3 STATION
F04	DRY PEDICURE SPA CHAIR	GLORALL	TRUFFLE

TA1	Glass Mirror with Stainless Steel Angle Frame
TA2	Surface Mounted Soap Dispenser
TA3	Surface Mounted Multi-roll Toilet Tissue Dispenser
TA4	Surface Mounted Seat Cover Dispenser
TA6	Stainless Steel Grab Bars with Snap Flange, 18"
TA8	Stainless Steel Grab Bars with Snap Flange, 36"
TA9	Stainless Steel Grab Bars with Snap Flange, 42"

GENERAL NOTES - ARCHITECTURAL

- 01 BLOCKING SHALL BE A MINIMUM OF UTILITY GRADE LUMBER
- 02 SUBFLOORING MAY BE A MINIMUM OF UTILITY GRADE LUMBER OR NO. 4 COMMON GRADE BOARDS
- 03 FIREBLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE
- 04 WHERE THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR/CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1,000 SQ. FT.
- 05 CORROSION-RESISTANT FLASHING SHALL BE INSTALLED AT ALL EXTERIOR WALL/DOOR/ROOF INTERSECTIONS, AND INTERSECTIONS OF DISSIMILAR MATERIALS.
- 06 ANY PENETRATIONS TO ONE OR BOTH SIDES OF DISSIMILAR-RATED ROOF OR DOOR-ROOF INTERSECTIONS MUST BE PROTECTED TO MAINTAIN THE INTEGRITY OF THE ASSEMBLY.
- 07 PARTITIONS ARE DIMENSIONED FROM SHEATHING TO SHEATHING, UNLESS OTHERWISE NOTED. DIMENSION MARKS MARKED "CLEAR" ALLOW FOR THICKNESS OF FINISHES.
- 08 PARTITIONS ARE TYPE E402 UNLESS OTHERWISE NOTED.
- 09 PARTITIONS IN HABITABLE SPACES SHALL BE 7'-0" MIN UNLESS OTHERWISE NOTED
- 10 FINISH SURFACE OF ALL FLOORING MATERIALS THROUGHOUT
- 11 FINISH FLOORING SHALL BE 1/2" MIN. THICK. FINISHES OF WALL-BASE INTERSECTIONS FLOOR WITH MORE THAN 1/2" VARIATION. SCRIBE BASE TO FLOOR AS REQUIRED. PROVIDE ALL SUBSTRATE/LEVELING REQUIRED FOR FINISHES TO BE APPLIED AS INDICATED

P01	SINK	ELKAY		
P02	BATHROOM SINK	AMERICAN STANDARD	Decorum Wall-hung	ADA COMPLIANT INSTALLATION
P03	TOILET	AMERICAN STANDARD	K-3810-0	ADA COMPLIANT
P04	UTILITY SINK	SIGNATURE HARDWARE	JESSAMY WALL-MOUNT	
P05	UTILITY FAUCET	SIGNATURE HARDWARE	JESSAMY WALL-MOUNT	
P06	HANK SINK	NAMERS	SCARBORO 1501 SOFT	ADA COMPLIANT INSTALLATION
P07	FAUCET	KOHLER	46100	ADA COMPLIANT

ROOM FINISH SCHEDULE						
Room Number	Room Name	Finish				Comments
		Floor	Base	Wall	Ceiling	
GRADE						
001	SALON	LVT	VINYL	PAINTED GYP	PAINTED GYP	
002	UTILITY	LVT	VINYL	PAINTED GYP	PAINTED GYP	
003	BATHROOM	LVT	VINYL	PAINTED GYP	PAINTED GYP	
LEVEL 02						
201	STORAGE	LVT	VINYL	PAINTED GYP	PAINTED GYP	
202	STORAGE	LVT	VINYL	PAINTED GYP	PAINTED GYP	

DOOR HARDWARE SCHEDULE															
Hardware		Hanging Device		Lockset		Securing Device		Closing Device		Stop or Holder		Miscellaneous	Gasketing		Comments
Key	Description	Finish	Description	Finish	Description	Finish	Description	Finish	Description	Finish	Description	Head & Jamb	Sill		
01	HINGE	BHMA 630	CYLINDRICAL STOREROOM	BHMA 630	-	-	-	-	KICK DOWN	BHMA 630	-	-	-	UTILITY ROOM	
02	SLIDING	BHMA 630	POCKET CYLINDRICAL PRIVACY	BHMA 630	-	-	-	-			-	-	-	BATHROOM	
03	SLIDING	BHMA 630	DUMMY PULL	BHMA 630	-	-	-	-			-	-	-	STORAGE	

BATHROOM 003

5' - 6" CLR

TA9

TA6

3' - 9 1/2"

42" MIN

UTILITY 002

P04

P05

SALON 001

30

F01

F02

F03

F04

F05

TA1

TA2

TA3

TA4

TA8

P02

P07

EXIT

4 REFLECTED CEILING PLAN - LEVEL 02
1/4" = 1'-0"

3 REFLECTED CEILING PLAN - LEVEL 01
1/4" = 1'-0"

2 FLOOR PLAN - LEVEL 02
1/4" = 1'-0"

① FLOOR PLAN - LEVEL 01
1/4" = 1'-0"

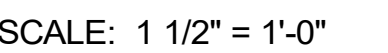
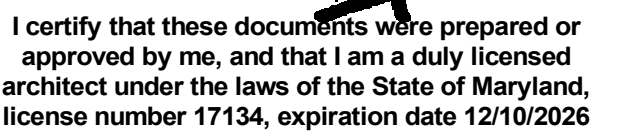


By Laura DiPasquale at 11:43 am, Sep 11, 2026

7042 CARROLL AVE
TAKOMA PARK, MD 20912

bestudio
ARCHITECTURE
242 10th St NE WDC | T: 202-670-2739

NO	DATE	DESCRIPTION
----	------	-------------



GRAPHIC SCALE SHOWN FOR REFERENCE ONLY - DO NOT SCALE OFF OF DRAWINGS

A500

ABBREVIATIONS & SYMBOLS			
* NOT ALL ABBREVIATIONS AND SYMBOLS INDICATED BELOW MAY BE USED ON THE PLANS			
#	NUMBER (OF)	XXX-#	EQUIPMENT DESIGNATION INDICATOR
%	PERCENT (OF)	①	SHEET NOTE INDICATOR
(S)	EXISTING TO REMAIN	----	REMOVE EXISTING
(R)	REMOVE EXISTING	----	EXISTING TO REMAIN
(RL)	RELOCATE EXISTING	----	NEW WORK
AABC	ASSOCIATED AIR BALANCE COUNCIL	●	POINT OF CONNECTION NEW TO EXISTING
AMCA	AIR MOVEMENT AND CONTROL ASSOCIATION	○	LIMIT OF REMOVAL
APD	AIR PRESSURE DROP	→	DUCT TRANSITION
ASHRAE	AMERICAN SOCIETY OF HEATING REFRIGERATION AND AIR CONDITIONING ENGINEERS	→	CONTROL WIRING/TUBING
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	=====	SOUND LINED DUCT
BBH	BASEBOARD HEATER	↘	ELBOW WITH TURNING VANES
BTU/H	BRITISH THERMAL UNITS PER HOUR	↗	FLEXIBLE CONNECTION
CAD	COMPUTER AIDED DESIGN	— VD	VOLUME DAMPER
CFM	CUBIC FEET PER MINUTE	— MD	MOTORIZED DAMPER
DB	DRY BULB	①	SWITCH
dBA	DECIBELS (A-WEIGHTED)	②	THERMOSTAT/TEMPERATURE SENSOR
DN	DOWN	⚡	AIR INTO AIR TERMINAL, ETC.
DX	DIRECT EXPANSION	→	AIR OUT OF AIR TERMINAL, ETC.
EAT	ENTERING AIR TEMPERATURE	→	SUPPLY AIR DEVICE
EF	EXHAUST FAN	↗	RETURN AIR DEVICE
ESP	EXTERNAL STATIC PRESSURE	↘	EXHAUST AIR DEVICE
ET	EXTERA	(#) < (#)	AIR DEVICE DESIGNATION QUANTITY IF INDICATED
F	DEGREES FAHRENHEIT	###	CFM IF INDICATED
FLA	FULL LOAD AMPS		
PFM	FEET PER MINUTE		
PSK	FOIL SCHEM JACKET		
FT	FEET		
HP	HORSEPOWER		
HSFP	HEATING SEASON PERFORMANCE FACTOR		
HVAC	HEATING, VENTILATING AND AIR CONDITIONING		
IN	INCHES		
KW	KILOWATTS		
LES	POUNDS		
MAX	MAXIMUM		
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR		
MCA	MINIMUM CIRCUIT AMPS		
MD	MOTORIZED DAMPER		
MERV	MINIMUM EFFICIENCY REPORTING VALUE		
MIN	MINIMUM		
MCCP	MAXIMUM OVER CURRENT PROTECTION		
NC	NOISE CRITERIA		
NEBB	NATIONAL ENVIRONMENTAL BALANCING BUREAU		
NEC	NATIONAL ELECTRICAL CODE		
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION		
NRCA	NATIONAL ROOFING CONTRACTORS ASSOCIATION		
OA	OUTSIDE AIR		
OED	OPEN ENDED DUCT		
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION		
PCF	POUNDS PER CUBIC FOOT		
PH	PHASE		
PVC	POLYVINYL CHLORIDE		
RAD	RETURN AIR DUCT		
RTU	ROOFTOP UNIT		
SA	SUPPLY AIR		
SAD	SUPPLY AIR DUCT		
SEER	SEASONAL ENERGY EFFICIENCY RATIO		
SF	SQUARE FEET		
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION		
SP	STATIC PRESSURE		
TAB	TESTING, ADJUSTING & BALANCING		
UL	UNDERWRITERS LABORATORIES		
V	VOLTS		
VAC	VOLTS ALTERNATING CURRENT		
VD	VOLUME DAMPER		
WB	WET BULB		
WG	WATER GAUGE		
WH	WALL HEATER		

VENTILATION											
NOTES:											
1. VENTILATION RATES PROVIDED PER 2021 INTERNATIONAL MECHANICAL CODE.											
2. OCCUPANT DENSITY IS BASED ON THE MAXIMUM ESTIMATED OCCUPANT LOAD IN # OF PEOPLE PER 1,000 SF FOR THIS OCCUPANCY CLASSIFICATION OR THE ACTUAL OCCUPANT LOAD COUNT AS SHOWN, WHICHEVER IS GREATER.											
3. E _z BASED ON INTERNATIONAL MECHANICAL CODE TABLE 403.3.1.1.2. * CEILING SUPPLY AND RETURN OF WARM AIR = 0.8											
4. MAX Z _p =0.263; E _v =0.89 RESULTING OUTSIDE AIR QUANTITY REQUIRED = 283 CFM OUTSIDE AIR QUANTITY SUPPLIED BY (E)RTU = 285 CFM											
CALCULATIONS:											
IMC 403.3.1.1											
(Equation 4-1) V _{bz} = R _z P _z + R _h A _z = Required breathing zone outdoor airflow (CFM)											
A _z = Net occupiable floor area (SF)											
(Table 403.3.1.1) O _D = Occupant Density (# people / 1000 SF)											
(Table 403.3.1.1) P _z = Zone population (# people)											
(Table 403.3.1.1) R _z = Area outdoor air rate (CFM / SF)											
(Table 403.3.1.1) R _h = Zone air distribution effectiveness (Table 403.3.1.1.2)											
(Equation 4-2) V _{bz} = V _{bz} /E _z = Zone outdoor airflow rate required (CFM)											
(Equation 4-3) Z _p = V _{bz} /V _z = Primary outdoor air fraction											
(Equation 4-5) V _{bz} = DER _{Pz} + I _R A _z = Uncorrected outdoor air intake required (CFM)											
(Equation 4-6) V _{bz} = DER _{Pz} + I _R A _z = 251.52 System Population (# people)											
(Equation 4-7) O = P _z /Z _p = 1.00 Occupant Diversity											
(Equation 4-8) V _{bz} = V _{bz} /E _z = 283 OA Total Required (CFM)											
E _z = 0.89 (From Table 403.3.1.1.2.3.2)											
Z _p = 1.200 SA Total Required (CFM)											
2 _z = 73.6% OA % Required											
(E)RTU = 285 OA Total Available (CFM)											
(E)RTU = 1,200 SA Total Available (CFM)											
Y = 23.8% OA % Available											
Y = Y OA Total Meets Standard?											
Y = Y OA % Meets Standard?											
Zone Identification											
#	Name	A _z	OD	P _z	R _z	R _h	I _R P _z	I _R P _z	I _R A _z	I _R A _z	Max Z _p
0	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.000
001	SALON	357	25	9	20	180	0.12	42.84	222.84	0.6279	0.263
002	UTILITY (-505F)	27	0	0	0	0	0.00	0.00	0.00	0.00	0.000
003	BATHROOM	42	0	0	0	0	0.00	0.00	0.00	0.00	0.000
201	SALON STORAGE	239	0	0	0	0	0.12	28.68	28.68	0.6336	0.256
5. NAIL SALON EXHAUST: REQUIRED EXHAUST = 0.6 CFM/SF SALON FLOOR AREA = 357 SF TOTAL EXHAUST REQUIRED = 0.6 CFM/SF * 357 SF = 215 CFM TOTAL EXHAUST PROVIDED BY EE-2 = 50 CFM/STATION * 8 STATIONS = 400 CFM											

CONTROLS	
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS AND LABOR REQUIRED TO INTERFACE ALL AUTOMATIC TEMPERATURE CONTROLS.	
2. ALL WIRING, CONDUIT & POWER FOR ALL CONTROLS SHALL BE THE RESPONSIBILITY OF THE CONTROLS CONTRACTOR, INCLUDING COORDINATION WITH OTHER TRADES. THE CONTROLS CONTRACTOR, AT HIS/HER OWN COST, SHALL ENGAGE THE ELECTRICAL CONTRACTOR AS REQUIRED.	
3. ALL CONTROL WIRING AND CONDUIT SHALL COMPLY WITH THE ELECTRICAL SPECIFICATIONS OF THIS PROJECT. ALL CONTROL WIRING SHALL BE LISTED AND LABELED AS PLENUM RATED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 70 (NEC).	
4. THERMOSTATS/SENSORS/CONTROLLERS/SWITCHES:	
A. SHALL ALL BE COMPATIBLE WITH THE AUTOMATIC TEMPERATURE CONTROL SYSTEM(S).	
B. ARE ALL SHOWN IN APPROXIMATE LOCATIONS ON THE MECHANICAL PLANS. COORDINATE FINAL LOCATIONS WITH THE ARCHITECTURAL DRAWINGS AND DETAILS.	
C. SHALL ALL BE MOUNTED SO THAT ANY LOCAL CONTROLS ARE 4'-0" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED.	
5. AFTER THE SYSTEMS HAVE BEEN BALANCED AND ALL ADJUSTMENTS COMPLETED, RUN A SIX HOUR TEST ON ALL APPLICABLE HEATING AND COOLING CYCLES TO DETERMINE IF THE SYSTEM(S) ARE RESPONDING TO TEMPERATURE CONTROLS. RECORD THERMOSTAT TEMPERATURE READING. PROVIDE AND RECORD AN INDEPENDENT TEMPERATURE MEASUREMENT AT EACH THERMOSTAT.	
6. PROVIDE TO THE OWNER A DEMONSTRATION OF THE PROGRAMMING AND OPERATION OF ALL NEW AUTOMATIC TEMPERATURE CONTROLS.	
7. SEQUENCE OF OPERATIONS:	
A. (E)RTU: EXISTING CONTROLS TO REMAIN. ADJUST SETPOINTS AS FOLLOWS:	
1) OCCUPIED TEMPERATURE RANGE: 74°F (+2°F) - CONTINUOUS FAN OPERATION - OUTSIDE AIR DAMPER OPEN	
2) NIGHT SETBACK TEMPERATURE RANGE: 70°F (+15°F) - AUTOMATIC FAN OPERATION - OUTSIDE AIR DAMPER CLOSED	
B. EE-1: INTERLOCK FAN WITH ASSOCIATED LIGHT SWITCH.	
C. EE-2: PROVIDE FAN WITH ON/OFF SWITCH TO BE LOCATED IN UTILITY ROOM.	
D. WH-1: HEATER SHALL BE CONTROLLED BY AN INTERGRAL THERMOSTAT TO MAINTAIN A MINIMUM TEMPERATURE SETTING OF 68°F (+2°F).	
E. BH-1: HEATER SHALL BE CONTROLLED BY AN INTERGRAL THERMOSTAT TO MAINTAIN A MINIMUM TEMPERATURE SETTING OF 68°F (+2°F).	
F. MOTORIZED DAMPERS THAT ARE INTERLOCKED WITH FANS OR OTHER EQUIPMENT SHALL OPEN PRIOR TO THE START-UP OF ASSOCIATED FANS.	

INSULATION

1. ALL INSULATION COVERINGS AND LININGS, INCLUDING ADHESIVES, SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING 25 AND A SMOKE-DEVELOPED RATING NOT EXCEEDING 50 AS TESTED IN ACCORDANCE WITH ASTM E 84, NFPA 255 AND UL 723. COVERINGS AND LININGS SHALL NOT FLAME, GLOW, SMOLDER OR SMOKE WHEN TESTED IN ACCORDANCE WITH ASTM C 411.

2. INSULATION SHALL BE CONTINUOUS THROUGH NON-RATED WALL PENETRATIONS AND HANGERS. COVERINGS SHALL NOT PENETRATE A WALL OR FLOOR REQUIRED TO HAVE A FIRE-RESISTANCE RATING.

3. ALL DUCT LEAKAGE TESTING MUST BE COMPLETED PRIOR TO THE INSTALLATION OF ANY ASSOCIATED INSULATION.

4. DUCTWORK:

A. INSIDE THE BUILDING ENVELOPE:

1) INSULATE DUCTWORK PER THE SCHEDULE BELOW WITH A FORMALDEHYDE-FREE FIBERGLASS FLEXIBLE BLANKET INSULATION, FACED WITH AN FSK FIRE RESISTIVE VAPOR BARRIER JACKET WITH A 2" TAB ON ONE EDGE. VAPOR BARRIERS SHALL HAVE A MAXIMUM PERMEANCE OF 0.05 PERM.

2) INSULATION SHALL BE WRAPPED ON DUCTS WITH FACING OVERLAPPING ALL JOINTS AT LEAST 2" AND HELD IN PLACE WITH 1/2" OUTWARD CLINCHING STAPLES ON 4" CENTERS. STAPLES AND SEAMS ARE TO BE SEALED WITH A BRUSH COAT OF VAPOR BARRIER MASTIC.

3) SERVICE OPENINGS SHALL NOT BE CONCEALED BY DUCT COVERINGS UNLESS THE EXACT LOCATION OF THE OPENING IS PROPERLY IDENTIFIED.

4) EXTERNAL INSULATION SHALL LEGIBLY IDENTIFIED AT INTERVALS NOT GREATER THAN 36 INCHES WITH THE NAME OF THE MANUFACTURER, THE THERMAL RESISTANCE R-VALUE AT THE SPECIFIED INSTALLED THICKNESS, AND THE FLAME SPREAD AND SMOKE-DEVELOPED INDEXES OF THE COMPOSITE MATERIALS.

B. SCHEDULE:

DUCTWORK AND/OR PLENUM SYSTEM (LOCATION)	MINIMUM R-VALUES	MINIMUM THICKNESS	
		EXTERNAL	LINING
		0.75 PCF	1.00 PCF
			1.50 PCF
			AT k=0.25 MAXIMUM
INSIDE THE BUILDING ENVELOPE			
SUPPLY AIR (UNCONDITIONED SPACE)	R-6	2.2"	2"
		1.5"	NR
EXHAUST AIR (ALL LOCATIONS)	NONE	NR	NR
		NR	NA
OUTSIDE THE BUILDING ENVELOPE			
OUTSIDE AIR (ALL LOCATIONS)	NONE	NR	NR
		NR	NA
EXHAUST AIR (ALL LOCATIONS)	NONE	NR	NR
		NR	NA

1) NA = NOT ALLOWED NR = NOT REQUIRED k = BTU*IN/FT²*F AT 75°F MEAN TEMPERATURE

2) MINIMUM THICKNESS AND R-VALUES ARE NOT MUTUALLY EXCLUSIVE AND EACH MUST BE MET REGARDLESS OF THE OTHER.

DUCTWORK	
1. ALL DUCTWORK MATERIALS AND INSTALLATION METHODS SHALL CONFORM WITH THE LATEST EDITION OF THE INTERNATIONAL MECHANICAL CODE.	
2. REFER TO EQUIPMENT DETAILS AND SCHEDULES FOR DUCTWORK SIZES NOT INDICATED ON FLOOR PLANS.	
3. METAL DUCTWORK:	
A. CONSTRUCT ALL DUCTWORK AND ACCESSORIES IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" FOR MAXIMUM 2" OPERATING PRESSURE AND SEAL CLASS A.	
B. UNLESS OTHERWISE NOTED, FABRICATE ALL DUCTWORK, HOUSING, DAMPERS, AND ALL OTHER DUCT-RELATED ACCESSORIES FROM GALVANIZED STEEL SHEETS.	
1) GALVANIZED STEEL SHEETS:	
a. COMPLY WITH ASTM A 653/A 653M, LOCK-FORMING QUALITY.	
b. PROVIDE MILL-PIROSPHATIZED FINISH FOR DUCTS WITH SURFACES EXPOSED TO VIEW.	
4. FLEXIBLE CONNECTORS:	
A. PROVIDE FLEXIBLE CONNECTORS AT THE INLET AND OUTLET CONNECTIONS FOR EACH FAN AND AIR HANDLING UNIT.	
B. PROVIDE NEOPRENE-COATED GLASS FABRIC MATERIAL, MINIMUM 30 OUNCES PER SQUARE YARD. EACH FLEXIBLE CONNECTOR SHALL ALLOW 1" OF FREE MOVEMENT AND SHALL BE COMPLETELY AIR TIGHT.	
C. BRACE DUCTWORK AS REQUIRED AT ALL FLEXIBLE CONNECTORS TO ENSURE THAT DUCTWORK IS KEPT IN ALIGNMENT.	
5. INSTALLATION:	
A. FURNISH AND INSTALL ALL DUCT HANGERS AND SUPPORTS IN ACCORDANCE WITH SECTION IV OF THE LATEST EDITION OF "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" AS PUBLISHED BY SMACNA. RIGID DUCTWORK SHALL BE SUPPORTED AT INTERVALS NOT TO EXCEED 12 FEET UNDER ANY CIRCUMSTANCE. FLEXIBLE AND OTHER FACTORY MADE DUCTWORK SHALL BE SUPPORTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.	
B. PROVIDE TURNING VANES MANUFACTURED OF GALVANIZED STEEL PER SMACNA IN ALL MITERED ELBOWS 30 DEGREES OR MORE.	
C. DUCTWORK DIMENSIONS INDICATED ON PLANS ARE INSIDE-CLEAR DIMENSIONS. CHANGES TO DUCT SIZES DUE TO FIELD CONDITIONS SHALL BE MADE ONLY IF THE DUCT SIZE FREE AREA IS MAINTAINED AND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.	
D. DUCTWORK RELATED ITEMS INDICATED ON THE PLANS, INCLUDING BUT NOT LIMITED TO RISERS & DROPS, ACCESS DOORS, VOLUME DAMPERS, ETC ARE SHOWN FOR CLARITY FOR SUCH REQUIREMENTS AT SPECIFIC LOCATIONS, AND SHALL NOT BE INTERPRETED AS THE ENTIRE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS, AS SPECIFIED ELSEWHERE IN THE CONTRACT DOCUMENTS.	
E. ALL RIGID DUCTWORK AND PLENUMS MUST BE THOROUGHLY CLEANED OF DEBRIS AND BLOWN FREE OF SMALL PARTICLES AND DUST PRIOR TO THE INSTALLATION OF FLEXIBLE DUCTWORK, CONNECTORS AND/OR AIR DEVICES.	
F. ALL DUCTWORK THAT IS EXPOSED TO VIEW, ABOVE DRYWALL CEILINGS OR PENETRATES FULL HEIGHT PARTITIONS SHALL BE OF SHEETMETAL CONSTRUCTION. NO FLEXIBLE DUCTWORK WILL BE PERMISSIBLE.	
G. LEAKAGE	
1) ALL DUCT JOINTS SHALL BE SEALED WITH HARDCAST 601. DUCT TAPE IS NOT PERMITTED.	
2) LEAKAGE TESTING FOR ALL DUCTWORK SHALL BE BY PRESSURE SENSATION AND SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.	
3) PERFORM ALL TESTING AFTER THE SEALS HAVE CURED COMPLETELY AND BEFORE COVERING WITH INSULATION OR CONCEALING IN MASONRY.	
H. INSTALL OUTSIDE AIR INTAKES A MINIMUM OF 10'-0" FROM ANY EXHAUST AIR DISCHARGE OR PLUMBING VENT. INSTALL EXHAUST AIR DISCHARGES A MINIMUM OF 10'-0" FROM ANY MECHANICAL AIR INTAKE AND A MINIMUM OF 3'-0" FROM ANY OTHER BUILDING OPENING.	
I. COORDINATE DUCTWORK LAYOUTS WITH ACTUAL BUILDING STRUCTURE, EXISTING CONDITIONS (IF APPLICABLE) AND THE WORK OF OTHER CONTRACTORS. PROPOSED DUCTWORK DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATING ANY DUCTWORK OR ORDERING ANY MECHANICAL EQUIPMENT.	

TESTING & BALANCING	
1. SCOPE:	
A. PROVIDE ALL REQUIRED LABOR, MATERIALS, TOOLS AND EQUIPMENT TO PERFORM THE COMPLETE TESTING, ADJUSTING AND BALANCING OF THE MECHANICAL SYSTEMS AND RELATED WORK INDICATED AND SPECIFIED ON THE DRAWINGS.	
B. TESTING, ADJUSTING AND BALANCING SHALL BE PERFORMED BY AN INDEPENDENT TAB CONTRACTOR WHO IS NEBB OR AABC CERTIFIED IN TESTING, ADJUSTING AND BALANCING OF AIR AND HYDRONIC SYSTEMS.	
C. THE MECHANICAL CONTRACTOR SHALL MAKE ANY CHANGES OR REPLACEMENTS TO SHEAVES, BELTS, DAMPERS, VALVES, ETC. REQUIRED FOR THE CORRECT BALANCE OF THE NEW AND/OR EXISTING MECHANICAL SYSTEMS AS ADVISED BY THE TAB CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.	
2. BALANCING SHALL NOT BE PERFORMED UNTIL ALL MECHANICAL EQUIPMENT IS PROPERLY INSTALLED AND IS 100% OPERATIONAL, ALL TEMPERATURE CONTROLS ARE INSTALLED AND CALIBRATED, AND ALL SYSTEMS ARE CLEANED, PIPING AND STRAINERS FLUSHED, AND CLEAN FILTERS INSTALLED. IT IS THE INTENT OF THIS SPECIFICATION TO ENSURE THAT THE ENTIRE PROJECT IS SUBSTANTIALLY COMPLETE SO THAT ALL COMPONENTS OF ALL MECHANICAL SYSTEMS CAN BE PUT INTO NORMAL OPERATION WITH ALL WINDOWS AND DOORS CLOSED AND BALANCED IN THAT CONDITION. IN NO CASE IS THE CONTRACTOR TO PERFORM HIS WORK IN A PIECEMEAL FASHION.	
3. SUBMIT TO THE OWNER THREE (3) COPIES OF THE FINAL TESTING AND BALANCING REPORT CERTIFIED BY THE INDEPENDENT TAB CONTRACTOR. THE FINAL REPORT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE NEBB PROCEDURAL STANDARD FOR THE TESTING, ADJUSTING AND BALANCING OF ENVIRONMENTAL SYSTEMS AND SHALL INCLUDE THE LOCATION, SERVICE, MANUFACTURER AND MODEL NUMBER OF EACH PIECE OF EQUIPMENT.	
4. MARK EQUIPMENT AND BALANCING DEVICE SETTINGS WITH SUITABLE PERMANENT IDENTIFICATIONS TO SHOW FINAL SETTINGS.	
5. THE TESTING, ADJUSTING AND BALANCING OF THE MECHANICAL SYSTEMS WILL BE CONSIDERED COMPLETE WHEN ALL MEASURED AIRFLOW AND HYDRONIC FLOW QUANTITIES ARE WITHIN ± 10% OF THE DESIGN QUANTITIES UNLESS THERE ARE REASONS BEYOND THE CONTROL OF THE TAB CONTRACTOR. DEFICIENCIES SHALL BE NOTED IN THE FINAL REPORT.	
6. MISCELLANEOUS:	
A. AIR DEVICES	
1) BALANCE TO CFM INDICATED ON PLANS	
2) ADJUST REGISTERS FOR TWO-WAY BLOW ANGLED AT 22 DEGREES TOWARDS THE FLOOR.	
B. EXISTING CONSTANT VOLUME AIR HANDLING UNIT	
1) ADJUST SUPPLY AIR TO TOTAL ADD-UP CFM	
2) ADJUST MINIMUM OUTSIDE AIR TO CFM INDICATED ON EQUIPMENT SCHEDULES.	

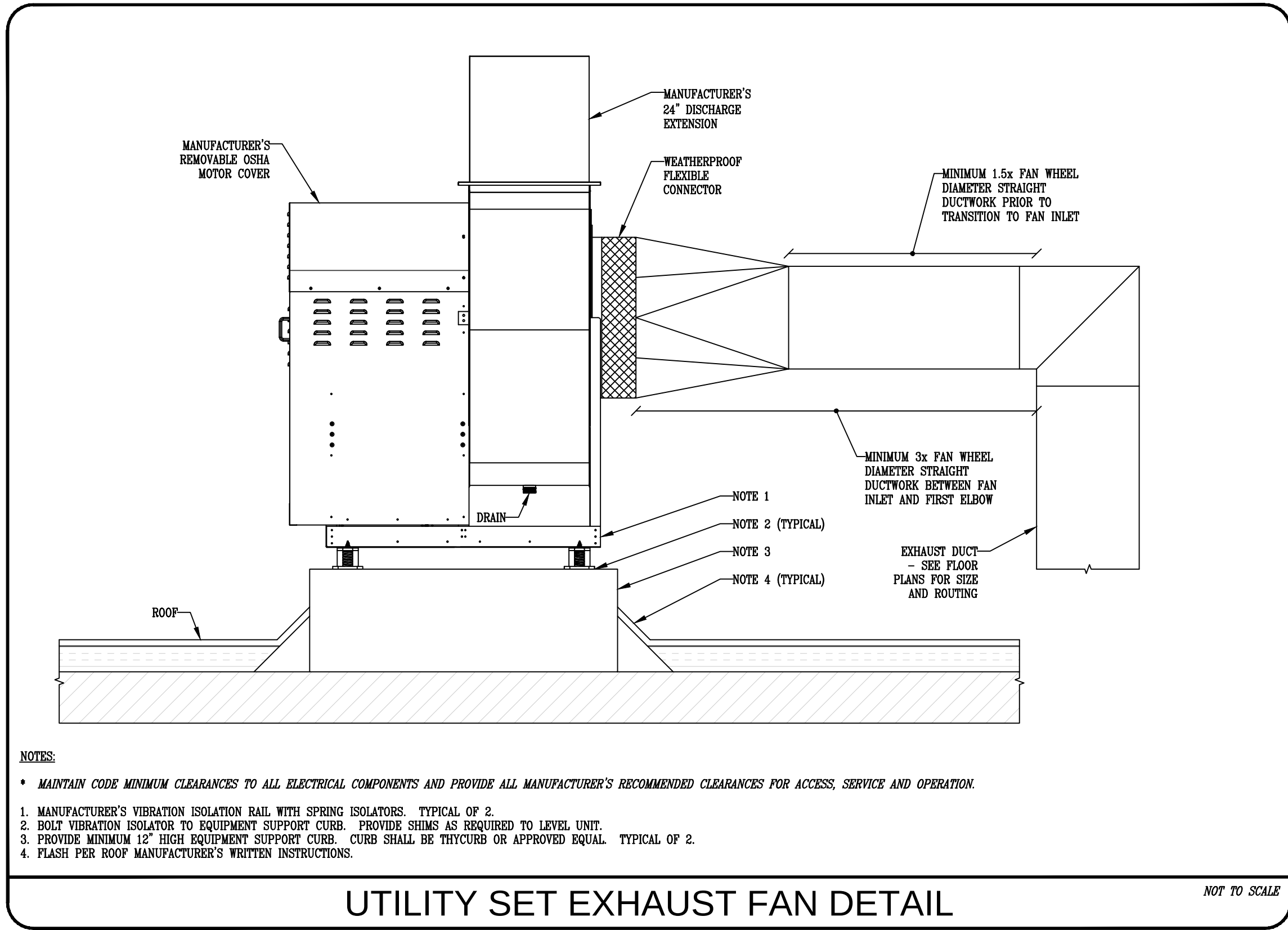
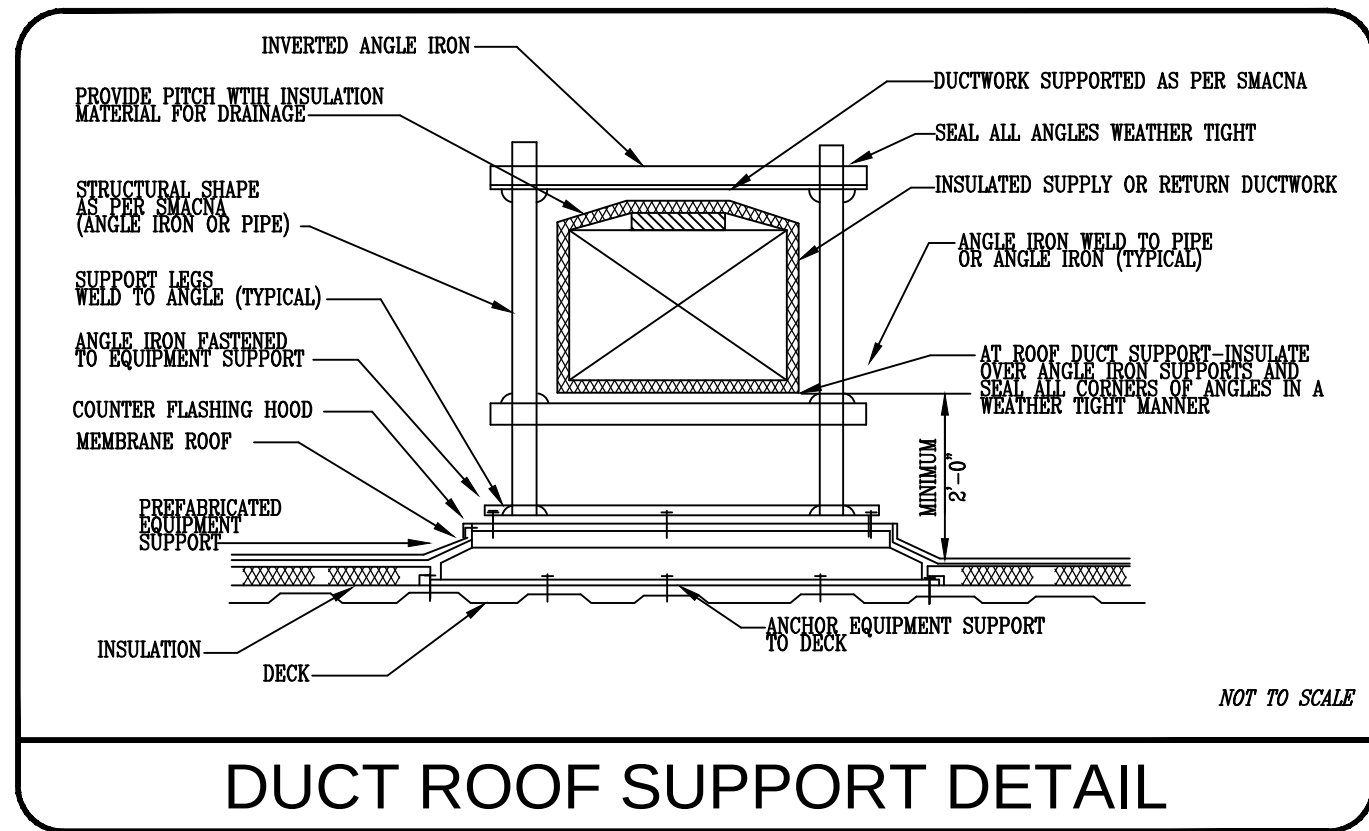
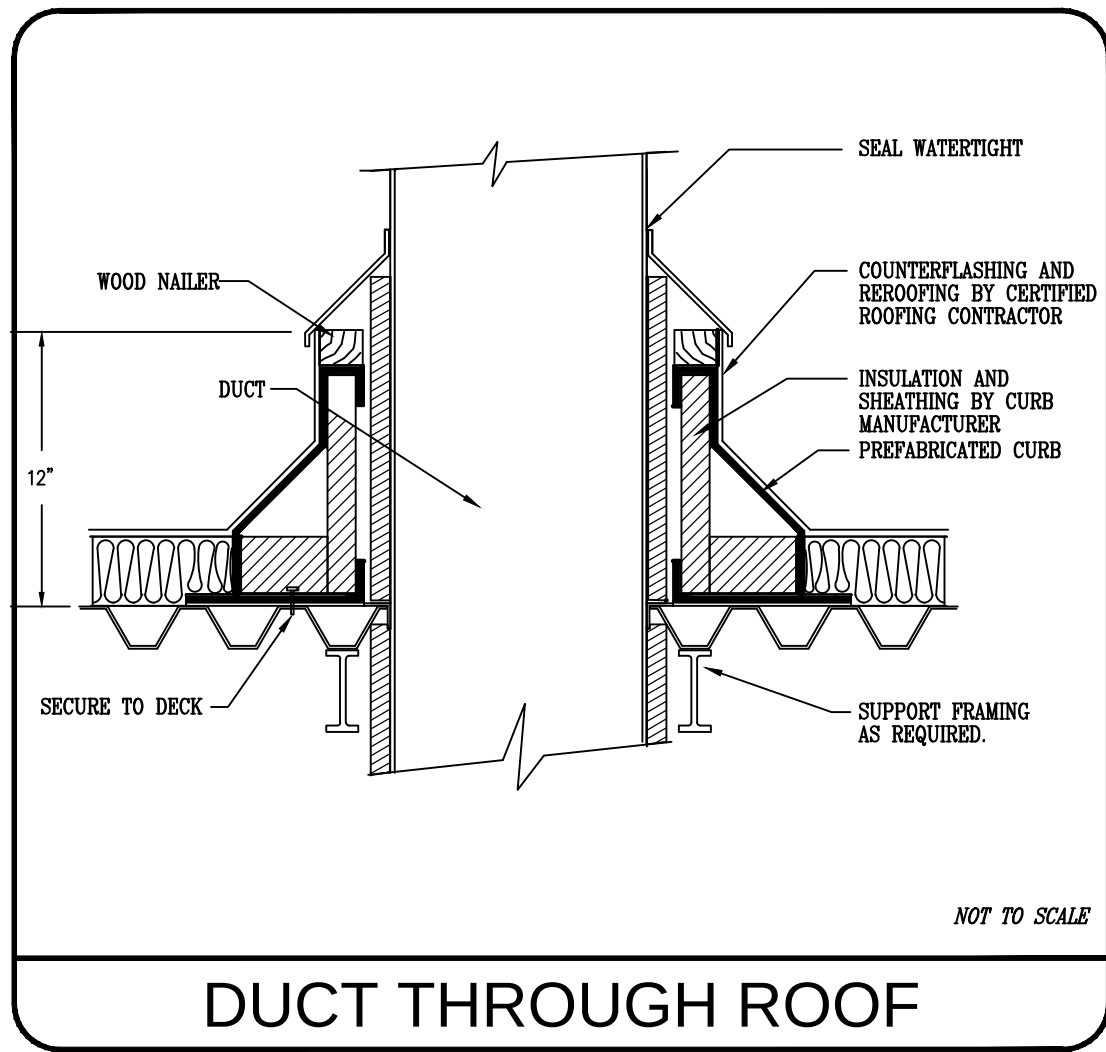
GENERAL NOTES

1. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
2. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF ALL LOCAL AND STATE CODES, RULES AND REGULATIONS.
3. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES AND TAXES.
4. MAKE NO CHANGES WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
5. MAKE AN ON-SITE INSPECTION PRIOR TO BID TO FULLY DETERMINE THE EXISTING CONDITIONS AND THE EXTENT OF DEMOLITION.
6. SIZES AND LOCATIONS OF EXISTING DUCTWORK AND PIPING SHOWN ON THE DRAWINGS ARE TAKEN FROM THE AVAILABLE DRAWINGS OF THE BUILDING. VERIFY SIZES AND LOCATIONS OF EXISTING DUCTWORK AND PIPING BEFORE PURCHASING MATERIALS AND EQUIPMENT, OR FABRICATING DUCTWORK.
7. FURNISH ALL SCAFFOLDING, RIGGING, HOISTING, AND SERVICES NECESSARY FOR THE ERECTION AND DELIVERY OF ALL EQUIPMENT AND APPARATUS FURNISHED, AND REMOVAL OF SAME FROM PREMISES WHEN NO LONGER REQUIRED.
8. CUTTING AND PATCHING SHALL BE DONE BY THE APPROPRIATE TRADE UNLESS OTHERWISE REQUIRED BY TRADE CUSTOM OR SPECIFIED UNDER ANOTHER SECTION OF THE SPECIFICATIONS. CONTRACTOR SHALL FURNISH SKETCHES SHOWING THE LOCATIONS AND SIZES OF ALL OPENINGS, CHASES, ETC. REQUIRED. CONTRACTOR IS LIABLE FOR CUTTING OR PATCHING MADE NECESSARY BY HIS FAILURE TO MAKE PROPER ARRANGEMENTS IN THIS RESPECT.
9. LOCATION OF EQUIPMENT, PIPING AND OTHER MECHANICAL WORK IS INDICATED DIAGRAMMATICALLY BY THE DRAWINGS. DETERMINE EXACT LOCATIONS ON THE JOB SITE, SUBJECT TO STRUCTURAL CONDITIONS AND THE WORK OF OTHER TRADES.
10. ALL MATERIAL AND EQUIPMENT INDICATED ON THE PLANS AND DESCRIBED IN THE SPECIFICATIONS SHALL BE PROVIDED BY THE CONTRACTOR NEW AND THE BEST PRODUCTS OF REPUTABLE MANUFACTURERS AND SHALL BE IN NEW CONDITION AT THE ACCEPTANCE OF THE WORK.
11. INSTALL ALL WORK IN A NEAT AND WORKMANLIKE MANNER, USING ONLY WORKMEN THOROUGHLY QUALIFIED IN THE TRADE OF DUTIES THEY ARE TO PERFORM. ROUGH WORK WILL BE REJECTED.
12. INSTALL EACH PIECE OF EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
13. THE CONTRACTOR ASSUMES THE RESPONSIBILITY FOR PROPER ARRANGEMENT OF PIPES, DUCTS, ETC. TO CONNECT APPROVED EQUIPMENT IN A PROPER AND APPROVED MANNER. FOLLOW THE EQUIPMENT MANUFACTURER'S DETAILED INSTRUCTIONS AND THE CONTRACT DOCUMENTS. NOTIFY THE ARCHITECT IMMEDIATELY OF ANY CHANGING CONDITIONS. NO EQUIPMENT INSTALLATION OR CONNECTIONS SHALL BE MADE IN A MANNER THAT VIOLDS THE MANUFACTURER'S WARRANTY. COORDINATE INSTALLATION OF WORK TO PROVIDE PROPER CLEARANCES FOR SERVICE AND OPERATION OF ALL EQUIPMENT AND ACCESSORIES.
14. INSTALL ALL WORK TO PROVIDE A MINIMUM OF 3'-6" CLEARANCE IN FRONT OF ALL ELECTRIC HEATER TERMINAL BOXES.
15. WHEREVER PIPES, DUCTWORK OR OTHER ITEMS PASS THROUGH FIRE RATED WALLS AND FLOORS, ADEQUATELY FIRESTOP THE SPACE BETWEEN THE ITEMS AND THE MASONRY OR SLEEVE. FIRE STOP SHALL BE A NON-COMBUSTIBLE, NON-MELTING, APPROVED MATERIAL.
16. SEE ARCHITECTURAL DRAWINGS FOR SUPPORT DETAILS OF ALL ROOF-MOUNTED EQUIPMENT AND FOR THE LOCATION OF ROOF PENETRATIONS.
17. UNLESS OTHERWISE NOTED, ALL SPECIFIED EQUIPMENT IS LESS THAN 200 LBS.
18. DO NOT CUT STRUCTURAL MEMBERS WITHOUT THE APPROVAL OF THE ARCHITECT AND ALL SUCH CUTTING SHALL BE DONE IN A MANNER AS DIRECTED BY THEM.
19. ANY AND ALL MATERIALS AND INSTALLATION METHODS USED IN THE MODIFICATION OF THE EXISTING ROOF SYSTEM SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE ROOF WARRANTY.
20. REFURBISH EXISTING RTU TO INCLUDE NEW FILTERS, BEARINGS GREASED IF APPLICABLE, AND REFRIGERANT CHECKED AND RECHARGED IF REQUIRED. RUN CONTROLS THROUGH ALL CYCLES AND CHECK FOR PROPER OPERATION AND ACCURACY, AND RECALIBRATE IF REQUIRED.
21. MAINTAIN A CLEAN WORK AREA AT ALL TIMES DURING CONSTRUCTION.
22. ALL HEATING AND AIR-CONDITIONING SYSTEMS SHALL BE PROVIDED WITH APPROVED FILTERS. MEDIA-TYPE AIR FILTERS SHALL BE U150 LISTED AND LABELED. HIGH-EFFICIENCY PARTICULATE FILTERS SHALL BE U156 LISTED AND LABELED. ANY LIQUID ADHESIVE COATINGS USED ON FILTERS SHALL HAVE A FLASH POINT NOT LOWER THAN 325°F. FILTERS SHALL BE INSTALLED IN AN APPROVED CONVENIENT LOCATION SUCH THAT ALL RETURN, OUTDOOR AND/OR MAKEUP AIR IS FILTERED UPSTREAM FROM ANY HEAT EXCHANGER OR COIL.
23. ALL HVAC SUPPLY AND RETURN DUCT AND EQUIPMENT OPENINGS SHALL BE PROTECTED DURING ALL PHASES OF CONSTRUCTION, INCLUDING DEMOLITION. WHERE HVAC SYSTEMS ARE UTILIZED DURING ANY PHASE OF CONSTRUCTION, ALL ASSOCIATED DUCT AND EQUIPMENT OPENINGS SHALL BE PROTECTED BY FILTER MEDIA WITH A MINIMUM RATING OF MERV-8 IN ACCORDANCE WITH ASHRAE 52.2. FILTER MEDIA SHALL BE ROUTINELY REPLACED AS REQUIRED TO LIMIT ANY ACCUMULATED PRESSURE DROP FROM UNDESIRABLY AFFECTING THE HVAC SYSTEM.
24. REPLACE ALL INLET FILTERS AFTER CONSTRUCTION IS COMPLETE, PRIOR TO ANY FLUSH OUT, TESTING & BALANCING, COMMISSIONING AND/OR OCCUPANCY.
25. AFTER INSTALLATION AND START-UP, THOROUGHLY CHECK EACH ITEM OF EQUIPMENT FOR VIBRATION TRANSMISSION TO THE STRUCTURE OR EXCESSIVE NOISE, AND IF EITHER OCCURS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING THE FAULTY SITUATION IMMEDIATELY.
26. TEST ALL SYSTEMS. SYSTEMS SHALL OPERATE SATISFACTORILY AS DESIGNED AND INTENDED. REPORT ANY DEFICIENCIES TO THE ENGINEER.
27. THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION, AND FOR ALL SAFETY PROGRAMS AND PRECAUTIONS DURING CONSTRUCTION.
28. MAINTAIN A MINIMUM OF ONE (1) COPY OF ALL DRAWINGS, ADDENDA, APPROVED SUBMITTALS, REVISIONS AND OTHER MODIFICATIONS IN GOOD ORDER AND MARKED TO RECORD ALL CHANGES MADE DURING CONSTRUCTION. THE COPY SHALL BE DELIVERED TO THE OWNER UPON THE COMPLETION OF WORK.
29. THIS CONTRACTOR SHALL GUARANTEE ALL MATERIALS, LABOR AND EQUIPMENT FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE. THE CONTRACTOR SHALL PAY FOR ANY REPAIRS OR REPLACEMENTS CAUSING CORRECTIVE WORK OR WEAR OR FAULTY MATERIALS AS CONSTRUCTED HEREIN WITHIN THE PERIOD COVERED BY THE GUARANTEE.

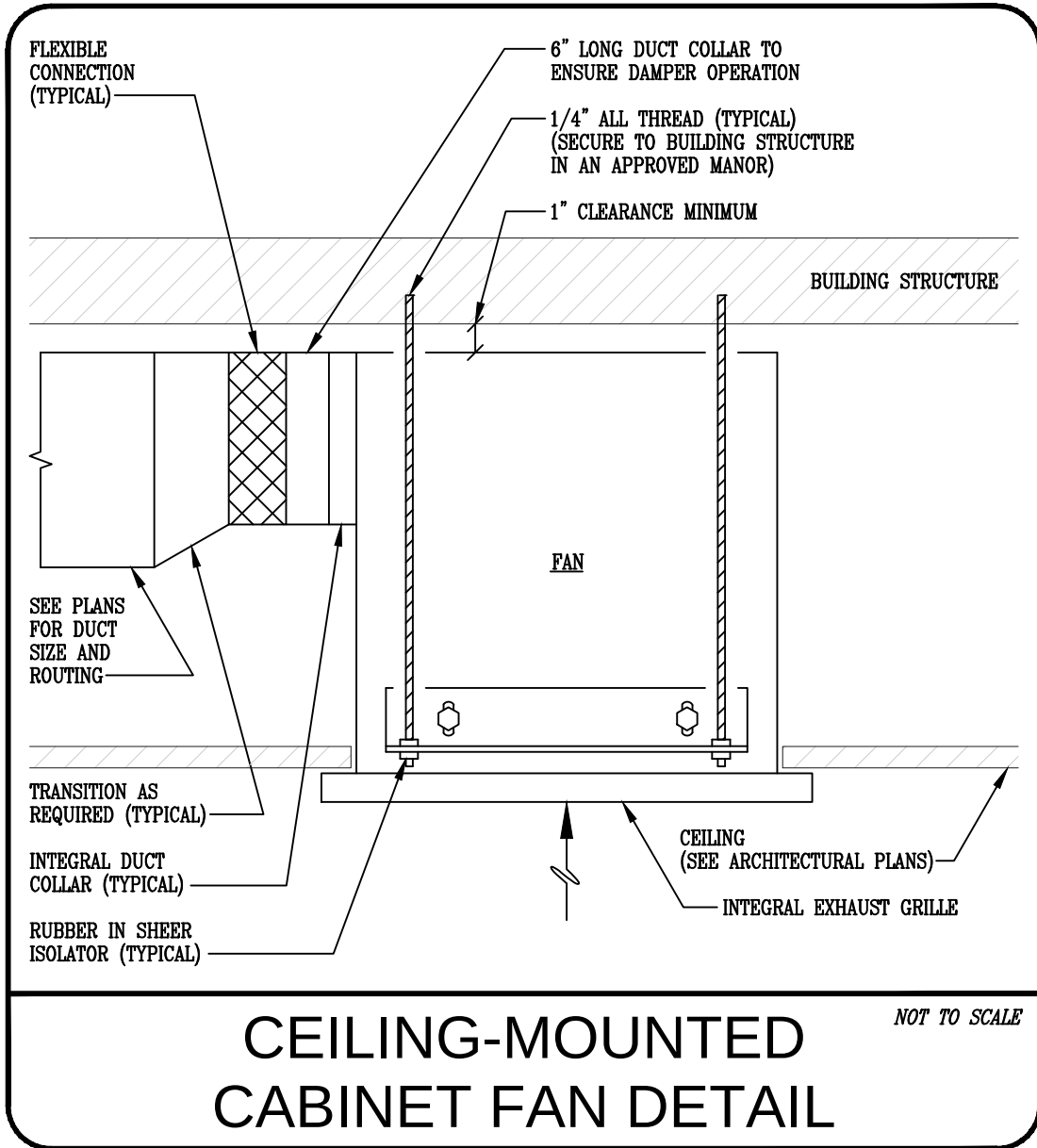
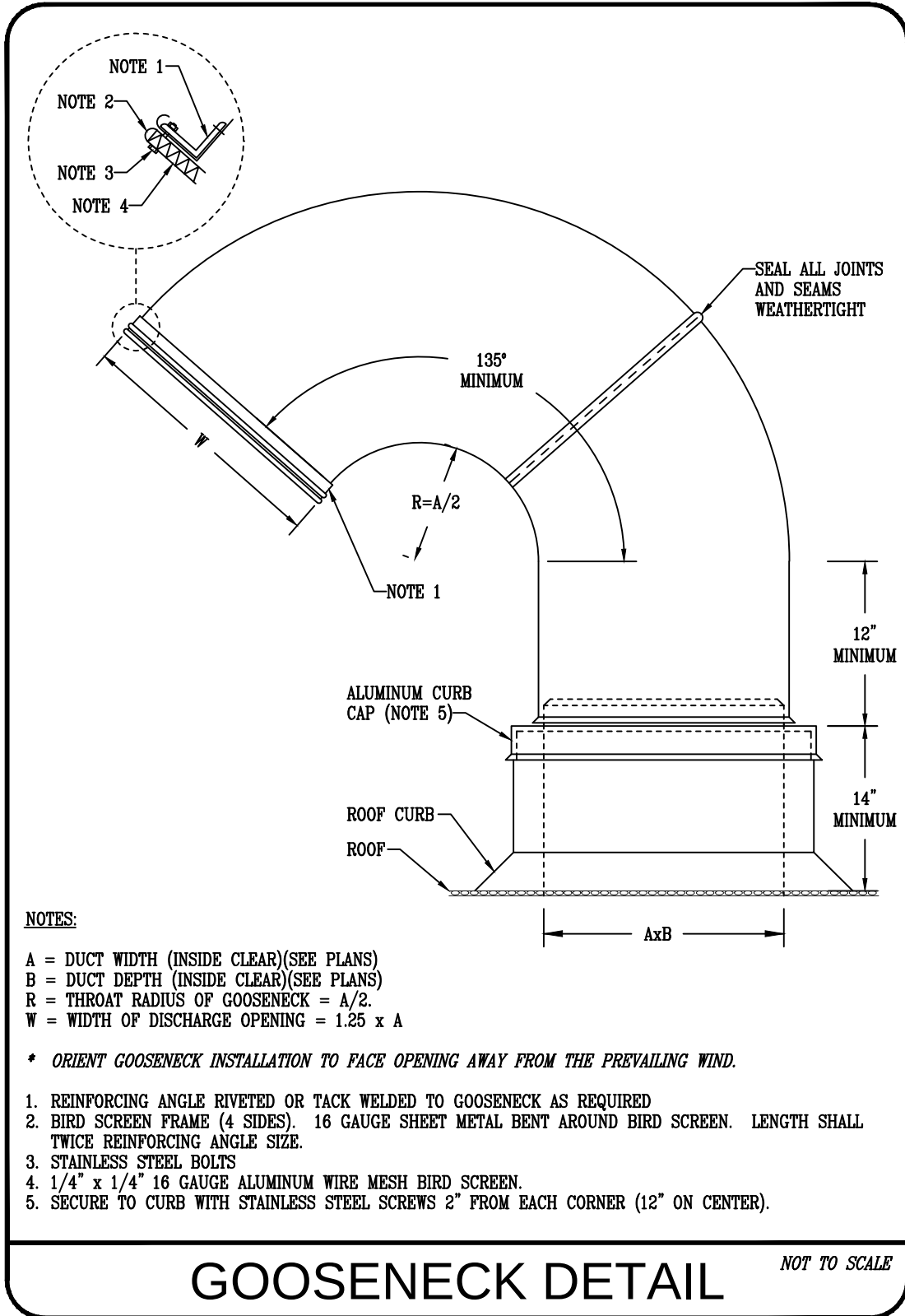
EXISTING ROOFTOP AIR CONDITIONING UNIT SCHEDULE																					
DESIGNATION	NOMINAL CAPACITY TONS	SEER2/ HSPF2 AT AHR1	AIRFLOW DISCHARGE CONFIGURATION	DX COOLING					DX HEATING		MIN OA CFM	SUPPLY FAN			ELECTRICAL		OPERATING WEIGHT LBS	MANUFACTURER	MODEL	NOTES	
				TOTAL MBH	SENSIBLE MBH	EAT °F DB/WB	AMBIENT °F	REFRIGERANT TYPE/LBS	TOTAL MBH	EAT °F DB		CFM	ESP IN WG	HP	V/PH	MCA					MOCP
RTU-1	3	13.4/6.7	HORIZONTAL	35.2	27.6	80/67	95	R-410A/7.25	32.2	70	285	1,200	0.6	1/2	208/1	25.9	40	375	DAIKIN/GOODMAN	GPHK3641AB	-
NOTES:																					
* INFORMATION TAKEN FROM EXISTING DRAWINGS AND/OR EQUIPMENT TAGS AND IS PROVIDED FOR REFERENCE ONLY.																					

WALL HEATER SCHEDULE									
DESIGNATION	MOUNTING TYPE	KW	V/PH	FLA	OPERATING WEIGHT LBS	MANUFACTURER	MODEL	NOTES	
WH-1	SURFACE	0.75	120/1	6.25	26	MARKEL	3320	ALL	
NOTES: * ACCEPTABLE MANUFACTURERS: BERKO, INDERCO, MARKEL, QMARK, TRANE * ALL HEATERS SHALL BE UL LISTED AND LABELED. * ALL HEATERS SHALL BE PROVIDED WITH AN THERMAL OVERLOAD CUT-OFF, FAN DELAY SWITCH, INTEGRAL MANUAL DISCONNECT SWITCH AND TAMPER RESISTANT THERMOSTAT (MINIMUM RANGE 45°F TO 85°F).									

FAN SCHEDULE													
DESIGNATION	SERVICE	TYPE	DRIVE	AIRFLOW CFM	SP IN WG	WATTS	MOTOR HP	MOTOR V/PH	SONES (dBA)	OPERATING WEIGHT LBS	MANUFACTURER	MODEL	NOTES
EF-1	BATHROOM 003	CEILING CABINET	DIRECT	110	0.2	114	<1/3	120/1	0.6	<15	KOHLER	K-34454	1
EF-2	NAIL STATIONS	UTILITY SET	DIRECT	400	0.5	53	1/2	115/1	48	77	COOK	100CPV-BC	2
NOTES: * ACCEPTABLE MANUFACTURERS: COOK, GREENHECK, PENN. OR YORK * ALL FANS SHALL BE AMCA CERTIFIED AND LABELED. * ALL FANS SHALL BE UL LISTED AND LABELED. 1. PROVIDE WITH INTEGRAL EXHAUST GRILLE WITH INTEGRATED LIGHT FIXTURE, INTEGRAL DISCONNECT, INTEGRAL BACKDRAFT DAMPER, UNIT-MOUNTED VARIABLE SPEED CONTROLLER AND RUBBER-IN-SHEAR VIBRATION ISOLATORS. 2. PROVIDE UNIT-MOUNTED VARIABLE SPEED CONTROLLER, INLET COMPANION FLANGE, FLEXIBLE INLET DUCT CONNECTOR, WEATHER HOOD WITH HINGED ACCESS DOOR, DISCHARGE SHUTTER, AND SUPPORT RAILS WITH VIBRATION ISOLATORS AS RECOMMENDED BY THE MANUFACTURER.													



AIR DEVICE SCHEDULE										
RE	EXISTING RETURN AIR DEVICE									
SI	SIDEWALL SUPPLY REGISTER (22.5 DEGREE DEFLECTION)									
CFM	CFM RANGE	DUCT	FACE	THROW	MAX APD	MAX NC	MANUFACTURER	MODEL	NOTES:	
	0-175	12x4	13x5	10	0.11	22	TITUS	300RL	1	
SR	EXISTING SUPPLY AIR DEVICE									
CFM										
NOTES:										
* ACCEPTABLE MANUFACTURERS: ANEMOSTAT, KRUGER, METALAIR, NAILOR, PRICE, TITUS OR TUTTLE BAILEY										
* ALL AIR DEVICES SHALL BE STEEL CONSTRUCTION WITH ENAMEL FINISH UNLESS OTHERWISE NOTED.										
* THROW VALUES LISTED ARE IN FEET AT A TERMINAL VELOCITY OF 150 FPM UNLESS OTHERWISE NOTED.										
* PROVIDE FRAME AND/OR ACCESSORIES AS REQUIRED TO MATCH CEILING/WALL/DOOR TYPE. REFER TO ARCHITECTURAL PLANS.										
* COORDINATE AIR DEVICE COLOR SELECTIONS WITH ARCHITECT. IF NO PREFERENCE IS EXPRESSED, COLOR SHALL BE WHITE.										
1. PROVIDE WITH OPPOSED BLADE DAMPER. DAMPER SHALL BE ADJUSTABLE THROUGH FACE OF AIR DEVICE.										



SUBMITTALS									
* SUBMITTALS ARE NOT CONTRACT DOCUMENTS. THEIR PURPOSE IS TO DEMONSTRATE THE WAY BY WHICH THE CONTRACTOR PROPOSES TO CONFORM TO THE INFORMATION GIVEN AND THE DESIGN CONCEPT EXPRESSED IN THE CONTRACT DOCUMENTS. ALL WORK SHALL BE IN ACCORDANCE WITH APPROVED SUBMITTALS EXCEPT THAT THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY FOR DEVIATIONS FROM REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE ENGINEER'S APPROVAL OF SUBMITTALS, NOR SHALL THE CONTRACTOR BE RELIEVED OF THE RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SUBMITTALS BY THE ENGINEER'S APPROVAL OF SUBMITTALS.									
1. SUBMIT THE FOLLOWING MATERIALS AND EQUIPMENT FOR REVIEW PRIOR TO ORDERING: A. FANS AND VENTS B. ELECTRIC HEATERS C. AIR DEVICES D. VIBRATION ISOLATORS E. DUCT INSULATION AND LINING F. FLEXIBLE DUCTS AND CONNECTORS G. COORDINATED DUCTWORK DRAWINGS H. DAMPERS AND ACTUATORS I. HANGERS AND SUPPORTS J. ACCESS PANELS K. FILTERS L. TEMPERATURE CONTROLS M. MATERIAL SAFETY DATA SHEETS SUBMIT THE FOLLOWING DOCUMENTS WITHIN 90 DAYS OF THE DATE OF ISSUANCE OF THE CERTIFICATE OF OCCUPANCY: N. TESTING, ADJUSTING AND BALANCING REPORT O. OPERATION AND MAINTENANCE MANUALS P. AS-BUILT RECORD DRAWINGS									
2. AT THE CONTRACTOR'S WRITTEN REQUEST, ELECTRONIC COPIES OF THE ENGINEER'S CAD FILES MAY BE PROVIDED TO THE CONTRACTOR FOR THE CONTRACTOR'S USE IN CONNECTION WITH THE PROJECT, SUBJECT TO THE CONTRACTOR COMPLETING AND SIGNING AN ELECTRONIC FILE RELEASE FORM PRIOR TO THE TRANSFER OF ELECTRONIC CAD FILES.									
3. THE CONTRACTOR SHALL REVIEW EACH SUBMITTAL AND CHECK FOR COORDINATION WITH OTHER WORK OF THE CONTRACT AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. MARK EACH SUBMITTAL WITH A STATEMENT CERTIFYING THAT SUBMITTAL HAS BEEN REVIEWED, CHECKED, AND APPROVED FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. SUBMITTALS THAT DO NOT BEAR CONTRACTOR'S APPROVAL WILL BE RETURNED WITHOUT ACTION.									
4. DEVIATIONS FROM THE MANUFACTURER(S) INDICATED AS THE BASIS OF DESIGN ON THE PLANS AND EQUIPMENT SCHEDULES SHALL BE SPECIFICALLY AND CLEARLY IDENTIFIED ON EACH SUBMITTAL.									
5. ALTERNATE MANUFACTURERS INDICATED ON THE PLANS AND EQUIPMENT SCHEDULES AS "ACCEPTABLE" HAVE BEEN INCLUDED FOR STANDARDS OF QUALITY ONLY, AND SHALL BE CONSIDERED A DEVIATION FROM THE BASIS OF DESIGN. MANUFACTURERS NOT INDICATED ON THE PLANS AND EQUIPMENT SCHEDULES AS "ACCEPTABLE" WILL NOT BE CONSIDERED WITHOUT PRIOR APPROVAL FROM THE OWNER AND ENGINEER.									
6. MODIFICATIONS REQUIRED TO THE WORK OF OTHER TRADES DUE TO CONTRACTOR-ORIGINATED DEVIATIONS FROM THE MANUFACTURERS INDICATED AS THE BASIS OF DESIGN ON THE PLANS AND EQUIPMENT SCHEDULES SHALL BE INCORPORATED AT NO ADDITIONAL COST TO THE OWNER.									
7. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE MECHANICAL EQUIPMENT REQUIREMENTS WITH THE GENERAL CONTRACTOR. ITEMS TO BE COORDINATED SHALL INCLUDE, BUT NOT BE LIMITED TO, SIZE, WEIGHT AND UTILITIES (ELECTRIC, GAS, ETC).									
8. THE CONTRACTOR SHALL ALLOW A MINIMUM OF FIVE (5) BUSINESS DAYS FOR THE REVIEW OF EACH SUBMITTAL, INCLUDING RESUBMITTALS. NO EXTENSION OF THE CONTRACT TIME WILL BE AUTHORIZED BECAUSE OF FAILURE TO TRANSMIT SUBMITTALS ENOUGH IN ADVANCE OF THE WORK TO PERMIT PROCESSING, INCLUDING RESUBMITTALS. EXPEDITED REVIEWS, IF REQUIRED, SHALL BE AT THE COST OF CONTRACTOR.									
9. COORDINATE ALL ROOF EQUIPMENT SUPPORT TYPES AND HEIGHTS WITH ROOF CONSTRUCTION PRIOR TO ORDERING.									

MISCELLANEOUS EQUIPMENT									
1. GENERAL: A. REFER TO EQUIPMENT SCHEDULES FOR ADDITIONAL REQUIREMENTS. B. ALL EQUIPMENT SHALL BE IDENTIFIED WITH EQUIPMENT LABELS MADE OF BLACK LAMINATED PLASTIC WITH 1/2" WHITE LETTERS AS DETERMINED BY THE OWNER'S REPRESENTATIVE. IF THE OWNER'S REPRESENTATIVE DOES NOT EXPRESS A PREFERENCE, AND A BUILDING STANDARD HAS NOT BEEN ESTABLISHED, THEN IDENTIFICATION SHALL BE TAKEN FROM THE PLANS AND SHALL BE LOCATED IN A POSITION THAT IS CLEARLY VISIBLE. THE TITLES SHALL BE SHORT AND CONCISE.									
2. VIBRATION ISOLATORS A. PROVIDE DOUBLE DEFLECTION NEOPRENE ISOLATION HANGERS FOR ALL SUSPENDED EQUIPMENT WEIGHING LESS THAN 100 LBS. B. THE QUANTITY AND LOCATION OF ISOLATORS SHALL BE AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.									
3. ACCESS PANELS: A. PROVIDE ACCESS PANELS TO SERVICE ALL DAMPERS, PIPING SPECIALTIES AND EQUIPMENT AS REQUIRED. B. ACCESS PANELS IN DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS. MINIMUM SIZE OF ACCESS PANELS SHALL BE 12"x12" EXCEPT WHERE DUCT IS LESS THAN 14" WIDE, IN WHICH CASE ONE DIMENSION SHALL BE 12" AND THE OTHER SHALL BE 2" LESS THAN THE DUCT WIDTH. ACCESS PANELS SHALL BE THE INSULATED DOOR TYPE ON ALL INSULATED DUCTS AND SHALL NOT BE COVERED BY THE DUCT INSULATION. C. ALL ACCESS DOORS SHALL BE ACCESSIBLE.									
4. CONTROL DAMPERS (ALUMINUM CONSTRUCTION, AIRFOIL OPPOSED-BLADE TYPE): A. ACCEPTABLE MANUFACTURERS: NAILOR, POTTORFF OR RUSKIN. B. SHALL BE LISTED AND LABELED IN ACCORDANCE WITH AMCA CLASS 1 FOR LOW LEAKAGE APPLICATIONS (MAXIMUM 4 CFM/SF AT 1" WG). C. MOTOR ACTUATORS SHALL BE 24VAC AND SHALL BE MOUNTED EXTERNAL TO THE AIR STREAM. D. SLEEVES AND MOUNTING ANGELES SHALL BE THE MANUFACTURER PRODUCT OF THE DAMPER MANUFACTURER AND SHALL BE PROVIDED WITH EACH DAMPER. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS FOR THE SPECIFIC TYPE OF INSTALLATION.									

ELECTRIC BASEBOARD HEATER SCHEDULE									
DESIGNATION	LENGTH FT	TYPE	MOUNTING TYPE	WATTS	V/PH	FLA	OPERATING WEIGHT LBS	MANUFACTURER	MODEL
BBH-1	6	BASEBOARD	FLOOR	1500	120/1	12.5	12.0	INDERCO	BBI
BBH-2	6	BASEBOARD	FLOOR	1500	120/1	12.5	12.0	INDERCO	BBI
NOTES: * ACCEPTABLE MANUFACTURERS: BERKO, INDERCO, MARKEL, QMARK * ALL HEATERS SHALL BE UL LISTED AND LABELED. * ALL HEATERS SHALL BE PROVIDED WITH AN AUTOMATIC THERMAL OVERLOAD CUT-OFF. * ALL HEATERS SHALL BE PROVIDED WITH AN INTEGRAL UNIT-MOUNTED DISCONNECT SWITCH AND INTEGRAL UNIT-MOUNTED TAMPERPROOF THERMOSTAT. * COORDINATE HEATER COLOR SELECTIONS WITH ARCHITECT. IF NO PREFERENCE IS EXPRESSED, COLOR SHALL BE WHITE.									



REVIEWED
By Laura DiPasquale at 11:43 am, Sep 11, 2026

HIFOXY BEAUTY

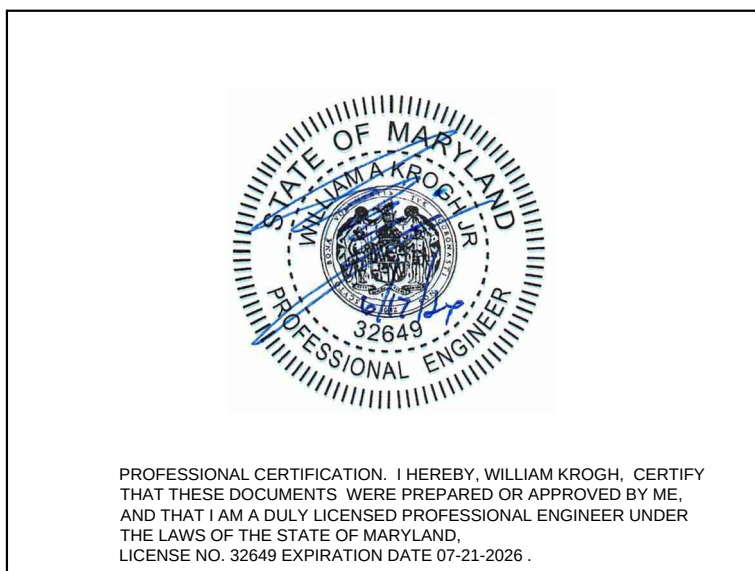
7042 CARROLL AVE
TAKOMA PARK, MD 20781

bestudio
ARCHITECTURE
242 10th St NE WDC
T: 202-670-2739

CALIBER DESIGN, Inc.
Mechanical - Electrical - Plumbing Engineering
22960 Shaw Road, Suite 620
Sterling, Virginia 20166
571.291.4012 ph
www.caliberdesigninc.com

REVISION SCHEDULE

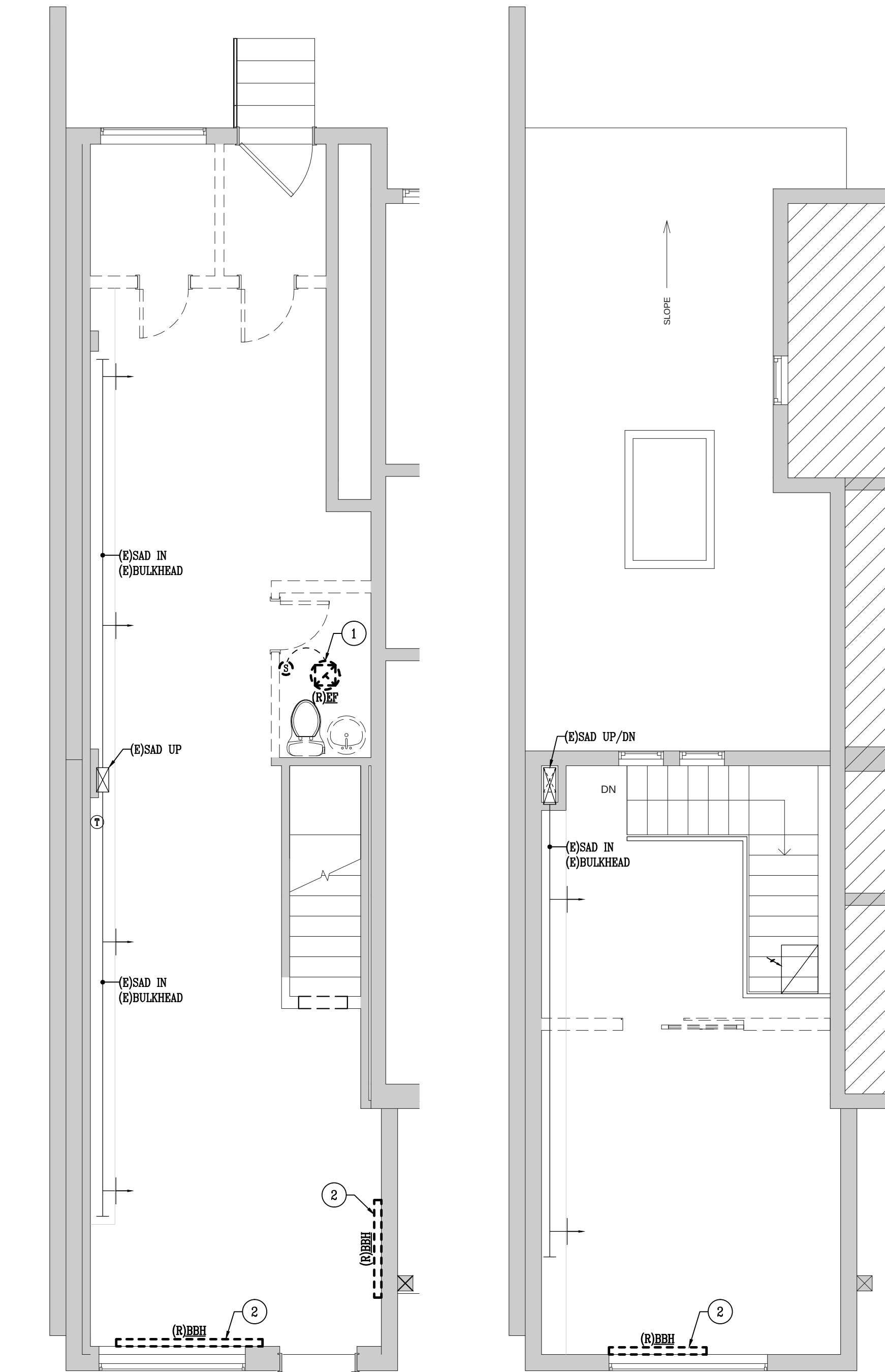
NO. DATE DESCRIPTION
06.12.2026 PERMIT



SCALE: NONE
GRAPHIC SCALE SHOWN FOR REFERENCE ONLY - DO NOT SCALE OFF OF DRAWINGS

MECHANICAL SCHEDULES
AND DETAILS

M002

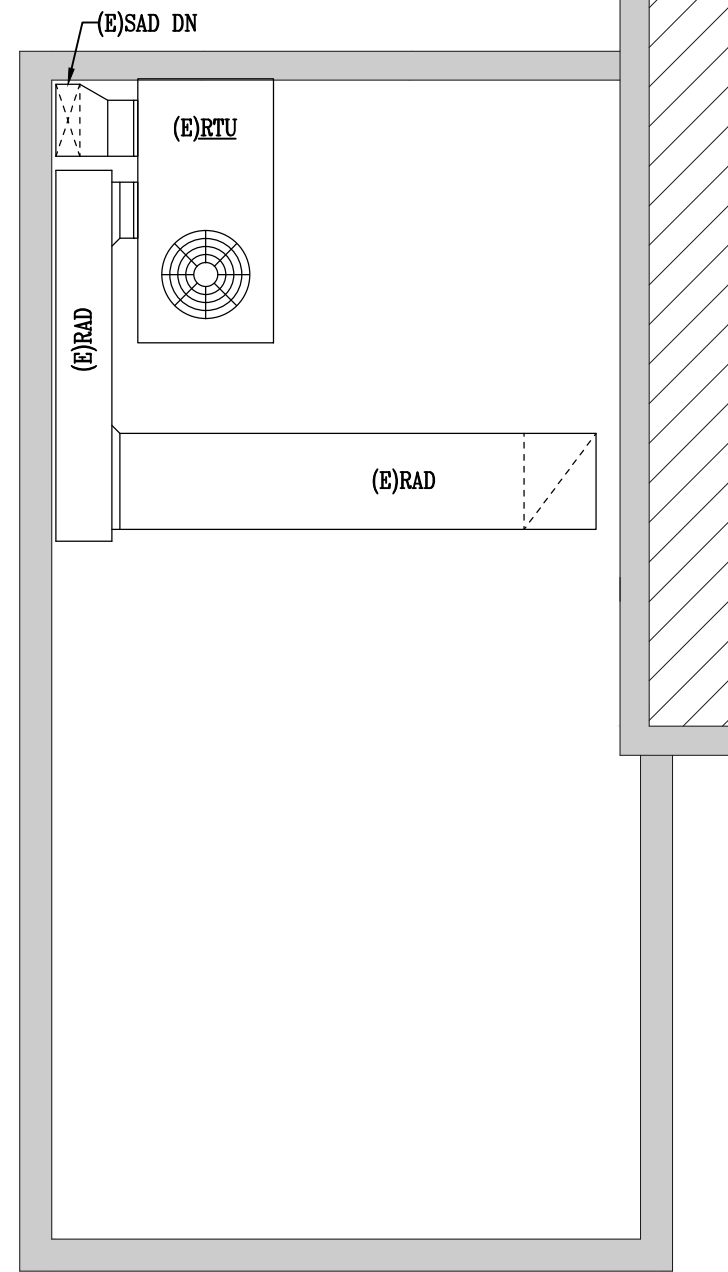


DEMOLITION
MECHANICAL PLAN
N - FIRST FLOOR

SCALE: 1/4"=1'-0"

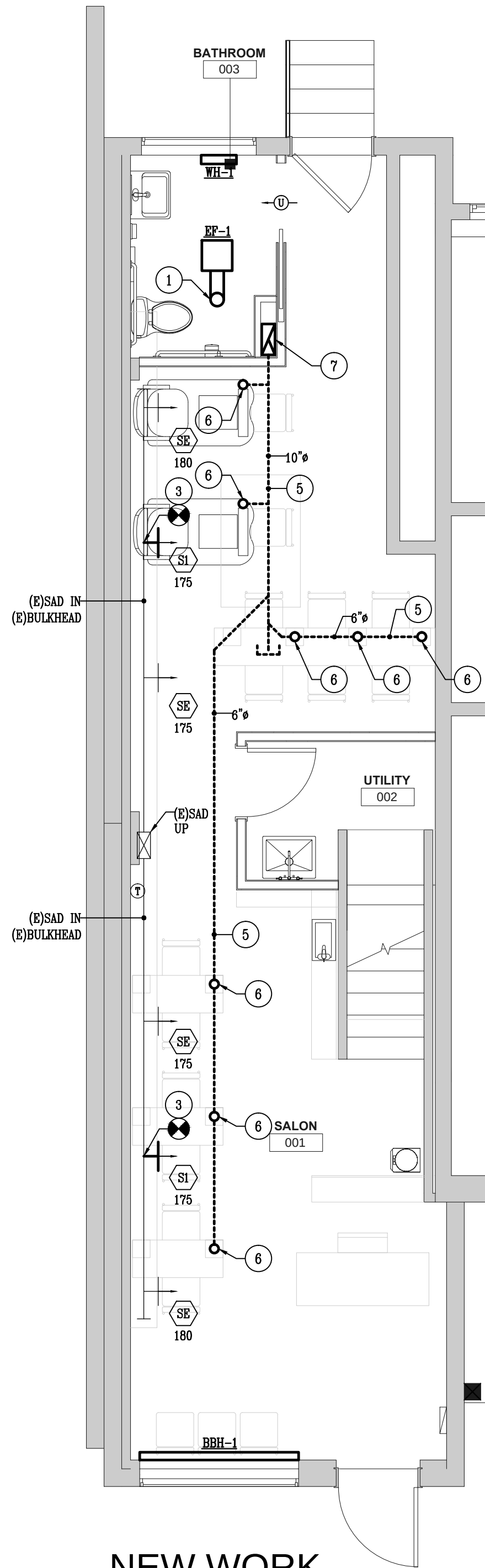
DEMOLITION
MECHANICAL PLAN
N - SECOND FLOOR

SCALE: 1/4"=1'-0"



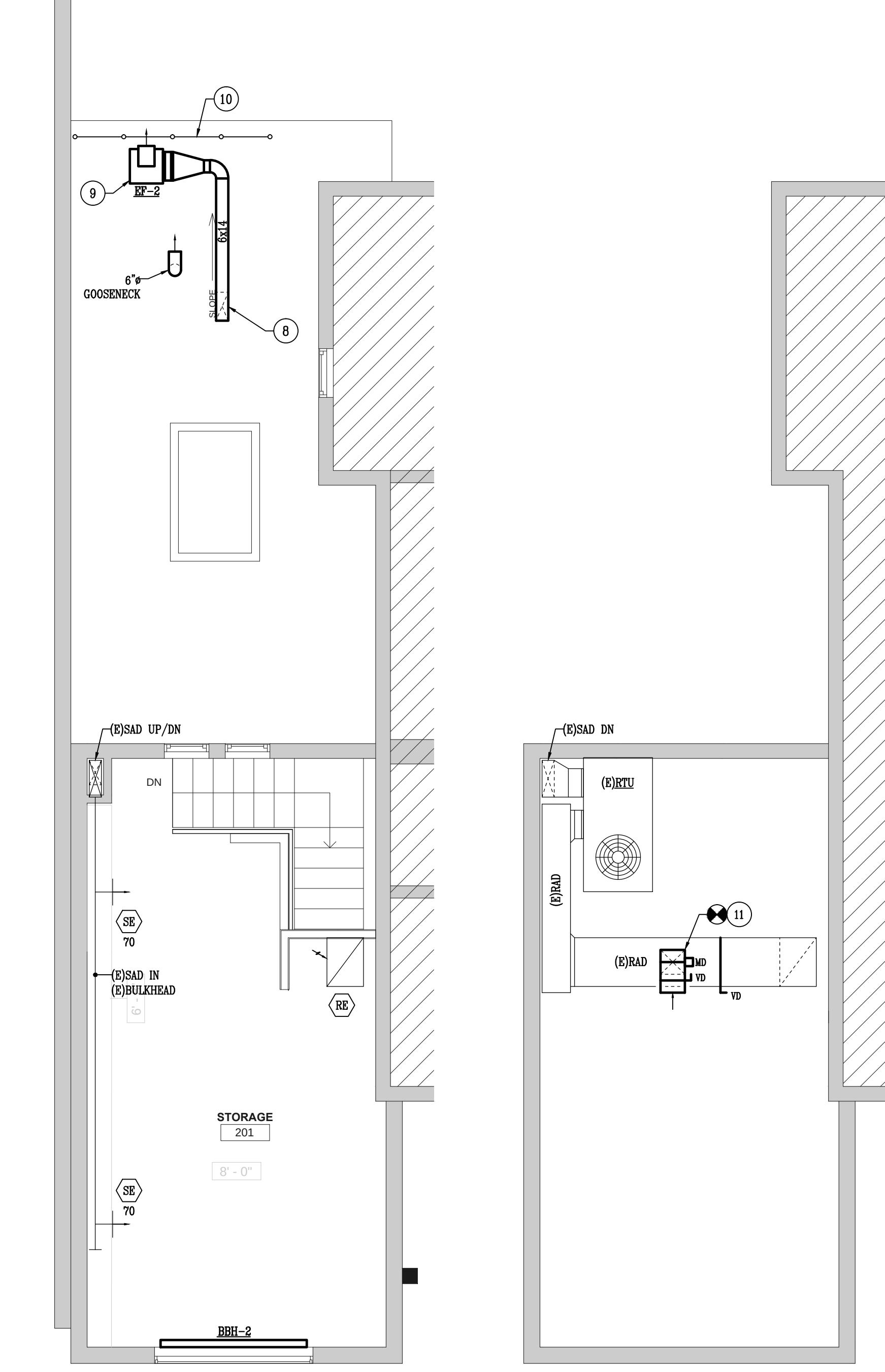
DEMOLITION
MECHANICAL PLAN
N - UPPER ROOF

SCALE: 1/4"=1'-0"



NEW WORK
MECHANICAL PLAN
N - FIRST FLOOR

SCALE: 1/4"=1'-0"



NEW WORK
MECHANICAL PLAN
N - SECOND FLOOR

SCALE: 1/4"=1'-0"

NEW WORK
MECHANICAL PLAN
N - UPPER ROOF

SCALE: 1/4"=1'-0"

KEY NOTES

- 1 REMOVE EXISTING CEILING MOUNTED EXHAUST FAN AND ALL ASSOCIATED DUCTWORK AND ACCESSORIES.
- 2 REMOVE ELECTRIC BASEBOARD HEATER.
- 3 PROVIDE NEW SIDEWALL SUPPLY AIR REGISTER IN EXISTING SUPPLY AIR DUCT IN EXISTING GYPSUM BOARD BULKHEAD.
- 4 6" EXHAUST AIR DUCT UP TO GOOSENECK ON ROOF ABOVE. REFER TO GOOSENECK DETAIL ON DRAWING M002.
- 5 PVC EXHAUST AIR DUCT BELOW GRADE.
- 6 STUB 4" PVC EXHAUST DUCT UP THROUGH FLOOR FOR NAIL STATION SOURCE CAPTURE SYSTEM. COORDINATE EXACT FINAL LOCATION WITH STATION FURNITURE SPECIFICATIONS AND LOCATION. PROVIDE MANUAL DAMPER ABOVE FLOOR AND BALANCE TO 50 CFM. CONNECT TO STATION FURNITURE PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 7 6x14 EXHAUST AIR DUCT DOWN IN CHASE TO BELOW FLOOR. TRANSITION IN VERTICAL TO 10" PVC PRIOR TO GRADE. REFER TO NOTE 5.
- 8 6x14 EXHAUST AIR DUCT ABOVE LOW ROOF DOWN IN CHASE BELOW. REFER TO NOTE 7.
- 9 UTILITY SET EXHAUST FAN ON LOW ROOF. COORDINATE INSTALLATION TO ORIENT DISCHARGE DIRECTION AS INDICATED.
- 10 NEW PROTECTIVE GUARD RAIL. REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.
- 11 PROVIDE NEW 12x12 OUTSIDE AIR INTAKE GOOSENECK WIRE WIRE MESH SCREEN ON TOP OF EXISTING RETURN AIR DUCT ABOVE UPPER ROOF. PROVIDE MOTORIZED DAMPER AND BALANCING DAMPERS IN NEW AND EXISTING DUCTWORK AS SHOWN. BALANCE TO AIRFLOWS INDICATED IN THE EXISTING ROOFTOP UNIT SCHEDULE ON DRAWING M002.

GENERAL DEMOLITION NOTES

1. ALL EQUIPMENT REMOVED BY THE CONTRACTOR, OTHER THAN DUCTWORK, WIRING AND AIR DEVICES, SHALL BECOME THE PROPERTY OF THE OWNER AND SHALL BE REMOVED, STORED OR DISPOSED OF BY THE CONTRACTOR AT THE DIRECTION OF THE OWNER.
2. THE REMOVAL OF EQUIPMENT, DUCTWORK AND/OR PIPING INDICATED ON THE PLANS SHALL INCLUDE THE REMOVAL OF ALL ASSOCIATED HANGERS, SUPPORTS, AIR DEVICES, POWER, WIRING AND CONTROLS UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS.
3. EXERCISE THE UTMOST CARE WHEN REMOVING AND/OR REINSTALLING EQUIPMENT INDICATED ON THE PLANS TO BE REMOVED OR RELOCATED, SO THAT EXISTING COMPONENTS ARE NOT DAMAGED. DAMAGED EQUIPMENT SHALL BE REPLACED OR REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
4. CLEAN ALL EQUIPMENT AND/OR AIR DEVICES INDICATED ON THE PLANS TO BE RELOCATED PRIOR TO REINSTALLATION.
5. CLOSE AND FINISH ALL OPENINGS IN WALLS, CEILINGS AND FLOORS RESULTING FROM DEMOLITION TO MATCH THE EXISTING SURROUNDING AREAS NOT RECEIVING NEW FINISHES. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATIONS AND SCOPE WITH THE GENERAL CONTRACTOR.
6. BLANK-OFF ALL UNUSED DUCT OPENINGS WITH THE SAME GAUGE METAL AS THE EXISTING DUCT AND SEAL AIR TIGHT. INSULATED DUCTWORK SHALL BE INSULATED WITH THE SAME INSULATION MATERIAL AND THICKNESS AS EXISTING AND SEALED VAPOR TIGHT.

APPROVED
Montgomery County
Historic Preservation Commission

[Signature]

REVIEWED

By Laura DiPasquale at 11:43 am, Sep 11, 2026

HIFOXY BEAUTY

7042 CARROLL AVE
TAKOMA PARK, MD 20781

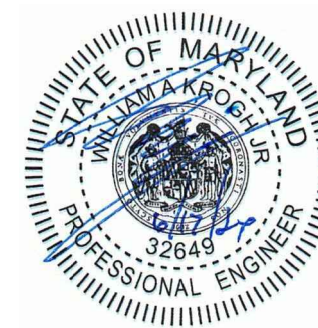
bestudio
ARCHITECTURE
242 10th St NE WDC
T: 202-670-2739

CALIBER DESIGN, Inc.
Mechanical - Electrical - Plumbing Engineering

22960 Shaw Road, Suite 620
Sterling, Virginia 20166
571.201.4012 ph
www.caliberdesigninc.com

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
	06.12.2026	PERMIT



PROFESSIONAL CERTIFICATION: I HEREBY, WILLIAM KROGH, 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. 32649 EXPIRATION DATE 07-21-2026.

4' 2' 0' 4' 8'
GRAPHIC SCALE: 1/4" = 1'-0"

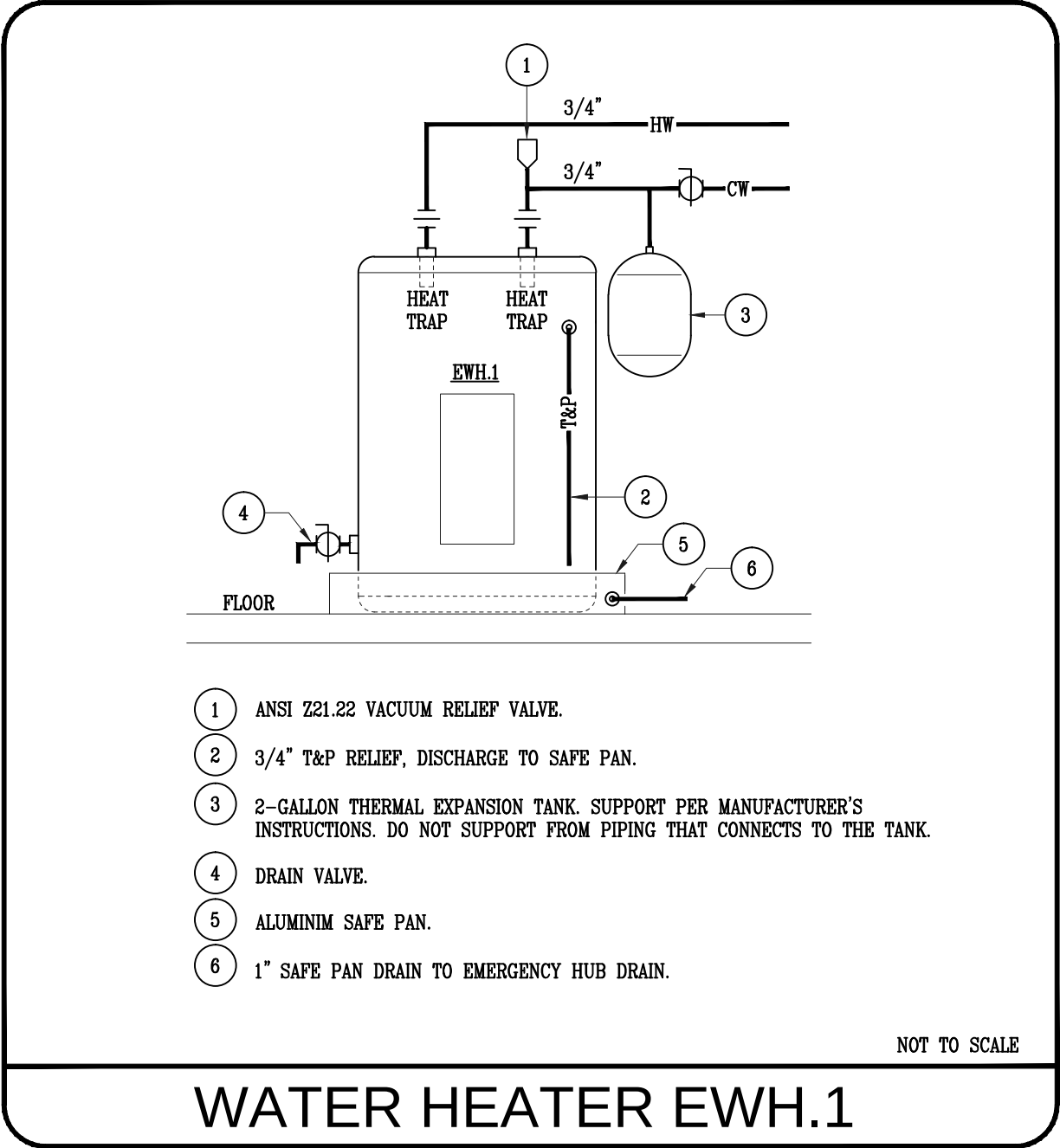
SCALE: 1/4" = 1'-0"
GRAPHIC SCALE SHOWN FOR REFERENCE ONLY - DO NOT SCALE OFF OF DRAWINGS

MECHANICAL PLANS

M101

PLUMBING FIXTURE SCHEDULE					
DESIGNATION	DESCRIPTION	WASTE	VENT	CW	HW
P01	FUTURE SINK: CAP WASTE AND WATER ROUGH-INS FOR FUTURE.	1-1/2"		1/2"	1/2"
P02	LAVATORY: AMERICAN STANDARD WALL 9024.001BC WALL HUNG RESTROOM SINK WITH SINGLE FAUCET HOLE. PROVIDE REQUIRED CARRIER OR WALL SUPPORT.	1-1/4"	2"	1/2"	1/2"
P07	FAUCET: DELTA 567LF-HGM-PP 0.5 GPM SINGLE LEVER FAUCET WITH PUSH POP-UP DRAIN AND CHROME FINISH. PROVIDE 1-1/4" P-TRAP, WASTE PIPING, ANGLE STOP VALVES, SUPPLY LINES, AND WALL ESCUTCHEONS. ALL TRIM PIPING TO BE CHROME PLATED. SEE PIPING SPECIALTIES FOR TMV AND PIPE COVER SPECS.				
P03	WATER CLOSET: AMERICAN STANDARD 2889.101 CONCEALED TRAPWAY, 1.28 GPF TOILET WITH OPTIONAL 4000.613 TANK WITH RIGHT HAND FLUSH LEVER. AMERICAN STANDARD 5901.100 ELONGATED, OPEN FRONT SEAT LESS LID. PROVIDE ANGLE STOP VALVE, SUPPLY LINE, AND WALL ESCUTCHEON.	3"	2"	1/2"	
P04	SERVICE SINK: SIGNATURE HARDWARE SH497599 WALL MOUNT SINK PROVIDE REQUIRED CARRIER OR WALL SUPPORT.	1-1/2"	2"	1/2"	1/2"
P05	FAUCET: SIGNATURE HARDWARE 497555 1.75 GPM WALL FAUCET WITH CHROME FINISH. PROVIDE DRAIN WITH STOPPER, 1-1/2" P-TRAP, WASTE PIPING, ANGLE STOP VALVES, SUPPLY LINES, AND WALL ESCUTCHEONS. ALL TRIM PIPING TO BE CHROME PLATED.				
P06	HAND SINK: NAKKEK'S SCAREBO 1501 WALL HUNG RESTROOM SINK WITH SINGLE FAUCET HOLE AND WALL SUPPORT.	1-1/4"	2"	1/2"	1/2"
P07	FAUCET: DELTA 567LF-HGM-PP 0.5 GPM SINGLE LEVER FAUCET WITH PUSH POP-UP DRAIN AND CHROME FINISH. PROVIDE 1-1/4" P-TRAP, WASTE PIPING, ANGLE STOP VALVES, SUPPLY LINES, AND WALL ESCUTCHEONS. ALL TRIM PIPING TO BE CHROME PLATED. SEE PIPING SPECIALTIES FOR TMV AND PIPE COVER SPECS.				

PIPE SUPPORT SPACING		
PIPE MATERIAL	MAX. HORIZONTAL SPACING	MAX. VERTICAL SPACING
SCH. 40 PVC	4 FEET	10 FEET
COPPER 1-1/4" AND SMALLER	6 FEET	10 FEET
COPPER 1-1/2" AND LARGER	10 FEET	10 FEET
CPVC	1" AND SMALLER = 3 FEET 1-1/4" AND LARGER = 4"	1-1/4" AND LARGER = 10 FEET

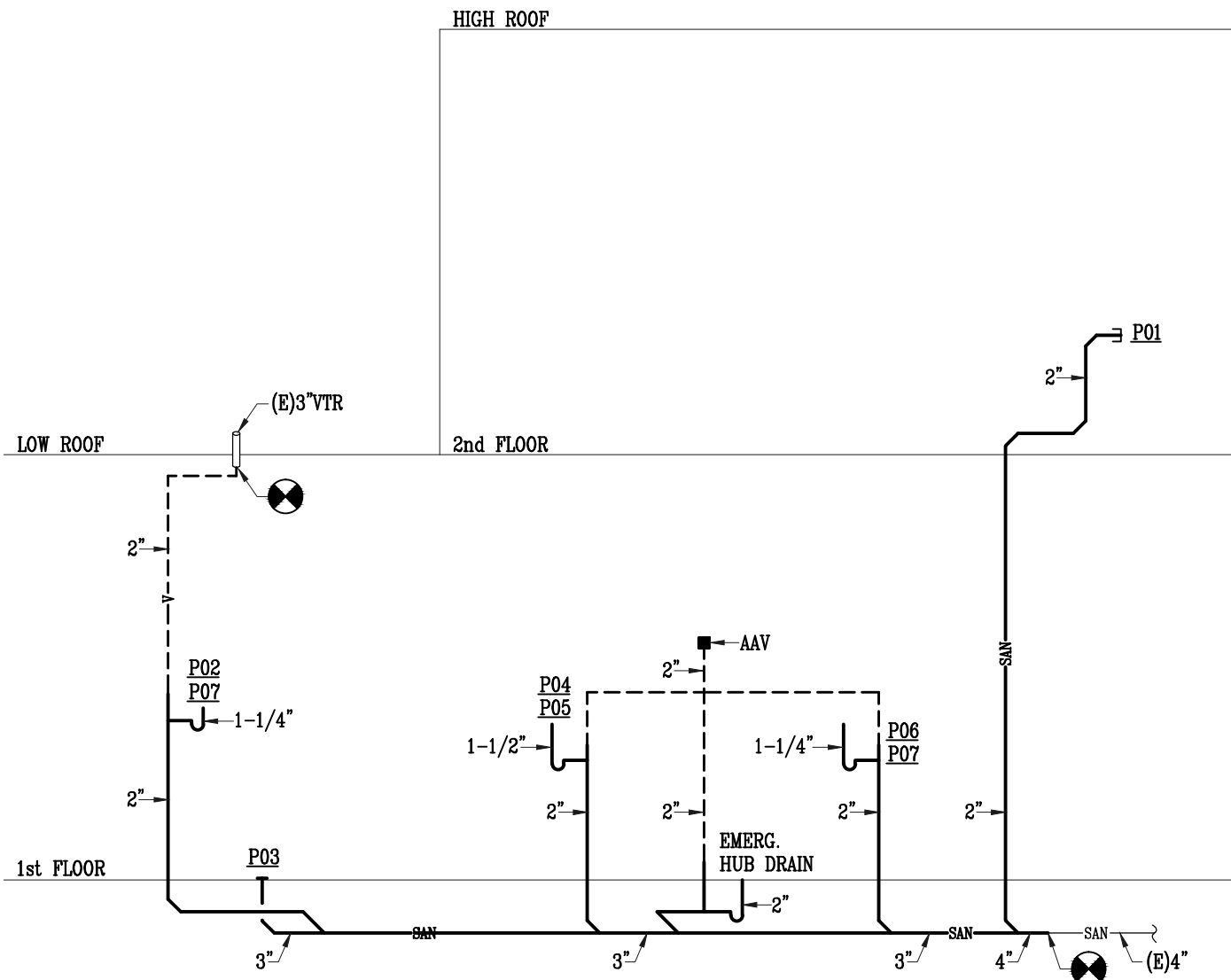


WATER HEATER SCHEDULE					
DESIGNATION	HW RECOVERY RATE	CAPACITY	ELECTRICAL	APPROX. OPERATING WEIGHT	MANUFACTURER MODEL
EWH.1	18 GPH @ 100°F TEMP. RISE 22 GPH @ 80°F TEMP. RISE 30 GPH @ 60°F TEMP. RISE	RATED 33 GALLONS NOMINAL 36 GALLONS	4,500 WATTS 240 VOLTS 1 Ph	400 LBS.	A.O. SMITH DRL-30
NOTES: 1. MEETS STANDBY LOSS REQUIREMENTS OF U.S. DOE AND ASHRAE/IES 90.1. UEF = 0.92. 2. INSTALL 2-GALLON TOTAL VOLUME THERMAL EXPANSION TANK ON WATER HEATER INLET PIPE. 3. SET WATER HEATER STORAGE TEMPERATURE AT 120°F. 4. PROVIDE INLET AND OUTLET NIPPLES WITH INTEGRATED HEAT TRAPS IF NOT INTEGRAL TO WATER HEATER.					

PIPING AND SPECIALTIES	
1. PLUMBING PIPING MATERIALS SHALL COMPLY WITH THE 2024 WSSC PLUMBING AND FUEL GAS CODE, 2024 INTERNATIONAL PLUMBING CODE WITH WSSC REVISIONS, AND BENCO DENTAL REQUIREMENTS.	
2. DOMESTIC WATER PIPING BASE BID: TYPE 1' COPPER PIPE WITH 125 PSI WROUGHT COPPER FITTINGS. CONNECTIONS TO BE MADE WITH LEAD-FREE SOLDER OR PRESS FITTINGS IF PERMITTED BY OWNERSHIP. PUSH ON FITTINGS (SHARKBITE AND SIMILAR) ARE NOT PERMITTED. VALVES SHALL BE TWO-PIECE, FULL PORT, BRASS OR BRONZE BODY, WITH STAINLESS BALL AND LEVER HANDLE, 600 PSIG CWP RATING. VALVES SHALL HAVE CPVC INLET AND OUTLET CONNECTIONS.	
3. DOMESTIC WATER PIPING DEDUCT ALTERNATE: CPVC PIPE WITH SOLVENT WELDED JOINTS AND FITTINGS. PUSH ON FITTINGS (SHARKBITE AND SIMILAR) ARE NOT PERMITTED. VALVES SHALL BE FULL PORT, BRONZE, BRASS OR BRONZE BODY, WITH STAINLESS BALL AND LEVER HANDLE, 600 PSIG CWP RATING. VALVES SHALL HAVE CPVC INLET AND OUTLET CONNECTIONS.	
4. DOMESTIC WATER PIPE INSULATION: INSULATION SHALL BE FIBERGLASS 25/50 CODE COMPLIANT INSULATION OR APPROVED EQUAL. INSULATION AND COVERINGS SHALL HAVE A FLAME-SPREAD RATING NOT EXCEEDING 25 AND A SMOKE-DEVELOPED RATING NOT EXCEEDING 50 AS TESTED UNDER PROCEDURE ASTM E-84, NFPA 255 AND UL 723. INSULATION OF PIPING SHALL BE CONTINUOUS THROUGH NON-RATED WALL PENETRATIONS AND HANGERS. PROVIDE GALVANIZED SHEET METAL SHIELDS BETWEEN PIPING INSULATION AND SUPPORT HANGERS. THICKNESSES INDICATED ARE FOR INSULATIONS WITH A CONDUCTIVITY NOT EXCEEDING 0.27 BTU PER INCH/HFTE°F AT 75°F MEAN TEMPERATURE. WHEREVER POSSIBLE, INSULATION SHALL BE SLIPPED OVER THE TUBING AS A FULL CYLINDER. SEAL ALL JOINTS PER MANUFACTURER INSTRUCTIONS. PIPE INSULATION THICKNESS SHALL BE AS FOLLOWS: a. COLD WATER SMALLER THAN 1-1/2" = 1/2" THICK INSULATION. b. HOT WATER PIPING TO BE COVERED WITH 1" THICK INSULATION.	
5. SANITARY WASTE AND VENT PIPING: ASTM D2665 DWV SCH. 40 PVC PIPE WITH SOLVENT WELDED JOINTS AND FITTINGS.	
6. INSTALLATION: A. REFER TO RISER DIAGRAMS AND MFR. INSTRUCTIONS FOR SIZES OF ALL PIPING TO FIXTURES AND EQUIPMENT. B. MAKE PROPER CONNECTIONS TO ALL FIXTURES AND EQUIPMENT PER MFR. INSTRUCTIONS, EVEN THOUGH ALL BRANCH MAINS, ELBOWS AND CONNECTIONS MAY NOT BE SHOWN ON THESE DRAWINGS. C. SANITARY WASTE PIPING SMALLER THAN 3" SHALL BE SLOPED AT (2%) 1/4" PER HORIZONTAL FOOT. SANITARY WASTE PIPING 3" AND LARGER SHALL BE SLOPED AT (1%) 1/8" PER HORIZONTAL FOOT MINIMUM. PROVIDE CLEANOUTS AS REQUIRED PER THE PLUMBING CODE. D. THE PLUMBING CONTRACTOR MUST PERFORM A VIDEO INSPECTION ON THE SANITARY WASTE PIPING BEFORE AND AFTER CONSTRUCTION TO ENSURE THAT THE PIPING IS CLEAR OF OBSTRUCTIONS, "BELLIES", AND IS READY FOR USE. PROVIDE THE OWNER VIDEO OF THE FINDINGS FOR REVIEW AND THEIR RECORDS. NOTIFY THE ARCHITECT AND ENGINEER OF ANY ISSUES. E. NEW PIPING SHALL BE IDENTIFIED BY NAME AND DIRECTIONAL FLOW ARROW IN ACCORDANCE WITH ASPE AND ANSI STANDARDS. 7. PIPING SPECIALTIES: A. AIR ADMITTANCE VALVE (AAV): OATEY "SUREVENT" AAV; LISTING: ASSE 1050 & 1051 AND ASTM D 2885/D 2881. LOCATE SO THE AAV WILL BE ACCESSIBLE FOR INSPECTION AND REPLACEMENT. EACH TO BE SIZED FOR DPU'S CONNECTED. PROVIDE OATEY 36280 LOUVERED WALL BOX IF INSTALLED IN WALL CAVITY. B. ASSE 1024 BFP: ZURN 700XL DUAL CHECK WITH CONNECTION SIZES TO MATCH EQUIPMENT SUPPLY LINES. C. TMV: LAVATORY SHALL BE PROVIDED WITH ZURN POINT-OF-USE ZW3610700XL ASSE 1070 MIXING VALVE SET AT 105°F. D. LAV. WASTE AND WATER PIPE COVERS: TRUEBRO 102EZ EQUAL WASTE AND WATER PIPE COVERS. E. TRAP PRIMER: PPP, INC. PR-500 3 PSI PRESSURE DROP ACTIVATED VALVE. F. ASSE 1015 BFP: WATTS U-1P007 1" DOUBLE CHECK VALVE ASSEMBLY.	

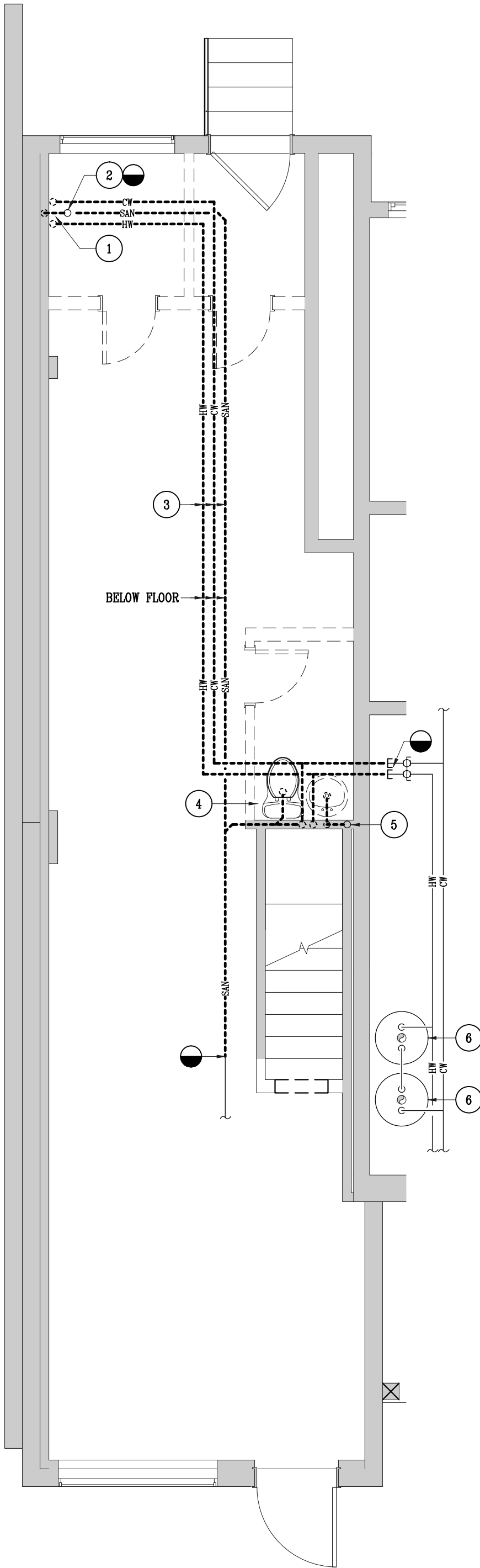
GENERAL NOTES	
1. PLUMBING WORK SHALL COMPLY WITH THE 2024 WSSC PLUMBING AND FUEL GAS CODE (2024 INTERNATIONAL PLUMBING CODE WITH WSSC ADDITIONS, DELETIONS, AND MODIFICATIONS).	
2. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES AND TAXES.	
3. MAKE NO CHANGES WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT AND THE ENGINEER.	
4. SIZES AND LOCATIONS OF EXISTING PIPING SHOWN ON THE DRAWINGS ARE APPROXIMATE. MAKE AN ON-SITE INSPECTION PRIOR TO START OF WORK TO FULLY DETERMINE THE EXISTING CONDITIONS AND THE EXTENT OF WORK INVOLVED ON THE PROJECT.	
5. CUTTING AND PATCHING SHALL BE DONE BY THE APPROPRIATE TRADE UNLESS OTHERWISE REQUIRED BY TRADE CUSTOM. THE PLUMBING CONTRACTOR SHALL FURNISH SKETCHES SHOWING THE LOCATIONS AND SIZES OF ALL REQUIRED OPENINGS AND CHASES. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ADDITIONAL CUTTING OR PATCHING MADE NECESSARY BY HIS FAILURE TO MAKE PROPER ARRANGEMENTS IN THIS RESPECT.	
6. LOCATIONS OF FIXTURES, EQUIPMENT, PIPING AND OTHER PLUMBING WORK IS INDICATED DIAGRAMMATICALLY BY THE DRAWINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF THE BUILDING AND LOCATIONS OF FIXTURES AND EQUIPMENT. DETERMINE EXACT LOCATIONS ON THE JOB SITE, COORDINATE WITH STRUCTURAL CONDITIONS AND THE WORK OF OTHER TRADES.	
7. ALL MATERIALS AND EQUIPMENT INDICATED ON THE PLANS AND DESCRIBED IN THE SPECIFICATIONS SHALL BE PROVIDED NEW BY THE CONTRACTOR, AND SHALL BE IN NEW CONDITION AT THE ACCEPTANCE OF THE WORK.	
8. SUBMITTALS: A. SUBMIT SHOP DRAWINGS FOR THE FOLLOWING MATERIALS AND EQUIPMENT PRIOR TO ORDERING: 1) PLUMBING FIXTURES AND EQUIPMENT 2) VALVES AND PIPING SPECIALTIES 3) PIPE INSULATION B. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE PLUMBING EQUIPMENT REQUIREMENTS WITH THE GENERAL CONTRACTOR. MODIFICATIONS REQUIRED DUE TO CONTRACTOR-ORIGINATED DEVIATIONS FROM THE MANUFACTURERS INDICATED AS THE BASIS OF DESIGN ON THE PLANS AND EQUIPMENT SCHEDULES SHALL BE INCORPORATED AT NO ADDITIONAL COST TO THE OWNER. 9. COMPLETE ALL WORK IN A NEAT AND WORKMANLIKE MANNER, USING ONLY WORKMEN THOROUGHLY QUALIFIED IN THE TRADE THEY ARE TO PERFORM. ROUGH WORK WILL BE REJECTED. 10. INSTALL EACH ITEM OF EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. NO INSTALLATION OR CONNECTION SHALL BE MADE IN A MANNER THAT VOIDS THE MANUFACTURER'S WARRANTY. 11. THE CONTRACTOR ASSUMES THE RESPONSIBILITY FOR PROPER ARRANGEMENT OF PIPES TO CONNECT FIXTURES AND EQUIPMENT IN A PROPER AND APPROVED MANNER. COORDINATE INSTALLATION OF WORK TO PROVIDE PROPER CLEARANCES FOR SERVICE AND OPERATION. 12. WHEREVER PIPES OR OTHER ITEMS PASS THROUGH FIRE-RATED WALLS AND FLOORS, ADEQUATELY FIRESTOP THE PENETRATION. FIRESTOP SHALL BE A NON-COMBUSTIBLE, NON-MELTING, APPROVED MATERIAL. 13. DO NOT CUT STRUCTURAL MEMBERS WITHOUT THE APPROVAL OF THE ARCHITECT AND ALL SUCH CUTTING SHALL BE DONE IN A MANNER AS DIRECTED BY THEM. 14. PROVIDE DOORS PANELS TO SERVICE ALL VALVES, PIPING SPECIALTIES AND EQUIPMENT AS REQUIRED. 15. NEW AND MODIFIED POTABLE WATER SYSTEMS SHALL BE PURGED OF DELETERIOUS MATTER AND DISINFECTED PRIOR TO UTILIZATION. THE METHOD TO BE FOLLOWED SHALL BE THAT PRESCRIBED BY THE HEALTH AUTHORITY OR WATER PURVEYOR HAVING JURISDICTION OR, IN THE ABSENCE OF A PRESCRIBED METHOD, THE PROCEDURE DESCRIBED IN EITHER AWWA C651 OR AWWA C652, OR AS DESCRIBED IN THIS SECTION PER IPC SECTION 610. A. PIPING SHALL BE FLUSHED WITH CLEAN, POTABLE WATER UNTIL DIRTY WATER DOES NOT APPEAR AT THE POINTS OF OUTLET. B. THE SYSTEM SHALL BE FILLED WITH A WATER/CHLORINE SOLUTION CONTAINING NOT LESS THAN 50 PPM (50 MG/L) OF CHLORINE, AND THE SYSTEM SHALL BE VALVED OFF AND ALLOWED TO STAND FOR 24 HOURS, OR THE SYSTEM SHALL BE FILLED WITH A WATER/CHLORINE CONTAINING NOT LESS THAN 200 PPM (200 MG/L) OF CHLORINE AND ALLOWED TO STAND FOR 3 HOURS. C. FOLLOWING THE REQUIRED STANDING TIME, THE SYSTEM SHALL BE FLUSHED WITH CLEAN POTABLE WATER UNTIL THE CHLORINE IS PURGED FROM THE SYSTEM. D. THE PROCEDURE SHALL BE REPEATED WHERE SHOWN BY A BACTERIOLOGICAL EXAMINATION THAT CONTAMINATION REMAINS PRESENT IN THE SYSTEM. 16. MAINTAIN A CLEAN WORK AREA AT ALL TIMES DURING CONSTRUCTION. AFTER JOB COMPLETION, THE CONTRACTOR SHALL CLEAN THE ENTIRE WORK SITE OF RUBBISH, PLASTER, DIRT AND ANY OTHER DEBRIS. 17. TEST FIXTURES, EQUIPMENT AND PIPING SYSTEMS. ALL SHALL OPERATE SATISFACTORILY AS DESIGNED AND INTENDED. REPORT ANY DEFICIENCIES TO THE ENGINEER. 18. THIS CONTRACTOR SHALL GUARANTEE ALL MATERIALS, LABOR AND EQUIPMENT FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE. THE CONTRACTOR SHALL PAY FOR ANY REPAIRS OR REPLACEMENTS CAUSED BY DEFECTIVE WORKMANSHIP OR FAULTY MATERIALS AS CONSTRUED HEREIN WITHIN THE PERIOD COVERED BY THE GUARANTEE.	

ABBREVIATIONS & SYMBOLS	
(R) EXISTING TO REMAIN	----- REMOVE EXISTING
AAV AIR ADMITTANCE VALVE	—HW— EXISTING HOT WATER
ADA AMERICAN DISABILITIES ACT	—CW— EXISTING COLD WATER
APP ABOVE FINISHED FLOOR	---V--- EXISTING VENT
AJH AUTHORITIES HAVING JURISDICTION	—SAN— EXISTING SANITARY WASTE
ANSI AMERICAN NATIONAL STANDARDS INSTITUTE	—HW— NEW HOT WATER
ASSE AMERICAN SOCIETY OF SANITARY ENGINEERS	—CW— NEW COLD WATER
ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS	---V--- NEW VENT
BFP BACKFLOW PREVENTER	—SAN— NEW SANITARY WASTE
CO CLEAN OUT	—TP— TRAP PRIMER
CW COLD WATER	—CAP— CAPPED PIPE
EWH ELECTRIC WATER HEATER	—○— PIPE TURNING UP
GPF GALLONS PER FLUSH	—◇— PIPE TURNING DOWN
GPH GALLONS PER HOUR	—○— BALL VALVE
GPM GALLONS PER MINUTE	
HW HOT WATER	
SAN SANITARY WASTE	
V VENT	
VTR VENT PIPE THRU ROOF	
○ CONNECT TO EXISTING	
○ EXTENT OF REMOVAL	



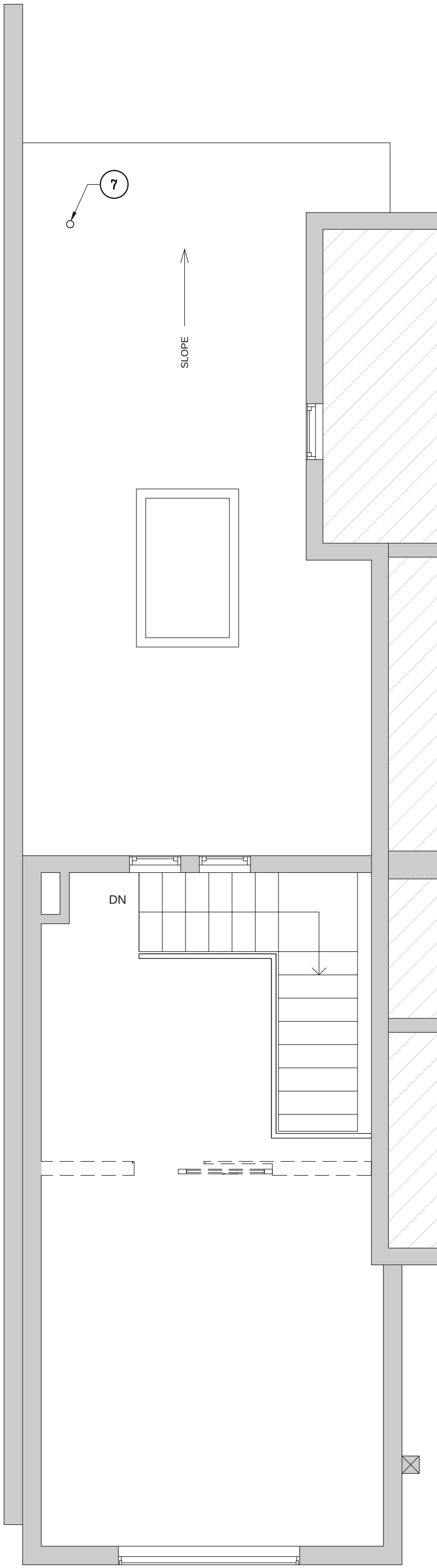
DEMOLITION PLUMBING PLAN
- FIRST FLOOR

SCALE: 1/4"=1'-0"



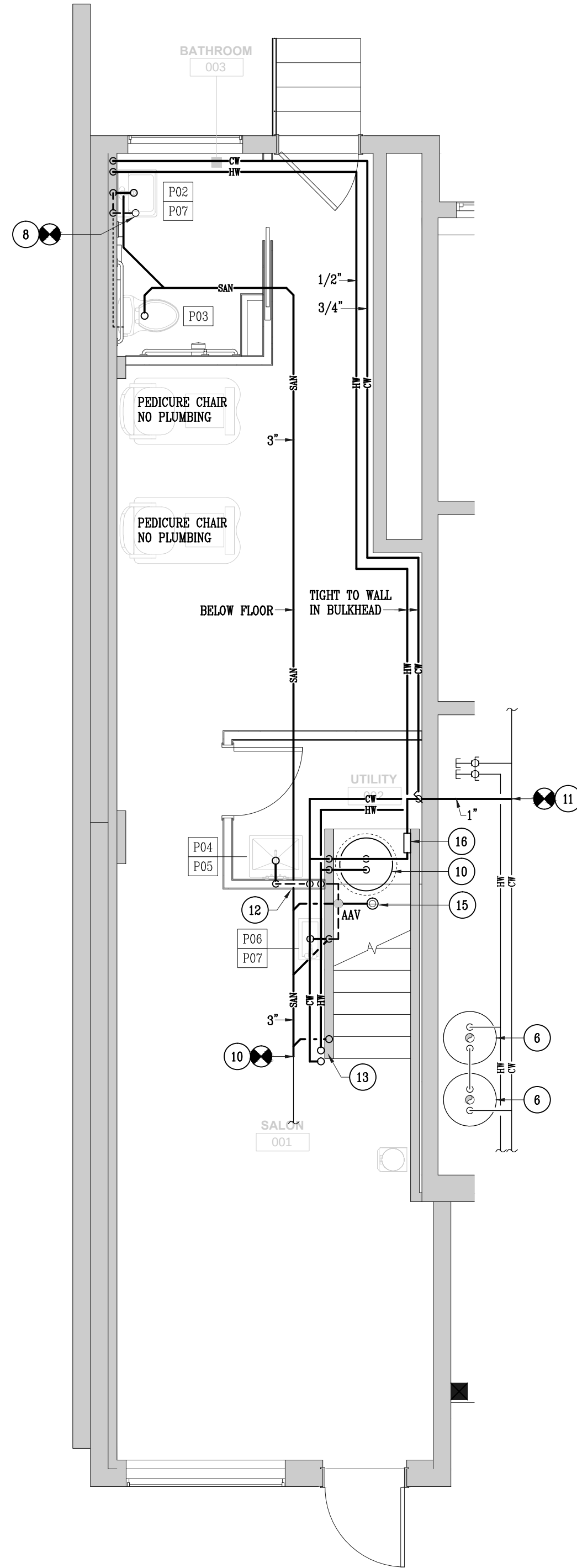
DEMOLITION PLUMBING PLAN
- SECOND FLOOR

SCALE: 1/4"=1'-0"



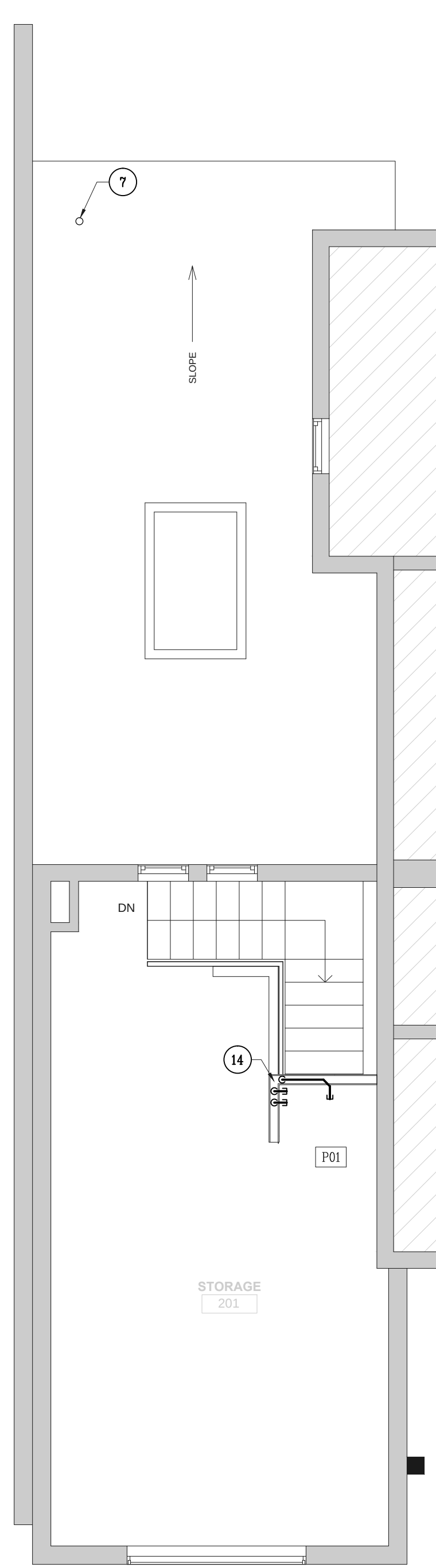
NEW WORK PLUMBING
PLAN - FIRST FLOOR

SCALE: 1/4"=1'-0"



NEW WORK PLUMBING
PLAN - SECOND FLOOR

SCALE: 1/4"=1'-0"



KEY NOTES

- 1 REMOVE UNUSED/ABANDONED WASTE, VENT, AND WATER PIPING AS NEEDED FOR INSTALLATION OF NEW RESTROOM FIXTURES.
- 2 EXISTING VTR TO REMAIN VTR CONNECTION OF NEW VENT PIPING.
- 3 REMOVE WASTE AND WATER PIPING FROM BELOW FLOOR. PIPING SHOWN IN APPROXIMATE LOCATION, PLUMBING CONTRACTOR TO FIELD VERIFY.
- 4 REMOVE WATER CLOSET, LAVATORY, AND ASSOCIATED PIPING.
- 5 CAP CONNECTION TO VENT STACK.
- 6 50-GALLON/40,000 BTUH WATER HEATER IN BASEMENT OF ADJACENT BUILDING TO REMAIN.
- 7 EXISTING 3" VTR TO REMAIN.
- 8 CONNECT TO EXISTING 3" VTR.
- 9 EWH1 BELOW STAIRS.
- 10 CONNECT TO EXISTING 4" SAN BELOW THE FLOOR.
- 11 CONNECT TO EXISTING 1" COLD WATER PIPE IN BASEMENT OF ADJACENT BUILDING.
- 12 2" SAN DOWN THRU FLOOR.
- 13 1/2" HOT AND COLD WATER, AND 2" SAN UP.
- 14 1/2" HOT AND COLD WATER FROM BELOW, AND 2" SAN DOWN.
- 15 2" EMERGENCY HUB DRAIN, PROVIDE TRAP PRIMER.
- 16 ASSE 1015 BPP.

GENERAL DEMOLITION NOTES

1. REMOVE EXISTING FIXTURES AND PIPING AS NOTED ON THE PLANS. REMOVE EXISTING PIPING NOT BEING REUSED AND CAP AT CONNECTION TO SOURCE OR PREPARE FOR CONNECTION OF NEW PIPING AS REQUIRED BY PROJECT SCOPE.
2. PLAN SPECIFIC DEMOLITION NOTES SHALL NOT BE CONSIDERED ALL-INCLUSIVE. PROVIDE ALL INCIDENTAL DEMOLITION WORK THAT MIGHT REASONABLY BE REQUIRED IN PREPARATION FOR NEW WORK. REGARDLESS IF IT IS NOT SPECIFICALLY NOTED ON PLANS. THIS WORK SHALL INCLUDE BUT NOT BE LIMITED TO REMOVAL OF PLUMBING FIXTURES, TRIM, SUPPLIES, TRAPS, CLEANOUTS, DRAINS, VALVES, AND RELATED PIPING. THE REMOVAL OF PIPING AND EQUIPMENT SHALL INCLUDE THE REMOVAL OF ALL ASSOCIATED HANGERS AND SUPPORTS.
3. FIXTURES AND TRIM REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE LANDLORD, AND SHALL BE REMOVED, STORED OR DISPOSED OF BY THE CONTRACTOR AT THE DIRECTION OF THE LANDLORD.
4. PERFORM DEMOLITION WORK IN SUCH A MANNER AS TO NOT DAMAGE ADJOINING SURFACES OR EQUIPMENT INDICATED TO REMAIN. NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH DEMOLITION WORK THAT MAY AFFECT THE STRUCTURAL INTEGRITY OF THE BUILDING.
5. CLOSE AND FINISH ALL OPENINGS IN WALLS, CEILINGS, AND FLOORS RESULTING FROM PIPE DEMOLITION TO MATCH THE SURROUNDING AREAS. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS AND SCOPE WITH THE GENERAL CONTRACTOR.
6. MAINTAIN THE OPERATION OF PLUMBING SYSTEMS IN ADJACENT AREAS NOT BEING AFFECTED BY THE WORK UNTIL THE PROJECT IS COMPLETE.
7. NOTIFY IN WRITING, AND COORDINATE WITH THE LANDLORD A MINIMUM OF TEN (10) BUSINESS DAYS IN ADVANCE OF ALL UTILITY SERVICE INTERRUPTIONS.

APPROVED
Montgomery County
Historic Preservation Commission

[Signature]

REVIEWED

By Laura DiPasquale at 11:44 am, Sep 11, 2026

HIFOXY BEAUTY

7042 CARROLL AVE
TAKOMA PARK, MD 20781

bestudio
ARCHITECTURE
242 10th St NE WDC
T: 202-670-2739

CALIBER DESIGN, Inc.
Mechanical - Electrical - Plumbing Engineering

22960 Shaw Road, Suite 620
Sterling, Virginia 20166
571.291.4012 ph
www.caliberdesigninc.com

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
06.12.2026	06.12.2026	PERMIT



PROFESSIONAL CERTIFICATION: I HEREBY, WILLIAM KROGH, 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. 32649 EXPIRATION DATE 07-21-2026.

4' 2' 0' 4' 8'
GRAPHIC SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'-0"
GRAPHIC SCALE SHOWN FOR REFERENCE ONLY - DO NOT SCALE OFF OF DRAWINGS

PLUMBING PLANS

P101

GENERAL NOTES

- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL LATEST ADOPTED NATIONAL, STATE, LOCAL CODES AND THE AUTHORITIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LICENSES, PERMITS, CERTIFICATIONS OF INSPECTION, ETC. AND PAY ALL APPLICABLE TAXES AND FEES REQUIRED FOR ALL THE WORK IN ACCORDANCE WITH THE PROVISIONS OF THE CONTRACT DOCUMENTS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY AND REMOVE ALL NECESSARY SCAFFOLDING, RIGGING, HOISTING, AND SERVICES NECESSARY FOR WORK IN THE CONTRACT DOCUMENTS.
- PRIOR TO BID, THE CONTRACTOR SHALL SURVEY THE SITE AND EVALUATE ALL EXISTING CONDITIONS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND/OR ENGINEER IN ADVANCE OF ANY CONDITION THAT WOULD PREVENT THE WORK ON THE CONTRACT DOCUMENTS FROM BEING COMPLETED. FAILURE TO SURVEY THE SITE PRIOR TO BID AND START OF CONSTRUCTION WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO FULFILL THE OBLIGATIONS OF THE CONTRACT DOCUMENTS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OTHER TRADE DOCUMENTS AND COORDINATE WITH ALL OTHER DISCIPLINES.
- LATEST ACCEPTABLE PRACTICES OF THE TRADE, BY QUALIFIED AND COMPETENT WORKMEN. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER. THE OWNER MAINTAINS THE RIGHT TO REJECT ANY WORK PERFORMED IN AN UNSATISFACTORY MANNER.
- ALL WORK SHALL BE PERFORMED WITH MINIMUM INTERFERENCE TO EXISTING FACILITIES.
- THE CONTRACTOR SHALL GUARANTEE SATISFACTORY TO THE OWNER THAT ALL WORK INSTALLED WILL BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF COMPLETION. THE CONTRACTOR SHALL PAY FOR ANY REPAIRS OR REPLACEMENTS CAUSED BY DEFECTIVE WORKMANSHIP OR FAULTY MATERIALS WITHIN THIS TIME PERIOD.
- THE DRAWINGS ARE SCHEMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK. CONSULT THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF DEVICES AND FIXTURES.
- ALL PRODUCTS SHALL BE LISTED AND LABELED BY UNDERWRITERS LABORATORIES, INC. FOR THEIR APPLICATION. LABELS WILL BE ACCEPTED REFERENCE THE APPROPRIATE UL STANDARD BY OTHER NATIONALLY RECOGNIZED TESTING LABORATORIES (NRTL) IF APPROVED BY LOCAL AUTHORITIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL MAINTAIN, FOR THE OWNER, ONE COPY OF ALL DRAWINGS, APPROVED SHOP DRAWINGS, CERTIFICATES OF APPROVAL, REVISIONS AND OTHER MODIFICATIONS MADE DURING CONSTRUCTION. THE SET OF DRAWINGS AND OTHER INFORMATION SHALL BE DELIVERED TO THE OWNER UPON COMPLETION OF WORK.
- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, AND SERVICES REQUIRED FOR A COMPLETE WORKING INSTALLATION.
- ALL MATERIALS SHALL BE NEW, FREE FROM DEFECTS AND INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING ALL SYSTEMS TO ENSURE PROPER FUNCTION.
- THE CONTRACTOR SHALL PROVIDE ACCESS PANELS AS REQUIRED BY THE NATIONAL ELECTRICAL CODE. ALL ACCESS PANEL LOCATIONS ARE SUBJECT TO APPROVAL BY THE ARCHITECT.
- CIRCUIT NUMBERS INDICATE A GENERAL ARRANGEMENT OF CIRCUITS, FOR IDENTIFICATION PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BALANCING THE PHASES IN THE PANELBOARDS.
- G.C. SHALL COORDINATE ALL SECURITY EQUIPMENT & CONNECTIVITY WITH THE TENANT'S SECURITY VENDOR AND ALL WORK ASSOCIATED TO ASSURE A COMPLETE & SUCCESSFUL SECURITY INSTALLATION.

DEMOLITION & REMODELING

- CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LIGHTING FIXTURES TO BE REMOVED OR REUSED. ALL REUSED FIXTURES SHALL BE REPAIRED, CLEANED AND RE-LAMPED FOR USE DURING TENANT FIT-OUT.
- CONTRACTOR SHALL REMOVE ALL RECEPTACLES, DATA/TELEPHONE OUTLETS, ETC. WITHIN PARTITIONS INDICATED TO BE DEMOLISHED.
- THE CONTRACTOR SHALL MAINTAIN CONTINUITY OF ALL CIRCUITS AFFECTED BY DEMOLITION. THE INTEGRITY TO OTHER AREAS SHALL NOT BE COMPROMISED.
- WHERE EXISTING ELECTRICAL DEVICES ARE BEING REMOVED AND JUNCTION BOXES ARE NOT BEING REUSED, THE ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING WIRE AND CABLE, PROVIDE BLANK COVER PLATE AND PAINT TO MATCH EXISTING.
- EXISTING CIRCUITING THAT SERVES BASE BUILDING EQUIPMENT (MECHANICAL EQUIPMENT, ELEVATORS, STAIRS, LIFE SAFETY SYSTEMS, ETC.) AND ALL OTHER LANDLORD CONTROLLED DEVICES SHALL REMAIN FULLY OPERABLE.
- CONTRACTOR SHALL REMOVE ALL UNUSED CONDUIT, WIRE AND CABLE.
- CONCEALED CONDUIT MAY BE LEFT ABANDONED IN PLACE AS LONG AS NOT INTERFERING WITH NEW WORK. REMOVE ALL WIRE AND CAP ENDS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL DEBRIS RELATED TO ELECTRICAL DEMOLITION.
- THE CONTRACTOR SHALL NOT INTERRUPT THE POWER SERVING OCCUPIED AREAS INCLUDING OTHER FLOORS. CONTRACTOR SHALL PROVIDE TEMPORARY FEEDS AS REQUIRED IN ORDER TO MAINTAIN CONTINUITY OF POWER TO THESE AREAS. ALL POWER SHUTDOWNS SHALL BE COORDINATED WITH THE OWNER.
- ALL EXISTING LIFE SAFETY DEVICES AND WIRING SHALL REMAIN IN SERVICE. PROVIDE TEMPORARY SUPPORTS FOR EXISTING DEVICES AND WIRING IF SUPPORTING STRUCTURES (WALLS, CEILINGS, ETC.) ARE TO BE DEMOLISHED.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL FIRE AND SMOKE RATED ASSEMBLIES WITHIN THE BUILDING AFFECTED BY WORK UNDER THIS CONTRACT. PATCH AND/OR REPAIR ALL FIRE AND SMOKE RATED ASSEMBLIES AS REQUIRED TO MAINTAIN EXISTING OR NEW RATING.
- CONTRACTOR SHALL SUBMIT AN INVENTORY TO OWNER OF ALL ELECTRICAL DEVICES, EQUIPMENT, ETC. BEING REMOVED.
- PLAN DESIGNATIONS:
A. DEMOLITION PLAN:
1) DEVICES SHOWN DASHED ARE TO BE REMOVED.
2) DEVICES SHOWN LIGHT & SOLID ARE EXISTING TO REMAIN AND REMAIN OPERABLE.
3) DEVICES SHOWN DASHED WITH ADJACENT 'X' ARE TO BE RELOCATED.
B. NEW WORK PLAN:
1) DEVICES SHOWN LIGHT & SOLID ARE EXISTING TO REMAIN.
2) DEVICES SHOWN BOLD AND SOLID ARE NEW.
3) DEVICES SHOWN BOLD AND SOLID WITH ADJACENT 'X' ARE DEVICES THAT HAVE BEEN RELOCATED.
- ELECTRICAL CIRCUITS BEING REMOVED SHALL BE REMOVED BACK TO SOURCE.
- ALL BREAKERS THAT BECOME 'SPARE' AFTER DEMOLITION AND NEW WORK IS COMPLETE SHALL BE SWITCHED TO THE 'OFF' POSITION AND LABELED 'SPARE' IN THE PANEL SCHEDULE.
- ALL ITEMS FROM DEMOLITION SHALL BE SALVAGED FOR REUSE. CONTRACTOR SHALL CONFER WITH BUILDING OWNER IF ANY QUESTIONS ARISE PRIOR TO DESTROYING AN ITEM.

WIRING, RACEWAYS, & BOXES

- ALL CONDUCTORS SHALL BE COPPER, UNO. USE OF ALUMINUM CONDUCTORS IS PROHIBITED.
- ALL CONDUCTORS SHALL BE IDENTIFIED BY PHASE AND SYSTEM AT ALL POINTS OF ACCESS. COMPLY WITH NEC 210.5(C) AND 215.12(C). COLOR CODED AS FOLLOWS:
A. 120/208V: A=BLACK, B=RED, C=BLUE, NEUTRAL=WHITE, GROUND=GREEN.
B. 277/480V: A=Brown, B=Orange, C=Yellow, NEUTRAL=GRAY, GROUND=GREEN.
- ANY BRANCH CIRCUIT THAT IS OVER 100 FEET OF CIRCUIT LENGTH SHALL HAVE CONDUCTORS ONE SIZE LARGER.
- ALL INTERIOR WIRING SHALL BE INSTALLED IN MINIMUM 1/2" CONDUIT (EMT OR FLEXIBLE METAL CONDUIT). ALL EXTERIOR WIRING SHALL BE INSTALLED IN MINIMUM 3/4" IMC OR RIGID CONDUIT. SEE EXCEPTIONS LISTED BELOW.
A. AC CABLEING WITH INSULATED GROUNDING CONDUCTOR, MAY BE SUBSTITUTED FOR LIGHTING CIRCUITS IF APPROVED BY LOCAL AUTHORITIES HAVING JURISDICTION AND IF INSTALLED IN A CONCEALED LOCATION.
B. MC CABLE WITH INSULATED GROUNDING CONDUCTOR MAY BE SUBSTITUTED FOR BRANCH CIRCUITS AND FEEDERS, UP TO A MAXIMUM OF 60 AMPS IF APPROVED BY LOCAL AUTHORITIES HAVING JURISDICTION AND IF INSTALLED IN A CONCEALED LOCATION. SUPPORT CABLE EVERY 6'-0" AND WITHIN 12" OF ANY OUTLET.
C. ALL PANEL FEEDERS AND ROOFTOP EQUIPMENT FEEDERS SHALL BE RUN IN RIGID TYPE CONDUIT. (EMT MINIMUM FOR INDOOR APPLICATIONS).
- PROVIDE AN ADDITIONAL CONDUCTOR FOR ALL EXIT LIGHTS, BATTERY PACKS AND LIGHT FIXTURES EQUIPPED WITH EMERGENCY LIGHTING BATTERY PACKS. CONNECT FIXTURES ON THE LINE SIDE AHEAD OF THE LOCAL SWITCH PER ART.700-121 OF THE N.E.C.
- ALL CONDUCTORS SHALL BE THERMOPLASTIC TYPE THIN OR THWN 600 VOLT. WIRE AMPACITIES SHALL BE LIMITED TO THE 75°C COLUMN OF TABLE 310.16 IN THE NEC, UNLESS OTHERWISE NOTED.
- THE MINIMUM BRANCH CIRCUIT CONDUCTOR SHALL BE #12 AWG.
- CIRCUITS MAY NOT INDICATE THE QUANTITY OF WIRES. THE CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR A COMPLETE WORKING SYSTEM WHETHER INDICATED ON PLANS OR NOT.
- WHERE MORE THAN THREE CURRENT-CARRYING CONDUCTORS ARE IN A RACEWAY OR CABLE THE CONTRACTOR SHALL BE RESPONSIBLE FOR DERATING CONDUCTORS AS PER THE NATIONAL ELECTRICAL CODE.
- ALL CONDUCTORS SHALL BE IN ACCORDANCE WITH ASTM STANDARDS, #10 AWG AND SMALLER SHALL BE SOLID, #8 AND LARGER SHALL BE STRANDED.
- ALL COUPLINGS, FITTINGS AND CONNECTORS SHALL BE STEEL, CAST IS NOT ACCEPTABLE.
- ALL RACEWAYS SHALL BE CONCEALED WHERE POSSIBLE. WHERE RACEWAYS CANNOT BE CONCEALED, EMT SHALL BE USED AND LOCATED AS PER ARCHITECT'S DIRECTION FOR INTERIOR APPLICATIONS ONLY. IMC OR RIGID CONDUIT SHALL BE USED ON ALL EXTERIOR APPLICATIONS AND/OR DAMP/WET LOCATIONS. ALL EXTERIOR APPLICATIONS SHALL BE PROVIDED WITH CONDUIT SEALS AND SLP COUPLINGS AT EXTERIOR PENETRATIONS. INSTALL ALL CONDUITS PARALLEL OR PERPENDICULAR TO BUILDING STRUCTURE.
- CONDUCTORS SHALL BE SPACE FREE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATELY SIZED PULL AND JUNCTION BOXES AS REQUIRED. JUNCTION AND PULL BOXES SHALL BE ACCESSIBLE.
- PROVIDE (2) TWO PULL STRINGS IN ALL EMPTY CONDUITS.
- EMT SHALL BE USED FOR INTERIOR APPLICATIONS EMERGENCY AND LIFE SAFETY LOADS, UNLESS OTHERWISE NOTED.
- A MINIMUM SIZE OF 1" SHALL BE USED FOR ALL BELOW GRADE INSTALLATIONS. THE FOLLOWING MATERIALS SHALL BE ACCEPTABLE: SCHEDULE 40 PVC, RIGID GALVANIZED STEEL, CONDUIT OR INTERMEDIATE METAL CONDUIT.
- ALL INTERIOR OUTLET BOXES SHALL BE GALVANIZED STEEL, ALL EXTERIOR BOXES SHALL BE GALVANIZED STEEL, NEMA 3R MINIMUM, SIZED TO ACCOMMODATE THE WIRING DEVICES AND WIRING BEING INSTALLED.
- PROVIDE ALL NECESSARY ANCHORS, SLEEVES, HANGERS, ETC.
- ALL BRANCH CIRCUIT WIRING AND CONDUITS SHALL BE CONCEALED BEHIND BUILDING FINISHES UNLESS OTHERWISE NOTED.
- PROVIDE SUPPORTS FOR ALL CONDUIT RUNS. SUPPORTS SHALL NOT BE MORE THAN 10' APART. SECURE ALL SUPPORTS TO BUILDING STRUCTURE.
- ALL JUNCTION BOXES WILL BE LABELED WITH THE FOLLOWING INFORMATION ON THE COVER: PANEL ID, CIRCUIT/BREAKER #. LABELS WILL BE OF TYPED CHARACTERS.

GROUNDING

- PROVIDE GROUNDING OF THE ENTIRE ELECTRICAL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITH ALL CIRCUITS AND FEEDERS WHETHER SHOWN ON THE PLANS OR NOT. ADJUST FEEDER AND BRANCH CIRCUIT RACEWAY SIZE IF REQUIRED.

MECHANICAL & PLUMBING EQUIPMENT

- PROVIDE ALL REQUIRED STARTERS, CONTROLLERS AND DISCONNECT SWITCHES.
- PROVIDE CONDUIT, WIRING, AND CONTROL WIRING FOR ALL STARTERS, CONTROLLERS, DISCONNECT SWITCHES AND JUNCTION BOXES FOR ALL EQUIPMENT.
- REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION AND ELECTRICAL REQUIREMENTS OF EQUIPMENT.
- MAKE FINAL CONNECTION TO ALL EQUIPMENT.
- ALL EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.

EQUIPMENT

- ACCEPTABLE EQUIPMENT MANUFACTURERS SHALL BE SQUARE D, GENERAL ELECTRIC, EATON AND SIEMENS.
- MAINTAIN CODE REQUIRED CLEARANCES FOR EQUIPMENT AND DEVICES AS REQUIRED TO COMPLY WITH NEC 110.28.
- PROVIDE EQUIPMENT LABEL MADE OF BLACK LAMINATED PLASTIC WITH 1/2" WHITE LETTERS ON ALL EQUIPMENT.
- ALL NEW CIRCUIT BREAKERS SHALL BE MOLDED CASE, THERMAL-MAGNETIC, BOLT-ON TYPE UNLESS OTHERWISE NOTED. CIRCUIT BREAKERS TO BE INSTALLED IN EXISTING PANELS SHALL MATCH THE EXISTING CIRCUIT BREAKERS.
- ONCE THE PROJECT IS COMPLETE AND THE SPACE IS UNDER NORMAL OPERATION THE CONTRACTOR SHALL BALANCE ALL PANELBOARD LOADS WITH NO MORE THAN 10% LOAD DIFFERENCE BETWEEN PHASES.
- ELECTRICAL PANEL SCHEDULES WILL BE UPDATED FOR ALL CIRCUITS TO INCLUDE SUITE, ROOM NAME, AND LOAD SERVED.
- WHEN CONNECTION TO EXISTING EQUIPMENT IS REQUIRED THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT EXISTING TERMINATION PROVISIONS COMPLY WITH NEC 110.14(C)(1). WHERE REQUIRED ADJUST CONDUCTOR BEING TERMINATED AS REQUIRED FOR COMPLIANCE.
- ALL NEW EQUIPMENT SHALL BE PROVIDED WITH TERMINATION PROVISIONS SUITABLE FOR CONDUCTORS OPERATING AT 75°C OR CONTRACTOR SHALL ADJUST CONDUCTOR AMPACITY AS REQUIRED TO COMPLY WITH NEC 110.14(C).
- SAFETY SWITCHES - ALL SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE, UNLESS NOTED OTHERWISE ALL SWITCHES LOCATED IN INTERIOR LOCATIONS SHALL BE NEMA TYPE 1. ALL SWITCHES IN EXTERIOR LOCATION OR IN LOCATIONS SUBJECT TO EXPOSURE TO MOISTURE SHALL BE NEMA TYPE 3R (WEATHERPROOF)

LIGHTING

- ALL LIGHTING LAYOUT MODIFICATIONS DUE TO OBSTRUCTIONS IN THE FIELD SHALL BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL CLEAN AND PROVIDE NEW LAMPS FOR EACH EXISTING/RELOCATED LIGHT FIXTURE ON THIS PROJECT. THE NEW LAMP TEMPERATURE SHALL BE 3500K UNLESS NOTED OTHERWISE.
- PROVIDE MINIMUM #12 AWG SUPPORTS FROM EACH CORNER OF ALL RECESSED 2X2 AND 2X4 LIGHTING FIXTURES TO BUILDING STRUCTURE. (IF CONTRACTOR CHOOSES TO SUPPORT LIGHT FIXTURES FROM GRID WITH APPROVED SCREENS/CLIPS, IT IS CONTRACTORS RESPONSIBILITY, AT CONTRACTORS EXPENSE, TO OBTAIN APPROVAL THAT THE CEILING CAN STRUCTURALLY SUPPORT FIXTURES).
- ALL DOWNLIGHTING FIXTURES MOUNTED IN LAY-IN CEILING TILES SHALL BE LOCATED IN CENTER OF TILE UNLESS OTHERWISE APPROVED BY ARCHITECT AND SHALL BE SUPPORTED BY MEANS OF BAR HANGERS SUPPORTED ON MAIN TEES OF CEILING SUSPENSION SYSTEM.
- LIGHTING SWITCHES: 1P-20A DECORA STYLE, WHITE, ROCKER QUIET OPERATING TYPE, UNO.
- COORDINATE ALL LIGHT SWITCH LOCATIONS WITH DOOR SWINGS. SWITCHES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO FRAME ON LATCH SIDE OF THE DOOR.
- SEE ARCHITECTURAL PLANS FOR EXACT LIGHTING FIXTURE LOCATIONS AND MOUNTING HEIGHTS. REFER TO DETAIL ON LIGHTING PLAN.
- FIXTURES OF EQUAL QUALITY SHALL ONLY BE CONSIDERED BY PRIOR SUBMISSION TO THE ARCHITECT.
- PROVIDE MOUNTING TYPES AND DIRECTIONAL ARROWS AS INDICATED ON THE FLOOR PLANS FOR EXIT LIGHTS.
- COORDINATE ALL PENDANT AND SUSPENSION LENGTHS, FINISHES, OPTIONS, AND ACCESSORIES WITH ARCHITECT PRIOR TO ORDERING.
- CONTRACTOR SHALL PROVIDE AN ALTERNATE PRICE TO PROVIDE DISCONNECT MEANS FOR ALL EXISTING AND EXISTING TO BE REUSED FLUORESCENT FIXTURES PER ART. 410-130 OF THE NEC.
- ALL OCCUPANCY SENSOR LOCATIONS ARE APPROXIMATE. REFER TO MANUFACTURES INSTALLATION INSTRUCTIONS PRIOR TO INSTALLATION.
- ULTRASONIC CEILING MOUNTED SENSORS SHALL BE LOCATED A MINIMUM OF SIX FEET FROM HVAC SUPPLY/RETURN VENTS.
- CONTRACTOR IS RESPONSIBLE FOR: OCCUPANCY SENSOR PROPER SENSITIVITY & TIME DELAY SETTINGS (FOR NON-ADAPTIVE PRODUCTS) RECOMMENDED PLACEMENT, AND FIELD VERIFICATION OF CIRCUITS WITHIN RESPECT TO POWER PLACEMENT.

DEVICES

- ACCEPTABLE DEVICE MANUFACTURERS SHALL BE LEGRAND, HUBBELL, ARROW-HART, AND LUTRON.
- ALL COVER PLATES SHALL BE DECORA STYLE (STANDARD SIZE ONLY) FOR ALL NEW DEVICES. THE USE OF OVERSIZED PLATES TO CONCEAL DAMAGED DRYWALL AROUND BACKBOXES WILL NOT BE ACCEPTABLE.
- THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR DEVICE AND COVER PLATE COLORS. WHERE COLORS HAVE NOT BEEN SPECIFIED THE CONTRACTOR SHALL MATCH BUILDING STANDARD.
- ALL DEVICES SHALL BE INSTALLED IN RECESSED GALVANIZED STEEL BOXES AND SET FLUSH TO FINISHED SURFACES, UNLESS OTHERWISE NOTED.
- ALL MOUNTING HEIGHTS ARE FROM FINISHED FLOOR TO CENTERLINE OF DEVICE, UNLESS OTHERWISE NOTED.
- ALL RECEPTACLES SHALL BE 20A, GROUNDING TYPE, SPECIFICATION GRADE UNLESS OTHERWISE NOTED. RECEPTACLES DESIGNATED FOR COMPUTER USE SHALL BE GRAY.
- ALL TOGGLE SWITCHES SHALL BE 20A, 120/277V, SPECIFICATION GRADE, DECORA STYLE, UNLESS OTHERWISE NOTED.
- SIMILAR DEVICES ADJACENT TO EACH OTHER SHALL BE INSTALLED IN A MULTI-GANG OUTLET BOX WITH COMMON FACEPLATE. DEVICES OF DIFFERENT VOLTAGES SHALL BE SEPARATED WITH A PERMANENTLY INSTALLED INSULATED BARRIER.
- CONTRACTOR TO REUSE EXISTING WALL MOUNTED MOTION LIGHT SWITCHES AND CEILING MOUNTED MOTION SENSORS AS REQUIRED.
- ALL EXISTING TO REMAIN TOGGLE SWITCHES, RECEPTACLES AND COVER PLATES SHALL BE REPLACED WITH NEW DEVICES MATCHING NEWLY SPECIFIED TYPE. REFER TO ARCHITECTURAL DRAWINGS FOR DEVICE SPECIFICATIONS.

ELECTRICAL SYMBOLS

- ALL DEVICES SHALL BE RECESSED MOUNTED FLUSH IN WALL, CEILING OR FLOOR UNLESS OTHERWISE NOTED. CONTRACTOR TO REFER TO ARCHITECTURAL DRAWINGS FOR ALL DEVICE HEIGHTS AND FOR CONFIRMATION OF DEVICE LOCATIONS.
- EXISTING SINGLE POLE SWITCH
- SINGLE POLE SWITCH; LEGRAND # LMSW-101-(W)(HUBBEL NX CONTROLS ARE ACCEPTABLE EQUAL)
- DUAL-TECHNOLOGY MANUAL ON AUTOMATIC VACANCY SENSOR SWITCH, LEGRAND #DSW-301 (LED), (HUBBEL NX CONTROLS ARE ACCEPTABLE EQUAL)
- FLUSH CEILING MOUNTED LOW-VOLTAGE DUAL-TECHNOLOGY MOTION SENSOR, LEGRAND #LMDC-100 (HUBBEL NX CONTROLS ARE ACCEPTABLE EQUAL)
- DUPLEX RECEPTACLE, 5-20R U.O.N
- CEILING MOUNTED DUPLEX RECEPTACLE, WHITE 5-20R U.O.N
- JUNCTION BOX MOUNTED ABOVE CEILING
- WALL MOUNTED JUNCTION BOX
- 120/208 VOLT, 3 PHASE, 4 WIRE PANELBOARD

ELECTRICAL ABBREVIATIONS

A	AMPS	IG	ISOLATED GROUND
AFB	ABOVE FINISHED FLOOR	JB	JUNCTION BOX
AWG	AMERICAN WIRE GAUGE	KVA	KILOVOLT AMPS
BKR	BREAKER	KW	KILOWATT
C	CONDUIT	MCB	MAIN CIRCUIT BREAKER
CLG	CEILING	MLO	MAIN LUGS ONLY
CRAC	COMPUTER ROOM AIR CONDITIONER	MCP	MAXIMUM OVERCURRENT PROTECTION
(D) OR EXIST	EXISTING	NMCP	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
EC	EMPTY CONDUIT W/PULL WIRE	NEMA	NON-FUSED SAFETY SWITCH
EM	EMERGENCY	NFSS	OVER CURRENT PROTECTION DEVICE
EMT	ELECTRIC METALLIC TUBING	OCPD	POLE
EWH	ELECTRIC WATER HEATER	P	PHASE
PAAP	FIRE ALARM ANNUNCIATOR PANEL	PPF	PROVISIONS FOR FUTURE
PACP	FIRE ALARM CONTROL PANEL	TELE	TELEPHONE
FIA	FULL LOAD AMPS	TYP	TYPICAL
FSS	FUSED SAFETY SWITCH	UN	UNLESS OTHERWISE NOTED
GFI	GROUND FAULT INTERRUPTER	XMFR	TRANSFORMER
GND	GROUND		
HP	HORSEPOWER		

AS BUILTS AND O&M MANUALS

THE CONTRACTOR SHALL PROVIDE THE FOLLOWING DOCUMENTATION WITHIN 30 DAYS OF COMPLETION OF THE INSTALLATION AND COMMISSIONING OF THE PROJECT.

- AS BUILT ELECTRICAL DRAWINGS OF THE ENTIRE ELECTRICAL DRAWING SET
- O & M MANUALS TO INCLUDE APPROVED COPIES OF ALL ELECTRICAL EQUIPMENT SUBMITTALS AND EQUIPMENT OPERATIONS MANUALS

SHOP DRAWING SUBMITTALS

- THE CONTRACTOR SHALL SUBMIT ELECTRONIC COPIES OF SHOP DRAWINGS FOR LIGHTING FIXTURES, DEVICES, DEVICE COVER PLATES, EQUIPMENT, CONDUIT, WIRE, FIRE ALARM EQUIPMENT AND ALL OTHER MATERIALS. OBTAIN APPROVAL BEFORE EQUIPMENT IS ORDERED, BUILT OR INSTALLED. DOCUMENTS SUBMITTED TO DISCLOSE ITEMS FOR WHICH APPROVAL IS BEING REQUESTED SHALL BE AS SPECIFIED AND IDENTIFICATION OF ITEM SUBMITTED SHALL BE CLEARLY NAMED.
- SUBMITTAL SHALL INCLUDE COVERSHEET INCLUDING CONTRACTOR'S NAME, PROJECT NAME AND PROJECT ADDRESS. SUBMITTALS WHICH DO NOT INCLUDE THIS INFORMATION WILL BE RETURNED AND WILL NOT BE REVIEWED.
- THE ELECTRICAL CONTRACTOR AND THE GENERAL CONTRACTOR MUST REVIEW AND PROVIDE THEIR APPROVAL STAMP AND/OR REVIEW COMMENTS ON THE SUBMITTAL PRIOR TO SUBMITTING THE THE SHOP DRAWING FOR ENGINEERING REVIEW. SUBMITTALS THAT THE GENERAL CONTRACTOR AND ELECTRICAL CONTRACTOR HAVE NOT REVIEWED AND STAMPED PRIOR TO SUBMISSION TO ENGINEER FOR ENGINEERING REVIEW AND APPROVAL WILL BE RETURNED AND WILL NOT BE REVIEWED.

LIGHTING COMMISSIONING

CONTRACTOR SHALL ENGAGE AN INDEPENDENT COMMISSIONING AGENT TO TEST THE FUNCTIONALITY OF THE LIGHTING CONTROLS. TESTING TO INCLUDE:

- PLACEMENT, SENSITIVITY AND TIMEOUT ADJUSTMENTS FOR OCCUPANCY/VACANCY SENSORS YIELD ACCEPTABLE PERFORMANCE.
- TIME SWITCHES, PROGRAMMABLE SCHEDULE CONTROLS AND PHOTOCELLS ARE PROGRAMMED TO TURN LIGHTS OFF.
- PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON THE AMOUNT OF USEABLE DAYLIGHT IN THE SPACE AS SPECIFIED.

CUTTING, PATCHING & PENETRATIONS

- ALL PENETRATIONS SHALL BE FIRE STOPPED IN ACCORDANCE WITH IBC, NEC AND NFPA.
- ABSOLUTELY NO PENETRATIONS ARE PERMITTED IN POST TENSION BEAMS. X-RAYING IS REQUIRED FOR ALL FLOOR PENETRATIONS AND MUST BE PERFORMED OFF-HOURS AND COORDINATED WITH BUILDING MANAGEMENT. THE USE OF GPR IS NOT PERMITTED UNLESS SPECIFICALLY APPROVED BY BUILDING OWNER IN WRITING.
- PENETRATIONS MUST BE PERFORMED OFF-HOURS AND COORDINATED WITH BUILDING MANAGEMENT AND STRUCTURAL ENGINEER.
- ALL CUTTING AND PATCHING SHALL BE DONE BY THE APPROPRIATE TRADE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING ALL PENETRATIONS TO THE INTERIOR AND EXTERIOR OF THE BUILDING AS A RESULT OF HIS WORK, IN SUCH A MANNER THAT THE DESIGNED FIRE RATING IS MAINTAINED. WHEN FIRE RATING IS UNKNOWN THE PENETRATION SHALL RECEIVE A 2 HOUR FIRE RATING.

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED
By Laura DiPasquale at 11:44 am, Sep 11, 2026

HIFOXY BEAUTY

7042 CARROLL AVE
TAKOMA PARK, MD 20781

bestudio
ARCHITECTURE
242 10th St NE WDC
T: 202-670-2739

CALIBER DESIGN, Inc.
Mechanical - Electrical - Plumbing Engineering
22960 Shaw Road, Suite 620
Sterling, Virginia 20166
571.291.4012 ph
www.caliberdesigninc.com

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
	06.12.2026	PERMIT

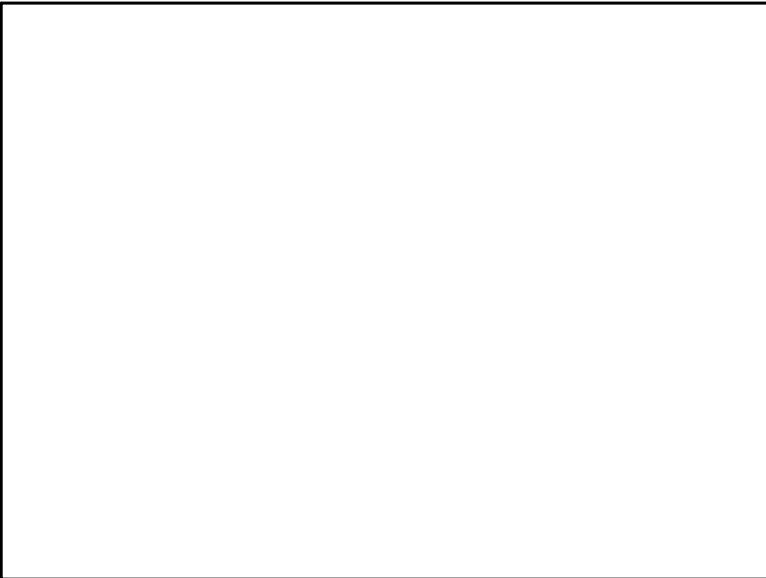


PROFESSIONAL CERTIFICATION: I HEREBY LESTER ABRAHAMS, CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 46062 EXPIRATION DATE 01-22-2027.

SCALE: NONE
GRAPHIC SCALE SHOWN FOR REFERENCE ONLY - DO NOT SCALE OFF OF DRAWINGS

ELECTRICAL NOTES
AND SPECIFICATIONS

E001



LIGHT FIXTURE SCHEDULE									
FXTURE	DESIGNATION	MANUFACTURER	CATALOG NUMBER	MOUNTING	LAMPS	VOLTAGE	WATTAGE	DIMMING	REMARKS
	F0	KOHLER	K-34455 - EXHAUST FAN W/ LIGHT	SURFACE	LED	120	114	NO	
	F1	AMERLUX	HSE=R=REM=T=16-120-0-10V	RECESSED	LED	120	16	YES	
	E1	EXISTING	EXISTING	RECESSED	LED	120	20	NO	
	E2	EXISTING	EXISTING	RECESSED	LED	120	75	NO	
	Y	LIGHTALARMS	CM-PB-LA	SURFACE	LED	120	10	NO	
LIGHT FIXTURE NOTES									
* FOR EXACT LIGHTING LOCATIONS, SEE ARCHITECTURAL REFLECTING CEILING PLANS.									
* PROVIDE MOUNTING TYPES AND DIRECTIONAL ARROWS AS INDICATED ON THE FLOOR PLANS.									
* REFER TO FIXTURE SYMBOL IN LEGEND FOR FIXTURE SPECIFICATION. FIXTURE LETTER DESIGNATIONS ARE SHOWN ONLY WHERE REQUIRED FOR CLARITY.									
* SUPPORT ALL RECESSED FIXTURES FROM BUILDING STRUCTURE WITH MINIMUM #12 CEILING HANGER WIRE, FROM EACH CORNER OF FIXTURE. CONTRACTOR MAY USE APPROVED CLIPS AT THEIR OWN DISCRETION AND EXPENSE AND WILL BE SOLELY RESPONSIBLE TO ENSURE THAT THE CEILING GRID SYSTEM HAS THE STRUCTURAL CAPACITY TO SUPPORT THE WEIGHT OF THE NEW/RELOCATED LIGHT FIXTURES.									
* HALF-SHADED FIXTURES AND/OR FIXTURES WITH A SUBSCRIPT 'EW' DENOTES EMERGENCY WHITE LIGHT FIXTURES WITH BODINE B50 (FLUORESCENT)/BODINE B5L310 (LED) OR APPROVED EQUAL EMERGENCY BATTERY BALLAST.									

COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title: 7042 CARROLL AVE SALON
Project Type: Alteration

Construction Site: Owner/Agent: Designer/Contractor:

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Retail	826	0.84	694
Total Allowed Watts =			694

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Retail (826 sq.ft.)				
LED: F0: Other:	1	1	114	114
LED: F1: Other:	1	7	16	112
LED: E1: Other:	1	15	20	300
LED: E2: Other:	1	2	75	150
Total Proposed Watts =				676

Interior Lighting PASSES

Interior Lighting Compliance Statement

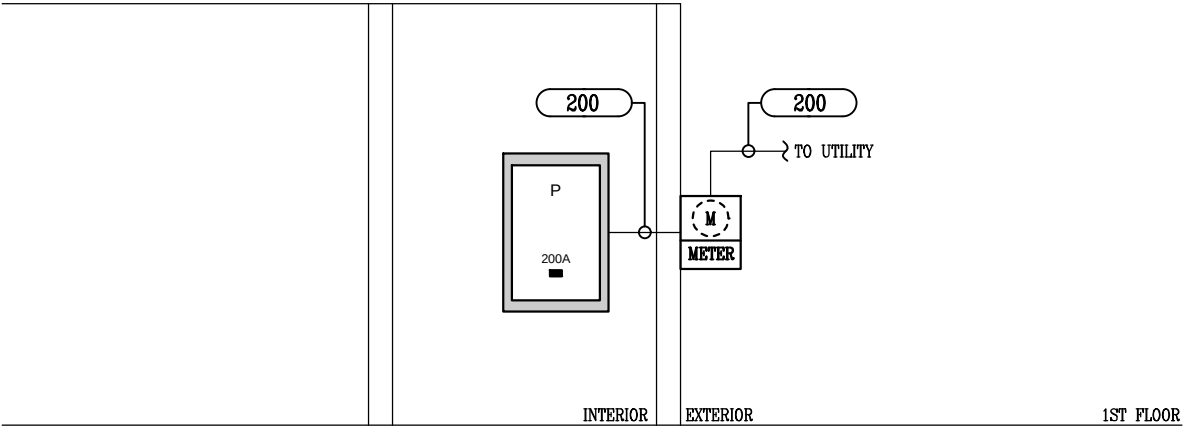
Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Lester E. Abrahams, Jr. PE - Electrical Engineer
Name - Title Signature Date

Project Title: 7042 CARROLL AVE SALON
Data filename:

Report date: 06/17/26
Page 1 of 5

SINGLE PHASE PANEL SCHEDULE																
Panel ID: P			EXISTING					NORMAL					Voltage: 120/240, 1PH			
Location: # Floor Electrical Closet													Service: 1 PHASE, 3 WIRE			
Mounting: SURFACE													Mains: 200A BREAKER			
Neutral: SOLID													AIC: EXISTING			
Load Description	kVA	Wire Size	Cond. Size	Brk	P	Ckt #	A	B	Ckt #	P	Brk	Cond. Size	Wire Size	kVA	Load Description	
SPARE	-	-	-	20	1	1	*	-	2	2	40	EX	EX	5.0	(E) RTU	
LTS (E)	1.0	EX	EX	15	1	3	-	*	4	-	-	-	-	-	---	
RECEPT (E)	0.7	EX	EX	15	1	5	*	-	6	1	20	EX	EX	0.7	(E) RECEPT	
SPARE	-	-	-	15	1	7	-	*	8	1	20	EX	EX	0.7	(E) RECEPT	
RECEPT (E)	0.7	EX	EX	20	1	9	*	-	10	1	20	EX	EX	0.5	(E) LTS	
LTS (E)	0.5	EX	EX	20	1	11	-	*	12	1	20	EX	EX	0.5	(E) LTS	
BBH-1	■ 1.5	12	1/2	20	1	13	*	-	14	1	20	EX	EX	0.7	(E) RECEPT	
BBH-2	■ 1.5	12	1/2	20	1	15	-	*	16	1	20	EX	EX	0.7	(E) RECEPT	
WH-1	■ 0.8	12	1/2	20	1	17	*	-	18	1	20	EX	EX	0.7	(E) RECEPT	
EF-2	■ 0.1	12	1/2	20	1	19	-	*	20	1	20	EX	EX	0.7	(E) RECEPT	
Salon/Utility Rec	■ 0.9	12	1/2	20	1	21	*	-	22	1	20	EX	EX	0.7	(E) RECEPT	
Window Rec	■ 0.2	12	1/2	20	1	23	-	*	24	1	20	EX	EX	0.7	(E) RECEPT	
SPARE	-	-	-	60	2	25	*	-	26	2	30	3/4	10	4.5	■ EWH-1	
---	-	-	-	-	-	27	-	*	28	-	-	-	-	-	---	
SPARE	-	-	-	20	1	29	*	-	30	1	20	EX	EX	0.7	(E) RECEPT	
Notes: Unless noted otherwise, all breakers are EXISTING to be used as indicated.																
■ Provide new circuit breaker with AIC rating to match existing.																
Load Summary																
Lighting (L): Receptacles (R): Largest Motor Load (LM): Remaining HVAC Loads: Miscellaneous: Kitchen Equipment: Continuous Loads:	Connected kVA	Demand Factor		Demand kVA												
	2.5	125%		3.1												
	8.8	10 + 50%>10		8.8												
	0.0	125%		0.0												
	0.0	100%		0.0												
	5.1	100%		5.1												
	0.0	100%		0.0												
TOTAL CONNECTED KVA =		24.6		27.3												
				113.6												



EXISTING POWER RISER DIAGRAM

SCALE: NONE

- ALL EQUIPMENT AND WIRING SHOWN ON RISER DIAGRAM IS EXISTING, UON

FEEDER SCHEDULE		
3 PHASE,3 WIRE AND GROUND		
FEEDER DESIGNATION	NUMBER OF SETS	FEEDER AMPACITY
200	3 #3/0, 1 #6C. IN 2 1/2"C.	200A.
* SCHEDULE BASED ON THHN/THWN, COPPER CONDUCTORS.		
* SUB-SCRIPT ' N' MEANS FEEDER IS NEW.		



REVIEWED
By Laura DiPasquale at 11:44 am, Sep 11, 2026

HIFOXY BEAUTY

7042 CARROLL AVE
TAKOMA PARK, MD 20781

bestudio
ARCHITECTURE
242 10th St NE WDC
T: 202-670-2739

CALIBER DESIGN, Inc.
Mechanical - Electrical - Plumbing Engineering
22960 Shaw Road, Suite 620
Sterling, Virginia 20166
571.291.4012 ph
www.caliberdesigninc.com

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
	06.12.2026	PERMIT

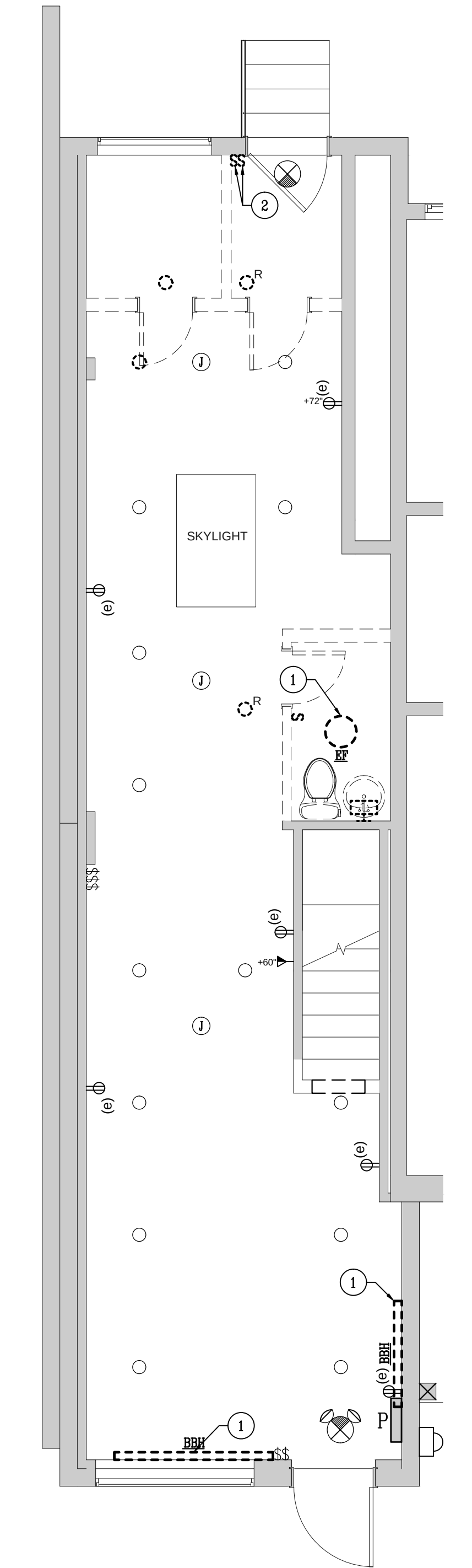


PROFESSIONAL CERTIFICATION. I HEREBY LESTER ABRAHAMS, CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 46062 EXPIRATION DATE 01-22-2027.

SCALE: NONE
GRAPHIC SCALE SHOWN FOR REFERENCE ONLY - DO NOT SCALE OFF OF DRAWINGS

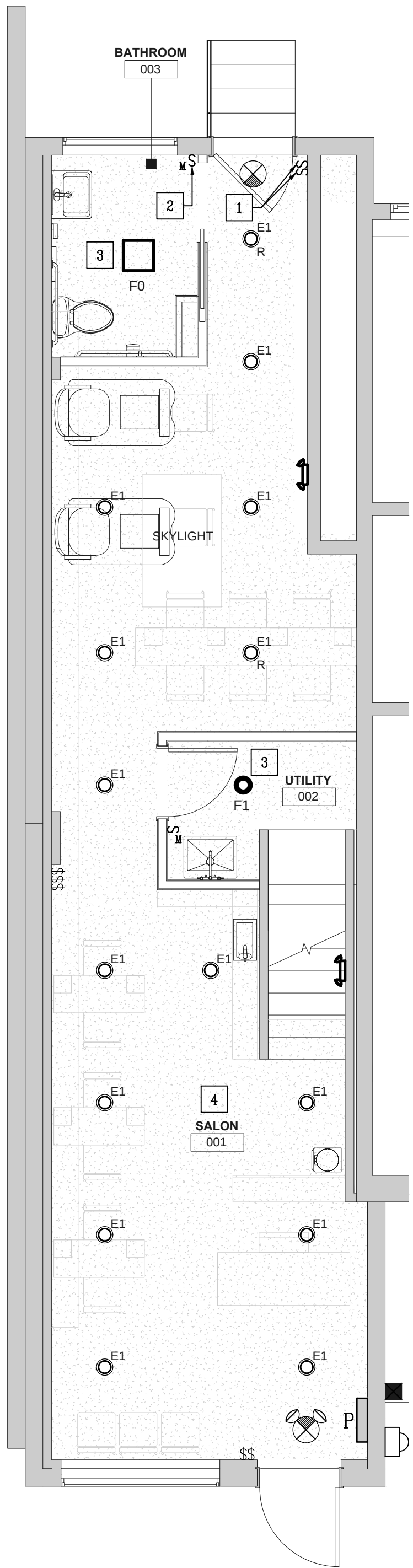
ELECTRICAL RISER
AND SCHEDULES

E002



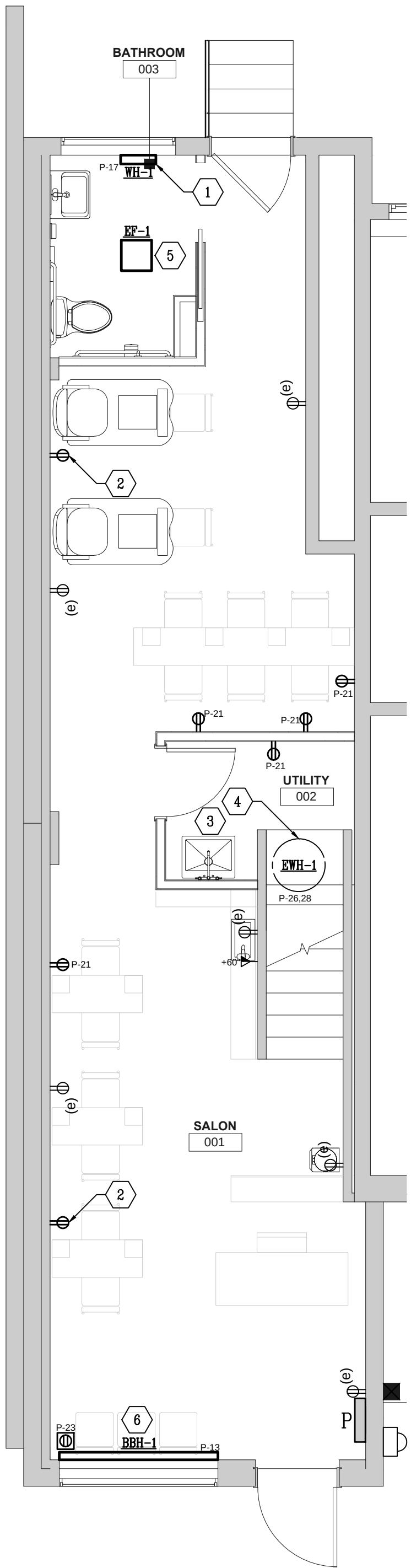
DEMOLITION ELECTRICAL
PLAN - FIRST FLOOR

SCALE: 1/4"=1'-0"



NEW WORK LIGHTING
PLAN - FIRST FLOOR

SCALE: 1/4"=1'-0"



NEW WORK POWER
PLAN - FIRST FLOOR

SCALE: 1/4"=1'-0"

GENERAL NOTES

DEMOLITION:

- UNLESS NOTED OTHERWISE ALL DEVICES SHOWN ARE EXISTING TO REMAIN AND REMAIN OPERABLE.
- DEVICES SHOWN DASHED AND WITH THE LETTER 'R' ARE EXISTING TO BE RELOCATED.
- DEVICES SHOWN DASHED ARE EXISTING TO BE REMOVED INCLUDING ALL BRANCH CIRCUIT WIRING AND CONDUIT.

LIGHTING:

- ALL FINAL LOCATIONS AND ARRANGEMENTS OF LIGHTING FIXTURES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN.
- CONTRACTOR SHALL PROVIDE MULTI-GANG COVERPLATES WHERE SWITCHES ARE SHOWN TOGETHER.
- REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL NOTES.
- ALL DEVICES AND CIRCUITING SHOWN BOLD ARE NEW.
- DEVICES SHOWN WITH THE LETTER(S) 'R' OR 'RL' ARE RELOCATED DEVICES, NEW LOCATION AS SHOWN.
- UNLESS NOTED OTHERWISE DEVICES ARE EXISTING TO REMAIN.
- CONTRACTOR TO RESTORE EXISTING CIRCUITS INTERRUPTED BY NEW WORK.
- ALL HALF SHADED FIXTURES, FAN, BATTERY BACKED UP FIXTURES, AND EXIT SIGNS ARE CONNECTED TO LINE SIDE AHEAD OF SWITCH OF NEAREST NORMAL LIGHTING CIRCUIT AS PER ART. 700-124 OF THE NEC.
- IN CEILING AREAS SCHEDULED TO BE EXPOSED TO THE EXISTING STRUCTURE, ALL WIRING SHALL BE INSTALLED TIGHT TO STRUCTURE. BRANCH CIRCUITING SHALL RUN EITHER PERPENDICULAR OR PARALLEL TO THE EXISTING STRUCTURAL GRID OF THE BUILDING.

POWER:

- ELECTRICIAN TO REFER TO ARCHITECT'S POWER/COMMUNICATIONS PLANS FOR ADDITIONAL INFORMATION, AS THESE SHEETS ARE TO BE PART OF THE ELECTRICIAN'S SCOPE OF WORK AS SUPPLEMENTAL INFORMATION TO WORK SHOWN ON THIS DRAWING. ANY INFORMATION SHOWN ON THESE DRAWINGS (I.E. NOTES, FIXTURES, QUANTITIES, DEVICES, LOCATIONS, ETC.) ARE TO BE INCLUDED IN THE ELECTRICIAN'S SCOPE OF WORK AND PRICE, AND IF EXCLUDED, WILL NOT BE PERMITTED AS A CHANGE ORDER. IT IS THE ELECTRICIAN'S RESPONSIBILITY TO COORDINATE WITH THESE DRAWINGS AND BRING TO THE ATTENTION OF THE ARCHITECT AND ENGINEER ANY DISCREPANCIES PRIOR TO SUBMITTING A BID OR COMPLETING THE WORK.
- ALL DEVICES AND CIRCUITING SHOWN BOLD ARE NEW.
- UNLESS NOTED OTHERWISE DEVICES ARE EXISTING TO REMAIN.
- CONTRACTOR TO PROVIDE TYPEWRITTEN ADHESIVE LABEL ON EACH MECHANICAL UNIT AND MECHANICAL EQUIPMENT DISCONNECTS, EXHAUST FANS, AND WATER HEATERS. LABEL SHALL INCLUDE PANEL NAME AND CIRCUIT NUMBER IDENTIFICATION.
- CONTRACTOR TO PROVIDE TYPEWRITTEN ADHESIVE LABEL ON EACH NEW AND EXISTING RECEPTACLE LABEL SHALL INCLUDE PANEL NAME AND CIRCUIT NUMBER IDENTIFICATION.
- CONTRACTOR TO RESTORE EXISTING CIRCUITS INTERRUPTED BY NEW WORK.
- IN CEILING AREAS SCHEDULED TO BE EXPOSED TO THE EXISTING STRUCTURE, ALL WIRING SHALL BE INSTALLED TIGHT TO STRUCTURE. BRANCH CIRCUITING SHALL RUN EITHER PERPENDICULAR OR PARALLEL TO THE EXISTING STRUCTURAL GRID OF THE BUILDING.
- SUBSCRIPT INDICATES NAME OF PANELBOARD FROM WHICH DEVICE IS FED. ASSOCIATED NUMBER INDICATES CIRCUIT NUMBER IN PANELBOARD FROM WHICH DEVICE IS FED.

DEMOLITION KEY NOTES

- REMOVE ALL ELECTRICAL WORK ASSOCIATED WITH DEMOLITION OF MECHANICAL EQUIPMENT, INCLUDING ALL DISCONNECTS, WIRING AND CONDUIT BACK TO SOURCE.
- LIGHT SWITCH TO BE RELOCATED. REFER TO NEW WORK LIGHTING PLAN FOR NEW LOCATION.

LIGHTING KEY NOTES

- EXISTING RELOCATED LIGHT SWITCH (NEW LOCATION AS SHOWN). EXTEND EXISTING BRANCH CIRCUIT WIRING WITH WIRE AND CONDUIT MATCHING THE EXISTING TYPE TO NEW LOCATION AND MAKE FINAL CONNECTION. LIGHT SWITCH TO CONTROL LIGHT FIXTURE(S) THAT THE SWITCH WAS PREVIOUSLY CONTROLLING.
- LIGHT SWITCH TO CONTROL LIGHT AND FAN (SAME UNIT).
- PROVIDE 2 #12, 1 #12 GND. IN 1/2" C AND CONNECT TO EXISTING 120V NORMAL LIGHTING CIRCUIT PREVIOUSLY SERVING THIS AREA. CIRCUIT CAPACITY SHALL NOT EXCEED 1920 WATTS.
- EXISTING ELECTRICAL WORK IN THIS AREA TO REMAIN AND REMAIN OPERABLE UNLESS NOTED OTHERWISE.

KEY NOTES

- WALL HEATER (WH-1) - 120 VOLT, 1 PHASE, 760 WATTS WITH FACTORY INTEGRAL DISCONNECT. COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS.
- PROVIDE 2 #12, 1 #12 GND. IN 1/2" C AND CONNECT TO EXISTING 120V RECEPTACLE CIRCUIT PREVIOUSLY SERVING THIS AREA. CIRCUIT CAPACITY SHALL NOT EXCEED 1920 WATTS.
- ALL RECEPTACLES LOCATED WITHIN 6' FROM EDGE OF SINK SHALL BE GFCI PROTECTED.
- ELECTRIC WATER HEATER (EWH-1) - 4.5 KW, 240 VOLT, 1 PHASE WITH 30 AMP, 2 POLE, 240 VOLT TOGGLE SWITCH FOR DISCONNECT MEANS. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH IN.
- EXHAUST FAN (EF-1) - 120 VOLT, 1 PHASE, 114 WATTS WITH FACTORY INTEGRAL DISCONNECT. COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS. CONTROLLED/FED BY LIGHT SWITCH.
- BASEROARD HEATER (RBH-1) - 120 VOLT, 1 PHASE, 1500 WATTS WITH FACTORY INTEGRAL DISCONNECT. COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS.

EXISTING EGRESS LIGHTING

ALL EXISTING NORMAL & EMERGENCY LIGHTING AND EXIT SIGNAGE PREVIOUSLY INSTALLED FROM PRIOR APPROVED DRAWING REVIEWS AND FIRE MARSHAL INSPECTIONS THAT ARE LOCATED OUTSIDE OF THE AREA OF WORK ARE EXISTING TO REMAIN AND REMAIN OPERABLE.

LIGHTING CONTROL SUMMARY

ALL DAYLIGHT ZONES HAVE A LIGHTING LOAD OF LESS THAN 150 WATTS; AUTOMATIC DAYLIGHT CONTROLS ARE NOT REQUIRED.

ALL NEW AREAS ARE MANUAL SWITCHED AND CONTROLLED VIA CEILING OR WALL MOUNTED VACANCY SENSORS.

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED

By Laura DiPasquale at 11:44 am, Sep 11, 2026

HIFOXY BEAUTY

7042 CARROLL AVE
TAKOMA PARK, MD 20781

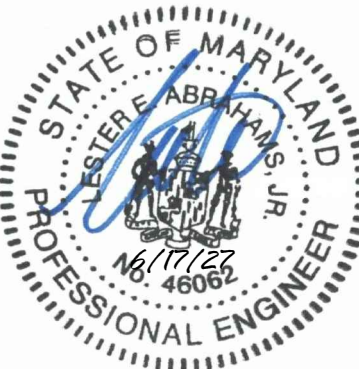
bestudio
ARCHITECTURE
242 10th St NE WDC
T: 202-670-2739

CALIBER DESIGN, Inc.
Mechanical - Electrical - Plumbing Engineering

22960 Shaw Road, Suite 620
Sterling, Virginia 20166
571.291.4012 ph
www.caliberdesigninc.com

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
	06.12.2026	PERMIT



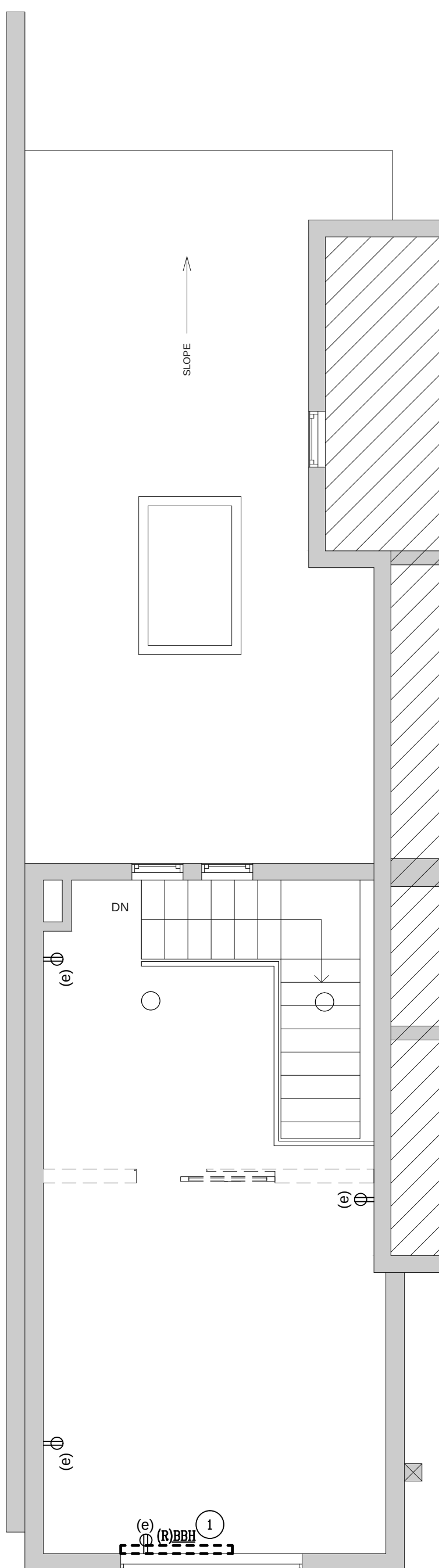
PROFESSIONAL CERTIFICATION: I HEREBY LESTER ABRAHAMMS, CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 46062 EXPIRATION DATE 01-22-2027.

4' 2' 0' 4' 8'
GRAPHIC SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'-0"
GRAPHIC SCALE SHOWN FOR REFERENCE ONLY - DO NOT SCALE OFF OF DRAWINGS

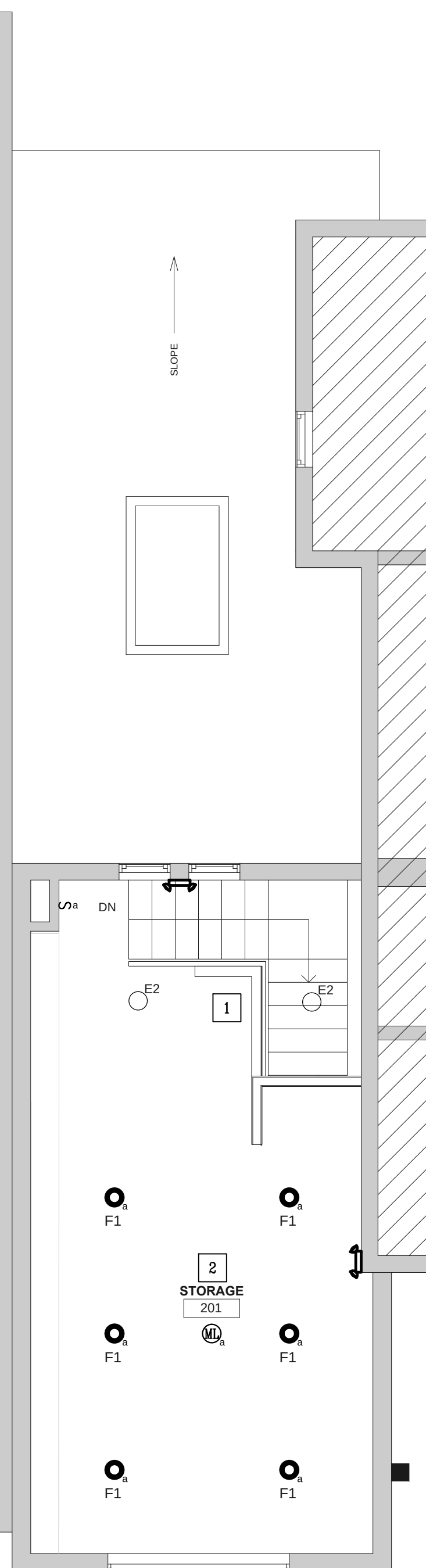
FIRST FLOOR
ELECTRICAL PLANS

E101



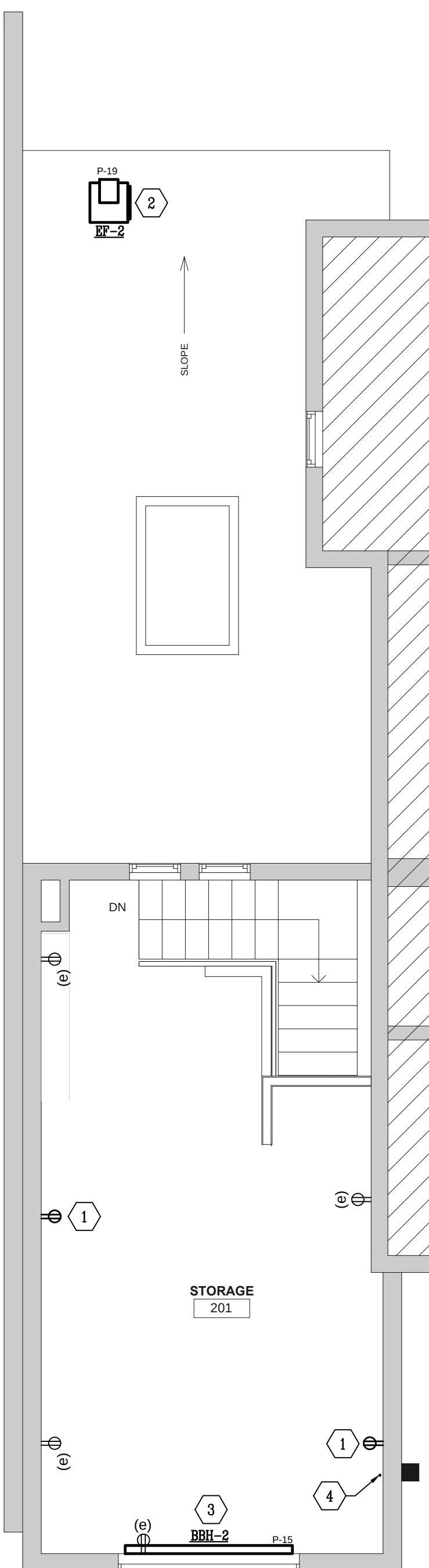
DEMOLITION ELECTRICAL
PLAN - SECOND FLOOR

SCALE: 1/4"=1'-0"



NEW WORK LIGHTING PLAN - SECOND FLOOR

SCALE: 1/4"=1'-0"



NEW WORK POWER
PLAN - SECOND FLOOR
SCALE: 1/4"=1'-0"

GENERAL NOTES

DEMOLITION:

- UNLESS NOTED OTHERWISE ALL DEVICES SHOWN ARE EXISTING TO REMAIN AND REMAIN OPERABLE.
- DEVICES SHOWN DASHED AND WITH THE LETTER 'E' ARE EXISTING TO BE RELOCATED.
- DEVICES SHOWN DASHED ARE EXISTING TO BE REMOVED INCLUDING ALL BRANCH CIRCUIT WIRING AND CONDUIT.

LIGHTING:

- ALL FINAL LOCATIONS AND ARRANGEMENTS OF LIGHTING FIXTURES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLAN.
- CONTRACTOR SHALL PROVIDE MULTI-GANG COVERPLATES WHERE SWITCHES ARE SHOWN TOGETHER.
- REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL NOTES.
- ALL DEVICES AND CIRCUITING SHOWN BOLD ARE NEW.
- DEVICES SHOWN WITH THE LETTER(S) 'E' OR 'EL' ARE RELOCATED DEVICES, NEW LOCATION AS SHOWN.
- UNLESS NOTED OTHERWISE DEVICES ARE EXISTING TO REMAIN.
- CONTRACTOR TO RESTORE EXISTING CIRCUITS INTERRUPTED BY NEW WORK.
- ALL HALF SHADE FIXTURES, EW, BATTERY BACKED UP FIXTURES, AND EXIT SIGNS ARE CONNECTED TO LINE SIDE AHEAD OF SWITCH OF NEAREST MAIN LIGHTING CIRCUIT AS PER ART. 700-121 OF THE NEC.
- IN CEILING AREAS SCHEDULED TO BE EXPOSED TO THE EXISTING STRUCTURE, ALL WIRING SHALL BE INSTALLED TIGHT TO STRUCTURE. BRANCH CIRCUITING SHALL RUN EITHER PERPENDICULAR OR PARALLEL TO THE EXISTING STRUCTURE GRID OF THE BUILDING.
- SUBSCRIPT INDICATES NAME OF PANELBOARD FROM WHICH FIXTURE IS FED. ASSOCIATED NUMBER INDICATES CIRCUIT NUMBER IN PANELBOARD FROM WHICH FIXTURE IS FED. ASSOCIATED LOWER CASE LETTER, WHERE USED, INDICATES LIGHT FIXTURE CONTROL, DEVICE.

POWER:

- ELECTRICIAN TO REFER TO ARCHITECT'S POWER/COMMUNICATIONS PLANS FOR ADDITIONAL INFORMATION AS THESE SHEETS ARE TO BE PART OF THE ELECTRICIAN'S SCOPE OF WORK AS SUPPLEMENTAL INFORMATION TO WORK SHOWN ON THIS DRAWING. ANY INFORMATION SHOWN ON THESE DRAWINGS (I.E. NOTES, DIMENSIONS, SQUARES, DIMENSION LOCATIONS, ETC.) ARE TO BE INCLUDED IN THE ELECTRICIAN'S SCOPE OF WORK AND PRICE, AND IF EXCLUDED, WILL NOT BE PERMITTED AS A CHANGE ORDER. IT IS THE ELECTRICIAN'S RESPONSIBILITY TO COORDINATE WITH THESE DRAWINGS AND BRING TO THE ATTENTION OF THE ARCHITECT AND ENGINEER ANY DISCREPANCIES PRIOR TO SUBMITTING A BID OR COMPLETING THE WORK.
- ALL DEVICES AND CIRCUITING SHOWN BOLD ARE NEW.
- UNLESS NOTED OTHERWISE DEVICES ARE EXISTING TO REMAIN.
- CONTRACTOR TO PROVIDE TYPEWRITTEN ADHESIVE LABEL ON EACH MECHANICAL UNIT AND MECHANICAL EQUIPMENT DISCONNECTS, EXHAUST FANS, AND WATER HEATERS. LABEL SHALL INCLUDE PANEL NAME AND CIRCUIT NUMBER IDENTIFICATION.
- CONTRACTOR TO PROVIDE TYPEWRITTEN ADHESIVE LABEL ON EACH NEW AND EXISTING RECEPTACLE LABEL SHALL INCLUDE PANEL NAME AND CIRCUIT NUMBER IDENTIFICATION.
- CONTRACTOR TO RESTORE EXISTING CIRCUITS INTERRUPTED BY NEW WORK.
- IN CEILING AREAS SCHEDULED TO BE EXPOSED TO THE EXISTING STRUCTURE, ALL WIRING SHALL BE INSTALLED TIGHT TO STRUCTURE. BRANCH CIRCUITING SHALL RUN EITHER PERPENDICULAR OR PARALLEL TO THE EXISTING STRUCTURAL GRID OF THE BUILDING.
- SUBSCRIPT INDICATES NAME OF PANELBOARD FROM WHICH DEVICE IS FED. ASSOCIATED NUMBER INDICATES CIRCUIT NUMBER IN PANELBOARD FROM WHICH DEVICE IS FED.

DEMOLITION KEY NOTES

- 1 REMOVE ALL ELECTRICAL WORK ASSOCIATED WITH DEMOLITION OF MECHANICAL EQUIPMENT, INCLUDING ALL DISCONNECTS, WIRING AND CONDUIT BACK TO SOURCE.

LIGHTING KEY NOTES

- | | |
|---|--|
| 1 | EXISTING ELECTRICAL WORK IN THIS AREA TO REMAIN AND REMAIN OPERABLE UNLESS NOTED OTHERWISE. |
| 2 | PROVIDE 2 #12, 1 #12 GND. IN 1/2" C AND CONNECT TO EXISTING 120V NORMAL LIGHTING CIRCUIT PREVIOUSLY SERVING THIS AREA. CIRCUIT CAPACITY SHALL NOT EXCEED 1920 WATTS. |

KEY NOTES

- 1 PROVIDE 2 #12, 1 #12 GND, IN 1/2" CANNY CONNECT TO EXISTING 120V RECEPTACLE CIRCUIT PREVIOUSLY SERVING THIS AREA. CIRCUIT CAPACITY SHALL NOT EXCEED 1800 WATTS. REFER TO PANEL SCHEDULE FOR CIRCUIT DESIGNATION.
- 2 EXHAUST FAN (FP-2) - 120 VOLT, 1 PHASE, 53 WATTS WITH FACTORY INTEGRAL DISCONNECT. COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS. PROVIDE WEATHER PROOF, GFCI DUPLEX MOUNTED UNDER 25 FEET OF UNIT. PROVIDE 2 #12, 1 #12 GND, IN 1/2" CANNY AND CONNECT TO ANGRAGE EXISTING 120V LINE. REFER TO PANEL SCHEDULE FOR CIRCUIT DESIGNATION.
- 3 BASEBOARD HEATER (HBH-2) - 120 VOLT, 1 PHASE, 1500 WATTS WITH FACTORY INTEGRAL DISCONNECT. COORDINATE EXACT LOCATION WITH MECHANICAL DRAWINGS.
- 4 PROVIDE A 3/4" EMPTY CONDUIT WITH PULL STRING FROM PANEL 'P' ON THE FIRST FLOOR TO THIS LOCATION FOR FUTURE USE.

EXISTING EGRESS LIGHTING

ALL EXISTING NORMAL & EMERGENCY LIGHTING AND EXIT SIGNAGE PREVIOUSLY INSTALLED FROM PRIOR APPROVED DRAWING REVIEWS AND FIRE MARSHAL INSPECTIONS THAT ARE LOCATED OUTSIDE OF THE AREA OF WORK ARE EXISTING TO REMAIN AND REMAIN OPERABLE.

LIGHTING CONTROL SUMMARY

ALL DAYLIGHT ZONES HAVE A LIGHTING LOAD OF LESS THAN 150 WATTS; AUTOMATIC DAYLIGHT CONTROLS ARE NOT REQUIRED.

ALL NEW AREAS ARE MANUAL SWITCHED AND CONTROLLED VIA CEILING OR WALL MOUNTED VACANCY SENSORS.

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED
By Laura DiPasquale at 11:44 am, Sep 11, 2026

HIFOXY BEAUTY

7042 CARROLL AVE
TAKOMA PARK, MD 20781

bestudio
ARCHITECTURE
242 10th St NE WDC
T: 202-670-2739

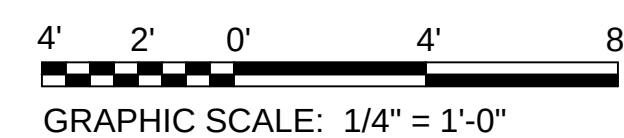
CALLIBER DESIGN, Inc.
Mechanical - Electrical - Plumbing Engineering
22960 Shaw Road; Suite 620
Sterling, Virginia 20166
571.291.4012 ph
www.calliberdesigninc.com

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
	06.12.2026	PERMIT



PROFESSIONAL CERTIFICATION. I HEREBY, LESTER ABRAHAMS, 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. 46062 EXPIRATION DATE 01-22-2027.



SCALE: 1/4" = 1'-0"

GRAPHIC SCALE SHOWN FOR REFERENCE ONLY - DO NOT SCALE OFF OF DRAWINGS

SECOND FLOOR ELECTRICAL PLANS

E102