

**TOP FLOOR SUITE,
6744 Old McLean Village Dr, McLean, VA 22101**

OCCUPANCY GROUP: BUSINESS (B)
CONSTRUCTION TYPE: IIIB
SPRINKLER SYSTEM: NONE REQUIRED (AREA < 12,000 SF)
FIRE ALARM: PORTABLE FIRE EXTINGUISHERS PROVIDED, NO FIRE ALARM REQUIRED (<50 OCCUPANTS)
OCCUPANT LOAD: 29 PERSONS (SEE OCCUPANT LOAD CALCULATIONS)
EXITS REQUIRED: 1 EXIT REQUIRED (UNDER 50 OCCUPANTS)
PROVIDED: 1 EXIT

PREPARATION OF AS-BUILT ARCHITECTURAL FLOOR PLANS BASED ON PROVIDED INFORMATION AND SITE CONDITIONS.
PREPARATION OF AS-BUILT ELECTRICAL PLANS SHOWING EXISTING FIXTURES, DEVICES, AND EQUIPMENT LOCATIONS.
PREPARATION OF AS-BUILT PLUMBING PLANS SHOWING EXISTING PLUMBING FIXTURES AND PIPING LAYOUTS.
PREPARATION OF AS-BUILT MECHANICAL PLANS SHOWING EXISTING HVAC EQUIPMENT AND DUCTWORK LAYOUTS.
PREPARATION OF REQUIRED ELECTRICAL, PLUMBING, AND MECHANICAL CALCULATIONS BASED ON EXISTING CONDITIONS.
SUBMISSION OF COMPLETE AS-BUILT DRAWING SET IN PDF AND CAD FORMAT.

WALLS & CEILINGS: CLASS C (FLAME SPREAD 76-200, SMOKE DEVELOPED ≤ 450)
FLOORS: CLASS II (AS REQUIRED BY VCC 804)
ALL FINISHES TO COMPLY WITH VCC SECTIONS 803 & 804.

REFER TO SHEET A02 FOR DOOR AND HARDWARE SCHEDULE.
ALL DOORS TO COMPLY WITH VCC 1010 & FAIRFAX COUNTY LDS REQUIREMENTS.
ALL WORK SHALL COMPLY WITH 2021 INTERNATIONAL BUILDING CODE (IBC), 2021 INTERNATIONAL FIRE PREVENTION CODE, AND LOCAL FAIRFAX COUNTY AMENDMENTS.
NO DRINKING FOUNTAIN PROVIDED. BOTTLED WATER SERVICE TO BE MADE AVAILABLE TO OCCUPANTS PER VPC 410.4 EXCEPTION.
FURNITURE LAYOUT SHOWN FOR OCCUPANT LOAD CALCULATION.
WAITING ROOM SEATING PROVIDED FOR 14 OCCUPANTS (CODE BASIS: 15 SF PER PERSON).
ACCESSIBILITY SHALL COMPLY WITH 2017 ANSI A117.1.
ALL DIMENSIONS SHALL BE VERIFIED ON SITE PRIOR TO CONSTRUCTION.
CONTRACTOR SHALL COORDINATE WITH ALL TRADES AND REPORT DISCREPANCIES.
ALL EXIT SIGNS AND EMERGENCY LIGHTING SHALL BE INSTALLED PER CODE AND APPROVED BY THE LOCAL AHJ.
ALL MECHANICAL, ELECTRICAL, AND PLUMBING WORK SHALL COMPLY WITH APPLICABLE CODES AND BE COORDINATED WITH ARCHITECTURAL PLANS.
ALL MATERIALS EXISTING TO REMAIN.

2021 MECHANICAL CODE
2021 ENERGY EFFICIENCY CODE
2021 PLUMBING CODE
2021 INTERNATIONAL BUILDING CODE
2021 INTERNATIONAL FIRE PREVENTION CODE
2021 VIRGINIA BUILDING & CONSTRUCTION CODE
2017 ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

4 HAIR STYLING CHAIRS = 8 OCCUPANTS
2 SHAMPOO STATIONS = 4 OCCUPANTS
WAITING ROOM $(202.9 \div 15) = 14$ OCCUPANTS
OFFICE $(85.7 \div 100) = 1$ OCCUPANT
TOTAL OCCUPANT LOAD = 29 OCCUPANTS

SHEET INDEX	
SHEET NUMBER	SHEET NAME
A-01	COVER SHEET
A-02	FLOOR PLANS
A-03	FURNITURE AND EQUIPMENT PLAN
F-01	LIFE SAFETY PLAN
M-01	MECHANICAL HVAC PLAN,SCHEDULES & DETAILS
E-01	ELECTRICAL GENERAL NOTES
E-02	ELECTRICAL LIGHTING & POWER PLANS
E-03	PANEL SCHEDULE /LOAD CALCULATIONS
P-01	PLUMBING PLANS
P-02	PLUMBING RISERS & SCHEDULE
P-03	PLUMBING DETAILS

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GENERAL CONTRACTOR

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STAMP

Top Floor Suite / Salon TI

6744 Old McLean Village Dr,
McLean, VA 22101

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TYPE	DATE
REVIEW SET	
SET	
INSTRUCTION SET	
SET	

DRAWN BY	MA
CHECKED BY	SA

PROJECT NUMBER:

DATE:

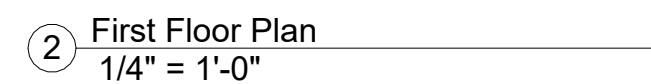
02/03/26

SHEET TITLE

COVER SHEET

SHEET NUMBER:

A-01



Hardware set	Locks and latches				Accessories						Electric locking			Card reader		Interior stair door	Special locking	Quantity
	Function	Entry side	Exit side	Install	Hinge	Closer	Seals	Hold open	Flush bolts	Opener	Type	Operation	Fail	location	Operation			
Set: 1.0	EO	None	FE PN	CR	CT PT	OH	WT	None	None	None	None	N/A	N/A	None	N/A	No	No	17
	Description:		Doors are normally closed and latched: EXIT ONLY. Pressing of either exit device will shunt door contact for authorized egress. Door contact monitor position of the door and report status to security system (stair exterior discharge door)															
	EN	KY	PN FE	MO BH PT	OH	WT	None	None	None	EL	UL	UR	None	N/A	Yes	Yes	1	
Set: 1.1	Description:		Door is normally closed and lever of exit device is electronically locked. Upon activation of the fire alarm system, power to the exit device trim is interrupted lever locks, door stays latched. Manual egress at all times by pressing the rail of the exit device. Pressing exit device will shunt door contact for authorized Egress. Door contact monitors the position of the door and reports status to the security system.															

Locks and latches

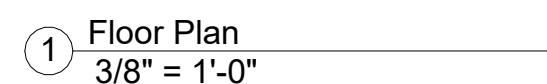
Function

DL Deadlatch paddle
EH Emergency supplemental
hardware
EO Exit only
KY Key operated
LV Lever
NE No entry
TT Thumb turn
[Install](#)
BR Borred hardware
CV Concealed vertical rode
hardware
EV Exposed vertical rod hardware
MO Morticed hardware
SF Surface mounted

Hinge

WT Weather seals
Hold open
FL Floor mounted hold-open
KD Kickdown hold-open
MH Magnetic hold-open
WL Wall mounted hold-open
Flush bolts
AF Automatic flush bolt
MF Manual flush bolt
Electric Locking
Type
DE Delayed egress
EL Electric lockset
HR Hardware release
ES Electric strike
HT HiTorque lock

- ML Mag lock
- MS Motion sensor
- RB Request to exit button
- SG Sign
- SR Sensor release
- Operation**
- RL Release lock
- SA Shunt alarm
- UL Unlock/release
- UR Unlock remain latched
- Fail**
- FR Fail release/unlatch
- FS Fail secure
- Card reader**
- BT Both sides
- EG Egress side
- ET Entry side



Note:
All the Walls are Existing Walls.

Top Floor Suite / Salon TI

6744 Old McLean Village Dr,
McLean, VA 22101

[illegible]

ISSUE DATES	
TYPE	DATE
OWNER REVIEW SET	
PERMIT SET	
BID SET	
CONSTRUCTION SET	
AS BUILT SET	

DRAWN BY	MA
CHECKED BY	SA

PROJECT NUMBER

6158-03

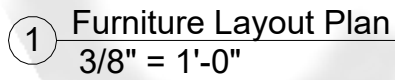
DATE: _____

4/03/26

SHEET TITLE:

FLOOR PLANS

SHEET NUMBER:



Note:
All the Walls are Existing Walls.



-
- Diagram 3: Air Handling Detail. This cross-sectional diagram illustrates the connection between a smoke detector and an air handling unit. Key components and labels include:
- SUPPLY AIR DUCT**: Located at the top left, showing air flow into the unit.
 - O.A. DUCT W/ VOL. DAMPER**: Outdoor air duct with a volume damper, located at the top right.
 - CEILING**: The upper boundary of the room.
 - SMOKE DETECTOR**: A circular device with a circled 'S' inside, positioned where the supply air duct enters the air handling unit.
 - SUPPLY AIR DUCT**: The duct leading from the smoke detector into the air handling unit.
 - WALL**: The vertical boundary of the room.
 - AIR HANDLING UNIT**: The central mechanical unit for circulating air.
 - CLOSET DOOR/WALL**: The side boundary of the closet area.
 - O.A. DUCT W/ VOL. DAMPER**: Another outdoor air duct with a volume damper, located at the bottom right.
 - FLOOR LEVEL**: The bottom boundary of the room.
 - RETURN AIR**: Air being drawn back into the unit, shown with an arrow pointing right.
 - R.A. OPENING W/FILTER**: Return air opening with a filter, located at the bottom left.
 - RETURN AIR PLENUM**: A chamber for collecting return air, located at the bottom center.
 - R.A. OPENING**: Return air opening, located at the bottom center.
- A warning symbol (a triangle with an exclamation mark) is located on the right side of the diagram.
- AIR HANDLING DETAIL**
- 3

6744 Old McLean Village Dr,
McLean, VA 22101

M-01

GENERAL ELECTRICAL NOTES:

GENERAL REQUIREMENTS:

1. ALL WORK SHALL CONFORM TO THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70), ALL STATE AND LOCAL CODES, RULES, AND REGULATIONS, AND PROJECT SPECIFICATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES, PERMITS, AND LICENSES FOR THE COMPLETE INSTALLATION OF THE WORK OUTLINED IN THESE CONTRACT DOCUMENTS.
3. THE CONTRACT DOCUMENTS ARE DIAGRAMMATIC IN NATURE AND NOT EVERY DETAIL OR EXACT LOCATION OF EQUIPMENT AND/OR CONDUIT IS SHOWN. VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO ORDERING ANY MATERIAL OR PERFORMING ANY WORK. NOTIFY THE ENGINEER OF RECORD OF ANY CONDITIONS OR DIMENSIONS WHICH WOULD AFFECT PERFORMANCE OF WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND/OR SPECIFICATIONS.
4. THE ELECTRICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH CATALOG SHEETS TO THE DESIGNER OF RECORD PRIOR TO ORDERING ANY ELECTRICAL EQUIPMENT. SHOP DRAWINGS AND CATALOG SHEETS SHALL BE SUBMITTED AS A COMPREHENSIVE COMPLETE SET, AND PARTIAL EQUIPMENT SUBMITTALS WILL NOT BE ACCEPTED. ELECTRICAL SUBMITTALS SHALL INCLUDE:
 - a. LIGHTING FIXTURES AND CONTROLS
 - b. PANELBOARDS AND SAFETY SWITCHES
 - c. WIRING
 - d. CONDUIT AND FITTINGS
 - e. WIRING DEVICES
5. CONTRACTOR IS TO COORDINATE W/ GENERAL CONTRACTOR IN REGARDS TO PROJECT TIMELINE, WORK HOURS, AS WELL AS ANY BONDING OR INSURANCE REQUIREMENTS.
6. HANDLE, STORE AND PROTECT EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. REPLACE DAMAGED OR DEFECTIVE ITEMS WITH NEW ITEMS.

COORDINATION:

1. ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATIONS AND ELECTRICAL REQUIREMENTS OF MECHANICAL/PLUMBING EQUIPMENT WITH THE MECHANICAL/PLUMBING CONTRACTORS PRIOR TO ORDERING ANY MATERIAL OR PERFORMING ANY WORK ASSOCIATED WITH SUCH EQUIPMENT.

2. ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATION OF LIGHT FIXTURES WITH MECHANICAL CONTRACTOR, PLUMBING CONTRACTOR, AND FIRE PROTECTION CONTRACTOR PRIOR TO INSTALLATION TO AVOID CONFLICT WITH DUCTWORK, PIPING, AND SPRINKLER SYSTEM COMPONENTS.

3. EXACT DEVICE LOCATIONS (RECEPTACLES, DATA/TELEPHONE OUTLETS, LIGHT FIXTURES, ETC.) SHALL BE COORDINATED WITH ARCHITECTURAL PLANS.

4. TRACK LIGHTS, FLOOD LIGHTS, AND WALL WASHERS SHALL HAVE THEIR AIMING ANGLES ADJUSTED PER OWNER/ARCHITECTURAL REQUIREMENTS PRIOR TO FINALIZATION OF LIGHTING WORK.

LIGHTING LEGEND	
Symbol	Description
	5" Recessed Cans
	TWO POLE SWITCH
	TWO POLE SWITCH
	DUPLEX RECEPTACLE
	GFCI RECEPTACLE
	QUADRUPLES
	PANEL

三-01

PANEL LP-01 100AMPS				VOLTAGE 120/240V				3 WIRE SYSTEM			
CKT	TRIP	P	DESCRIPTION	A		B		DESCRIPTION	P	TRIP	CKT
1	20A	1	SALON LIGHTING	120VA	120VA			SALON LIGHTING	1	20A	2
3	20A	1	SALON LIGHTING			120VA	60VA	SALON LIGHTING	1	20A	4
5	20A	1	OFFICE LIGHTS	80VA	100VA			OFFICE FAN	1	20A	6
7	20A	1	WAITING AREA LIGHTS			60VA	40VA	WAITING AREA LIGHTS	1	20A	8
9	20A	1	WASHROOM LIGHTS	20VA	30VA			WASHROOM LIGHTS	1	20A	10
11	20A	1	STORAGE AREA LIGHTS			60VA	17VA	EF-01	1	20A	12
13	40A	2	CONDENSER UNIT	5500VA		5500VA		CONDENSER UNIT	2	40A	14
15	20A	2	AIR HANDLING UNIT	750VA		750VA		AIR HANDLING UNIT	2	20A	16
17	20A	1	ELECTRIC COOLER	600VA	360VA			SALON RECEPTACLE	1	20A	18
19	20A	1	SPARE			0VA	0VA	SPARE	1	20A	20
21	20A	1	SALON RECEPTACLE			360VA	720VA	SALON RECEPTACLE	1	20A	22
23	20A	1	WAITING AREA RECEPTACLE	1080VA	1080VA			OFFICE RECEPTACLE	1	20A	24
25	20A	1	WAITING ARE RECEPTACLE			360VA	180VA	BATH ROOM RECEPTACLE	1	20A	26
27	20A	1	SPARE	0VA	0VA			SPARE	1	20A	28
29	20A	1	SPARE			0VA	0VA	SPARE	1	20A	30
31	20A	1	SPARE	0VA	0VA			SPARE	1	20A	32
			CONNECTED PHASE LOAD	9840VA		8227VA					
			TOTAL CONNECTED AMPS	50 AMPS							
			TOTAL CONNECTED LOAD	11817VA							

	LOAD CALCULATION TABLE	
LOAD DESCRIPTION	CALCULATION / REFERENCE	LOAD (VA)
General Lighting	NEC 220.12	4375
General Receptacles	NEC 220.14, 220.44	4320
Sign Load	NEC 220.14(F)	1,500
Exhaust Fan	Motor Load	16.5
ELECTRIC WATER COOLER		600
HVAC Load	NEC 430.250	6250
Motor	NEC 220.56	20.5
TOTAL LOAD	$I = VA \div (1.732 \times V)$	17082
SERVICE CURRENT @ 240V		71.1A

MAIN CONSULTANTS

 **CAD DRAFTER**

CAD DRAFTER
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info@cadrafter.us

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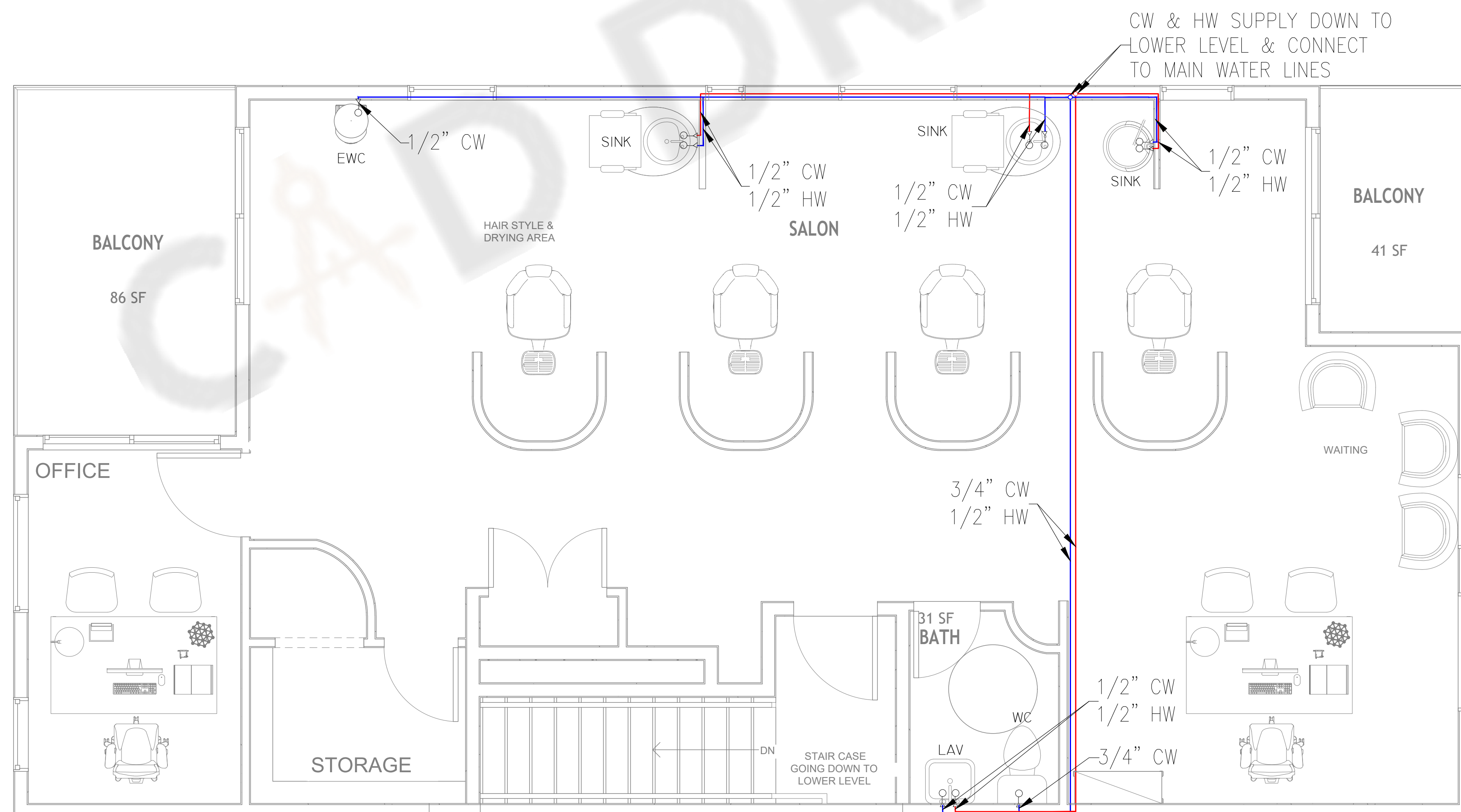
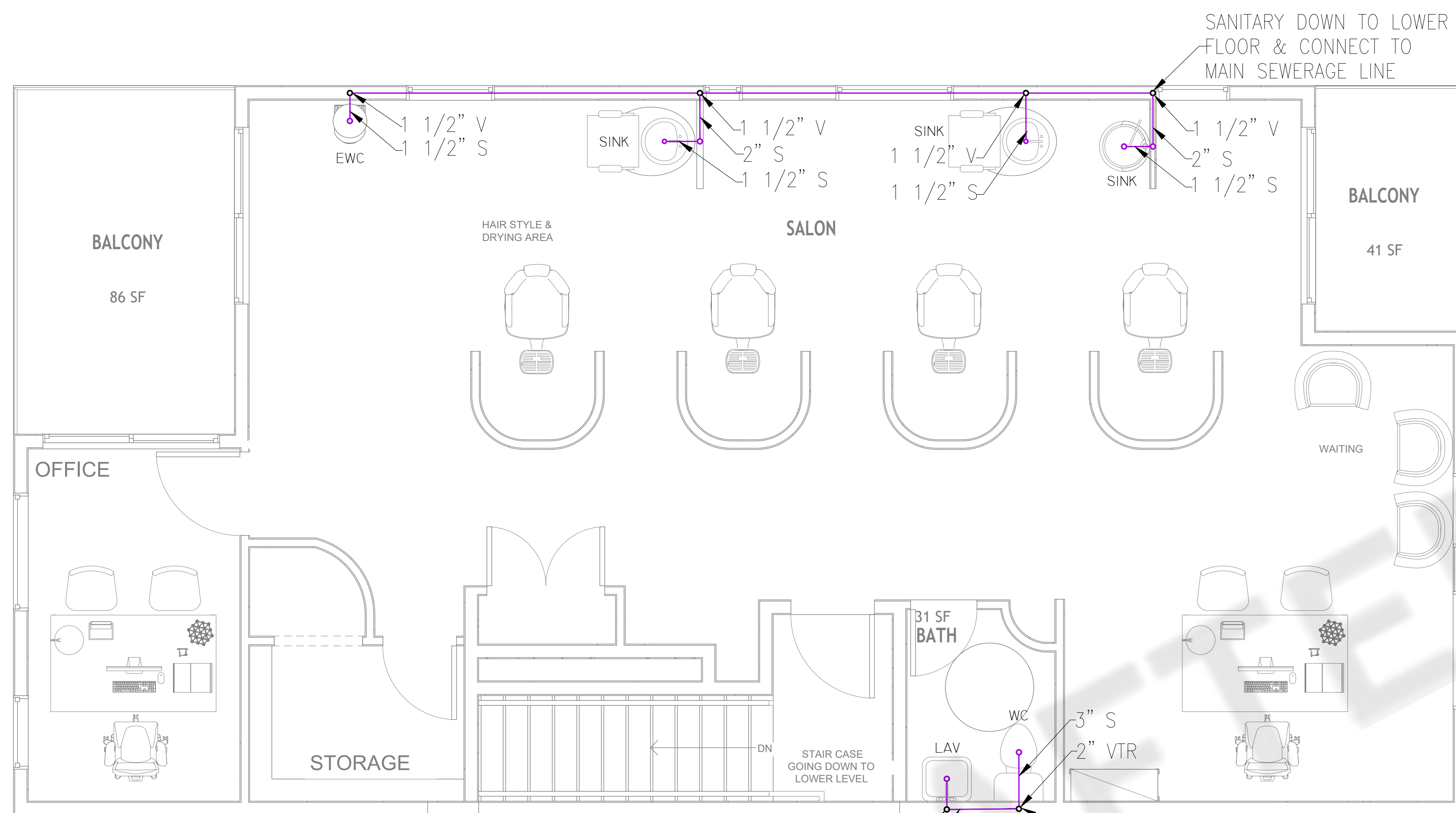
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Top Floor Suite / Salon TI

REVISION DATE[illegible]

ISSUE DATES	
TYPE	DATE
OWNER REVIEW SET	
SCHEMATIC PROPOSAL	
DRAWN BY	A.S
CHECKED BY	A.K
PROJECT NUMBER:	
6158-03	

DATE:	10/11/2026
SHEET TITLE:	PANEL SCHEDULE /LOAD CALCULATIONS
SHEET NUMBER:	E-03

[illegible]

ISSUE DATES	
TYPE	DATE
OWNER REVIEW SET	
SCHEMATIC PROPOSAL	
DRAWN BY	S.A
CHECKED BY	A.K
PROJECT NUMBER	
S158-03	
DATE:	
1/06/26	

SHEET TITLE:

PLUMBING PLANS

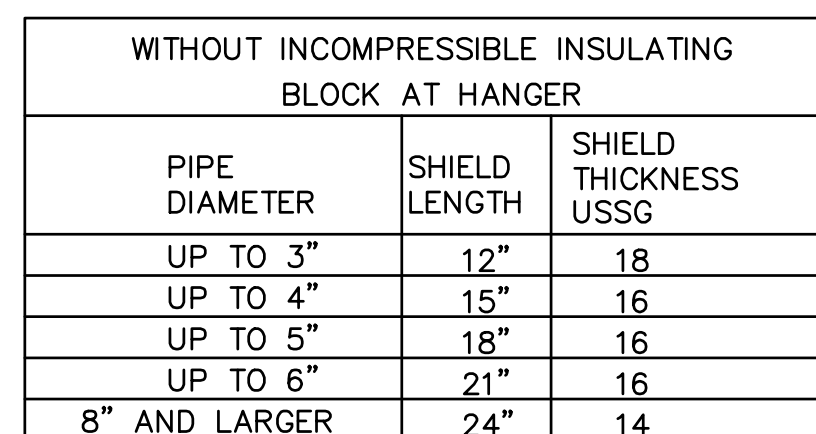
SHEET NUMBER:

P-01



- NOTES:
1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT SPECIFICATIONS AND LOCATIONS OF ALL APPLIANCES, PLUMBING FIXTURES AND FAUCETS. WHERE THERE IS A DISCREPANCY BETWEEN ENGINEERING AND ARCHITECTURAL DRAWINGS OF ALL APPLIANCES AND FIXTURE SPECIFICATIONS, NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
 2. ALL FIXTURES AND APPLIANCES SHALL BE APPROVED BY VAITIES HAVING JURISDICTION ON WATER HEATER, SHOWER HEAD AND FAUCETS SHALL BE CERTIFIED BY THE COMMISSION.
 3. PLUMBING CONTRACTOR SHALL COORDINATE NUMBER OF REQUIRED HOLES FOR ALL SINK BASED ON EQUIPMENT/ACCESSORIES SPECIFIED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENT.
 4. EACH PLUMBING FIXTURE AND FITTING SHALL MEET FLOW RATES SPECIFIED IN LOCAL BUILDING CODE.
 5. ALL FIXTURE, EQUIPMENT AND MATERIALS SHALL BE APPROVED.

P-02



INSULATED PIPE SUPPORT



6



ISSUE DATES

SHEET NUMBER

P-03

Air System Sizing Summary for SYSTEM-1

Project Name: 6158-03
Prepared by: CAD DRAFTER

06/09/2026
01:27AM

Air System Information

Air System Name **SYSTEM-1**
Equipment Class **SPLT AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **970.0** ft²
Location **Ronald Regan Washing, Virginia**

Sizing Calculation Information

Calculation Months **Jan to Dec**
Sizing Data **Calculated**

Zone CFM Sizing **Sum of space airflow rates**
Space CFM Sizing **Individual peak space loads**

Central Cooling Coil Sizing Data

Total coil load **3.7** Tons
Total coil load **44.1** MBH
Sensible coil load **35.7** MBH
Coil CFM at Jul 1500 **1844** CFM
Max block CFM **1844** CFM
Sum of peak zone CFM **1844** CFM
Sensible heat ratio **0.810**
CFM/Ton **502.2**
ft²/Ton **264.2**
BTU/(hr·ft²) **45.4**
Water flow @ 10.0 °F rise **N/A**

Load occurs at **Jul 1500**
OA DB / WB **94.2 / 75.4** °F
Entering DB / WB **78.1 / 66.7** °F
Leaving DB / WB **60.2 / 59.1** °F
Coil ADP **58.2** °F
Bypass Factor **0.100**
Resulting RH **57** %
Design supply temp. **58.0** °F
Zone T-stat Check **1 of 1** OK
Max zone temperature deviation **0.0** °F

Central Heating Coil Sizing Data

Max coil load **37.1** MBH
Coil CFM at Des Htg **1844** CFM
Max coil CFM **1844** CFM
Water flow @ 20.0 °F drop **N/A**

Load occurs at **Des Htg**
BTU/(hr·ft²) **38.2**
Ent. DB / Lvg DB **63.9 / 82.5** °F

Supply Fan Sizing Data

Actual max CFM **1844** CFM
Standard CFM **1843** CFM
Actual max CFM/ft² **1.90** CFM/ft²

Fan motor BHP **0.00** BHP
Fan motor kW **0.00** kW
Fan static **0.00** in wg

Outdoor Ventilation Air Data

Design airflow CFM **198** CFM
CFM/ft² **0.20** CFM/ft²

CFM/person **9.91** CFM/person

Air System Design Load Summary for SYSTEM-1

Project Name: 6158-03
Prepared by: CAD DRAFTER

06/09/2026
01:27AM

	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jul 1500 COOLING OA DB / WB 94.2 °F / 75.4 °F			HEATING DATA AT DES HTG HEATING OA DB / WB 17.9 °F / 14.8 °F		
ZONE LOADS	Details	Sensible (BTU/hr)	Latent (BTU/hr)	Details	Sensible (BTU/hr)	Latent (BTU/hr)
Window & Skylight Solar Loads	216 ft²	8534	-	216 ft²	-	-
Wall Transmission	1130 ft²	5977	-	1130 ft²	13271	-
Roof Transmission	970 ft²	8462	-	970 ft²	6093	-
Window Transmission	216 ft²	2072	-	216 ft²	6617	-
Skylight Transmission	0 ft²	0	-	0 ft²	0	-
Door Loads	0 ft²	0	-	0 ft²	0	-
Floor Transmission	0 ft²	0	-	0 ft²	0	-
Partitions	0 ft²	0	-	0 ft²	0	-
Ceiling	0 ft²	0	-	0 ft²	0	-
Overhead Lighting	212 W	723	-	0	0	-
Task Lighting	212 W	723	-	0	0	-
Electric Equipment	212 W	723	-	0	0	-
People	20	5445	5055	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	0% / 0%	0	0	0%	0	0
>> Total Zone Loads	-	32660	5055	-	25981	0
Zone Conditioning	-	31804	5055	-	26037	0
Plenum Wall Load	0%	0	-	0	0	-
Plenum Roof Load	0%	0	-	0	0	-
Plenum Lighting Load	0%	0	-	0	0	-
Return Fan Load	1844 CFM	0	-	1844 CFM	0	-
Ventilation Load	198 CFM	3860	3329	198 CFM	11034	0
Supply Fan Load	1844 CFM	0	-	1844 CFM	0	-
Space Fan Coil Fans	-	0	-	-	0	-
Duct Heat Gain / Loss	0%	0	-	0%	0	-
>> Total System Loads	-	35664	8384	-	37071	0
Central Cooling Coil	-	35664	8387	-	0	0
Central Heating Coil	-	0	-	-	37071	-
>> Total Conditioning	-	35664	8387	-	37071	0
Key:	Positive values are clg loads Negative values are htg loads			Positive values are htg loads Negative values are clg loads		

System Psychrometrics for SYSTEM-1

Project Name: 6158-03
Prepared by: CAD DRAFTER

06/09/2026
01:27AM

July DESIGN COOLING DAY, 1500

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (°F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	94.2	0.01457	198	400	3860	3329
Vent - Return Mixing	Outlet	78.1	0.01141	1844	1572	-	-
Central Cooling Coil	Outlet	60.2	0.01045	1844	1572	35664	8387
Central Heating Coil	Outlet	60.2	0.01045	1844	1572	0	-
Supply Fan	Outlet	60.2	0.01045	1844	1572	0	-
Cold Supply Duct	Outlet	60.2	0.01045	1844	1572	-	-
Zone Air	-	76.2	0.01103	1844	1713	31804	5055
Return Plenum	Outlet	76.2	0.01103	1844	1713	0	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.080 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4744.9 BTU/(hr-CFM)

Site Altitude = 10.0 ft

TABLE 2: ZONE DATA

Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (°F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
Zone 1	32660	Cooling	31804	76.2	1844	1713	0	0

System Psychrometrics for SYSTEM-1

Project Name: 6158-03
Prepared by: CAD DRAFTER

06/09/2026
01:27AM

WINTER DESIGN HEATING

TABLE 1: SYSTEM DATA

Component	Location	Dry-Bulb Temp (°F)	Specific Humidity (lb/lb)	Airflow (CFM)	CO2 Level (ppm)	Sensible Heat (BTU/hr)	Latent Heat (BTU/hr)
Ventilation Air	Inlet	17.9	0.00098	198	400	-11034	0
Vent - Return Mixing	Outlet	63.9	0.00098	1844	481	-	-
Central Cooling Coil	Outlet	63.9	0.00098	1844	481	0	0
Central Heating Coil	Outlet	82.5	0.00098	1844	481	37071	-
Supply Fan	Outlet	82.5	0.00098	1844	481	0	-
Cold Supply Duct	Outlet	82.5	0.00098	1844	481	-	-
Zone Air	-	69.5	0.00098	1844	491	-26037	0
Return Plenum	Outlet	69.5	0.00098	1844	491	0	-

Air Density x Heat Capacity x Conversion Factor: At sea level = 1.080; At site altitude = 1.080 BTU/(hr-CFM-F)

Air Density x Heat of Vaporization x Conversion Factor: At sea level = 4746.6; At site altitude = 4744.9 BTU/(hr-CFM)

Site Altitude = 10.0 ft

TABLE 2: ZONE DATA

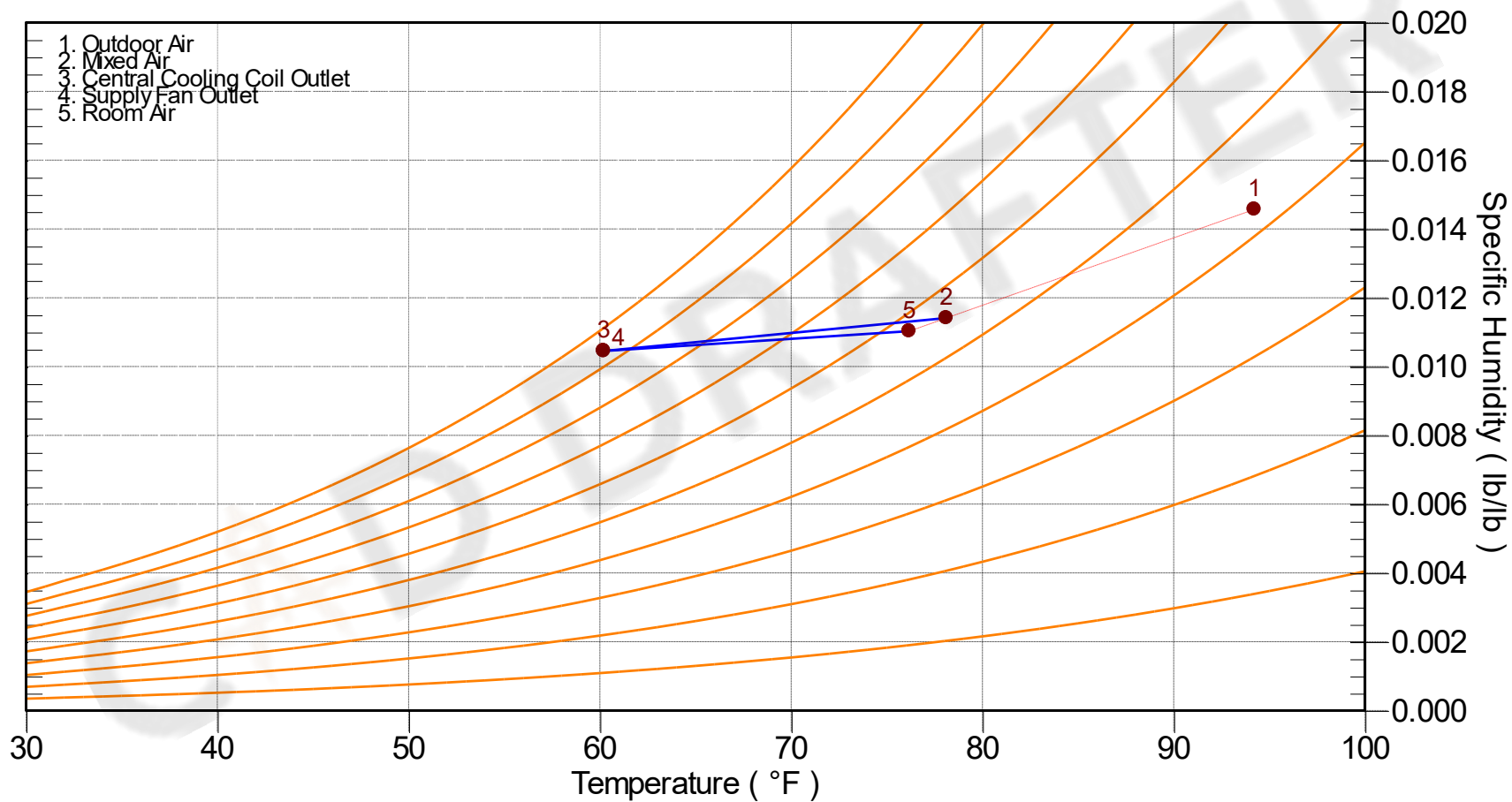
Zone Name	Zone Sensible Load (BTU/hr)	T-stat Mode	Zone Cond (BTU/hr)	Zone Temp (°F)	Zone Airflow (CFM)	CO2 Level (ppm)	Terminal Heating Coil (BTU/hr)	Zone Heating Unit (BTU/hr)
Zone 1	-25981	Heating	-26037	69.5	1844	491	0	0

System Psychrometrics for SYSTEM-1

Project Name: 6158-03
Prepared by: CAD DRAFTER

06/09/2026
01:27AM

Location: Ronald Regan Washing, Virginia
Altitude: 10.0 ft.
Data for: July DESIGN COOLING DAY, 1500



System Psychrometrics for SYSTEM-1

Project Name: 6158-03
Prepared by: CAD DRAFTER

06/09/2026
01:27AM

Location: Ronald Regan Washing, Virginia
Altitude: 10.0 ft.
Data for: WINTER DESIGN HEATING

