

SALUDA CC HVAC UPGRADES

RIVERSIDE LIFELONG HEALTH & REHABILITATION

672 Gloucester Road Saluda, Virginia 23149



LOCATION MAP

PHASING NOTES

THE FACILITY WILL BE OCCUPIED DURING CONSTRUCTION. AS SUCH, ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE DESIGN PACKAGE, AND ALL MECHANICAL SERVICES SHALL BE MAINTAINED IN OCCUPIED AREAS EXCEPT FOR LIMITED UNAVOIDABLE SHUT-DOWN TIMES COORDINATED WITH THE OWNER.

THESE NOTES OUTLINE A PROPOSED MEANS OF ACCOMPLISHING THE PROJECT CONSTRUCTION WHILE ADJACENT AREAS OF THE FACILITY REMAIN IN OPERATION AND OCCUPIED. THEY DEFINE IN GENERAL THE CONCEPT AND SCOPE OF PHASING FOR THE PROJECT. THEY ARE NOT INTENDED TO LIST EACH AND EVERY ACTION THAT WILL BE REQUIRED. A DEFINITIVE SEQUENCE AND TIME SCHEDULE FOR ACCOMPLISHING THE WORK WILL BE ESTABLISHED BY THE CONTRACTOR'S PROPOSED CONSTRUCTION SCHEDULE. WHERE UTILITY OUTAGES ARE INTERRUPTED BEYOND THE SCHEDULED AND COORDINATED TIME PERIODS AND AFFECT OPERATION OF THE ADJACENT REMAINING FACILITY OPERATIONS, TEMPORARY UTILITIES SHALL BE PROVIDED UNDER THIS CONTRACT.

THE CONTRACTOR SHALL GIVE FULL CONSIDERATION TO THE PHASING WHEN DETERMINING WHEN AND WHERE EQUIPMENT IS TO BE REMOVED AND INSTALLED.

SEE THESE DRAWINGS FOR SPECIFIC EQUIPMENT, PIPING, DUCTWORK, AND WORK NOTES.

- PRIOR TO REMOVING MECHANICAL EQUIPMENT AND PIPING FOR EACH PHASE, THE CONTRACTOR SHALL DISCONNECT EACH AREA FROM THE HYDRONIC SYSTEM.

PHASE 1:

- AREA D WORK INCLUDES REMOVAL OF ALL FAN COIL UNITS WHICH SERVE THE RESIDENT ROOMS, INCLUDING ALL ASSOCIATED DUCTWORK, GRILLES, DIFFUSERS, LOUVERS, DAMPERS, PIPING, AND SUPPORTS.
- REMOVAL OF ALL CONDENSATE PIPING.
- INSTALLATION OF NEW FAN COIL UNITS SERVING RESIDENT ROOMS.
- INSTALLATION OF NEW DOAS-3 AND ASSOCIATED DUCTWORK, DIFFUSERS, LOUVERS, AND PIPING.
- INSTALLATION OF THE NEW PIPING SYSTEM TO THE EXISTING HYDRONIC SYSTEM.
- INSTALLATION OF GPS BI-POLAR IONIZATION FANS IN CORRIDORS.
- PROVIDE NEW ELECTRICAL CONNECTIONS TO HVAC EQUIPMENT.
- PROVIDE MEANS OF FLUSHING HYDRONIC SYSTEM FROM ANY DEBRIS AT END OF PHASE OF WORK. PRIOR TO STARTUP OF NEW EQUIPMENT, CONTRACTOR SHALL REACH OUT TO WALTZ ENGINEERED SALES, INC. (757) 542-3055.

PHASE 2:

- AREA A WORK INCLUDES REMOVAL OF ALL FAN COIL UNITS WHICH SERVE THE RESIDENT ROOMS, INCLUDING ALL ASSOCIATED DUCTWORK, GRILLES, DIFFUSERS, LOUVERS, DAMPERS, PIPING, AND SUPPORTS.
- REMOVAL OF ALL CONDENSATE PIPING.
- INSTALLATION OF NEW FAN COIL UNITS SERVING RESIDENT ROOMS.
- INSTALLATION OF NEW DOAS-1 AND ASSOCIATED DUCTWORK, DIFFUSERS, LOUVERS, AND PIPING.
- INSTALLATION OF THE CHILLED WATER AND HOT WATER PIPING THAT IS A PART OF THE HYDRONIC SYSTEM.
- INSTALLATION OF GPS BI-POLAR IONIZATION FANS IN CORRIDORS.
- PROVIDE NEW ELECTRICAL CONNECTIONS TO HVAC EQUIPMENT.
- PROVIDE MEANS OF FLUSHING HYDRONIC SYSTEM FROM ANY DEBRIS AT END OF PHASE OF WORK. PRIOR TO STARTUP OF NEW EQUIPMENT, CONTRACTOR SHALL REACH OUT TO WALTZ ENGINEERED SALES, INC. (757) 542-3055.

PHASE 4:

- AREA B WORK INCLUDES REMOVAL OF ALL FAN COIL UNITS WHICH SERVE THE RESIDENT ROOMS, INCLUDING ALL ASSOCIATED DUCTWORK, GRILLES, DIFFUSERS, LOUVERS, DAMPERS, PIPING, AND SUPPORTS.
- REMOVAL OF ALL CONDENSATE PIPING.
- INSTALLATION OF NEW FAN COIL UNITS SERVING RESIDENT ROOMS.
- INSTALLATION OF NEW DOAS-2 AND ASSOCIATED DUCTWORK, DIFFUSERS, LOUVERS, AND PIPING.
- INSTALLATION OF THE CHILLED WATER AND HOT WATER PIPING THAT IS A PART OF THE HYDRONIC SYSTEM.
- INSTALLATION OF GPS BI-POLAR IONIZATION FANS IN CORRIDORS.
- PROVIDE NEW ELECTRICAL CONNECTIONS TO HVAC EQUIPMENT.
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PHASE 5:

- AREA C WORK INCLUDES REMOVAL OF ALL FAN COIL UNITS WHICH SERVE THE RESIDENT ROOMS, INCLUDING ALL ASSOCIATED DUCTWORK, GRILLES, DIFFUSERS, LOUVERS, DAMPERS, PIPING, AND SUPPORTS.
- REMOVAL OF ALL CONDENSATE PIPING.
- INSTALLATION OF NEW FAN COIL UNITS SERVING RESIDENT ROOMS.
- INSTALLATION OF NEW DOAS-1 AND ASSOCIATED DUCTWORK, DIFFUSERS, LOUVERS, AND PIPING.
- INSTALLATION OF THE CHILLED WATER AND HOT WATER PIPING THAT IS A PART OF THE HYDRONIC SYSTEM.
- INSTALLATION OF GPS BI-POLAR IONIZATION FANS IN CORRIDORS.
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GOVERNING STATE AND LOCAL CODES

2018 VIRGINIA CONSTRUCTION CODE (VCC)
VIRGINIA ADMINISTRATIVE SECTION & TECHNICAL AMENDMENTS (www.vbcoa.org)
2017 NATIONAL ELECTRICAL CODE (NEC)
2018 VIRGINIA MECHANICAL CODE (VMC)
2018 VIRGINIA PLUMBING CODE (VPC)

BUILDING OCCUPANCY

2018 VCC: HOSPITAL I-2

SPECIAL BID REQUIREMENTS

- ALL MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON EQUIPMENT SCHEDULES. PROVIDE BAS SYSTEM AND INTEGRATE ALL EQUIPMENT AND CONTROLS SEQUENCES PROVIDED.
- CONTRACTOR SHALL PROVIDE A DUMPSTER DURING DEMOLITION LOCATED ON THE SITE AS DIRECTED BY THE FACILITIES ENGINEERING DEPARTMENT. WORK AREA SHALL BE CLEANED AT THE END OF EACH WORK DAY.
- THE CONTRACTOR'S BID PRICE SHALL BE ALL INCLUSIVE OF THE INDICATED WORK SHOWN OR DESCRIBED IN THE CONSTRUCTION DOCUMENTS.
- ANY INFORMATION CONSIDERED MISSING OR IN CONFLICT WITHIN THE CONSTRUCTION DOCUMENTS, SHALL BE PUT INTO AN RFI FOR THE ENGINEER TO RESPOND TO A MINIMUM OF 5 DAYS PRIOR TO THE BID DUE DATE.

VG
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CONSULTING ENGINEERS
6330 NEWTON ROAD, SUITE 400, NORFOLK, VA 23502
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RHS
RIVERSIDE HEALTH SYSTEM

PRELIMINARY PROGRESS PRINT
50%
12/15/2023
12/15/2023
SUBMITTAL
FOR CONSTRUCTION
SEAL

Revisions
Description
No.

RIVERSIDE HEALTH SYSTEMS
SALUDA CC HVAC UPDATES
TITLE SHEET
672 GLOUCESTER ROAD
SALUDA, VA 23149

Project #: 23061
Date: 12/15/2023
Project Manager: RCP
Designed By: CKH
Drawn By: BAC
Checked By: PCS

G-001
SHEET 1 OF 21

1

2

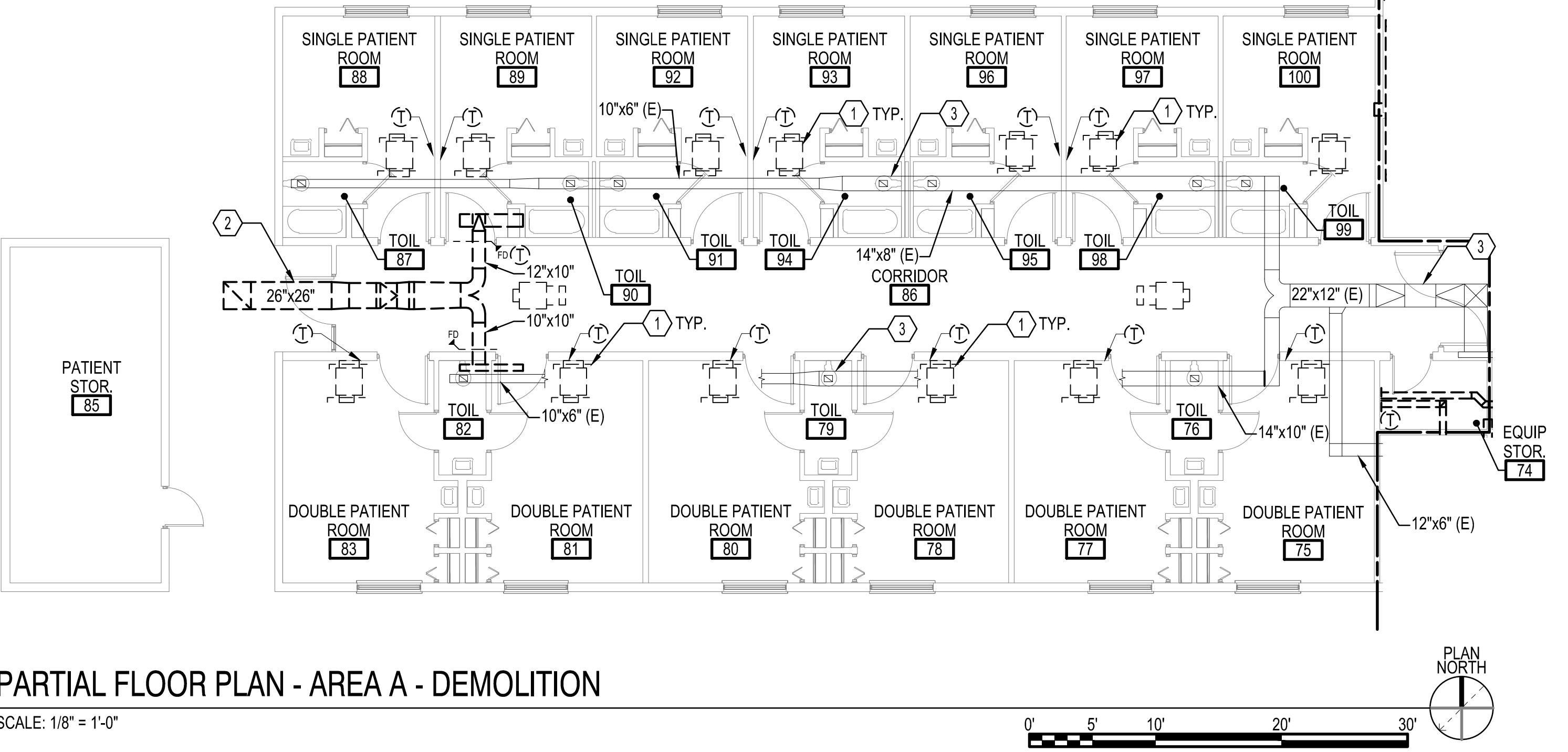
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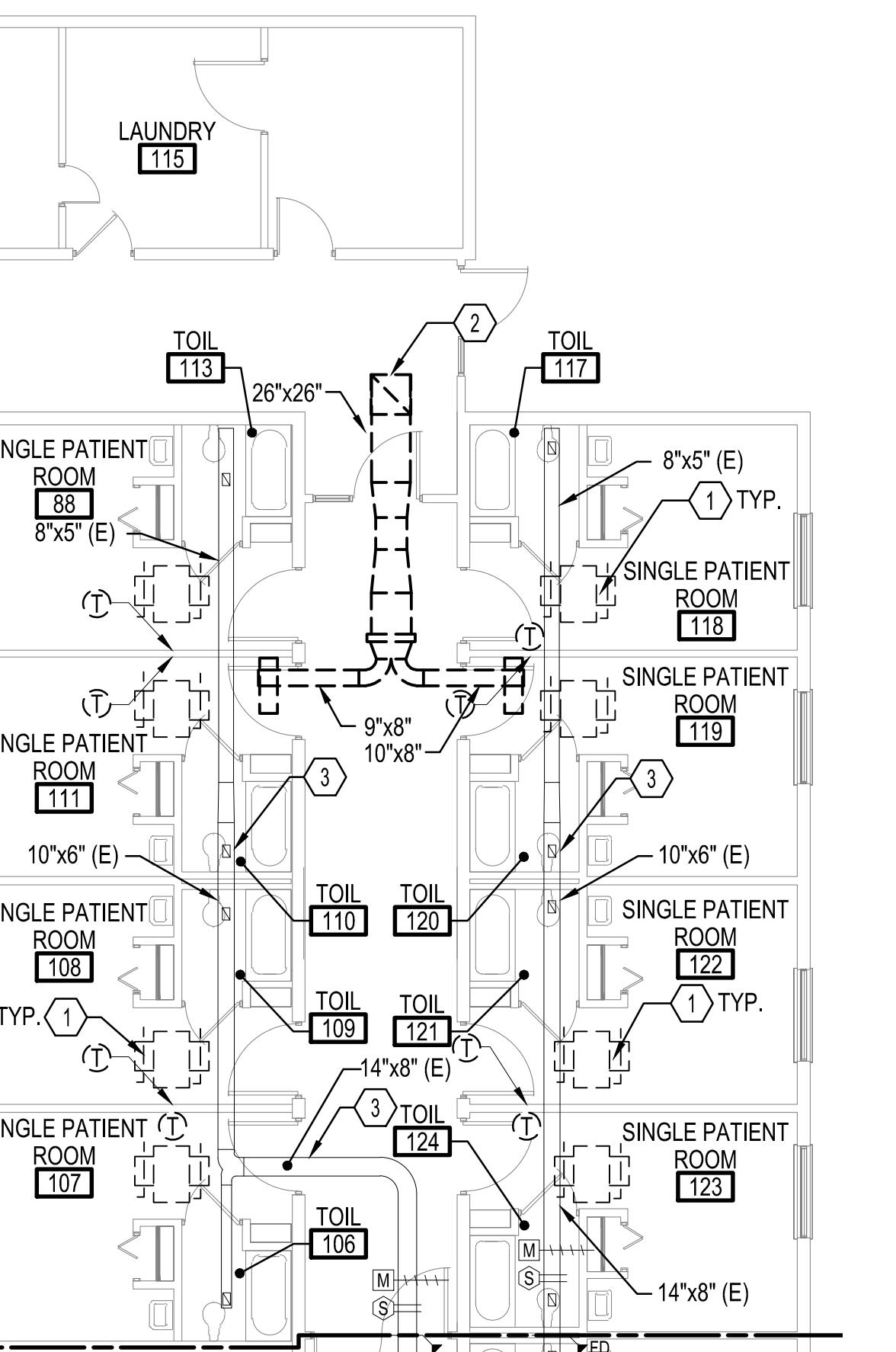
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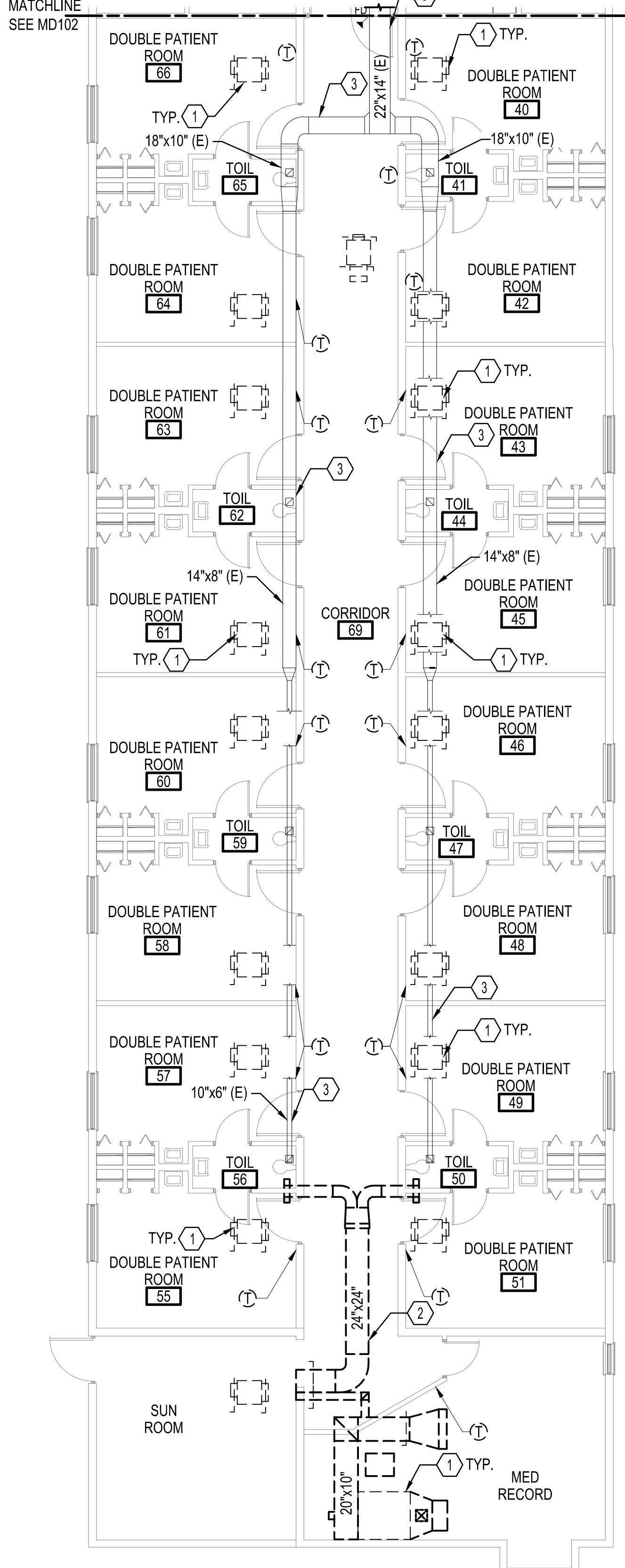
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D1 PARTIAL FLOOR PLAN - AREA A - DEMOLITION



A2 PARTIAL FLOOR PLAN - AREA B - DEMOLITION

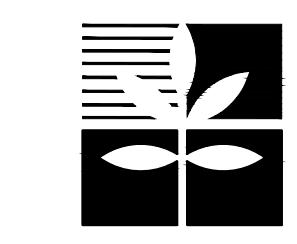


A4 PARTIAL FLOOR PLAN - AREA D - DEMOLITION

SHEET KEYNOTES

- DISCONNECT AND REMOVE 4-PIPE FAN COIL UNIT COMPLETE INCLUDING, BUT NOT LIMITED TO, ASSOCIATED DUCTWORK, DAMPERS, EQUIPMENT SUPPORTS, AND HANGERS. ASSOCIATED FACE MOUNTED DIFFUSERS AND GRILLES, AND THERMOSTATS ASSOCIATED WITH FAN COIL UNIT SHALL BE DEMOLISHED. FOR INFORMATION ON DEMOLITION OF PIPING, SEE MD103.
- DEMOLISH OUTSIDE AIR DUCTWORK COMPLETE. DEMOLISH EXISTING DUCT HANGERS SUPPORTING EQUIPMENT.
- DUCTWORK IS EXISTING TO REMAIN. CONTRACTOR SHALL ENSURE THAT DUCTWORK IS NOT DAMAGED DURING DEMOLITION PHASE.

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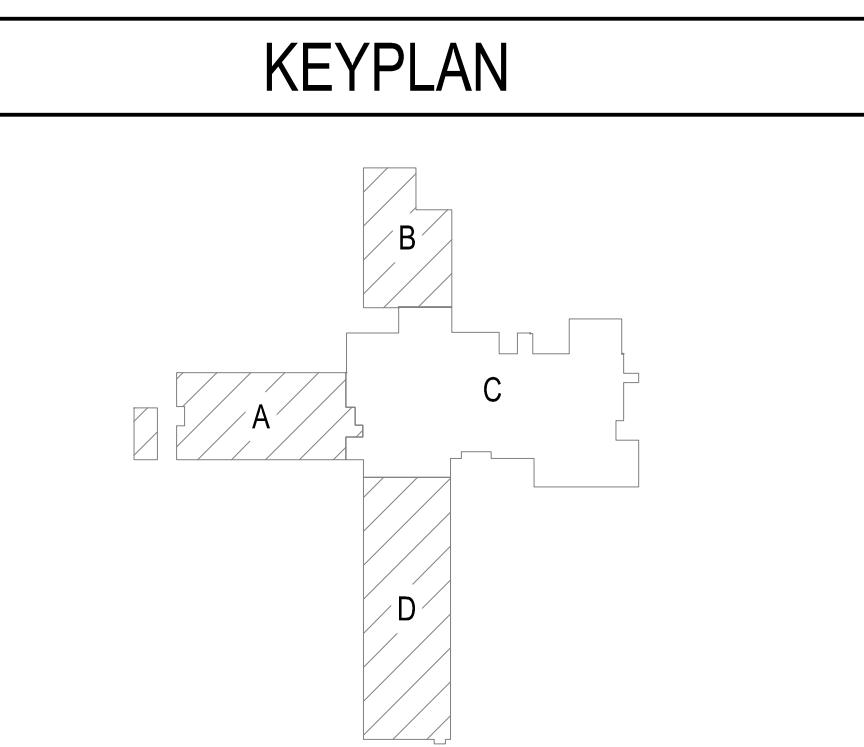
RIVERSIDE HEALTH SYSTEM



Revisions	Date
No. _____	_____ Description

SALUDA, VA 23149
672 GLOUCESTER ROADRIVERSIDE HEALTH SYSTEMS
SALUDA CC HVAC UPDATES

PART FIRST PLAN - AREAS A, B, AND D - DEMOLITION



Project #:	23061
Date:	12/15/2023
Project Manager:	RCP
Designed By:	CKH
Drawn By:	DMG
Checked By:	PCS

MD101

SHEET 3 OF 21

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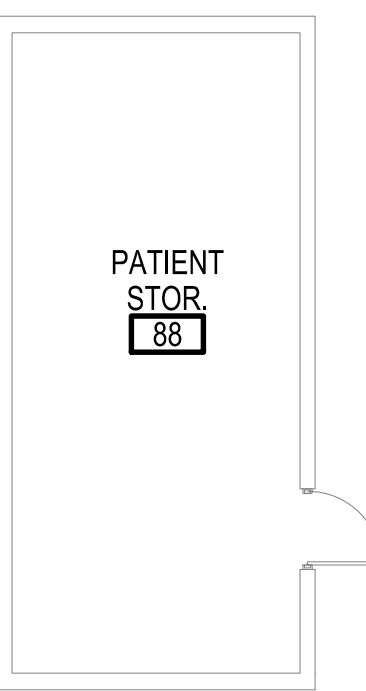
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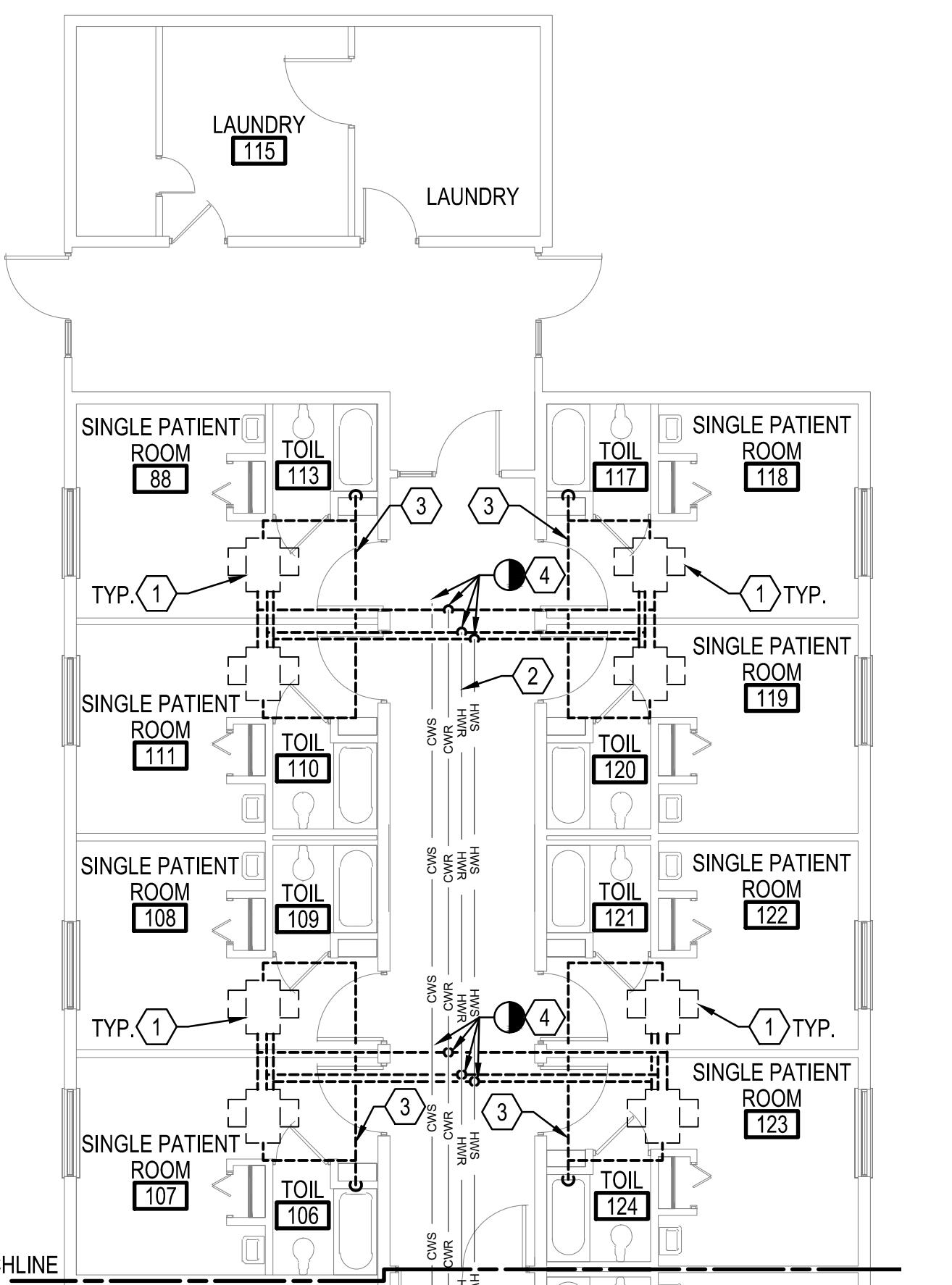
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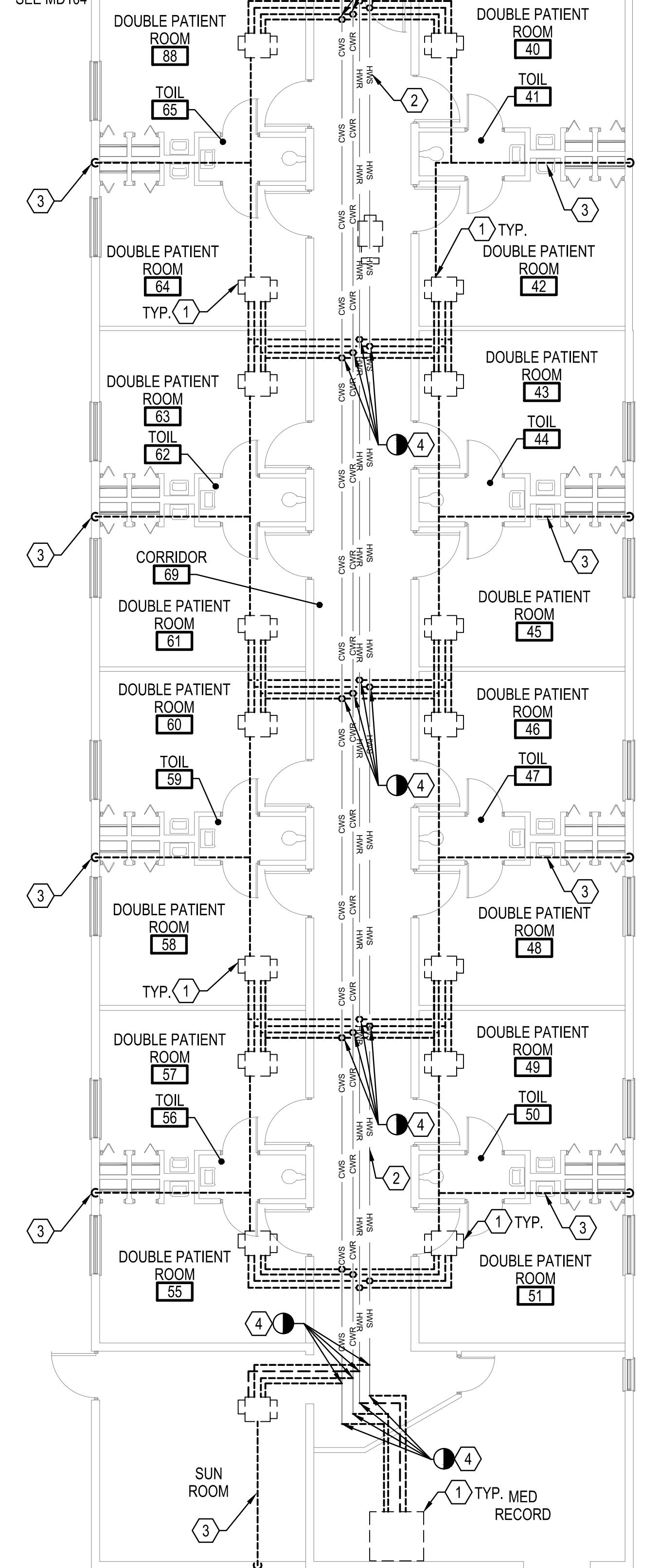
D1 PARTIAL FLOOR PLAN - AREA A - PIPING - DEMOLITION

SCALE: 1/8" = 1'-0"



A2 PARTIAL FLOOR PLAN - AREA B - PIPING - DEMOLITION

SCALE: 1/8" = 1'-0"



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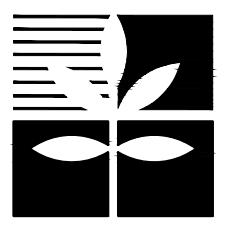
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SHEET KEYNOTES

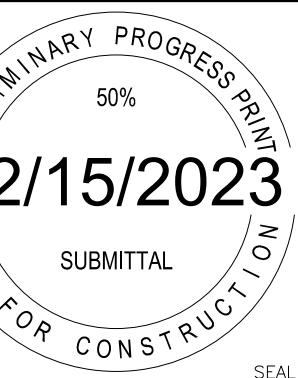
- DISCONNECT AND REMOVE 4-PIPE FAN COIL UNIT COMPLETE INCLUDING, BUT NOT LIMITED TO, HOT WATER PIPING, CHILLED WATER PIPING, CONDENSATE PIPING, AND DRAIN PAN. FOR MORE INFORMATION ON DEMOLITION OF DUCTWORK, SEE MD101.
- EXISTING PIPING TO REMAIN. CONTRACTOR TO ENSURE ENTIRE WING HAS BEEN DISCONNECTED FROM THE HYDRONIC SYSTEM PRIOR TO DEMOLITION WORK.
- DEMOLISH EXISTING CONDENSATE PIPING COMPLETE INCLUDING ANY ASSOCIATED HANGERS OR SUPPORTS.
- DEMOLISH CHILLED WATER SUPPLY AND RETURN, AND HOT WATER SUPPLY AND RETURN PIPING FROM MAIN TO FAN COIL UNIT AND ANY ASSOCIATED VALVES.



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RIVERSIDE HEALTH SYSTEM



Revisions

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No. _____

Description _____

SALUDA, VA 23149

RIVERSIDE HEALTH SYSTEMS SALUDA CC HVAC UPDATES

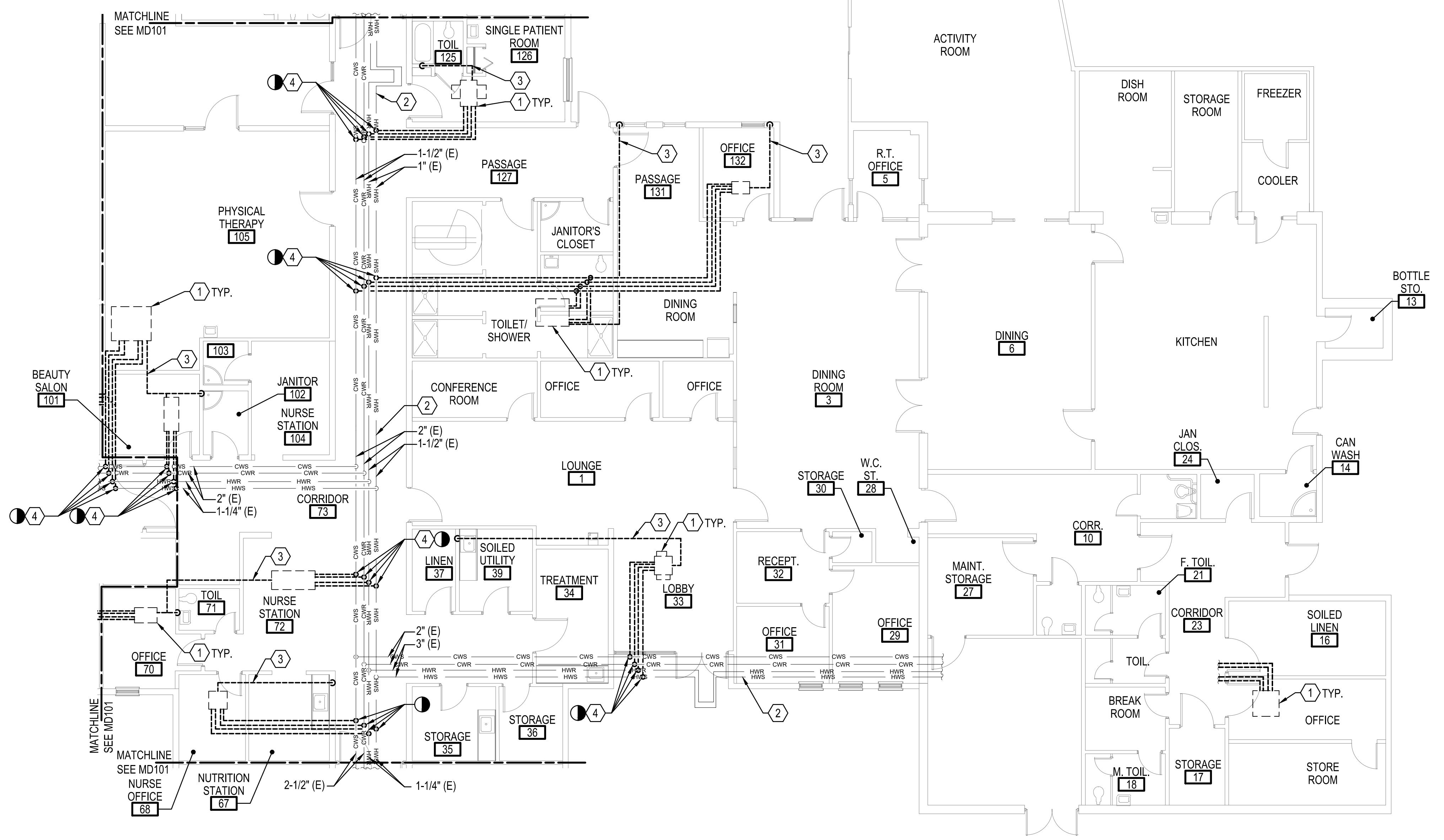
672 GLOUCESTER ROAD

Project #: 23061
Date: 12/15/2023

Project Manager: RCP
Designed By: CKH
Drawn By: DMG
Checked By: PCS

MD104

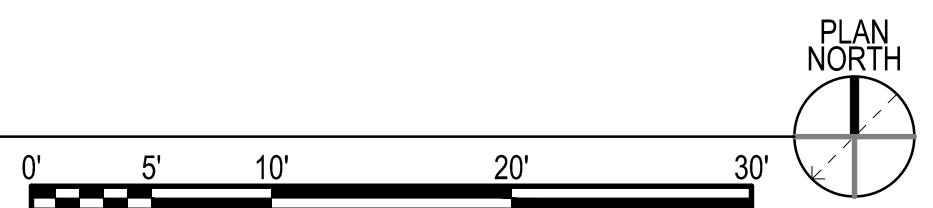
Sheet 6 of 21



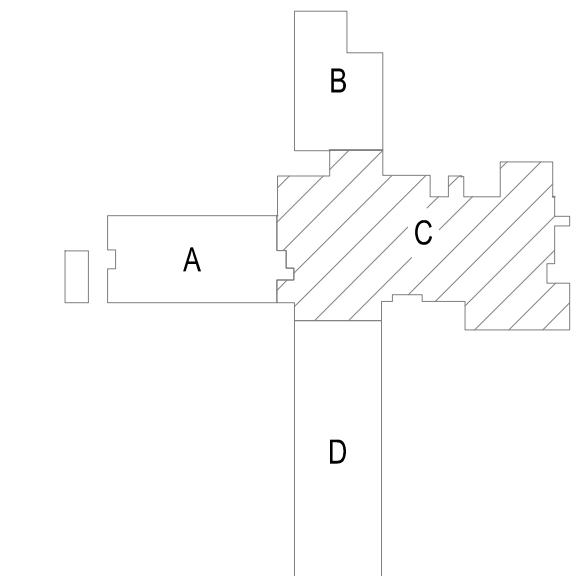
A2 PARTIAL FLOOR PLAN - AREA C - PIPING - DEMOLITION

SCALE: 1/8" = 1'-0"

0' 5' 10' 20' 30'



KEYPLAN



MD104

Sheet 6 of 21

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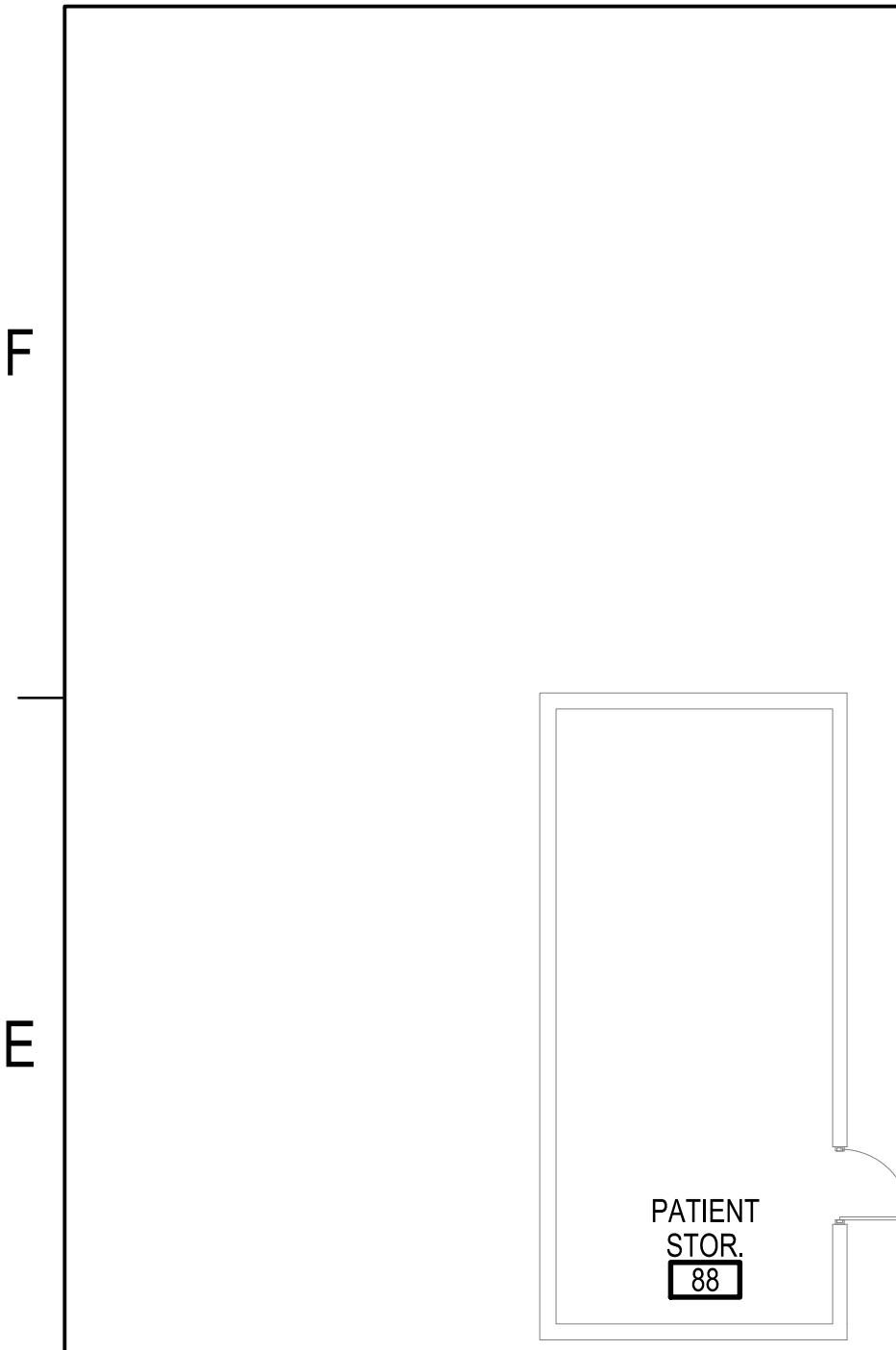
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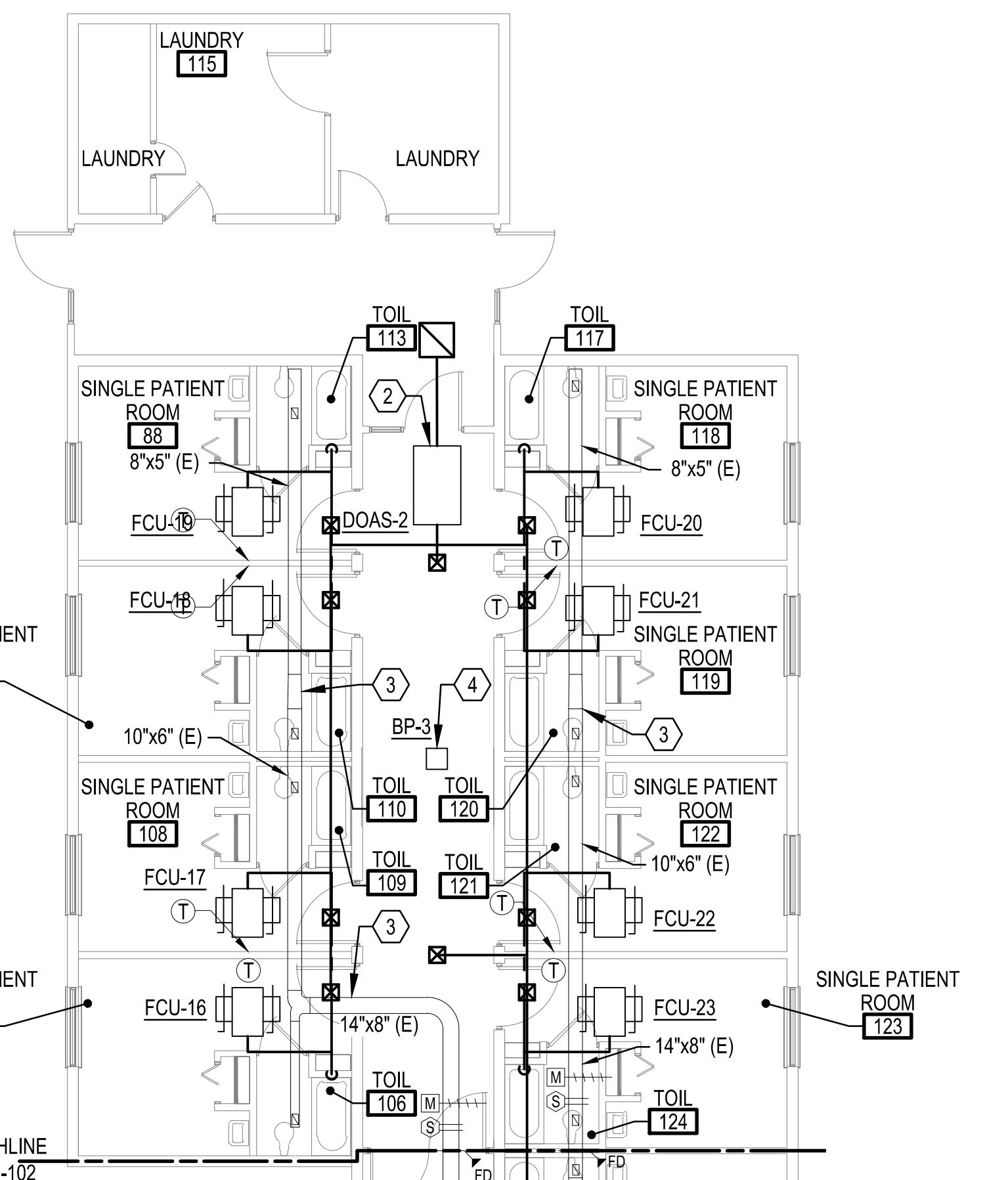
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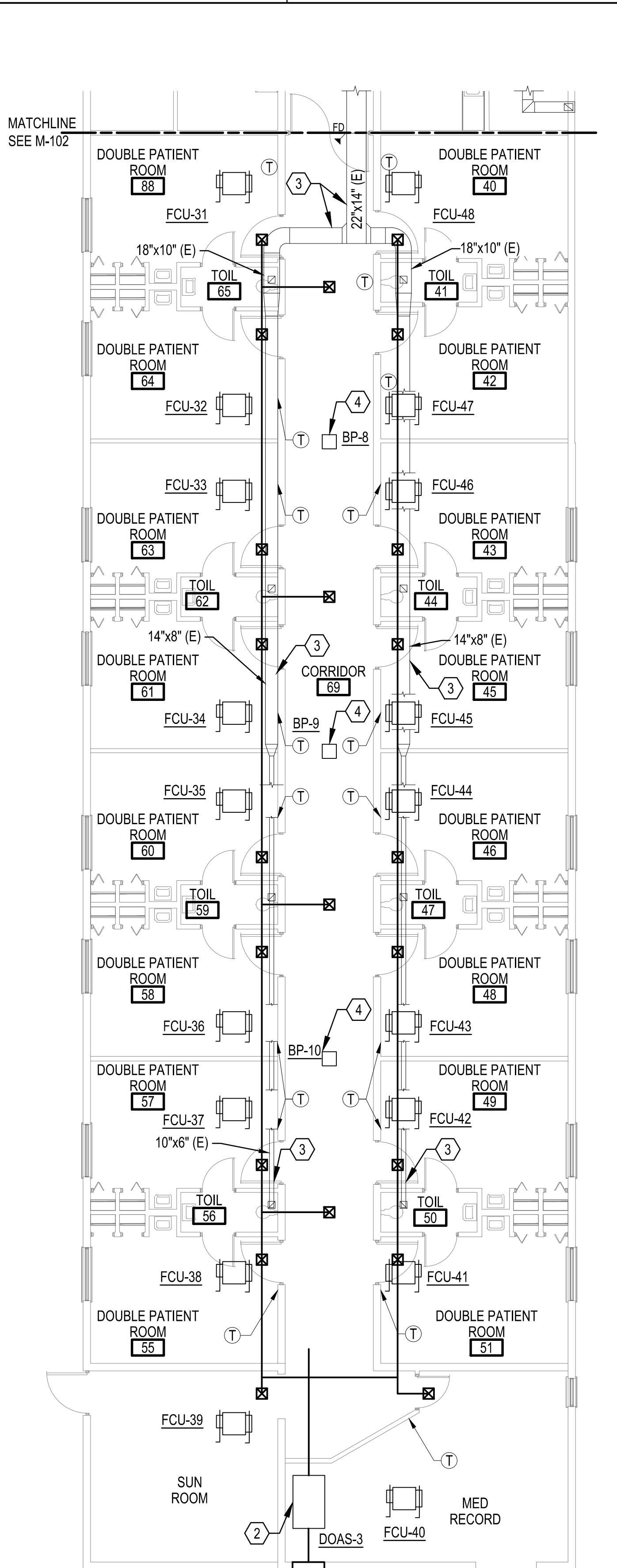
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D1 PARTIAL FLOOR PLAN - AREA A - NEW WORK

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A2 PARTIAL FLOOR PLAN - AREA B - NEW WORK

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A4 PARTIAL FLOOR PLAN - AREA D - NEW WORK

- SHEET KEYNOTES**
- PROVIDE NEW FAN COIL UNIT COMPLETE INCLUDING THERMOSTATIC CONTROLS. THERMOSTAT SHALL BE MOUNTED APPROXIMATELY 4'-0" AFF. FOR MORE INFORMATION ON INSTALLATION, REFER TO MANUFACTURER IOM AND SEE SHEET M-102. PROVIDE UNIT WITH AUXILIARY DRAIN PAN.
 - PROVIDE NEW DEDICATED OUTDOOR AIR UNIT COMPLETE INCLUDING BUT NOT LIMITED TO EQUIPMENT SUPPORTS, CONDENSATE DRAIN PIPING, AND THERMOSTATIC CONTROLS. FOR MORE INFORMATION ON INSTALLATION, REFER TO MANUFACTURER IOM. PROVIDE UNIT WITH AUXILIARY DRAIN PAN.
 - EXHAUST DUCTWORK IS EXISTING TO REMAIN.
 - PROVIDE GPS IDF-2 BIPOLAR IONIZATION FAN IN CEILING. FOR MORE INFORMATION, SEE FAN SCHEDULE ON SHEET M-601.



Revisions	Date
No. _____	_____

RIVERSIDE HEALTH SYSTEMS
SALUDA, VA 23149
672 GLOUCESTER ROAD
PARTIAL FLOOR PLAN - AREAS A, B, AND D - NEW WORK

Project #:	23061
Date:	12/15/2023
Project Manager:	RCP
Designed By:	CKH
Drawn By:	DMG
Checked By:	PCS

M-101
SHEET 7 OF 21

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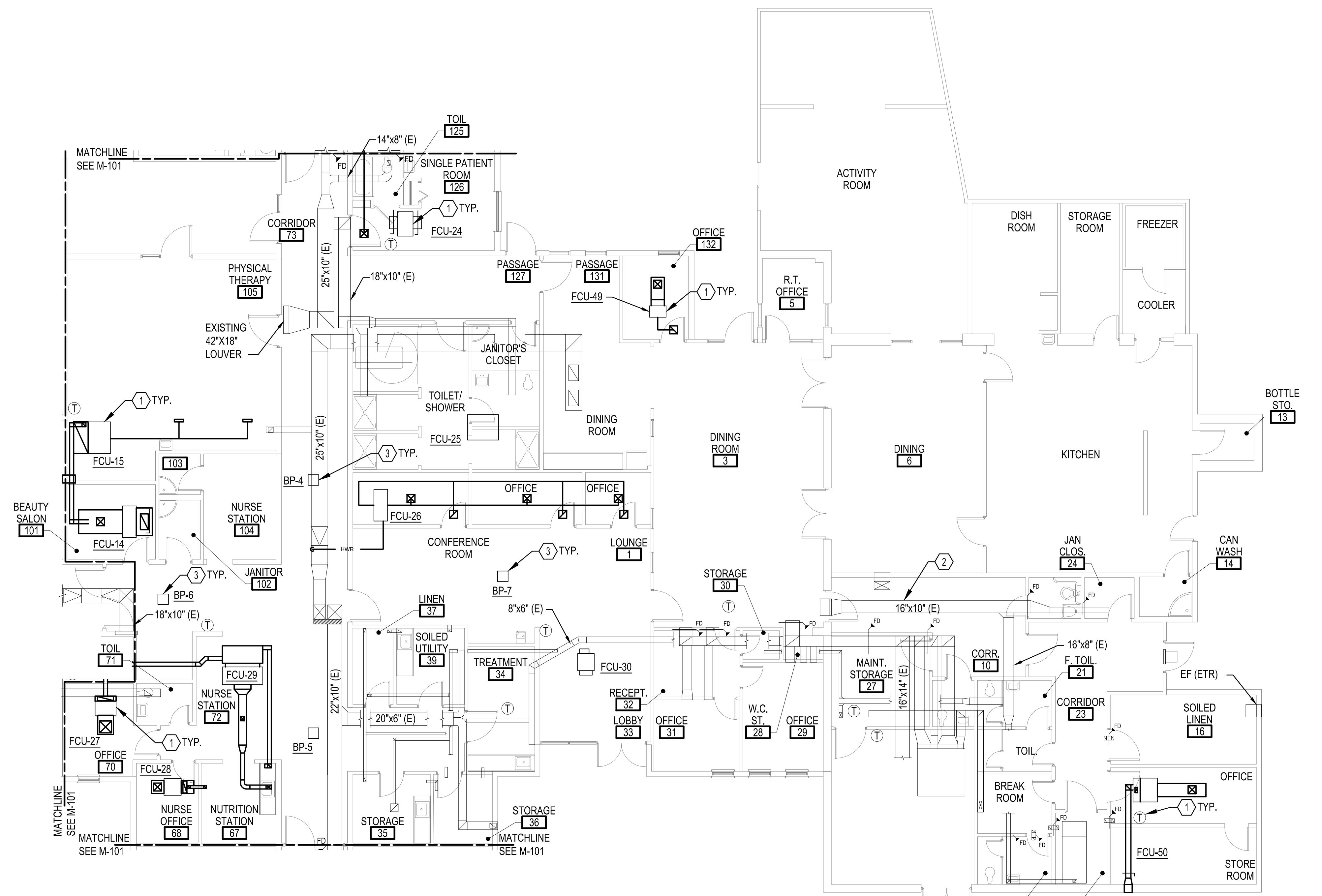
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(A2) PARTIAL FLOOR PLAN - AREA C - NEW WORK

SCALE: 1/8" = 1'-0"



0' 5' 10' 20' 30'



SHEET KEYNOTES

1. PROVIDE NEW FAN COIL UNIT COMPLETE INCLUDING FLEXIBLE PIPING CONNECTIONS, THERMOSTATIC CONTROLS, AND ALL MANUFACTURER RECOMMENDED VALVES. FOR MORE INFORMATION ON INSTALLATION, REFER TO MANUFACTURERS IOM AND SEE SHEET M-501. PROVIDE UNIT WITH DRAIN PAN.
2. DUCTWORK IS EXISTING TO REMAIN.
3. PROVIDE GPS IDF-2 BIPOLAR IONIZATION FAN IN CEILING. FOR MORE INFORMATION, SEE FAN SCHEDULE ON SHEET M-601.



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RIVERSIDE HEALTH SYSTEM



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RIVERSIDE HEALTH SYSTEMS SALUDA CC HVAC UPDATES	
672 GLOUCESTER ROAD SALUDA, VA 23149	

PARTIAL FLOOR PLAN - AREA C - NEW WORK

672 GLOUCESTER ROAD

Project #:	23061
Date:	12/15/2023
Project Manager:	RCP
Designed By:	CKH
Drawn By:	DMG
Checked By:	PCS

M-102
SHEET 8 OF 21

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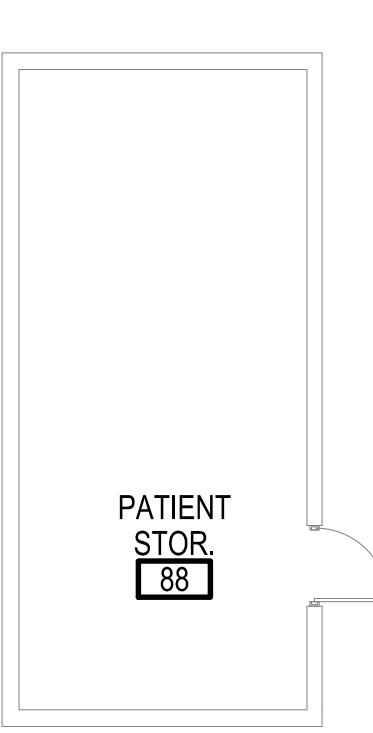
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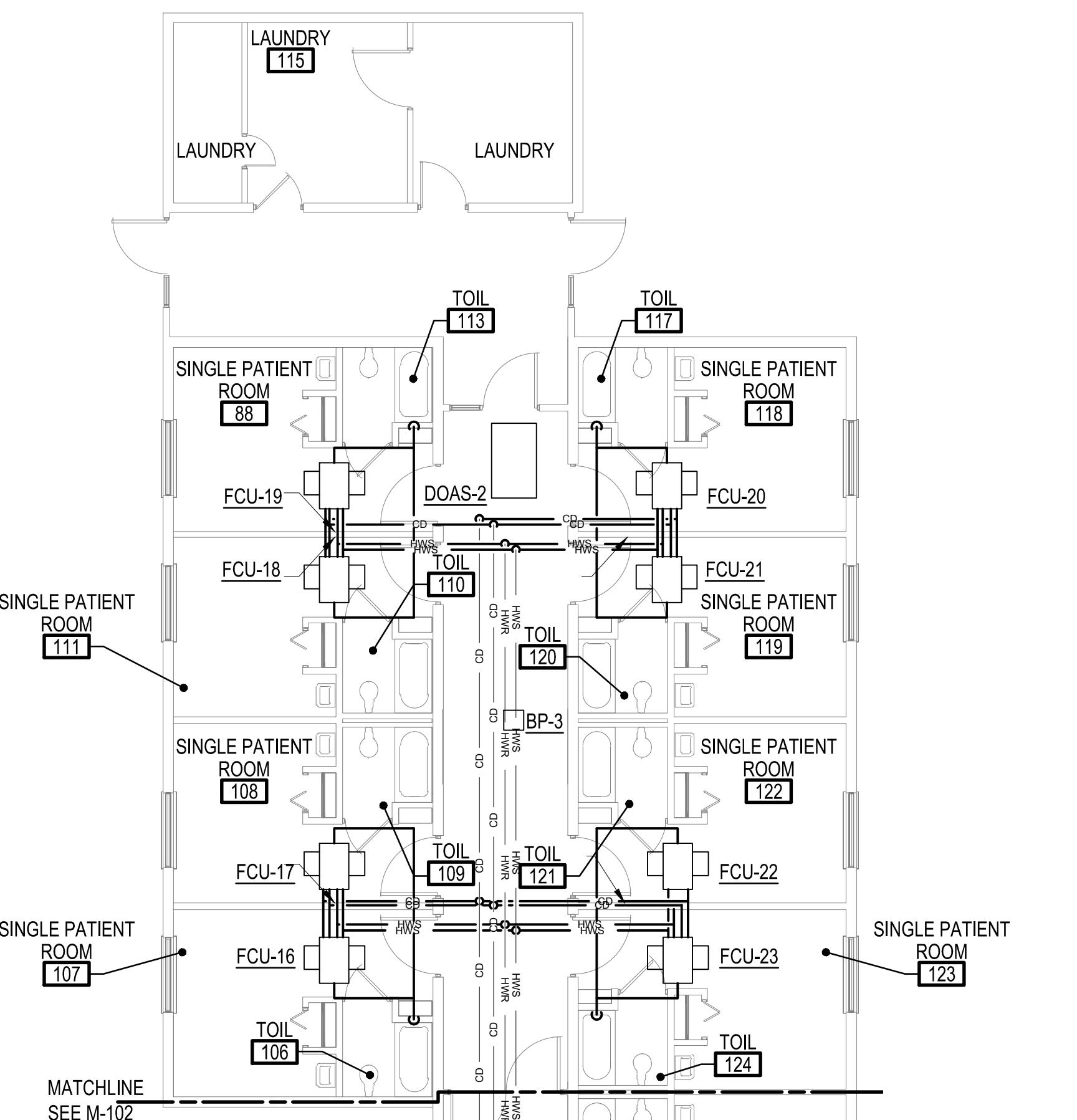
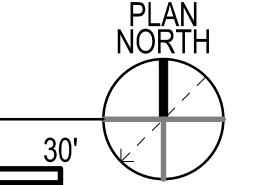


PARTIAL FLOOR PLAN - AREA A - NEW WORK

D1

SCALE: 1/8" = 1'-0"

0' 5' 10' 20' 30'

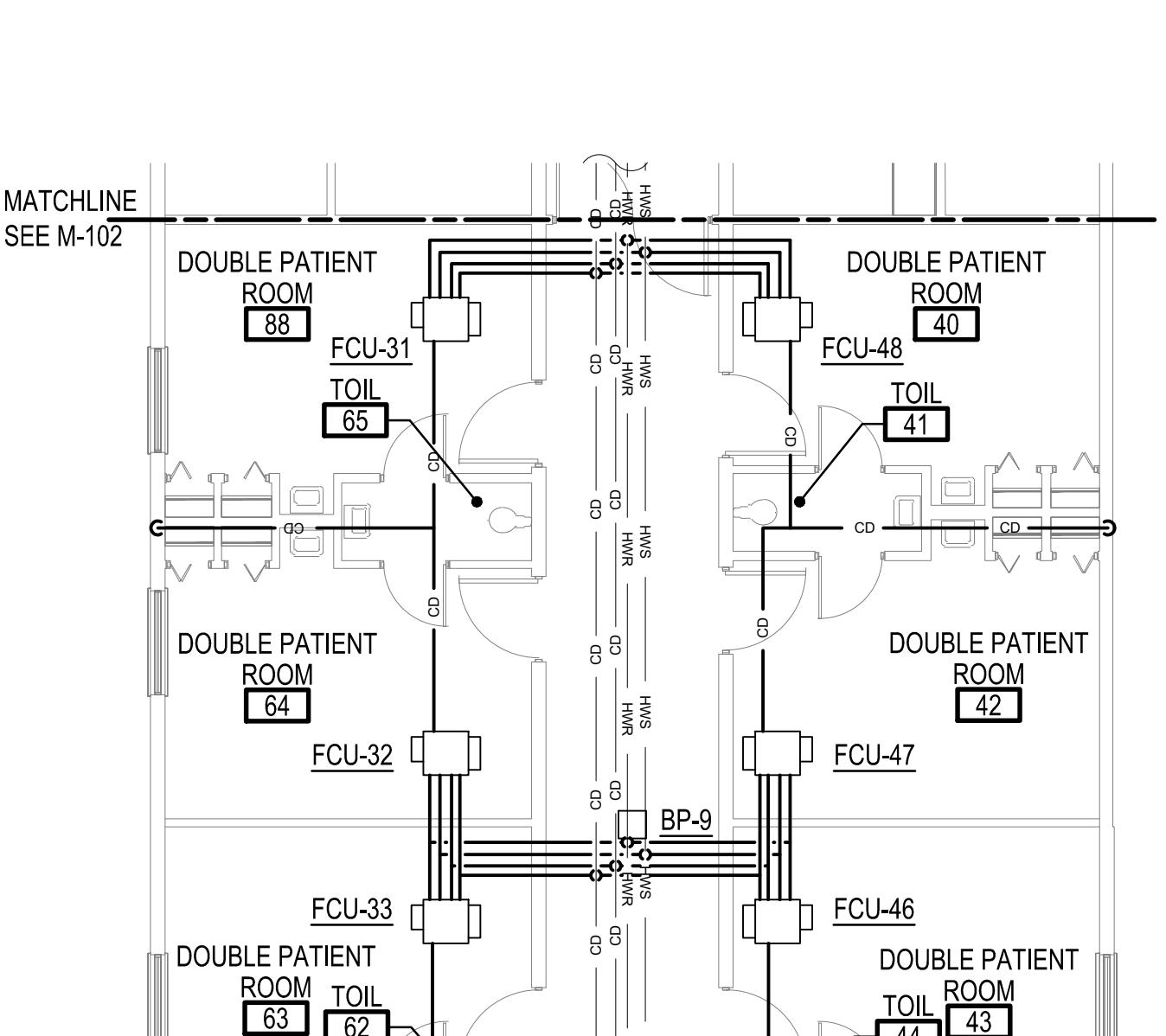
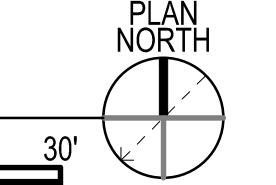


PARTIAL FLOOR PLAN - AREA B - NEW WORK

A2

SCALE: 1/8" = 1'-0"

0' 5' 10' 20' 30'



PARTIAL FLOOR PLAN - AREA D - NEW WORK

A4

SCALE: 1/8" = 1'-0"

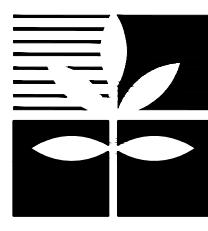
0' 5' 10' 20' 30'



SHEET KEYNOTES

1. PROVIDE NEW FAN COIL UNIT COMPLETE INCLUDING FLEXIBLE PIPING CONNECTIONS, THERMOSTATIC CONTROLS, AND ALL MANUFACTURER RECOMMENDED VALVES. FOR MORE INFORMATION ON INSTALLATION, REFER TO MANUFACTURERS IOM AND SEE SHEET M-501. PROVIDE UNIT WITH DRAIN PAN.
2. PROVIDE NEW DEDICATED OUTDOOR AIR UNIT COMPLETE INCLUDING BUT NOT LIMITED TO EQUIPMENT SUPPORTS, CONDENSATE DRAIN PIPING, AND THERMOSTATIC CONTROLS. FOR MORE INFORMATION ON INSTALLATION, REFER TO MANUFACTURER IOM. PROVIDE UNIT WITH AUXILIARY DRAIN PAN.
3. PIPING IS EXISTING TO REMAIN.
4. PROVIDE NEW CHILLED WATER SUPPLY AND RETURN, AND HOT WATER SUPPLY AND RETURN PIPING WITH FLEXIBLE CONNECTIONS TO HVAC EQUIPMENT. PROVIDE VALVES AS REQUIRED FOR A COMPLETE INSTALLATION.

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RIVERSIDE HEALTH SYSTEMS
SALUDA, VA 23149
672 GLOUCESTER ROAD
PARTIAL FLOOR PLAN - AREAS A, B, AND D - NEW WORK

672 GLOUCESTER ROAD

Saluda, VA 23149

Project #:

23061

Date:

12/15/2023

Project Manager:

RCP

Designed By:

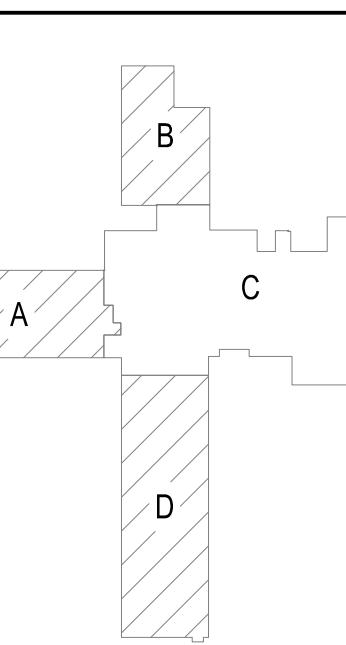
CKH

Drawn By:

DMG

Checked By:

PCS



M-103

SHEET 9 OF 21

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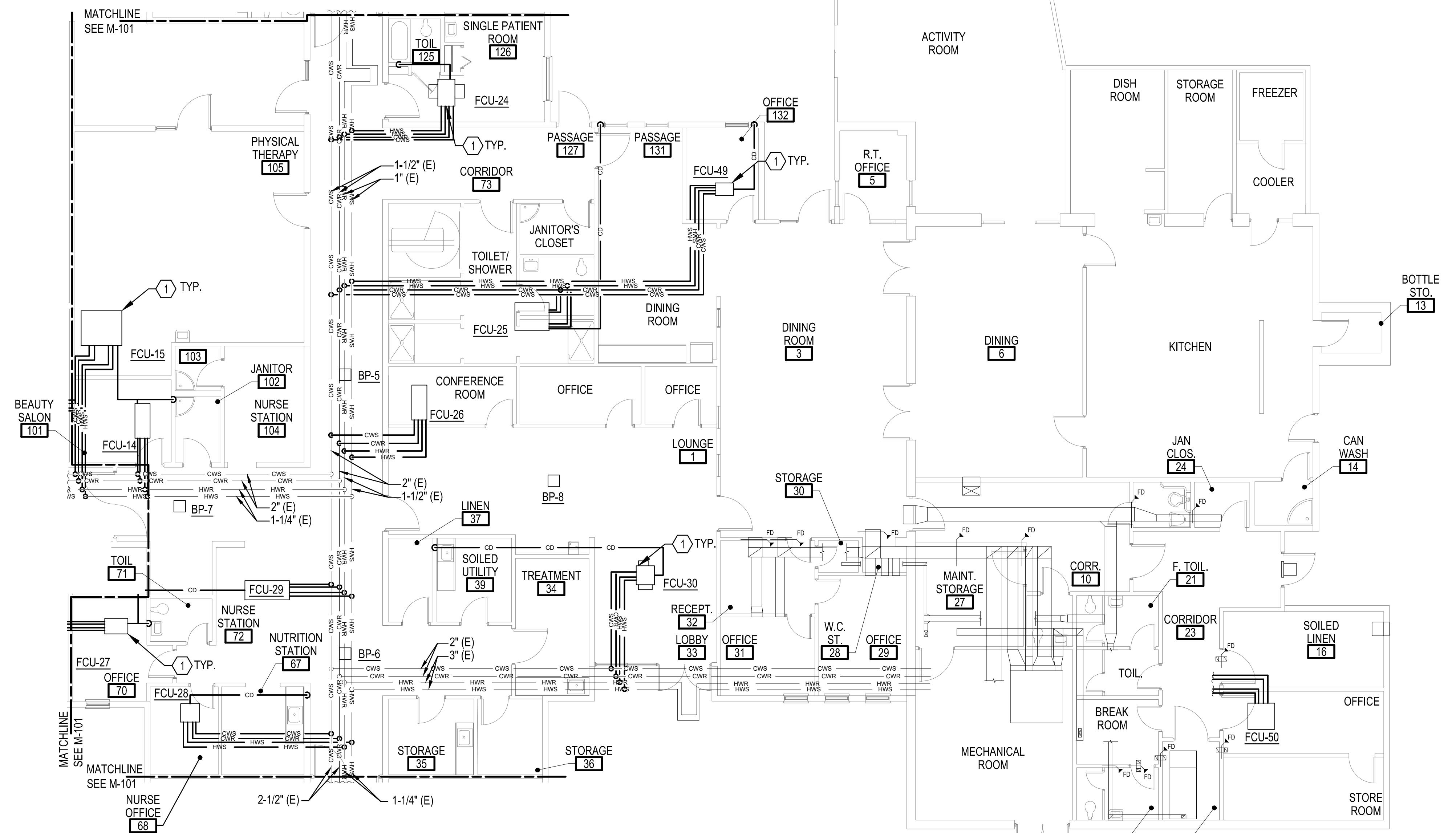
C

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(A2) PARTIAL FLOOR PIPING PLAN - AREA C - NEW WORK

SCALE: 1/8" = 1'-0"



0' 5' 10' 20' 30'



SHEET KEYNOTES

1. PROVIDE NEW FAN COIL UNIT COMPLETE INCLUDING FLEXIBLE PIPING CONNECTIONS, THERMOSTATIC CONTROLS, AND ALL MANUFACTURER RECOMMENDED VALVES. FOR MORE INFORMATION ON INSTALLATION, REFER TO MANUFACTURERS IOM AND SEE SHEET M-501. PROVIDE UNIT WITH DRAIN PAN.
2. PIPING IS EXISTING TO REMAIN.
3. PROVIDE NEW CHILLED WATER SUPPLY AND RETURN, AND HOT WATER SUPPLY AND RETURN PIPING WITH FLEXIBLE CONNECTIONS TO HVAC EQUIPMENT. PROVIDE VALVES AS REQUIRED FOR A COMPLETE INSTALLATION.



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Revisions

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**RIVERSIDE HEALTH SYSTEMS
SALUDA CC HVAC UPGRADES**

SALUDA, VA 23149

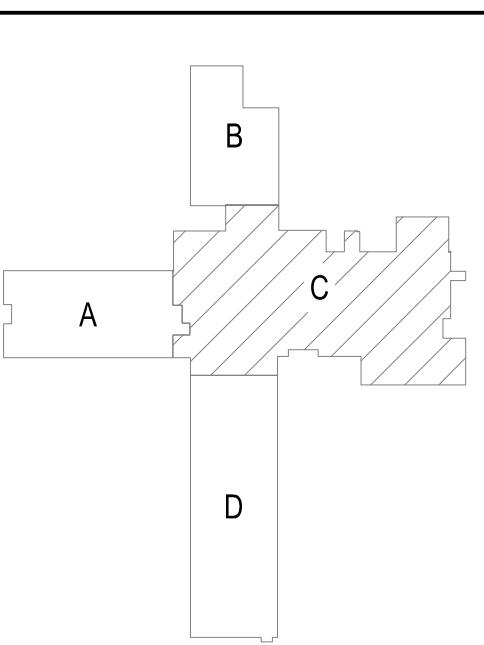
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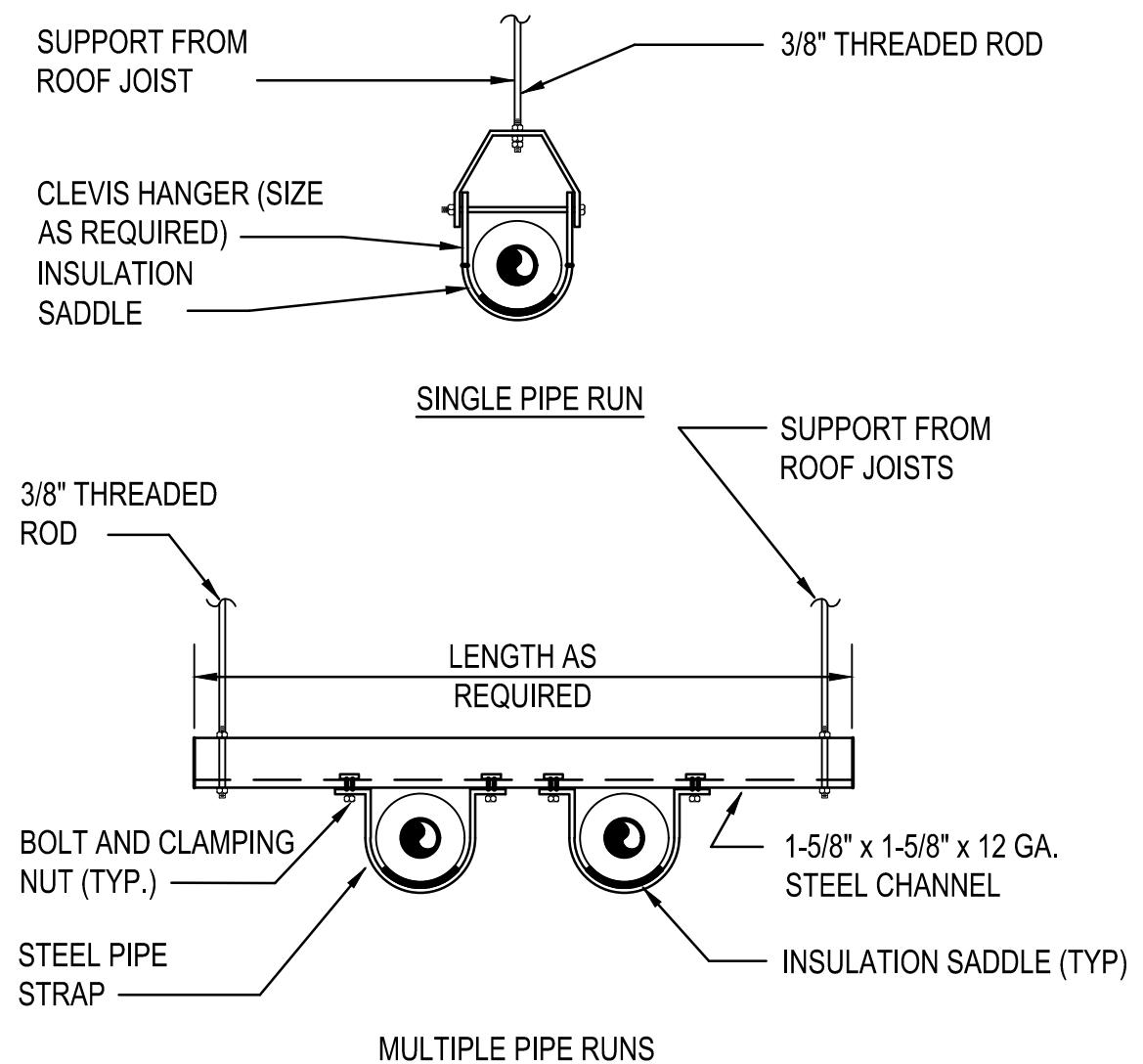
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SHEET 10 OF 21



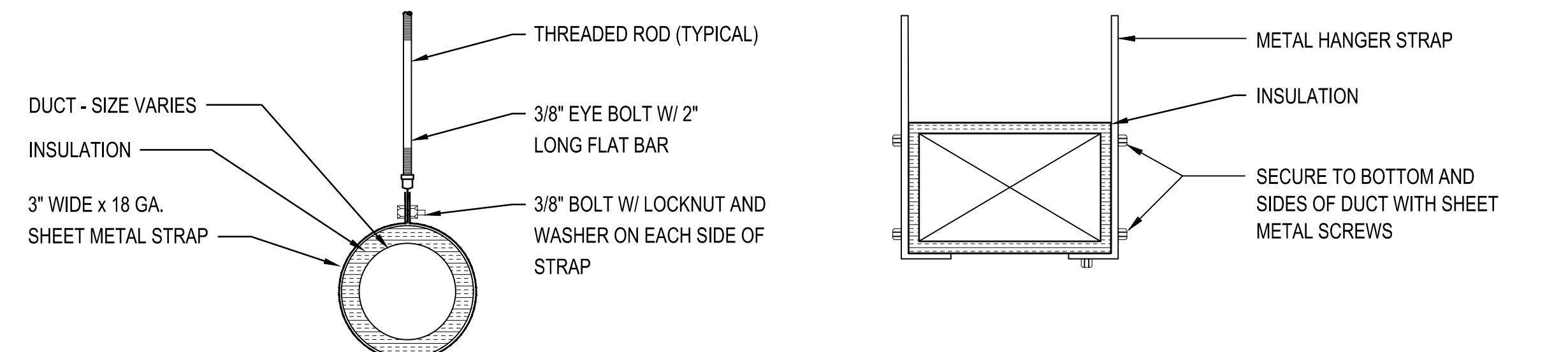
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(E2) TYPICAL PIPE SUPPORT DETAILS

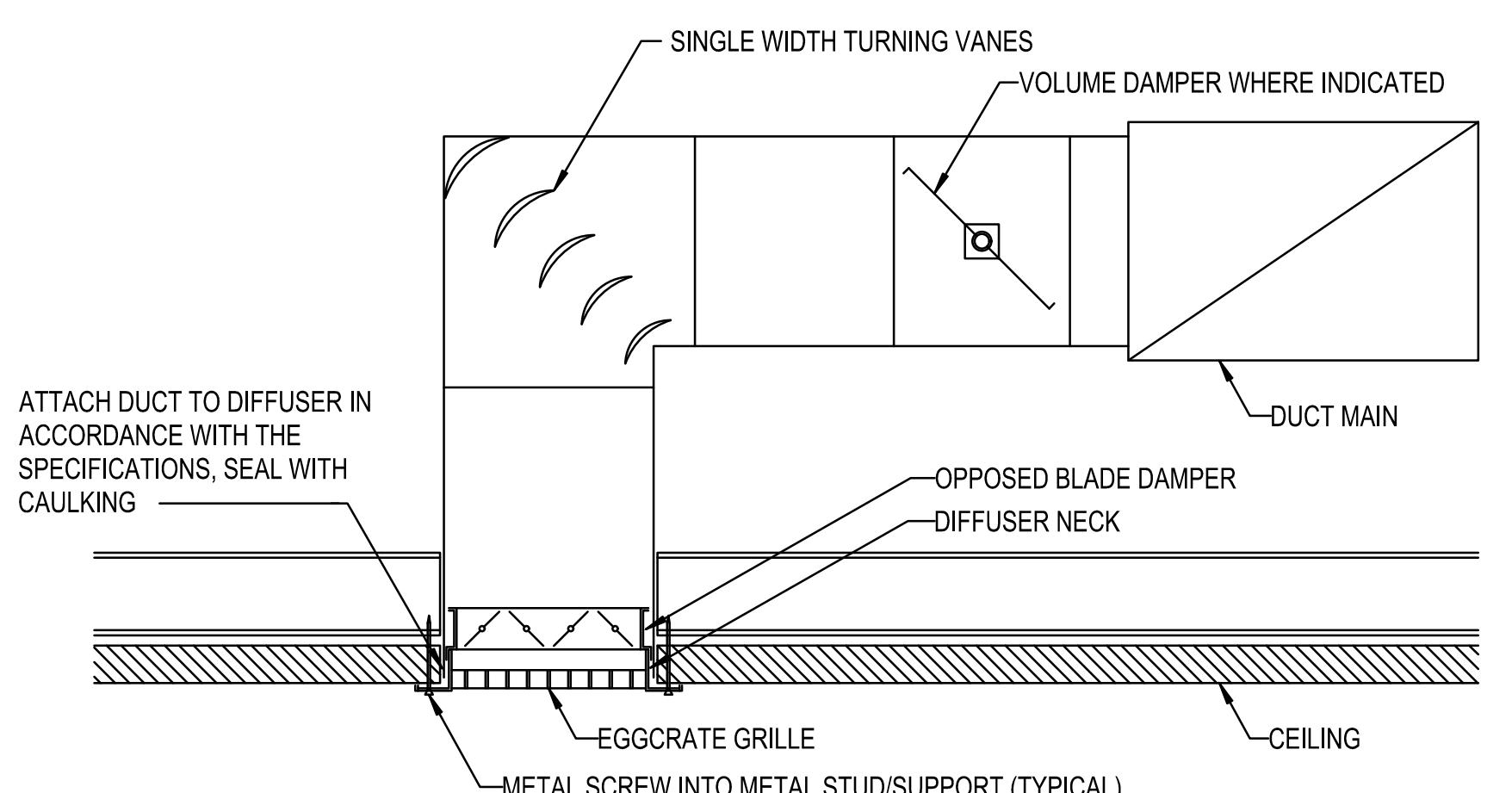
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NOTE: FOR ANGLE SIZE AND HANGER STRAP GAUGE, SEE SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS.

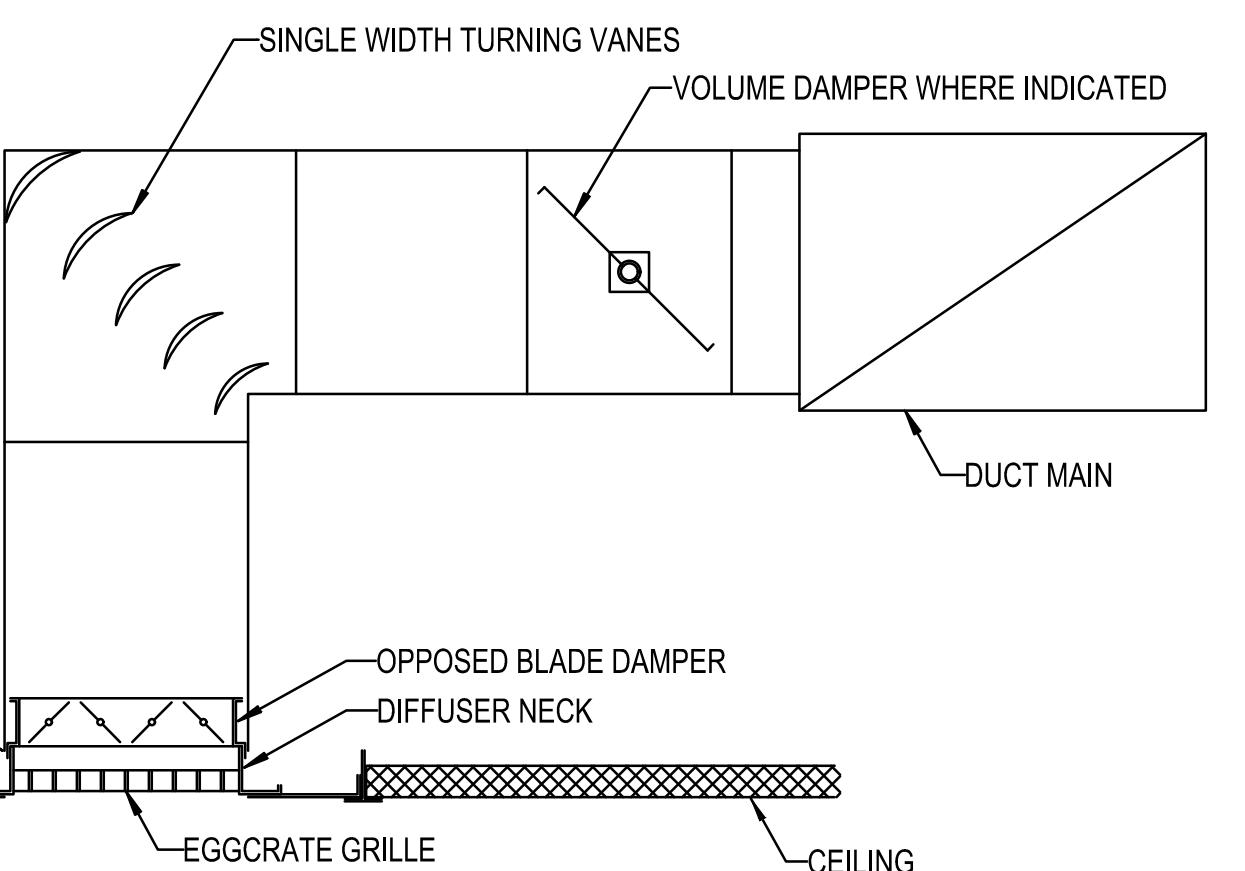
(E4) TYPICAL DUCT SUPPORT DETAILS

NOT TO SCALE



(A2) TYPICAL RETURN/EXHAUST GRILLE CONNECTION DETAIL

NOT TO SCALE



(A4) TYPICAL SUPPLY DIFFUSER CONNECTION DETAIL

NOT TO SCALE

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VG
VANSANT & GUSLER, INC.
CONSULTING ENGINEERS
6330 NEWTON ROAD, SUITE 400, NORFOLK, VA 23502
TELEPHONE: (757) 461-6757



RIVERSIDE HEALTH SYSTEM

PRELIMINARY PROGRESS PRINT
12/15/2023
50%
SUBMITTAL
FOR CONSTRUCTION
SEAL

Revisions	Date
No. _____	_____

RIVERSIDE HEALTH SYSTEMS
SALUDA, VA 23149
672 GLOUCESTER ROAD
MECHANICAL DETAILS

Project #: 23061
Date: 12/15/2023

Project Manager: RCP
Designed By: CKH
Drawn By: DMG
Checked By: PCS

M-501

SHEET 11 OF 21

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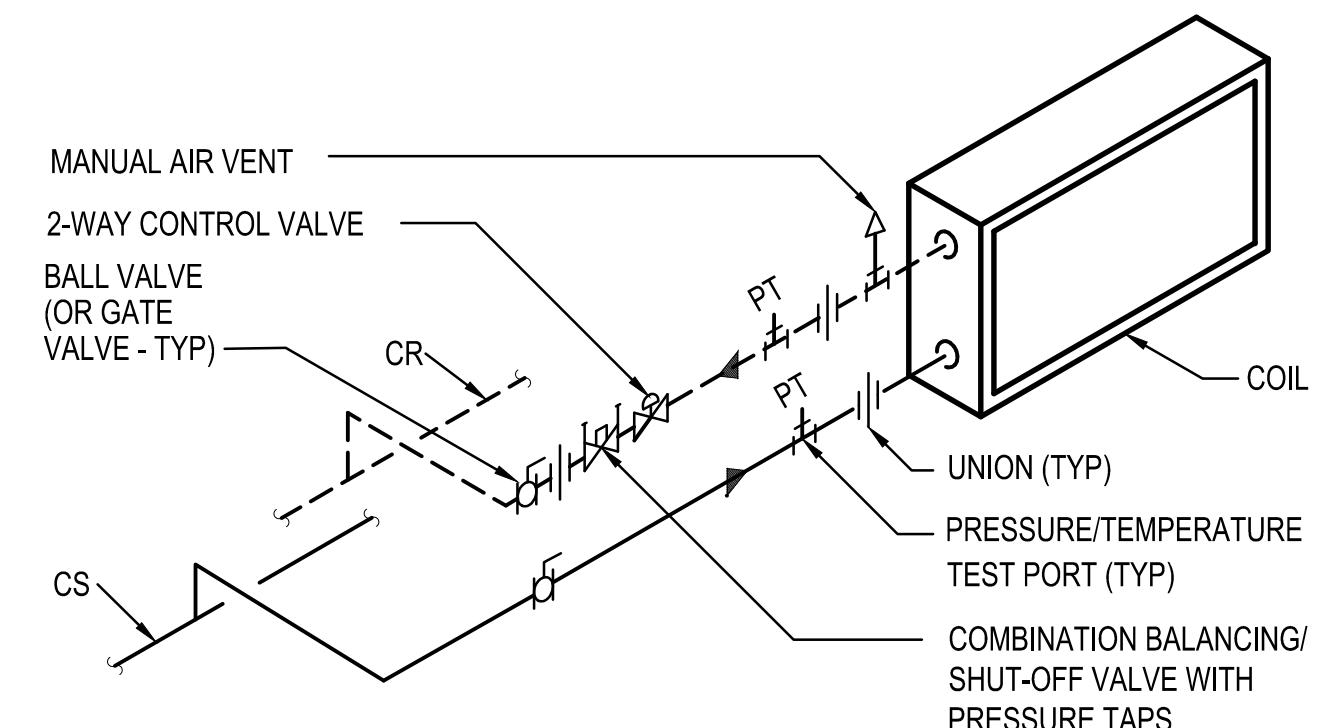
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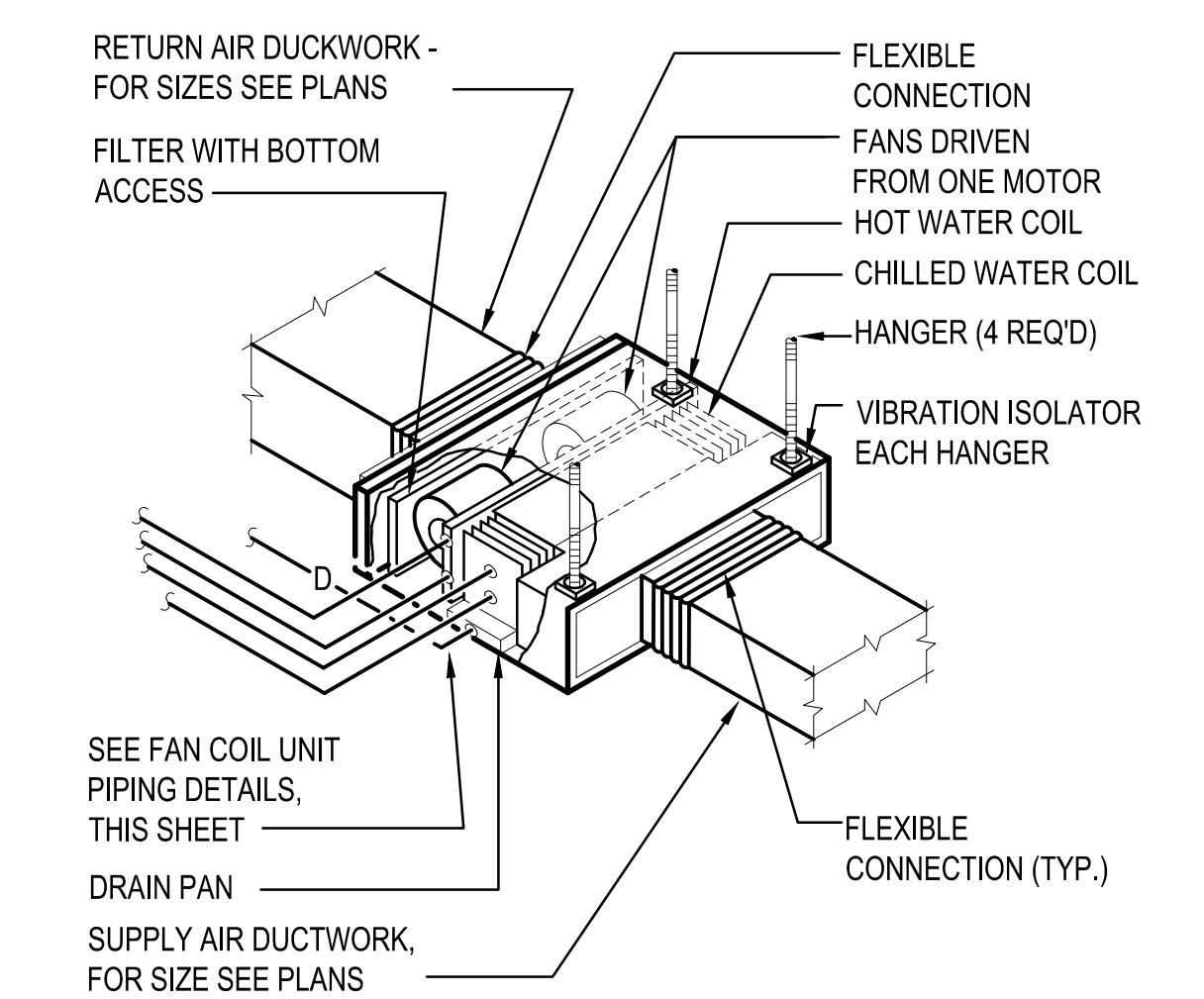
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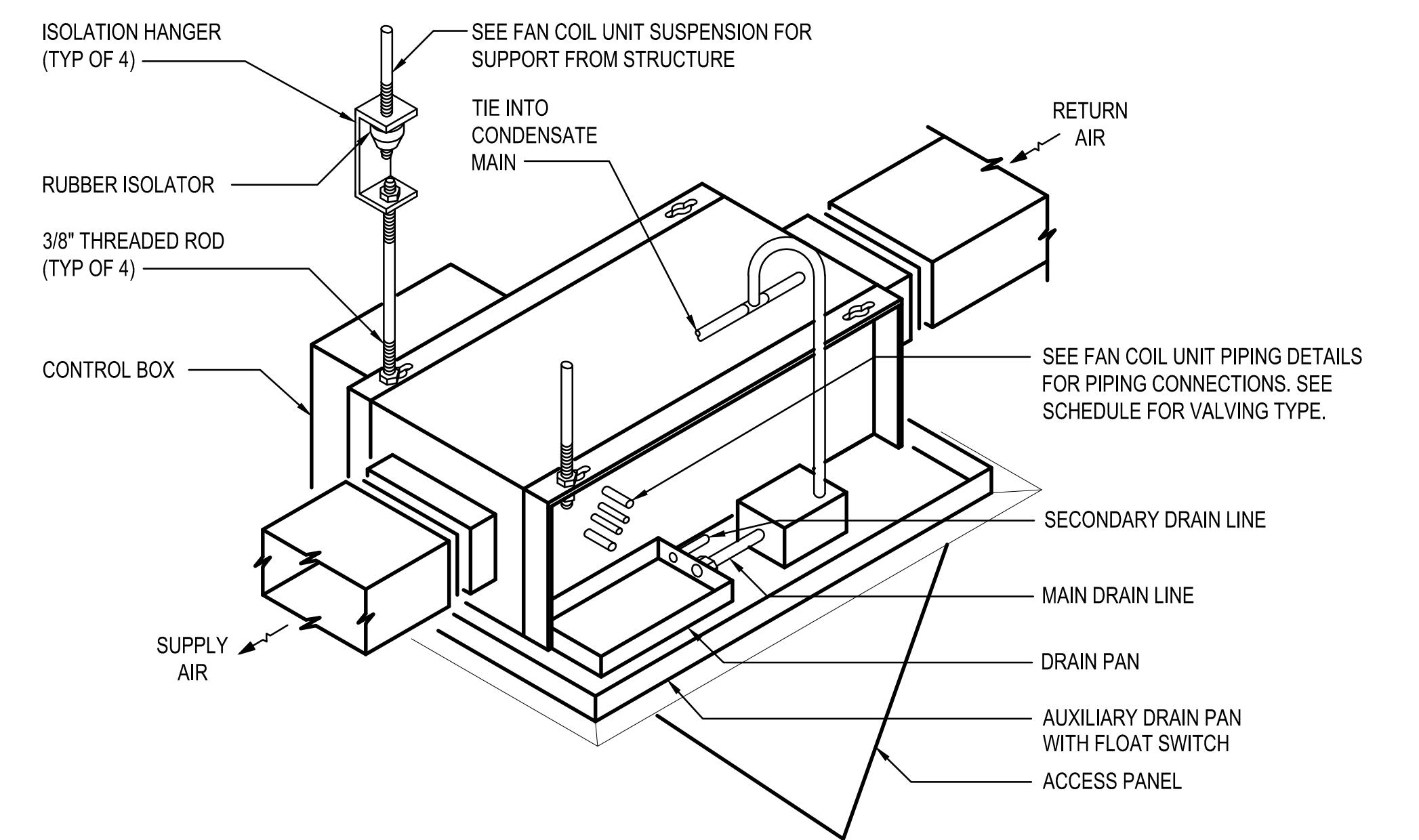
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(D3) FCU COOLING COIL PIPING DETAIL
NOT TO SCALE



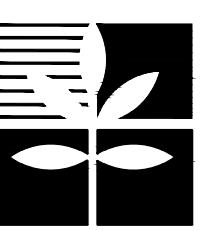
(D5) HORIZONTAL CONCEALED FCU DETAIL - 4 PIPE
NOT TO SCALE



(B4) CONCEALED FAN COIL UNIT INSTALLATION DETAIL
NOT TO SCALE



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RIVERSIDE HEALTH SYSTEM



Revisions

Description

No.

SALUDA, VA 23149

RIVERSIDE HEALTH SYSTEMS
SALUDA CC HVAC UPDATES
MECHANICAL DETAILS

672 GLOUCESTER ROAD

Project #:	23061
Date:	12/15/2023

Project Manager:	RCP
Designed By:	CKH
Drawn By:	DMG
Checked By:	PCS

M-502

SHEET 12 OF 21

DEDICATED OUTDOOR AIR UNIT SCHEDULE

TAG NO.	SUPPLY FAN DATA						HOT WATER HEATING COIL DATA								CHILLED WATER COOLING COIL DATA								REHEAT HOT WATER COIL DATA										
	C.F.M. (MAX./MIN.)	O.A. C.F.M.	E.S.P. (IN. WG.)	T.S.P. (IN. WG.)	FAN TYPE	ELECTRICAL DATA		TOTAL CAPACITY M.B.H.	E.D.B. (°F)	L.D.B. (°F)	E.W.T. (°F)	G.P.M.	L.W.T. (°F)	MAX. A.P.D. (IN. WG.)	MAX. W.P.D. (FT. WG.)	TOTAL CAPACITY M.B.H.	E.D.B. (°F)	E.W.B. (°F)	L.D.B. (°F)	L.W.B. (°F)	E.W.T. (°F)	L.W.T. (°F)	G.P.M.	MAX. A.P.D. (IN. WG.)	MAX. W.P.D. (FT. WG.)	TOTAL CAPACITY M.B.H.	E.D.B. (°F)	L.D.B. (°F)	E.W.T. (°F)	G.P.M.	L.W.T. (°F)	MAX. A.P.D. (IN. WG.)	MAX. W.P.D. (FT. WG.)
						VOLTS	PHASE																										
DOAS-1	920	920	0.50	2.00	PLENUM	208	1	31.2	53.5	85.1	200	3.22	180	0.02	3.65	42.2	80.9	69.3	54.9	54.7	45	55	8.40	0.30	2.39	33.3	55.0	88.7	200	3.44	180	0.02	4.11
DOAS-2	810	810	0.50	2.00	PLENUM	208	1	26.7	54.4	85.1	200	2.76	180	0.01	4.48	36.3	80.5	69.0	54.9	54.7	45	55	7.23	0.20	4.14	30.7	55.0	90.3	200	3.17	180	0.01	5.84
DOAS-3	1270	1270	0.50	2.00	PLENUM	208	1	46.1	51.2	85.1	200	4.76	180	0.03	7.53	61.0	81.7	70.0	54.9	54.8	45	55	12.16	0.50	4.82	49.9	55.0	91.6	200	5.15	180	0.03	8.73

NOTES:

1. LEAVING AIR TEMPERATURE IS TO BE PROVIDED AT THE UNIT DISCHARGE, TOTAL & SENSIBLE CAPACITIES ARE "NET" VALUES TO BE PROVIDED DOWNSTREAM OF THE SUPPLY AIR FAN.
- [2. PROVIDE WITH MOTOR STARTER(S) SIZED IN ACCORDANCE WITH NEMA RECOMMENDATIONS.]
- [2. PROVIDE WITH INVERTER DUTY RATED MOTOR(S) AND VARIABLE FREQUENCY DRIVE(S)]
3. PROVIDE WITH THE FOLLOWING SECTIONS: [MIXING BOX], [ECONOMIZER], [ANGLED FILTER], [FLAT FILTER], [MEDIUM ACCESS], [PREHEAT COIL], [MEDIUM ACCESS], [COOLING COIL], [MEDIUM ACCESS], [REHEAT COIL], [MEDIUM ACCESS], [FAN], [DIFFUSER], [FINAL FILTER]
4. [PROVIDE A SEPARATE 120 VOLT/1 PHASE ELECTRICAL CONNECTION FOR FACTORY MOUNTED SERVICE MODULE FOR SERVICE LIGHT AND RECEPTACLE.]

GRILLE, REGISTER & DIFFUSER SCHEDULE							
TAG	TYPE	FACE DIMENSION	SERVICE	C.F.M. RANGE	NECK SIZE	MAX. P.D.	MANUFACTURER/ MODEL NO.
A	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	24"X24"	SUPPLY	0-115	6"ø	0.08	PRICE ASCD
B	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	24"X24"	SUPPLY	120-225	8"ø	0.08	PRICE ASCD
C	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	24"X24"	SUPPLY	230-400	10"ø	0.08	PRICE ASCD
D	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	24"X24"	SUPPLY	405-625	12"ø	0.08	PRICE ASCD
F	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	12"x12"	SUPPLY	0-115	6"ø	0.08	PRICE ASCD
G	LOUVERED FACE ADJUSTABLE LAY-IN CEILING DIFFUSER	12"x12"	SUPPLY	120-225	8"ø	0.08	PRICE ASCD
L	CEILING LAY-IN RETURN GRILLE 45° DEFLECTION, 3/4" SPACING	24"x24"	RETURN	0-420	12"x12"	0.05	PRICE 530
M	CEILING LAY-IN RETURN GRILLE 45° DEFLECTION, 3/4" SPACING	24"x24"	RETURN	425-730	20"x20"	0.05	PRICE 530
Q	CEILING LAY-IN RETURN GRILLE 45° DEFLECTION, 3/4" SPACING	12"x12"	EXHAUST	0-225	12"x12"	0.05	PRICE 530

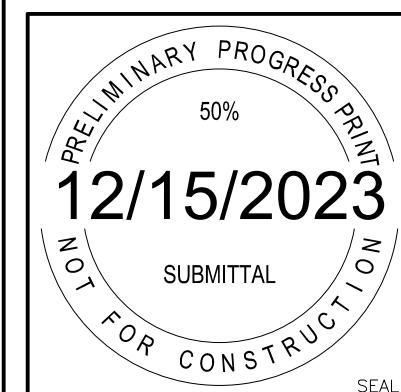
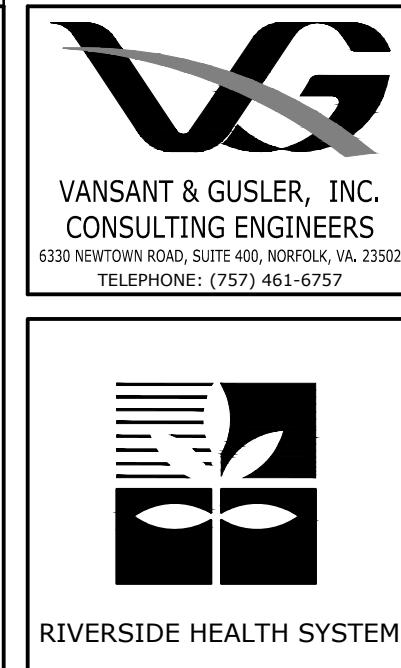
THE FOLLOWING NOTES ARE TYPICAL UNLESS OTHERWISE NOTED:

1. SELECTIONS BASED ON PRICE
2. PROVIDE ALUMINUM DIFFUSERS AND REGISTERS WITH OPPOSED BLADE VOLUME DAMPERS, BAKED STANDARD WHITE ENAMEL FINISH (INCLUDING HEAD OF SCREWS), MAXIMUM NC=25 AT HIGHEST CFM AND PROVIDE SQUARE TO ROUND TRANSITION AS REQUIRED.
3. PROVIDE 4-WAY PATTERN CEILING DIFFUSERS, UNLESS OTHERWISE NOTED ON PLANS OR SCHEDULE.
4. MAXIMUM PRESSURE DROP SHALL INCLUDE VOLUME DAMPER WHERE DAMPER IS PROVIDED.

HVAC DESIGN CONDITIONS						
CONDITIONED AREA	indoors		outdoors			
	summer		winter	summer		
	°F D.B.	% R.H.	°F D.B.	°F W.B.	°F D.B.	
RHS SALUDA RESIDENT AREAS	72.0	50	70.0	95.1	75.7	18.5

NOTES:

1. OUTDOOR CONDITIONS ARE FOR SALUDA, VIRGINIA AT 99.6% HEATING AND 0.4% COOLING.
2. INDOOR DESIGN TEMPERATURE HAS A +/- 2°F DEADBAND AND A +/- 10% RH DEADBAND.



Revisions	Date
Description	
No.	

RIVERSIDE HEALTH SYSTEMS SALUDA CC HVAC UPDATES	MECHANICAL SCHEDULES
672 GLOUCESTER ROAD	
Project #: 23061	
Date: 12/15/2023	

Project Manager: RCP
Designed By: CKH
Drawn By: DMC
Checked By: PCS

M-601
SHEET 13 OF 21



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CONSULTING ENGINEERS
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RIVERSIDE HEALTH SYSTEM



Revisions	Date
No.	

RIVERSIDE HEALTH SYSTEMS SALUDA CC HVAC UPGRADES		SALUDA, VA 23149
MECHANICAL SCHEDULES		672 GLOUCESTER ROAD

Project #: 23061
Date: 12/15/2023

Project Manager: RCP
Designed By: CKH
Drawn By: DMG
Checked By: PCS

M-602
SHEET 14 OF 21

4-PIPE FAN COIL UNIT SCHEDULE

TAG NO.	APPROX. C.F.M. (U.O.N.)	O.A. C.F.M.	EXTERNAL STATIC PRESSURE (IN. WG.)	CHILLED WATER COOLING DATA			HOT WATER HEATING COIL			FAN MOTOR H.P.
				MIN. TOTAL CAPACITY (B.T.U./HR)	MIN. SENS. CAPACITY (B.T.U./HR)	G.P.M.	MAX. PD (FT. WG.)	MIN. CAPACITY (B.T.U./HR)	G.P.M.	
FCU-1	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-2	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-3	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-4	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-5	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-6	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-7	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-8	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-9	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-10	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-11	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-12	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-13	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-14	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-15	555	25	0.10	17,460	13,360	3.6	2.57	28,710	2.9	0.55
FCU-16	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-17	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-18	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-19	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-20	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-21	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-22	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-23	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-24	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-25	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-26	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-27	210	10	0.10	6,406	4,916	1.3	3.11	12,334	1.3	0.44
FCU-28	240	15	0.10	7,649	5,859	1.6	1.71	13,531	1.4	0.08
FCU-29	1000	100	0.25	27,164	21,234	5.5	1.63	60,816	6.2	4.12
FCU-30	635	50	0.25	16,850	13,180	3.4	3.80	29,440	3.0	0.57
FCU-31	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-32	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-33	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-34	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-35	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-36	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-37	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-38	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-39	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-40	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-41	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-42	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-43	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-44	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-45	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-46	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-47	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-48	400	20	0.10	12,414	9,524	2.5	2.17	20,776	2.1	0.22
FCU-49	280	10	0.10	8,869	3,789	1.8	2.34	15,831	1.6	0.84
FCU-50	280	10	0.10	8,869	3,789	1.8	2.34	15,831	1.6	0.84

NOTES:

1. UNITS SHALL BE THE HORIZ. CONCEALED TYPE WITH DIRECT DRIVE FAN(S), HINGED BOTTOM ACCESS, 3 ROW COOLING, AND 1 ROW HEATING COIL CONFIGURATION.
2. PROVIDE AUXILIARY DRAIN PAN UNDER UNIT VALVES.
3. UNIT COOLING CAPACITIES BASED ON 45°F ENT. WATER TEMP., 80°F DB/67°F WB ENT. AIR TEMP., WET COIL, AND MEDIUM OR LOW FAN SPEED OPERATION.
4. UNIT HEATING CAPACITY BASED ON 200°F ENT. WATER TEMP., 70°F ENT. AIR TEMP., AND MEDIUM OR LOW FAN SPEED OPERATION.
5. 120 VOLTS, SINGLE PHASE POWER REQUIREMENT. PROVIDE WITH DOOR INTERLOCKING DISCONNECT SWITCH AND SILENT SOLID STATE RELAY.
6. DESIGN BASED ON ENVIRO-TECH.

Project Manager: RCP
Designed By: CKH
Drawn By: DMG
Checked By: PCS

M-602

SHEET 14 OF 21

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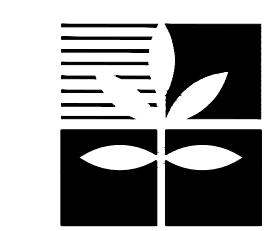
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RIVERSIDE HEALTH SYSTEM



Revisions

No. _____ Description _____ Date _____

RIVERSIDE HEALTH SYSTEMS
SALUDA CC HVAC UPDATES
672 GLOUCESTER ROAD
SALUDA, VA 23149

MECHANICAL FLOW DIAGRAMS

Project #:	23061
Date:	12/15/2023

Project Manager:	RCP
Designed By:	CKH
Drawn By:	DMG
Checked By:	PCS

M-701

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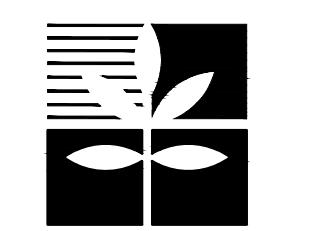
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RIVERSIDE HEALTH SYSTEM



SEAL

Revisions

No. _____ Description _____ Date _____

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