

MECHANICAL GENERAL NOTES

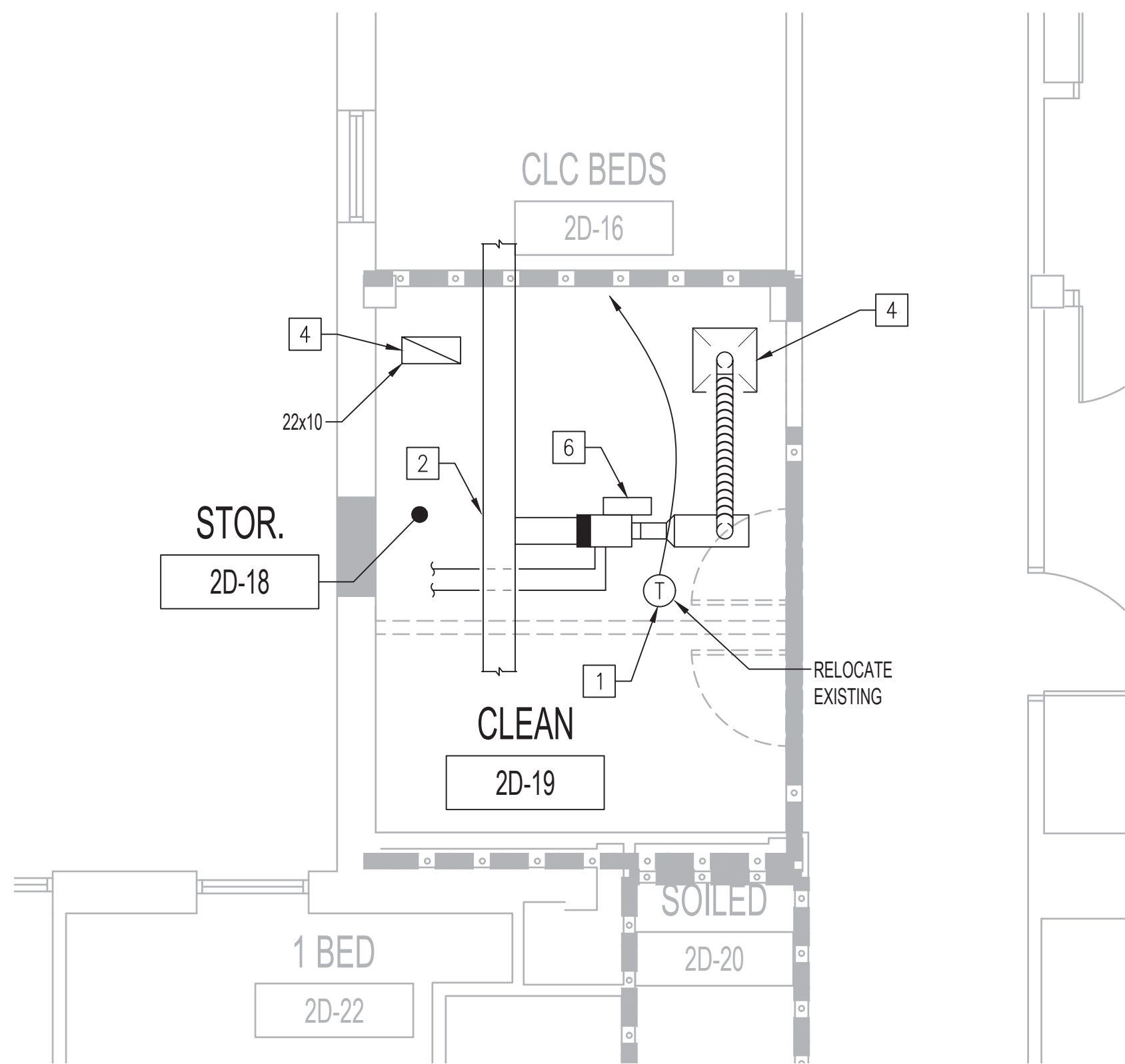
- A. INSTALLING HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING HVAC EQUIPMENT SYSTEM COMPONENTS AND CONTROLS TO BE USED AS BACK UP FOR NEW SPLIT SYSTEM AIR CONDITIONING FROM DAMAGE WITHIN NEW TR SPACE. EXISTING SHALL REMAIN OPERATIONAL UPON COMPLETION OF CONTRACT.
- B. CONTRACTOR RESPONSIBLE FOR REMOVING AND REINSTALLATION OF CEILING TILES AS REQUIRED TO FACILITATE INSTALLATION OF REFRIGERANT AND CONDENSATE DRAIN PIPING.

MECHANICAL KEY NOTES - NEW WORK

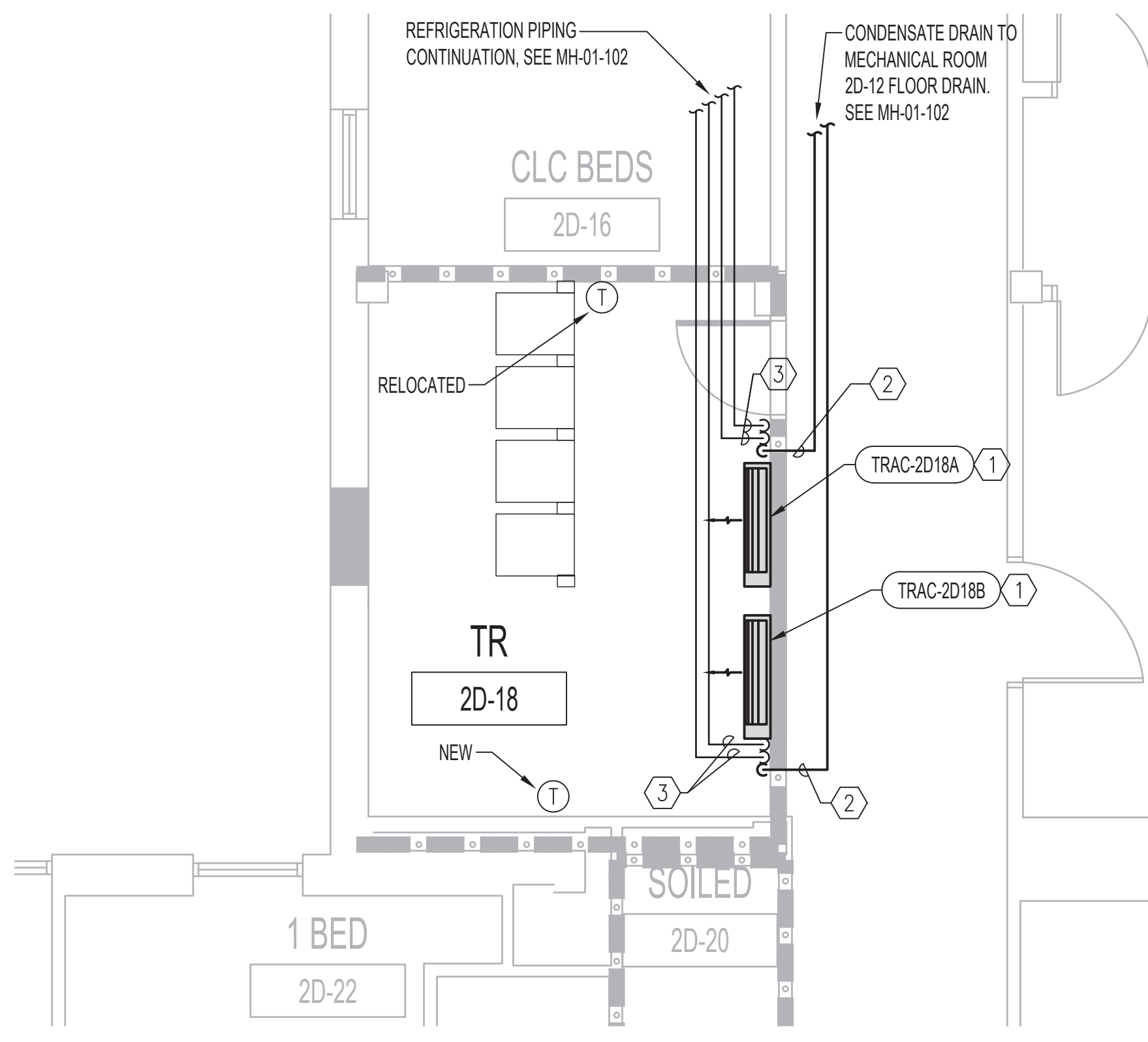
1. WALL MOUNTED VRF DUCT FREE DX SPLIT SYSTEMS INDOOR UNIT, TELECOMMUNICATION ROOM AIR CONDITIONING UNIT (TRAC), COORDINATE ALL LOCATIONS WITH NEW AND EXISTING PIPING, ELECTRIC PANELS ETC. FOR CODE REQUIRED CLEARANCE AND EQUIPMENT ACCESS PRIOR TO FINAL LOCATION.
2. INSULATED COPPER CONDENSATE DRAIN LINE FROM NEW WALL MOUNTED CONDENSATE PUMPS BELOW AC UNITS TO NEAREST INDIRECT WASTE CONNECTION. FOR LOCATION AND PIPING ROUTING SEE FULL FLOOR PLANS. ( IN MULTIPLE SYSTEM INSTALLATIONS DRAIN LINES FROM EACH UNIT SHALL BE SERVED BY ONE CONDENSATE PUMP AND DRAIN LINE TO NEAREST WICP SINK OR FLOOR DRAIN WITH A SINGLE INDEPENDENT CONNECTION FOR ALL INSTALLATION CONDENSATE LINES EXITING ROOMS.)
3. REFRIGERANT SUCTION (RS) AND LIQUID (RL) LINES FROM EVAPORATOR COIL CONNECTION TO REMOTE OUTDOOR AIR COOLED CONDENSING UNIT (ACCU) FOR LOCATION AND PIPING ROUTING SEE ROOF AND FULL FLOOR PLANS. SIZE PIPING PER MANUFACTURES RECOMMENDATION.

MECHANICAL KEY NOTES - DEMOLITION

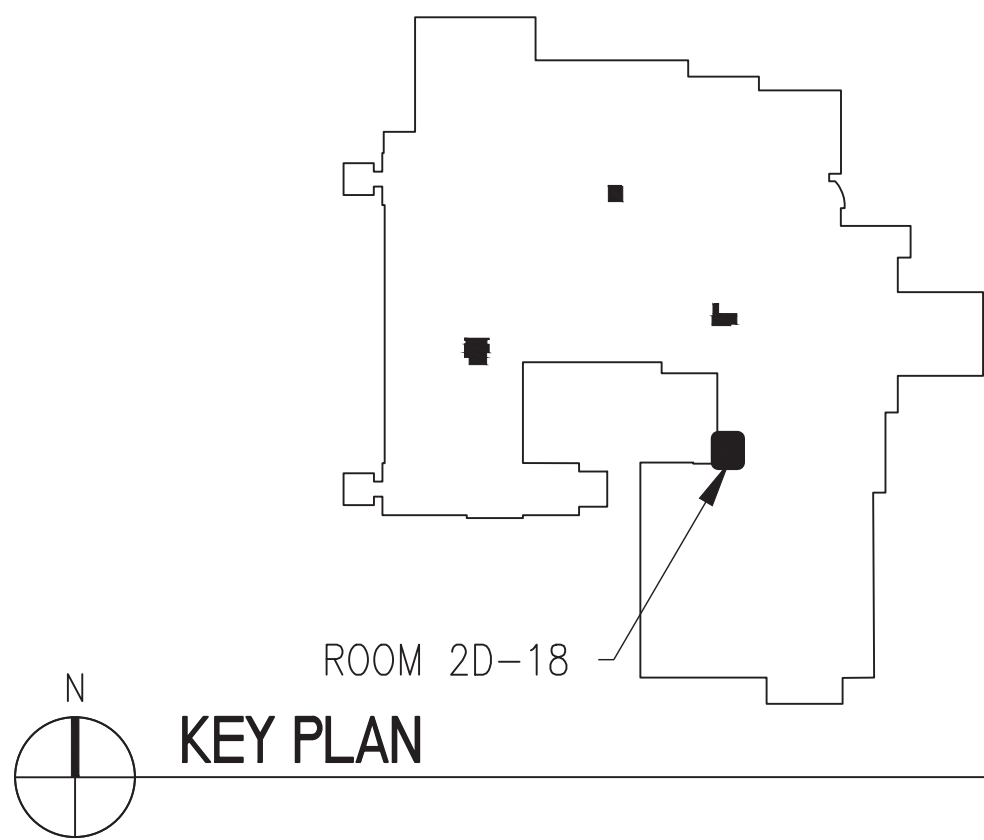
1. EXISTING THERMOSTATS AND CONTROL WIRING TO REMAIN AND ARE TO BE ADJUSTED 10 DEGREES ABOVE NEW AC EQUIPMENT SETPOINTS
2. ALL EXISTING HVAC SYSTEMS, EQUIPMENT, AIR DISTRIBUTION DUCTWORK, PLUMBING PIPING, MEDICAL GAS AND CONTROLS TO REMAIN. THIS INCLUDES ALL EQUIPMENT, PIPING, DUCTWORK AND CONTROLS SERVING AREAS OUTSIDE OF THIS ROOM .
3. EXISTING GRILLES, REGISTERS AND OPEN ENDED DUCTS TO REMAIN AS IS.
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1 ENLARGED HVAC DEMO PLAN RM 2D-18  
1/4"=1'-0"



2 ENLARGED HVAC PLAN RM 2D-18  
1/4"=1'-0"



KEY PLAN

		CONSULTANT	ARCHITECT/ENGINEER OF RECORD	STAMP	Office of Construction and Facilities Management	Drawing Title MECHANICAL - BUILDING 1-9-46 - ENLARGED PLANS - SECOND FLOOR	Phase ISSUE FOR BID	Project Title EHRM INFRASTRUCTURE UPGRADES	Project Number 437-21-205
									Building Number 01, 09, 46
								Location FARGO VA HEALTH CARE SYSTEM	Drawing Number
								Issue Date 3/18/2022	MH-01-424
								Checked DG	
								Drawn BX	
		ISSUE FOR BID Revisions:	03-18-22 Date:						

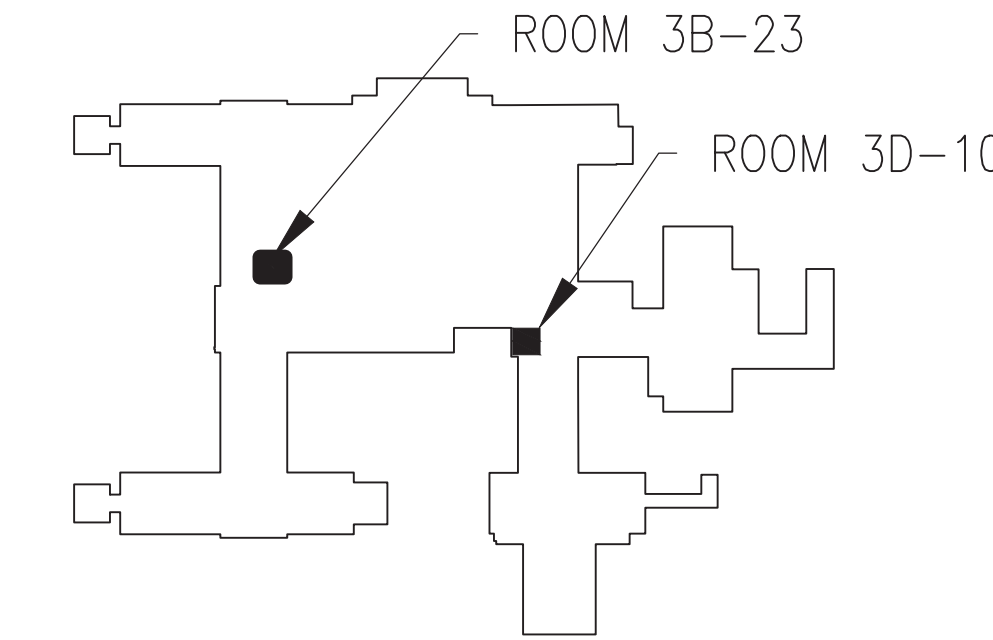


MECHANICAL GENERAL NOTES

- A. SEE ENLARGED TELECOMMUNICATION ROOM MECHANICAL PLANS PER CIRCLE TAG DESIGNATIONS
- B. SEE COMBINED ROOF PLAN MH-01-106 FOR SPLIT SYSTEM AIR COOLED CONDENSING UNIT (ACCU) LOCATIONS.

MECHANICAL KEY NOTES - NEW WORK

1. CONTRACTOR TO PROVIDE OPENING IN CHASE AND REPAIR OPENING UPON COMPLETION OF PIPE INSTALLATION.



KEY PLAN



1 BUILDING 1, 9, 46 - THIRD FLOOR PLAN  
1/16"=1'-0"

0' 4' 8' 12'

ISSUE FOR BID	03-18-22
Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD

STAMP

*Bancroft*  
BANCROFT ARCHITECTS + ENGINEERS  
3300 Dundee RD.  
Northbrook, IL 60062  
T: 847.952.9362  
www.bancroft-ae.com  
Bancroft Project No: 18-121

REGISTERED PROFESSIONAL ENGINEER  
RAED HAMID  
PE-28170  
DATE: 3/18/2022  
NORTH DAKOTA  
*Paul Hamid*

Office of  
Construction  
and Facilities  
Management

VA U.S. Department  
of Veterans Affairs

Drawing Title  
MECHANICAL - BUILDING 1-9-46 - THIRD  
FLOOR PLAN

SHEET 122 OF 279

Phase ISSUE FOR BID

Project Title  
EHRM INFRASTRUCTURE  
UPGRADES

Project Number  
437-21-205

Building Number  
01, 09, 46

Location  
FARGO VA HEALTH CARE SYSTEM

Issue Date  
3/18/2022

Checked  
DG

Drawn  
BX

Drawing Number  
MH-01-103

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MECHANICAL GENERAL NOTES

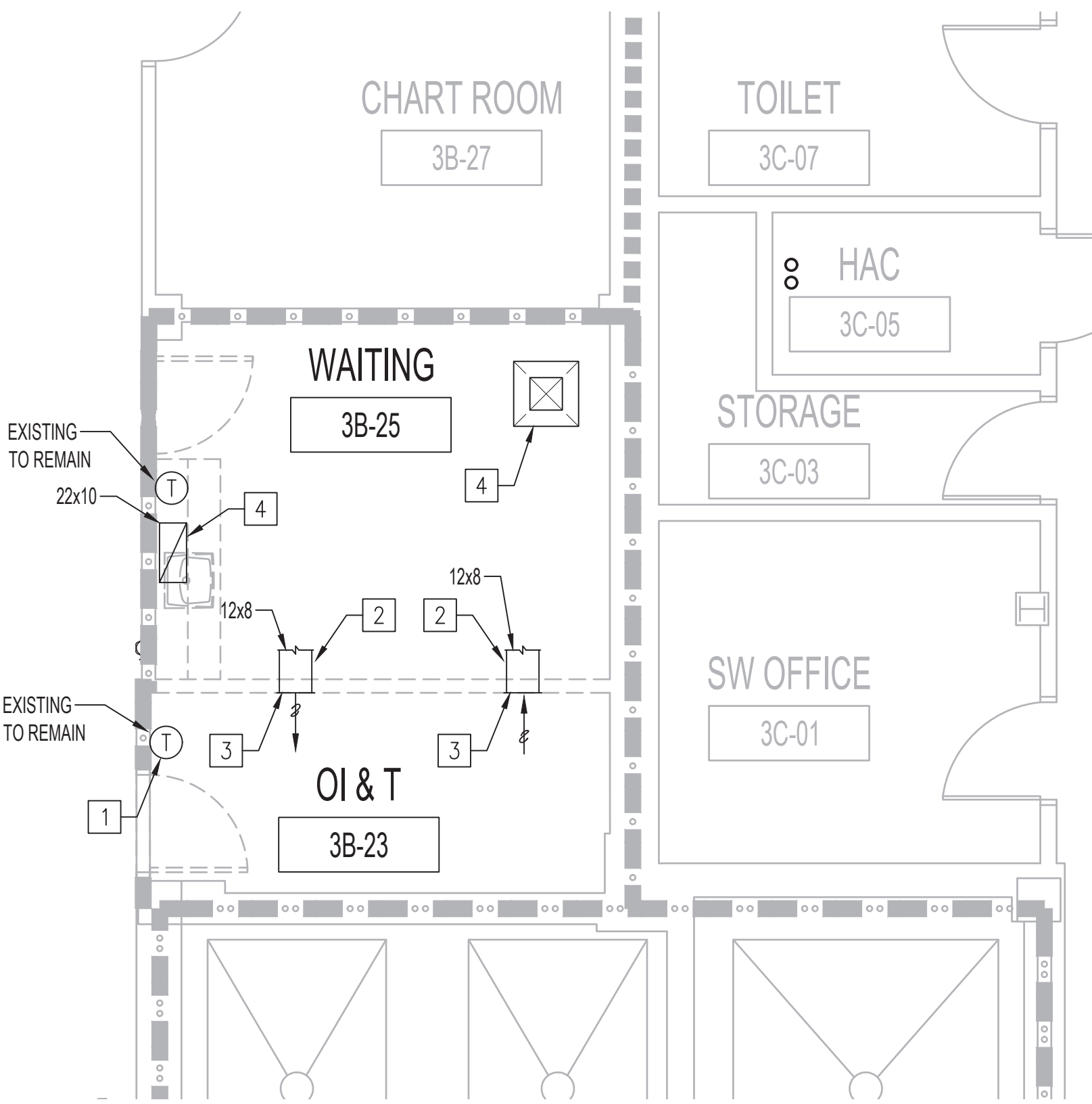
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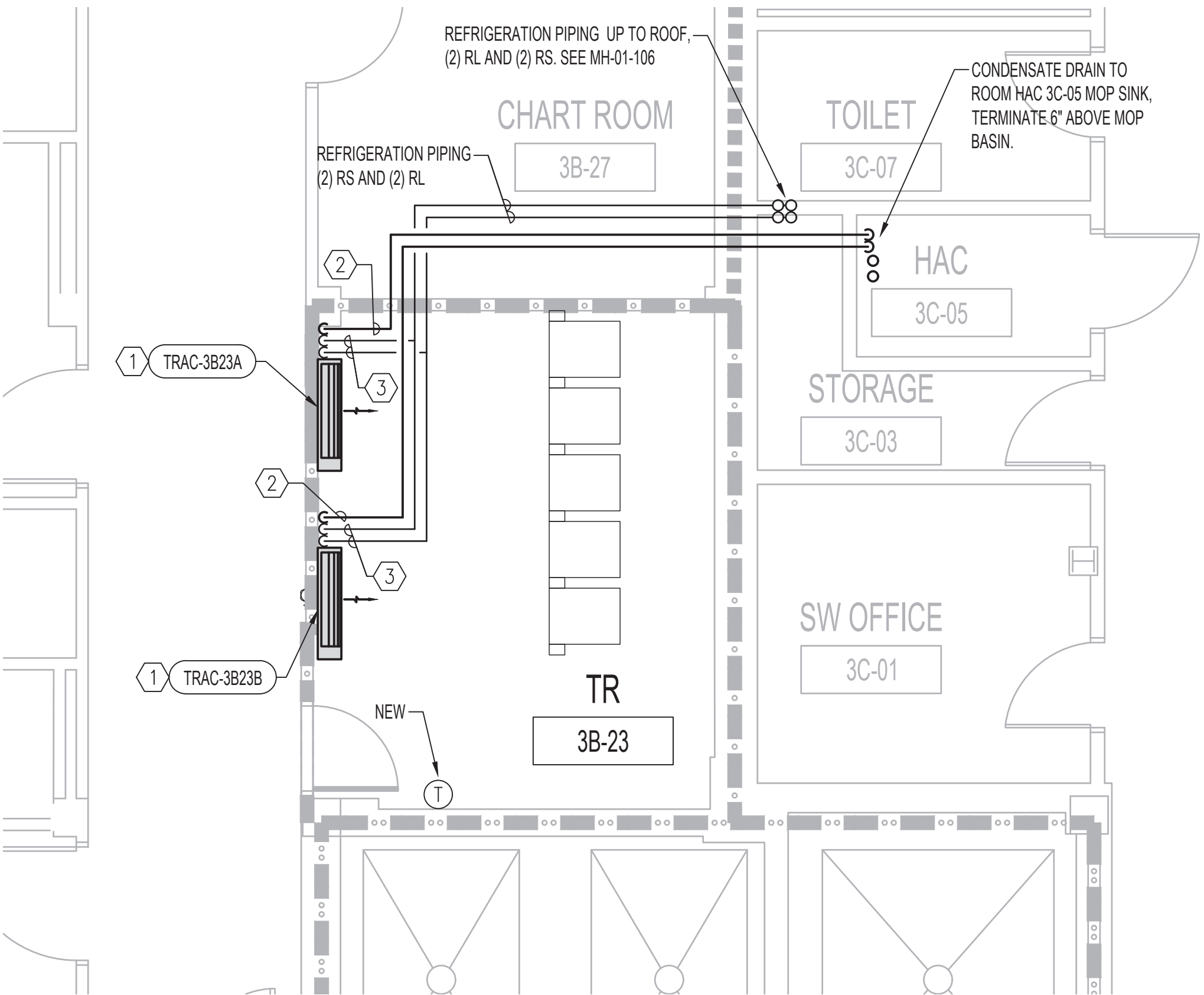
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MECHANICAL KEY NOTES - DEMOLITION

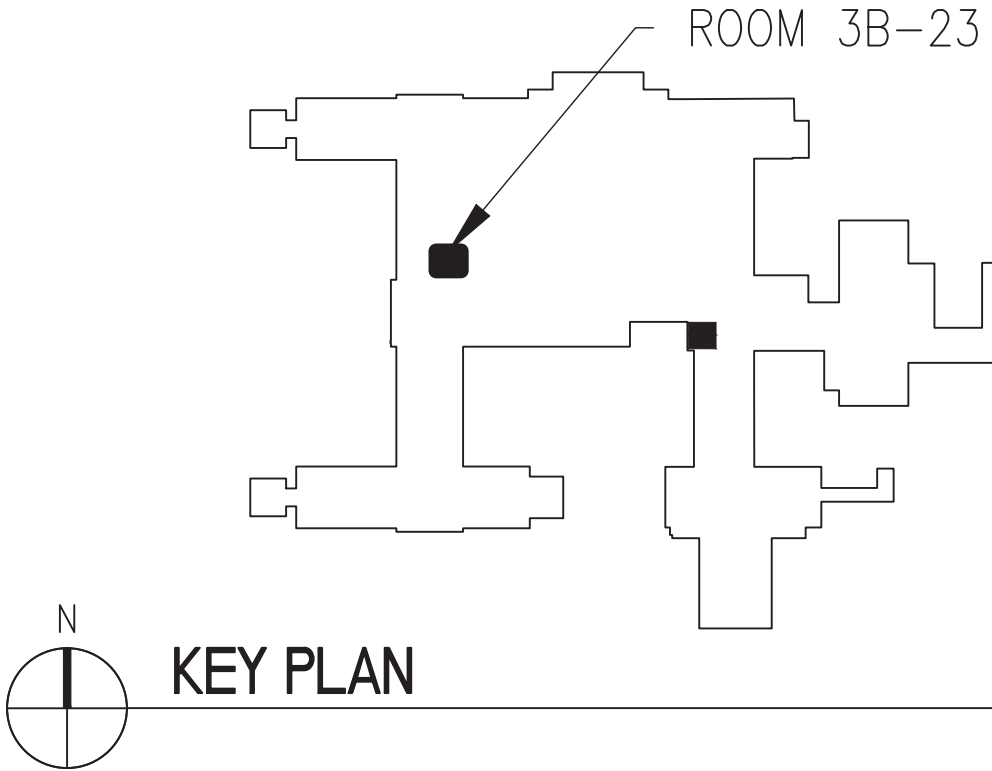
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1 ENLARGED HVAC DEMO PLAN RM 3B-23  
1/4"=1'-0"



2 ENLARGED HVAC PLAN RM 3B-23  
1/4"=1'-0"



		CONSULTANT	ARCHITECT/ENGINEER OF RECORD	STAMP	Office of Construction and Facilities Management	Drawing Title MECHANICAL - BUILDING 1-9-46 - ENLARGED PLANS - THIRD FLOOR	Phase ISSUE FOR BID	Project Title EHRM INFRASTRUCTURE UPGRADES	Project Number 437-21-205
		Drawing Number MH-01-431							

MECHANICAL GENERAL NOTES

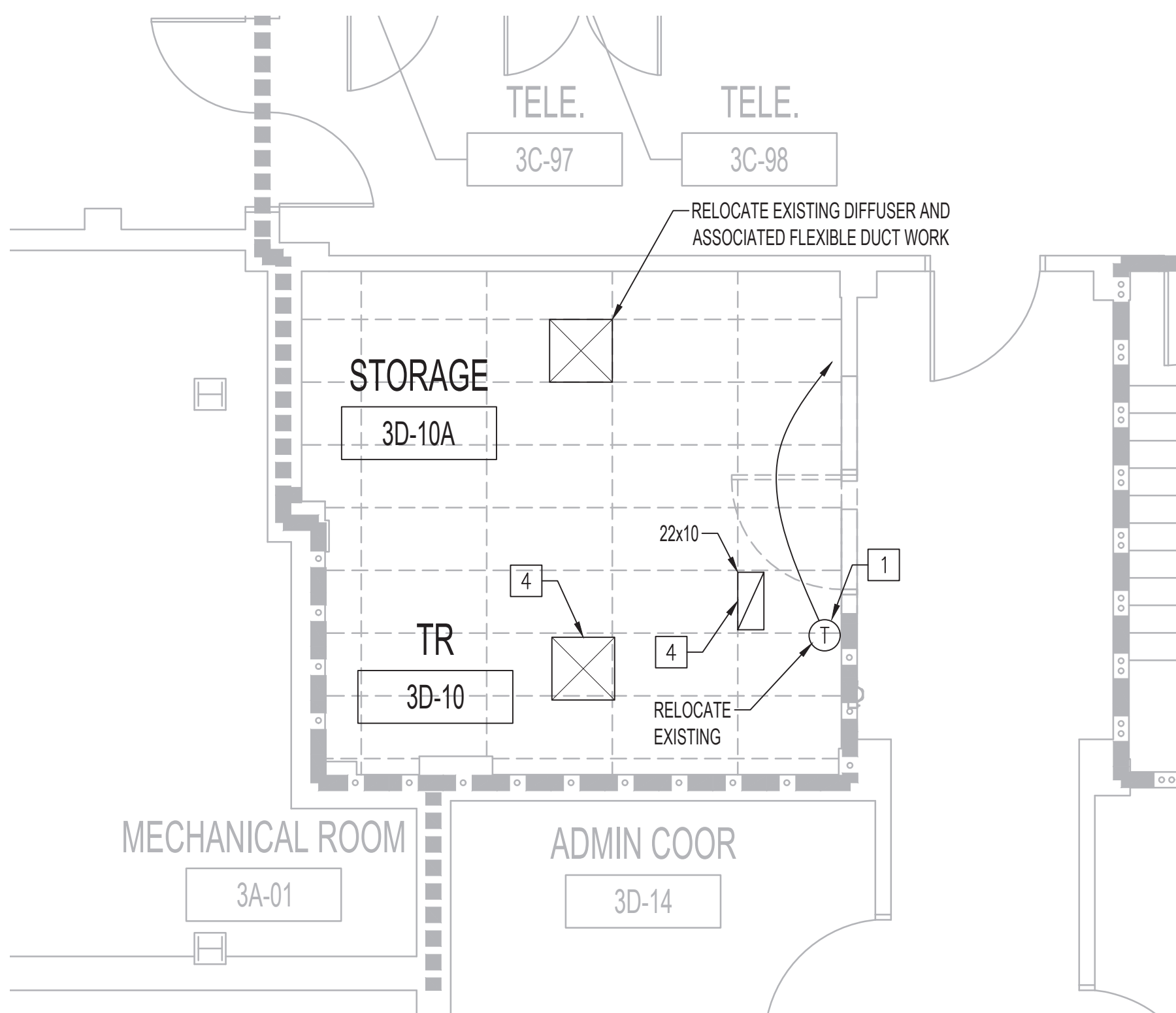
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MECHANICAL KEY NOTES - NEW WORK

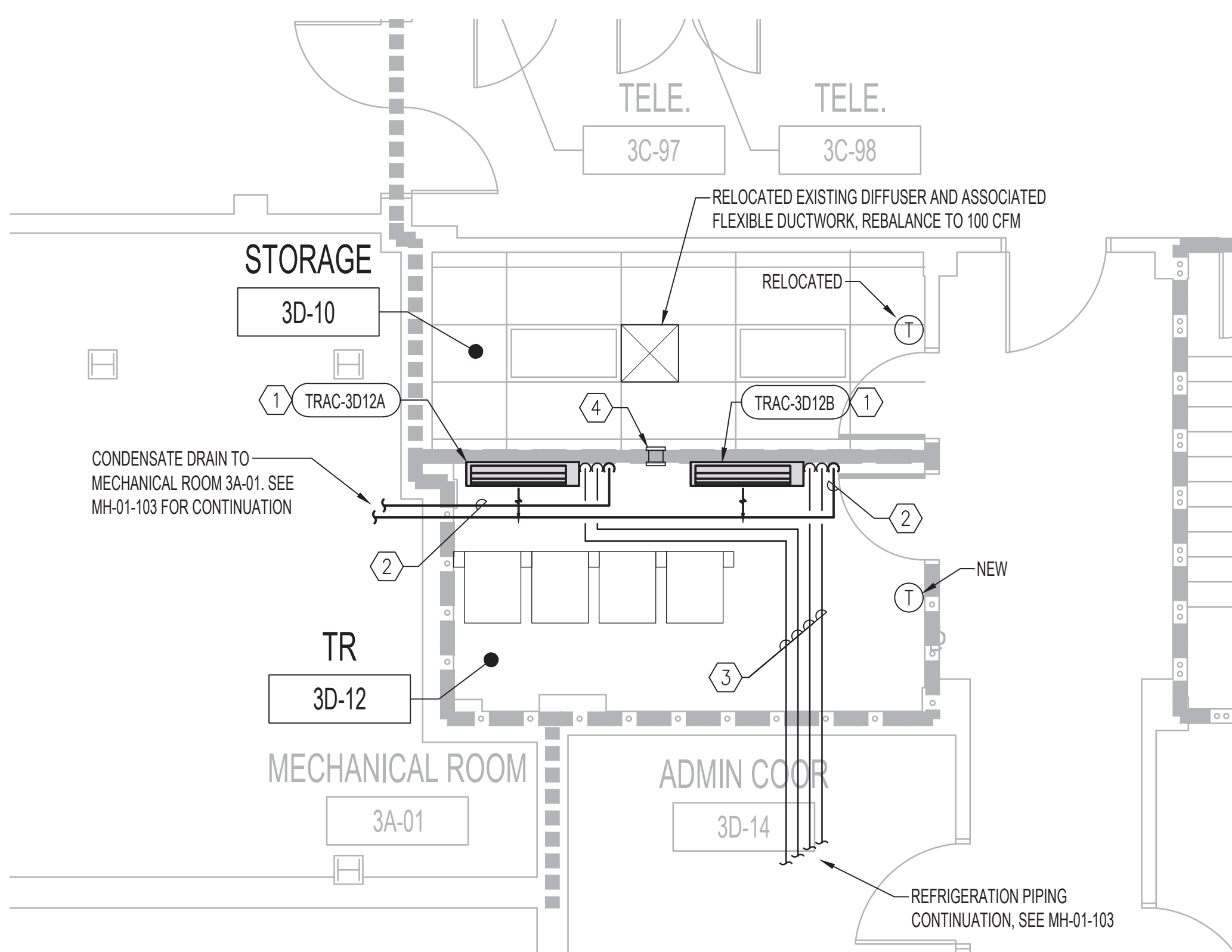
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4. INSTALL NEW 8x6" TRANSFER GRILLES ON BOTH SIDES OF WALL. TITUS 350 RL WITH FLANGED FRAME COLOR WHITE, OR VA APPROVED EQUAL.

MECHANICAL KEY NOTES - DEMOLITION

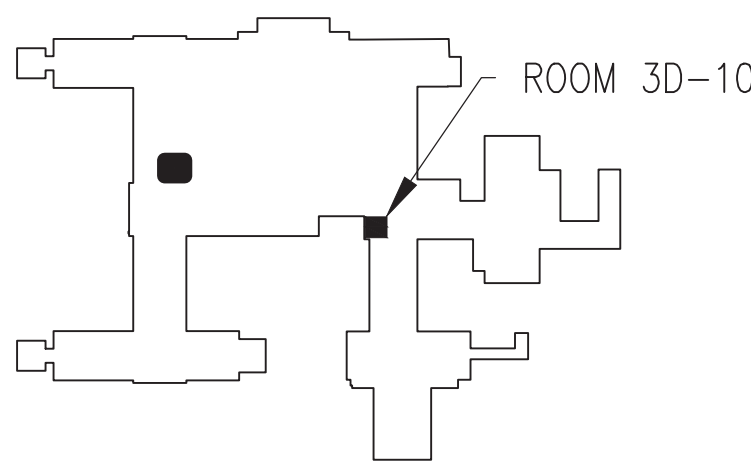
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4 ENLARGED HVAC DEMO PLAN RM 3D-10  
1/4"=1'-0"



2 ENLARGED HVAC PLAN RM 3D-10 AND 3D-12  
1/4"=1'-0"

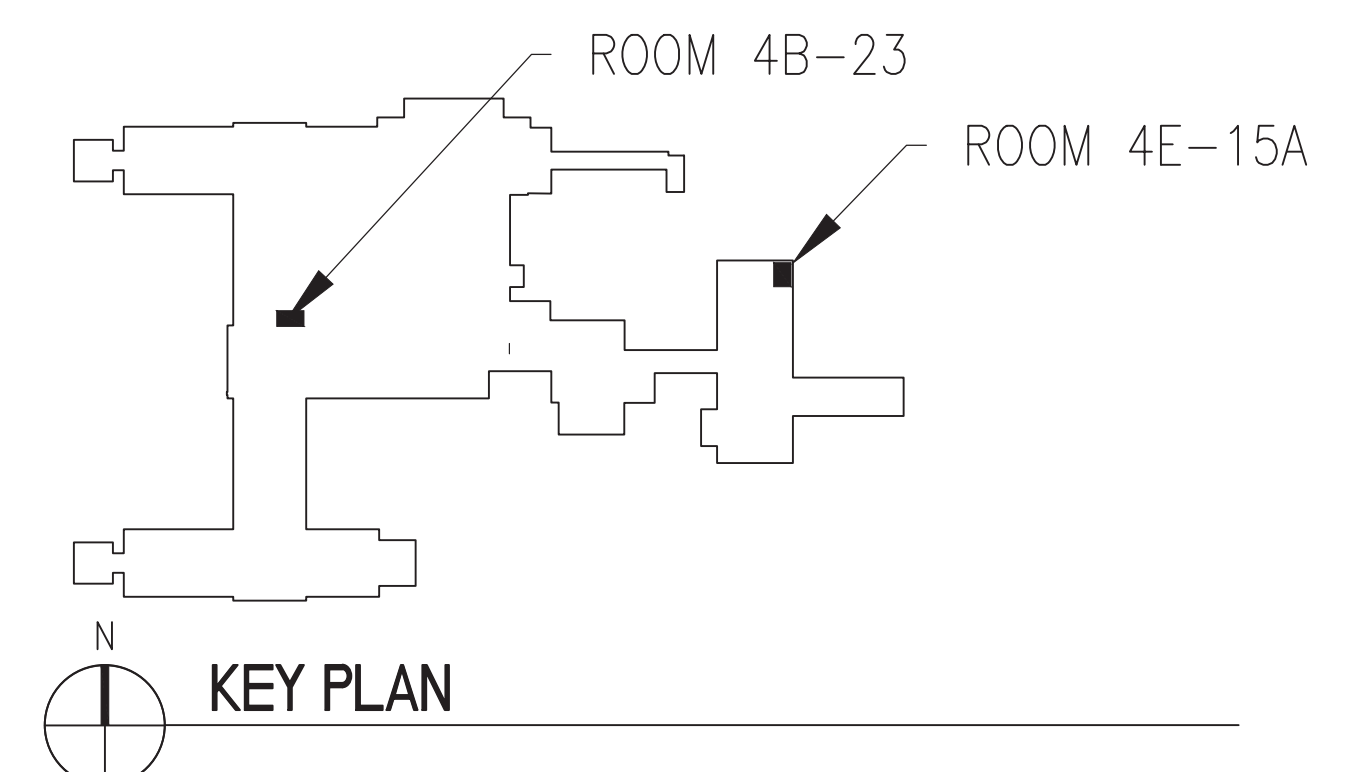


KEY PLAN

		CONSULTANT	<div><div><div>3300 Dundee RD. Northbrook, IL 60062 T: 847/952-9362 www.bancroft-ae.com Bancroft Project No: 18-121</div></div></div>	STAMP <div></div>	Office of Construction and Facilities Management <div> U.S. Department of Veterans Affairs</div>	Drawing Title MECHANICAL - BUILDING 1-9-46 - ENLARGED PLANS - THIRD FLOOR	Phase ISSUE FOR BID	Project Title EHRM INFRASTRUCTURE UPGRADES	Project Number 437-21-205 Building Number 01, 09, 46						
ISSUE FOR BID	03-18-22					SHEET 124 OF 281		Location FARGO VA HEALTH CARE SYSTEM	Project Number 437-21-205 Building Number 01, 09, 46						
Revisions:	Date:														
								Issue Date 3/18/2022	Checked DG	Drawn BX	MH-01-432				



1. CONTRACTOR TO PROVIDE OPENING IN CHASE AND REPAIR OPENING UPON COMPLETION OF PIPE INSTALLATION.



1/16"=1'-0" 0 4' 8' 16' 32'

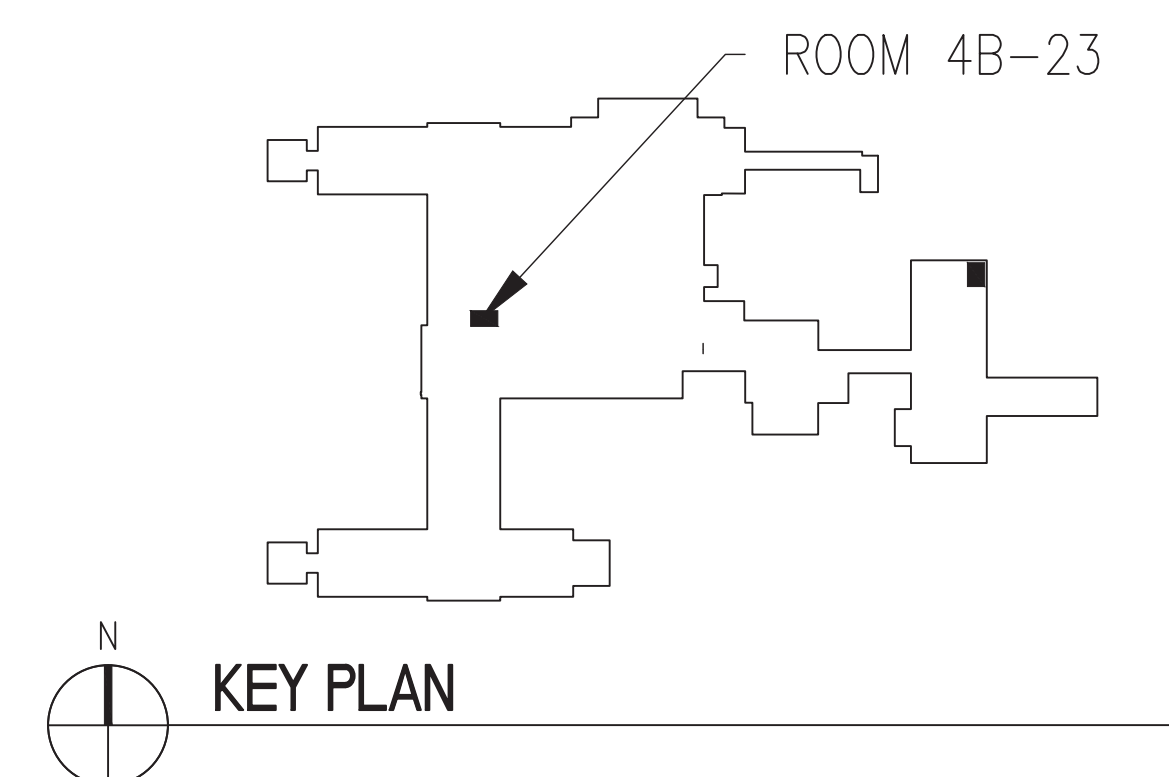
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ISSUE FOR BID	03-18-22
Revisions:	Date:



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		CONSULTANT	ARCHITECT/ENGINEER OF RECORD	STAMP	Drawing Title MECHANICAL - BUILDING 1-9-46 - ENLARGED PLANS - FOURTH FLOOR	Phase ISSUE FOR BID	Project Title EHRM INFRASTRUCTURE UPGRADES	Project Number 437-21-205
								Building Number 01_09_46
							Location FARGO VA HEALTH CARE SYSTEM	Drawing Number MH-01-441
ISSUE FOR BID	03-18-22				SHEET 126 OF 279		Issue Date 3/18/2022	
Revisions:	Date:						Checked DG	Drawn BX

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MECHANICAL GENERAL NOTES

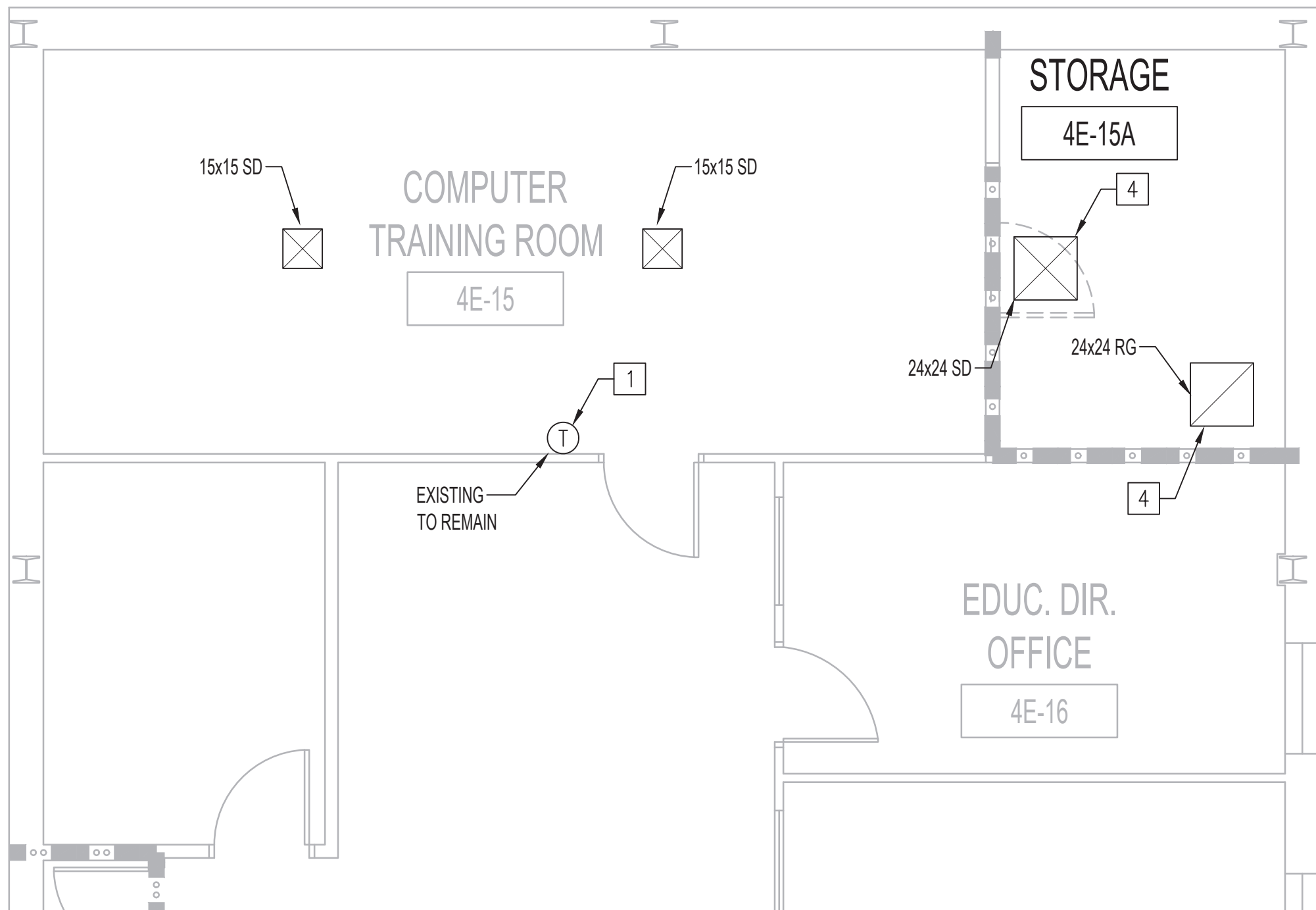
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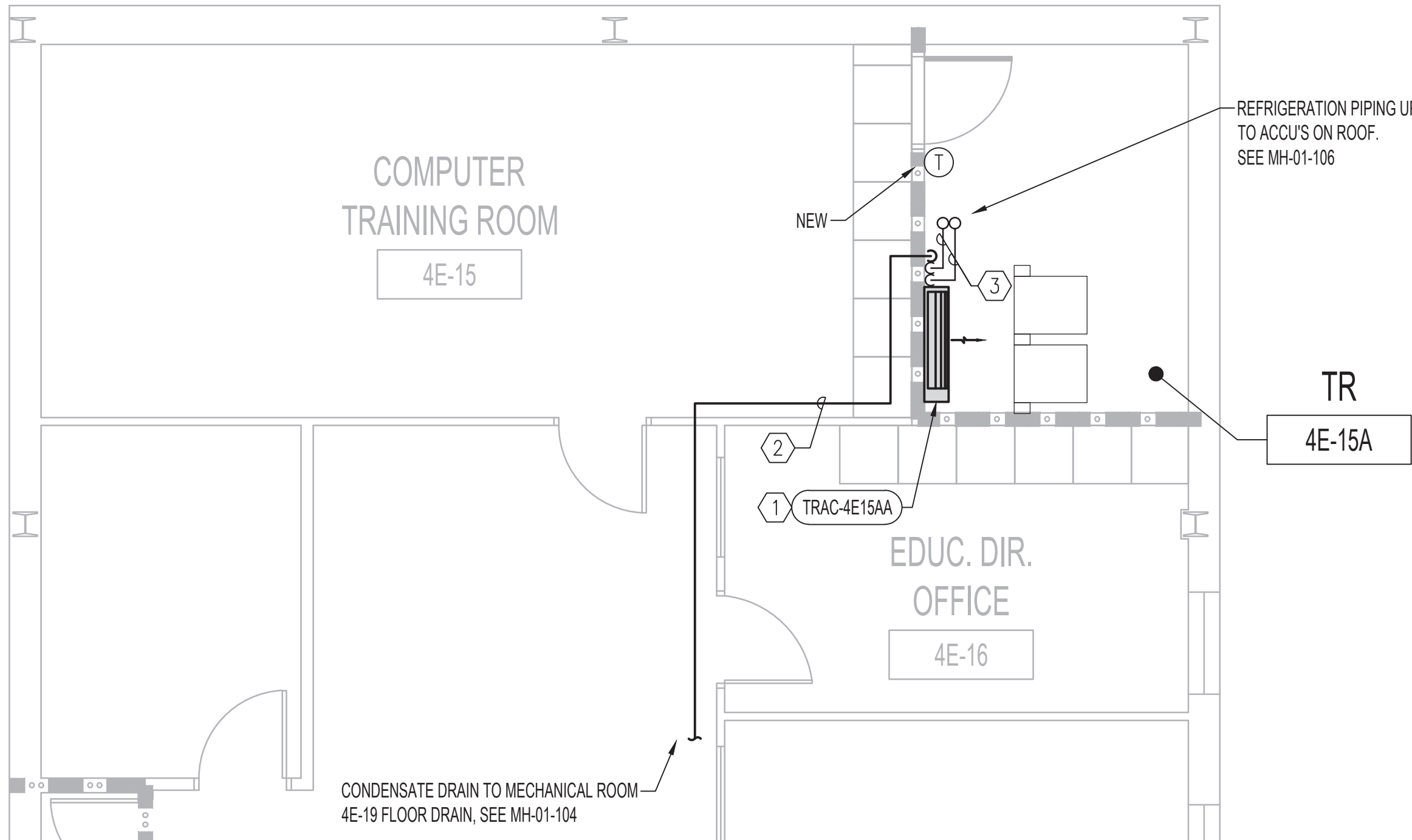
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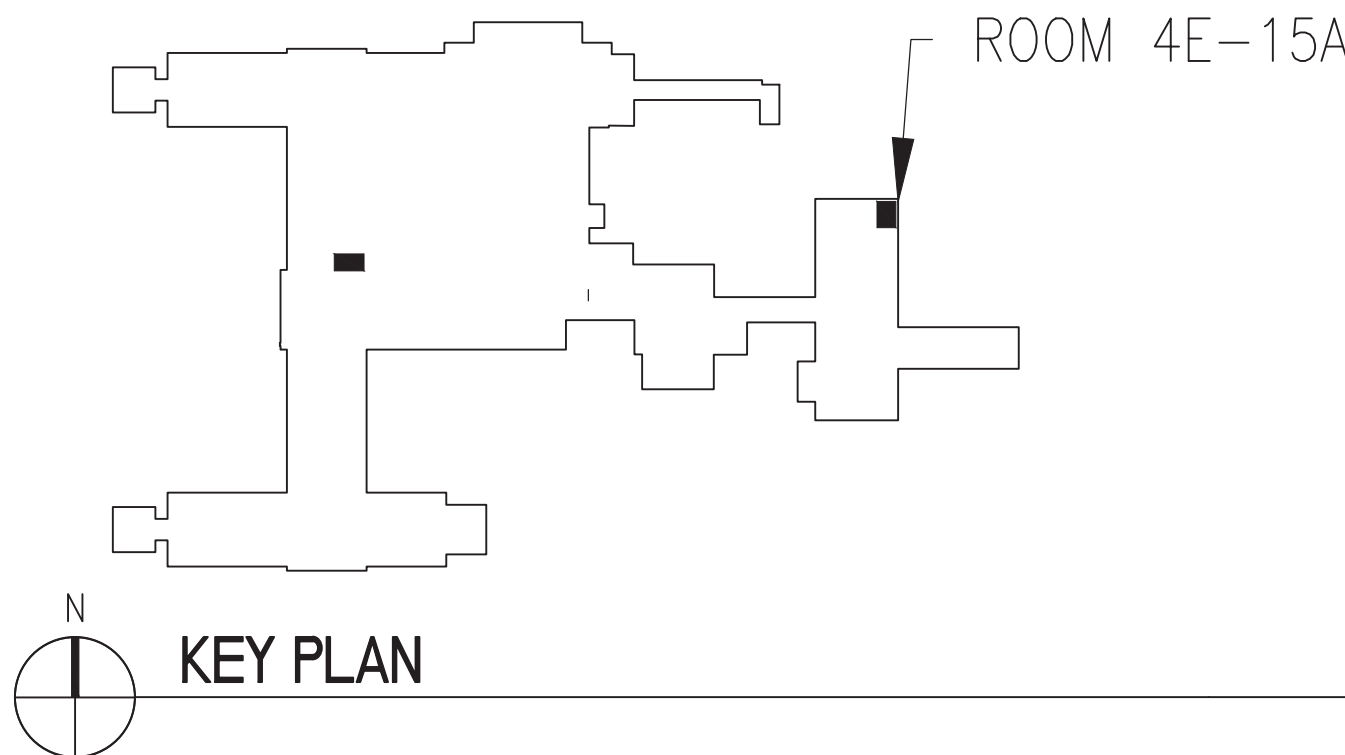
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1/4"=1'-0"

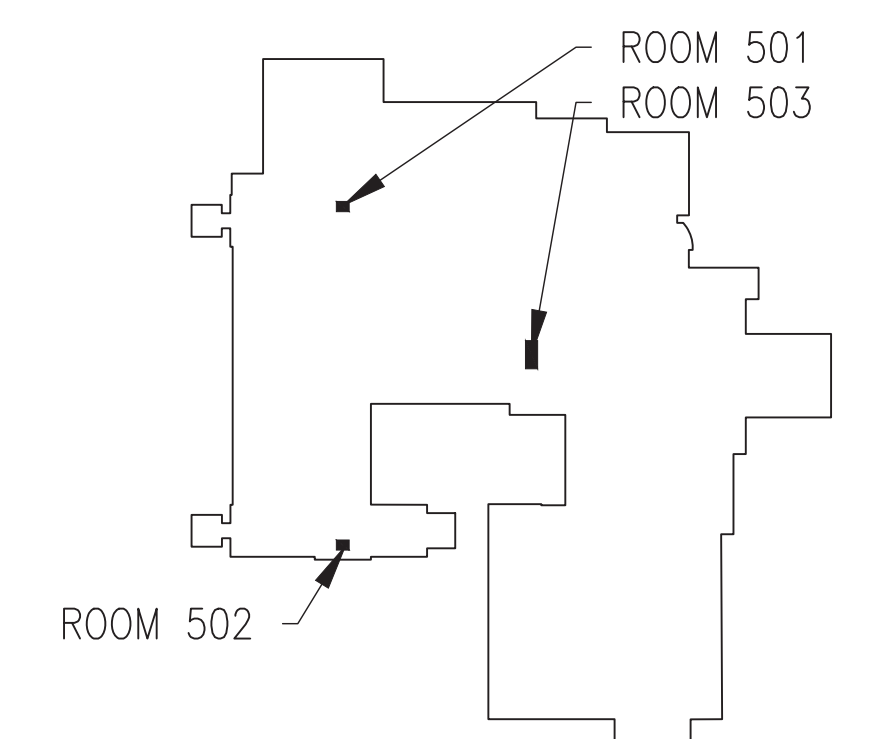
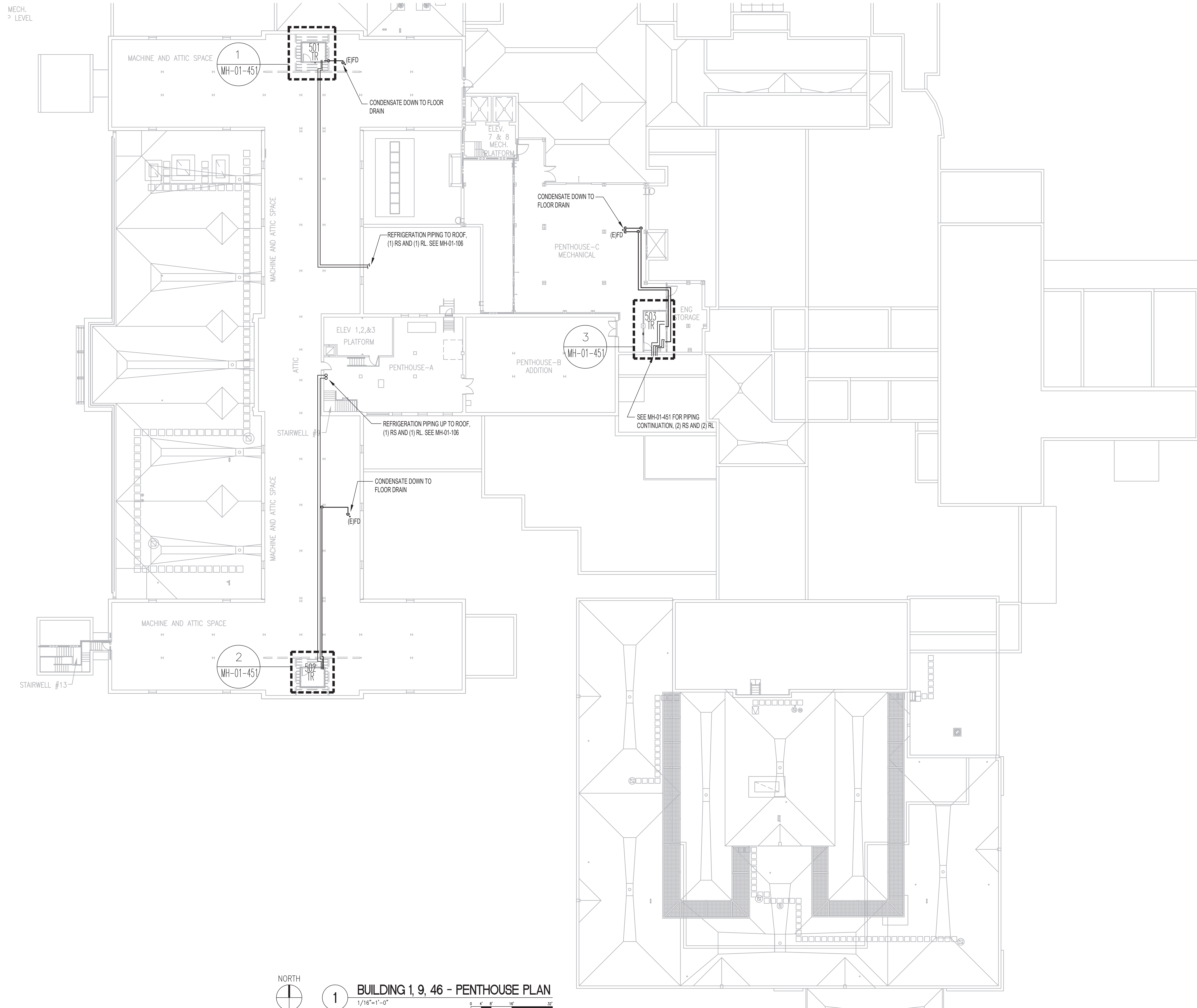


2 ENLARGED HVAC PLAN RM 4E-15A  
1/4"=1'-0"



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N  KEY PLAN

NORTH

A simple compass rose with a circle and four lines extending to the cardinal directions. The top line is labeled 'NORTH', the bottom line is labeled 'SOUTH', the left line is labeled 'WEST', and the right line is labeled 'EAST'.

1

BUILDING 1. 9. 46 - PENTHOUSE PLAN

$$1/16^* = 1' - 0''$$

0	4'	8'	16'	32'
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STAMP

 3300 Dundee RD.  
Northbrook, IL 60062  
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[www.bancroft-ae.com](http://www.bancroft-ae.com)  
Bancroft Project No. 18-171

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REGISTERED PROFESSIONAL ENGINEER  
RAED HAMID  
PE-28170  
DATE 3/18/2022  
NORTH DAKOTA

Office of  
Construction  
and Facilities  
Management

**VA** | U.S. Department  
of Veterans Affairs

Drawing Title	MECHANICAL - BUILDING 1-9-46 - PENTHOUSE PLAN
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SHEET 128 OF 279

Phase	ISSUE FOR BID
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Project Title	EHRM INFRASTRUCTURE UPGRADES
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Location	FARGO VA HEALTH CARE SYSTEM

Project Number	437-21-205
Building Number	01, 09, 46

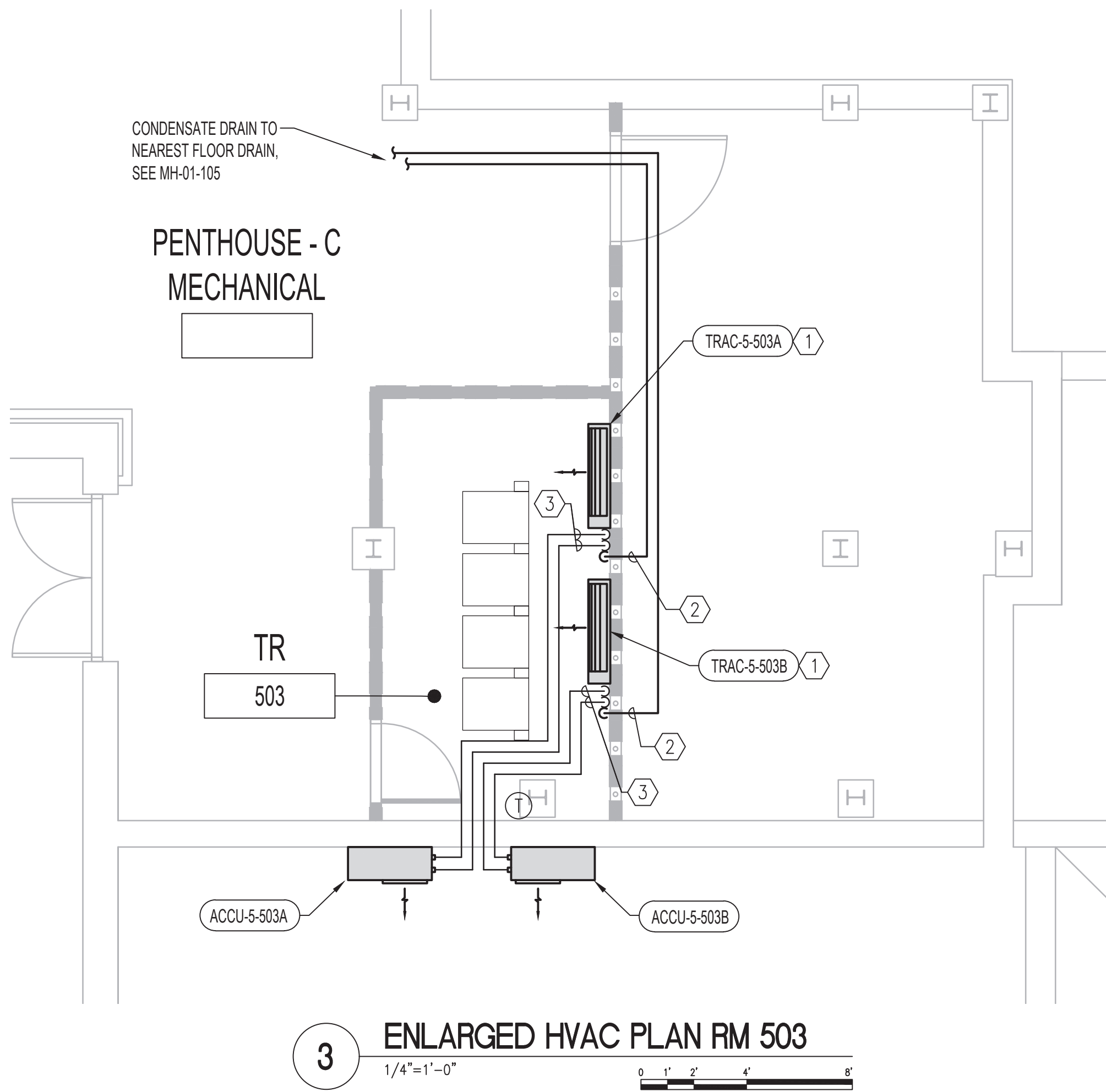
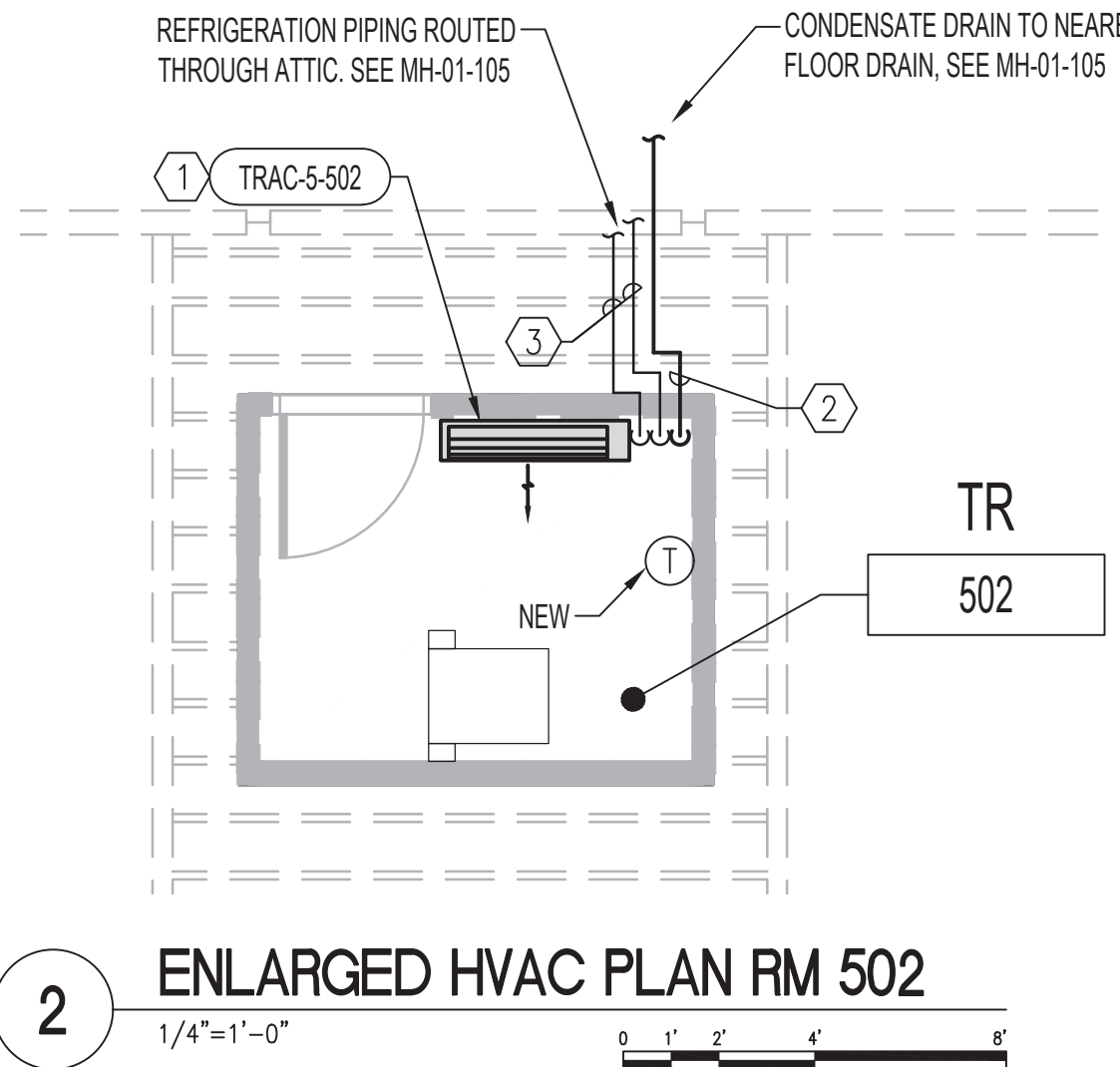
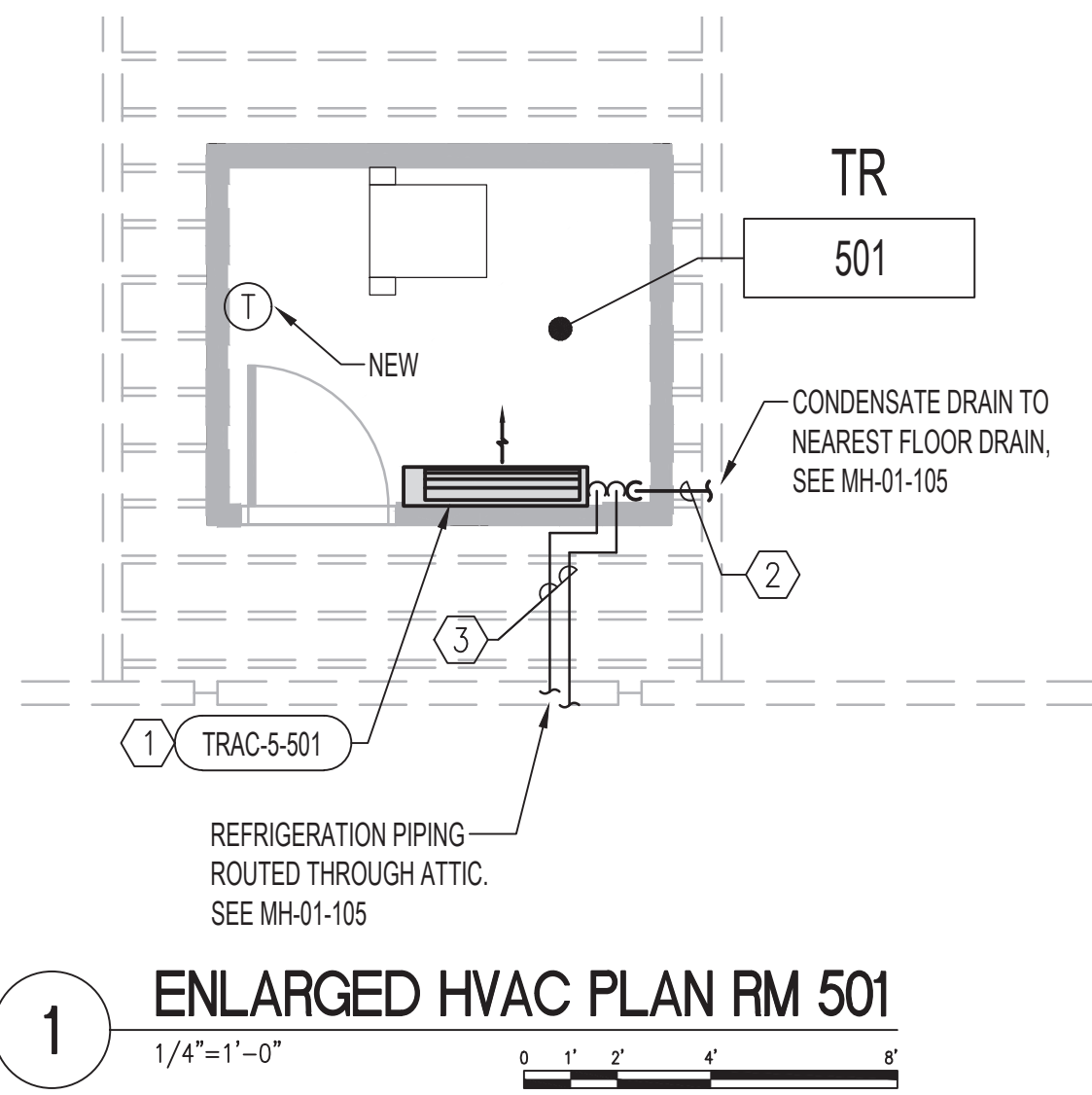
Drawing Number

MH-01-105

ISSUE FOR BID	03-18-22
Revisions:	Date:



K:\COG\_PROJECTS\2018\15-121-362261\00044\_VSN\23\_ID12 (North Dakota + Iowa)\437-21-205 EHRM Fargo, ND\000\_Demo\00402\_Drawings\WORKING\MH-01-451.dwg 3/15/2022 8:40:20 AM D 3/15/2022 8:40:20 AM F



## MECHANICAL GENERAL NOTES

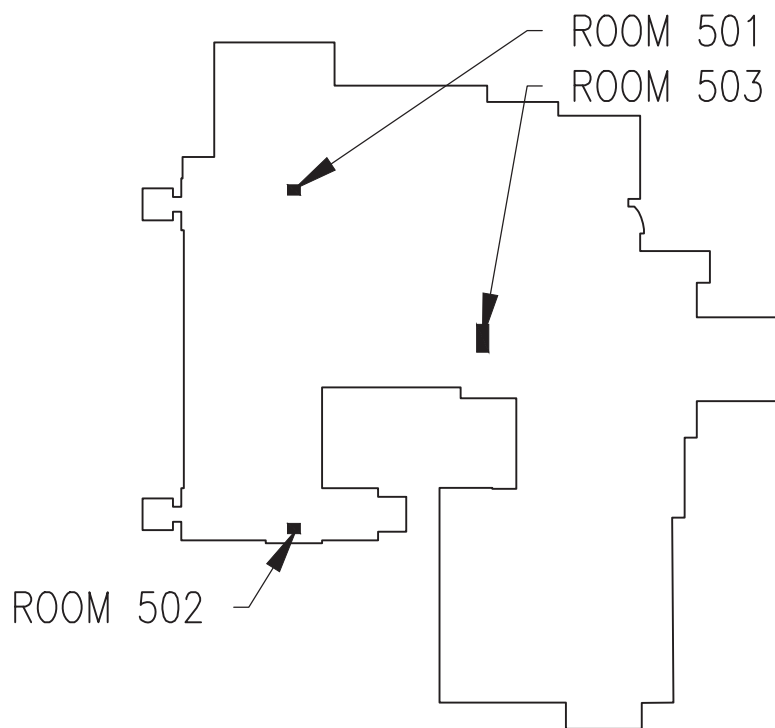
- INSTALLING HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING HVAC EQUIPMENT SYSTEM COMPONENTS AND CONTROLS TO BE USED AS BACK UP FOR NEW SPLIT SYSTEM AIR CONDITIONING FROM DAMAGE WITHIN NEW TR SPACE. EXISTING SHALL REMAIN OPERATIONAL UPON COMPLETION OF CONTRACT.
- CONTRACTOR RESPONSIBLE FOR REMOVING AND REINSTALLATION OF CEILING TILES AS REQUIRED TO FACILITATE INSTALLATION OF REFRIGERANT AND CONDENSATE DRAIN PIPING.

## MECHANICAL KEY NOTES - NEW WORK

- WALL MOUNTED VRF DUCT FREE DX SPLIT SYSTEMS INDOOR UNIT, TELECOMMUNICATION ROOM AIR CONDITIONING UNIT (TRAC), COORDINATE ALL LOCATIONS WITH NEW AND EXISTING PIPING, ELECTRIC PANELS ETC. FOR CODE REQUIRED CLEARANCE AND EQUIPMENT ACCESS PRIOR TO FINAL LOCATION.
- INSULATED COPPER CONDENSATE DRAIN LINE FROM NEW WALL MOUNTED CONDENSATE PUMPS BELOW AC UNITS TO NEAREST INDIRECT WASTE CONNECTION. FOR LOCATION AND PIPING ROUTING SEE FULL FLOOR PLANS. ( IN MULTIPLE SYSTEM INSTALLATIONS DRAIN LINES FROM EACH UNIT SHALL BE SERVED BY ONE CONDENSATE PUMP AND DRAIN LINE TO NEAREST MOP SINK OR FLOOR DRAIN WITH A SINGLE, INDEPENDENT CONNECTION FOR ALL INSTALLATION CONDENSATE LINES EXITING ROOMS.)
- REFRIGERANT SUCTION (RS) AND LIQUID (RL) LINES FROM EVAPORATOR COIL CONNECTION TO REMOTE OUTDOOR AIR COOLED CONDENSING UNIT (ACCU) FOR LOCATION AND PIPING ROUTING SEE ROOF AND FULL FLOOR PLANS. SIZE PIPING PER MANUFACTURES RECOMMENDATION.

## MECHANICAL KEY NOTES - DEMOLITION

- EXISTING THERMOSTATS AND CONTROL WIRING TO REMAIN AND ARE TO BE ADJUSTED 10 DEGREES ABOVE NEW AC EQUIPMENT SETPOINTS
- ALL EXISTING HVAC SYSTEMS, EQUIPMENT, AIR DISTRIBUTION DUCTWORK, PLUMBING PIPING, MEDICAL GAS AND CONTROLS TO REMAIN. THIS INCLUDES ALL EQUIPMENT, PIPING, DUCTWORK AND CONTROLS SERVING AREAS OUTSIDE OF THIS ROOM .
- EXISTING GRILLES, REGISTERS AND OPEN ENDED DUCTS TO REMAIN AS IS.
- WHERE EXISTING CEILINGS ARE TO BE REMOVED, EXISTING DIFFUSERS, GRILLES , FLEXIBLE DUCT SHALL BE SUSPENDED FROM FROM STRUCTURE ABOVE, AS PART OF NEW WORK SCOPE. A SECOND ADJUSTMENT OF LOCATIONS MAY BE REQUIRED TO ACCOMMODATE NEW DATA WIRING AND DEVICES.
- EXISTING SPLIT SYSTEM DX CASSETTE OR VRF FAN COIL TERMINALS, RELATED CONTROLS AND DRAIN PIPING SHALL REMAIN AS BACK UP SYSTEMS FOR NEW DEDICATED HEAT REMOVAL AND COOLING IN NEW WORK SCOPE.
- EXISTING VAV BOX AND RELATED PIPING, DUCTWORK, AIR DEVICES AND THERMOSTATS TO REMAIN AS BACK UP SYSTEMS FOR NEW DEDICATED HEAT REMOVAL AND COOLING IN NEW WORK SCOPE.
- EXISTING EXHAUST FAN, DUCTWORK, THERMOSTATS AND RELATED TEMP CONTROLS TO REMAIN AS BACK UP SYSTEM FOR NEW DEDICATED HEAT REMOVAL AND COOLING IN NEW WORK SCOPE.



KEY PLAN

ISSUE FOR BID	03-18-22
Revisions:	Date:

CONSULTANT

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Bancroft Project No: 18-121

STAMP

REGISTERED PROFESSIONAL ENGINEER  
RAED HAMID  
P.E. 28170  
DATE: 3/18/2022  
NORTH DAKOTA  
P. Hamed

Office of  
Construction  
and Facilities  
Management

VA

U.S. Department  
of Veterans Affairs

Drawing Title  
MECHANICAL - BUILDING 1-9-46 -  
ENLARGED PLANS - PENTHOUSE

SHEET 129 OF 279

Phase  
ISSUE FOR BID

Project Title  
EHRM INFRASTRUCTURE  
UPGRADES

Project Number  
437-21-205

Building Number  
01, 09, 46

Location  
FARGO VA HEALTH CARE SYSTEM

Issue Date  
3/18/2022

Checked  
DG

Drawn  
BX

Drawing Number  
MH-01-451





A. SEE ENLARGED TELECOMMUNICATION ROOM MECHANICAL PLANS FOR RELATED TELECOMMUNICATION ROOM INDOOR AIR CONDITIONERS.

1 BUILDING 1, 9, 46 - ROOF PLAN  
NTS

NT9

Project Number	437-21-205
Building Number	01, 09, 46
Drawing Number	MH-01-106

ISSUE FOR BID	03-18-22
Revisions:	Date:



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K:\COG\_PROJECTS\2018\18-121\_362263100044\_VISA 23 ID12 (North Dakota + Iowa)\437-21-205 EHRM Fargo, ND\000 - Demos\402 - Drawings\WORKING\MH-03-101.dwg  
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F

MECHANICAL GENERAL NOTES

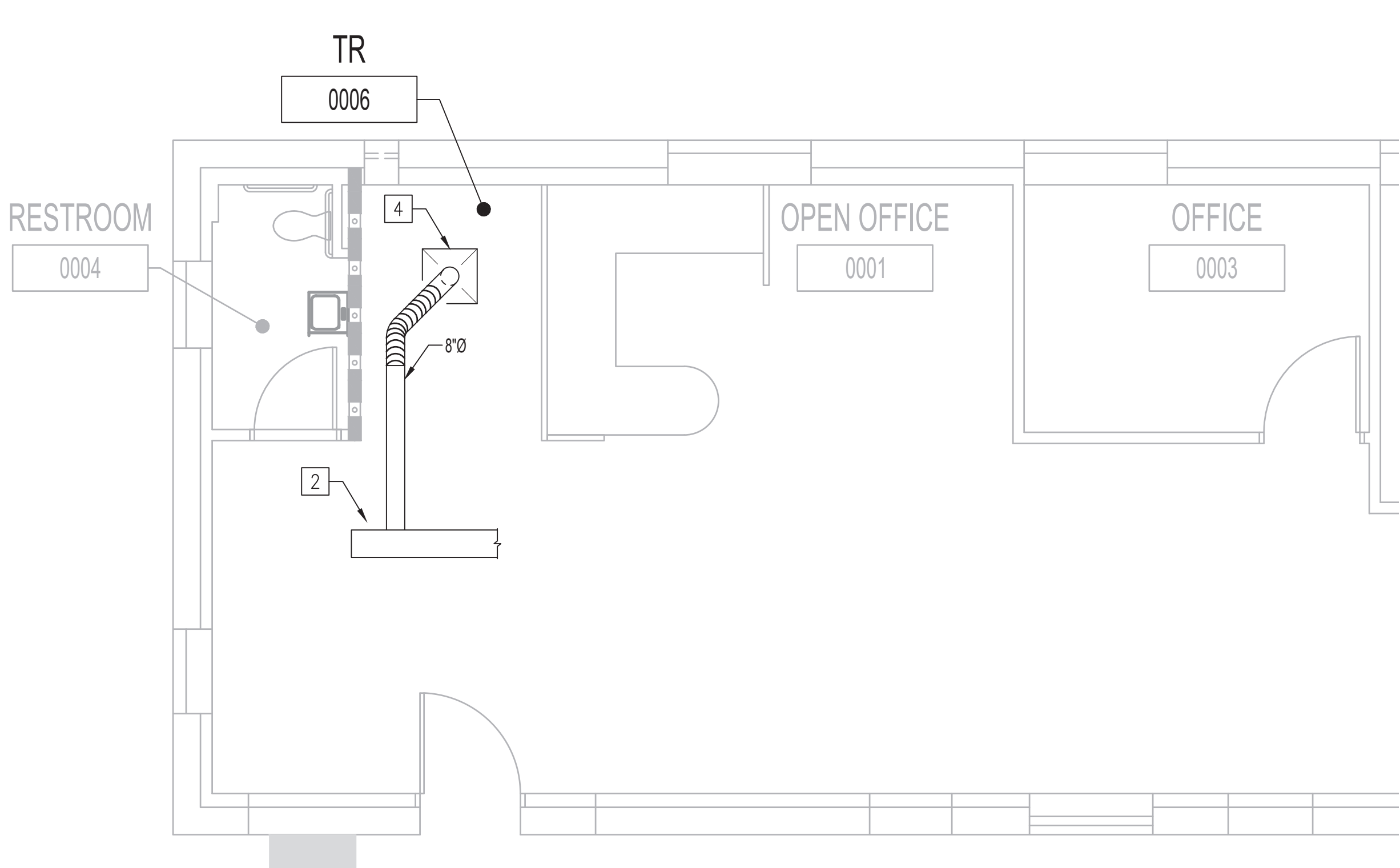
- A. INSTALLING HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING HVAC EQUIPMENT SYSTEM COMPONENTS AND CONTROLS TO BE USED AS BACK UP FOR NEW SPLIT SYSTEM AIR CONDITIONING FROM DAMAGE WITHIN NEW TR SPACE. EXISTING SHALL REMAIN OPERATIONAL UPON COMPLETION OF CONTRACT.
- B. CONTRACTOR RESPONSIBLE FOR REMOVING AND REINSTALLATION OF CEILING TILES AS REQUIRED TO FACILITATE INSTALLATION OF REFRIGERANT AND CONDENSATE DRAIN PIPING.

MECHANICAL KEY NOTES - NEW WORK

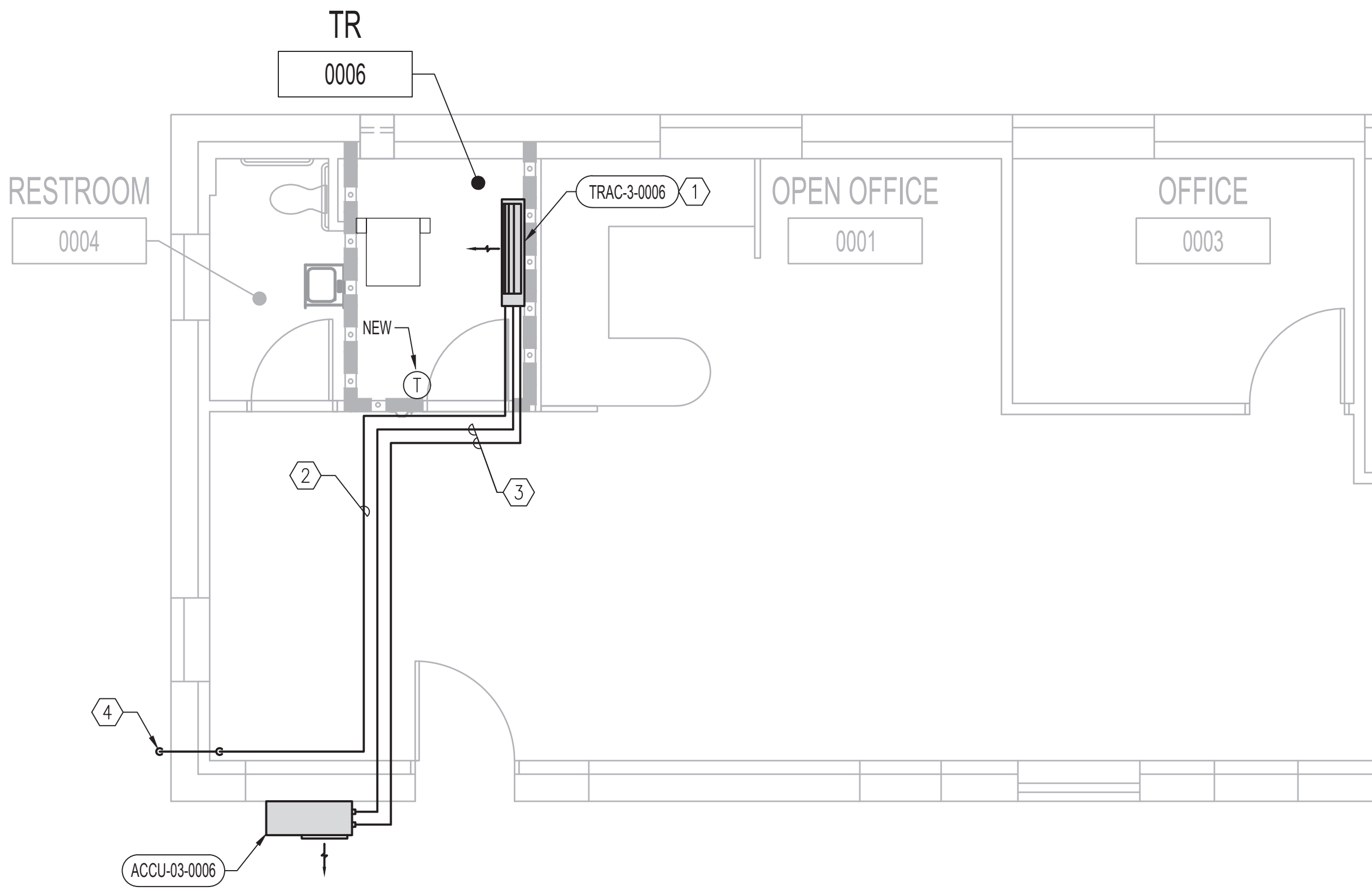
1. WALL MOUNTED VRF DUCT FREE DX SPLIT SYSTEMS INDOOR UNIT, TELECOMMUNICATION ROOM AIR CONDITIONING UNIT (TRAC), COORDINATE ALL LOCATIONS WITH NEW AND EXISTING PIPING, ELECTRIC PANELS ETC. FOR CODE REQUIRED CLEARANCE AND EQUIPMENT ACCESS PRIOR TO FINAL LOCATION.
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4. RUN 3/4" COPPER DRAIN LINE THROUGH WALL AND TERMINATE WITH 45° SCREENED ELBOW 42" MINIMUM ABOVE GRADE. PROVIDE SPLASH BLOCK ON GRADE BELOW. HEAT TRACE 5' FROM WALL.

MECHANICAL KEY NOTES - DEMOLITION

1. EXISTING THERMOSTATS AND CONTROL WIRING TO REMAIN AND ARE TO BE ADJUSTED 10 DEGREES ABOVE NEW AC EQUIPMENT SETPOINTS.
2. ALL EXISTING HVAC SYSTEMS, EQUIPMENT, AIR DISTRIBUTION DUCTWORK, PLUMBING PIPING, MEDICAL GAS AND CONTROLS TO REMAIN. THIS INCLUDES ALL EQUIPMENT, PIPING, DUCTWORK AND CONTROLS SERVING AREAS OUTSIDE OF THIS ROOM.
3. EXISTING GRILLES, REGISTERS AND OPEN ENDED DUCTS TO REMAIN AS IS.
4. WHERE EXISTING CEILINGS ARE TO BE REMOVED, EXISTING DIFFUSERS, GRILLES, FLEXIBLE DUCT SHALL BE SUSPENDED FROM FROM STRUCTURE ABOVE, AS PART OF NEW WORK SCOPE. A SECOND ADJUSTMENT OF LOCATIONS MAY BE REQUIRED TO ACCOMMODATE NEW DATA WIRING AND DEVICES.
5. EXISTING SPLIT SYSTEM DX CASSETTE OR VRF FAN COIL TERMINALS, RELATED CONTROLS AND DRAIN PIPING SHALL REMAIN AS BACK UP SYSTEMS FOR NEW DEDICATED HEAT REMOVAL AND COOLING IN NEW WORK SCOPE.
6. EXISTING VAV BOX AND RELATED PIPING, DUCTWORK, AIR DEVICES AND THERMOSTATS TO REMAIN AS BACK UP SYSTEMS FOR NEW DEDICATED HEAT REMOVAL AND COOLING IN NEW WORK SCOPE.
7. EXISTING EXHAUST FAN, DUCTWORK, THERMOSTATS AND RELATED TEMP CONTROLS TO REMAIN AS BACK UP SYSTEM FOR NEW DEDICATED HEAT REMOVAL AND COOLING IN NEW WORK SCOPE.



1 ENLARGED HVAC DEMO PLAN RM 0006  
1/4"=1'-0"



2 ENLARGED HVAC PLAN RM 0006  
1/4"=1'-0"

ISSUE FOR BID	03-18-22
Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD

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Drawing Title  
MECHAICAL - BUILDING 3 - ENLARGED  
PLAN

SHEET 131 OF 279

Phase ISSUE FOR BID

Project Title  
EHRM INFRASTRUCTURE  
UPGRADES

Location  
FARGO VA HEALTH CARE SYSTEM

Issue Date  
3/18/2022

Checked  
DG

Drawn  
BX

Project Number  
437-21-205

Building Number  
03

Drawing Number

MH-03-101



1. WALL MOUNTED VRF DUCT FREE DX SPLIT SYSTEMS INDOOR UNIT, TELECOMMUNICATION ROOM AIR CONDITIONING UNIT (TRAC), COORDINATE ALL LOCATIONS WITH NEW AND EXISTING PIPING, ELECTRIC PANELS ETC. FOR CODE REQUIRED CLEARANCE AND EQUIPMENT ACCESS PRIOR TO FINAL LOCATION.
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		CONSULTANT	ARCHITECT/ENGINEER OF RECORD  BANCROFT ARCHITECTS + ENGINEERS www.bancroft-a-e.com Bancroft Project No.: 18-121	Drawing Title MECHANICAL - BUILDING 11 - FIRST FLOOR PLAN	Project Title EHRM INFRASTRUCTURE UPGRADES	Project Number 437-21-205						
ISSUE FOR BID	03-18-22			SHEET 132 OF 279	FARGO VA HEALTH CARE SYSTEM	MH-11-101						
Revisions:	Date:											



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VA FORM 08 - 6231

MECHANICAL GENERAL NOTES

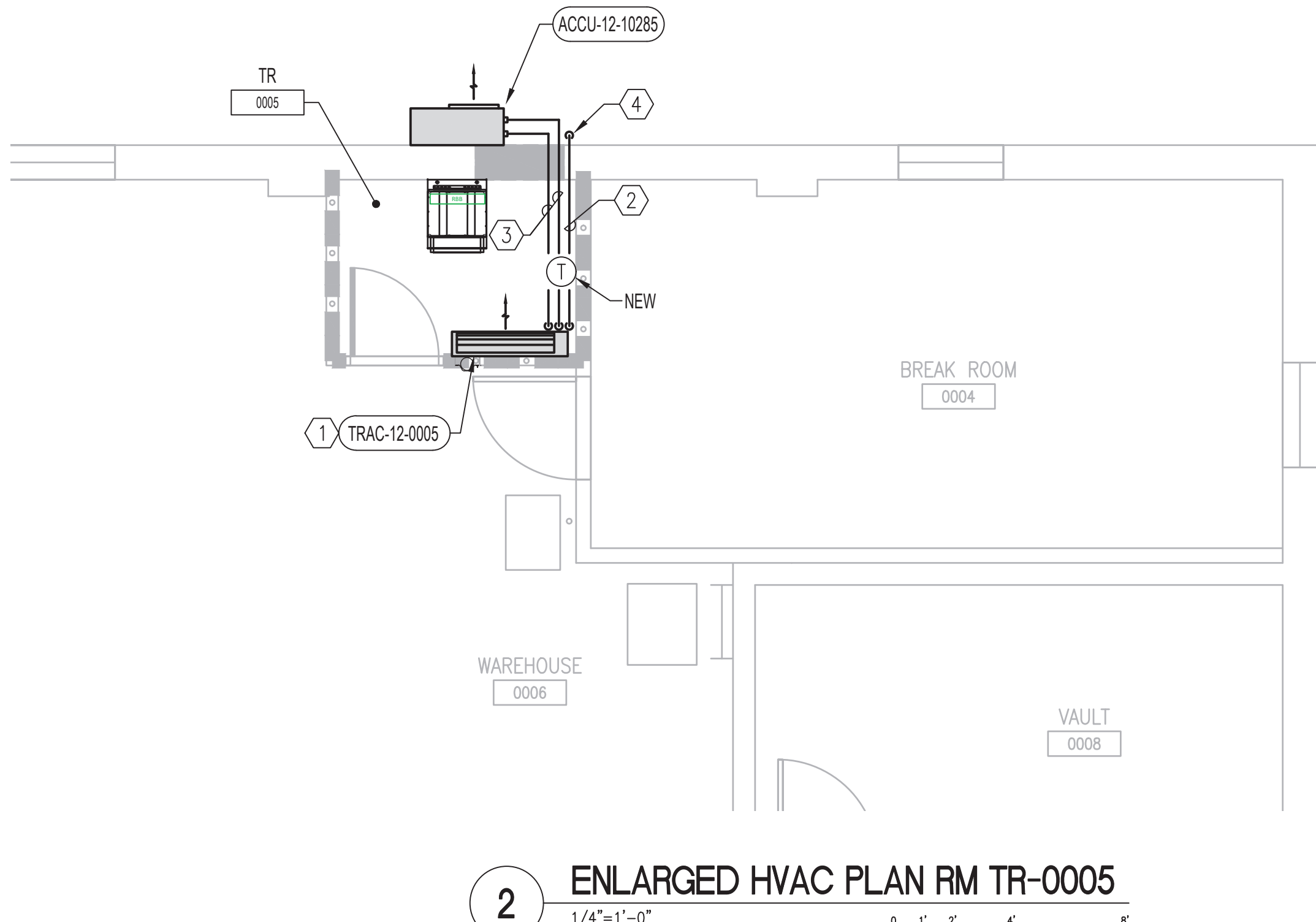
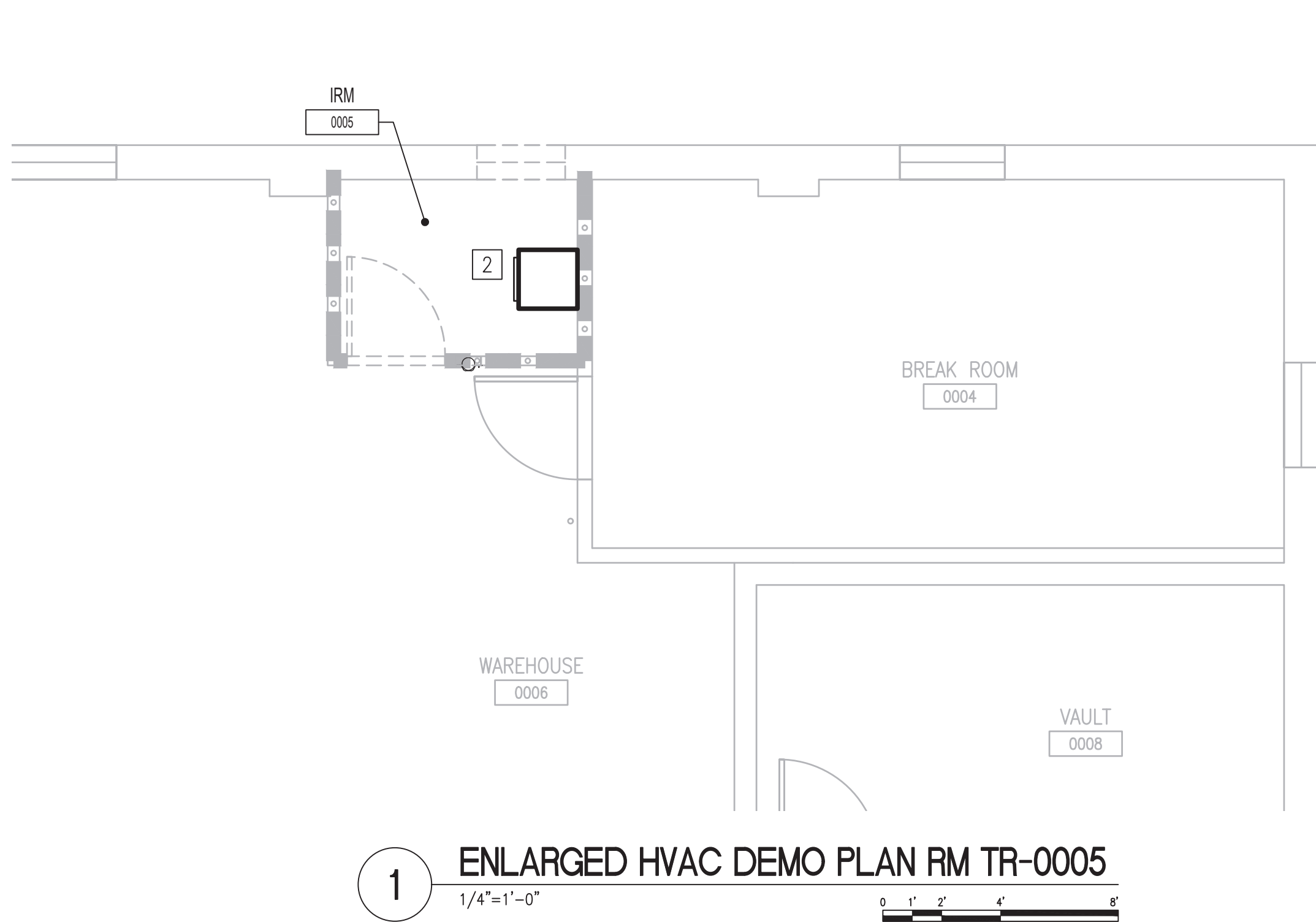
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- B. CONTRACTOR RESPONSIBLE FOR REMOVING AND REINSTALLATION OF CEILING TILES AS REQUIRED TO FACILITATE INSTALLATION OF REFRIGERANT AND CONDENSATE DRAIN PIPING.

MECHANICAL KEY NOTES - NEW WORK

1. WALL MOUNTED VRF DUCT FREE DX SPLIT SYSTEMS INDOOR UNIT, TELECOMMUNICATION ROOM AIR CONDITIONING UNIT (TRAC), COORDINATE ALL LOCATIONS WITH NEW AND EXISTING PIPING, ELECTRIC PANELS ETC. FOR CODE REQUIRED CLEARANCE AND EQUIPMENT ACCESS PRIOR TO FINAL LOCATION.
2. INSULATED COPPER CONDENSATE DRAIN LINE FROM NEW WALL MOUNTED CONDENSATE PUMPS BELOW AC UNITS TO NEAREST INDIRECT WASTE CONNECTION. FOR LOCATION AND PIPING ROUTING SEE ROOF AND FULL FLOOR PLANS. (IN MULTIPLE SYSTEM INSTALLATIONS DRAIN LINES FROM EACH UNIT SHALL BE SERVED BY ONE CONDENSATE PUMP AND DRAIN LINE TO NEAREST MOP SINK OR FLOOR DRAIN WITH A SINGLE INDEPENDENT CONNECTION FOR ALL INSTALLATION CONDENSATE LINES EXITING ROOMS.)
3. REFRIGERANT SUCTION (RS) AND LIQUID (RL) LINES FROM EVAPORATOR COIL CONNECTION TO REMOTE OUTDOOR AIR COOLED CONDENSING UNIT (ACCU) FOR LOCATION AND PIPING ROUTING SEE ROOF AND FULL FLOOR PLANS. SIZE PIPING PER MANUFACTURES RECOMMENDATION.
4. RUN 3/4" COPPER DRAIN LINE THOUGH WALL AND TERMINATE WITH 45° SCREENED ELBOW 42" MINIMUM ABOVE GRADE. PROVIDE SPLASH BLOCK ON GRADE BELOW. HEAT TRACE 5' FROM WALL.


MECHANICAL KEY NOTES - DEMOLITION

1. EXISTING THERMOSTATS AND CONTROL WIRING TO REMAIN AND ARE TO BE ADJUSTED 10 DEGREES ABOVE NEW AC EQUIPMENT SETPOINTS
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ISSUE FOR BID	03-18-22
Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD

3300 Dundee RD. Northbrook, IL 60062 T: 847.952.9362 www.bancroft-ae.com Bancroft Project No: 18-121

STAMP


Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title MECHANICAL - BUILDING 12 - ENLARGED PLAN - FIRST FLOOR
SHEET 133 OF 279

Phase ISSUE FOR BID
Location FARGO VA HEALTH CARE SYSTEM
Issue Date 3/18/2022
Checked DG
Drawn BX

Project Title EHRM INFRASTRUCTURE UPGRADES
Issue Date 3/18/2022
Checked DG
Drawn BX

Project Number 437-21-205
Building Number 12
Drawing Number MH-12-401



MECHANICAL GENERAL NOTES

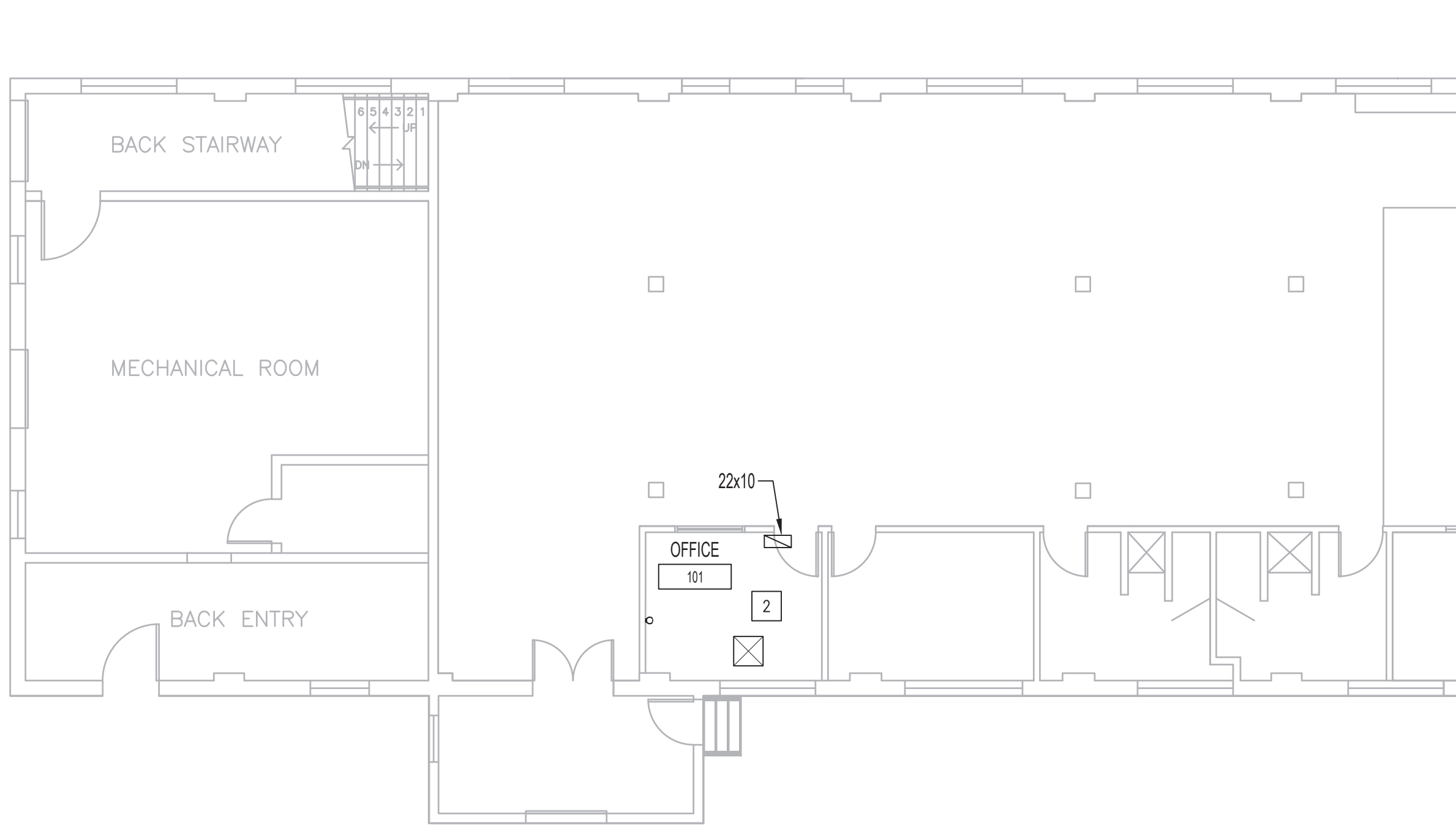
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MECHANICAL KEY NOTES - NEW WORK

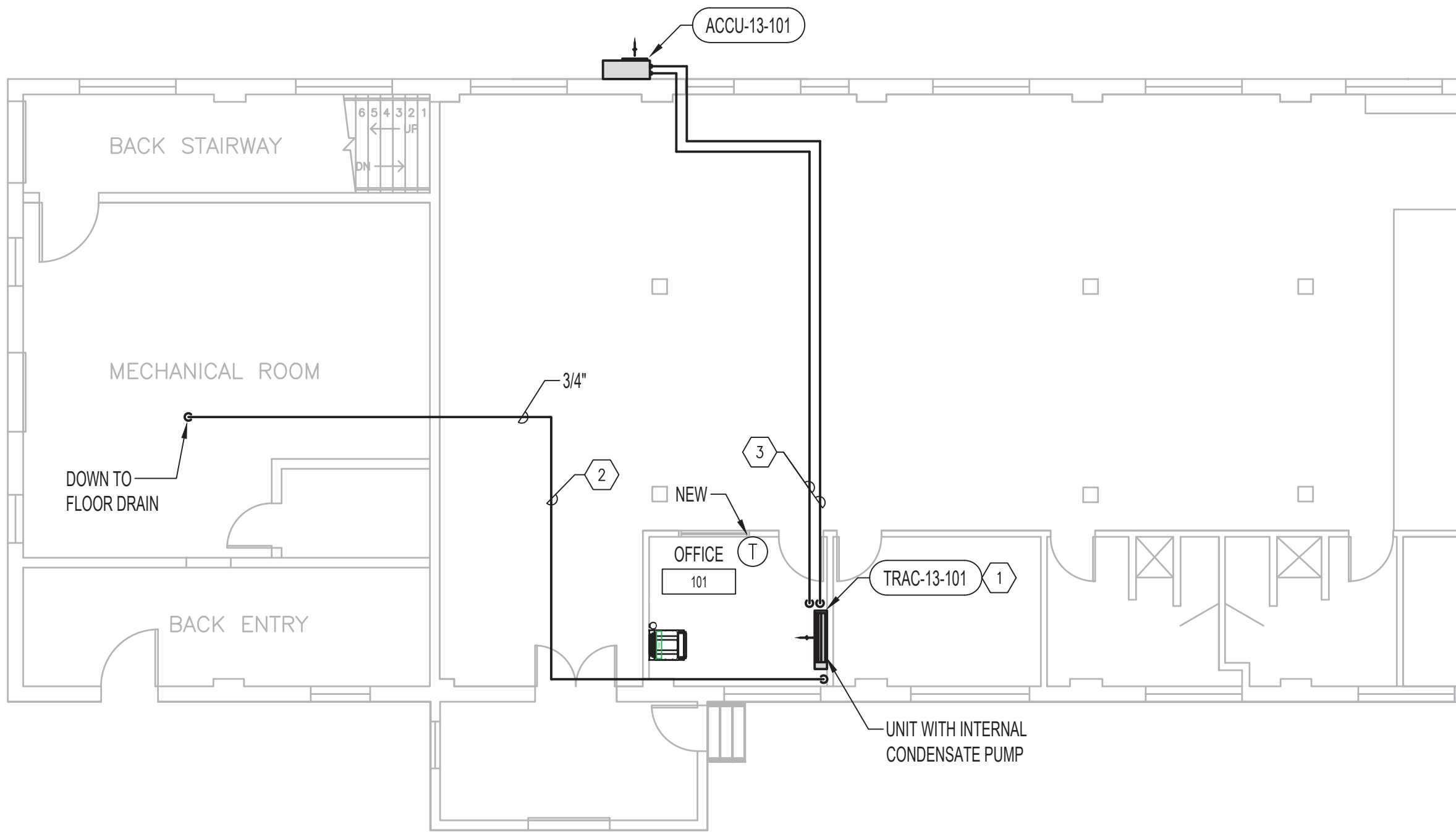
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1 ENLARGED HVAC DEMO PLAN RM OFFICE-101  
1/8"=1'-0"



1 ENLARGED HVAC PLAN RM OFFICE-101  
1/8"=1'-0"

ISSUE FOR BID	03-18-22
Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD

3300 Dundee RD. Northbrook, IL 60062 T: 847.952.9362 www.bancroft-ae.com Bancroft Project No: 18-121

STAMP


Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title MECHANICALL - BUILDING 13 - FIRST FLOOR PLAN
SHEET 134 OF 279

Phase ISSUE FOR BID
Location FARGO VA HEALTH CARE SYSTEM
Issue Date 3/18/2022
Checked WG
Drawn BX

Project Title EHRM INFRASTRUCTURE UPGRADES
Location FARGO VA HEALTH CARE SYSTEM
Issue Date 3/18/2022
Checked WG
Drawn BX

Project Number 437-21-205
Building Number 13
Drawing Number MH-13-101

MECHANICAL GENERAL NOTES

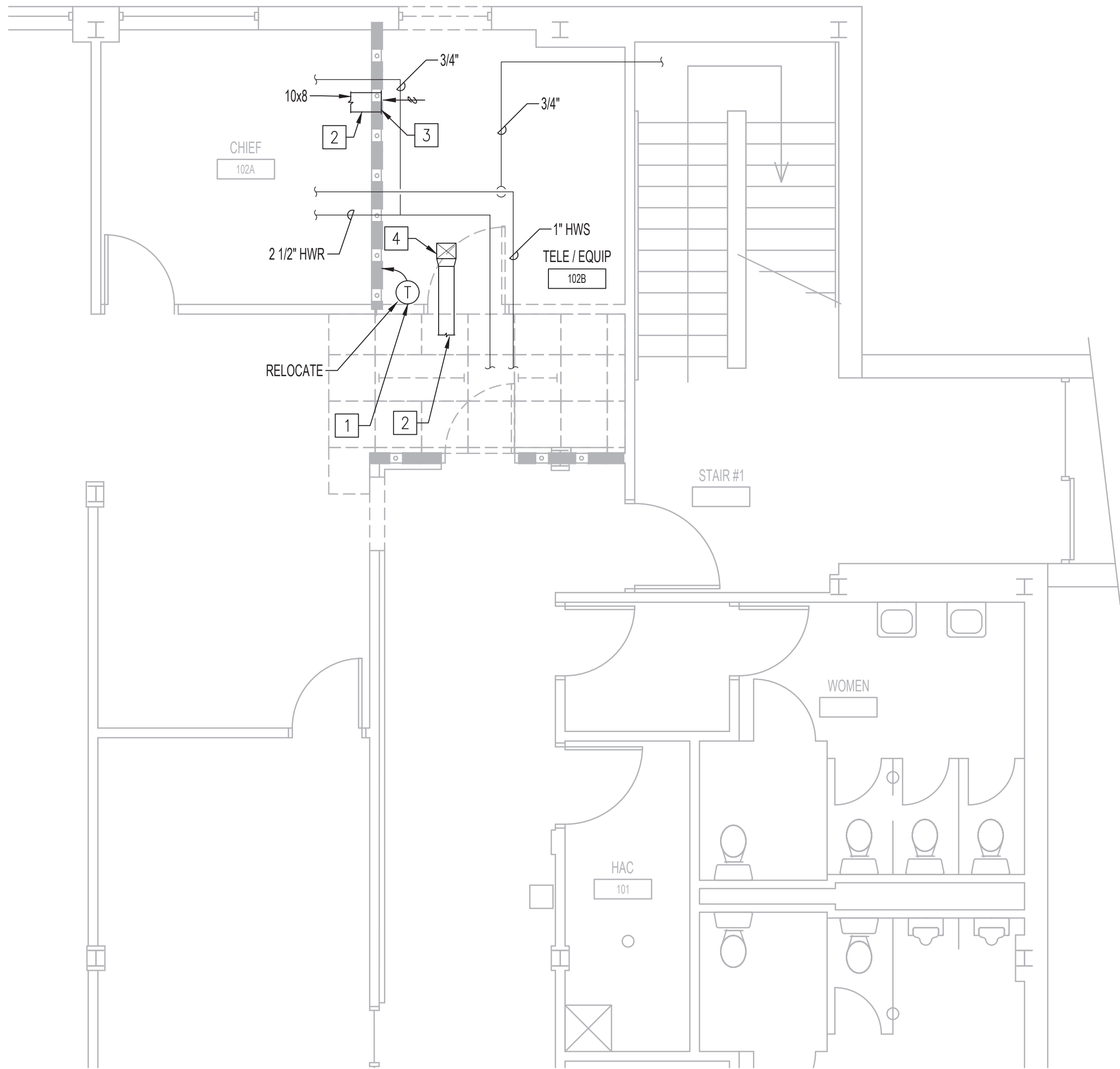
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MECHANICAL KEY NOTES - NEW WORK

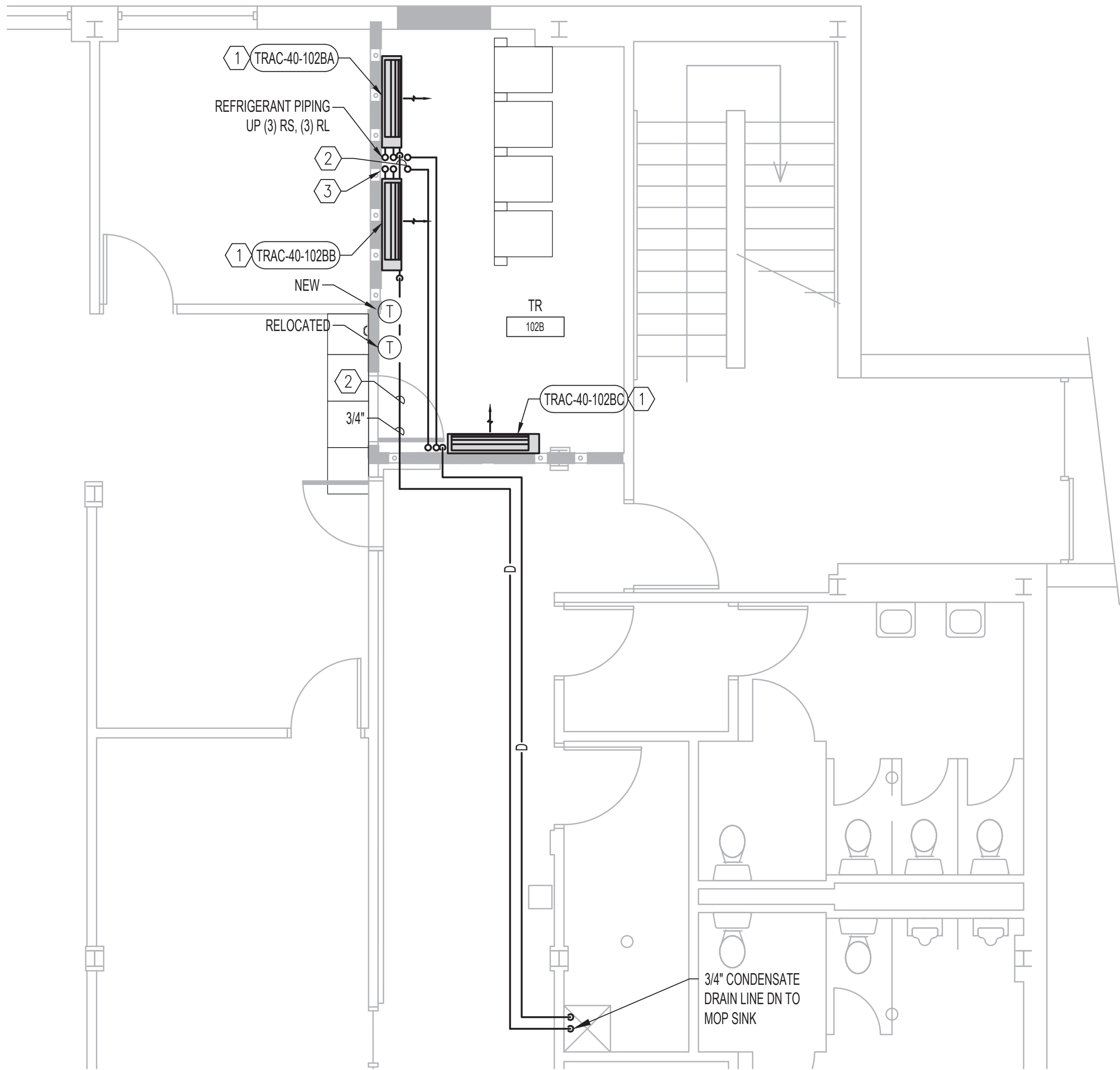
1. WALL MOUNTED VRF DUCT FREE DX SPLIT SYSTEMS INDOOR UNIT, TELECOMMUNICATION ROOM AIR CONDITIONING UNIT (TRAC), COORDINATE ALL LOCATIONS WITH NEW AND EXISTING PIPING, ELECTRIC PANELS ETC. FOR CODE REQUIRED CLEARANCE AND EQUIPMENT ACCESS PRIOR TO FINAL LOCATION.
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MECHANICAL KEY NOTES - DEMOLITION

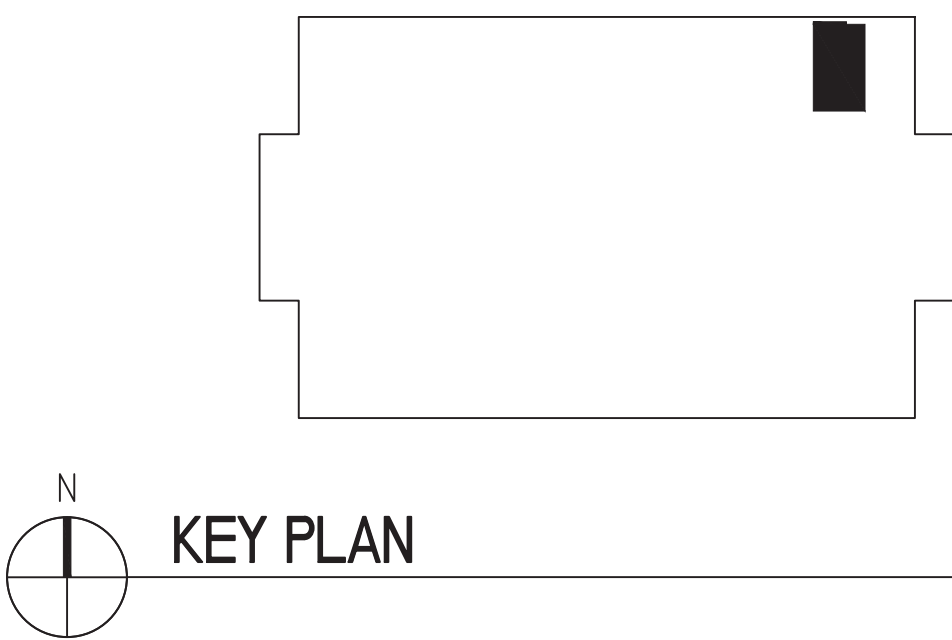
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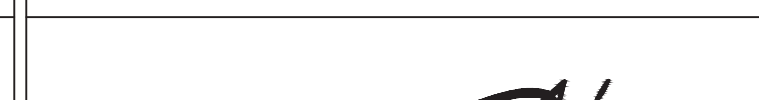

1 ENLARGED HVAC DEMO PLAN RM 102B  
1/4"=1'-0"



2 ENLARGED HVAC PLAN RM 102B  
1/4"=1'-0"



KEY PLAN

		CONSULTANT	<div><div><div>3300 Dundee RD, Northbrook, IL 60062 T: 847.952.9362 www.bancroft-ae.com Bancroft Project No: 18-121</div></div></div>	<div><div>REGISTERED PROFESSIONAL ENGINEER</div><div>RAED HAMID PE-28170 DATE 3/18/2022</div><div>NORTH DAKOTA</div><div></div></div>	<div><div>Office of Construction and Facilities Management</div><div><div>VA</div><div>U.S. Department of Veterans Affairs</div></div></div>	Drawing Title	MECHANICAL - BUILDING 40 - ENLARGED PLANS - FIRST FLOOR	Phase	ISSUE FOR BID	Project Title	EHRM INFRASTRUCTURE UPGRADES	Project Number	437-21-205
										Building Number	40		
										Drawing Number			
ISSUE FOR BID	03-18-22									Location	FARGO VA HEALTH CARE SYSTEM		
Revisions:	Date:									Issue Date	3/18/2022	Checked	DG
										Drawn	BX		
													MH-40-101



MECHANICAL GENERAL NOTES

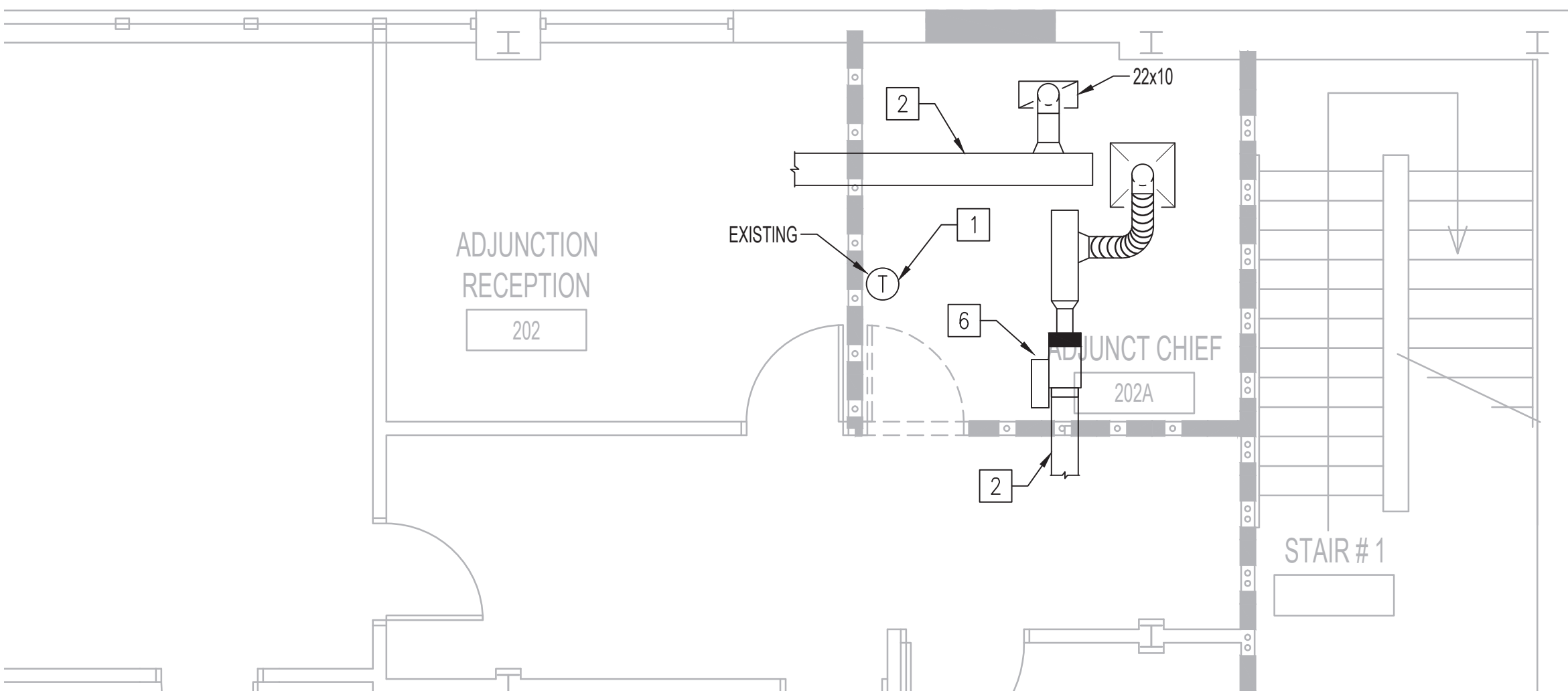
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MECHANICAL KEY NOTES - NEW WORK

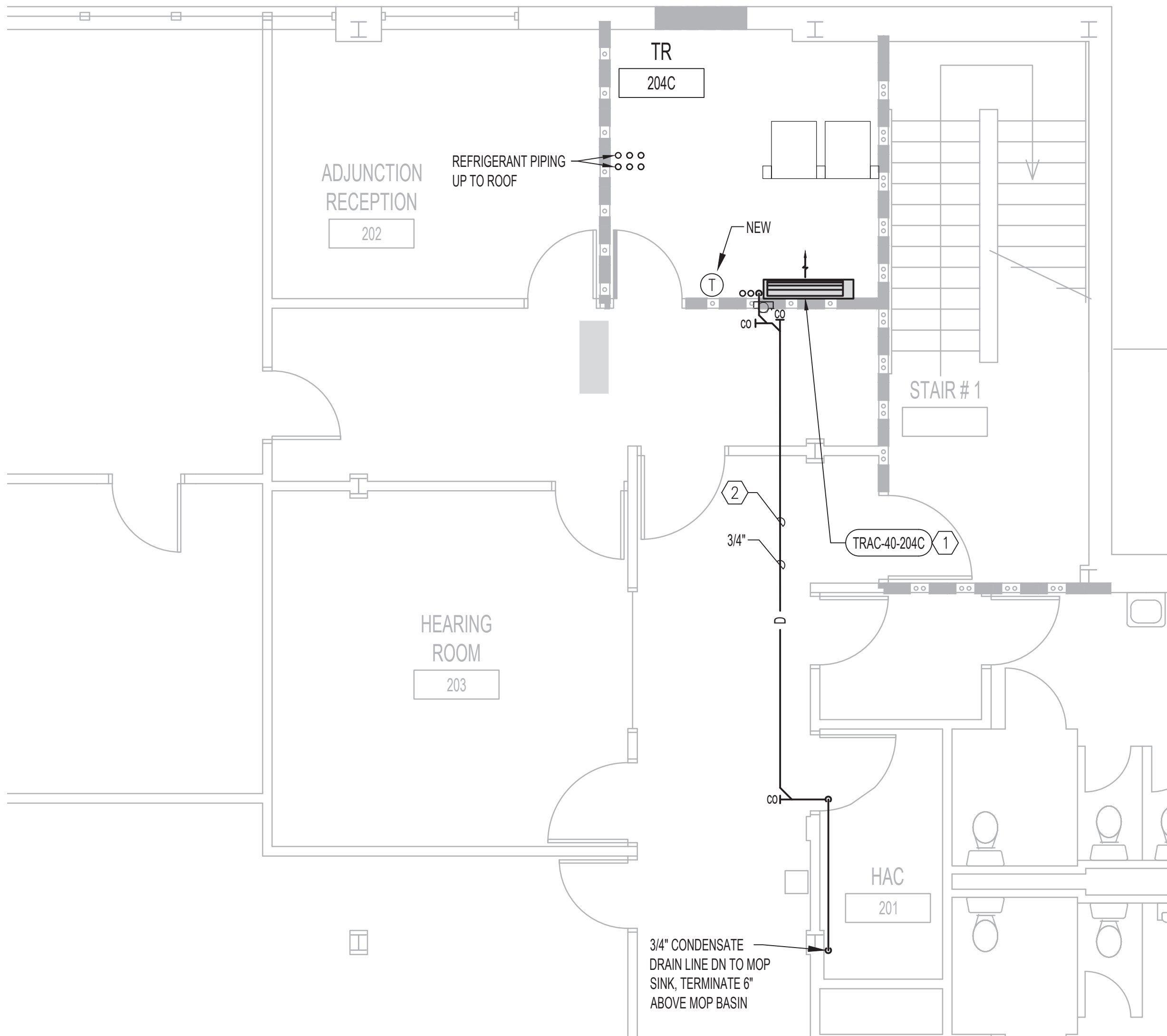
1. WALL MOUNTED VRF DUCT FREE DX SPLIT SYSTEMS INDOOR UNIT, TELECOMMUNICATION ROOM AIR CONDITIONING UNIT (TRAC), COORDINATE ALL LOCATIONS WITH NEW AND EXISTING PIPING, ELECTRIC PANELS ETC. FOR CODE REQUIRED CLEARANCE AND EQUIPMENT ACCESS PRIOR TO FINAL LOCATION.
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4. REFRIGERANT PIPING DOWN THROUGH ROOF PIPE PORTAL. (2) RS, (2) RC.

MECHANICAL KEY NOTES - DEMOLITION

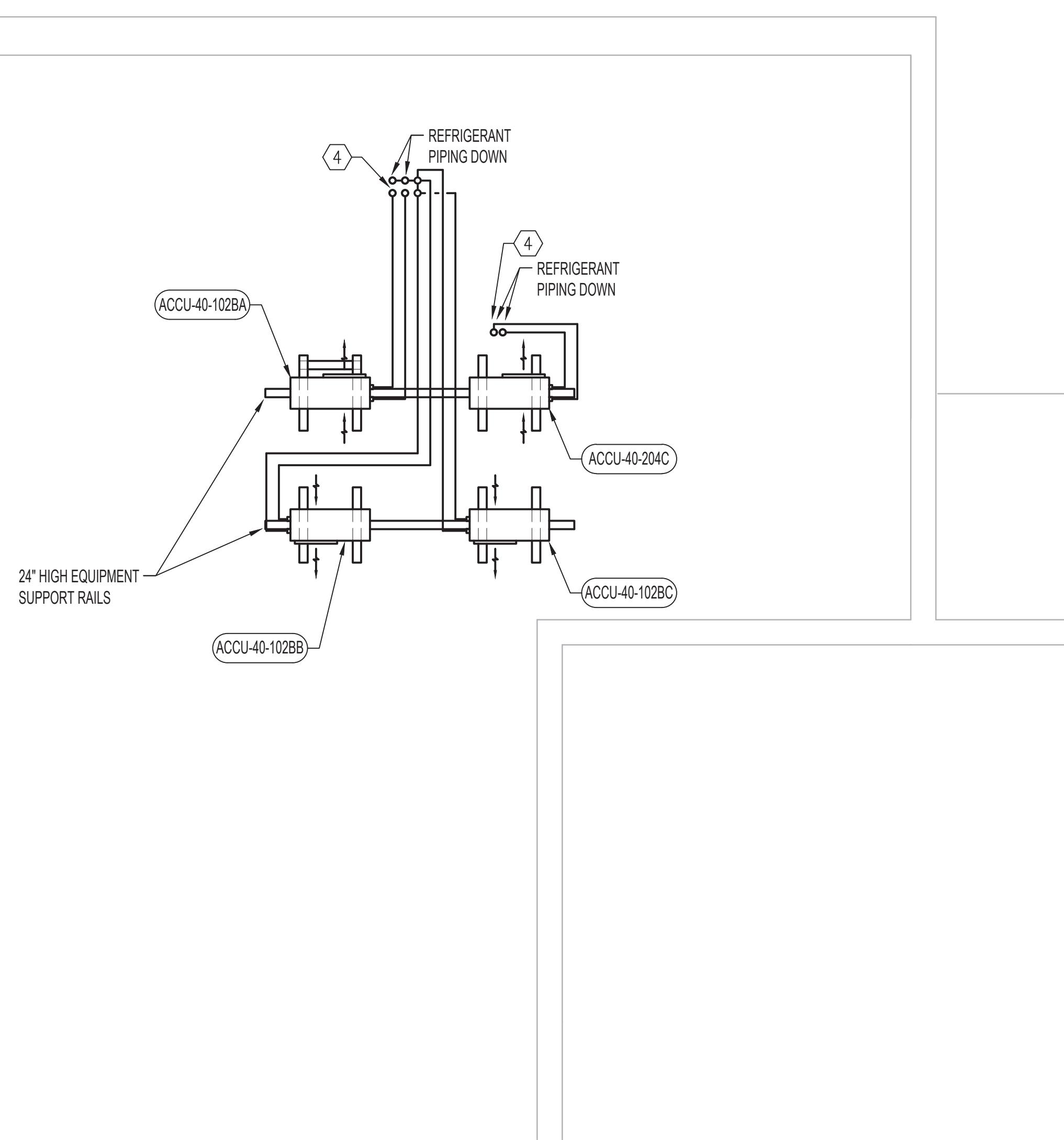
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1 ENLARGED HVAC DEMO PLAN RM 204C  
1/4"=1'-0"



2 ENLARGED HVAC PLAN RM 204C  
1/4"=1'-0"




3 ENLARGED HVAC ROOF PLAN BUILDING 40  
1/4"=1'-0"

K:\CGO\_PROJECTS\2018\15-121\_36226180044\_VISA\23 ID2 (North Dakota + Iowa)\437-21-205 EHRM Fargo, ND\000 - Design\402 - Drawings\WORKING\MEH-40-102.dwg  
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ISSUE FOR BID	03-18-22
Revisions:	Date:

CONSULTANT
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ARCHITECT/ENGINEER OF RECORD
 BANCROFT ARCHITECTS + ENGINEERS 3300 Dundee RD. Northbrook, IL 60062 T: 847.952.9362 www.bancroft-ae.com Bancroft Project No: 18-121

STAMP


Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title
MECHANICAL - BUILDING 40 - ENLARGED PLANS - SECOND FLOOR
SHEET 136 OF 279

Phase
ISSUE FOR BID

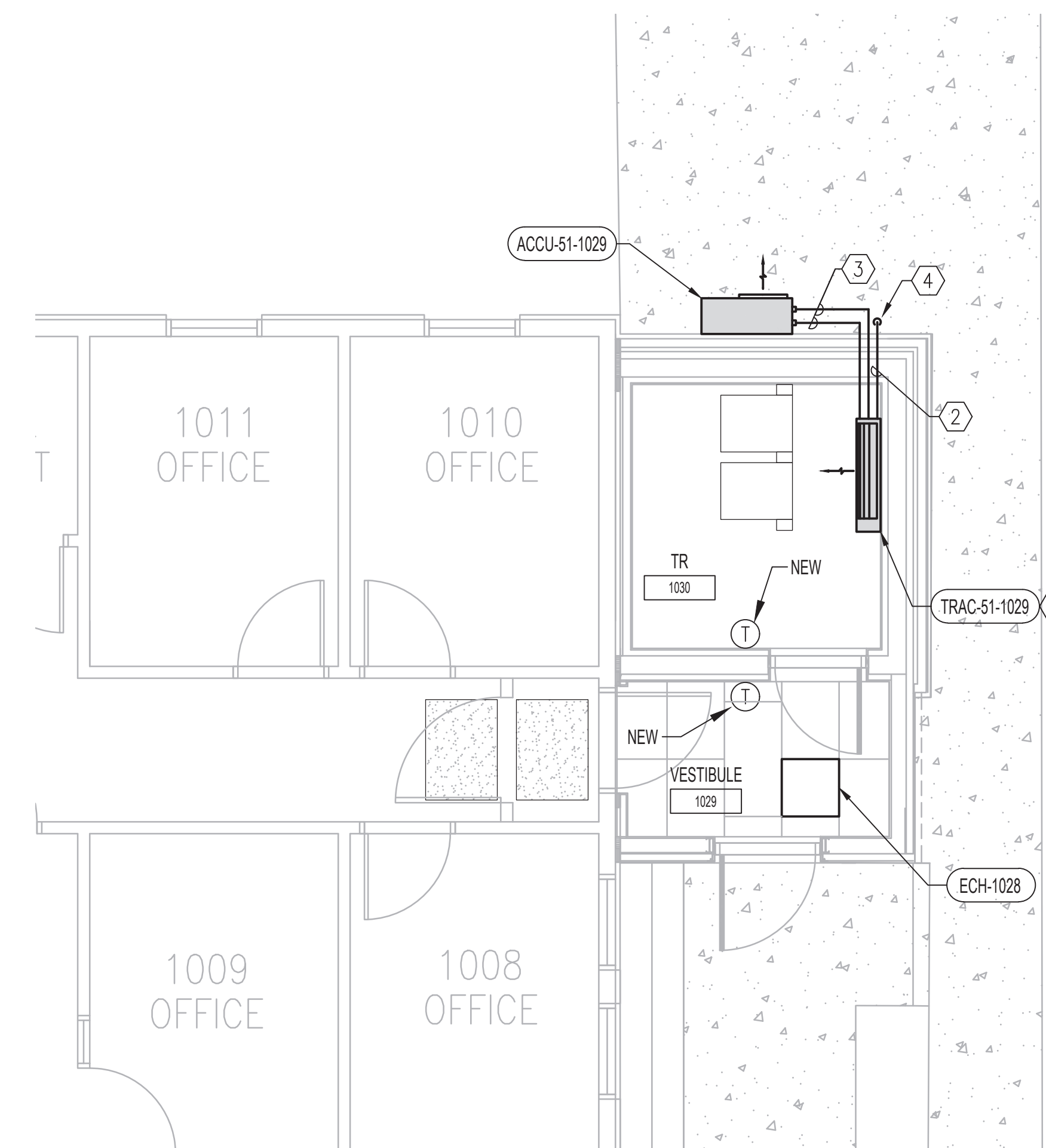
Project Title
EHRM INFRASTRUCTURE UPGRADES
Location
FARGO VA HEALTH CARE SYSTEM
Issue Date
3/18/2022
Checked
DG
Drawn
BX

Project Number
437-21-205
Building Number
40
Drawing Number
MH-40-102

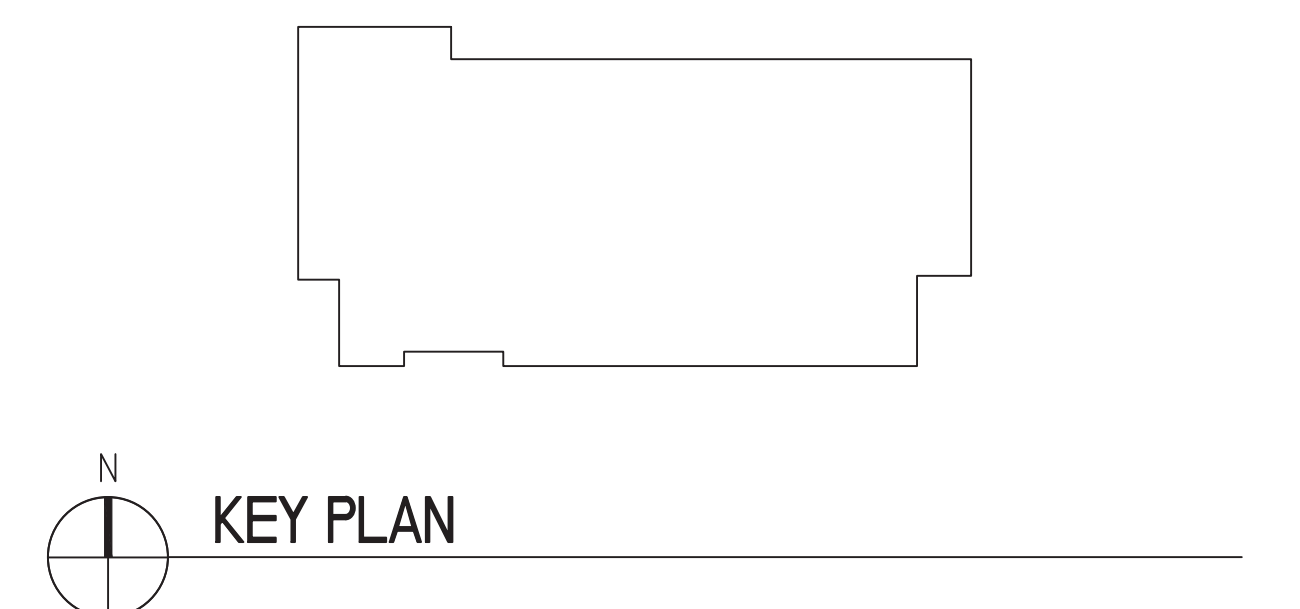


1. WALL MOUNTED VRF DUCT FREE DX TRUCK SYSTEMS INDOOR UNIT. TELECOMMUNICATION ROOM AIR CONDITIONING UNIT (DRA). COORDINATE ALL LOCATIONS WITH NEW AND EXISTING PIPING, ELECTRIC PANELS ETC. FOR CODE REQUIRED CLEARANCE AND EQUIPMENT ACCESS PRIOR TO FINAL LOCATION.
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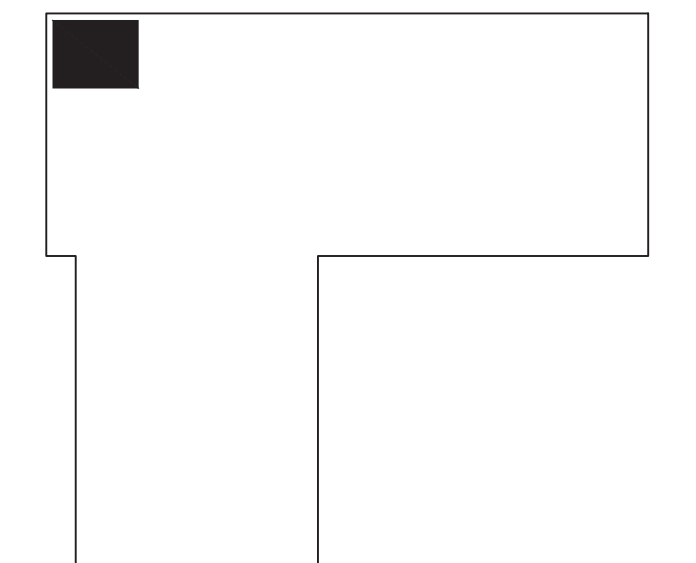
1 ENLARGED HVAC PLAN RM 1029  
1/4" = 1'-0" 0 1' 2' 4'

[illegible]



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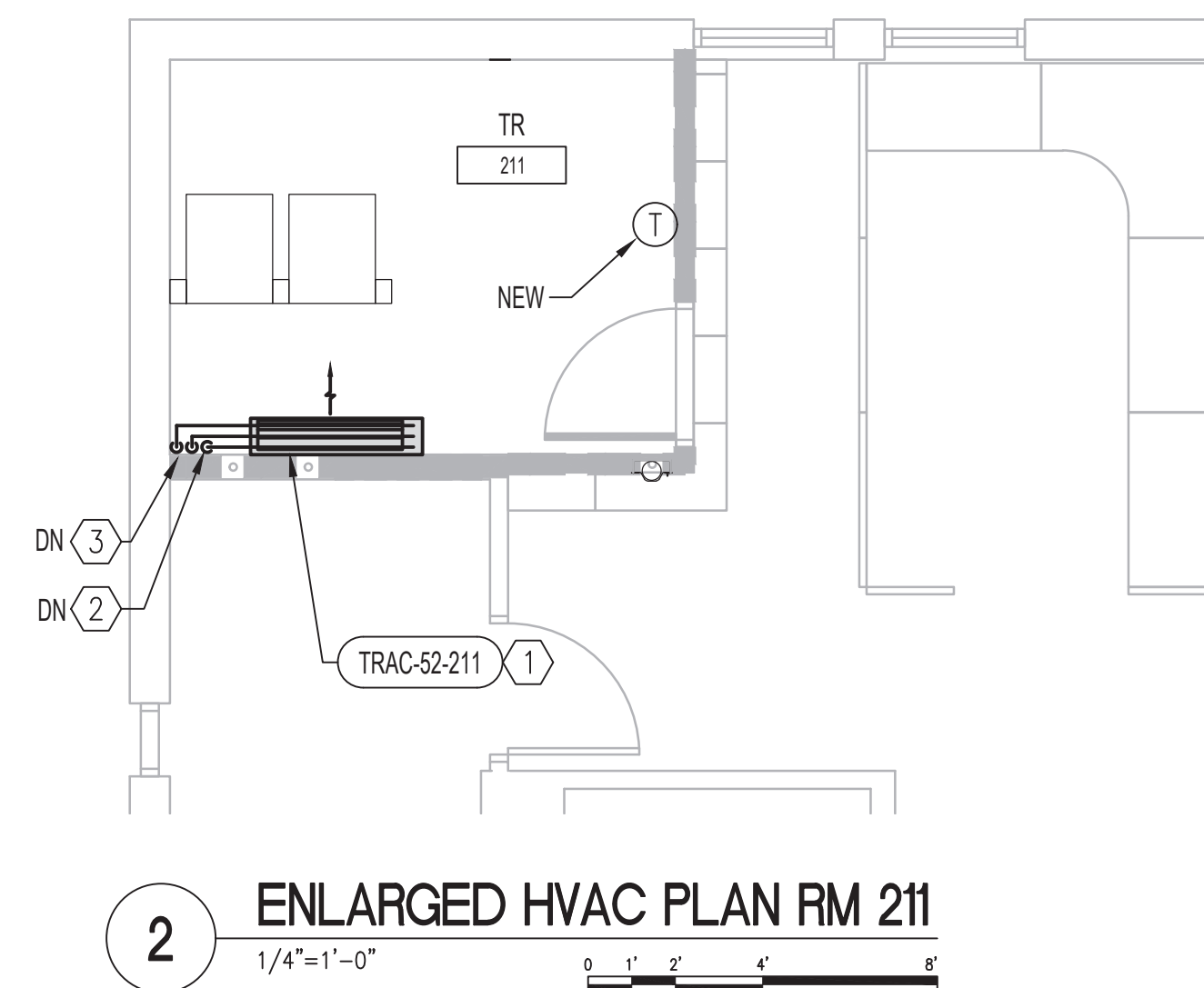
## KEY PLAN

		CONSULTANT	ARCHITECT/ENGINEER OF RECORD	STAMP	<div> <div>Office of Construction and Facilities Management</div> <div> <div>VA</div> <div>U.S. Department of Veterans Affairs</div> </div> </div>	<div> <div>Drawing Title</div> <div>MECHANICAL - BUILDING 52 - ENLARGED PLANS - FIRST FLOOR</div> </div> <div> <div>Project Title</div> <div>EHRM INFRASTRUCTURE UPGRADES</div> </div>	<div> <div>Phase</div> <div>ISSUE FOR BID</div> </div>	<div> <div>Project Title</div> <div>EHRM INFRASTRUCTURE UPGRADES</div> </div> <div> <div>Project Number</div> <div>437-21-205</div> </div> <div> <div>Building Number</div> <div>52</div> </div>	<div> <div>Drawing Number</div> <div>MH-52-101</div> </div>
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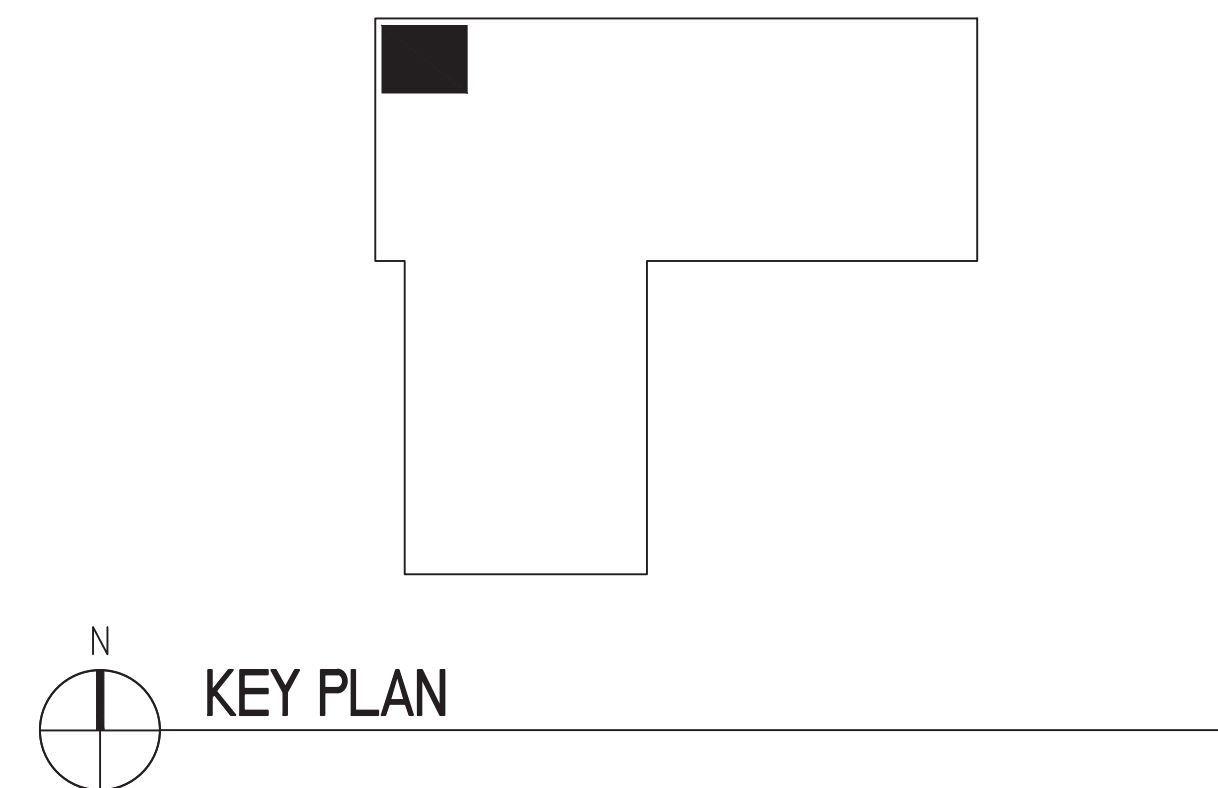
## MECHANICAL KEY NOTES - NEW WORK

1. WALL MOUNTED VRF DUCT FREE DX (SPAC) SYSTEMS INDOOR UNIT. TELECOMMUNICATION ROOM AIR CONDITIONING UNIT (TRU), COORDINATE ALL LOCATIONS WITH NEW AND EXISTING PIPING, ELECTRIC PANELS ETC. FOR CODE REQUIRED CLEARANCE AND EQUIPMENT ACCESS PRIOR TO FINAL LOCATION.
2. INSULATED COPPER CONDENSATE DRAIN LINE FROM NEW WALL MOUNTED CONDENSATE PUMPS BELOW AC UNITS TO NEAREST INDIRECT WASTE CONNECTION. FOR LOCATION AND PIPING ROUTING SEE ROOF AND FULL FLOOR PLANS. (IN MULTIPLE SYSTEM INSTALLATIONS DRAIN LINES FROM EACH UNIT SHALL BE SERVED BY ONE CONDENSATE PUMP AND DRAIN LINE TO NEAREST MOP SINK OR FLOOR DRAIN WITH A SINGLE INDEPENDENT CONNECTION FOR ALL INSTALLATION CONDENSATE LINES EXITING ROOMS.)
3. REFRIGERANT SUCCTION (RS) AND LIQUID (RL) LINES FROM EVAPORATOR COIL CONNECTION TO REMOTE OUTDOOR AIR COOLED CONDENSING UNIT (ACCU). FOR LOCATION AND PIPING ROUTING SEE ROOF AND FULL FLOOR PLANS. SIZE PIPING PER MANUFACTURER'S RECOMMENDATION.

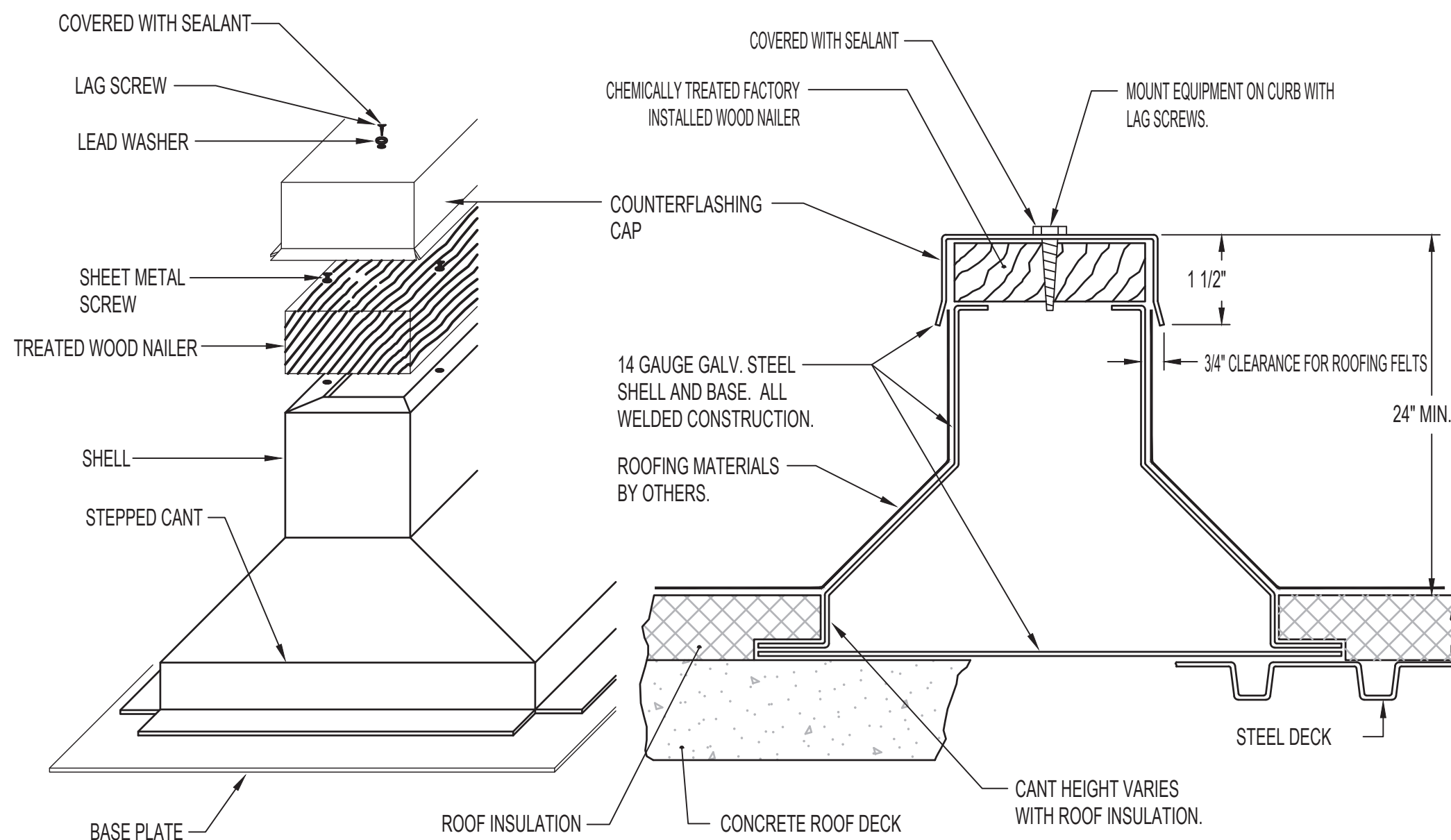
1. EXISTING THERMOSTATS AND CONTROL WIRING TO REMAIN AND ARE TO BE ADJUSTED 10 DEGREES ABOVE NEW AC EQUIPMENT SETPOINTS
2. ALL EXISTING HVAC SYSTEMS, EQUIPMENT, AIR DISTRIBUTION EQUIPMENT, PUMPING PIPING, MEDICAL GAS AND CONTROLS TO REMAIN THIS INCLUDES ALL EQUIPMENT, PIPING, DUCTWORK AND CONTROLS SERVING AREAS OUTSIDE OF THIS ROOM .
3. EXISTING GRILLES, REGISTERS AND OPEN ENDED DUCTS TO REMAIN AS IS.
4. WHERE EXISTING CEILINGS ARE TO BE REMOVED, EXISTING DIFFUSERS, GRILLES , FLEXIBLE DUCT SHALL BE SUSPENDED FROM STRUCTURE ABOVE AS PART OF NEW WORK SCOPE. A SECOND ADJUSTMENT OF LOCATIONS MAY BE REQUIRED TO ACCOMMODATE NEW DATA WIRING AND DEVICES.
5. EXISTING SPLIT SYSTEM DX CASSETTE, OR VRF FAN COIL TERMINALS, RELATED CONTROLS AND DRAIN PIPING SHALL REMAIN AS BACK UP SYSTEMS FOR NEW DEDICATED HEAT REMOVAL AND COOLING IN NEW WORK SCOPE.
6. EXISTING VAV BOX AND RELATED PIPING, DUCTWORK, AIR DEVICES AND THERMOSTATS TO REMAIN AS BACK UP SYSTEMS FOR NEW DEDICATED HEAT REMOVAL AND COOLING IN NEW WORK SCOPE.
7. EXISTING EXHAUST FAN, DUCTWORK, THERMOSTATS AND RELATED TEMP CONTROLS TO REMAIN AS BACK UP SYSTEM FOR NEW DEDICATED HEAT REMOVAL AND COOLING IN NEW WORK SCOPE.



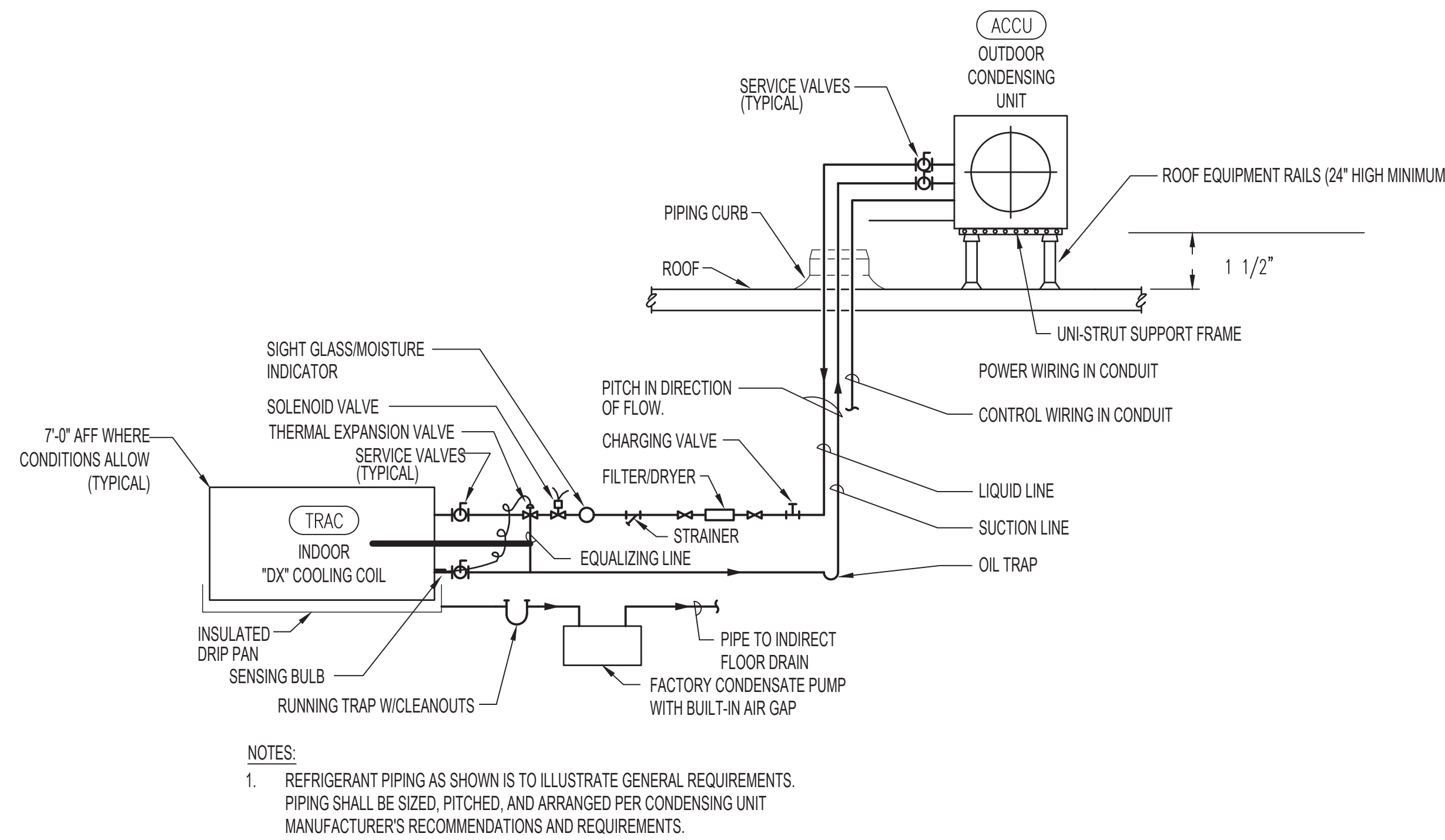
2 ENLARGED HVAC PLAN RM 211  
1/4" = 1'-0" 0 1' 2' 4' 8'

[illegible]

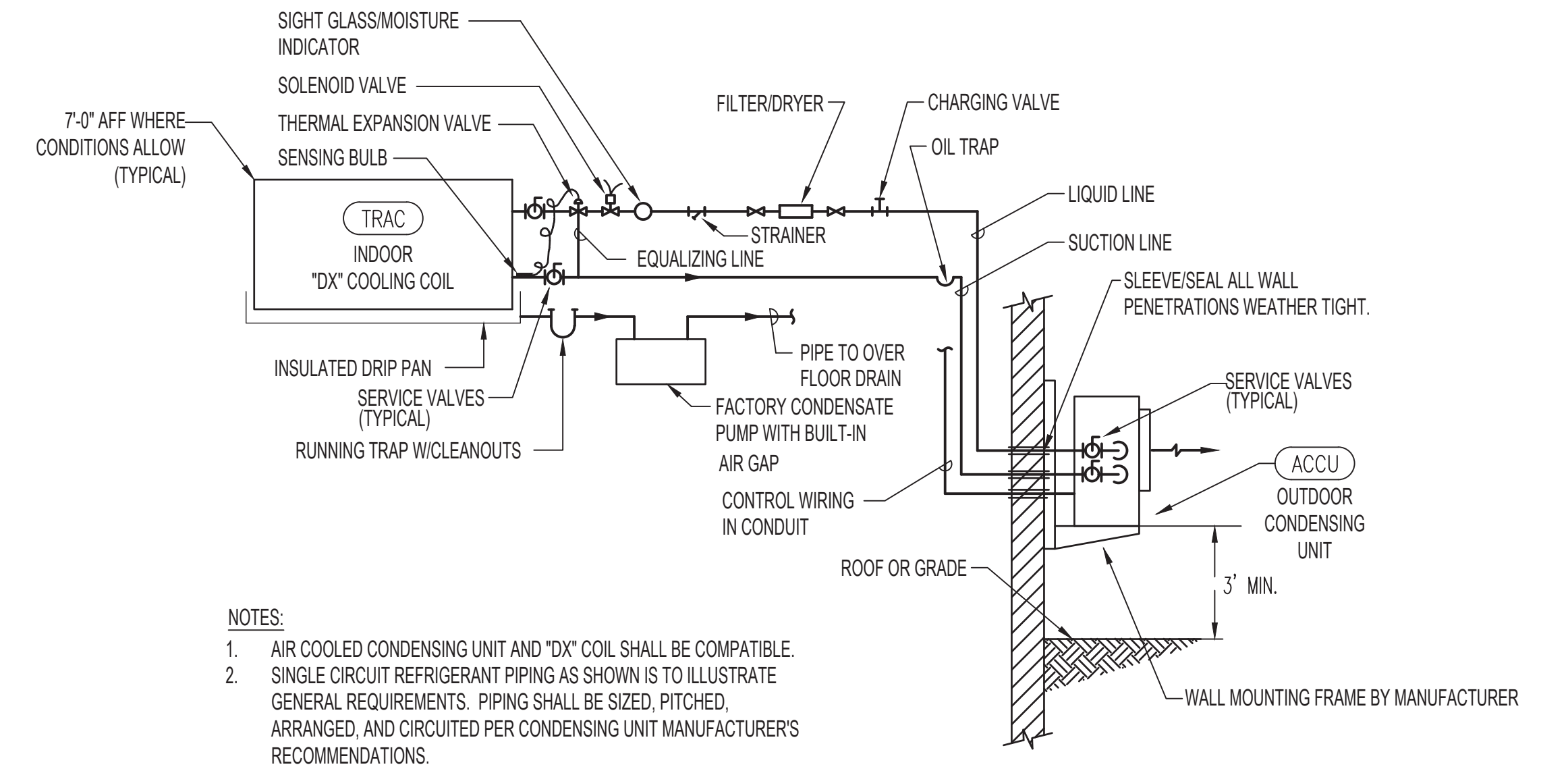




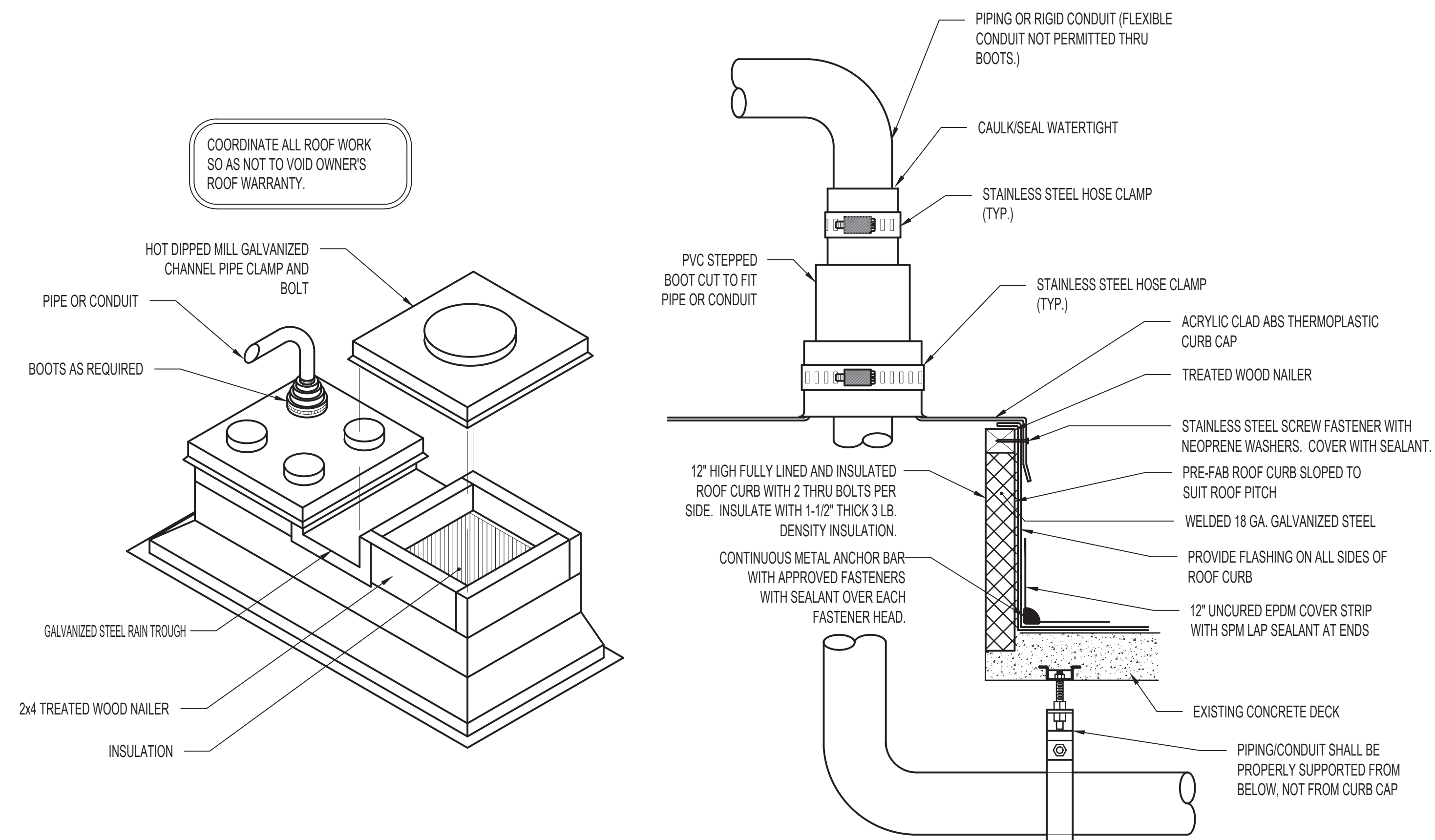
1 ROOF MOUNTED EQUIPMENT RAIL/CURB  
NTS



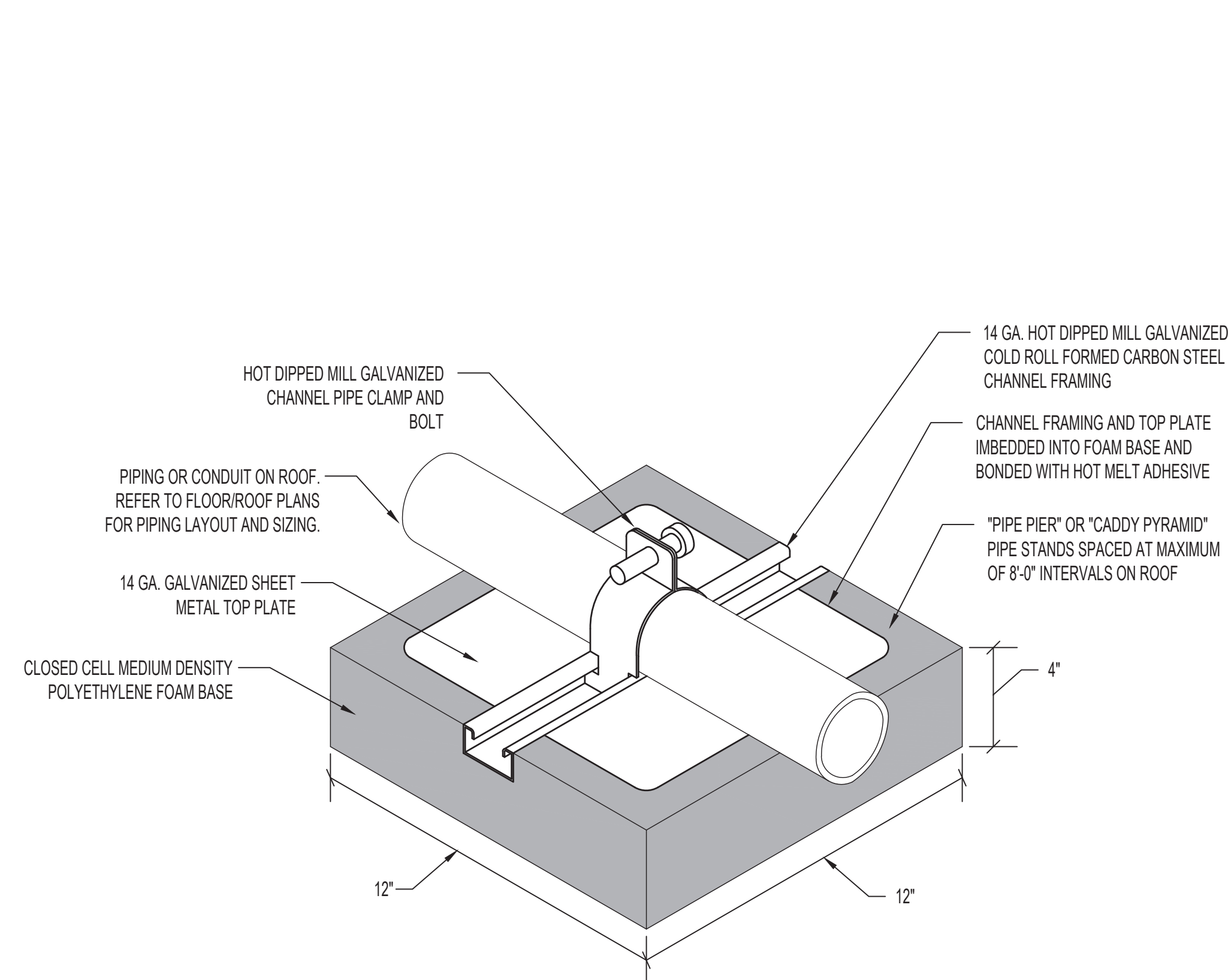
2 TRAC UNIT REFRIGERANT PIPING DETAIL (ROOF)  
NTS



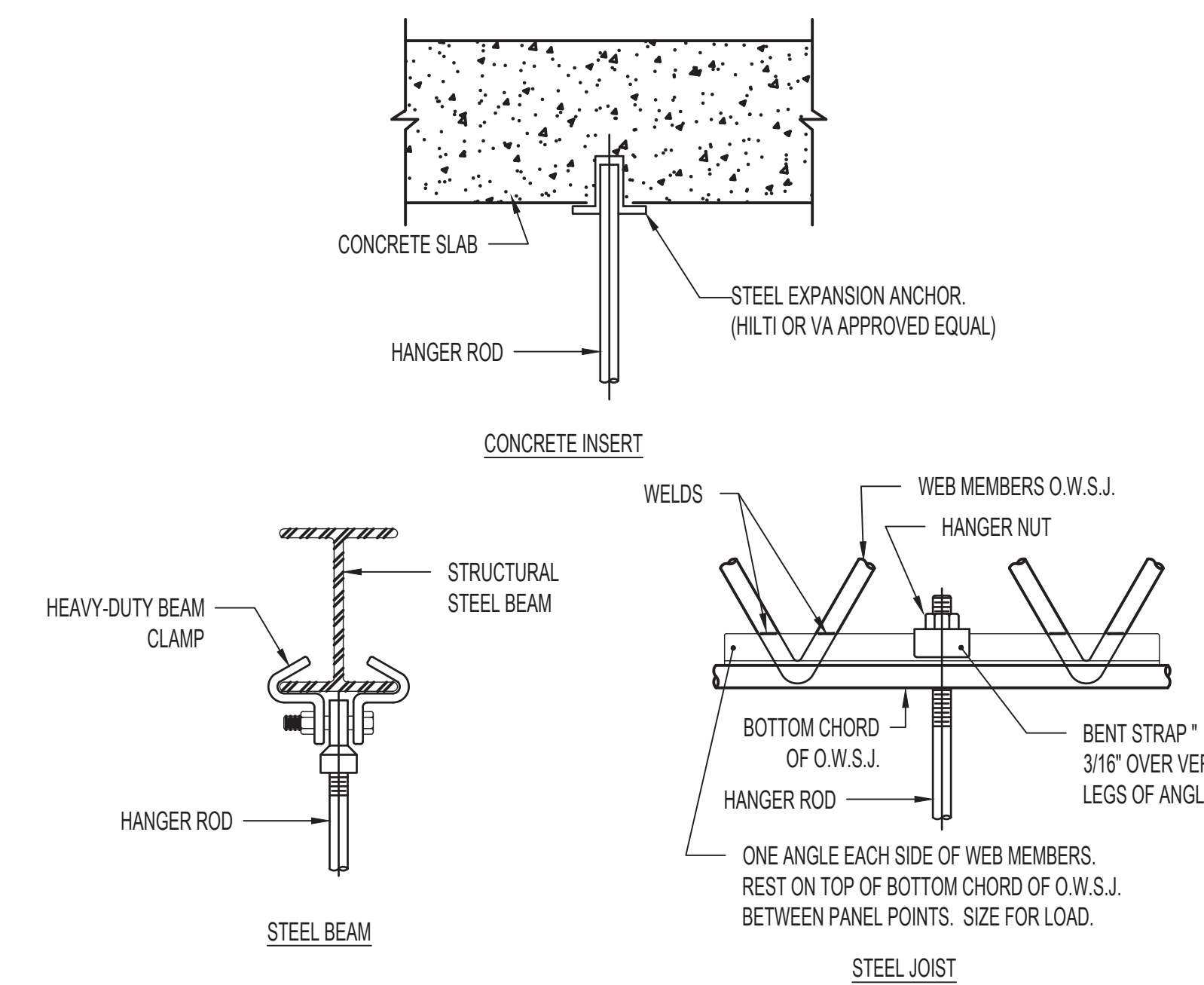
3 TRAC UNIT REFRIGERANT PIPING DETAIL (WALL)  
NTS



4 PIPING OR CONDUIT ROOF CURB DETAIL  
NTS



5 PIPING-CONDUIT (150 LB. CAPACITY) ROOF SUPPORT  
NTS



PIPE HANGERS AND SUPPORTS		
SUPPORT HORIZONTAL STEEL AND COPPER PIPING AS FOLLOWS:		
NOMINAL PIPE SIZE	DISTANCE BETWEEN SUPPORTS	HANGER ROD DIAMETERS
1/2"	6'	3/8"
3/4 TO 1-1/2"	6'	1/2"
2" TO 2-1/2"	10'	1/2"
3" AND 4"	12'	5/8"
6" TO 12"	14'	7/8"
14" TO 18"	20'	1"

PLACE HANGER WITHIN 1 FOOT OF EACH HORIZ. ELBOW. SUPPORT HORIZ. SOIL WASTE AND STORM PIPE NEAR EACH HUB, WITH 5 FEET MAXIMUM SPACING BETWEEN HANGERS. VERTICAL PIPING.

- SUPPORT VERTICAL WATER PIPING AT EVERY FLOOR.
- SUPPORT VERTICAL SOIL PIPE AT EACH FLOOR AT HUB.

WHERE SEVERAL PIPES CAN BE INSTALLED IN PARALLEL AND AT SAME ELEVATION PROVIDE MULTIPLE OR TRAPEZE HANGERS. WHERE PRACTICAL, SUPPORT RISER PIPING INDEPENDENTLY OF CONNECTED HORIZ. PIPING.

6 PIPE HANGER  
NTS

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STAMP

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title
MECHANICAL DETAILS
SHEET 140 OF 279

Phase
ISSUE FOR BID

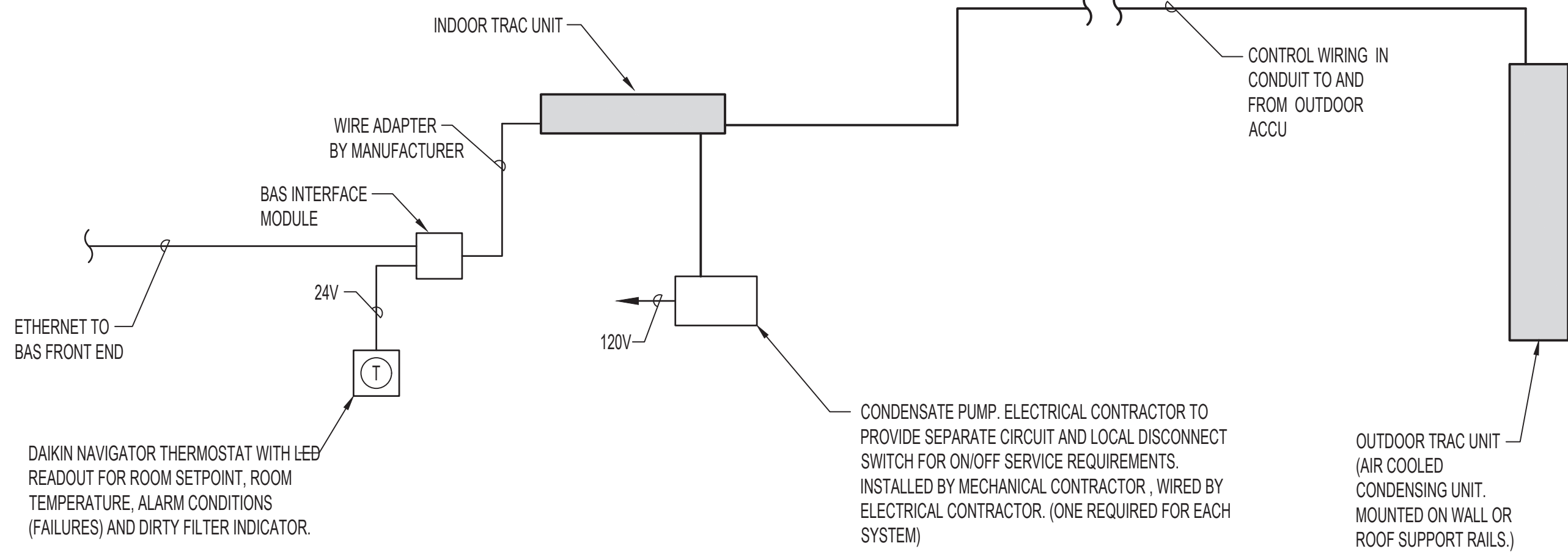
Project Title
EHRM INFRASTRUCTURE UPGRADES
Location
FARGO VA HEALTH CARE SYSTEM
Issue Date
3/18/2022
Checked
DG
Drawn
BX

Project Number
437-21-205
Building Number
-
Drawing Number
M501



BAS INTERFACE MODULE DAIKIN AZA16WSPDKC.DKN OR APPROVED EQUAL PLUS INTERFACE AVAILABLE POINTS		
NO.	POINT NAME	READ ONLY/WRITABLE
1	UNIT ON/OFF	WRITABLE
2	SETPOINT	WRITABLE
3	ROOM TEMPERATURE	WRITABLE
4	MODE AUTO / COOL / HEAT / FAN / DRY / ALARM	WRITABLE
5	FAN SPEED	WRITABLE
6	LOUVER POSITION	WRITABLE
7	ERROR CODE	READ ONLY
8	DIGITAL INPUT STATUS	READ ONLY

UNDERSIDE OF FLOOR OR ROOF DECK



NOTE:  
INFORMATION AND ARRANGEMENT INCLUDES BASIS OF DESIGN SPECIFIC PART NUMBERS. VA  
APPROVED DESIGN SHALL BE EQUAL AND INCLUDE SIMILAR DEVICES AND ARRANGEMENT.

### 3 TYPICAL TRAC UNIT CONTROLS AND DEVICES DETAIL

NTS

### Wiring Diagrams

FTXS30/36LVJU - INDOOR TRAC OR APPROVED EQUAL

