

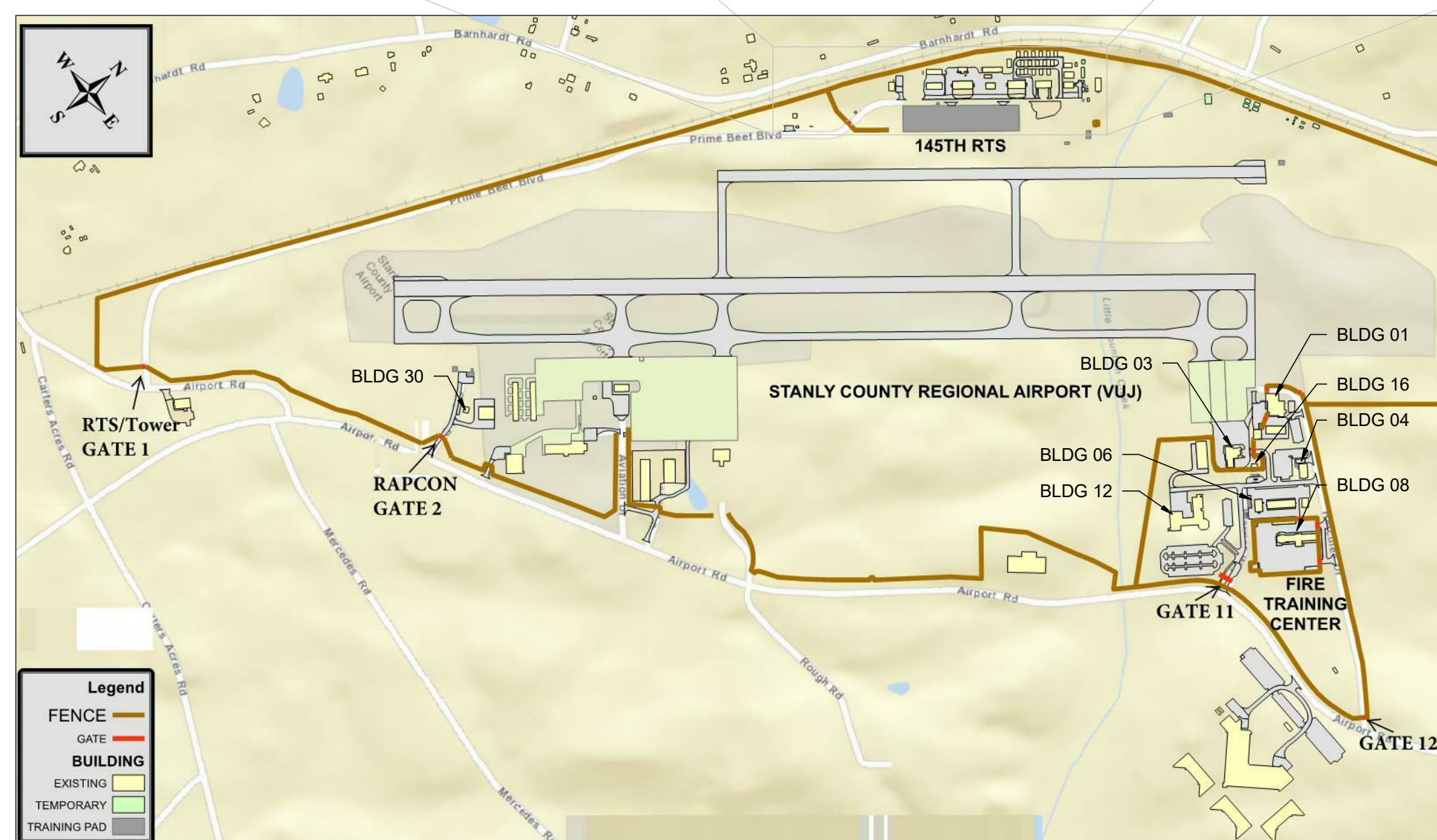
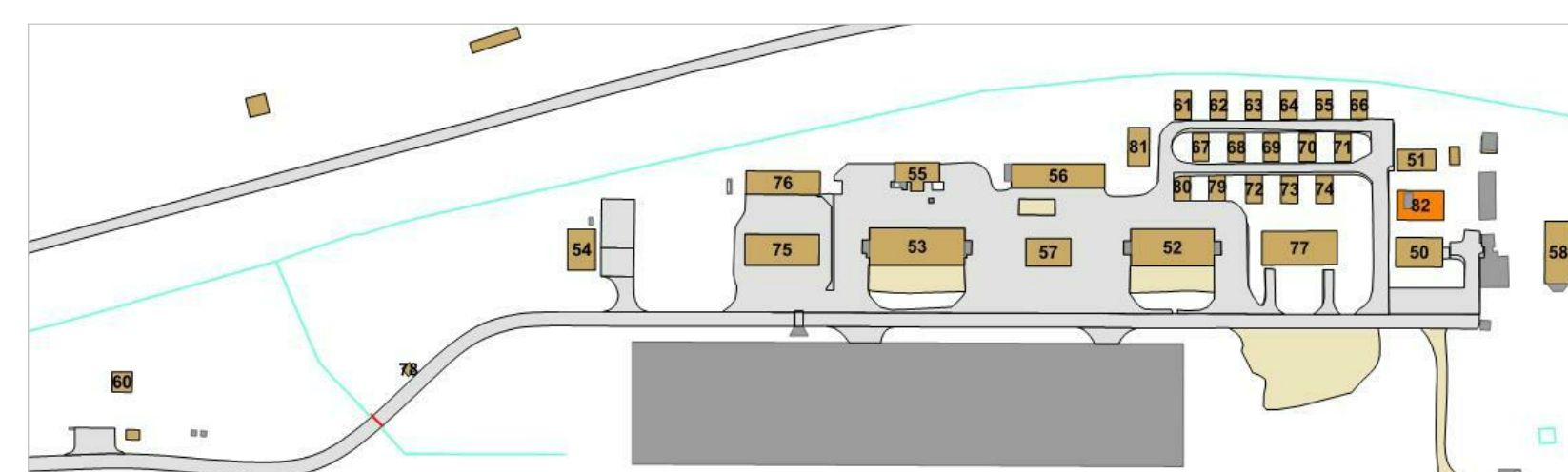
NORTH CAROLINA AIR NATIONAL GUARD

REPLACE HVAC SYSTEMS BASE WIDE 145th AIRLIFT WING NEW LONDON, NC



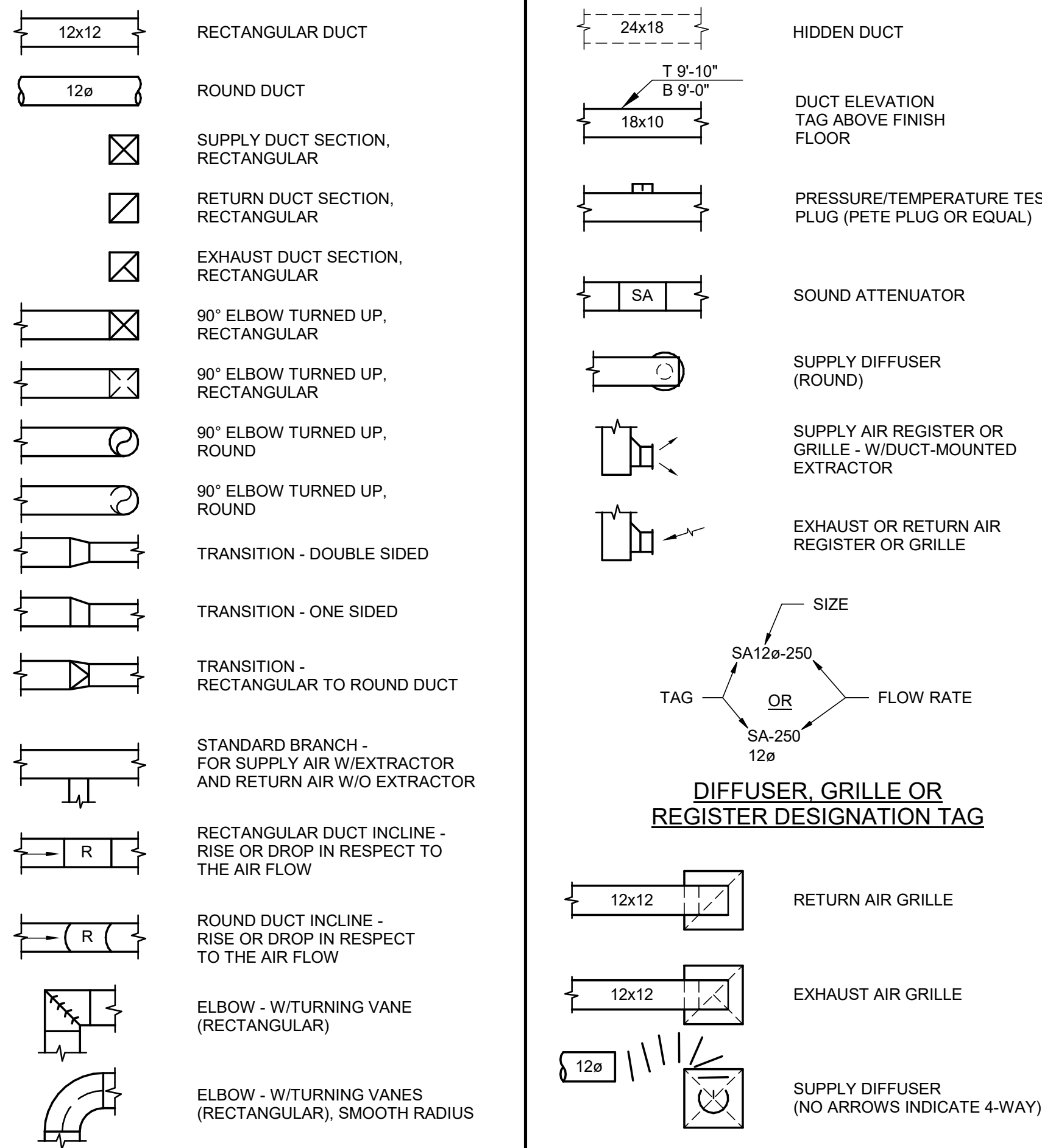
CONTRACT NO.: W9133L-15-D-0004
TASK ORDER NO.: W91242-18-F-0130
PN: WEFM142600

B-3 DESIGN SUBMISSION
FEBRUARY 2020



INDEX OF DRAWINGS	
SHEET #	DESCRIPTION
00M001	GENERAL NOTES, LEGENDS, AND ABBREVIATIONS
01MD101	BUILDING 01 - FIRST FLOOR MECHANICAL DEMOLITION PLAN
01MD102	BUILDING 01 - ROOF MECHANICAL DEMOLITION PLAN
01M101	BUILDING 01 - FIRST FLOOR MECHANICAL PLAN
01M102	BUILDING 01 - ROOF MECHANICAL PLAN
03M101	BUILDING 03 - MECHANICAL PLAN
04M101	BUILDING 04 - MECHANICAL PLANS
06M101	BUILDING 06 - MECHANICAL PLAN
08MD101	BUILDING 08 - MECHANICAL DEMOLITION PLANS
08M101	BUILDING 08 - MECHANICAL PLANS
12MD101	BUILDING 12 - ROOF MECHANICAL DEMOLITION PLAN
12M101	BUILDING 12 - MECHANICAL PLANS
16M101	BUILDING 16 - MECHANICAL PLANS
30M101	BUILDING 30 - MECHANICAL PLANS
50M101	BUILDING 50 - MECHANICAL PLAN
51M101	BUILDING 51 - MECHANICAL PLAN
54M101	BUILDING 54 - MECHANICAL DEMOLITION
60MD101	BUILDING 60 - MECHANICAL DEMOLITION PLANS
60M101	BUILDING 60 - MECHANICAL PLANS
75M101	BUILDING 75 - MECHANICAL PLANS
77M101	BUILDING 77 - MECHANICAL PLAN
81M101	BUILDING 81 - MECHANICAL PLAN
TCM101	TROOP CAMP - NEW WORK PLAN
99M001	MECHANICAL SCHEDULES
99M002	MECHANICAL SCHEDULES
99M003	MECHANICAL DETAILS
99M004	MECHANICAL DETAILS

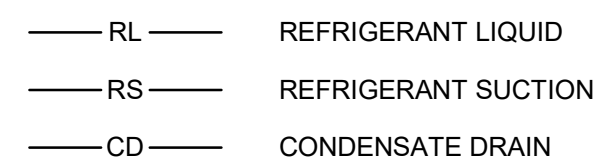
HVAC SYMBOLOGY



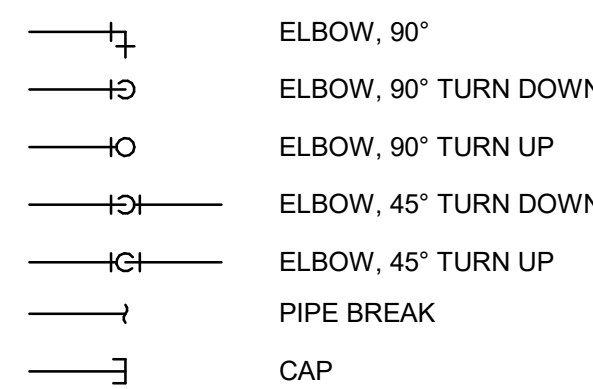
ABBREVIATIONS

Table of abbreviations for HVAC and mechanical systems, including terms like AD (Access Door), APD (Air Pressure Drop), and various units and materials.

PIPING



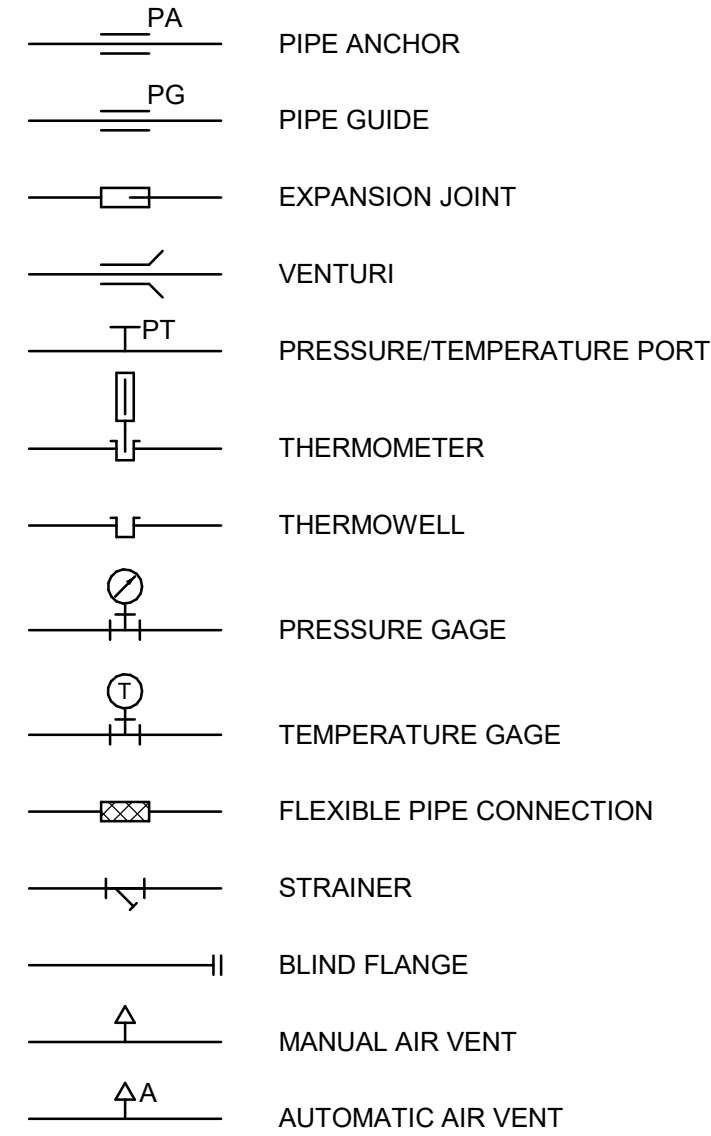
PIPING FITTINGS



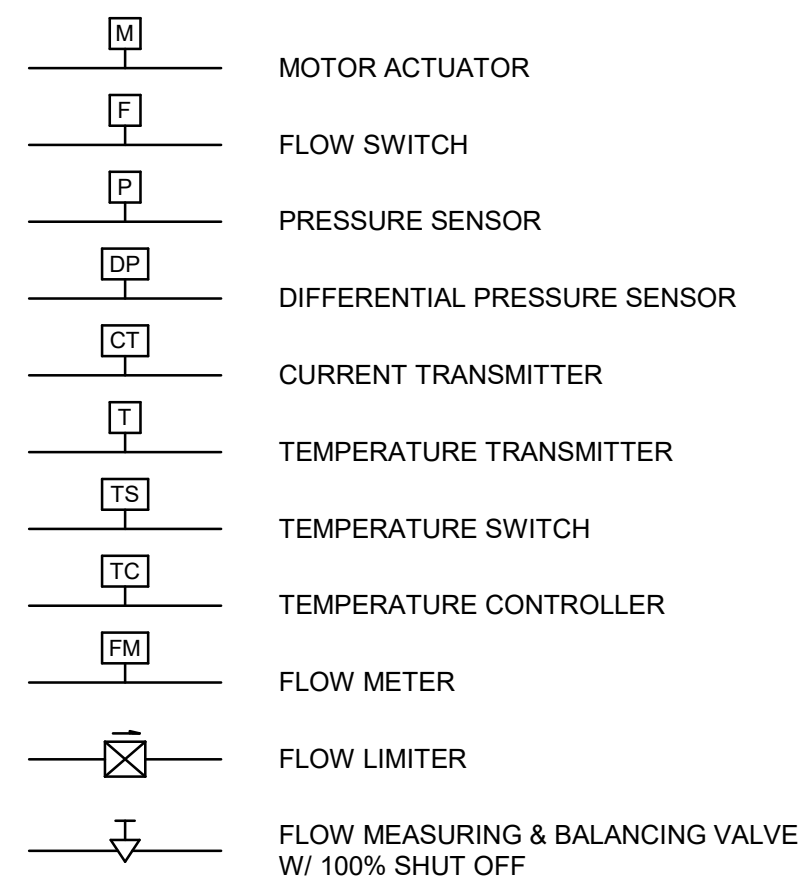
DEMOLITION NOTES

- 1. THE SCOPE OF WORK IS LIMITED TO THE RENOVATION/REPLACEMENT OF A PORTION OF THE EXISTING MECHANICAL EQUIPMENT. HVAC WORK INCLUDES CONDUCTING A TEST AND BALANCE REPORT PRIOR TO AND AFTER CONSTRUCTION, DUCTWORK MODIFICATIONS TO MEET THE RENOVATED SPACE/SYSTEMS REQUIREMENTS, AND THE ADDITION OF ANY OTHER ARCHITECTURAL ELEMENTS REQUIRED AS INDICATED ON DRAWINGS.
2. PRIOR TO THE START OF CONSTRUCTION OR DEMOLITION WORK, A CERTIFIED TEST AND BALANCE REPORT SHALL BE SUBMITTED TO THE ENGINEER. THE TEST AND BALANCE REPORT SHALL INCLUDE THE FOLLOWING FROM THE EXISTING AIR HANDLING UNIT TO BE REPLACED, MEASURE AND RECORD FROM THE SUPPLY AIRFLOW FROM THE AHU, OUTSIDE AIRFLOW RATE TO THE AHU, AND RETURN AIRFLOW TO THE UNIT.
3. SYSTEMS SHALL BE ADJUSTED TO ACHIEVE THE MEASURED AIRFLOW RATES AS EXISTING EQUIPMENT PRIOR TO DEMOLITION OR AS INDICATED ON PLANS. WORK SHALL INCLUDE ADDING ANY BALANCING DAMPERS WITHIN EXISTING OR NEW DUCTWORK, CHANGING BELTS AND SHEAVES NECESSARY TO THE AHU TO ACHIEVE AIRFLOW RATES. AT POINT OF SUBSTANTIAL COMPLETION, CONTRACTOR SHALL TEST, ADJUST, AND BALANCE THE SYSTEM AND SUBMIT A CERTIFIED REPORT TO THE ENGINEER INDICATING THE FOLLOWING: SUPPLY AIR FLOW FROM THE NEW AHU, OUTSIDE AIR FLOW TO THE NEW AHU, AND RETURN AIR FLOW FROM THE SPACE.
4. DRAWINGS WERE PREPARED IN PART BASED ON EXISTING AS-BUILT'S DRAWINGS AND NON-DESTRUCTIVE FIELD WORK. EXISTING MECHANICAL DUCTWORK AND PIPING SHOWN IS SCHEMATIC AND MAY NOT NECESSARILY REPRESENT EXACT LOCATIONS.
5. EXISTING MECHANICAL DUCTWORK AND PIPING NOT ASSOCIATED WITH THE RENOVATION IS NOT SHOWN AND SHALL REMAIN IN SERVICE.
6. FIELD VERIFY EXISTING CONDITIONS AND REPORT DISCREPANCIES TO THE GOVERNMENT/ENGINEER BEFORE COMMENCING WORK.
7. ALL MATERIALS AND EQUIPMENT BEING REMOVED UNDER DEMOLITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF SITE, UNLESS OTHERWISE NOTED. UNITS INDICATED FOR REMOVAL SHALL BE DISPOSED OF AS RECYCLED MATERIALS AND SHALL NOT BE REUSED ELSEWHERE. REFER TO DIVISION 1 SPECIFICATIONS FOR ADDITIONAL INFORMATION AND TRACKING REQUIREMENTS.
8. REFER TO DIVISION 1 SPECIFICATIONS FOR REQUIREMENTS AND INSTRUCTIONS ON THE RECLAMATION AND DISPOSAL OF ALL REFRIGERANT. ALL DISPOSAL SHALL BE THE RESPONSIBILITY OF THE GOVERNMENT. CONTRACTOR RESPONSIBLE FOR RECLAIMING AND TRACKING (UNIT, POUNDS, AND OUNCES) AND COORDINATING WITH BCE/ENVIRONMENTAL FOR TURNOVER. THE BCE WILL PROVIDE THE CONTRACTOR WITH CONTAINERS FOR RECLAIMED REFRIGERANT WHICH WILL BE TURNED OVER WHEN FULL.
9. EXISTING HVAC EQUIPMENT/COMPONENTS TO BE REPLACED WITH NEW EQUIPMENT/COMPONENT OF LIKE OR SIMILAR ELECTRICAL REQUIREMENTS. NEW EQUIPMENT/COMPONENTS SHALL BE CONNECTED TO THE EXISTING CIRCUIT AND DISCONNECT REMAINING AFTER DEMOLITION. REFER TO NEW WORK DRAWINGS FOR FURTHER CLARIFICATION.
10. DISCONNECT ELECTRICAL SERVICES TO ELECTRICAL DEVICES THAT ARE NOTED TO BE REMOVED, WIRE AND CONDUIT TO BE REMOVED BACK TO THE FIRST TERMINATION POINT WHICH IS TO REMAIN.

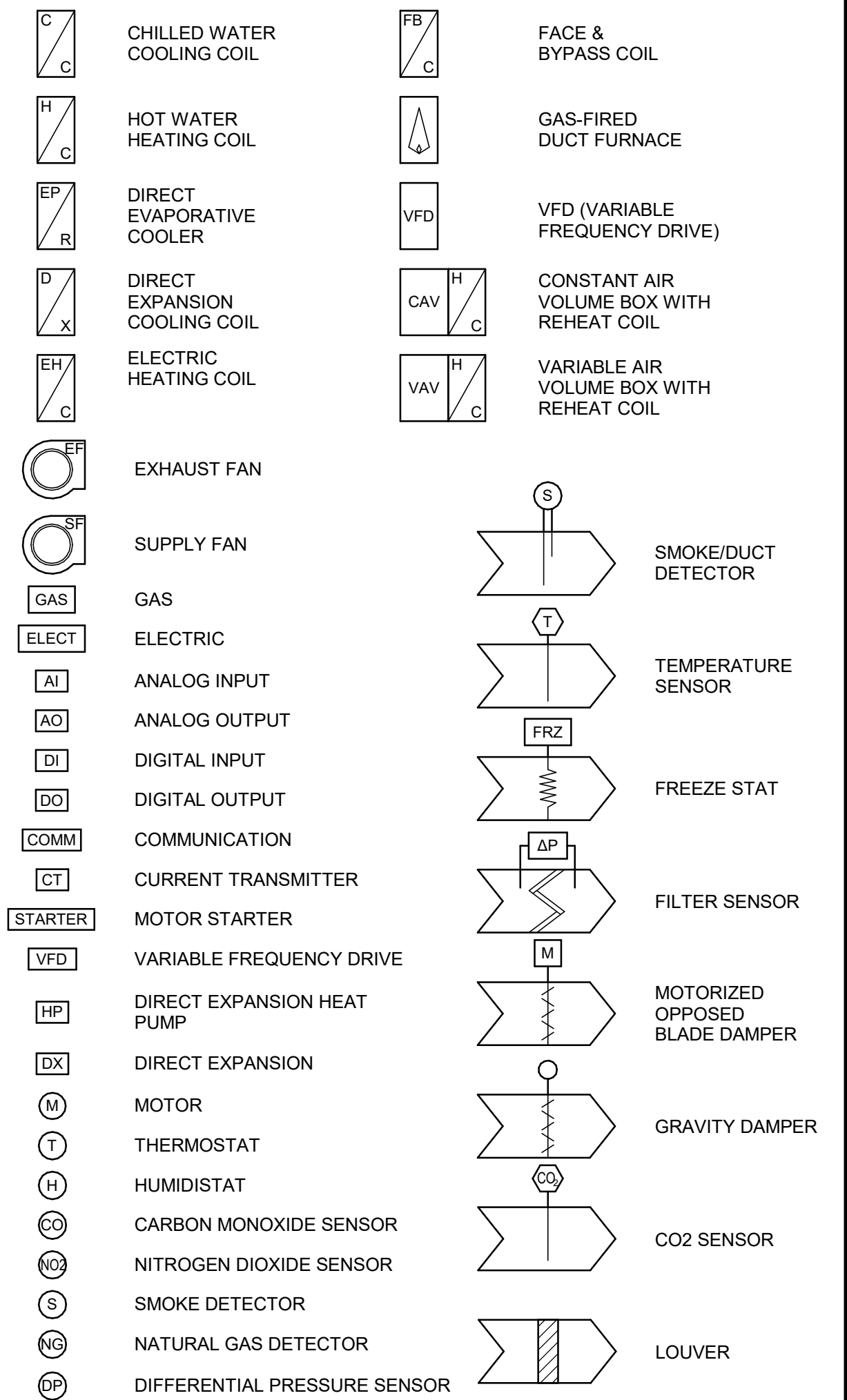
PIPING SPECIALTIES



SCHEMATIC SYMBOLS



AIR FLOW SCHEMATIC AND TEMPERATURE CONTROL DIAGRAM SYMBOLOGY



GENERAL NOTES

- 1. PROVIDE AND INSTALL ALL MECHANICAL SYSTEMS IN ACCORDANCE WITH THE UNIFIED FACILITIES CRITERIA (UFC'S), 2018 NORTH CAROLINA MECHANICAL CODE AND ALL OTHER APPLICABLE STATE AND LOCAL CODES.
2. PROVIDE AND INSTALL ALL PLUMBING SYSTEMS IN ACCORDANCE WITH THE 2018 INTERNATIONAL PLUMBING CODE AND ALL OTHER APPLICABLE STATE AND LOCAL CODES.
3. CONTRACT DOCUMENT DRAWINGS FOR MECHANICAL WORK (HVAC) ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY. PLANS SHOULD NOT BE SCALED.
4. INSTALL ALL MECHANICAL AND PLUMBING EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
5. VERIFY ALL CLEARANCES BEFORE FABRICATING AND INSTALLING WORK. COORDINATE WITH ALL OTHER TRADES.
6. DRAWINGS REFLECT DIMENSIONS OF DESIGN MFG. EQUIPMENT. ALLOWABLE ALTERNATES, WHILE EQUAL IN OUTPUT CAPACITY WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MEET THE SPACE REQUIREMENTS AND PROVE EQUALITY WITH DESIGN MFG. EQUIPMENT.
7. COORDINATE ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. COORDINATE AND PROVIDE ALL DUCT AND PIPING TRANSITIONS REQUIRED FOR FINAL EQUIPMENT CONNECTIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DUCT AND PIPING DIMENSIONS BEFORE FABRICATION.
8. ALL CONTROL WIRE AND CONDUIT SHALL COMPLY WITH THE UFC'S AND NFPA 70. IF WHIP/LIQUID TIGHT/CONDUIT AND CONDUCTOR ARE DAMAGED DURING DEMO, CONTRACTOR SHALL REPLACE WITH NEW.
9. ALL MISCELLANEOUS STEEL REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN DETAILS FOR PIPING, DUCTWORK, AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
10. PROVIDE ACCESS PANELS FOR INSTALLATION IN DUCTWORK, WALLS AND CEILINGS, WHERE REQUIRED, TO SERVICE CONTROLS DEVICES, DAMPERS, VALVES, DUCTWORK, SMOKE DETECTORS, AND OTHER CONCEALED MECHANICAL EQUIPMENT. ACCESS PANEL INSTALLATION SHALL BE COORDINATED WITH PROCESS REQUIREMENTS, ARCHITECTURAL WORK TO MATCH MATERIALS AND FINISHES.
11. ALL DUCTWORK, PIPING, AND EQUIPMENT SUPPORTED FROM STRUCTURAL STEEL SHALL BE COORDINATED WITH ALL TRADES. ALL ATTACHMENTS TO STEEL BAR JOISTS, TRUSSES, OR JOIST GIRDERS SHALL BE AT PANEL POINTS OR AS SHOWN ON THE MECHANICAL AND STRUCTURAL DRAWINGS. PROVIDE BEAM CLAMPS MEETING MSS STANDARDS. WELDING TO STRUCTURAL MEMBERS SHALL NOT BE PERMITTED.
12. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK AND PIPING SYSTEMS CONNECTED TO FANS, PUMPS AND OTHER EQUIPMENT WHICH REQUIRE VIBRATION ISOLATION.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY HEATING AND COOLING OF AFFECTED AREAS OF THE BUILDINGS DURING CONSTRUCTION. CONTRACTOR RESPONSIBILITIES TO INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING: THE INSTALLATION, CONNECTION, AND DISCONNECTION OF THE SERVICES. UTILITY SOURCES FOR THE TEMPORARY SYSTEMS SHALL BE PROVIDED BY THE GOVERNMENT. CONTRACTOR RESPONSIBLE FOR EXTENDING UTILITIES AS REQUIRED. CONTRACTOR SHALL HAVE PRE-CONSTRUCTION MEETING WITH COR WITH PLANNED PHASING AND MEANS OF PROVIDING TEMPORARY COOLING AND HEATING TO OBTAIN APPROVAL OF PLAN PRIOR TO STARTING CONSTRUCTION. DEMOLITION OF EXISTING SYSTEMS SHOULD NOT COMMENCE UNTIL TEMPORARY SYSTEMS ARE IN PLACE AND THE COR HAS INSPECTED AND APPROVED THE TEMPORARY SYSTEMS. CONTRACTOR SHALL COMPLETE CONSTRUCTION IN PHASES SUCH THAT DOWNTIME IS MINIMIZED.

C:\hd\2018\10137117-00-MP_derrek_worley.rvt 2/19/2020 3:16:31 PM



Table with columns: ISSUE, DATE, DESCRIPTION. Includes entries for FEB 2020 B-3 DESIGN SUBMITTAL.

Table with columns: PROJECT MANAGER, N. OVERBY; DESIGNED BY, D. WORLEY; DRAWN BY, D. WORLEY; CHECKED BY, M. DIMOFF; CONTRACT #, W91242-18-F-0130; ANG PROJECT #, WEFM142600; HDR PROJECT #, 10137117.

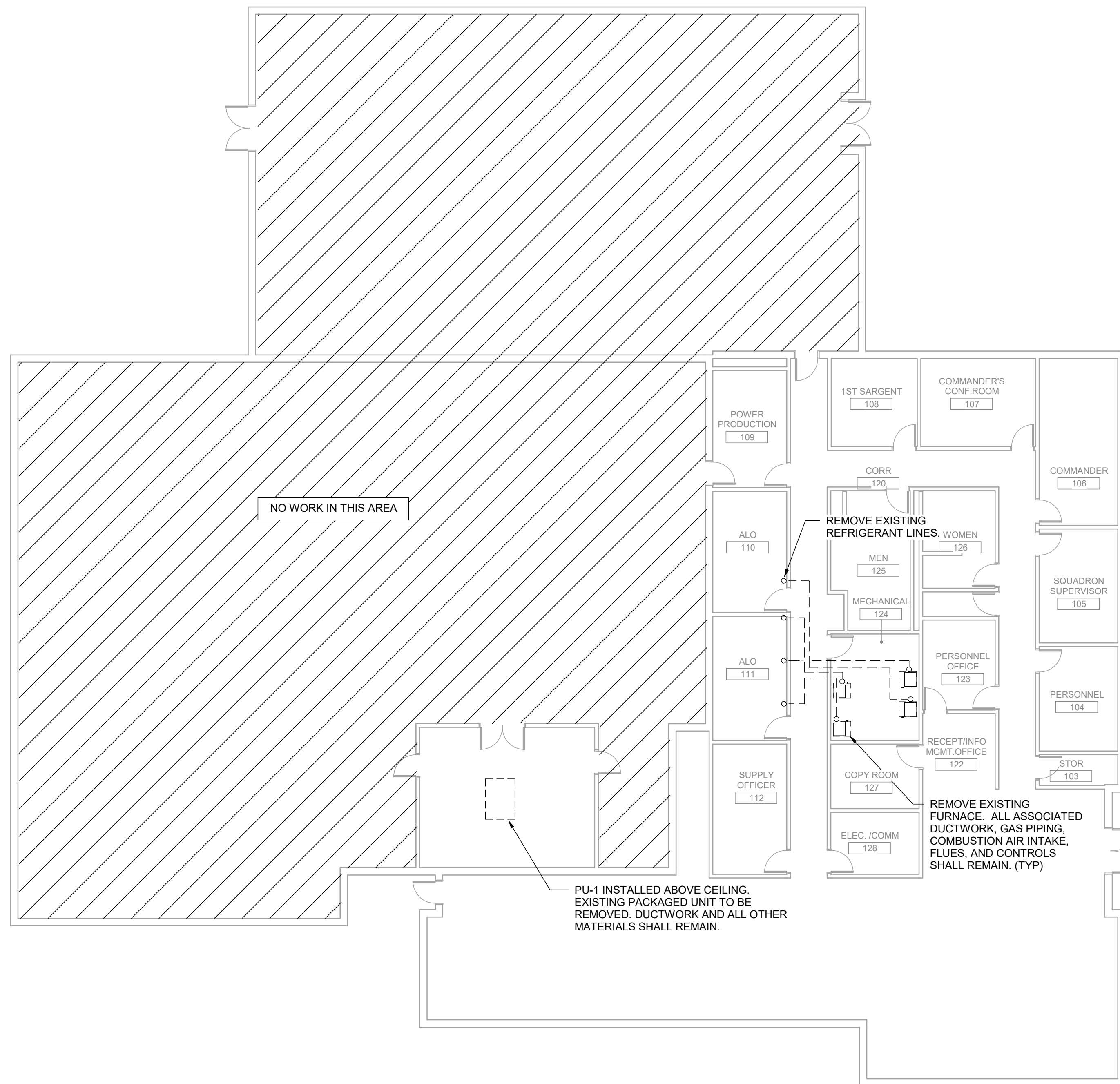
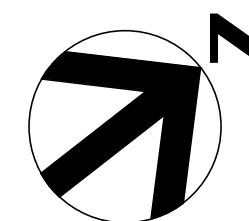


REPLACE HVAC SYSTEMS BASE WIDE - STANLY CO. NC AIR NATIONAL GUARD 145TH AIRLIFT WING NEW LONDON, NC

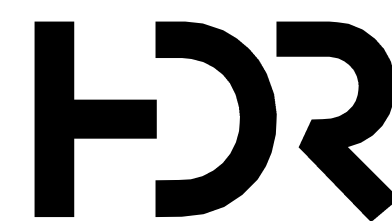
STANLY COUNTY AIR NATIONAL GUARD STATION STANLY COUNTY AIRPORT

GENERAL NOTES, LEGENDS, AND ABBREVIATIONS

Table with columns: SCALE, NONE; FILENAME, 10137117-00-MP.rvt; SHEET, 00M001.



C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:34 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER N. OVERBY	
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117

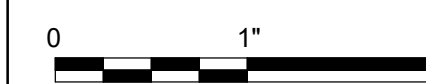


**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 01
FIRST FLOOR MECHANICAL DEMOLITION PLAN**



FILENAME | 10137117-00-MP.rvt
SCALE | 3/32" = 1'-0"

SHEET
01MD101

1

2

3

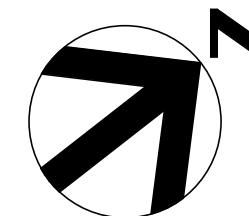
4

5

6

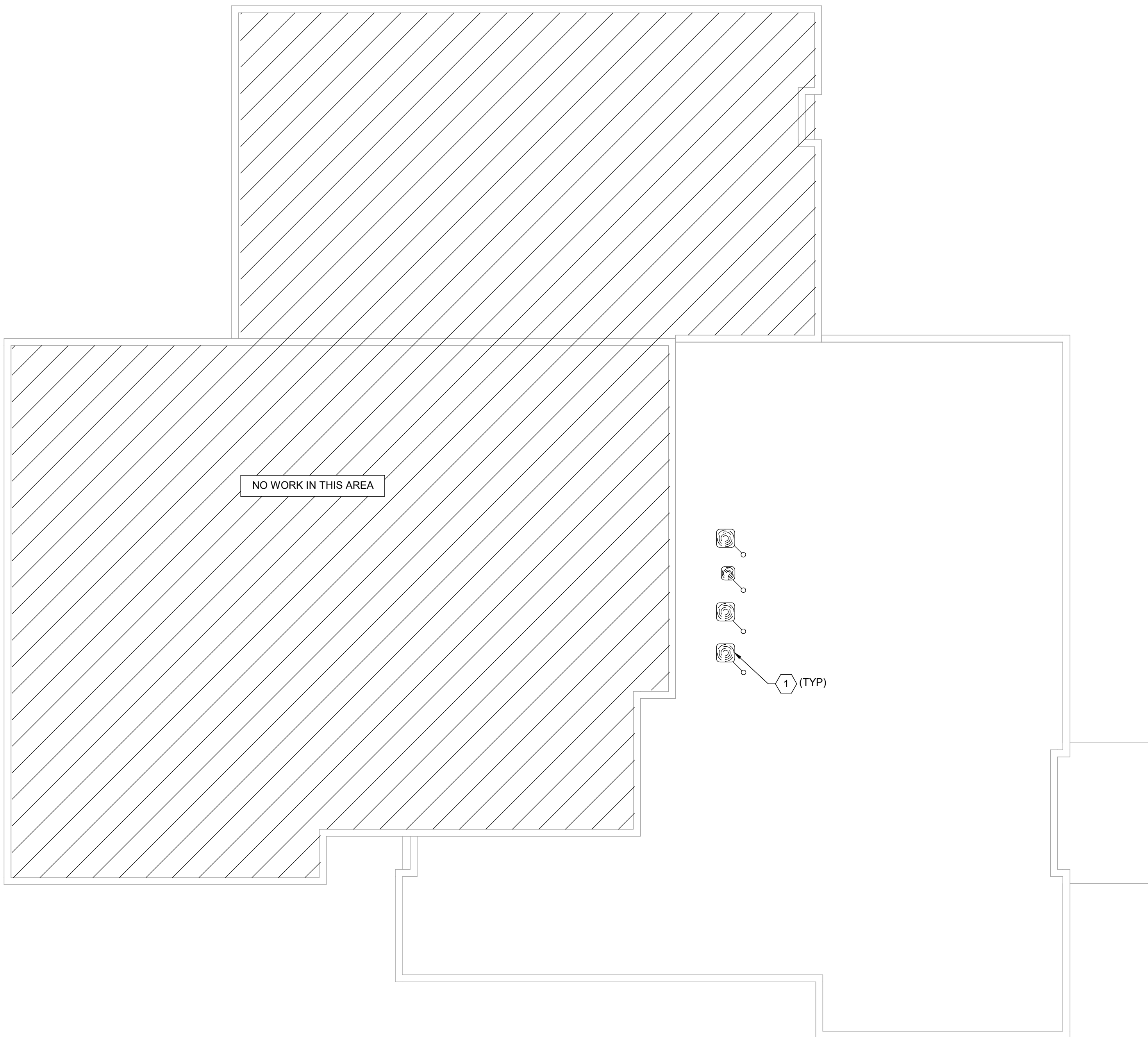
7

8



KEYNOTES #

- 1 EXISTING CONDENSING UNITS AND ASSOCIATED REFRIGERANT LINES TO BE REMOVED. EXISTING ELECTRICAL CONDUIT, WIRING, AND DISCONNECTS TO REMAIN. ROOF PENETRATIONS TO BE REUSED.



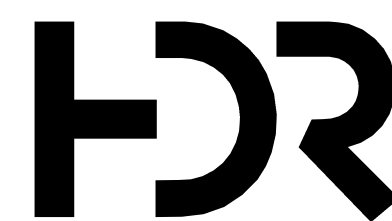
D

C

B

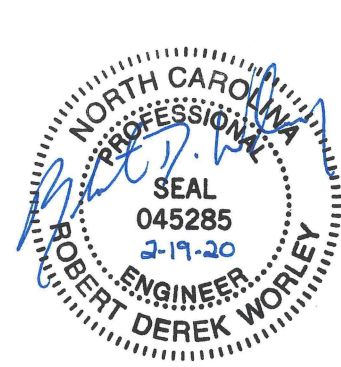
A

C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:34 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER N. OVERBY	
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

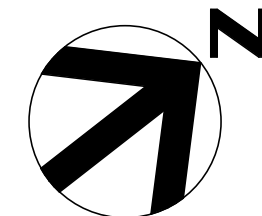
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 01
ROOF MECHANICAL DEMOLITION PLAN**

0 1" 2"

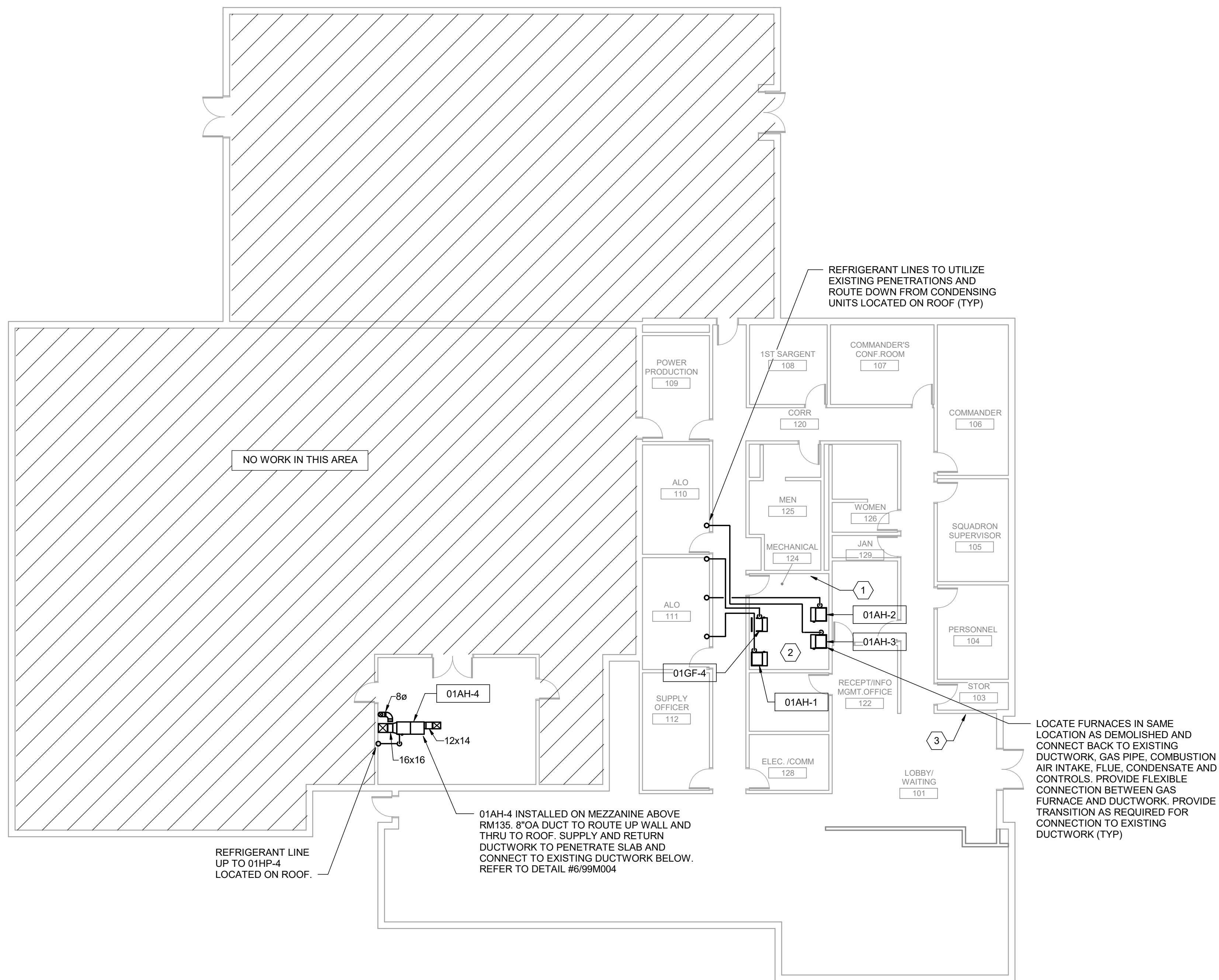
FILENAME 10137117-00-MP.rvt
SCALE 3/32" = 1'-0"

SHEET
01MD102

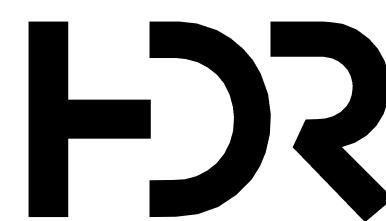


KEYNOTES #

- 1 BAS CONTROLLER (ALERTON MODEL: ACM). ALL NEW AND EXISTING MECHANICAL EQUIPMENT SHALL BE TIED IN AND VISIBLE ON THE EXISTING FRONT END.
- 2 SMART METER ON EXISTING PROPANE SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
- 3 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #6/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.



C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:32 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117

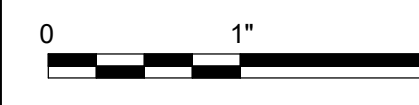


**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

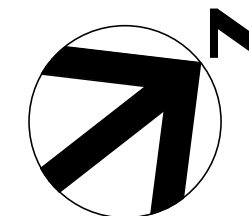
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 01
FIRST FLOOR MECHANICAL PLAN**



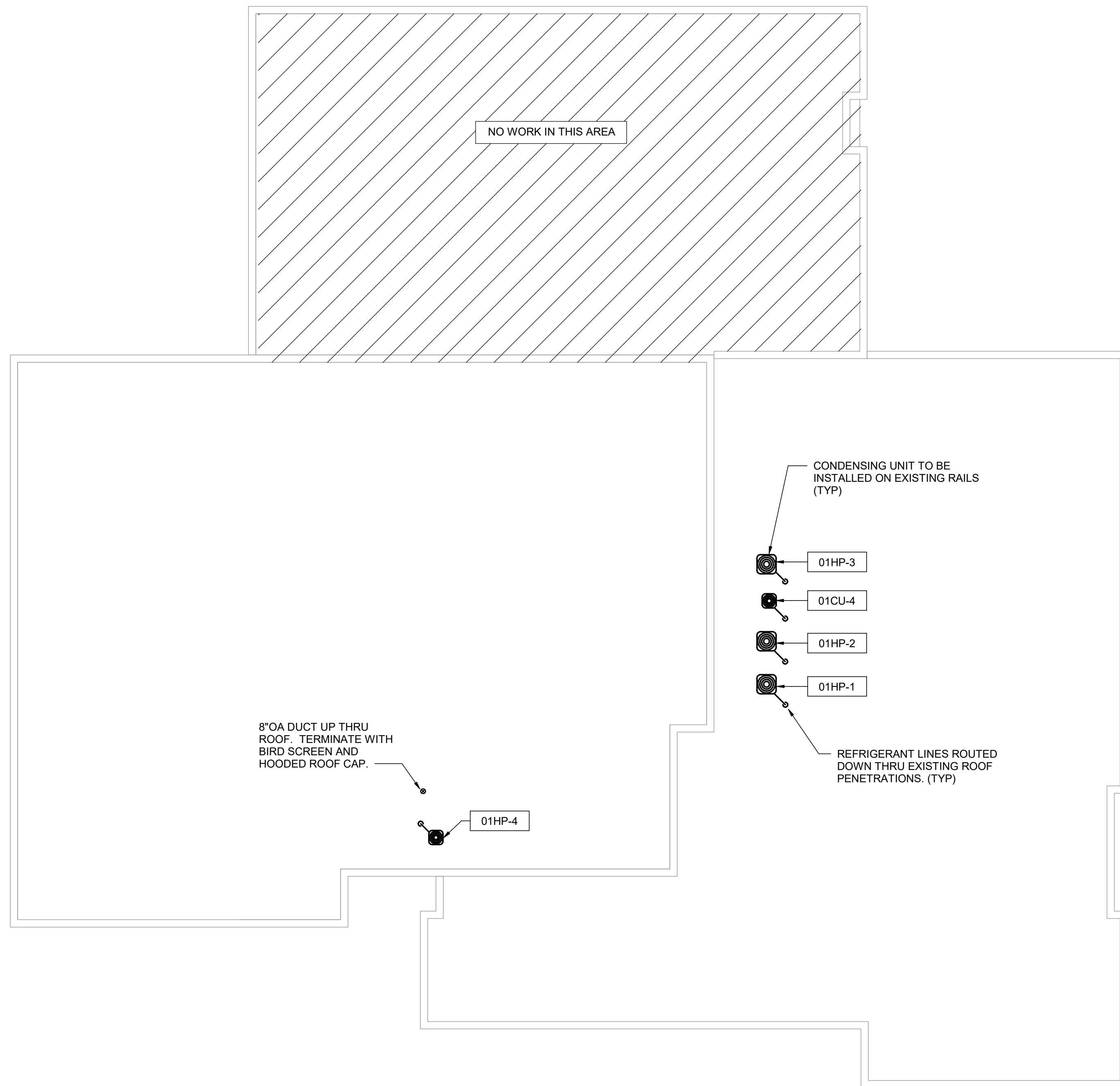
FILENAME | 10137117-00-MP.rvt
SCALE | 3/32" = 1'-0"

SHEET
01M101

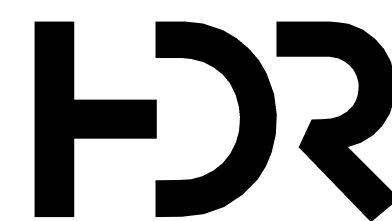


GENERAL NOTE:

A. ALL ROOF WORK AND PENETRATIONS SHALL BE EXECUTED BY A CERTIFIED ROOFER WITH THE APPROVAL OF THE GOVERNMENT/COR.

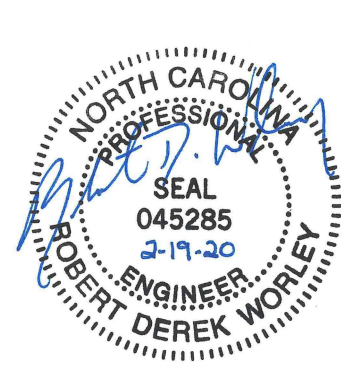


C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:33 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

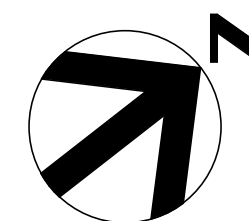
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 01
ROOF MECHANICAL PLAN**

0 1" 2"

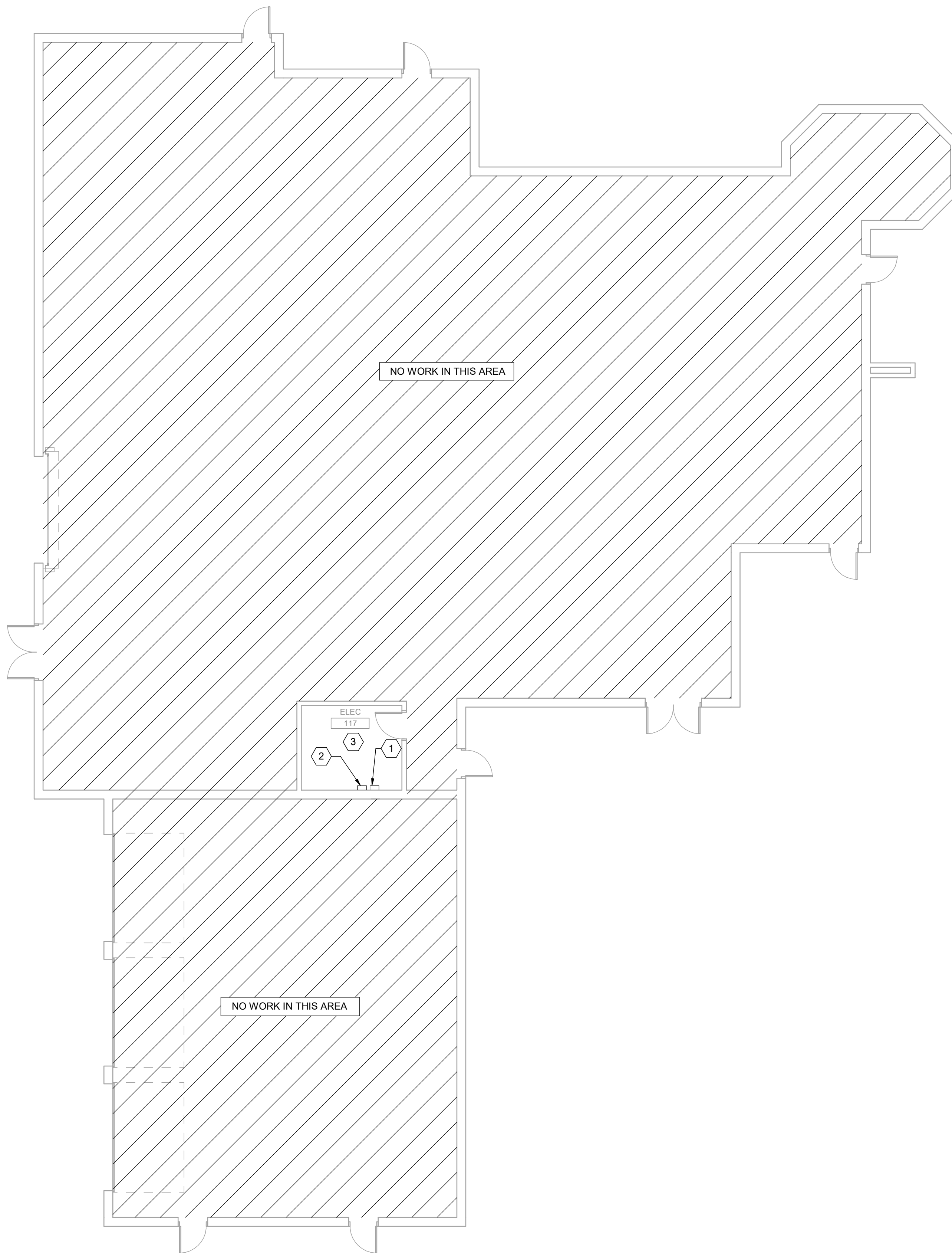
FILENAME | 10137117-00-MP.rvt
SCALE | 3/32" = 1'-0"

SHEET
01M102

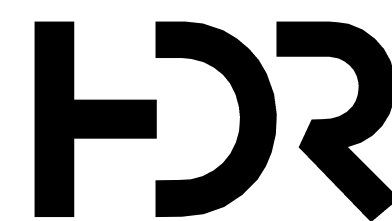


KEYNOTES (#)

- 1 SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
- 2 SMART METER ON EXISTING PROPANE SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
- 3 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.



C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:35 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER N. OVERBY	
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

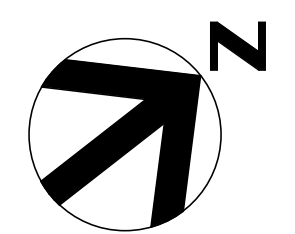
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 03
MECHANICAL PLAN**

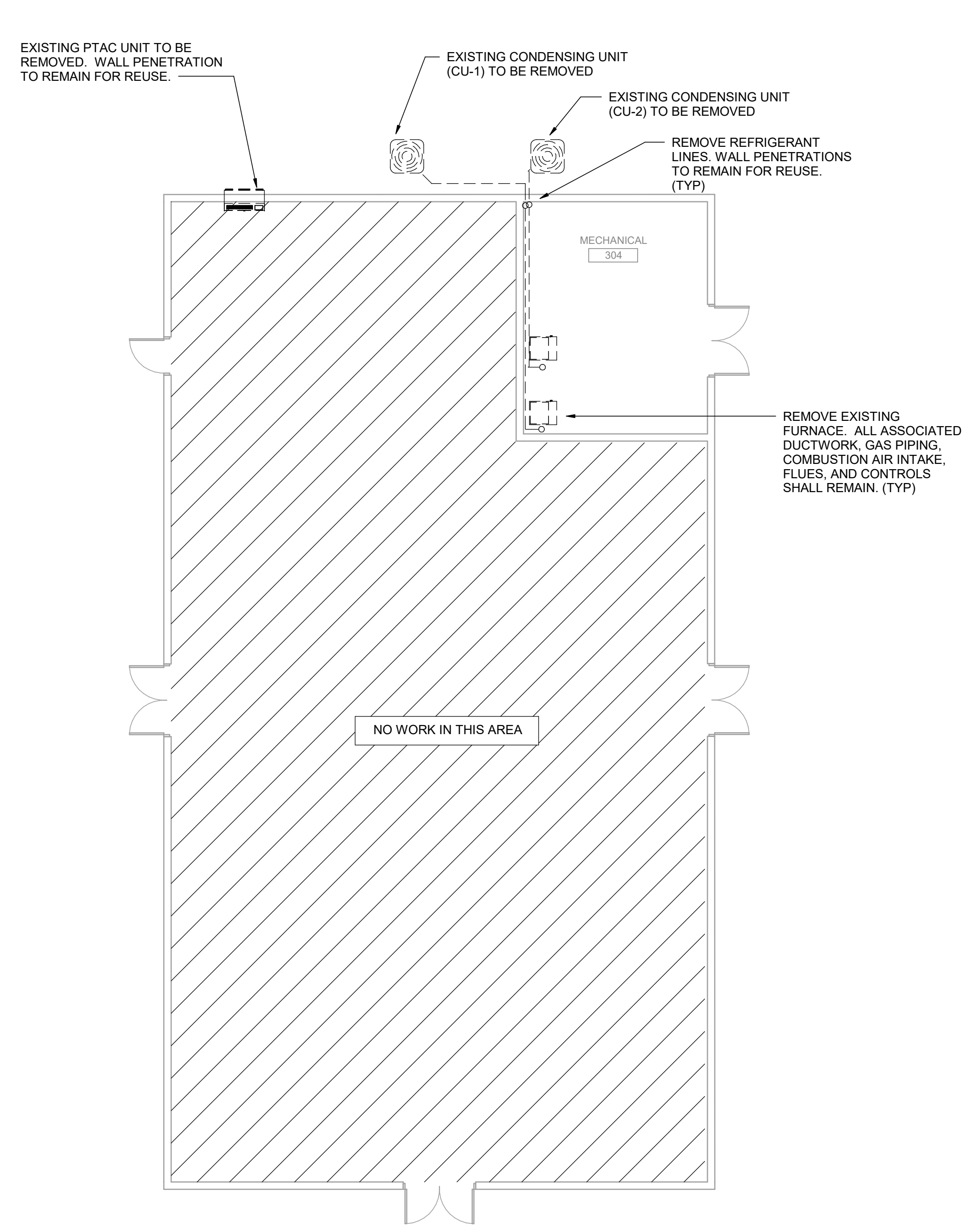
0 1" 2"

FILENAME | 10137117-00-MP.rvt
SCALE | 1/8" = 1'-0"

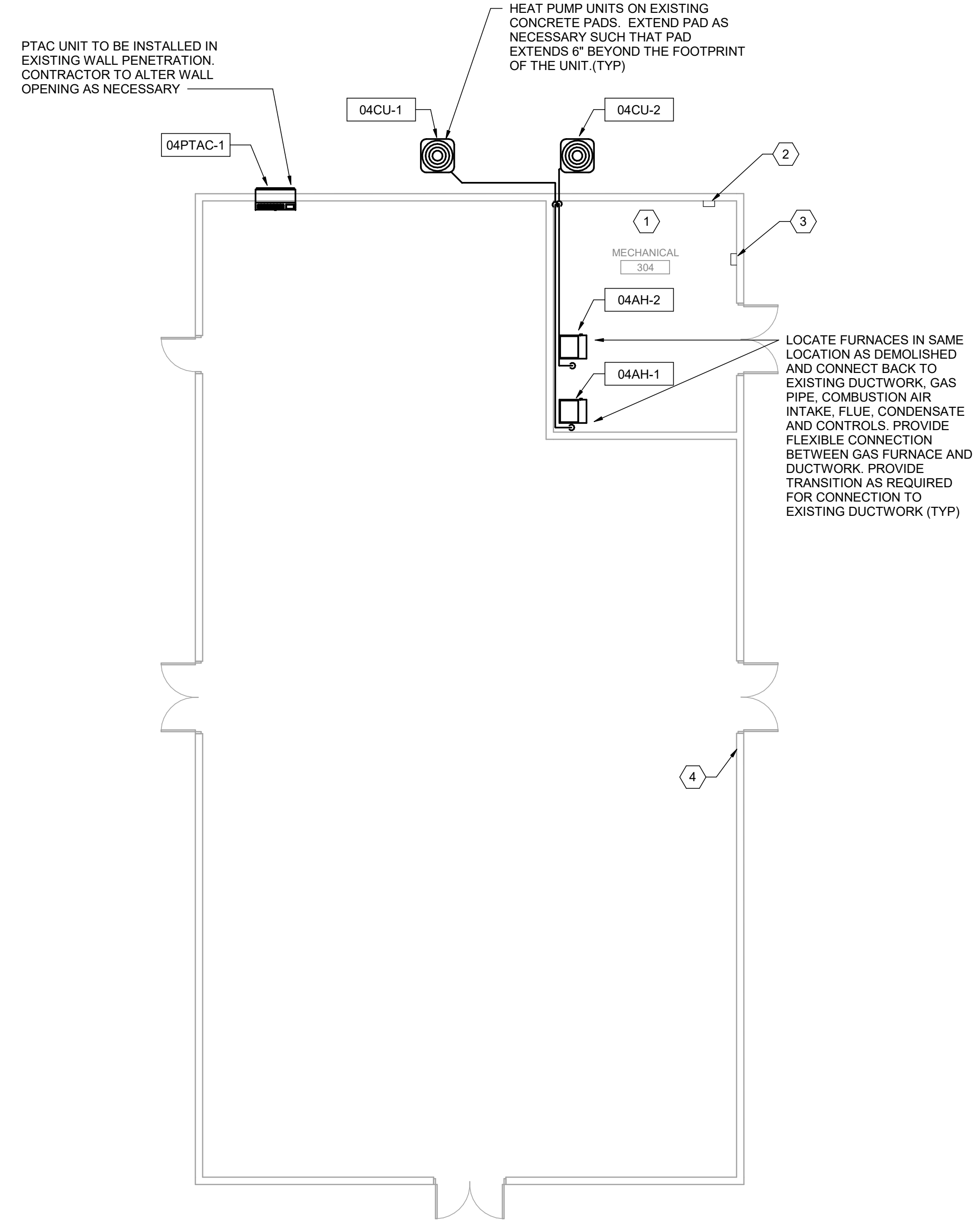
SHEET
03M101



- KEYNOTES** #
- BACNET ROUTER, TEMPERATURE SENSOR AND DOOR SWITCHES. ROUTER SHALL COMMUNICATE WITH EXISTING BAS CONTROLLER LOCATED IN BUILDING 1.
 - SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
 - SMART METER ON EXISTING PROPANE SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
 - PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOWERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.

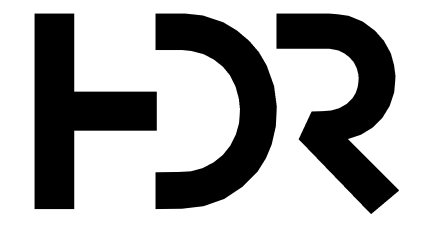


MECHANICAL DEMOLITION PLAN
1/8" = 1'-0"



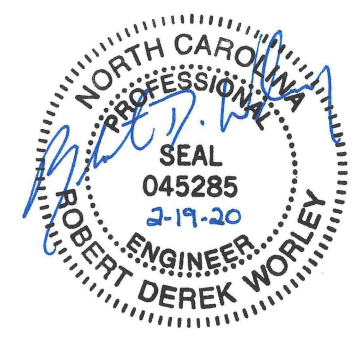
MECHANICAL PLAN
1/8" = 1'-0"

C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:36 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

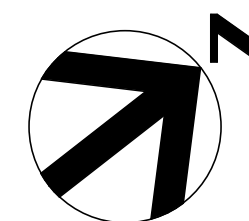
**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 04
MECHANICAL PLANS**

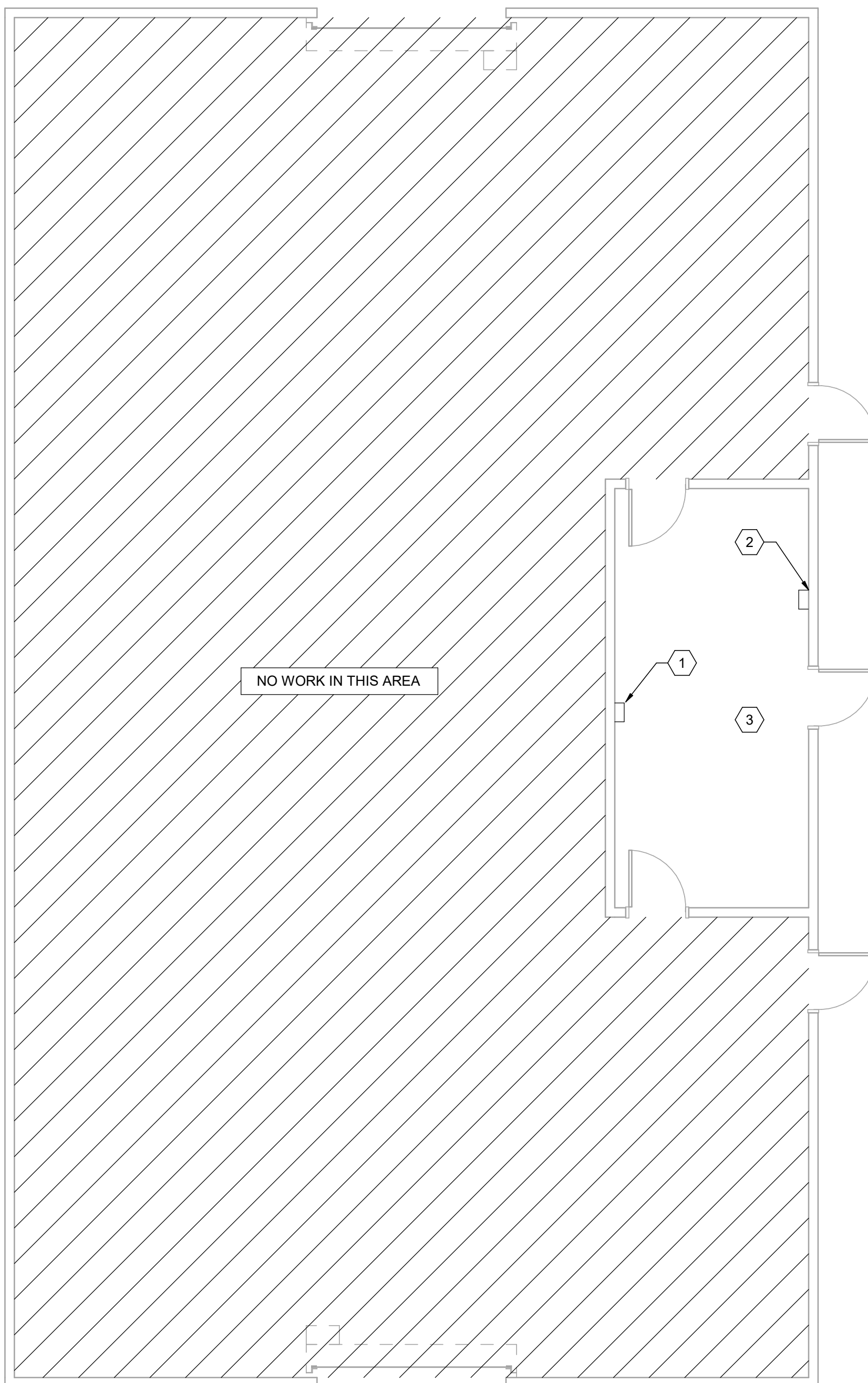
0 1" 2"

FILENAME | 10137117-00-MP.rvt | SHEET
SCALE | 1/8" = 1'-0" | **04M101**



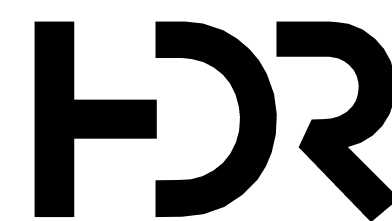
KEYNOTES #

- 1 SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
- 2 SMART METER ON EXISTING PROPANE SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
- 3 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.



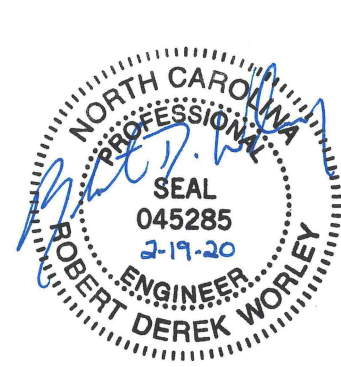
NO WORK IN THIS AREA

C:\vd\2018\10137117-00-MP_derek.worley.rvt 2/19/2020 3:16:37 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER N. OVERBY	
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117

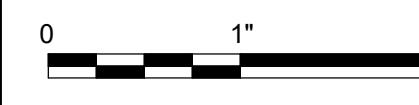


**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

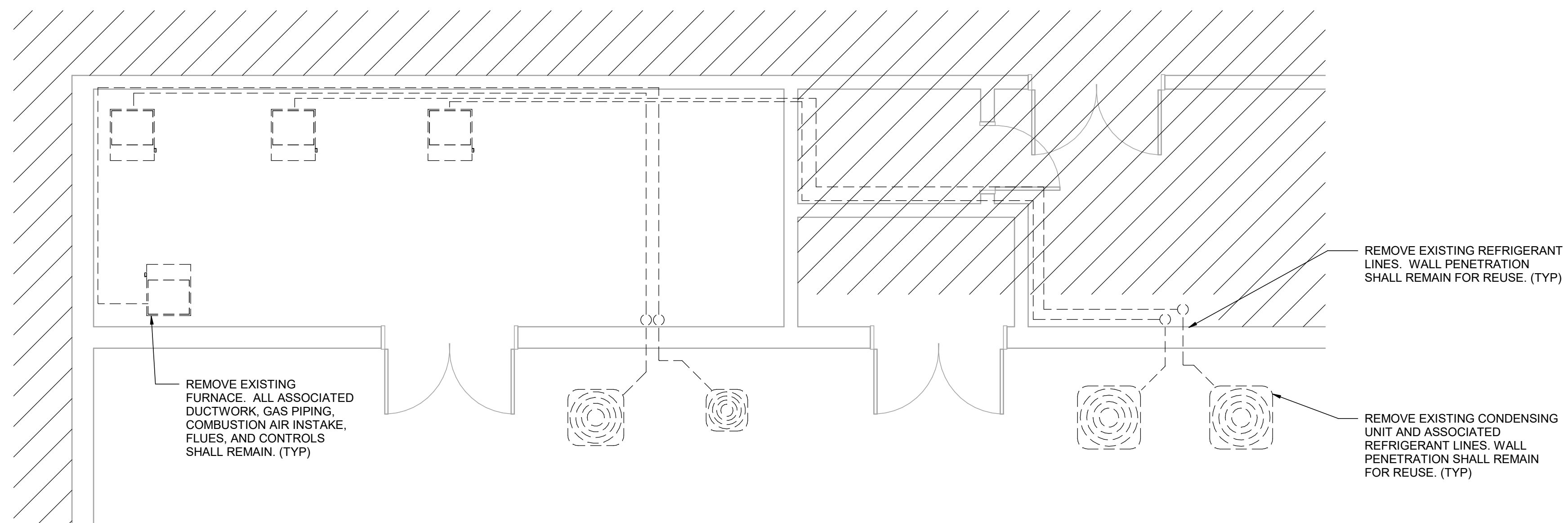
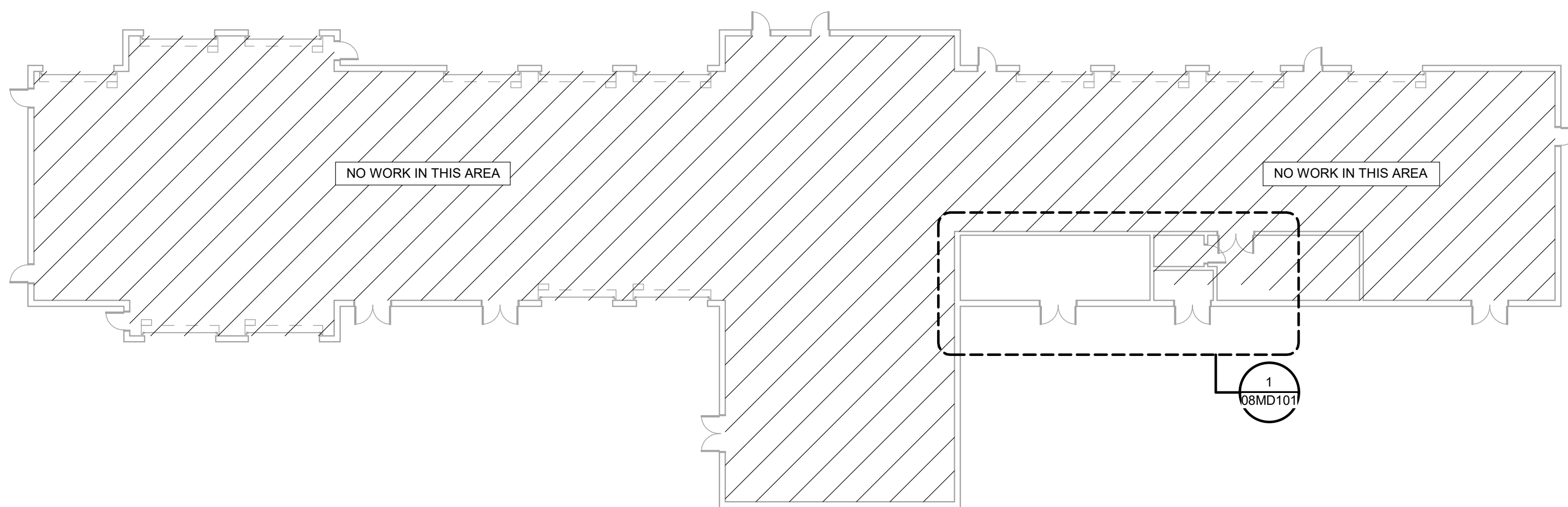
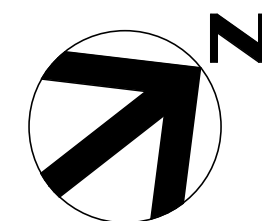
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 06
MECHANICAL PLAN**



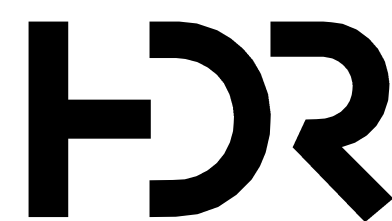
FILENAME | 10137117-00-MP.rvt
SCALE | 3/16" = 1'-0"

SHEET
06M101



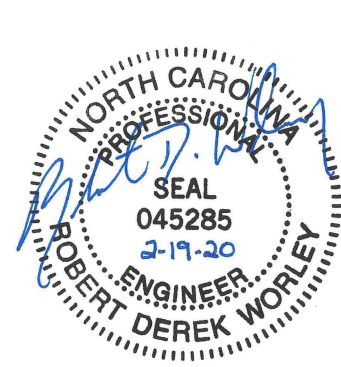
1 ENLARGED MECHANICAL DEMOLITION PLAN
1/4" = 1'-0"

C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:38 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER N. OVERBY	
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117

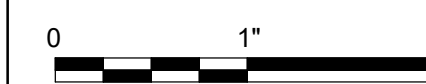


**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

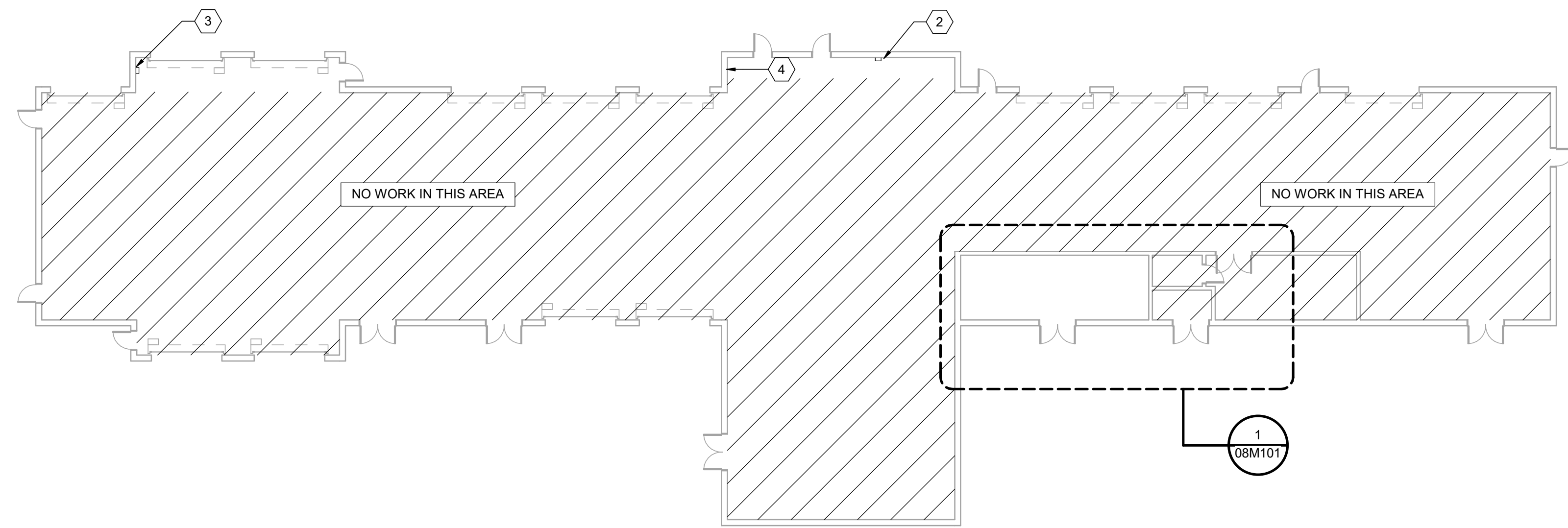
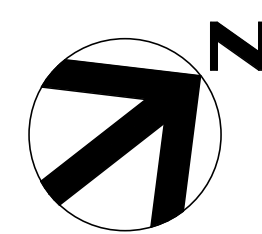
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 08
MECHANICAL DEMOLITION PLANS**



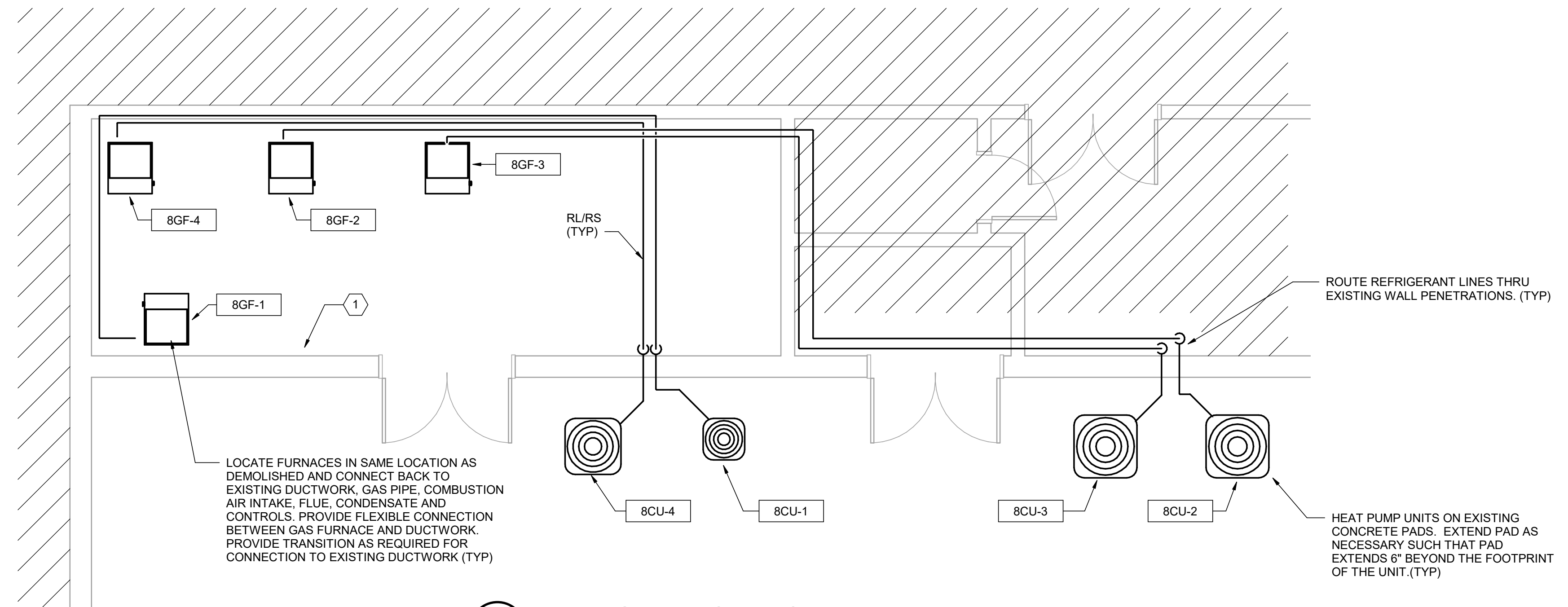
FILENAME | 10137117-00-MP.rvt
SCALE | AS NOTED

SHEET
08MD101



BUILDING 08 OVERALL PLAN
1/16" = 1'-0"

- KEYNOTES** #
- 1 BACNET ROUTER, TEMPERATURE SENSOR AND DOOR SWITCHES. ROUTER SHALL COMMUNICATE WITH EXISTING BAS CONTROLLER LOCATED IN BUILDING 3.
 - 2 SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
 - 3 SMART METER ON EXISTING PROPANE SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
 - 4 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/SILOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.



ENLARGED MECHANICAL PLAN
1/4" = 1'-0"

C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:38 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

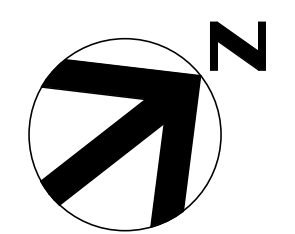
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 08
MECHANICAL PLANS**

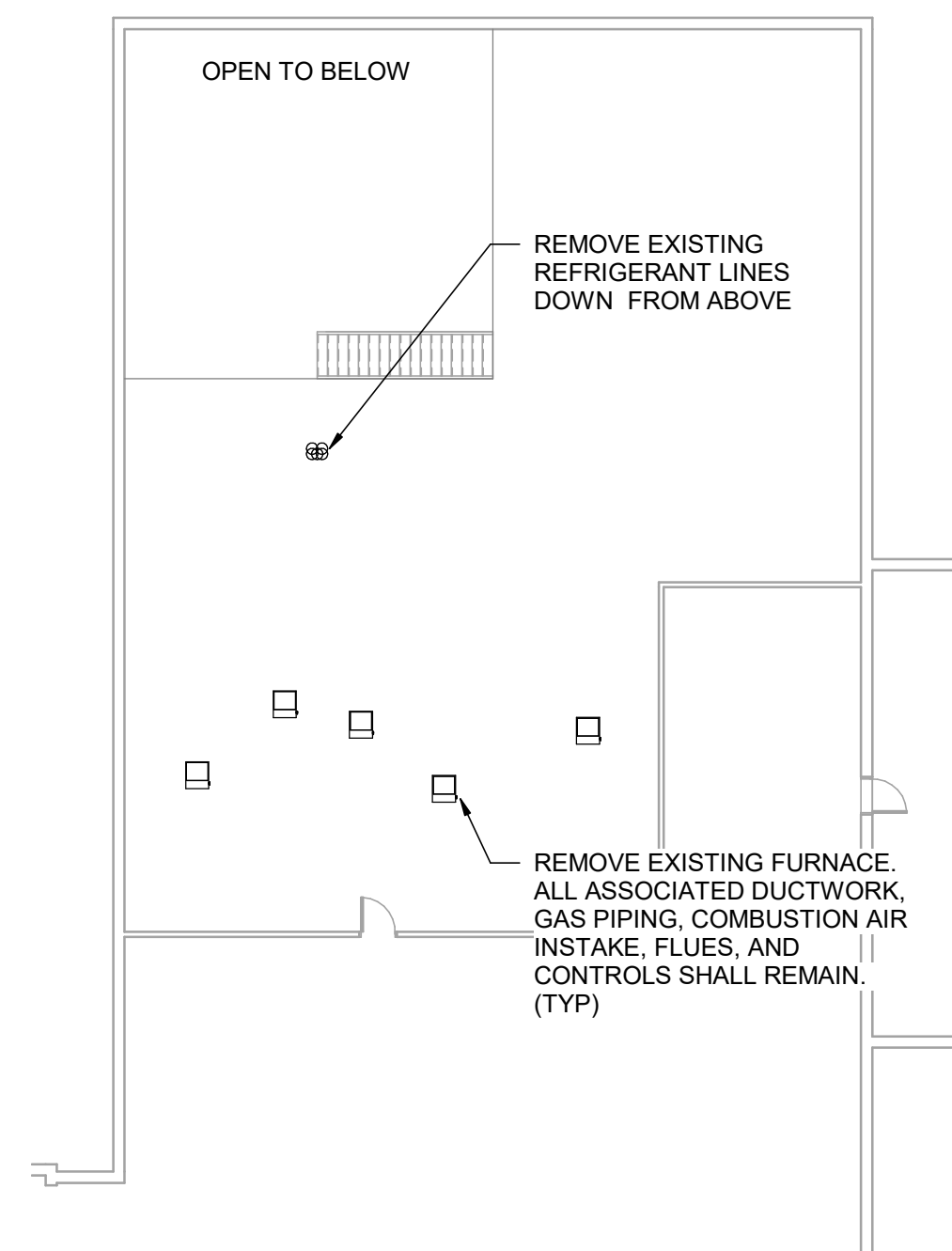
0 1" 2"

FILENAME | 10137117-00-MP.rvt
SCALE | AS NOTED

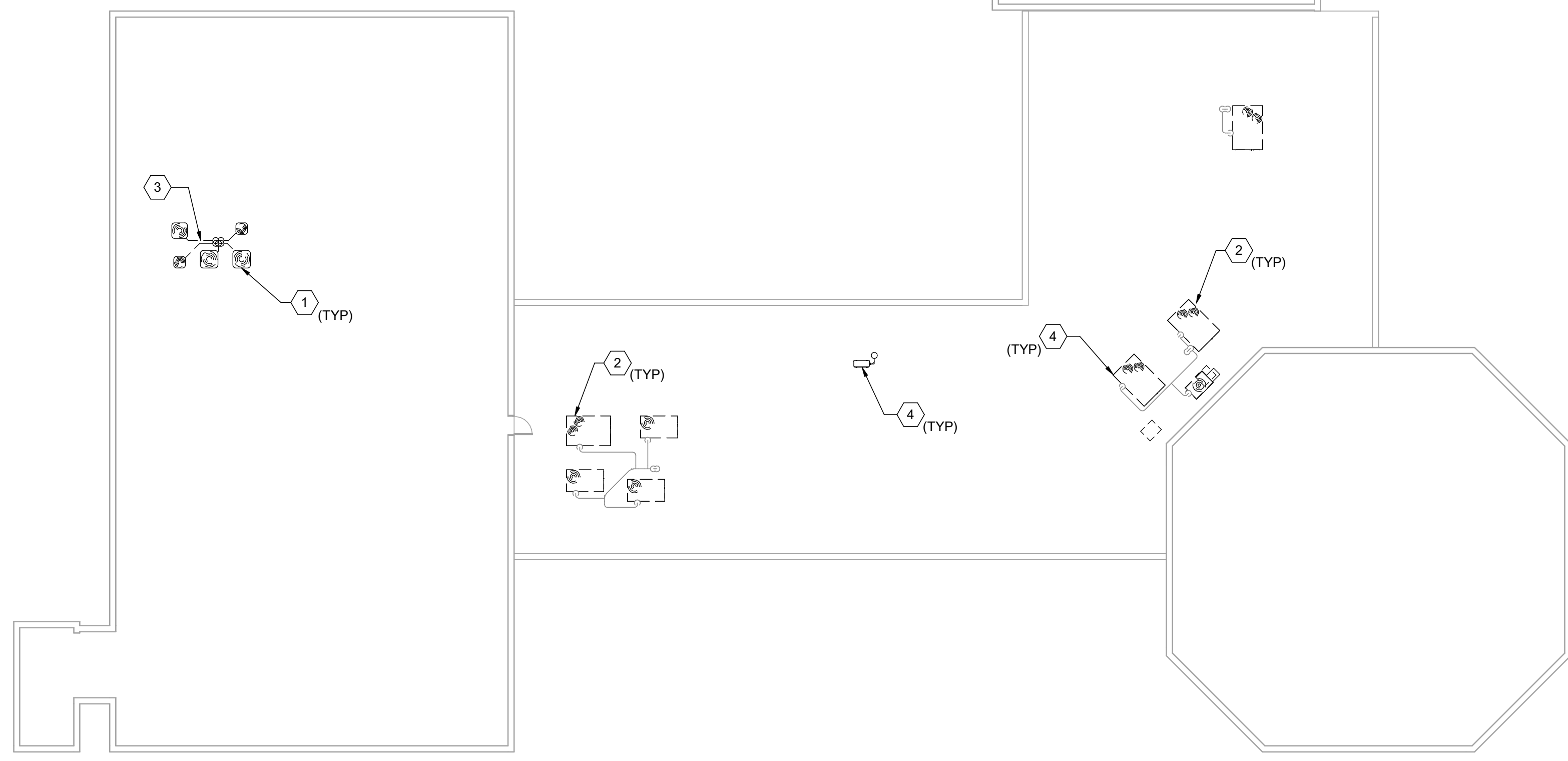
SHEET
08M101



- KEYNOTES** #
- 1 EXISTING CONDENSING UNITS AND ASSOCIATED REFRIGERANT LINES TO BE REMOVED. EXISTING ELECTRICAL CONDUIT, WIRING, AND DISCONNECTS TO REMAIN. ROOF PENETRATIONS TO BE REUSED.
 - 2 EXISTING ROOFTOP UNIT AND ASSOCIATED CONTROLS TO BE REMOVED. ALL ELECTRICAL CONDUIT, WIRING, AND DISCONNECT TO REMAIN FOR REUSE.
 - 3 REFRIGERANT PIPING TO BE REMOVED. MAINTAIN REFRIGERANT VAULT AND ROOF PENETRATION FOR REUSE.
 - 4 ALL INDICATED ROOF MOUNTED EQUIPMENT TO BE REMOVED. ROOF CURBS AND PENETRATIONS TO BE REUSED.

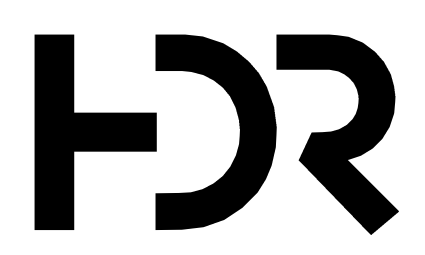


MEZZANINE MECHANICAL DEMOLITION PLAN
1/16" = 1'-0"



ROOF MECHANICAL DEMOLITION PLAN
1/16" = 1'-0"

C:\vd\2018\10137117-00-MP_derek.worley.rvt 2/19/2020 3:16:41 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

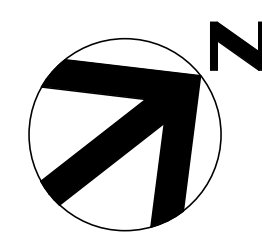
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 12
ROOF MECHANICAL DEMOLITION PLAN**

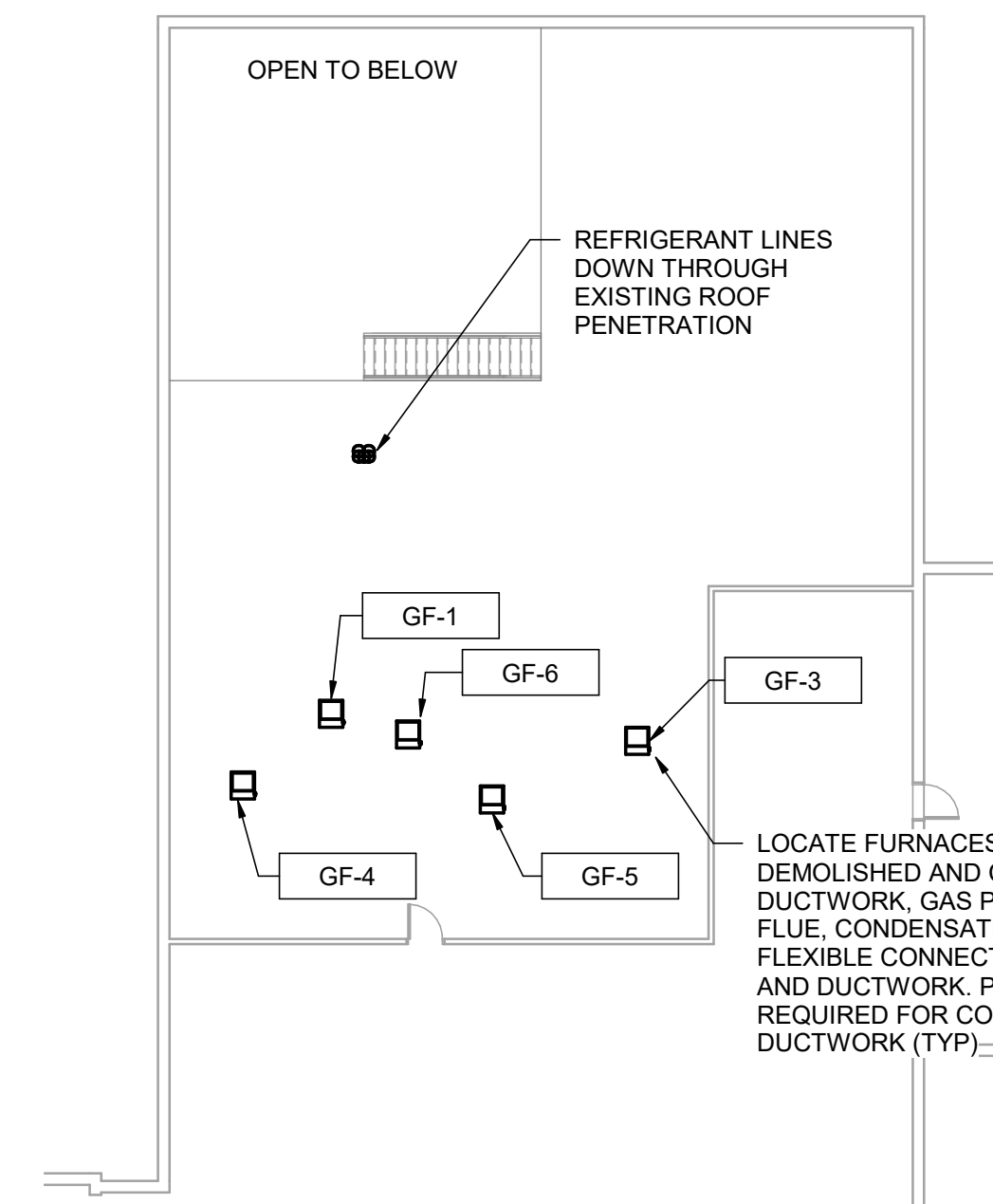
0 1" 2"

FILENAME | 10137117-00-MP.rvt
SCALE | 1/16" = 1'-0"

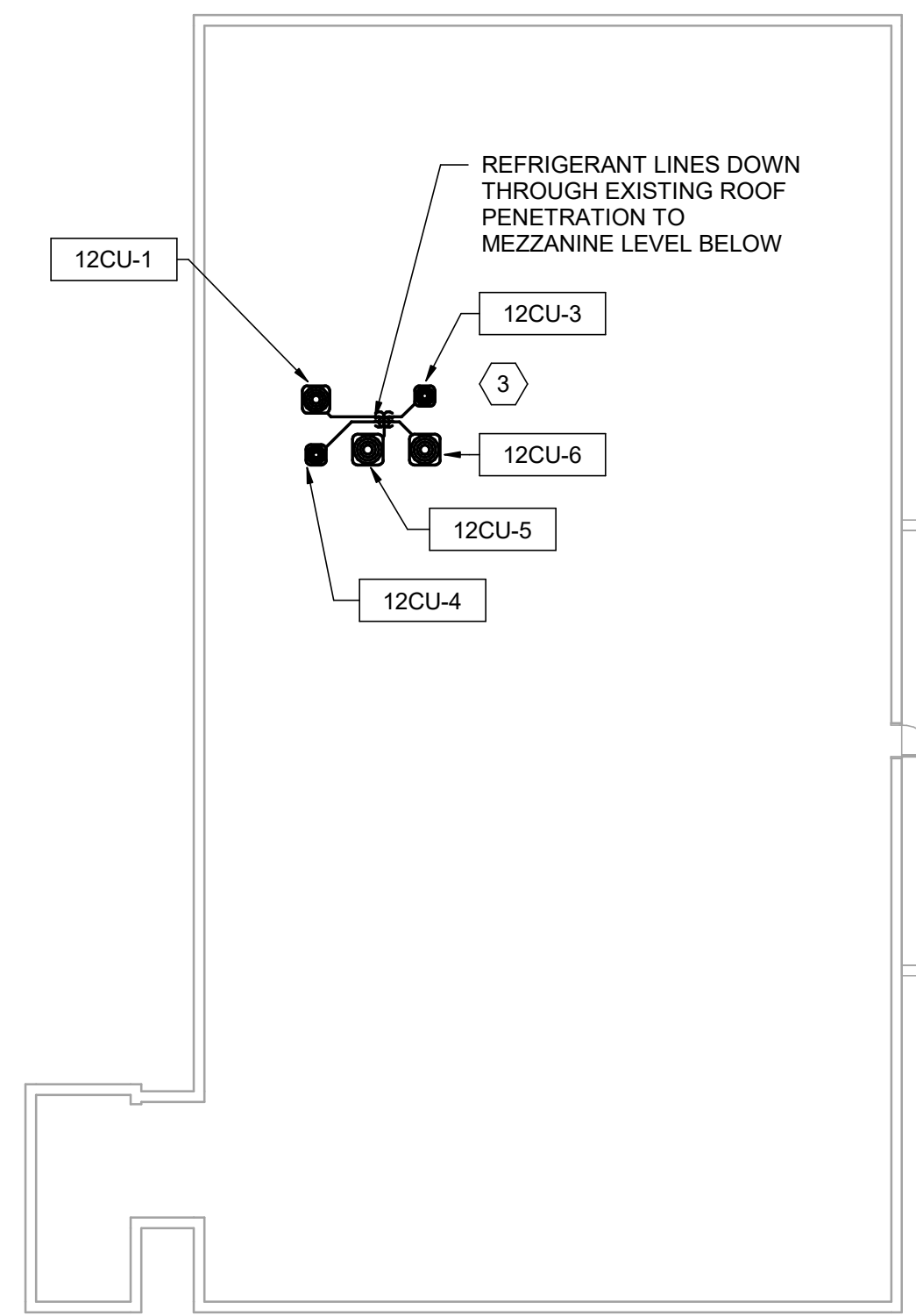
SHEET
12MD101



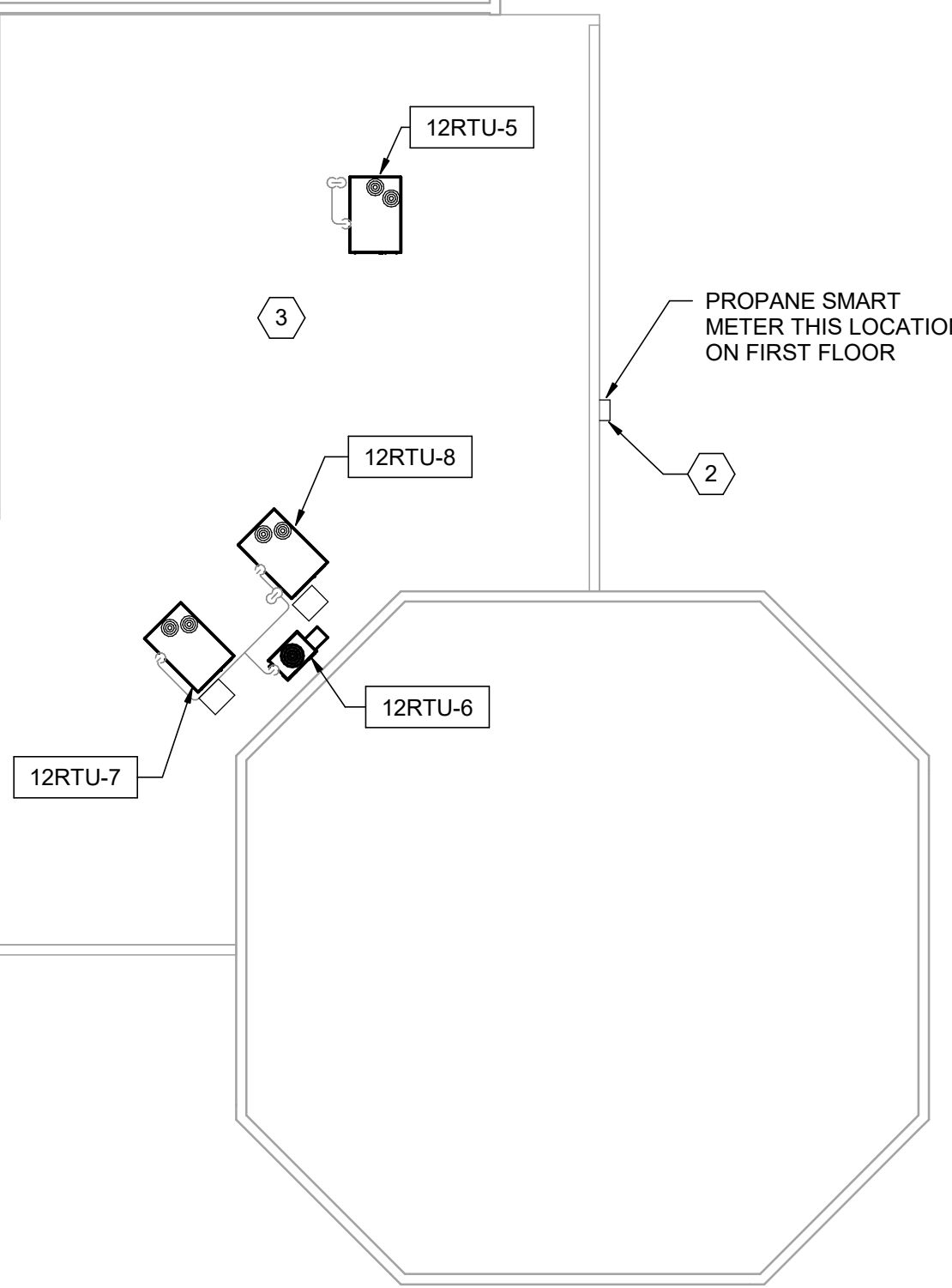
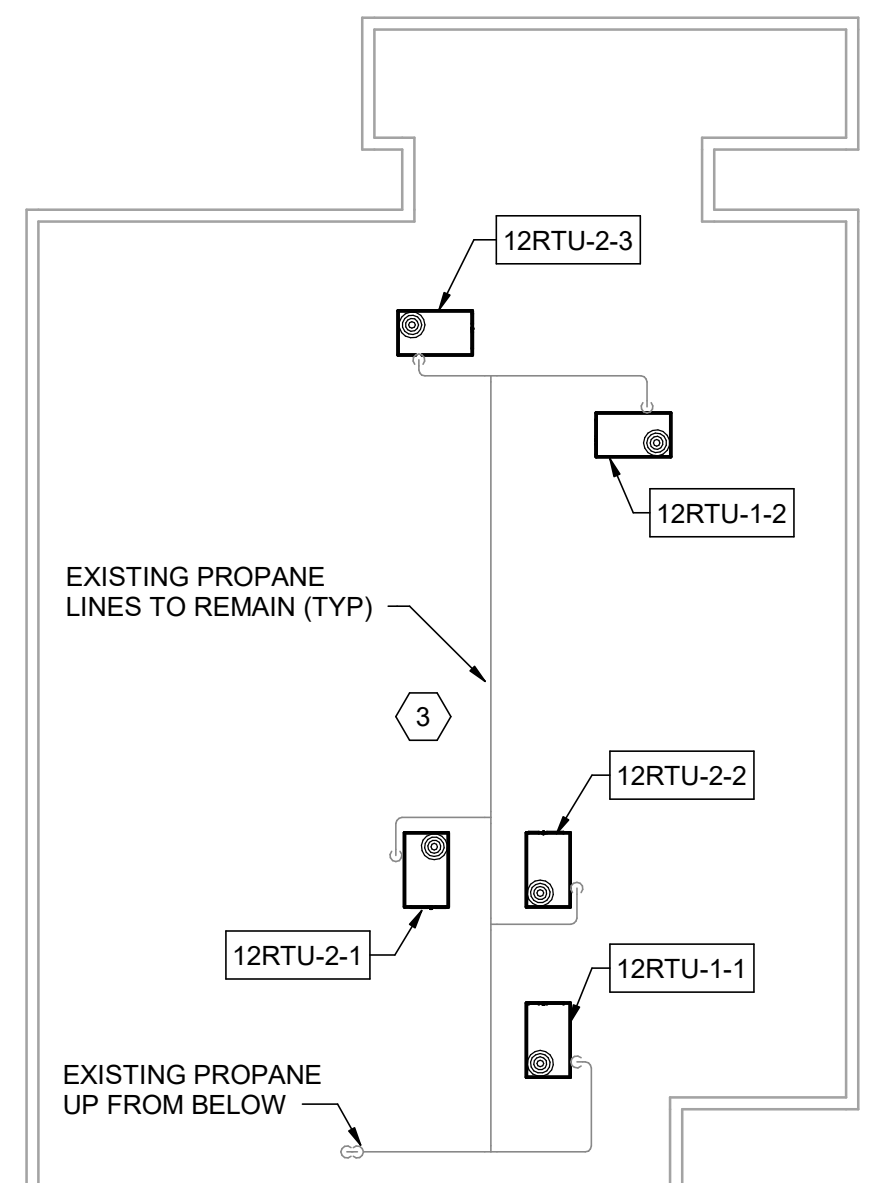
- KEYNOTES** #
- 1 WALL MOUNTED INDOOR UNIT LOCATED ON FIRST FLOOR IN ROOM 128.
 - 2 SMART METER ON EXISTING PROPANE SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
 - 3 EXISTING LIGHTNING PROTECTION CABLES AND SYSTEM TO BE REINSTALLED UPON COMPLETION OF ROOFTOP UNIT INSTALLATION.
 - 4 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.



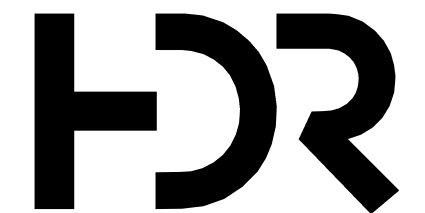
MEZZANINE MECHANICAL PLAN
1/16" = 1'-0"



ROOF MECHANICAL PLAN
1/16" = 1'-0"

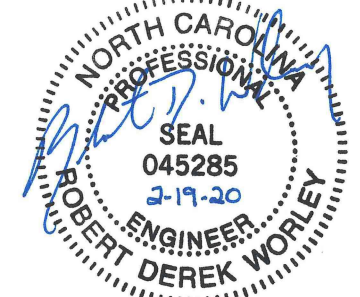


C:\p1201810137117-00-MP_derek.worley.rvt
2/19/2020 3:16:40 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

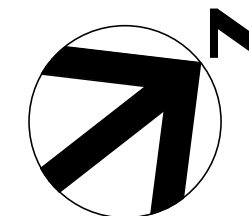
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 12
MECHANICAL PLANS**

0 1" 2"

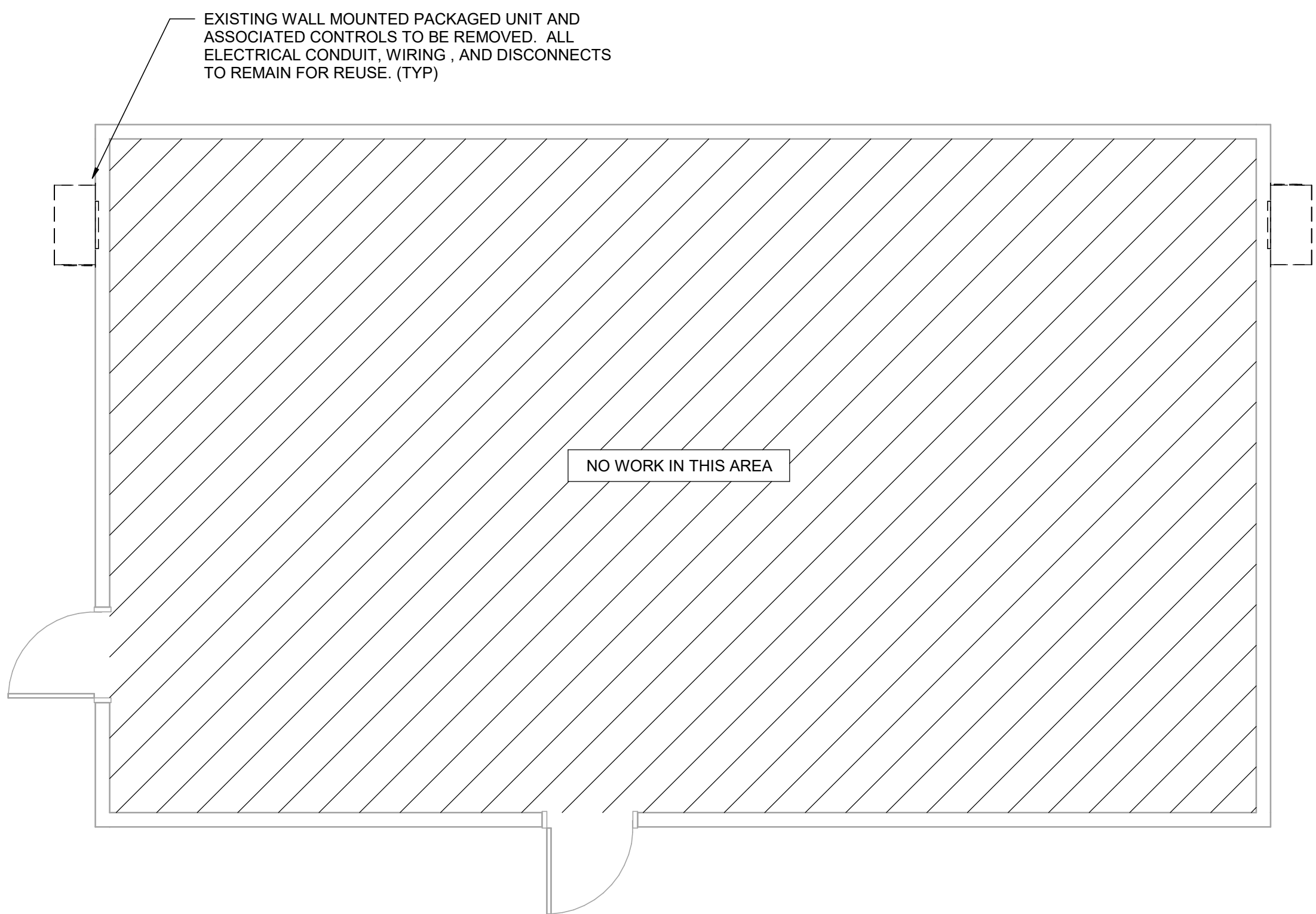
FILENAME | 10137117-00-MP.rvt
SCALE | 1/16" = 1'-0"

SHEET
12M101

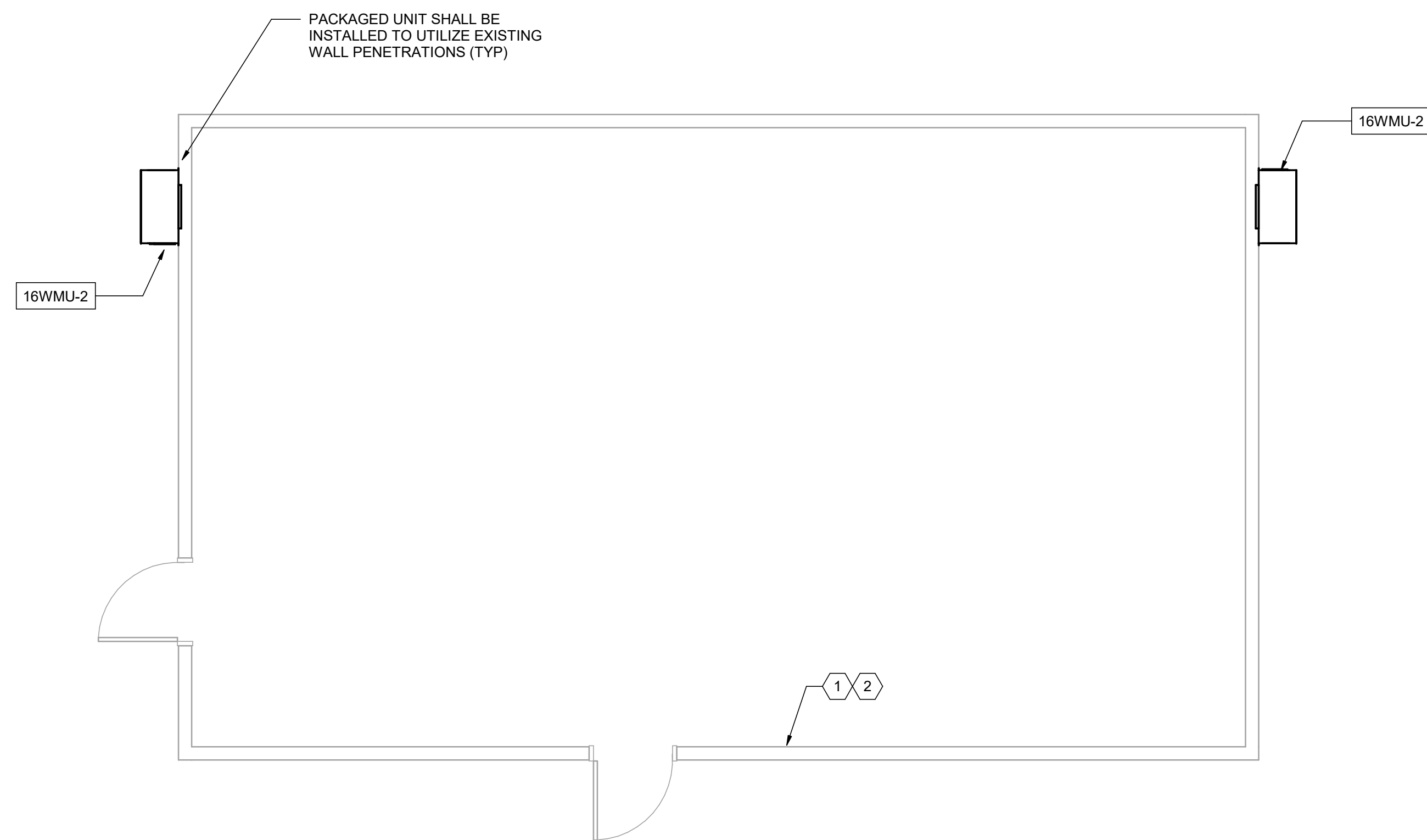


KEYNOTES #

- 1 BACNET ROUTER, TEMPERATURE SENSOR, AND THERMOSTAT (ALERTON MODEL:VLC/D). ROUTER SHALL COMMUNICATE WITH EXISTING BAS CONTROLLER LOCATED IN BUILDING 3.
- 2 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.

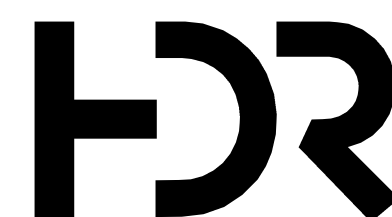


MECHANICAL DEMOLITION PLAN
1/4" = 1'-0"



MECHANICAL PLAN
1/4" = 1'-0"

C:\w\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:42 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

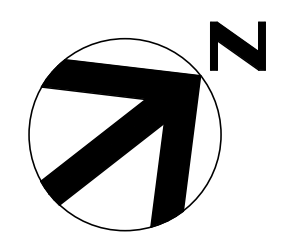
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 16
MECHANICAL PLANS**

0 1" 2"

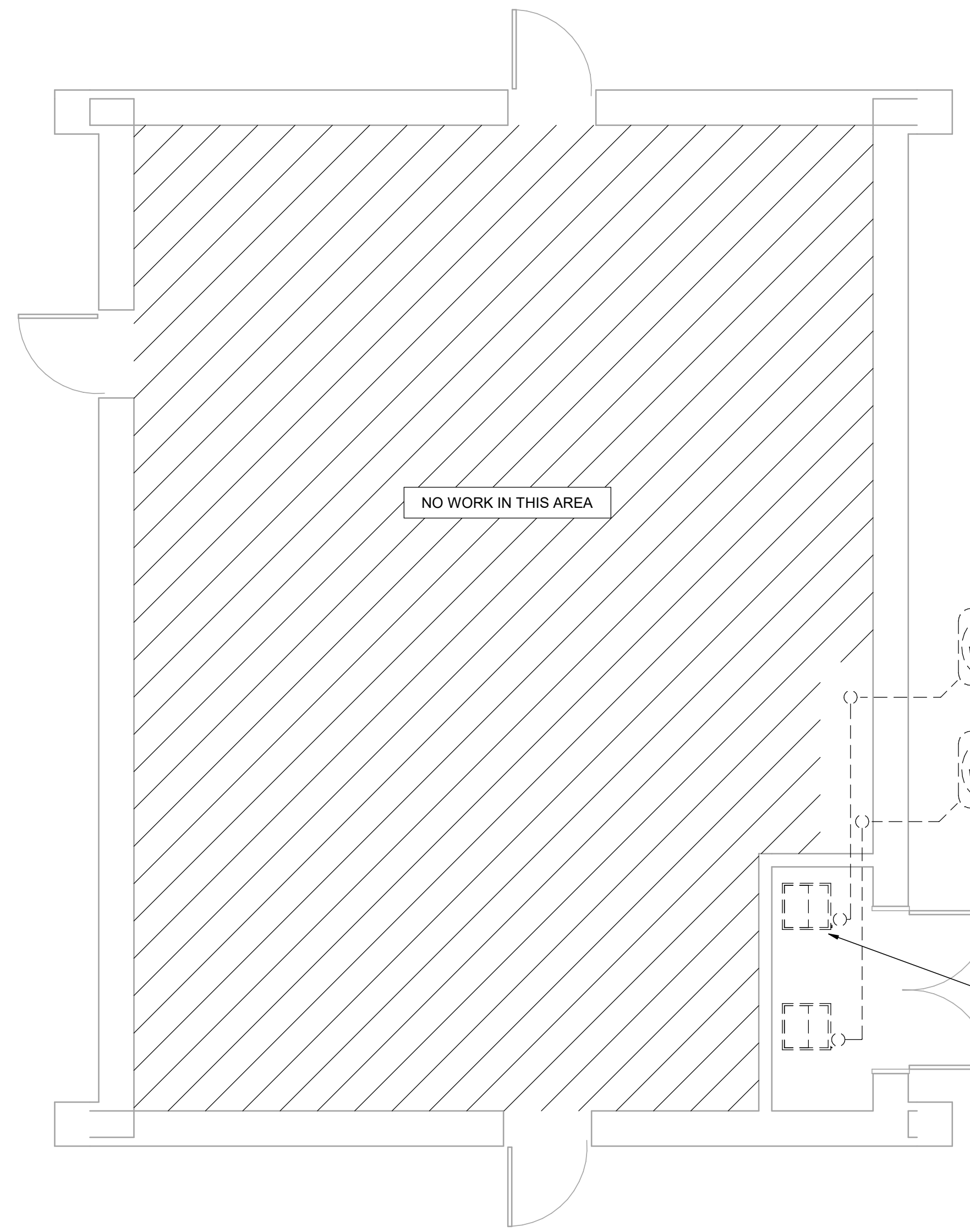
FILENAME | 10137117-00-MP.rvt
SCALE | 1/4" = 1'-0"

SHEET
16M101

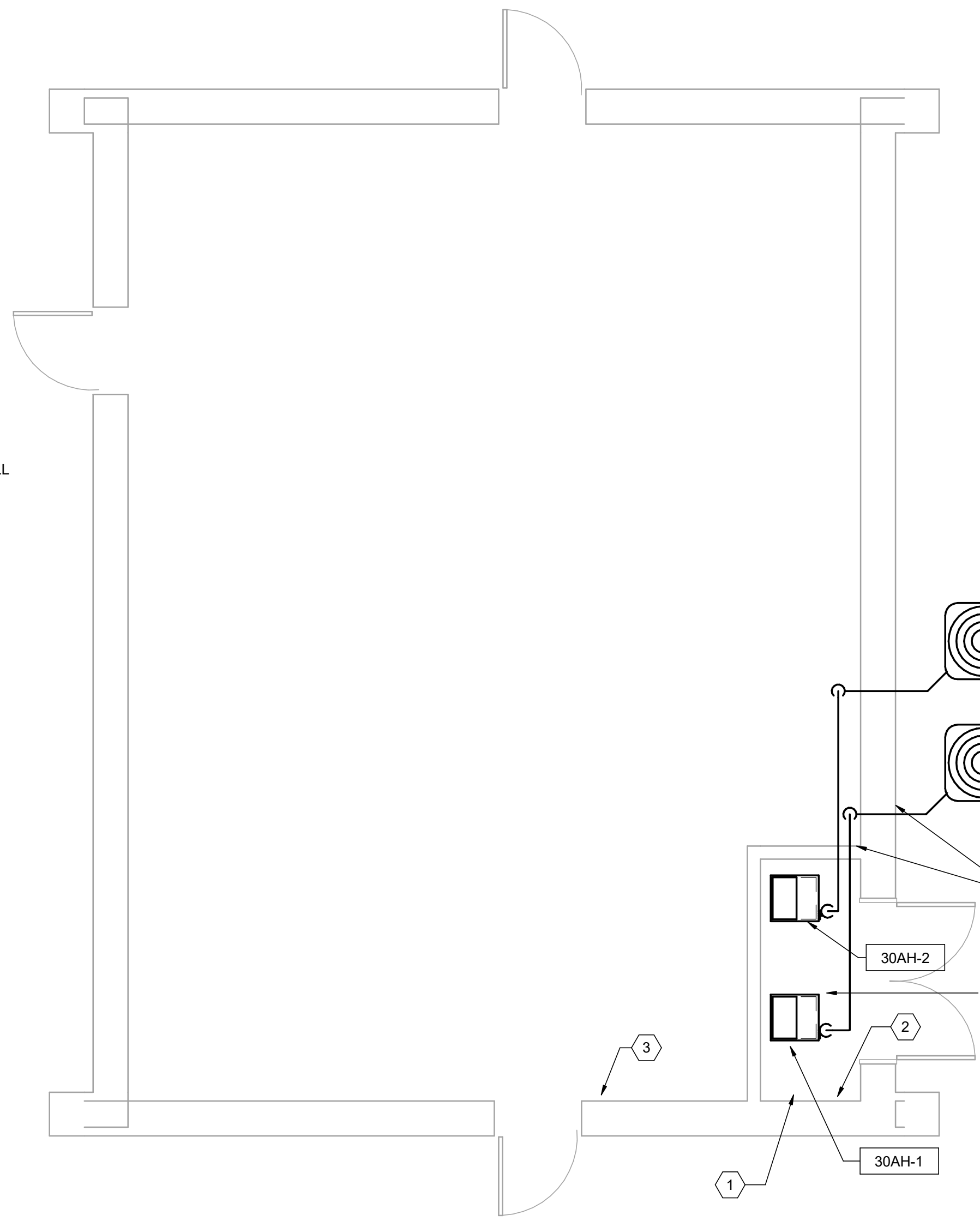


KEYNOTES #

- 1 BAS CONTROLLER (ALERTON MODEL: ACM). ALL NEW AND EXISTING MECHANICAL EQUIPMENT SHALL BE TIED IN AND VISIBLE ON THE EXISTING FRONT END.
- 2 SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
- 3 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.

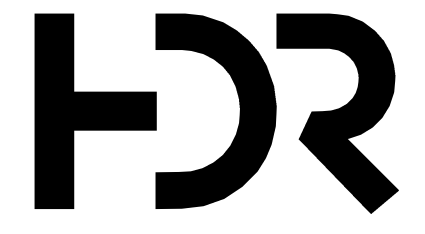


MECHANICAL DEMOLITION PLAN
1/4" = 1'-0"



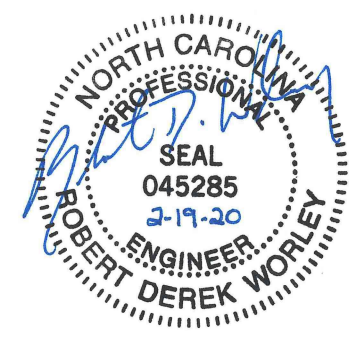
MECHANICAL PLAN
1/4" = 1'-0"

C:\p\2018\10137117-00-MP_derek.worley.rvt 2/19/2020 3:16:43 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

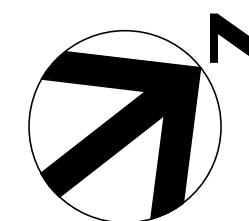
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 30
MECHANICAL PLANS**

0 1" 2"

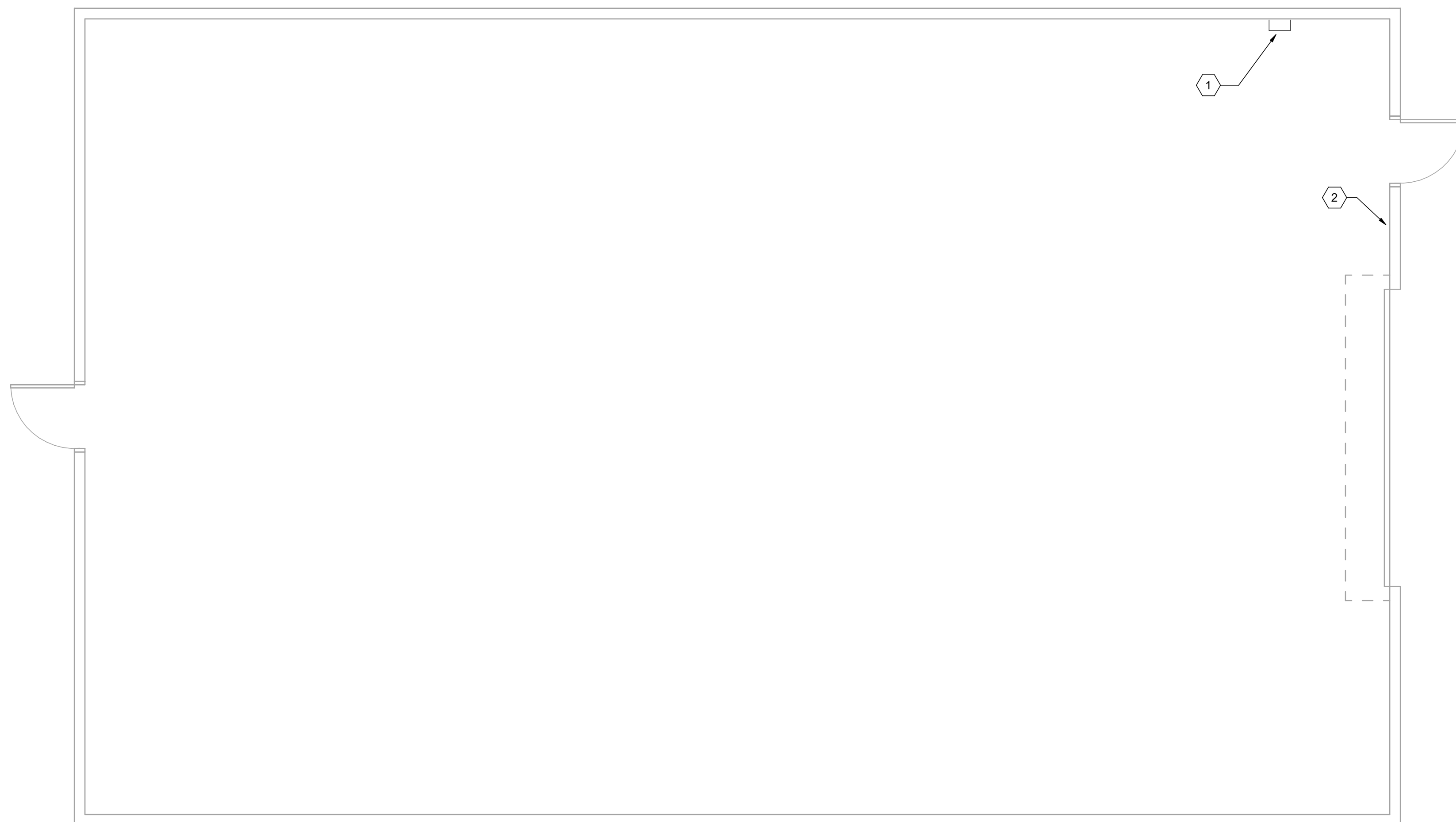
FILENAME | 10137117-00-MP.rvt
SCALE | 1/4" = 1'-0"

SHEET
30M101



KEYNOTES #

- 1 SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
- 2 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.



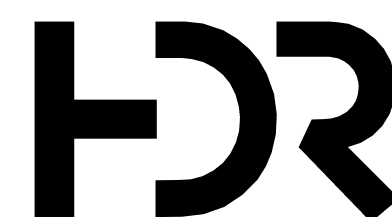
D

C

B

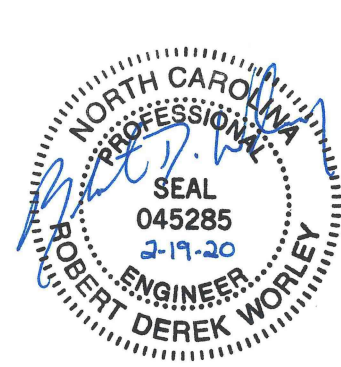
A

C:\vd\2018\10137117-00-MP_derek.worley.rvt 2/19/2020 3:16:43 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER N. OVERBY	
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117

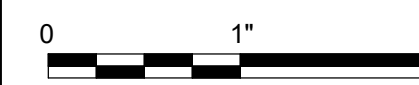


**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

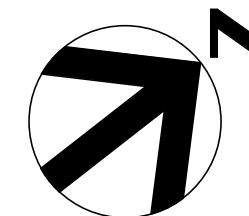
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 50
MECHANICAL PLAN**



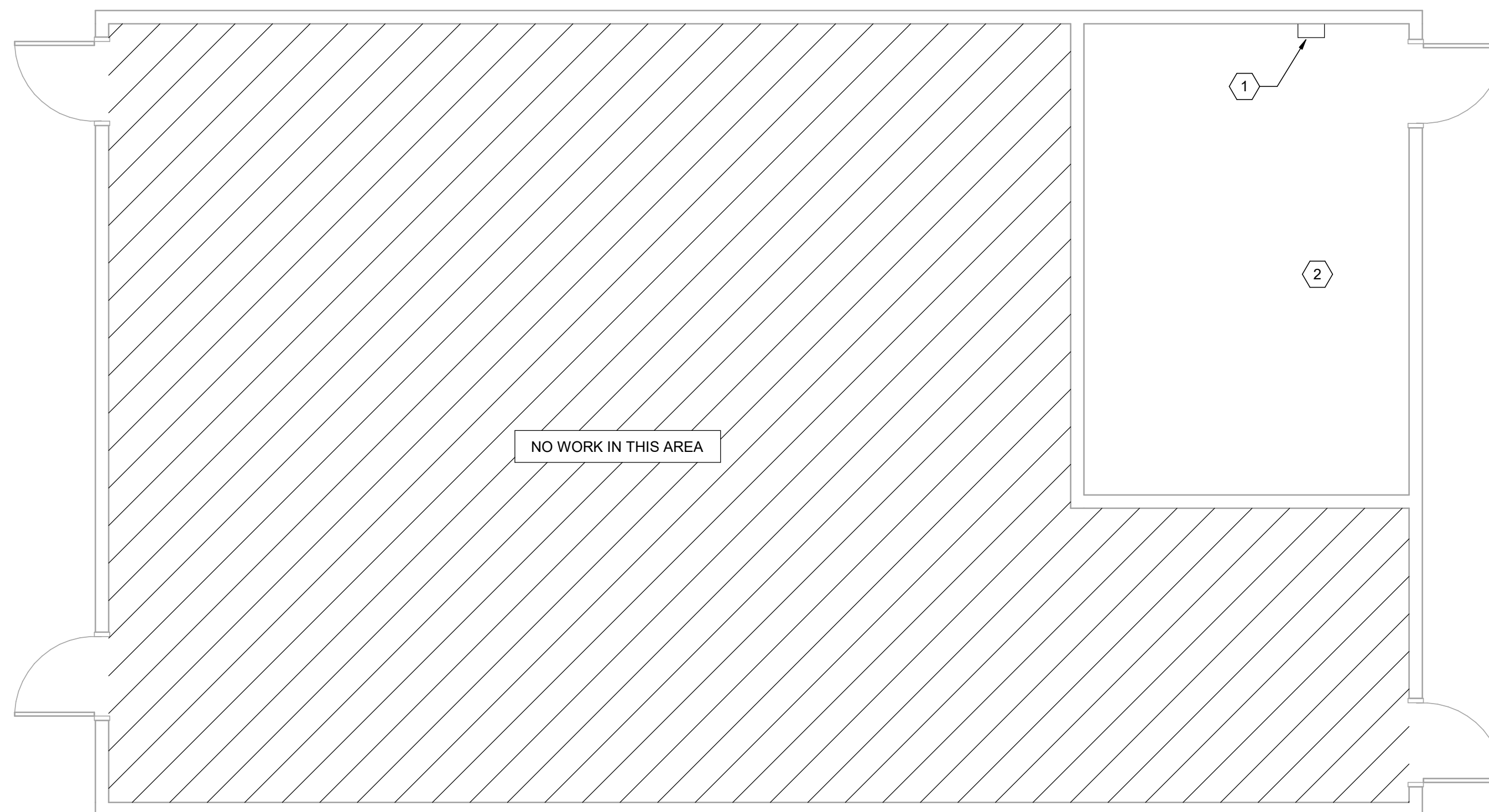
FILENAME | 10137117-00-MP.rvt
SCALE | 1/4" = 1'-0"

SHEET
50M101

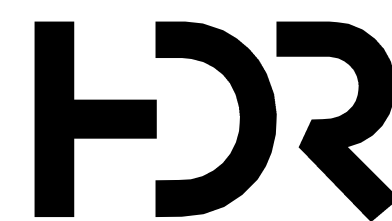


KEYNOTES #

- 1 SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
- 2 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.

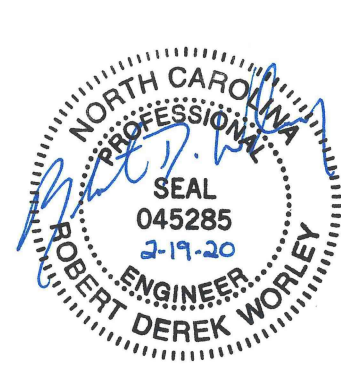


C:\vd\2018\10137117-00-MP-derek.worley.rvt
2/19/2020 3:16:44 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER N. OVERBY	
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

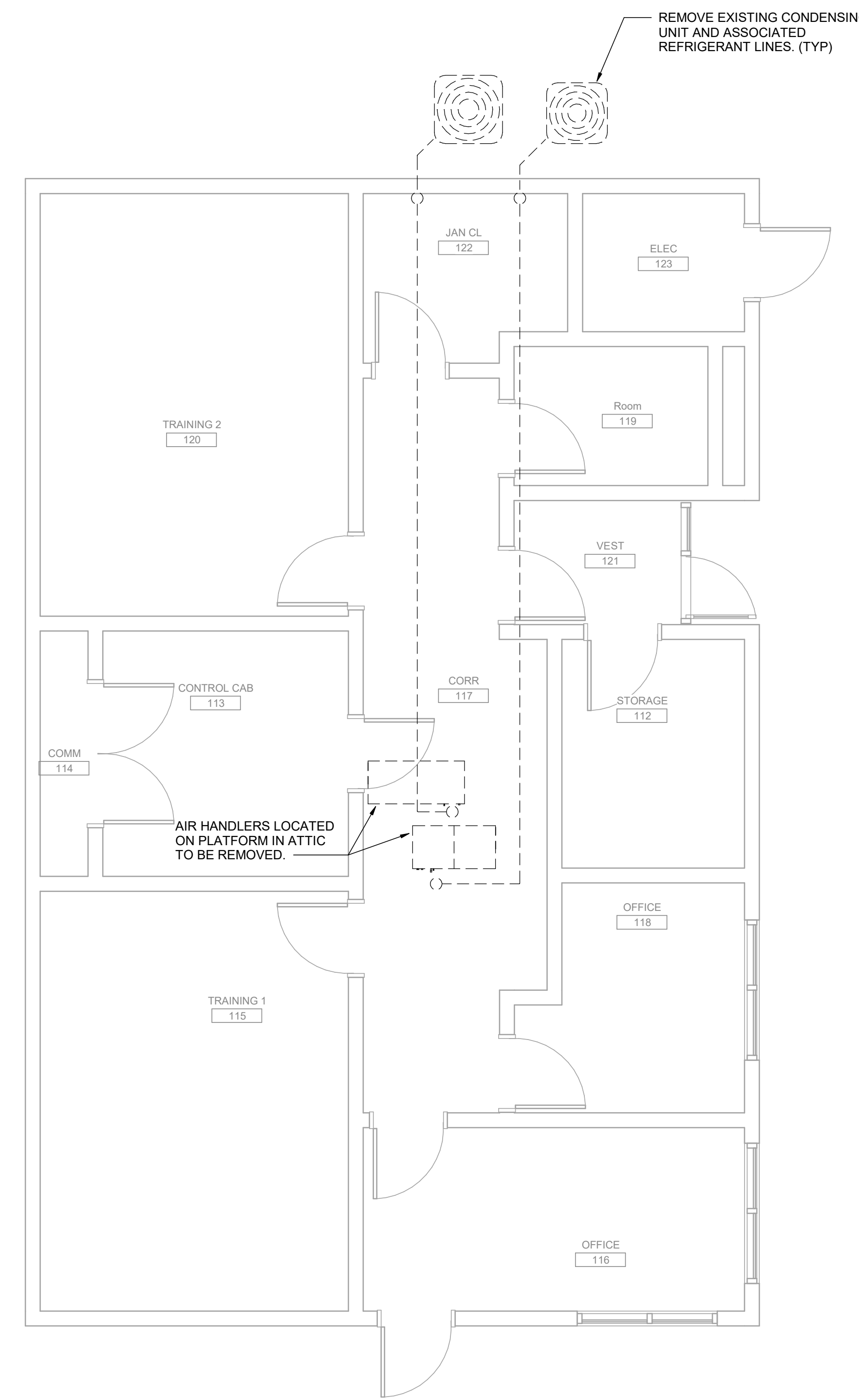
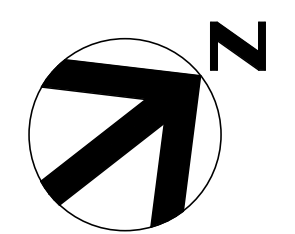
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 51
MECHANICAL PLAN**

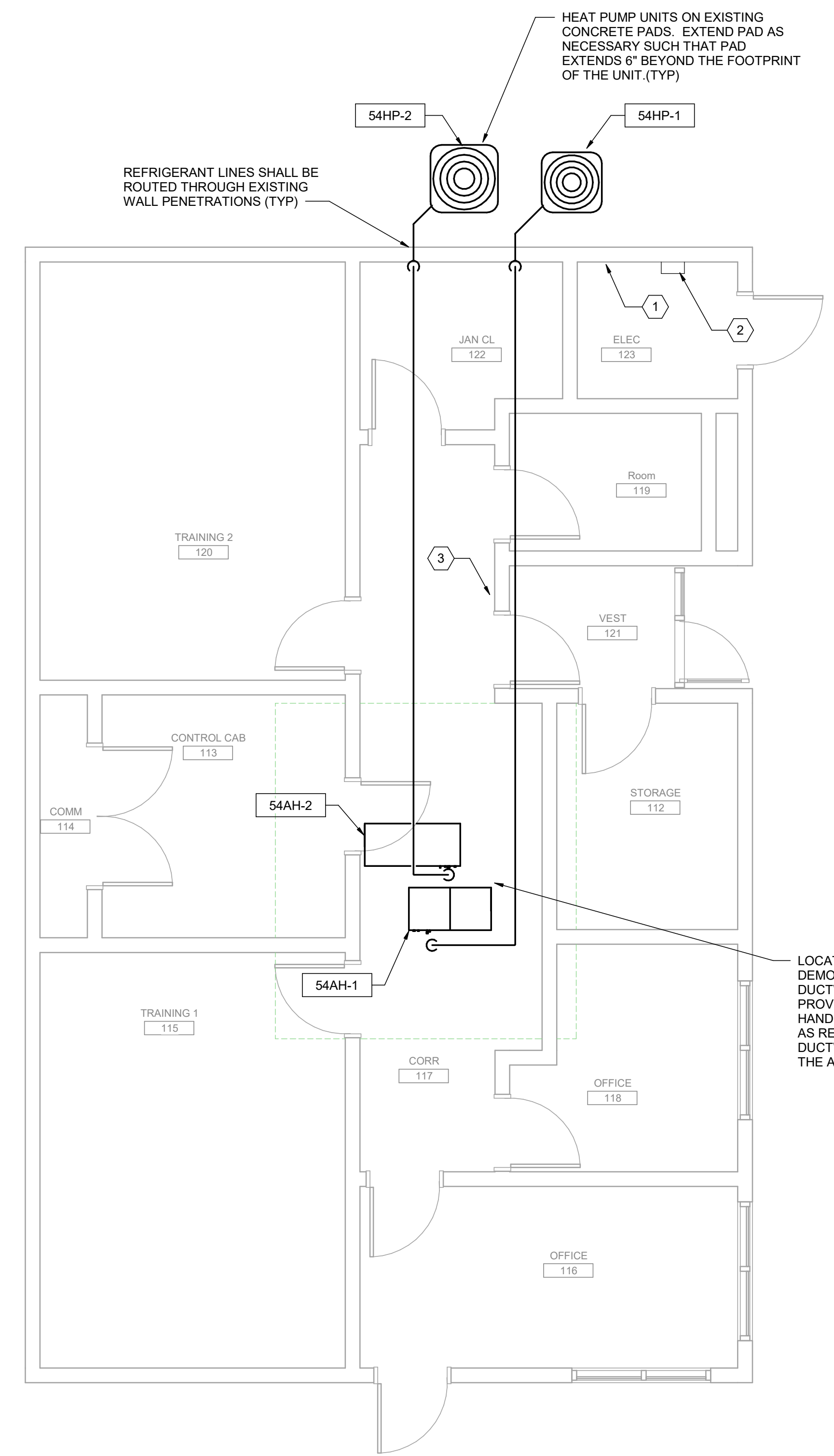
0 1" 2"

FILENAME | 10137117-00-MP.rvt
SCALE | 1/4" = 1'-0"

SHEET
51M101



MECHANICAL DEMOLITION PLAN
1/4" = 1'-0"

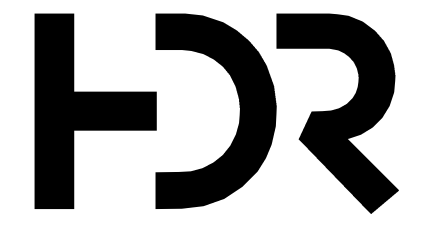


MECHANICAL PLAN
1/4" = 1'-0"

- KEYNOTES** #
- 1 BAS CONTROLLER (ALERTON MODEL: ACM). ALL NEW AND EXISTING MECHANICAL EQUIPMENT SHALL BE TIED IN AND VISIBLE ON THE EXISTING FRONT END.
 - 2 SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
 - 3 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.

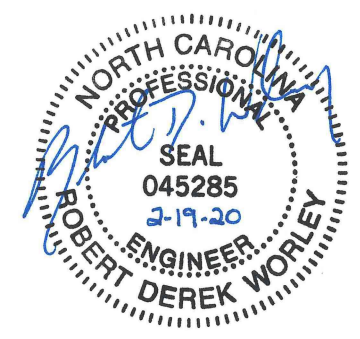
LOCATE AIR HANDLERS IN SAME LOCATION AS DEMOLISHED AND CONNECT BACK TO EXISTING DUCTWORK. CONDENSATE AND CONTROLS PROVIDE FLEXIBLE CONNECTION BETWEEN AIR HANDLER AND DUCTWORK. PROVIDE TRANSITION AS REQUIRED FOR CONNECTION TO EXISTING DUCTWORK. FILTERS SHALL BE REMOVED FROM THE AIR HANDLING UNITS AND (TYP)

C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:45 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WFM142600
HDR PROJECT #:	10137117

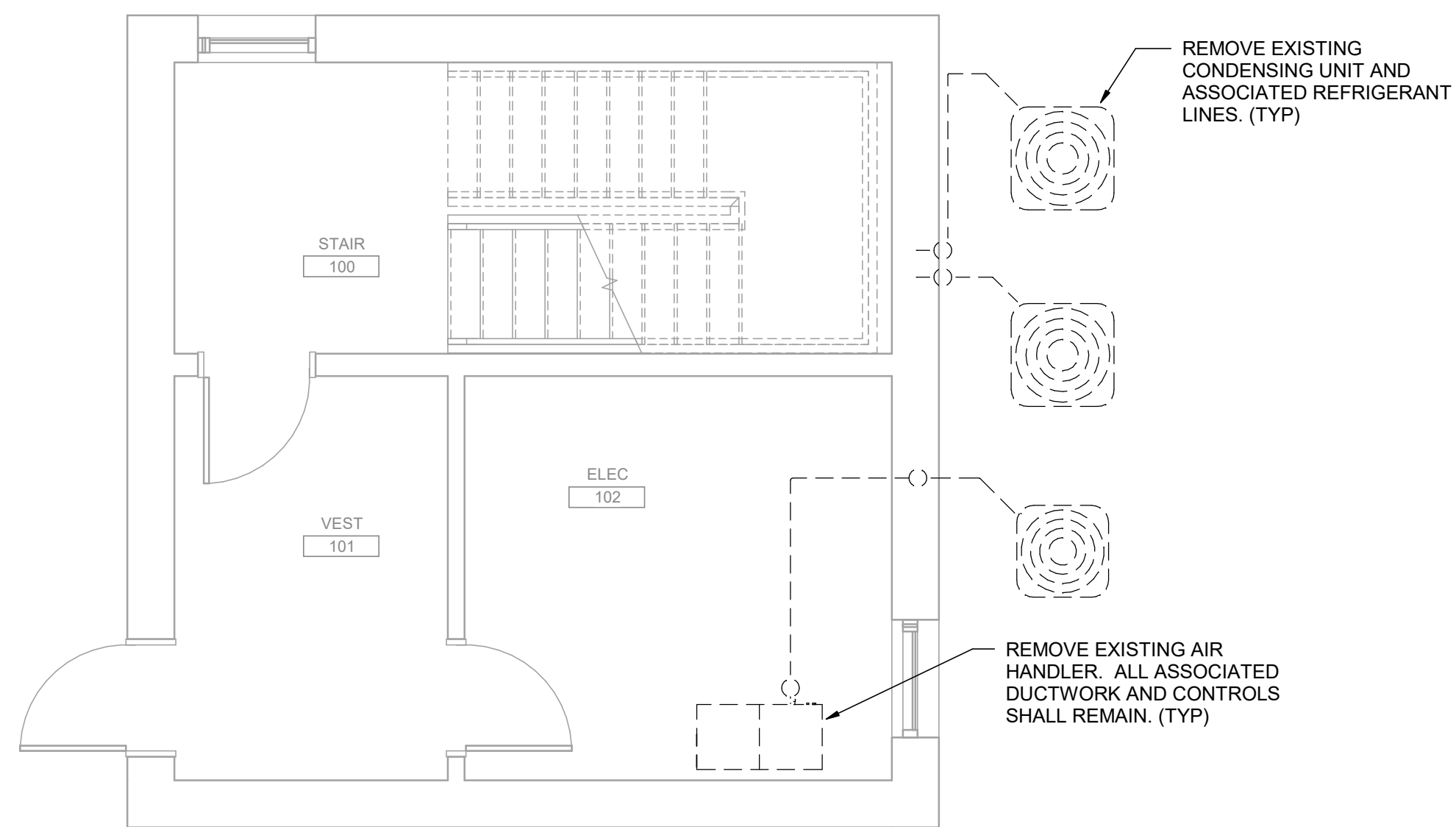
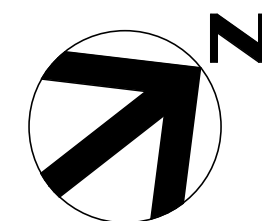


**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

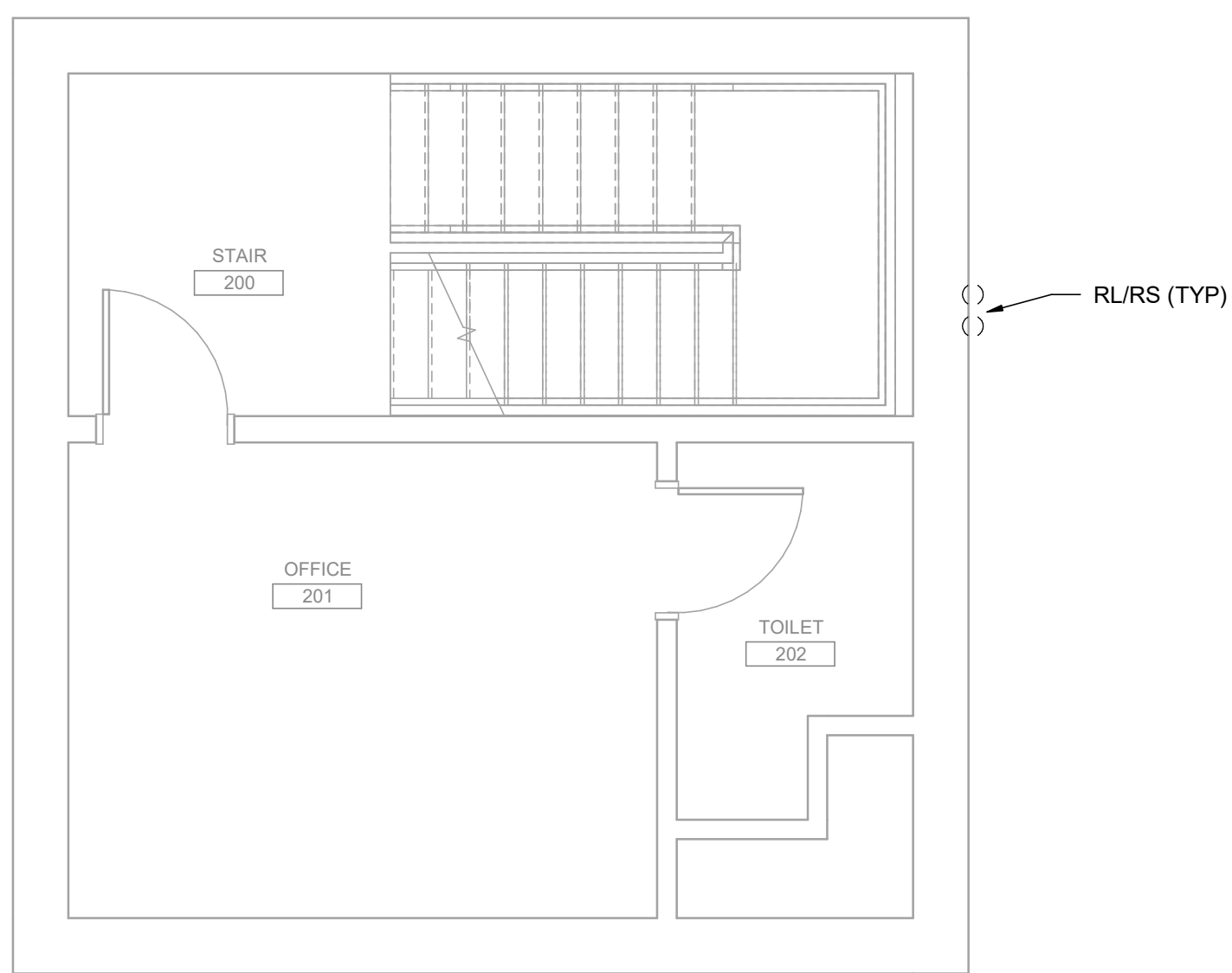
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**
**BUILDING 54
MECHANICAL PLANS**

0 1" 2" FILENAME 10137117-00-MP.rvt
SCALE 1/4" = 1'-0" SHEET **54M101**



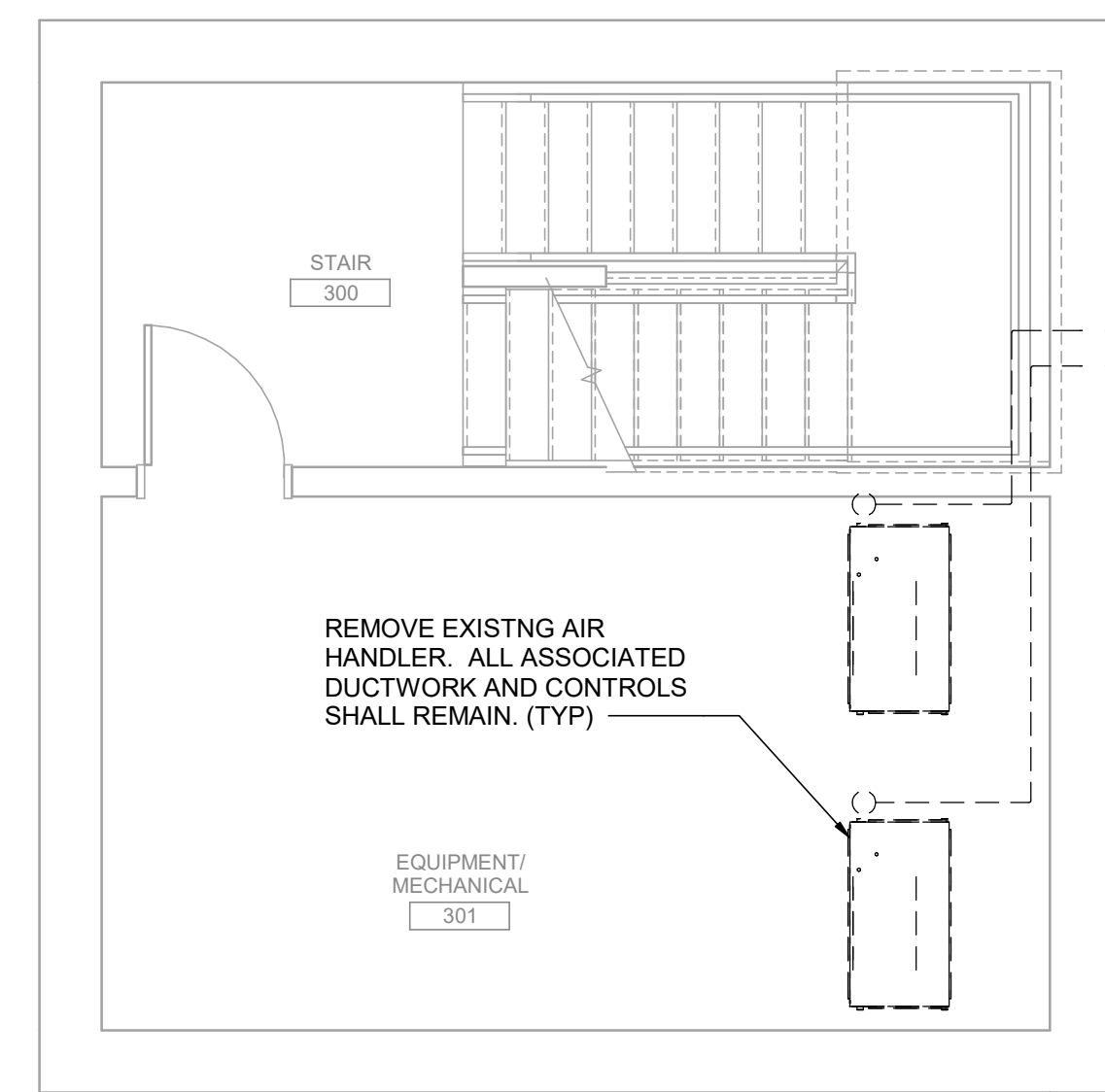
MECHANICAL DEMOLITION PLAN - FIRST FLOOR

1/4" = 1'-0"



MECHANICAL DEMOLITION PLAN - SECOND FLOOR

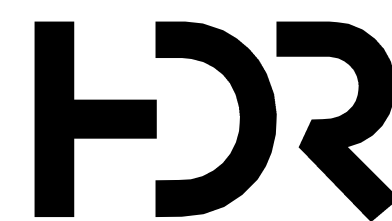
1/4" = 1'-0"



MECHANICAL DEMOLITION PLAN - THIRD FLOOR

1/4" = 1'-0"

C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:47 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

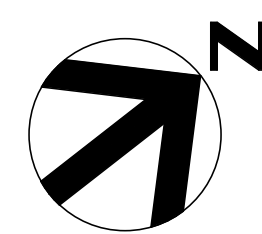
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 60
MECHANICAL DEMOLITION PLANS**

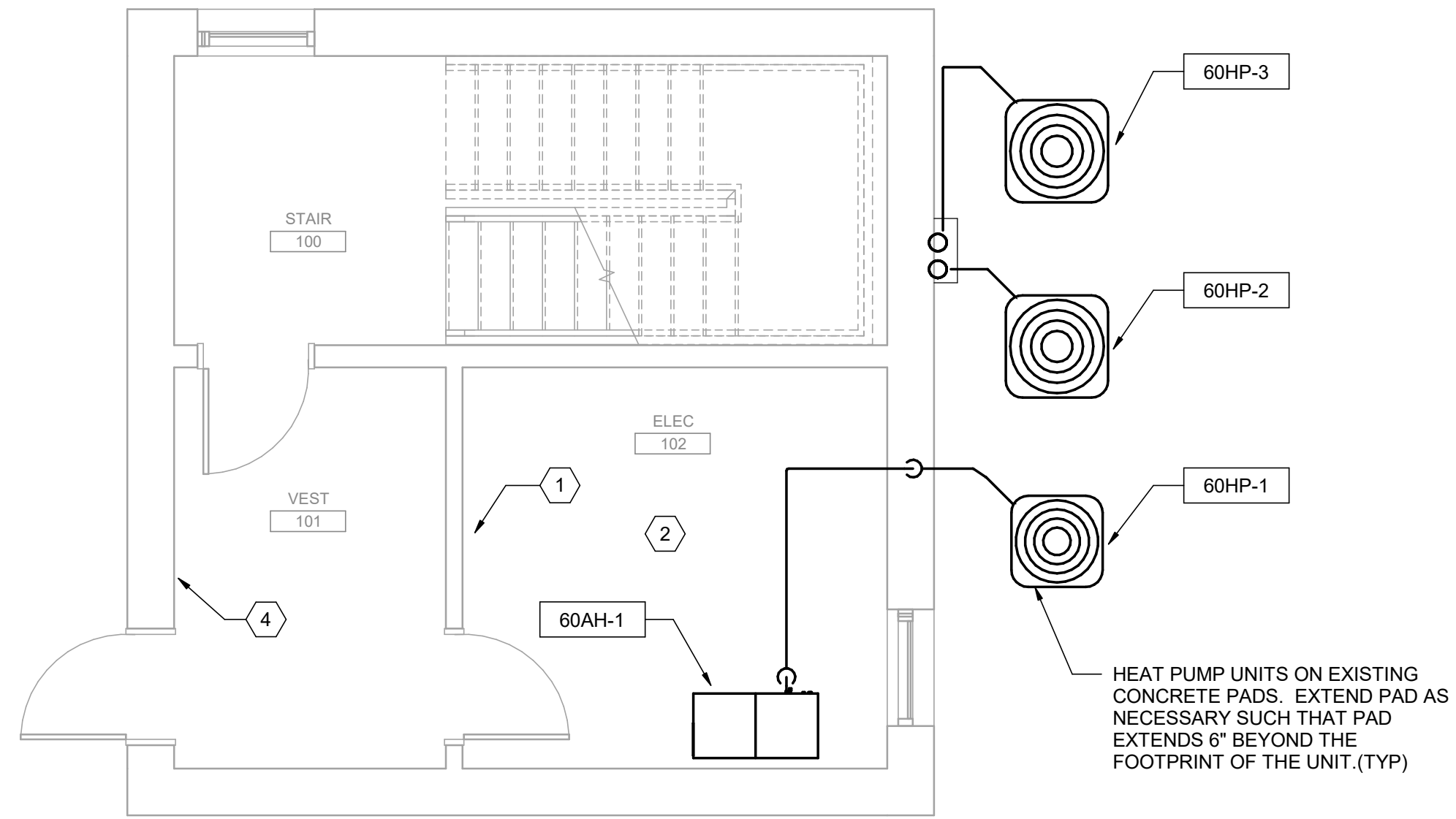


FILENAME 10137117-00-MP.rvt
SCALE 1/4" = 1'-0"

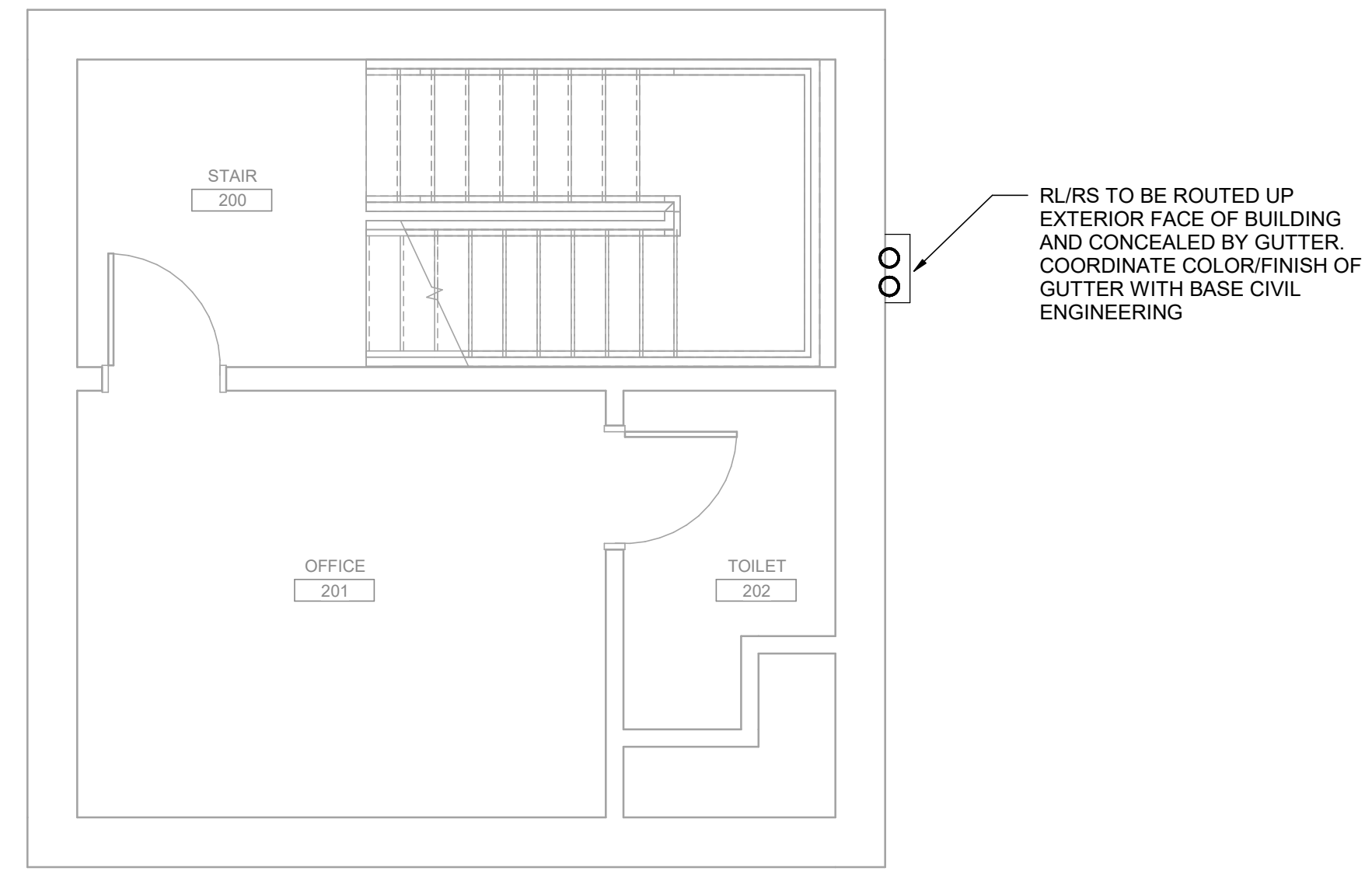
SHEET
60MD101



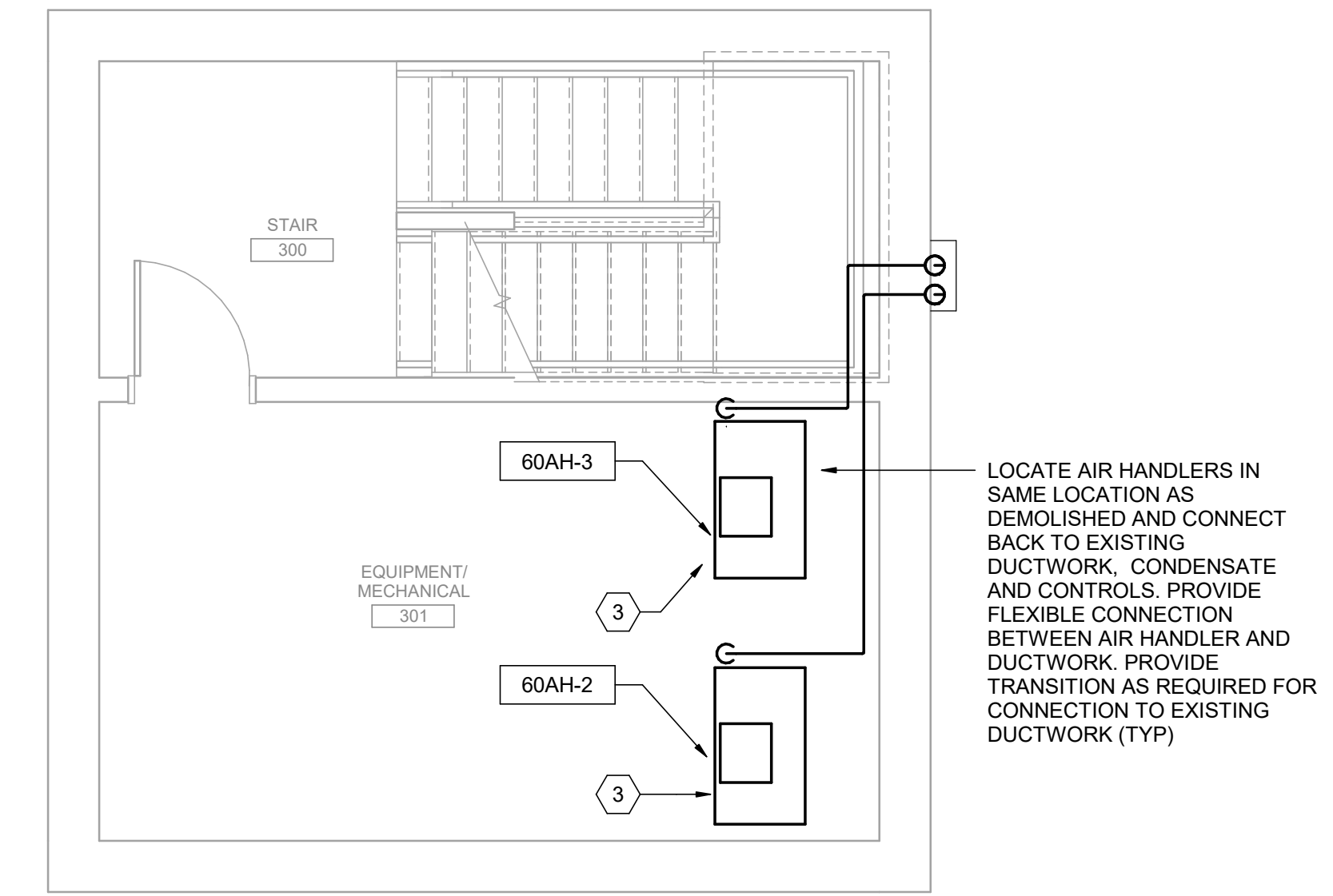
- KEYNOTES** #
- 1 BACNET ROUTER, TEMPERATURE SENSOR, AND THERMOSTAT (ALERTON MODEL:VLC/D). ROUTER SHALL COMMUNICATE WITH EXISTING BAS CONTROLLER LOCATED IN BUILDING 54.
 - 2 SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
 - 3 CONTRACTOR TO COORDINATE WITH COR, BASE CIVIL ENGINEERING, AND END USER FOR THE INSTALLATION OF THIS AIR HANDLER.
 - 4 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOWERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.



MECHANICAL PLAN - FIRST FLOOR
1/4" = 1'-0"

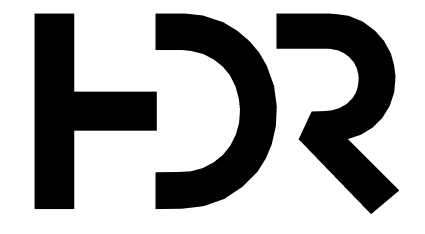


MECHANICAL PLAN - SECOND FLOOR
1/4" = 1'-0"



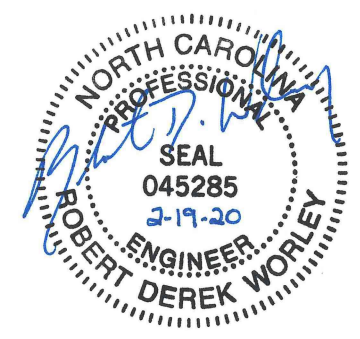
MECHANICAL PLAN - THIRD FLOOR
1/4" = 1'-0"

C:\p\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:46 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

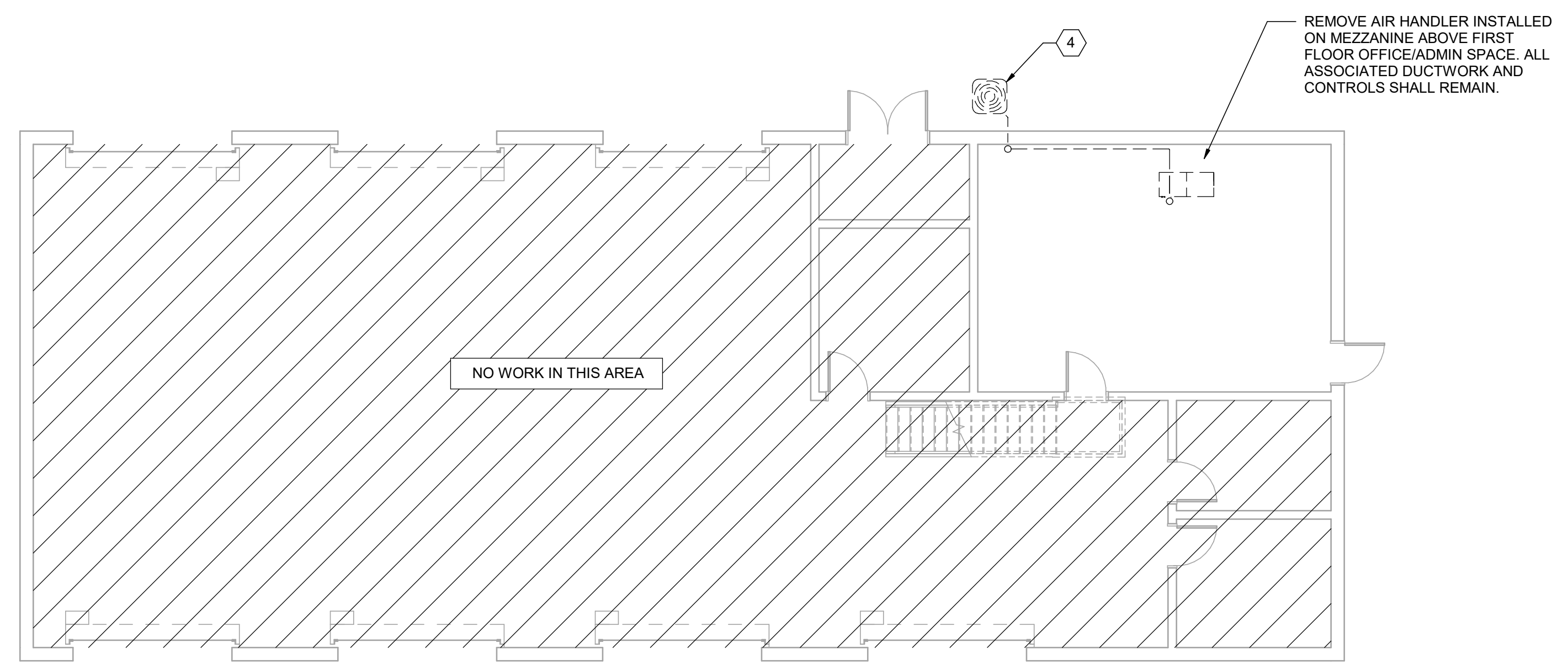
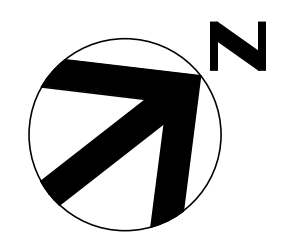
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 60
MECHANICAL PLANS**

0 1" 2"

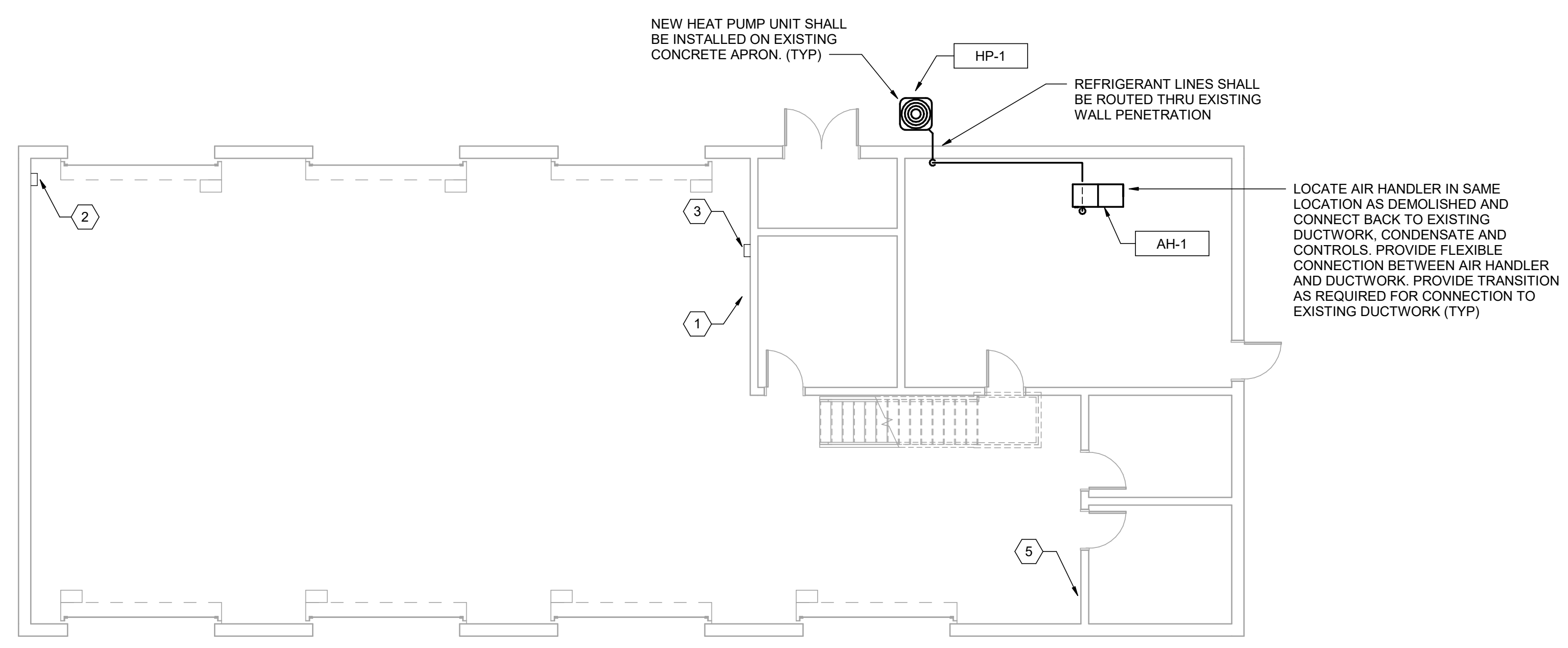
FILENAME | 10137117-00-MP.rvt
SCALE | 1/4" = 1'-0"

SHEET
60M101



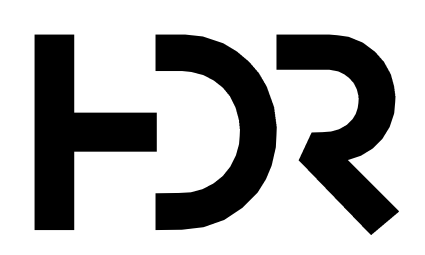
MECHANICAL DEMOLITION PLAN
1/8" = 1'-0"

- KEYNOTES** #
- BACNET ROUTER, TEMPERATURE SENSOR AND DOOR SWITCHES. ROUTER SHALL COMMUNICATE WITH EXISTING BAS CONTROLLER LOCATED IN BUILDING 77.
 - SMART METER ON EXISTING PROPANE SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
 - SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
 - HEAT PUMP UNIT AND ASSOCIATED REFRIGERANT PIPING TO BE REMOVED. ALL ELECTRICAL CONDUIT, WIRING, AND DISCONNECTS TO REMAIN. EXISTING WALL PENETRATION TO REMAIN FOR REUSE.
 - PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/SILOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.



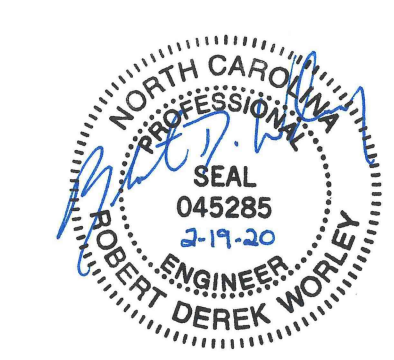
MECHANICAL PLAN
1/8" = 1'-0"

C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:48 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

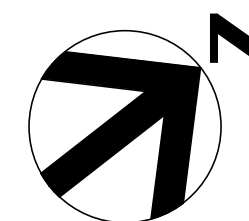
**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 75
MECHANICAL PLANS**

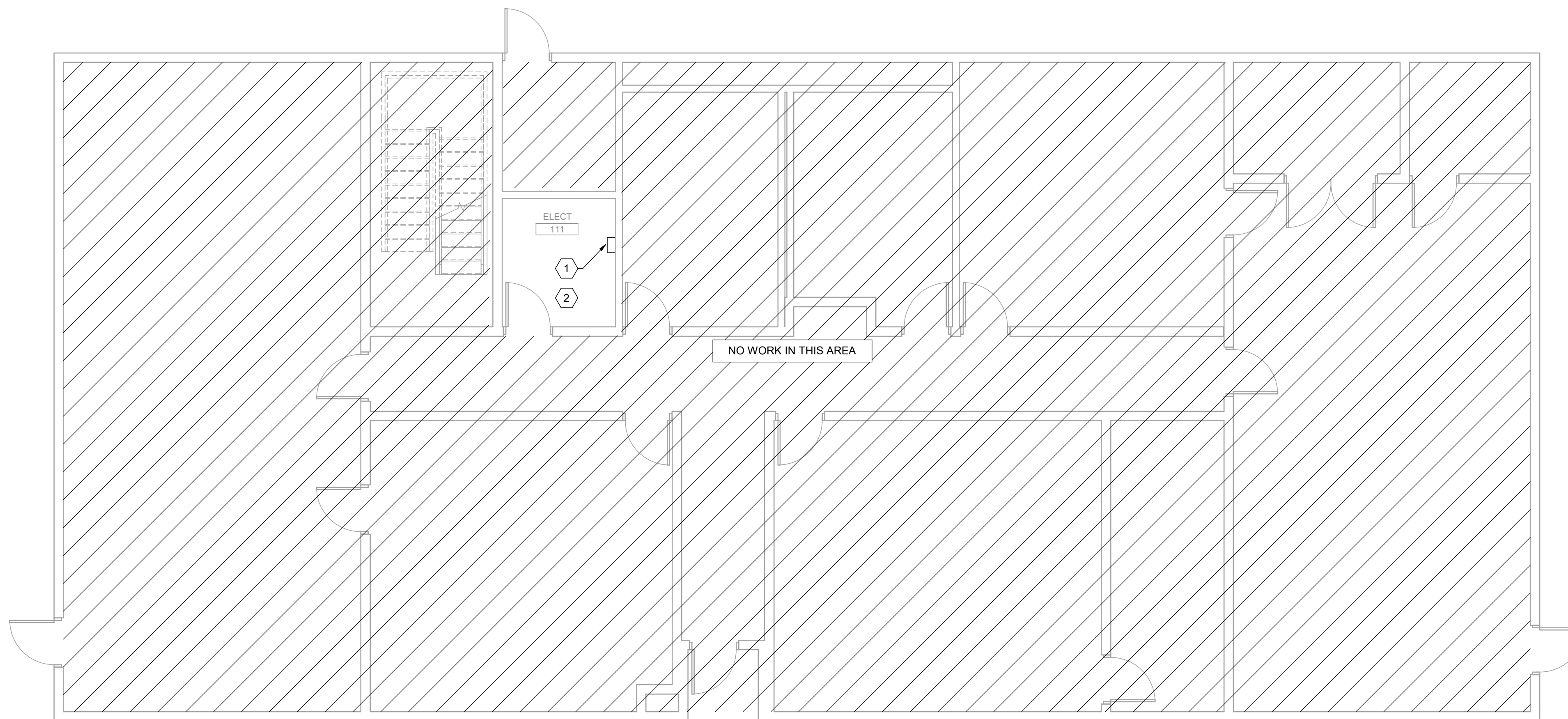
0 1" 2"

FILENAME | 10137117-00-MP.rvt | SHEET
SCALE | 1/8" = 1'-0" | **75M101**

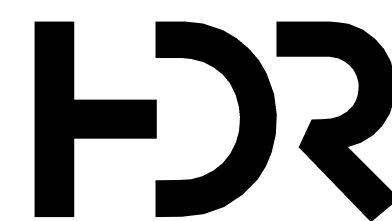


KEYNOTES #

- 1 SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
- 2 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #499M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.



C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:49 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

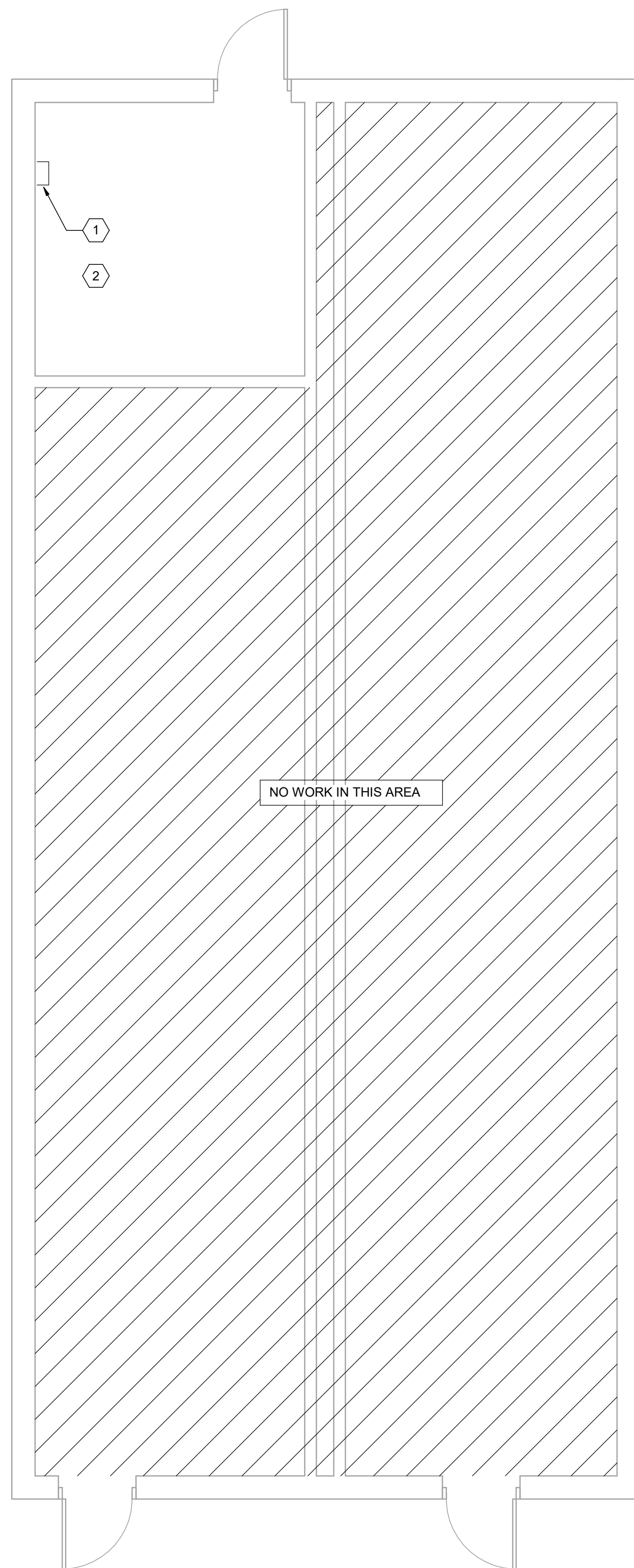
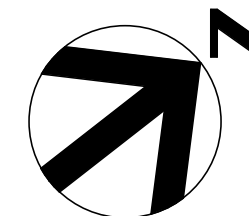
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 77
MECHANICAL PLAN**



FILENAME | 10137117-00-MP.rvt
SCALE | 3/16" = 1'-0"

SHEET
77M101

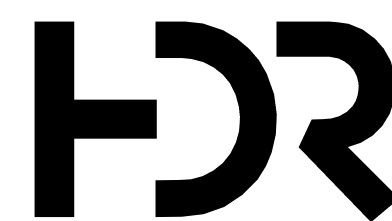


KEYNOTES #

- 1 SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METERS SHALL BE INSTALLED IN A WEATHER TIGHT ENCLOSURE. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
- 2 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SWITCH WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/SLOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/99M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.

NO WORK IN THIS AREA

C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:50 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117

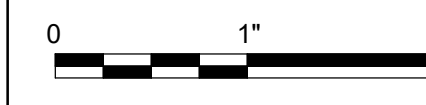


**REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC**

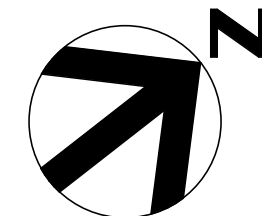
**STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT**

**BUILDING 81
MECHANICAL PLAN**



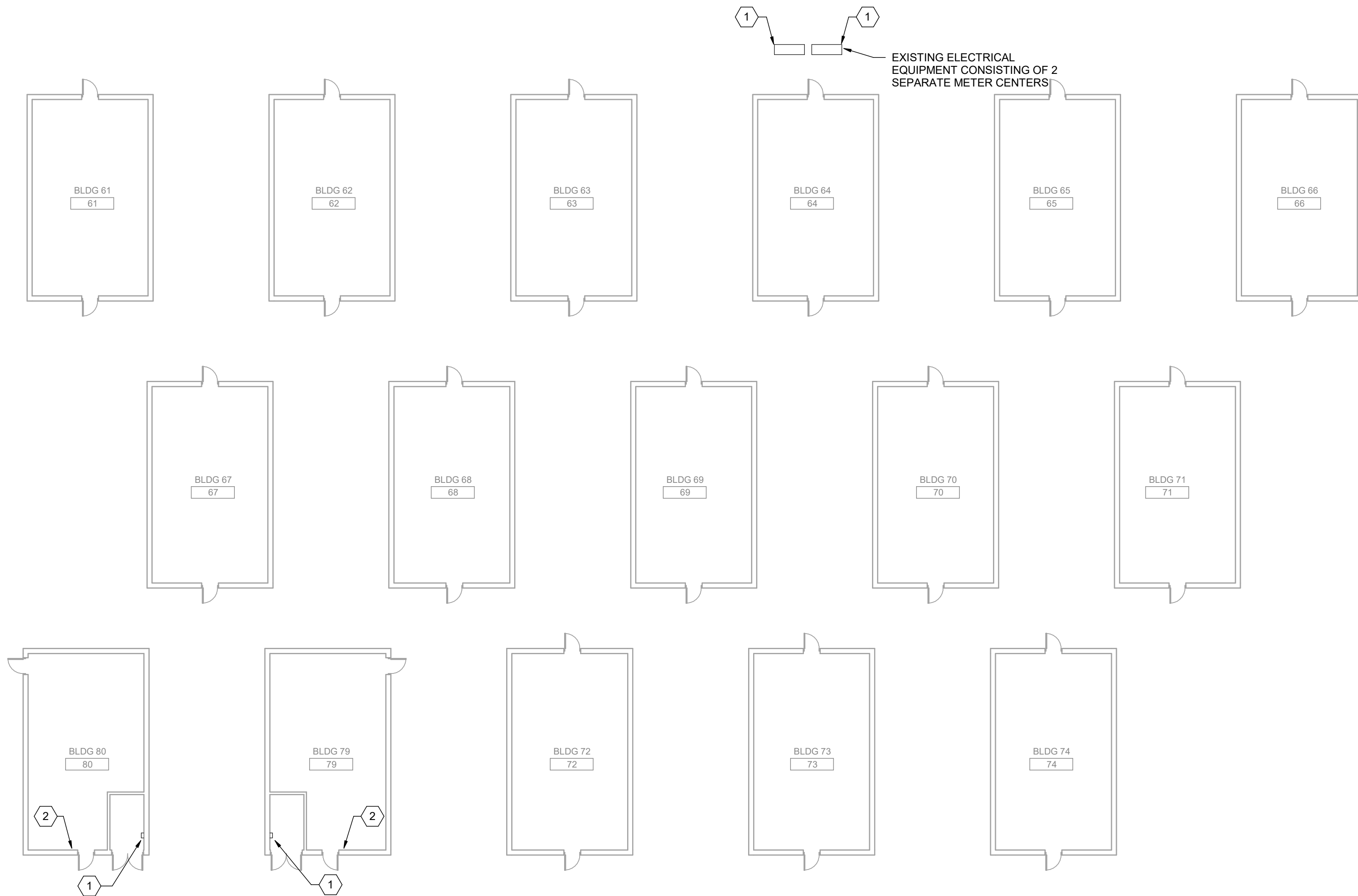
FILENAME | 10137117-00-MP.rvt
SCALE | 1/4" = 1'-0"

SHEET
81M101



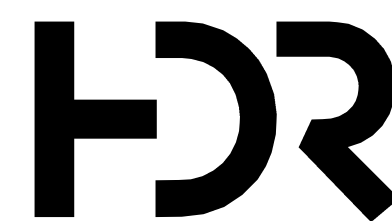
KEYNOTES #

- 1 SMART METER ON EXISTING ELECTRICAL SERVICE. COORDINATE TYPES AND DESIGNS WITH GOVERNMENT TO ENSURE THAT METER IS COMPATIBLE WITH EXISTING SYSTEM. METERS SELECTED SHALL MEET CURRENT UFC'S AND AIR FORCE REQUIREMENTS. METERS SHALL BE INSTALLED IN A WEATHER TIGHT ENCLOSURE. METER SHALL BE WIRED/ROUTED TO BUILDING CONTROLLER FOR VISIBILITY ON THE EXISTING FRONT END. IF METER IS NOT VISIBLE DUE TO COMMUNICATIONS RESTRICTIONS, NOTIFY COR AND ENSURE THAT METER IS ACCESSIBLE FOR REMOTE DOWNLOADING OF DATA.
- 2 PROVIDE EMERGENCY HVAC SHUTOFF SWITCH IN ACCORDANCE WITH SECTION 3-19, UFC 4-010-011 "STANDARD 18". SWITCH TO BE LOCATED WITHIN THE BUILDING AND VISIBLE TO ALL OCCUPANTS. COORDINATE FINAL LOCATION OF SHUTOFF WITH GOVERNMENT. EMERGENCY SHUTOFF SWITCH SHALL BE TIED INTO BUILDING BAS CONTROLLER/ROUTER AND INITIATE SHUT DOWN OF ALL HVAC EQUIPMENT AND CLOSURE OF ALL OUTSIDE AIR DAMPERS/LOUVERS WITHIN 30 SECONDS OF ACTIVATION. REFER TO DETAIL #4/89M004 FOR MORE INFORMATION. IF EMERGENCY SHUT-OFF SWITCH IS ALREADY PRESENT WITHIN THE BUILDING, COORDINATE WITH GOVERNMENT TO ENSURE PROPER FUNCTION AND THAT SWITCH IS CURRENTLY TIED TO THE FRONT END FOR VISIBILITY AND CONTROL WITHIN THE BAS. NOTIFY GOVERNMENT/COR OF EXISTING CONDITIONS AND CURRENT OPERATION.



EXISTING ELECTRICAL EQUIPMENT CONSISTING OF 2 SEPARATE METER CENTERS

C:\vd\2018\10137117-00-MP_derek.worley.rvt 2/19/2020 3:16:55 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER N. OVERBY	
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



REPLACE HVAC SYSTEMS BASE WIDE - STANLY CO.

NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC

STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT

TROOP CAMP
NEW WORK PLAN



FILENAME | 10137117-00-MP.rvt
SCALE | 1/16" = 1'-0"

SHEET
TCM101

GAS PACKAGED ROOFTOP UNIT SCHEDULE

MARK NO.	AREA SERVED	NOMINAL TONS	SUPPLY				COOLING CAPACITY (AT 95F AMBIENT)			HEATING CAPACITY			FILTER		ELECTRICAL				UNIT SIZE (L"xW"xH")	WEIGHT (LBS)	EER	SEER	MODEL INFORMATION		NOTES	
			AIRFLOW (CFM)	ESP (IN. WG.)	DRIVE	MAX. BHP	HP	TOTAL (MBH)	SENSIBLE (MBH)	REFRIG. TYPE	INPUT (MBH)	OUTPUT (MBH)	CONNECTI... SIZE	TYPE	SIZE (L"xW"xH")	VOLTAGE / PHASE	MCA	MOCP					FLA (DISCONNECT)	BASIS OF DESIGN		MODEL NO.
12RTU-1	BUILDING 12	4	1600	NOTE 11	DIRECT	0.72	--	50	37	R410A	67	53	1/2"	THROW AWAY	16 x 25 x 2	460 / 3	10	15	10	74 x 47 x 41	600	12	16	CARRIER	48GCDN05B1A6	1 - 8
12RTU-2	BUILDING 12	7.5	3000	NOTE 11	BELT	1.7	--	93.3	72.2	R410A	125	103	1/2"	THROW AWAY	20 x 20 x 2	460 / 3	18	20	19	88 x 59 x 49	1000	12	--	CARRIER	48HCDE08B1A6	1 - 9
12RTU-3	BUILDING 12	3	1200	NOTE 11	DIRECT	0.44	--	35.1	25.6	R410A	67	53	1/2"	THROW AWAY	16 x 25 x 2	460 / 3	9	15	8	74 x 47 x 33	600	12	16	CARRIER	48GCDN04B1A6	1 - 8
12RTU-4	BUILDING 12	6	2400	NOTE 11	BELT	1.7	--	74.7	56.8	R410A	72	59	1/2"	THROW AWAY	16 x 20 x 2	460 / 3	15	20	14	88 x 59 x 49	825	12	--	CARRIER	48HCDE07B1A6	1 - 9
12RTU-5	BUILDING 12	10	4000	NOTE 11	BELT	2.4	--	119.8	92.5	R410A	180	148	3/4"	THROW AWAY	20 x 20 x 2	460 / 3	22	25	23	88 x 59 x 49	1200	12	--	CARRIER	48HCDE11B1A6	1 - 9
12RTU-6	BUILDING 12	2	800	NOTE 11	DIRECT	-	1/2	23.0	18.0	R410A	60	49	1/2"	--	--	208 / 1	19.4	30	-	33 x 49 x 44	344	12	15	CARRIER	48VG-A240603	1 - 8
12RTU-7	BUILDING 12	10	4000	NOTE 11	BELT	2.4	--	119.8	92.5	R410A	180	148	3/4"	THROW AWAY	20 x 20 x 2	460 / 3	22	25	23	88 x 59 x 49	1200	12	--	CARRIER	48HCDE11B1A6	1 - 10
12RTU-8	BUILDING 12	10	4000	NOTE 11	BELT	2.4	--	119.8	92.5	R410A	180	148	3/4"	THROW AWAY	20 x 20 x 2	460 / 3	22	25	23	88 x 59 x 49	1200	12	--	CARRIER	48HCDE11B1A6	1 - 10
12RTU-1-1	BUILDING 12	4	1600	NOTE 11	DIRECT	0.72	--	50	37	R410A	67	53	1/2"	THROW AWAY	16 x 25 x 2	460 / 3	10	15	10	74 x 47 x 41	600	12	16	CARRIER	48GCDN05B1A6	1 - 8
12RTU-1-2	BUILDING 12	4	1600	NOTE 11	DIRECT	0.72	--	50	37	R410A	67	53	1/2"	THROW AWAY	16 x 25 x 2	460 / 3	10	15	10	74 x 47 x 41	600	12	16	CARRIER	48GCDN05B1A6	1 - 8
12RTU-2-1	BUILDING 12	4	1600	NOTE 11	DIRECT	0.72	--	50	37	R410A	67	53	1/2"	THROW AWAY	16 x 25 x 2	460 / 3	10	15	10	74 x 47 x 41	600	12	16	CARRIER	48GCDN05B1A6	1 - 8
12RTU-2-2	BUILDING 12	5	2000	NOTE 11	DIRECT	1.06	--	63	48.3	R410A	67	53	1/2"	THROW AWAY	16 x 25 x 2	460 / 3	12	15	11	74 x 47 x 41	650	12	16	CARRIER	48GCEN06B1A6	1 - 8
12RTU-2-3	BUILDING 12	5	2000	NOTE 11	DIRECT	1.06	--	63	48.3	R410A	67	53	1/2"	THROW AWAY	16 x 25 x 2	460 / 3	12	15	11	74 x 47 x 41	650	12	16	CARRIER	48GCEN06B1A6	1 - 8

- NOTES:
 1. 2-STAGE SCROLL COMPRESSOR
 2. MANUFACTURER'S ROOF CURB ADAPTER
 3. LOW AMBIENT CONTROL
 4. ENTHALPY BASED ECONOMIZER
 5. PROPANE CONVERSION KIT
 6. DISCHARGE AIR AND OUTSIDE AIR TEMPERATURE SENSORS
 7. OUTSIDE AIR DAMPER SHALL BE SET TO PROVIDE FRESH AIR EQUAL TO THE MEASURED OUTSIDE AIRFLOW RECORDED IN T&B REPORT PERFORMED PRIOR TO START OF CONSTRUCTION.
 8. HINGED DOORS
 9. HOT GAS REHEAT HUMIDITY CONTROL
 10. ERV OPTION
 11. EXTERNAL STATIC PRESSURE TO BE SET EQUAL TO THE MEASURED EXTERNAL STATIC PRESSURE RECORDED IN THE T&B REPORT PERFORMED PRIOR TO START OF CONSTRUCTION.

DUCTLESS SPLIT SYSTEM HEAT PUMP SCHEDULE

MARK NO.	NOMINAL TONS	REFRIG.	SEER	INDOOR UNIT			OUTDOOR UNIT							WEIGHT (LBS)	BASIS OF DESIGN	MODEL INFORMATION		NOTES
				SUPPLY AIR CFM (MAX - HI - MED - LOW)	OA CFM	POWERED FROM INDOOR UNIT	HEATING CAPACITY @47°F (MBH)	HEATING CAPACITY @17°F (MBH)	COOLING CAPACITY TOTAL (MBH)	COOLING CAPACITY SENSIBLE (MBH)	MCA	MOCP	VOLTAGE / PHASE			MCA	MOCP	
12MSCU-9 / 12MSAH-9	1.5	R410A	21.5	706-530-477-371	--	POWERED FROM INDOOR UNIT	21.6	13.1	18.0	14.4	13	20	208 / 1	75	LG	LSU18HSV5	LSN18HSV5	1 - 5

- NOTES:
 1. COOLING CAPACITY BASED ON 95° F OUTDOOR AIR TEMPERATURE
 2. R-410A REFRIGERANT
 3. WALL MOUNTED PROGRAMMABLE THERMOSTAT/CONTROLLER
 4. SINGLE POINT POWER CONNECTION AND DISCONNECT SWITCH
 5. CONDENSATE PUMP

PACKAGED TERMINAL HEAT PUMP SCHEDULE

MARK	NOMINAL CFM	OA CFM	COOLING CAPACITY		HEATING CAPACITY (MBH)	ELECTRIC HEAT (KW)	REFRIGERANT	MIN EER	ELEC DATA			MODEL INFORMATION		NOTES
			TOTAL (MBH)	SENSIBLE (MBH)					MCA	MOCP	V/PH	BASIS OF DESIGN	MODEL	
04PTAC-1	270	25	7.1	5.3	6.2	2.3	R410A	13.3	14.5	15	208 / 1	LG	LP073HDUC	1 - 5

- NOTES:
 1. 15A POWER CORD
 2. WALL MOUNTED THERMOSTAT.
 3. WASHABLE FILTER
 4. SUBBASE
 5. WALL SLEEVE KIT

SINGLE PACKAGED VERTICAL AIR CONDITIONER SCHEDULE

MARK	NOMINAL CFM	ESP (IN WC)	COOLING CAPACITY		REFRIG.	MIN EER	ELECTRICAL DATA				WEIGHT (LBS)	MODEL INFORMATION		NOTES
			TOTAL (MBH)	SENSIBLE (MBH)			MCA	MOCP	VOLTAGE / PHASE	ELEC. HEAT (KW)		BASIS OF DESIGN	MODEL	
16AC-1	600	0.4	16.4	12.7	R410A	9.0	46	50	208 / 1	8	310	BARD	W18A2-A08	1 - 4
16AC-2	1100	0.2	35.0	25.3	R410A	9.0	33	35	208 / 3	9	310	BARD	W36A2-B09	1 - 4

- NOTES:
 1. DISCONNECT SWITCH
 2. WALL MOUNTED THERMOSTAT.
 3. LOW AMBIENT OPERATION KIT FOR OPERATION DOWN TO 0 F.
 4. 2 INCH MERV 8 FILTER

C:\vd\2018\10137117-00-MP_derek.worley.rvt
 2/19/2020 3:16:51 PM



DESIGNED BY:	D. WORLEY	
DRAWN BY:	D. WORLEY	
CHECKED BY:	M. DIMOFF	
CONTRACT #:	W91242-18-F-0130	
ANG PROJECT #:	WEFM142600	
HDR PROJECT #:	10137117	
ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER N. OVERBY

DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



**REPLACE HVAC SYSTEMS
 BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
 145TH AIRLIFT WING
 NEW LONDON, NC**

**STANLY COUNTY AIR NATIONAL GUARD STATION
 STANLY COUNTY AIRPORT**

MECHANICAL SCHEDULES

0 1" 2"

FILENAME | 10137117-00-MP.rvt
 SCALE | NONE
 SHEET | 99M001

SPLIT SYSTEM HEAT PUMP SCHEDULE

MARK NO.	NOMINAL TONS	REFRIG.	SEER / EER	INDOOR UNIT										OUTDOOR UNIT						MODEL INFORMATION				NOTES	
				FAN DATA			ELECTRICAL DATA				FILTER DATA			HEATING CAPACITY		COOLING CAPACITY		ELECTRICAL DATA		WEIGHT (LBS)	BASIS OF DESIGN	HEAT PUMP UNIT (OUTDOOR)	AIR HANDLING UNIT (INDOOR)		
				DESIGN CFM	OA CFM	E.S.P. (IN WG)	HP	VOLTAGE / PHASE	MCA	MOCP	AUX. HEAT (kW)	TYPE	THICKNESS (in.)	@47°F (MBH)	@17°F (MBH)	TOTAL (MBH)	SENSIBLE (MBH)	VOLTAGE / PHASE	MCA						MOCP
01HP-1 / 01AH-1	6	R410A	11.0 / --	2600	NOTE 5	0.7	2.4	208 / 3	71.7	80	25	THROWAWAY	2	66.0	39	73.5	57.8	208 / 3	28	45	444	CARRIER	38AUQA07A0A5	40RUQA07A2A6	1 - 9
01HP-2 / 01AH-2	6	R410A	11.0 / --	2600	NOTE 5	0.7	2.4	208 / 3	71.7	80	25	THROWAWAY	2	66.0	39	73.5	57.8	208 / 3	28	45	444	CARRIER	38AUQA07A0A5	40RUQA07A2A6	1 - 9
01HP-3 / 01AH-3	6	R410A	11.0 / --	2600	NOTE 5	0.7	2.4	208 / 3	71.7	80	25	THROWAWAY	2	66.0	39	73.5	57.8	208 / 3	28	45	444	CARRIER	38AUQA07A0A5	40RUQA07A2A6	1 - 9
01HP-4 / 01AH-4	2	R410A	14.0 / --	800	NOTE 5	0.4	0.33	208 / 1	26.1	30	5	THROWAWAY	2	24	14.2	23.8	18.1	208 / 1	16.5	25	200	CARRIER	25HCC524A003	FB4CNP024L05	1 - 9
04CU-1 / 04AH-1	6	R410A	11.0 / --	2600	NOTE 5	0.7	2.4	208 / 3	71.7	80	25	THROWAWAY	2	66.0	39	73.5	57.8	208 / 3	28	45	444	CARRIER	38AUQA07A0A5	40RUQA07A2A6	1 - 8
04CU-2 / 04AH-2	6	R410A	11.0 / --	2600	NOTE 5	0.7	2.4	208 / 3	71.7	80	25	THROWAWAY	2	66.0	39	73.5	57.8	208 / 3	28	45	444	CARRIER	38AUQA07A0A5	40RUQA07A2A6	1 - 8
30CU-1 / 30AH-1	3	R410A	14.0 / --	1200	NOTE 5	0.4	0.5	208 / 1	72.9	80	15	THROWAWAY	2	33.8	20.15	33	25.3	208 / 3	11.7	20	200	CARRIER	25HCE436A005	FB4CNP036L15	1 - 8
30CU-2 / 30AH-2	2.5	R410A	14.0 / --	1000	NOTE 5	0.4	0.5	208 / 1	50.4	60	10	THROWAWAY	2	33.8	20.15	32.42	22.9	208 / 3	11.7	20	200	CARRIER	25HCE436A005	FB4CNP036L10	1 - 8
54CU-1 / 54AH-1	4	R410A	14.0 / --	1600	NOTE 5	0.4	0.75	208 / 1	52.8	60	10	THROWAWAY	2	46.5	26.9	47.5	36.3	208 / 1	28.5	40	260	CARRIER	25HCC548A003	FB4CNP048L10	1 - 8
54CU-2 / 54AH-2	1.5	R410A	-- / 14.0	600	NOTE 5	0.4	0.33	208 / 1	26.1	30	5	THROWAWAY	2	18.0	9.6	17.8	13.6	208 / 1	11.8	20	170	CARRIER	25HCC518A003	FB4CNP018L05	1 - 8
60CU-1 / 60AH-1	1.5	R410A	-- / 14.0	600	NOTE 5	0.4	0.33	208 / 1	26.1	30	5	THROWAWAY	2	18.0	9.6	17.8	13.6	208 / 1	11.8	20	170	CARRIER	25HCC518A003	FB4CNP018L05	1 - 9
60CU-2 / 60AH-2	6	R410A	11.0 / --	2600	NOTE 5	0.7	2.4	208 / 3	71.7	80	25	THROWAWAY	2	66.0	39	73.5	57.8	208 / 3	28	45	444	CARRIER	38AUQA07A0A5	40RUQA07A2A6	1 - 9
60CU-3 / 60AH-3	6	R410A	11.0 / --	2600	NOTE 5	0.7	2.4	208 / 3	71.7	80	25	THROWAWAY	2	66.0	39	73.5	57.8	208 / 3	28	45	444	CARRIER	38AUQA07A0A5	40RUQA07A2A6	1 - 9
75CU-1 / 75AH-1	3	R410A	14.0 / --	1200	NOTE 5	0.4	0.5	208 / 1	72.9	80	15	THROWAWAY	2	33.8	20.15	33	25.3	208 / 3	11.7	20	200	CARRIER	25HCE436A005	FB4CNP036L15	1 - 8

- NOTES:
 1. COOLING CAPACITY BASED ON 95° F OUTDOOR AIR TEMPERATURE
 2. R-410A REFRIGERANT
 3. WALL MOUNTED PROGRAMMABLE THERMOSTAT/CONTROLLER WITH BACNET CAPABILITY TO TIE IN TO EXISTING BMS
 4. PROVIDE DISCONNECT SWITCH
 5. OUTSIDE AIR DAMPER SHALL BE SET TO PROVIDE FRESH AIR EQUAL TO THE MEASURED OUTSIDE AIRFLOW RECORDED IN T&B REPORT PERFORMED PRIOR TO START OF CONSTRUCTION.
 6. LOW AMBIENT CONTROL
 7. CRANKCASE HEATER
 8. VARIABLE SPEED SUPPLY FAN
 9. LONG LINE SET

SPLIT SYSTEM DX COOLING W/GAS FURNACE SCHEDULE

MARK NO.	NOMINAL TONS	REFRIG.	SEER	INDOOR UNIT										OUTDOOR UNIT						MODEL INFORMATION				NOTES
				DESIGN CFM	OA CFM	E.S.P. (IN WG)	FAN DATA		GAS HEATING DATA			DX COOLING COIL DATA			ELECTRICAL			WEIGHT (LBS)	BASIS OF DESIGN	OUTDOOR UNIT	DX COIL	FURNACE / AHU		
							HP	VOLTAGE / PHASE	EAT (°F)	INPUT (MBH)	OUTPUT (MBH)	CABINET WIDTH	EAT db/wb °F	TOTAL	SENSIBLE	MCA	MOCP						VOLTAGE / PHASE	
01CU-4 / 01GF-4	3.5	R410A	14.5	1400	NOTE 5	0.5	1.0	115 / 1	70	80	78	21"	80 / 67	39.7	31.3	18	30	208 / 3	225	CARRIER	24ABBB342A005	CAPMP4221ALA	59MN7A060V21-0	1 - 9
08CU-1 / 08CU-1	3.5	R410A	14.5	1400	NOTE 5	0.5	1.0	115 / 1	70	60	59	21"	80 / 67	40.5	31.8	21.4	35	208 / 1	300	CARRIER	24APB642A003	CAPMP4221ALA	59MN7A060V17-14	1 - 9
08CU-2 / 08GF-2	3.5	R410A	14.5	1400	NOTE 5	0.5	1.0	115 / 1	70	60	59	21"	80 / 67	40.5	31.8	21.4	35	208 / 1	300	CARRIER	24APB642A003	CAPMP4221ALA	59MN7A060V17-14	1 - 9
08CU-3 / 08GF-3	2	R410A	14.5	800	NOTE 5	0.5	0.5	115 / 1	70	40	37	14"	80 / 67	24.2	18.1	14.1	25	208 / 1	175	CARRIER	24APB624A003	CAPMP3014ALA	59SP2A040E14-10	1 - 9
08CU-4 / 08CU-4	2.5	R410A	14.5	1000	NOTE 5	0.5	0.5	115 / 1	70	40	37	14"	80 / 67	30.0	22.9	14.1	25	208 / 1	205	CARRIER	24APB603A003	CAPMP3014ALA	59SP2A040E14-10	1 - 9
12CU-1 / 12GF-1	4	R410A	14.0	1600	NOTE 5	0.5	1.0	115 / 1	70	80	78	21"	80 / 67	44.5	31.8	17.8	30	208 / 3	225	CARRIER	24ABB348A005	CAPMP4821ALA	59MN7A080V21-20	1 - 9
12CU-3 / 12GF-3	3	R410A	14.0	1200	NOTE 5	0.5	0.5	115 / 1	70	60	59	17"	80 / 67	33	26.7	14.5	20	208 / 3	170	CARRIER	24ABB336A005	CAPMP3617ALA	59MN7A060V17-14	1 - 9
12CU-4 / 12GF-4	2.5	R410A	14.0	1000	NOTE 5	0.5	0.5	115 / 1	70	40	37	14"	80 / 67	27	20.7	11.2	20	208 / 3	136	CARRIER	24ABB330A005	CAPMP3014ALA	59SP2A040E14-10	1 - 9
12CU-5 / 12GF-5	5	R410A	14.0	1850	NOTE 5	0.5	1.0	115 / 1	70	100	98	21"	80 / 67	57.3	44.7	21.4	30	208 / 3	230	CARRIER	24ABB360A005	CAPMP6021ALA	59MN7A100V21-22	1 - 9
12CU-6 / 12GF-6	5	R410A	14.0	1850	NOTE 5	0.5	1.0	115 / 1	70	100	98	21"	80 / 67	57.3	44.7	21.4	30	208 / 3	230	CARRIER	24ABB360A005	CAPMP6021ALA	59MN7A100V21-22	1 - 9

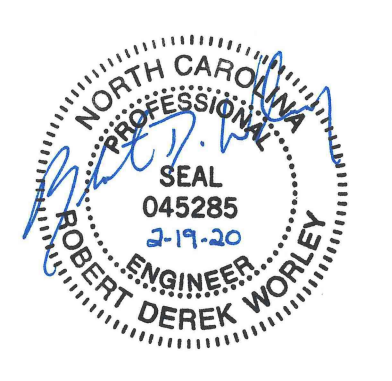
- NOTES:
 1. COOLING CAPACITY BASED ON 95° F OUTDOOR AIR TEMPERATURE
 2. R-410A REFRIGERANT
 3. WALL MOUNTED PROGRAMMABLE THERMOSTAT/CONTROLLER WITH BACNET CAPABILITY TO TIE IN TO EXISTING BMS
 4. PROVIDE DISCONNECT SWITCH
 5. OUTSIDE AIR DAMPER SHALL BE SET TO PROVIDE FRESH AIR EQUAL TO THE MEASURED OUTSIDE AIRFLOW RECORDED IN T&B REPORT PERFORMED PRIOR TO START OF CONSTRUCTION.
 6. LOW AMBIENT CONTROL
 7. CRANKCASE HEATER
 8. VARIABLE SPEED SUPPLY FAN
 9. PROPANE GAS CONVERSION KIT

C:\vd\2018\10137117-00-MP_derek.worley.rvt
 2/19/2020 3:16:52 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



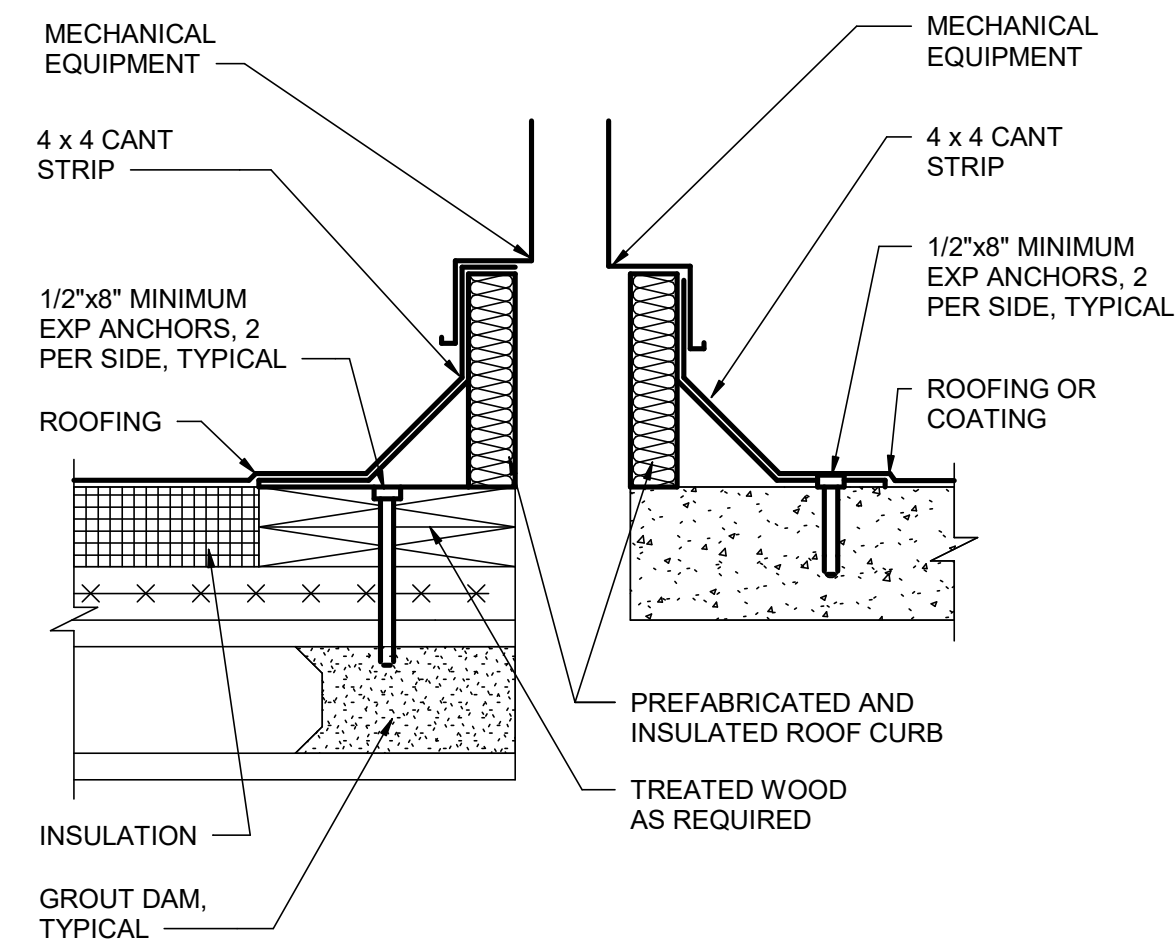
**REPLACE HVAC SYSTEMS
 BASE WIDE - STANLY CO.**

**NC AIR NATIONAL GUARD
 145TH AIRLIFT WING
 NEW LONDON, NC**

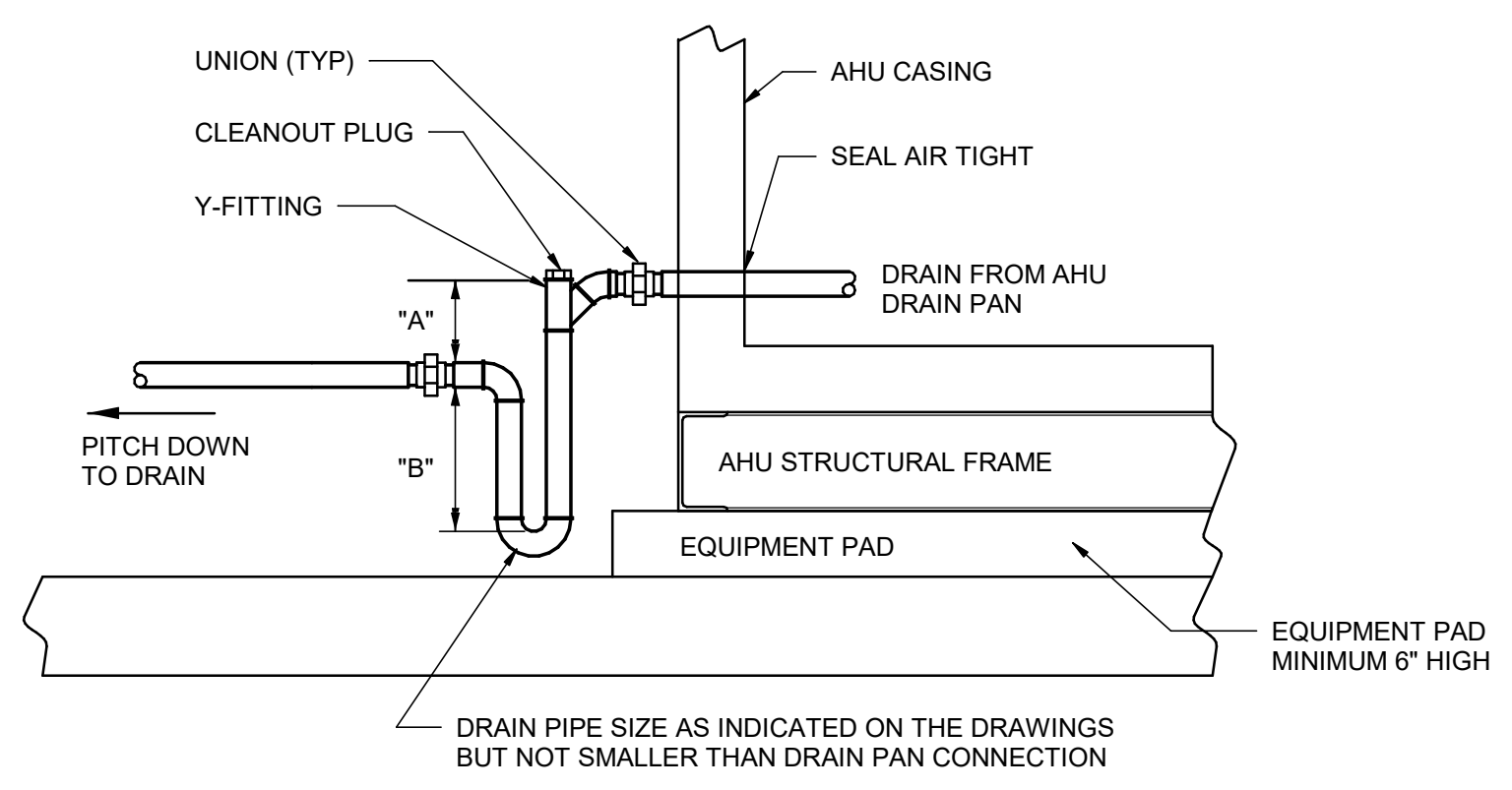
**STANLY COUNTY AIR NATIONAL GUARD STATION
 STANLY COUNTY AIRPORT**

MECHANICAL SCHEDULES

0 1" 2" FILENAME 10137117-00-MP.rvt SHEET 99M002
 SCALE NONE



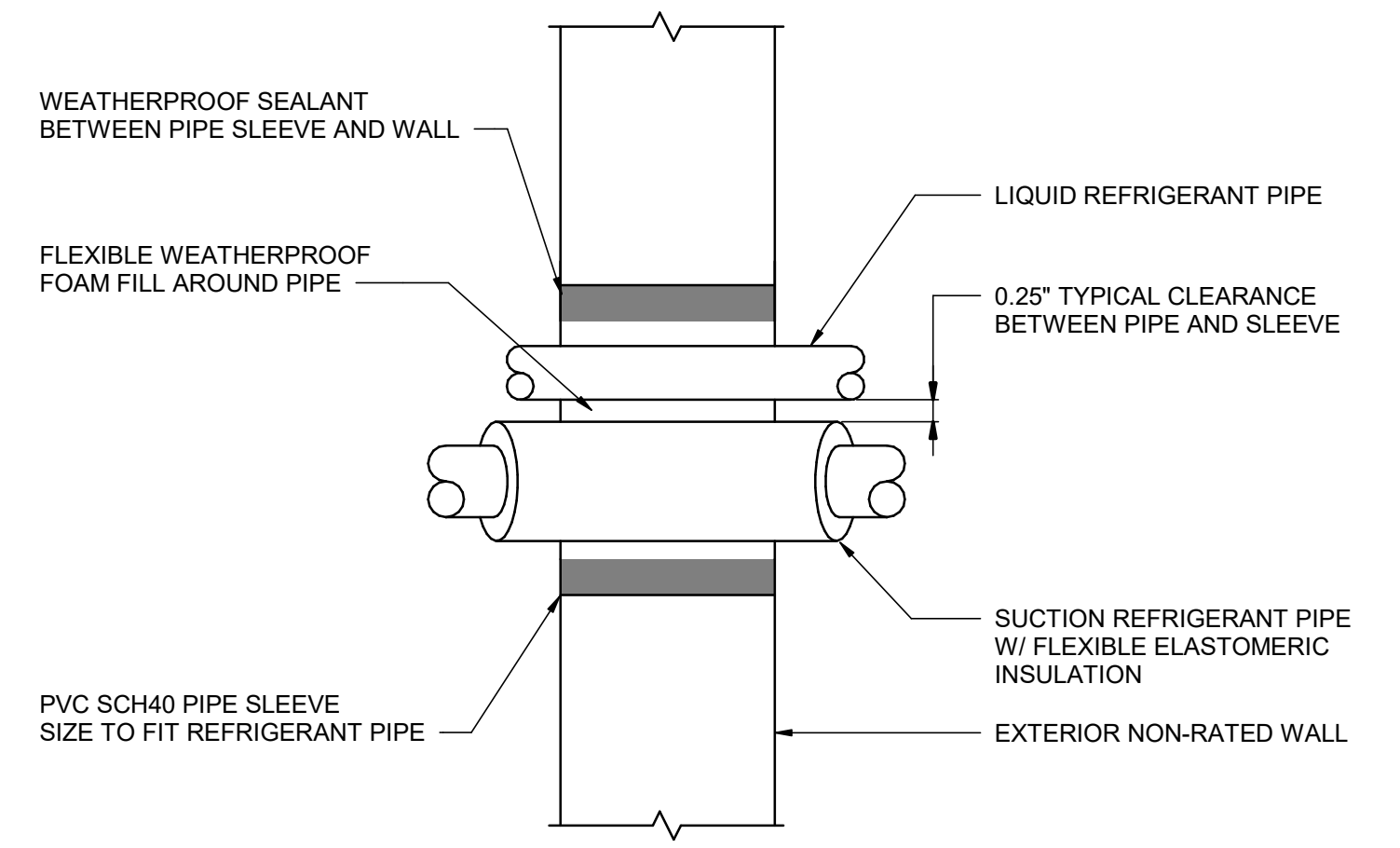
1 ROOF CURB PENETRATION
NOT TO SCALE



2 A/C CONDENSATE DRAIN
NOT TO SCALE

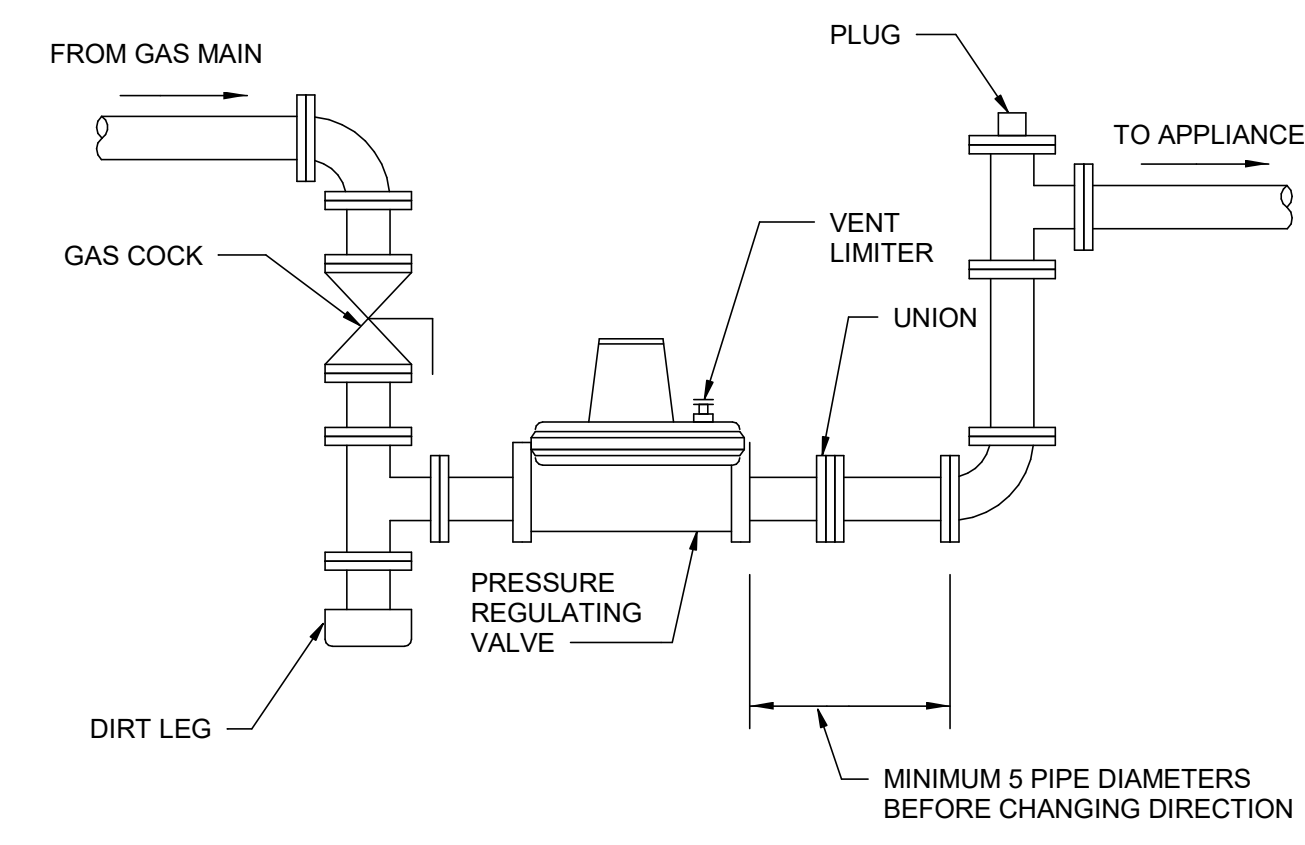
DRAW THRU SYSTEM
"A" = 1" + FAN STATIC PRESSURE
"B" = HALF OF "A"

BLOW THRU SYSTEM
"A" = MIN"
"B" = 1" + FAN STATIC PRESSURE

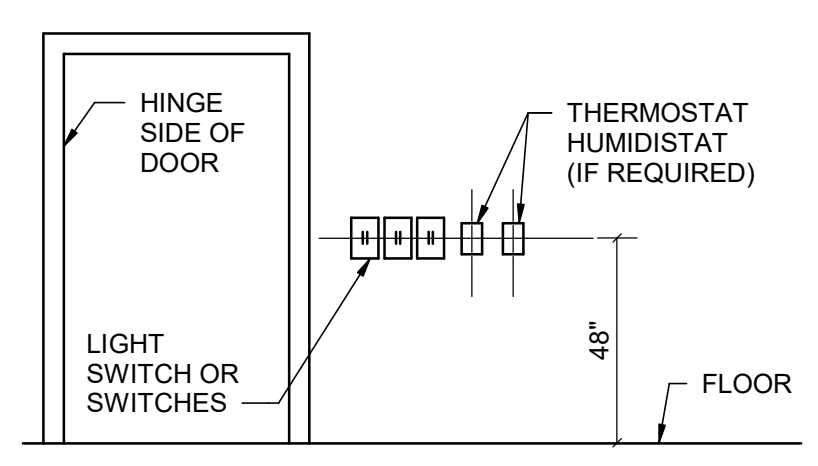


3 REFRIGERANT PIPE SLEEVE THROUGH NON-RATED EXTERIOR WALL
NOT TO SCALE

ABOVE GROUND WALL PENETRATION ONLY
PVC PIPE SLEEVE SIZE NOT TO EXCEED 6" SCH 40

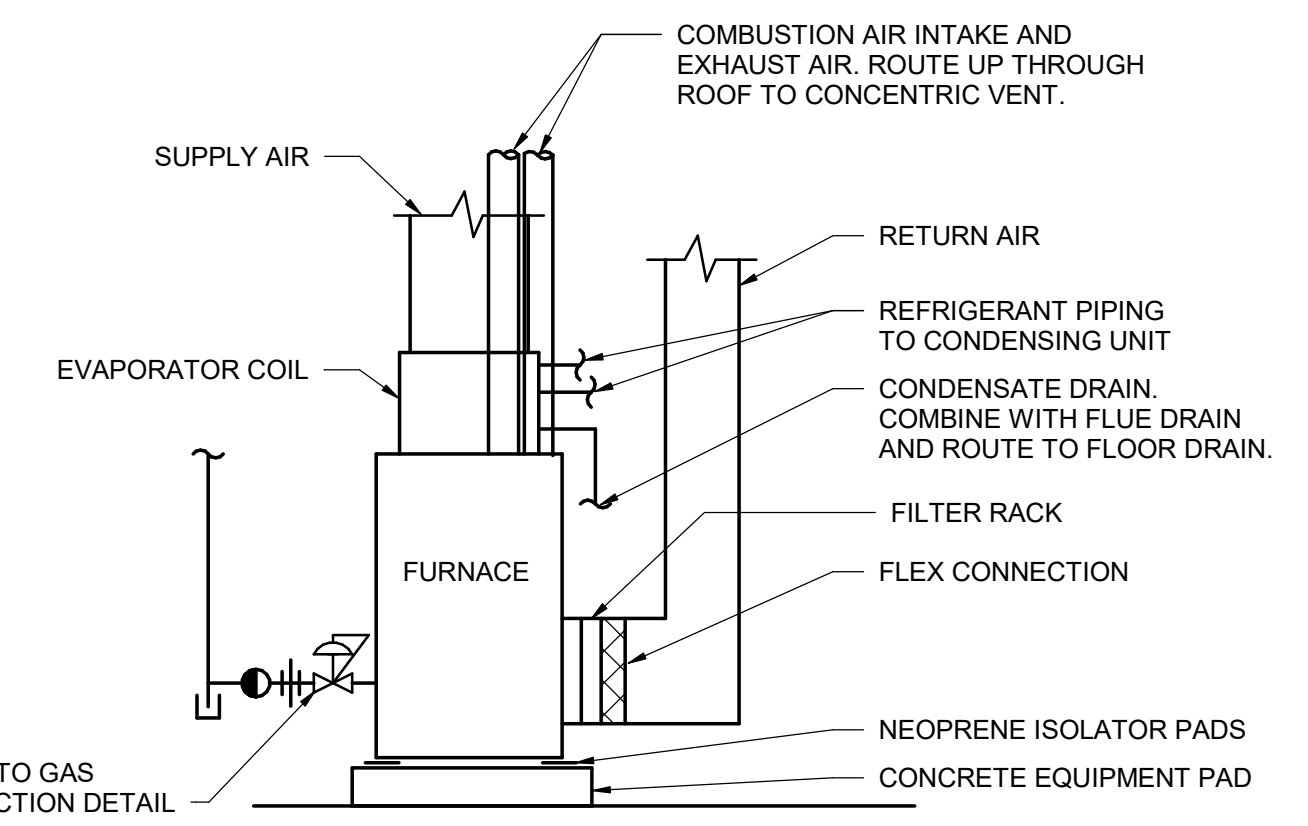


4 GAS CONNECTION DETAIL
NOT TO SCALE

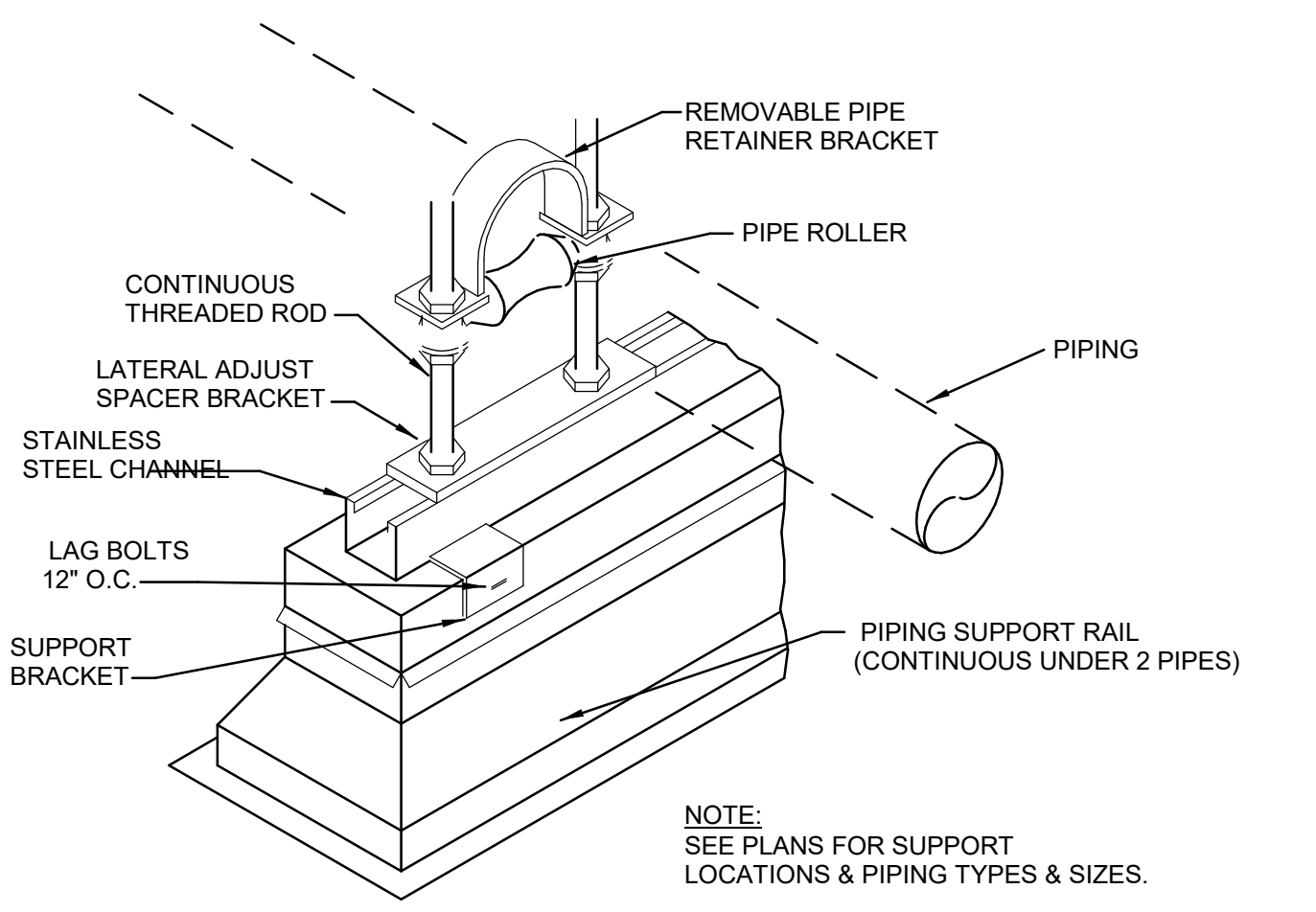


5 THERMOSTAT AND SWITCH MOUNTING DETAIL
NOT TO SCALE

NOTE:
1. WHEN ABOVE MOUNTING PROCEDURE IS IMPOSSIBLE HINGE SIDE MOUNTING WILL BE PERMITTED WITH APPROX. 6" CLEARANCE FROM EDGE OF DOOR (IN OPEN POSITION) TO EDGE OF THERMOSTAT & LIGHT SWITCH. IF NEITHER INSTALLATION IS POSSIBLE, SWITCHES AND CONTROLS SHALL BE LOCATED AS DIRECTED BY ENGINEER. DO NOT INSTALL ABOVE DIMMER SWITCHES.



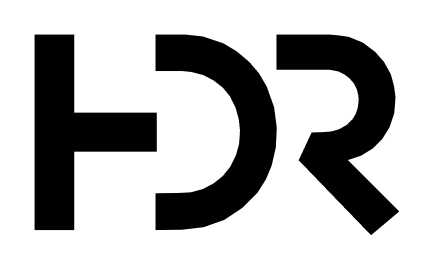
6 GAS FIRED FURNACE DETAIL
NOT TO SCALE



7 PIPING SUPPORT DETAIL
NOT TO SCALE

NOTE:
SEE PLANS FOR SUPPORT LOCATIONS & PIPING TYPES & SIZES.

C:\vd\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:53 PM



ISSUE	DATE	DESCRIPTION
FEB 2020	B-3 DESIGN SUBMITTAL	

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.

NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC

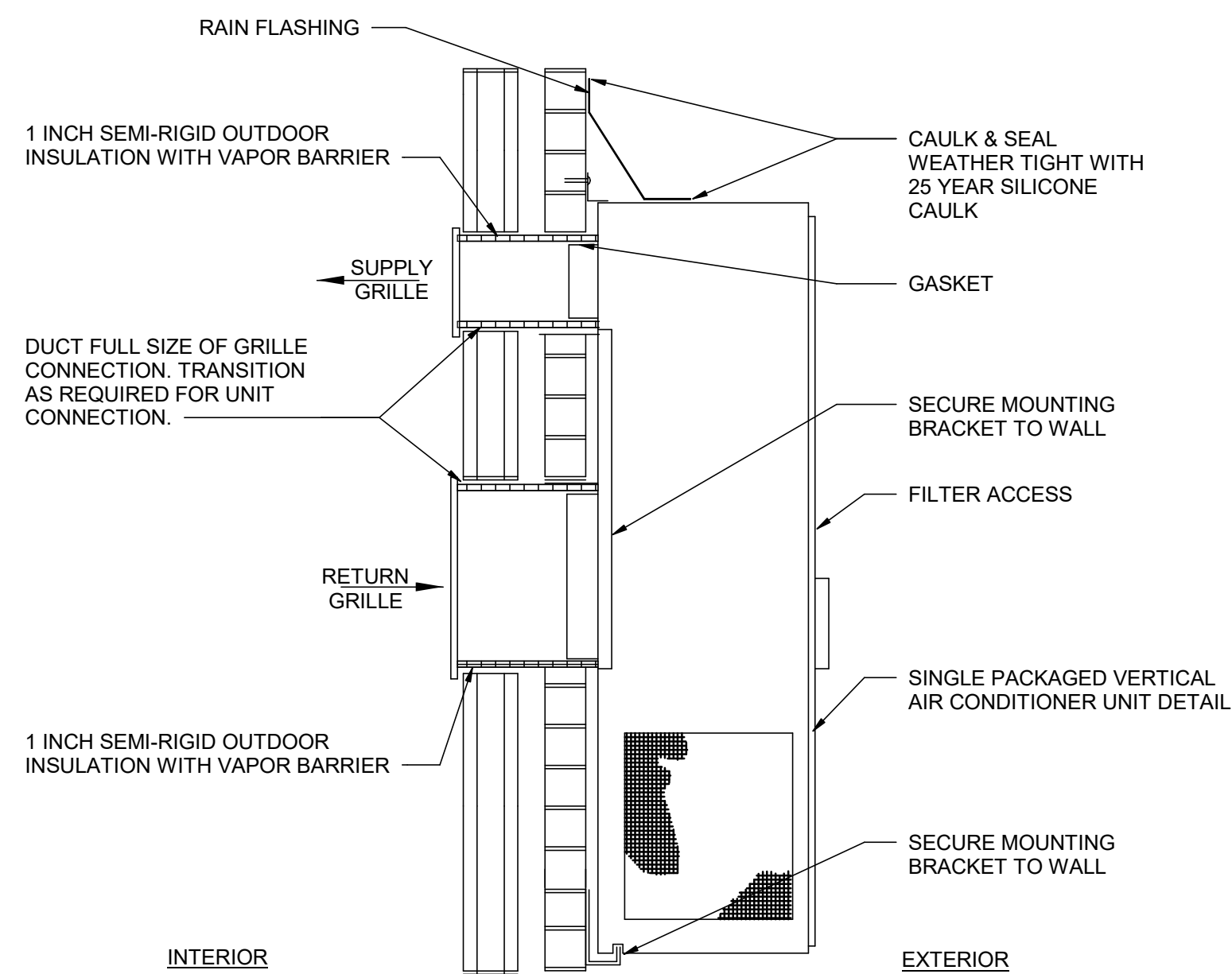
STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT

MECHANICAL DETAILS

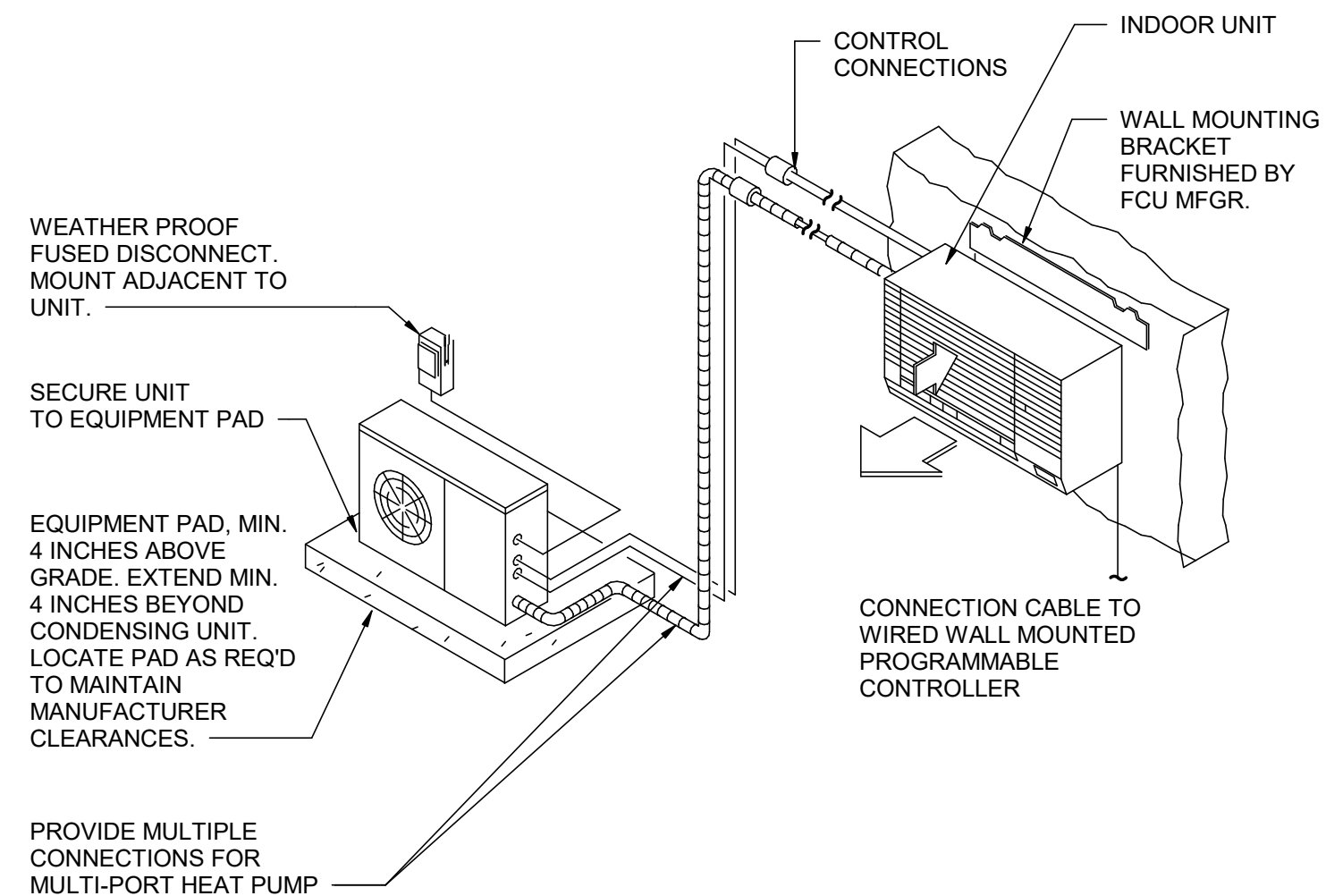
0 1" 2" SCALE

FILENAME | 10137117-00-MP.rvt
SCALE | NOT TO SCALE

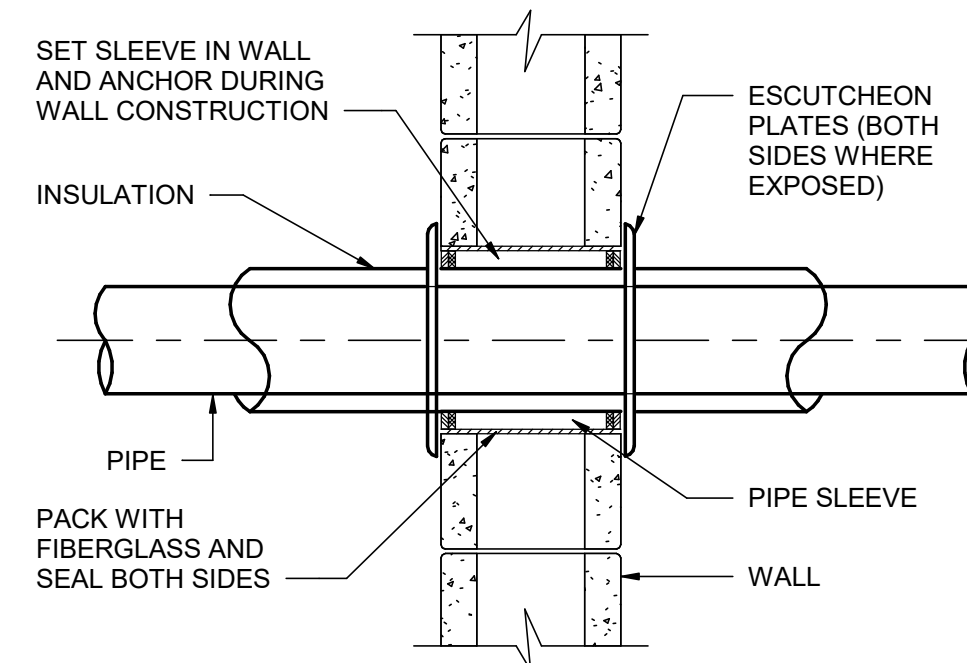
SHEET
99M003



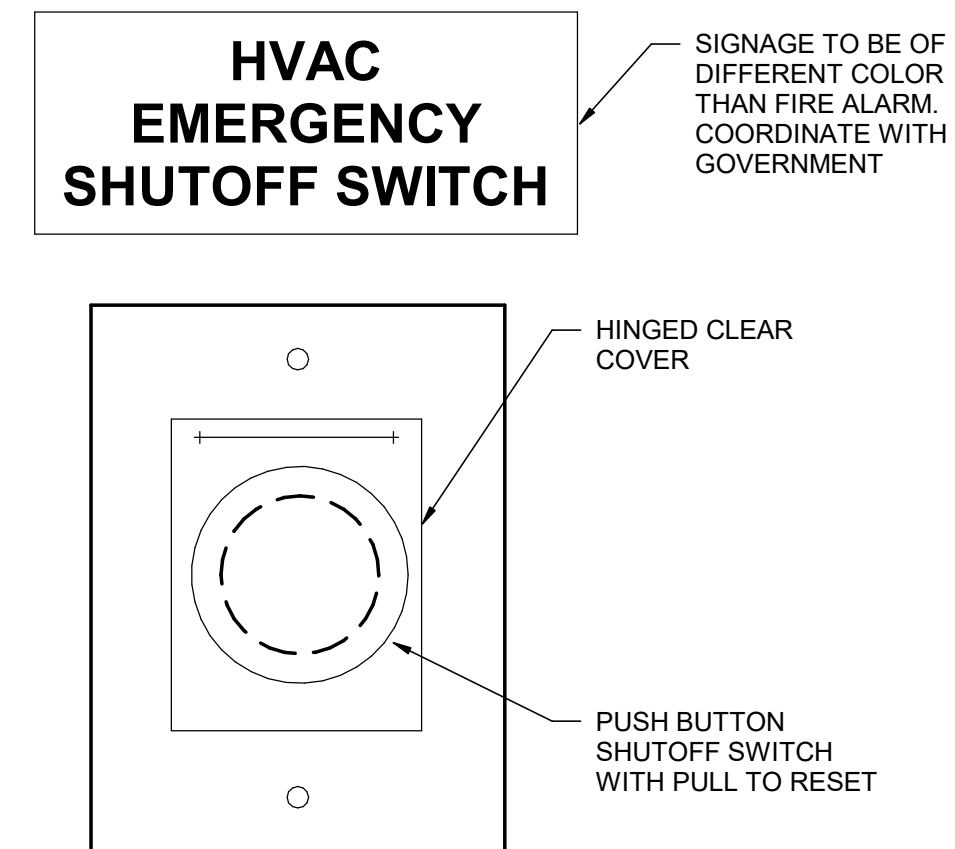
1 SINGLE PACKAGED VERTICAL AIR CONDITIONER UNIT DETAIL
NOT TO SCALE



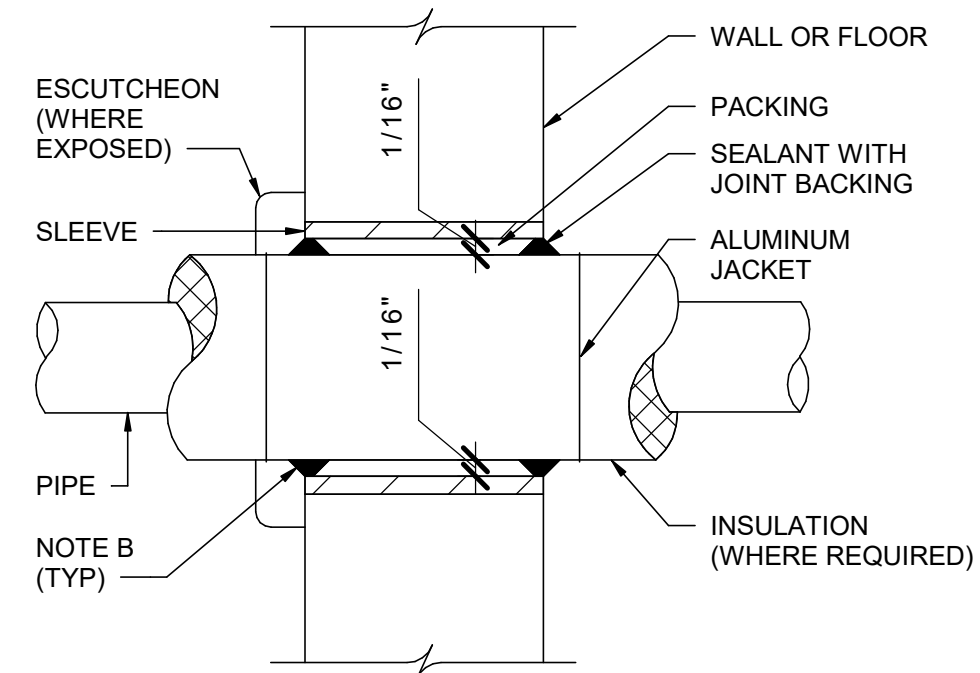
2 DUCTLESS WALL MOUNT DX SPLIT
NOT TO SCALE



3 PIPE SLEEVE THRU INTERIOR WALL DETAIL
NOT TO SCALE

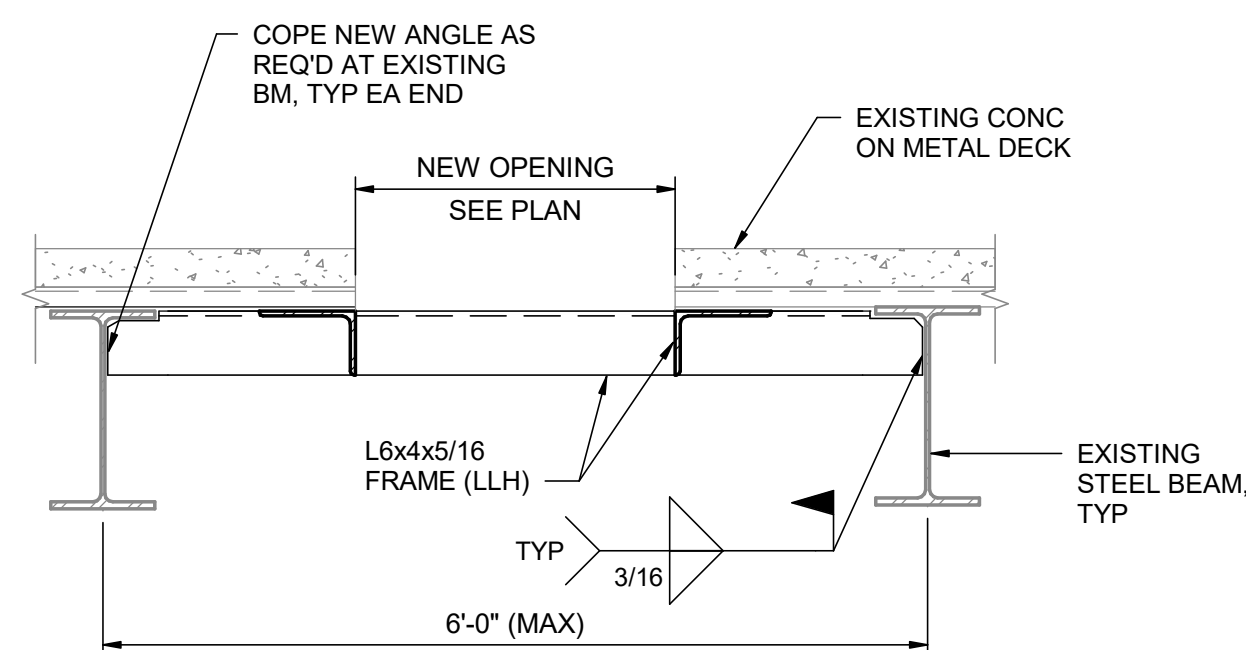


4 HVAC SHUTOFF SWITCH DETAIL
NOT TO SCALE

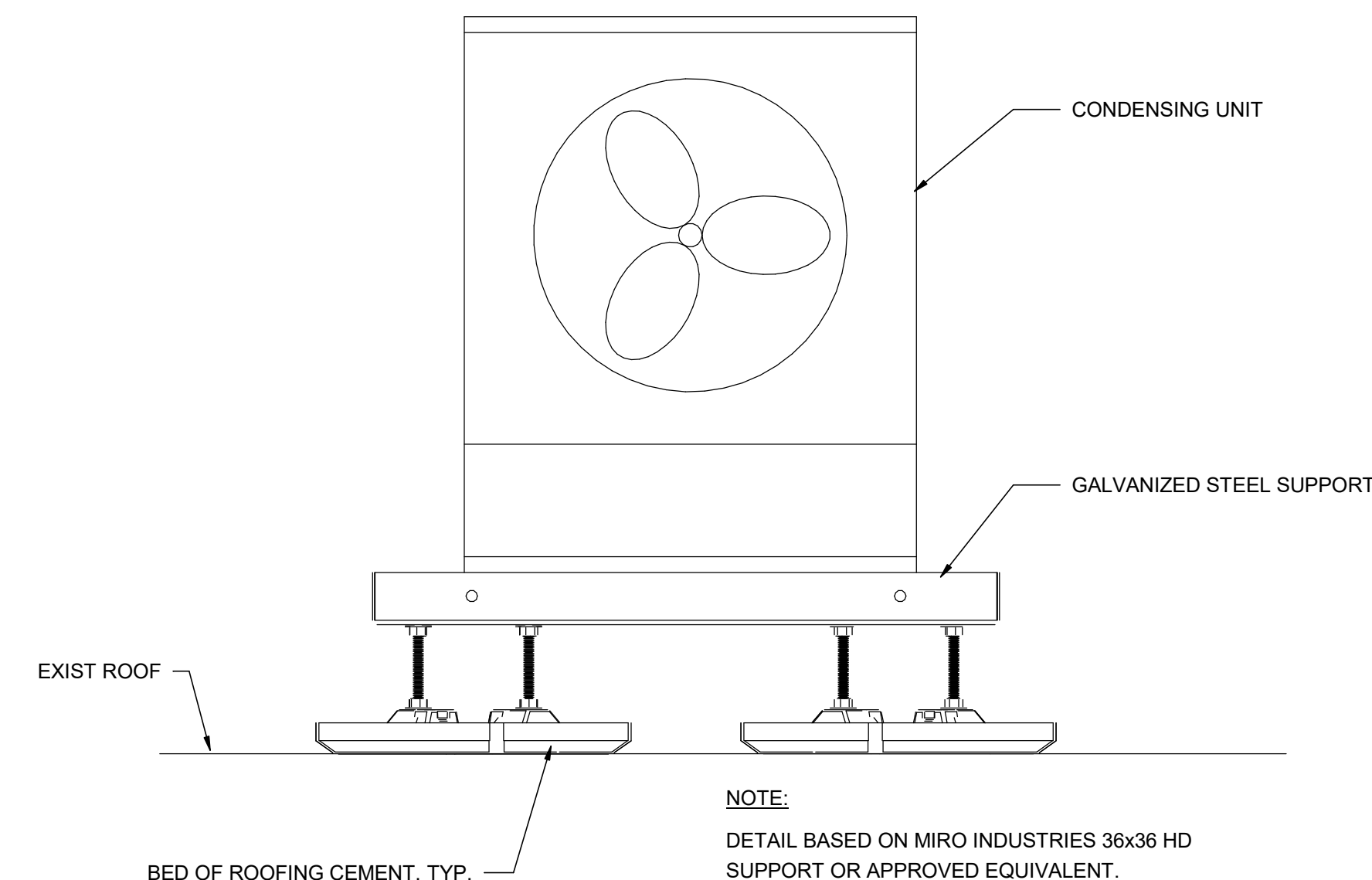


NOTES:
1. THIS DETAIL IS FOR NON FIRE-RATED CONSTRUCTION. PIPE PENETRATIONS IN FIRE-RATED CONSTRUCTION SHALL BE FIRE STOPPED WITH A UL-CLASSIFIED SYSTEM.
2. AT INSULATED WALLS PROVIDE PACKING AND SEALANT AT ANNULAR SPACE.

5 PIPE PENETRATION THROUGH WALLS AND FLOORS
NOT TO SCALE



6 ROOF DECK AND CONCRETE SLAB OPENING DETAIL
NOT TO SCALE



7 ROOF MOUNTED CONDENSING UNIT SUPPORT DETAIL
NOT TO SCALE

C:\p\2018\10137117-00-MP_derek.worley.rvt
2/19/2020 3:16:53 PM



ISSUE	DATE	DESCRIPTION
	FEB 2020	B-3 DESIGN SUBMITTAL

PROJECT MANAGER	N. OVERBY
DESIGNED BY:	D. WORLEY
DRAWN BY:	D. WORLEY
CHECKED BY:	M. DIMOFF
CONTRACT #:	W91242-18-F-0130
ANG PROJECT #:	WEFM142600
HDR PROJECT #:	10137117



REPLACE HVAC SYSTEMS
BASE WIDE - STANLY CO.

NC AIR NATIONAL GUARD
145TH AIRLIFT WING
NEW LONDON, NC

STANLY COUNTY AIR NATIONAL GUARD STATION
STANLY COUNTY AIRPORT

MECHANICAL DETAILS

0 1" 2" FILENAME 10137117-00-MP.rvt
SCALE NOT TO SCALE

SHEET
99M004