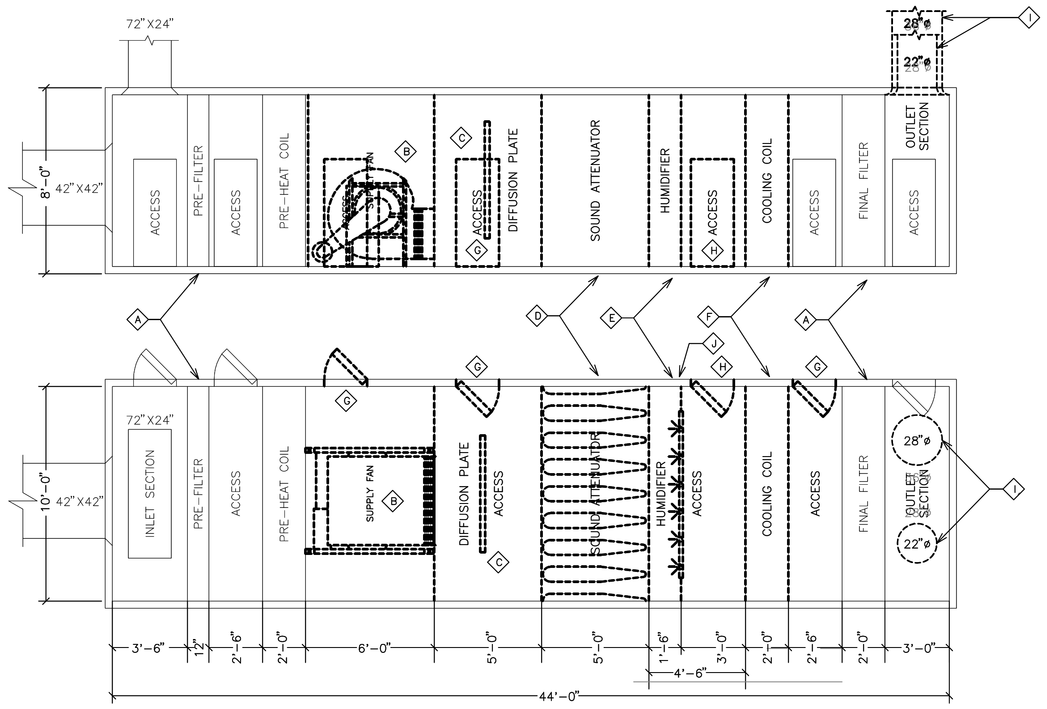
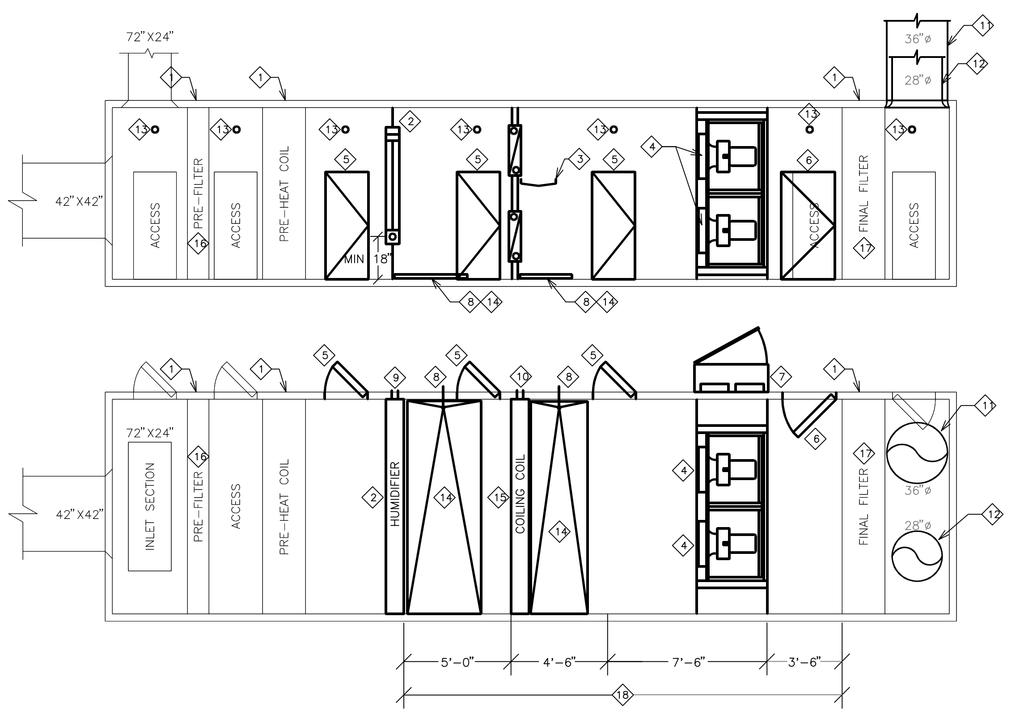


1 70-AH1NW-11 DEMOLITION PLAN
1/4"=1'-0"



2 70-AH1NW-11 UPGRADE PLAN
1/4"=1'-0"

KEY NOTES:

NOTE – Reference ShutDown Phasing Outline on this drawing to determine proper sequencing of work scope identified below.

1. EXISTING PRE-FILTER, FINAL FILTER, AND HEATING COIL TO REMAIN IN PLACE. CONTRACTOR SHALL CHEMICALLY TREAT AND POWER WASH EXISTING HEATING COIL FINS AND FILTER HOLDING FRAMES. PROVIDE PRE/POST DOCUMENTATION OF CONDITION AND ALLOW INSPECTION FROM VA FACILITIES AND ENGINEER.
2. STEAM SHORT ABSORPTION GRID FOR HUMIDIFICATION. CONDENSATE HEADER 18" AFF. COORDINATE PIPING PENETRATIONS FOR STEAM SERVICES AND SEAL AIR TIGHT TO MAINTAIN PRESSURE LEAKAGE RATING OF AHU CASING.
3. PROVIDE 12 INCH WIDE INTERMEDIATE DRAIN PAN DIRECTLY BELOW UPPER ROW OF COOLING COILS. PROVIDE DRAIN EXTENSION INTO LOWER PAN AS INDICATED, REFER TO PIPING DETAILS FOR ADDITIONAL INFORMATION.
4. PLENUM SUPPLY FAN ARRAY WITH INDIVIDUAL UPSTREAM BACKDRAFT DAMPERS. MECHANICAL CONTRACTOR TO FABRICATE HEAVY DUTY BASE RAILS TO HOLD ENTIRE FAN ARRAY LEVEL AND SECURE. INSTALL INSULATED 304 STAINLESS STEEL 20 GAUGE SHEET METAL PANELS AROUND ALL VOID AREAS SURROUNDING FAN ARRAY.
5. 24" WIDE ACCESS DOOR WITH 12"X12" WINDOW. (2) DOUBLE SIDED CAM LOCK TYPE HANDLES. COORDINATE INTEGRATION INTO EXISTING CASING PANELS AS REQUIRED AND PAINT TO MATCH. REFER TO DEMO PLANS TO CONFIRM EXISTING DOOR OPENING SIZES/LOCATIONS, OR CUT NEW OPENING AS NEEDED.
6. 30" WIDE ACCESS DOOR WITH 12"X12" WINDOW. (2) DOUBLE SIDED CAM LOCK TYPE HANDLES. COORDINATE INTEGRATION INTO EXISTING CASING PANELS AS REQUIRED AND PAINT TO MATCH. VERIFY DOOR IS LARGE ENOUGH FOR FAN REMOVAL, OR MODIFY EXISTING PANELS TO BE REMOVABLE AS REQUIRED.
7. LOCATION OF SUPPLY FAN VFD'S WITHIN FACTORY FURNISHED VENTED ENCLOSURE WITH REMOTE MONITORING PANELS MOUNTED ON OUTSIDE OF ENCLOSURE. EACH VFD IS DEDICATED TO EACH INDIVIDUAL FAN IN THE ARRAY AND IS SIZED FOR THE MAXIMUM DESIGN AIRFLOW RATING OF THE FAN. ENCLOSURE TO BE PREWIRED FOR SINGLE POINT POWER CONNECTION AND HAVE INDIVIDUAL FUSES, OR DISCONNECTS, FOR EACH FAN TO REMOVE FROM SERVICE IF NECESSARY. DIVISION 23 CONTRACTOR RESPONSIBLE FOR VFD AND SUBCONTRACTING ALL POWER CONNECTIONS BETWEEN VFDS AND FANS. ELECTRICAL CONTRACTOR TO ONLY PROVIDE MAIN SINGLE POINT POWER SERVICE CONNECTION TO VFD ENCLOSURE UNDER THEIR BIDS.
8. PROVIDE NEW COOLING COIL CONDENSATE AND HUMIDIFIER PIPE PENETRATIONS THROUGH AHU FOR NEW DRAIN PANS. SEAL AROUND PIPE PENETRATIONS TO BE AIR TIGHT.
9. PROVIDE STEAM/CONDENSATE PIPE PENETRATIONS FOR HUMIDIFICATION DISTRIBUTION TUBES. SEAL AROUND PIPE PENETRATIONS TO BE AIR TIGHT.
10. PROVIDE NEW CHILLED WATER PIPE PENETRATIONS FOR COOLING COIL. SEAL AROUND PIPES TO BE AIR TIGHT.
11. NEW 36"ø OPENING. PROVIDE BELL MOUTH CONNECTION.
12. NEW 28"ø OPENING. PROVIDE BELL MOUTH CONNECTION.
13. PROVIDE MARINE STYLE LIGHTS LOCATED IN EACH NEW SECTION. TERMINATE EACH NEW AND EXISTING LIGHT TO THE EXISTING AHU LIGHT SWITCH. DIVISION 23 CONTRACTOR TO SUBCONTRACT ALL POWER WIRING AND CONDUIT TO QUALIFIED ELECTRICAL CONTRACTOR TO PERFORM WORK.
14. PROVIDE NEW 316 STAINLESS STEEL DOUBLE SLOPING DRAIN PAN FOR NEW COOLING COIL BANK AND HUMIDIFIER GRID. INSTALL DIRECTLY ON TOP OF EXISTING AHU FLOOR AND SEAL PERIMETER WATER TIGHT. PROVIDE PROPER BRACING BENEATH PANS TO PREVENT ANY 'OIL-CANNING' DEFLECTIONS WHILE BEING WALKED ON BY MAINTENANCE ENGINEERS.
15. INSTALL COOLING COILS ON CUSTOM BUILT SUPPORT RACK CONSTRUCTED FULLY OF 304 STAINLESS STEEL. ALL COOLING COIL CASINGS TO ALSO BE OF 304 STAINLESS STEEL PER DRAWING SCHEDULE REQUIREMENTS. SUBMIT FABRICATION PLANS TO ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION OF SUPPORT RACK STRUCTURE.
16. PROVIDE THREE(3) SETS OF PRE-FILTERS IDENTIFIED ON EQUIPMENT SCHEDULES WITHIN THIS DRAWING SET. VERIFY THAT NEW FILTERS WILL FIT WITHIN EXISTING FILTER RACK AND PROVIDE NEW SPRING CLIPS OR WIRE TO HOLD FILTERS IN PLACE AT EACH CORNER. INSTALL FIRST SET OF FILTERS PRIOR TO CONSTRUCTION TO BE MONITORED THROUGH THE ENTIRE PHASING PROCESS. INSTALL SECOND SET OF FILTERS AFTER SUBSTANTIAL COMPLETION OF ALL PHASES. TURN-OVER THE FINAL THIRD SET OF FILTERS TO OWNER FOR STORAGE.
17. PROVIDE THREE(3) SETS OF FINAL FILTERS IDENTIFIED ON EQUIPMENT SCHEDULES WITHIN THIS DRAWING SET. VERIFY THAT NEW FILTERS WILL FIT WITHIN EXISTING FILTER RACK AND PROVIDE NEW LATCHES TO SECURELY COMPRESS FILTER GASKETS IN PLACE ALONG ALL EDGES. BALANCING CONTRACTOR TO MEASURE LEAKAGE RATE AROUND FILTERS FOR ACCEPTANCE BY ENGINEER. INSTALL FIRST SET OF FILTERS PRIOR TO CONSTRUCTION TO BE MONITORED THROUGH THE ENTIRE PHASING PROCESS. INSTALL SECOND SET OF FILTERS AFTER SUBSTANTIAL COMPLETION OF ALL PHASES. TURN-OVER THE FINAL THIRD SET OF FILTERS TO OWNER FOR STORAGE.
18. UNIT SECTIONS, STARTING AT HUMIDIFIER AND ENDING JUST BEFORE FINAL FILTERS, SHALL BE FULLY COVERED WITH 304 STAINLESS STEEL PANELS OVER THE EXISTING LINER IN PLACE. SECURE WITH NON-MICROBRIAL CAULKING AND STAINLESS SHEET METAL SCREWS. ANY SURFACE MOUNTED CONDUIT SHALL BE REMOVED AND REINSTALLED AS REQUIRED TO GE COMPLETE COVERAGE OF STAINLESS LINER. SEAL ALL PERIMETER EDGES AS REQUIRED.

GENERAL NOTES:

A. MECHANICAL CONTRACTOR SHALL REFER TO THE SPECIFICATION MANUAL EDITED FOR THIS PROJECT ALONG WITH ANY APPLICABLE STANDARDS. ALL REQUIREMENTS OF THOSE MANUALS SHALL BE MAINTAINED IN ADDITION TO ALL NOTES AND DESCRIPTIONS INDICATED WITHIN THESE DRAWINGS. ANY CONFLICTS BETWEEN THOSE DOCUMENTS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR INTERPRETATION.

B. MECHANICAL CONTRACTOR WILL BE RESPONSIBLE TO REVIEW ACCESSIBILITY TO AREAS OUTSIDE THE CONSTRUCTION LIMITS TO DETERMINE APPROXIMATE AMOUNT OF OVERTIME REQUIRED TO PERFORM ALL MECHANICAL WORK INDICATED. COORDINATION OF SCHEDULES WITH ADJACENT DEPARTMENTS AND CLEANING OF ALL DEBRIS AFTER EACH SHIFT SHOULD BE ASSUMED IN THE BASE BID.

C. ANY MAJOR VENTILATION OUTAGES INDICATED ON THESE DRAWINGS SHALL BE SCHEDULED TO BE PERFORMED AFTER NORMAL BUSINESS HOURS OR DURING WEEKEND PERIODS TO MINIMIZE DISRUPTION. VA HOSPITAL FACILITIES WILL REQUIRE A MINIMUM OF TWO(2) WEEKS NOTICE PRIOR TO ANY SUCH OUTAGE AFFECTING MORE THAN ONE ADJACENT AREA.

D. COORDINATE ALL NEW DUCTWORK ROUTING WITH ALL OTHER TRADES TO INSURE ADEQUATE CLEARANCES FOR PLUMBING, ELECTRICAL CONDUIT, STRUCTURAL SUPPORTS, PIPING, ETC. ANY UNAVOIDABLE CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER OF RECORD. PROVIDE ALL OFFSETS AND TRANSITIONS AS REQUIRED FOR A CLEAN INSTALLATION.

E. THE EXACT LOCATION OF EQUIPMENT ROUGH-INS SHALL BE VERIFIED WITH THE STAMPED APPROVED SHOP DRAWINGS PRIOR TO ANY FIELD INSTALLATION.

F. SUPPORT ALL DUCTWORK DIRECTLY TO STRUCTURE. DO NOT SUPPORT ANY DUCTS FROM DUCTWORK, CONDUIT, OR OTHER PIPING ENCOUNTERED.

G. WHERE MECHANICAL SYSTEMS TO REMAIN ARE DAMAGED, OR DISTURBED, DURING THE COURSE OF CONSTRUCTION THE CONTRACTOR WILL BE RESPONSIBLE TO REMOVE DAMAGED PORTIONS AND INSTALL NEW PRODUCTS OF EQUAL QUALITY AND FUNCTIONALITY.

H. ALL EXISTING DUCTWORK THROUGH NEW FIRE RATED WALLS SHALL BE ADEQUATELY FIRE SEALED AS REQUIRED. PIPING PENETRATIONS THROUGH INTERSTITIAL FLOOR SHALL BE DRILLED, OR CUT, BY THE CONTRACTOR AND FIRE SEALED AS REQUIRED.

I. THE MECHANICAL CONTRACTOR WILL BE RESPONSIBLE TO MAINTAIN EACH PROJECT SPACE IN A NEGATIVE PRESSURIZATION AND PROVIDE HEPA FILTRATION UNITS AS REQUIRED BY INFECTION CONTROL. IF NECESSARY CONSULT WITH VA, OR ENGINEER OF RECORD, FOR SUGGESTED METHODS THAT MAY BE UTILIZED TO ELIMINATE CONTAMINATED AIR TO OUTSIDE. VISUAL PRESSURIZATION INDICATORS SHALL BE PROVIDED AT EACH ENTRANCE TO THE CONSTRUCTION ZONE AND MONITORED DAILY TO INSURE A CONSTANT NEGATIVE PRESSURE IS MAINTAINED THROUGHOUT EACH PHASE. COORDINATE PRESSURIZATION PLANNING WITH VA FACILITIES AND INFECTION CONTROL REPRESENTATIVE PRIOR TO EACH CONSTRUCTION PHASE.

J. ALL EXISTING RETURN/EXHAUST DUCTWORK NOT TEMPORARILY CAPPED SHALL BE PROTECTED WITH REMOVABLE FILTER MEDIA TO PROTECT EXISTING DUCT SYSTEMS FROM CONSTRUCTION DEBRIS. ALL NEW DUCTWORK SHALL BE PROTECTED AS REQUIRED AND CLEANED PRIOR TO START-UP. IF CONSTRUCTION DEBRIS IS FOUND INSIDE UNPROTECTED DUCTWORK THAN DUCT CLEANING OF THE ENTIRE SYSTEM SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.

GENERAL NOTES:

K. PROVIDE EACH NEW SUPPLY DIFFUSER WITH A SINGLE BLADE TAKE-OFF DAMPER WITH QUADRANT LOCKING DEVICE. PERFORM ALL BALANCING OF NEW DIFFUSERS THROUGH THOSE TAKE-OFF DAMPERS. ALL NEW RETURN/EXHAUST GRILLES WILL BE PROVIDED WITH OPPOSED BLADE BALANCING DAMPERS POSITIONED UPSTREAM PAST A MINIMUM OF ONE TRANSITION FOR SOUND ABATEMENT. BALANCING ANY DIFFUSERS/GRILLES USING INTEGRAL DAMPERS WILL NOT BE AN APPROVED METHOD OF BALANCING.

L. THE FOLLOWING NOTES BELOW ARE SPECIFIC TO INFECTION CONTROL AND APPLY TO ALL SUBCONTRACTORS INVOLVED WITH THE PROJECT. ALL CONTRACTORS AND SUBCONTRACTORS SHALL FOLLOW THE INFECTION CONTROL RISK ASSESSMENT (ICRA AND ILSM) AND FGI GUIDELINES THROUGHOUT THE CONSTRUCTION PROCESS. ALL CONTRACTED WORKERS MUST RECEIVE INFORMATION/TRAINING ON INFECTION CONTROL RISKS AND PRACTICES PRIOR TO STARTING ANY ON SITE WORK.

M. ALL BALANCING REPORTS WILL BE MADE AVAILABLE TO VA HOSPITAL INFECTION CONTROL PERSONNEL ON REQUEST. SUBMIT THESE REPORTS ONLY AFTER THEY HAVE BEEN REVIEWED, AND APPROVED, BY THE ENGINEER OF RECORD.

N. ALL WORK OUTSIDE THE PROTECTED PROJECT BOUNDARIES ABOVE EXISTING CEILING SHALL BE COMPLETED WITH CEILINGS REPLACED IN THE SAME DAY UNLESS FULLY COORDINATED THROUGH INFECTION CONTROL. CLEAN AREA TO ORIGINAL CONDITION ON COMPLETION.

O. CEILING TILES WITH VISIBLE WATER DAMAGE SHALL BE SPRAYED TO DISINFECT AND ENCAPSULATE POTENTIAL MOLD PRIOR TO REMOVAL.

P. CONTRACTOR TO INSTALL TEMPORARY BARRIERS FOR EACH PROJECT PHASE AND/OR AREA. THESE BARRIERS SHALL BE COORDINATED WITH VA HOSPITAL AND, IN MOST CASES, CONTAIN SOME FORM OF AIRLOCK VESTIBULE PRIOR TO ENTERING THE CONSTRUCTION AREA.

Q. TUBE AND PING PONG BALL SYSTEM OR AIR PRESSURE GAUGES SHALL BE PROVIDED AT THE ENTRANCES TO EACH CONSTRUCTION AREA. ALL CONTRACTED WORKERS SHALL BE TRAINED TO VISUALLY MONITOR THESE DEVICES FOR ADEQUATE NEGATIVE PRESSURIZATION AS THEY ENTER/EXIT THE CONSTRUCTION AREA. DAILY LOGS SHALL BE KEPT BY THE MECHANICAL CONTRACTOR TO INSURE CONSTANT PRESSURIZATION HAS BEEN MAINTAINED.

R. PORTABLE HEPA FILTER UNITS SHALL BE UTILIZED DIRECTLY OUTSIDE EACH CONSTRUCTION AREA. UNITS WILL BE PROVIDED BY CONTRACTOR AND MAINTAINED BY MECHANICAL CONTRACTOR.

S. NEGATIVE PRESSURIZATION SHALL BE MAINTAINED IN EACH CONSTRUCTION AREA. IF LOCATED ON AN EXTERIOR WALL FANS SHOULD BE UTILIZED TO EXHAUST AIR DIRECTLY OUT A NEARBY WINDOW, TAKING PRECAUTIONS TO NOT INTERFERE WITH EXISTING BUILDING AIR INTAKES, PUBLIC AREAS, ETC. IF NO EXTERIOR WALL IS AVAILABLE THEN NEGATIVE AIR MACHINES WITH INTERNAL FILTRATION SHALL BE PROVIDED AND CONNECTION TO THE NEAREST EXHAUST OR RETURN DUCT AVAILABLE (CONTACT ENGINEER TO VERIFY EXISTING DUCTWORK CAPACITY PRIOR TO EXHAUST CONNECTION).

T. COORDINATE DEBRIS REMOVAL WITH VA PROJECT MANAGER. IF AN ACCEPTABLE EXIT PATH IS NOT AVAILABLE FROM THE PROJECT SITE THEN AFTER HOURS REMOVAL OF DEMOLISHED MATERIAL WILL BE PERFORMED. COVER ALL CARTS WITH SEALED COVERS TO MAINTAIN DUST CONTROL.

PHASING OUTLINE – AH1NW-11

A. WORK ASSOCIATED WITH THIS DRAWING TO BE PRICED AND IDENTIFIED AS BASE DESIGN. THE FOLLOWING WORK MUST BE PERFORMED DURING SHUTDOWNS BETWEEN THE TIMEFRAMES LISTED BELOW. UNDER NO CIRCUMSTANCES SHALL THE UNIT OR ANY SYSTEMS BE AFFECTED BEYOND THIS SHUTDOWN TIME PERIOD.

–FRIDAY AT 5PM THROUGH MONDAY AT 5AM. WORKERS MAY NEED TO BE SCHEDULED IN SHIFTS WORKING AROUND THE CLOCK IF NECESSARY. VERIFY WITH EACH SPECIFIC PHASE.

B. THE FOLLOWING IS A PROPOSED BREAKOUT OF WORK THAT MAY BE COMPLETED DURING NORMAL BUSINESS HOURS AS THIS WORK DOES NOT AFFECT THE OPERATION OF THE EXISTING SYSTEM IF COORDINATED WITH OUTDOOR AIR CONDITIONS.
1. INSTALLATION OF NEW CHILLED WATER PIPING AND COMPONENTS THAT ARE EXTERNAL OF THE AIR HANDLER.
2. INSTALLATION OF HUMIDIFIER PIPING AND CONTROLS THAT MAY BE COMPLETED EXTERNAL OF THE AIR HANDLER.
3. MOUNTING OF THE VFD ENCLOSURE AND PREPARATION FOR THE FINAL CONNECTIONS TO MOTORS.
4. NEW ELECTRICAL CONDUIT ROUTING EXTERNAL OF AHU.
5. INSTALLATION OF STEAM AND CONDENSATE PIPING AND COMPONENTS THAT ARE EXTERNAL OF THE AHU.
6. INSTALLATION OF LOW VOLTAGE CONTROL WIRING EXTERNAL OF THE AHU. PROGRAMMING OF NEW SEQUENCES OF OPERATIONS SHOULD BE PREPARED PRIOR TO SYSTEM OUTAGES AND READY FOR INTEGRATION.
7. ALL SYSTEM TESTING/COMMISSIONING EFFORTS NOT CRITICAL FOR VERIFICATION PRIOR TO START-UP AFTER PHASE OUTAGE WORK IS COMPLETED.
8. PATCHING AND PAINTING OF ANY DAMAGED AREAS OF EXTERNAL AHU CASING.
9. OTHER MISCELLANEOUS WORK NOT AFFECTING CURRENT OPERATION OF APPLICABLE SYSTEMS

C. THE FOLLOWING IS A PROPOSED BREAKOUT OF WORK TO BE COMPLETED DURING EACH SCHEDULED SHUTDOWN PERIOD.

SHUTDOWN #1
1. AHU DOOR MODIFICATIONS (see dwg key notes)
2. REMOVAL OF COOLING COIL SECTION WITHIN AHU (verify weather predictions will not require cooling until after phase #3 shutdown is complete). PATCH ORIGINAL COOLING COIL PIPING AHU PENETRATIONS
3. REMOVAL OF HUMIDIFIER DISTRIBUTION TUBES (note that humidification will not be available until phase #4 shutdown is complete).
4. REMOVAL OF SOUND ATTENUATING DEVICE.
5. REMOVAL OF DRAIN PANS AND PATCHING OF FLOOR BY WELDING SUPPORT ANGLES TO BASE STRUCTURE.
6. INSTALLATION OF NEW STAINLESS LINER FOR ALL AHU SECTIONS DEMOLISHED FOR ACCESS IN THIS PHASE.

SHUTDOWN #2
1. INSTALLATION OF NEW SUPPLY FAN ARRAY BASE FRAME AND INFILL MATERIALS AROUND ENTIRE ASSEMBLY.
2. INSTALL AND ENABLE NEW FANWALL SUPPLY FANS AND VFD'S. COORDINATE START-UP WITH CONTROLS CONTRACTOR FOR ANY TEMPORARY SAFETY INTERLOCKS.
3. TEST AIRFLOW AND BALANCE ALL AREAS SERVED BY THIS AHU PRIOR TO OCCUPANCY, REFER TO DRAWING MH1.3.
4. TIME PERMITTING, POTENTIAL FOR REMOVAL OF EXISTING SUPPLY FAN IN THIS PHASE (step #1 of next phase), PERFORM ONLY AFTER FANWALL START-UP TESTING PASSES. IF TIME DOES NOT PERMIT FOR FULL SUPPLY FAN REMOVAL THEN REMOVE FAN PARTITION TO ALLOW AIR TO PASS THROUGH UNTIL NEXT SHUTDOWN PHASE.

SHUTDOWN #3
1. REMOVE SUPPLY FAN, VFD, AND ELECTRICAL SERVICE. MODIFY SUPPLY DUCT CONNECTIONS (see dwg key notes).
2. REMOVE EXISTING DIFFUSION PLATE
3. INSTALLATION OF NEW STAINLESS LINER FOR ALL REMAINING AHU SECTIONS DEMOLISHED FOR ACCESS IN THIS PHASE BETWEEN COOLING COIL AND FANWALL.
4. INSTALL NEW COOLING COIL, DRAIN PANS.
5. INSTALL NEW COOLING COIL CONDENSATE PIPING INSIDE AND OUTSIDE OF AIR HANDLING UNIT
6. REMOVE CHILLED WATER PIPING TO BE DEMOLISHED
7. CONNECT NEW CHILLED WATER PIPING TO EXISTING MAIN AND TO NEW COOLING COIL (may be performed after outage during normal weekday hours).

SHUTDOWN #4 (** see note 4)
1. INSTALL NEW HUMIDIFIER SECTION, INCLUDING DRAIN PAN, AND MOUNT ALL CONTROL SENSORS REQUIRED.
2. REMOVE ALL STEAM AND CONDENSATE PIPING EXTERNAL OF THE AHU NEEDED TO BE DEMOLISHED.
3. CONNECT NEW STEAM AND CONDENSATE PIPING TO NEW HUMIDIFIER AND INSTALL ALL NEW PIPING AND COMPONENTS (may be performed after outage during normal weekday hours).
4. CONTRACTOR TO PROVIDE ALTERNATE DEDUCT PRICING TO PERFORM THE HUMIDIFIER INSTALLATION DURING NORMAL OCCUPIED HOURS WHILE FAN IN IN OPERATION. ** (note that internal drain pan would need to be installed during a previous outage phase)

SHUTDOWN #5 (** see note #5)
1. CONNECT ANY REMAINING EQUIPMENT OR SENSORS TO EXISTING BUILDING AUTOMATION SYSTEM. FINALIZE ALL CONTROL SEQUENCES FOR FINAL COMMISSIONING.
2. REPLACE ALL EXISTING FILTERS, BOTH PRE AND FINAL, THAT WERE IN UNIT DURING CONSTRUCTION. CONTRACTOR TO FURNISH FILTERS AND INSTALL NEW HOLDING LATCHES, AND/OR FILTER FRAME MODIFICATIONS, AS NOTED.
3. BALANCE/CALIBRATE ALL EQUIPMENT AS NECESSARY.
4. PERFORM FINAL PERFORMANCE COMMISSIONING TESTS. COORDINATE SCHEDULE BETWEEN CONTRACTOR AND DUNHAM COMMISSIONING AGENT.
5. THIS LAST PHASE SHOULD NOT REQUIRE MUCH DISRUPTION OF THE UNIT AND MAY BE PARTIALLY PERFORMED DURING NORMAL BUSINESS HOURS THE WEEK PRIOR TO THE WEEKEND OUTAGE FOR FINAL COMMISSIONING.

DEMOLITION KEY NOTES:

A. PREHEAT COIL, PRE-FILTER, AND FINAL FILTER, TO REMAIN. PRIOR TO FINAL BALANCING, CONTRACTOR SHALL COORDINATE REPLACEMENT OF ALL EXISTING FILTERS WITH NEW PANEL FILTERS FURNISHED BY CONTRACTOR (see key note 17). VERIFY ALL CLIPS OR FILTER LATCHING MECHANISMS ARE HOLDING A TIGHT SEAL AROUND PERIMETER OF EACH FILTER. REPORT ANY DISCOVERED LEAKAGE TO ENGINEER FOR REVIEW.

B. DEMOLISH SUPPLY FAN AND ASSOCIATED FRAME AND VFD. COORDINATE DISCONNECTION OF POWER WITH ELECTRICAL CONTRACTOR. PROVIDE OWNER WITH OPPORTUNITY TO SALVAGE PARTS FROM FAN PRIOR TO DISPOSAL OF EQUIPMENT.

C. DEMOLISH DIFFUSION PLATE. PATCH ANY DAMAGE TO FLOORING AND/OR INTERIOR AHU LINER PRIOR TO COVERING WITH NEW STAINLESS LINER THROUGHOUT, REFER TO NEW INSTALLATION PLANS.

D. DEMOLISH SOUND ATTENUATION. PATCH ANY DAMAGE TO FLOORING AND/OR INTERIOR AHU LINER PRIOR TO COVERING WITH NEW STAINLESS LINER THROUGHOUT, REFER TO NEW INSTALLATION PLANS.

E. DEMOLISH HUMIDIFIER DISTRIBUTION TUBING AND PIPING WITHIN UNIT. SEAL CASING PENETRATIONS WITH LIKE MATERIALS TO BE SAME AIR TIGHT LEAKAGE CLASSIFICATION AS UNIT CASING.

F. DEMOLISH COILING COIL, PAN, AND PIPING WITH IN UNIT. SEAL CASING PENETRATIONS WITH LIKE MATERIALS TO BE SAME AIR TIGHT LEAKAGE CLASSIFICATION AS UNIT CASING. REPAIR DAMAGE TO FLOOR CAUSED BY DRAIN PAN REMOVAL BY WELDING IN NEW ANGLES TO EXISTING BASE RAIL TO INSTALL TREAD PLATE FLOORING OF SAME GAUGE AS EXISTING.

G. DEMOLISH DOOR AND REPLACE WITH NEW DOOR WITH AN OUTWARD/INWARD SWING DOOR AGAINST SYSTEM PRESSURE. REFER TO SPECIFICATION FOR DOOR REQUIREMENTS TO MEET, OR EXCEED, QUALITY STANDARDS OF EXISTING DOORS.

H. DEMOLISH DOOR AND REPLACE WITH DOUBLE WALL INSULATED PANEL WITH LIKE MATERIALS. SEAL SEAMS AIR TIGHT.

I. DEMOLISH OPENING AND RECONFIGURE TO ACCEPT NEW OPENING SIZE INDICTED ON PLANS. ALL ROUND CONNECTIONS SHALL BE BELLMOUTH FITTINGS AS PREVIOUSLY INSTALLED.

J. CAP HUMIDIFIER AND COOLING COIL FLOOR DRAIN PAN WITHIN UNIT AT FLOOR AND OUTSIDE OF UNIT. DEMOLISH ALL DRAIN PIPING OUTSIDE OF UNIT.

CD ISSUE
FULLY SPRINKLERED

GENERAL NOTES:

GENERAL CONTRACTOR AND/OR ALL SUBCONTRACTORS SHALL FIELD VERIFY ALL DIMENSIONS SHOWN ON THESE PLANS AND SHALL BE RESPONSIBLE FOR VARIATIONS BETWEEN PLAN DIMENSIONS AND ACTUAL FIELD DIMENSIONS. WHERE VARIATIONS ARE FOUND TO OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING PRIOR TO PROCEEDING WITH CONSTRUCTION; NO ADJUSTMENT TO THE WORK WILL BE MADE WITHOUT THE PRIOR APPROVAL OF THE PROJECT ENGINEER.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR GENERAL DEMOLITION INCLUDING REMOVAL OF WALLS, PARTITIONS, DOORS & CEILING & FLOORS. ANY AND ALL CUTTING OF CONCRETE FLOORS, WALLS OR STRUCTURE SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY. CORE DRILLING THROUGH CONCRETE WALLS, FLOORS OR STRUCTURE FOR PIPING OR CONDUIT SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR BY TRADE; FIRESTOPPING OF THESE OPENINGS SHALL BE DONE BY THE RESPECTIVE SUBCONTRACTOR. REMOVAL OF DEBRIS RESULTING FROM DEMOLITION, CUTTING, AND/OR DRILLING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. PATCHING AND REPAIR OF CONCRETE WALLS, FLOOR, OR STRUCTURE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR; THIS WILL BE ACCOMPLISHED UPON COMPLETION OF THE INSTALLATION OF ANY AND ALL UTILITIES INSTALLED BY THE VARIOUS SUBCONTRACTORS.

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
JASON GOTTWALT, PE
Date 08/08/2014 Reg. No. 41360

Drawing Title: 70-AH1NW-11 AIR HANDLER 11 PLANS	Project Title: UPGRADE AHU'S PHASE 2		Project No. 618-13-130	Office of Facilities Management
			Building Number 70	
Drawing Scale: AS NOTED	Approved: Catherine Joyce, Chief, Projects Section	Location: V.A. MEDICAL CENTER ONE VETERANS DRIVE MINNEAPOLIS, MN 55417	DRAWING NO. 1293-70-MH1.0	Department of Veterans Affairs
Plot Scale: 12" = 1'-0"	Approved: Steven Challeen, Director, Engineering	Date 08/08/2014 / Checked JRG / Drawn JG/RF	Dwg. 05 of 30	