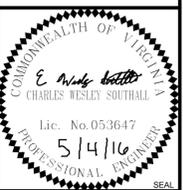


GENERAL NOTES:

1. SEE M-001 FOR MECHANICAL LEGEND, ABBREVIATIONS, AND NOTES.
2. PIPE SIZES ARE SHOWN ON RISER DIAGRAMS. SEE MD801 FOR DEMO HHW PIPE RISER.

DEMOLITION NOTES: (#)

1. DEMOLISH EXISTING HOT WATER RISERS.
2. DEMOLISH H&V-1 UNIT AND ASSOCIATED DUCTWORK, PIPING, AND CONTROLS. SEAL AND INSULATE VACATED AIR INTAKE OPENING.
3. DEMOLISH EXISTING HEATING HOT WATER PUMPS.
4. EXISTING EXHAUST DUCT AND ASSOCIATED EXHAUST FAN TO REMAIN. DEMOLISH EXISTING RELIEF DUCT. SEAL AND INSULATE VACATED PENETRATION.
5. EXISTING BOILERS AND PRIMARY HHW PUMPS TO REMAIN.
6. EXISTING PLUMBING EQUIPMENT TO REMAIN.
7. DEMOLISH EXISTING FAN COIL UNIT, DUCTWORK, PIPING, AND CONTROLS. SEAL VACATED OPENINGS.
8. EXISTING EXPANSION TANK TO REMAIN.
9. DEMOLISH CONTROL VALVE AND ALL ASSOCIATED EQUIPMENT.



APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY
PER SAT-TO DOCUMENT FROM GERARD MONTANA (PMBRANCH HEAD) WITH FEED AT NAVAL STATION NEWPORT-NEWPORT, RI

SATISFACTORY TO DATE 4/29/16

DES CWS DRW JR CHK BF

PM / DM MLWLEJ

BRANCH MANAGER

CHIEF ENGINEER DWG

FIRE PROTECTION

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC

NEWPORT-RHODE ISLAND

NAVAL STATION NEWPORT

NEWPORT, RHODE ISLAND

RENOVATION OF NGIS, BUILDING 172

BASEMENT DEMOLITION PLAN

SCALE: AS NOTED

EPROJCT NO. 13770079

CONSTR. CONTR. NO.

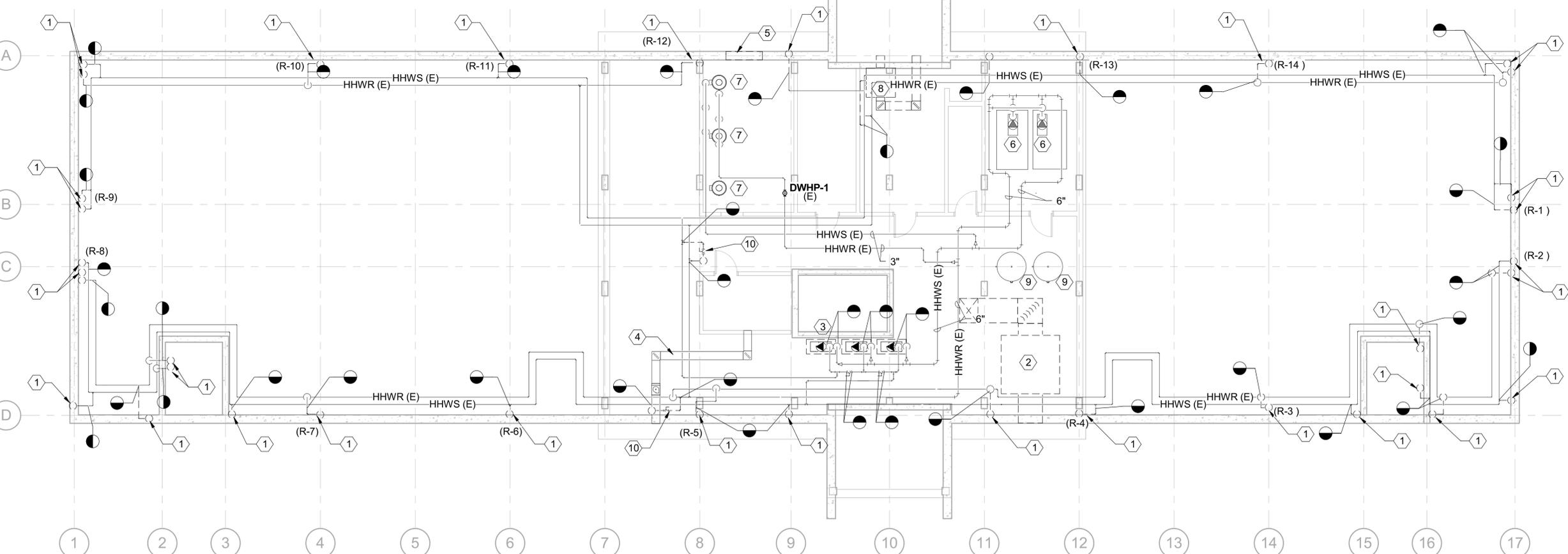
NAVFAC DRAWING NO. 12719516

SHEET 131 OF 200

MD100

DRAWING REVISION: 10 MAY 2014

GRAPHIC SCALE:



PLAN NORTH
HVAC DEMOLITION PLAN - BASEMENT
SCALE: 1/8" = 1'-0"

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REV DATE: 4/29/2016 10:21:10 AM
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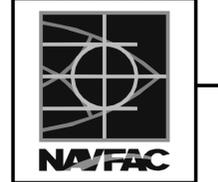
GENERAL NOTES:

- SEE M-001 FOR MECHANICAL LEGEND, ABBREVIATIONS, AND NOTES.
- PIPE SIZES ARE SHOWN ON RISER DIAGRAMS. SEE MD801 FOR DEMO HHW PIPE RISER.

DEMOLITION NOTES:

- DEMOLISH EXISTING PTAC, HOT WATER PIPING TO EXISTING HOT WATER BRANCH PIPING, THERMOSTATS AND CONTROL WIRING, AND ALL MISCELLANEOUS COMPONENTS ASSOCIATED WITH PTAC. PROVIDE TEMPORARY SEAL IN WALL OPENING UNTIL NEW PTHP CAN BE INSTALLED. EXISTING HOT WATER BRANCH PIPING AND ENCLOSURES TO REMAIN.
- DEMOLISH EXISTING HOT WATER RISERS TO HOT WATER BRANCH SHUTOFF VALVES.
- DEMOLISH EXISTING EXHAUST DUCTWORK AND CABINET FANS.
- DEMOLISH EXISTING SUPPLY AIR DUCTWORK AND REGISTERS.
- DEMOLISH EXISTING REGISTERS AND ALL ASSOCIATED DUCTWORK AND EQUIPMENT. SEAL VACATED OPENINGS.
- DEMOLISH EXISTING CABINET UNIT HEATERS AND ASSOCIATED HOT WATER PIPING CONNECTIONS AND THERMOSTATS AND CONTROL WIRING.
- DEMOLISH EXISTING EXHAUST DUCTWORK, REGISTERS, AND ANY ASSOCIATED EQUIPMENT. SEAL VENT OPENING IN EXTERIOR WALL AND PROVIDE MINERAL WOOL INSULATION INTERIOR TO THE SEAL.
- DEMOLISH EXISTING PTAC, HOT WATER PIPING TO EXISTING HOT WATER BRANCH PIPING, THERMOSTATS AND CONTROL WIRING, AND ALL MISCELLANEOUS COMPONENTS ASSOCIATED WITH PTAC. PROVIDE NEW SEALED WALL OPENING IN ACCORDANCE WITH ARCHITECTURAL.

DATE	DESCRIPTION



BURNS MEDONNELL
 1305 EXECUTIVE BLVD.
 SUITE 160
 CHESAPEAKE, VA 23320

APPROVED		
FOR COMMANDER NAVFAC/B.L.T.L.		
ACTIVITY		
PER SAT TO DOCUMENT FROM GERARD MONTANA (PM/BRANCH HEAD) WITH FEED AT NAVAL STATION NEWPORT-NEWPORT, RI		
SATISFACTORY TO DATE		
4/20/16		
DES CWS	DRW JR	CHK BF
PM/DM	MLW/LEJ	
BRANCH MANAGER		
CHIEF ENGINEER	DWG	
FIRE PROTECTION		

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
 NORTH IPT
 NAVAL STATION NEWPORT
 NEWPORT, RHODE ISLAND

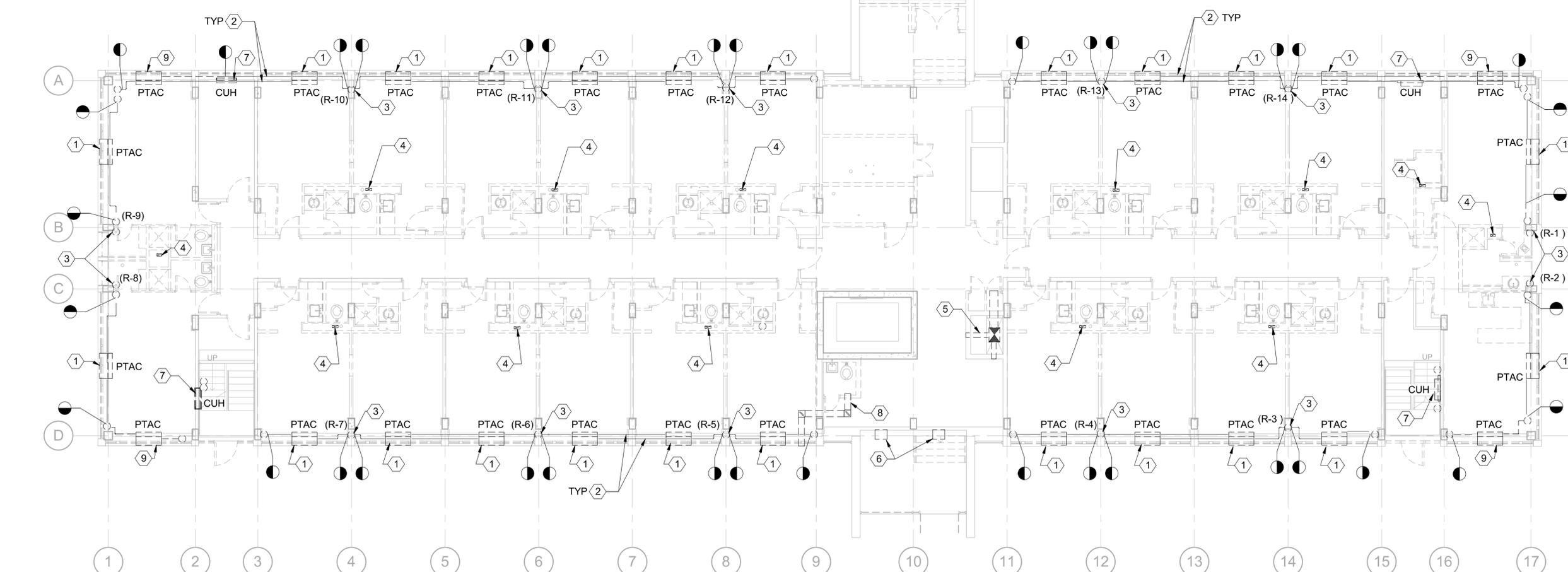
RENOVATION OF NGIS, BUILDING 172
 FIRST FLOOR DEMOLITION PLAN

SCALE:	AS NOTED
EPROJCT NO.	13770079
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12719517
SHEET	132 OF 200
MD101	

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FILE NAME: C:\Revit\Projects\160232-NGIS\172\172M\172M.dwg



PLAN NORTH
HVAC DEMOLITION PLAN - FIRST FLOOR
 SCALE: 1/8" = 1'-0"



GENERAL NOTES:

- 1. SEE M-001 FOR MECHANICAL LEGEND, ABBREVIATIONS, AND NOTES.

DEMOLITION NOTES: (#)

- 1. DEMOLISH ROOF EXHAUST FANS. PROVIDE TEMPORARY SEAL IN ROOF OPENINGS UNTIL NEW WORK IS INSTALLED.
- 2. DEMOLISH EXISTING ELEVATOR VENT LOUVER. PROVIDE TEMPORARY SEAL IN VACATED WALL OPENING UNTIL NEW WORK IS INSTALLED.



BURNS MEDONNELL
1305 EXECUTIVE BLVD.
SUITE 160
CHESAPEAKE, VA 23320

APPROVED

FOR COMMANDER NAVFAC/B.L.T.L.

ACTIVITY
PER SAT-TO DOCUMENT FROM GERARD MONTANI (PMBRANCH HEAD) WITH FEED AT NAVAL STATION NEWPORT-NEWPORT, RI

SATISFACTORY TO DATE 4/29/16

DES	CWS	DRW	JR	CHK	BF
PM/DM					MLWLEJ

BRANCH MANAGER

CHIEF ENGINEER DWG

FIRE PROTECTION

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
NORTH IPT
NAVAL STATION NEWPORT
NEWPORT, RHODE ISLAND
RENOVATION OF NGIS, BUILDING 172
ROOF DEMOLITION PLAN

SCALE: AS NOTED

PROJECT NO. 13770079

CONSTR. CONTR. NO.

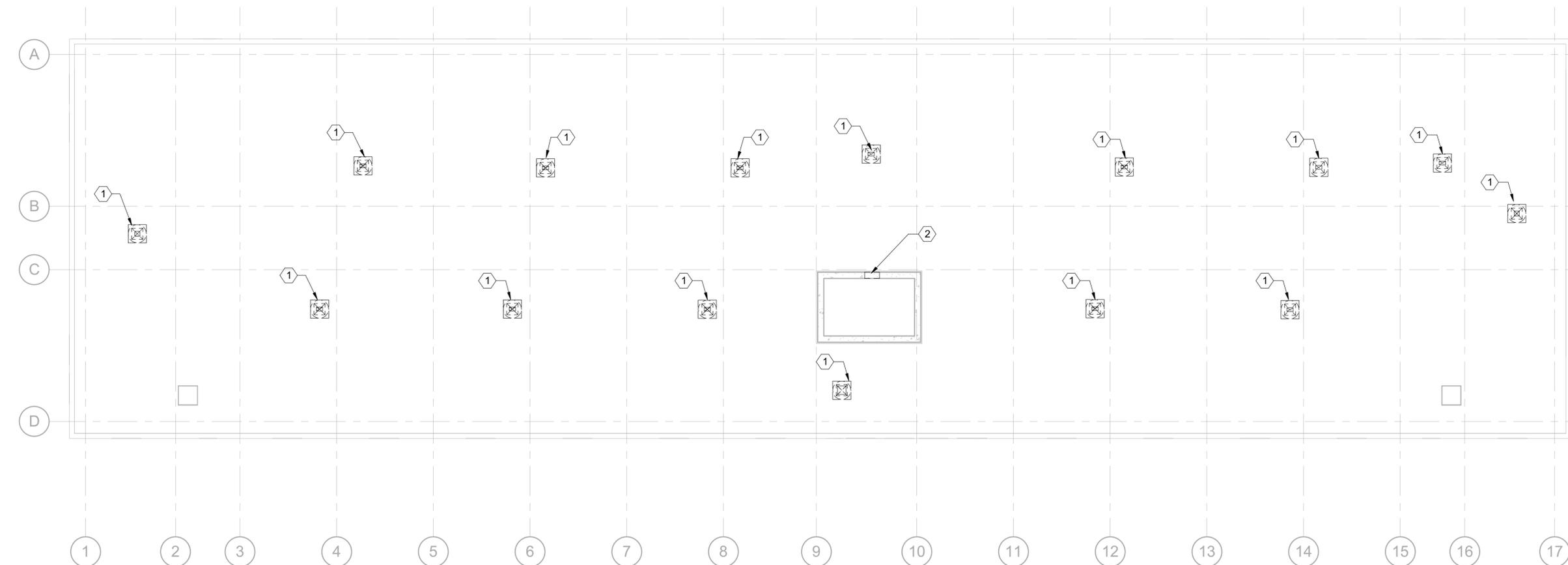
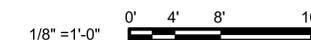
NAVFAC DRAWING NO. 12719521

SHEET 136 OF 200

MD105

DRAWFORM REVISION: 10 MAY 2014

GRAPHIC SCALE:



PLAN NORTH
HVAC DEMOLITION PLAN - ROOF
SCALE: 1/8" = 1'-0"

REV: DATE: 4/29/2016 10:21:23 AM
 FILE NAME: C:\Revit_Projects\186232-NGIS\186232-NGIS\172\Modals\MPEP\186232_M_cwsouthall.rvt
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 UNCLASSIFIED//FOR OFFICIAL USE ONLY
 UNCLASSIFIED//FOR OFFICIAL USE ONLY
 UNCLASSIFIED//FOR OFFICIAL USE ONLY

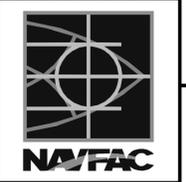
GENERAL NOTES:

- 1. SEE M-001 FOR MECHANICAL LEGEND, ABBREVIATIONS, AND NOTES.
- 2. SEE M-801 FOR HHWS/R RISER AND BRANCH SIZES.

NEW WORK NOTES: #

- 1. PROVIDE HEATING HOT WATER PUMPS WITH STRUCTURAL BASE WITH RUBBER ISOLATORS. RUBBER ISOLATORS SHALL HAVE A MINIMUM DEFLECTION OF 0.25". INSTALL NEW PUMPS AND END SUCTION DIFFUSER. SEE DETAIL C3/M-502 FOR PUMP CONNECTION DETAIL.
- 2. RL/RS PIPING UP TO CONDENSER ON GRADE. PIPING SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 3. EXISTING EXHAUST DUCT AND ASSOCIATED EXHAUST FAN TO REMAIN.
- 4. EXISTING EXPANSION TANK TO REMAIN.
- 5. PROVIDE NEW DIFFERENTIAL PRESSURE SENSOR.

NO.	DATE	DESCRIPTION



BURNS MEDONNELL
 1305 EXECUTIVE BLVD.
 SUITE 160
 CHESAPEAKE, VA 23320

APPROVED	A/E INFO
FOR COMMANDER NAVFAC/B.L.T.L.	
ACTIVITY	
PER SAT TO DOCUMENT FROM GERARD MONTANI (P/BRANCH HEAD) WITH FEED AT NAVAL STATION NEWPORT-NEWPORT, RI	
SATISFACTORY TO DATE	4/29/16
DES	CWS
DRW	JR
CHK	BF
PM/DM	MLW/LEJ
BRANCH MANAGER	
CHIEF ENGINEER	DWG
FIRE PROTECTION	

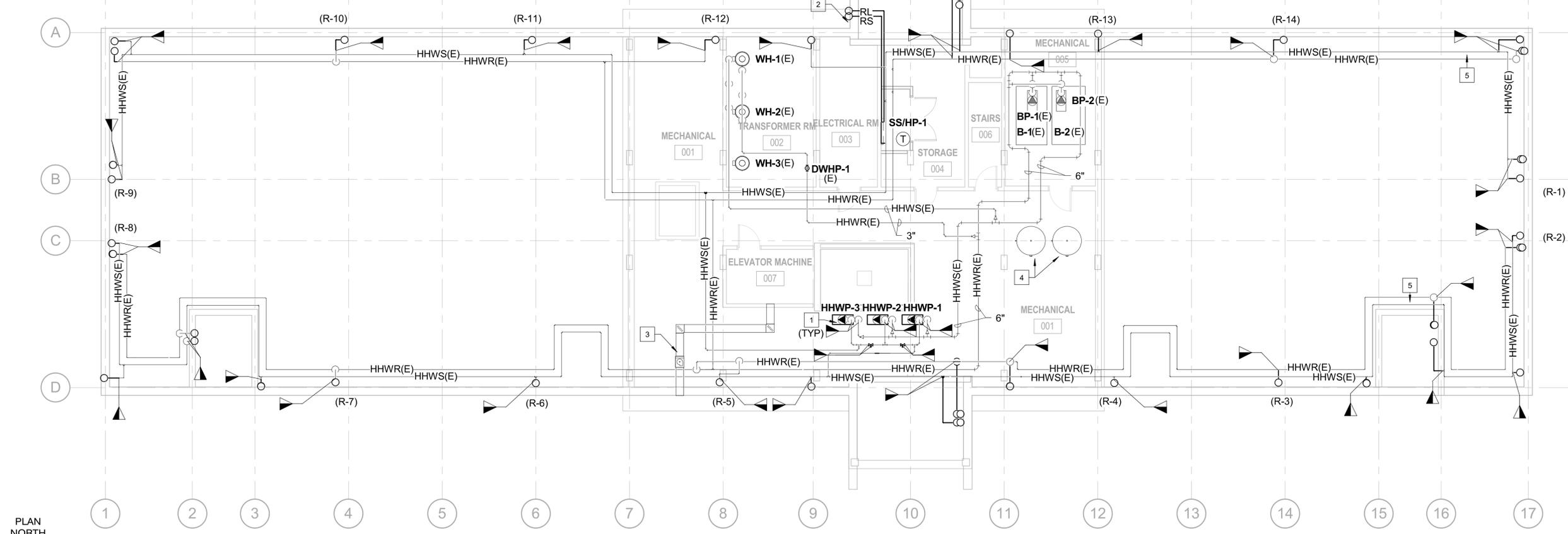
DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
 NORTH IPT
 NAVAL STATION NEWPORT
 NEWPORT, RHODE ISLAND
RENOVATION OF NGIS, BUILDING 172
 BASEMENT - HVAC PLAN

SCALE:	AS NOTED
PROJECT NO.	13770079
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12719523
SHEET	138 OF 200
MH100	

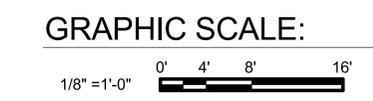
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FILE NAME: C:\Revit_Projects\180232-NGIS\172\Modals\MPEP6232_M_cvsouth\172.rvt

REV DATE: 4/29/2016 10:21:27 AM



PLAN NORTH
BASEMENT - HVAC PLAN
 SCALE: 1/8" = 1'-0"



GENERAL NOTES:

- 1. SEE M-001 FOR MECHANICAL LEGEND, ABBREVIATIONS, AND NOTES.
- 2. SEE M-801 FOR HHWS/R RISER AND BRANCH SIZES.
- 3. PTHP AND CUH HEATERS (THIS SHEET) SHALL BE CONNECTED AS SHOWN ON DETAIL C2/M-501.

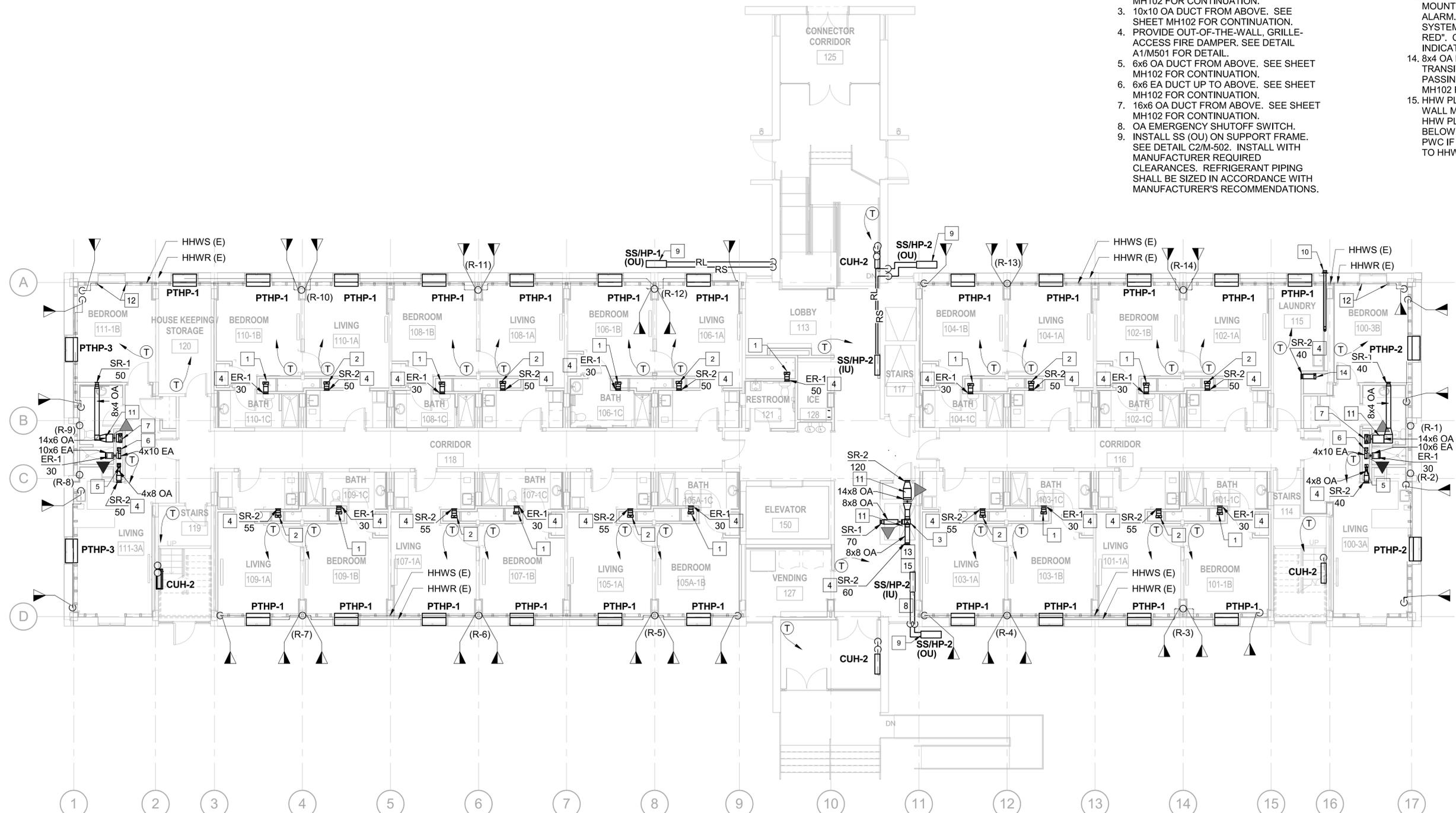
NEW WORK NOTES: #

- 1. 4x10 EA DUCT TRANSITIONING TO 6x8 EA THROUGH SLAB. SEE SHEET MH102 FOR CONTINUATION.
- 2. 10x10 OA DUCT FROM ABOVE. SEE SHEET MH102 FOR CONTINUATION.
- 3. 10x10 OA DUCT FROM ABOVE. SEE SHEET MH102 FOR CONTINUATION.
- 4. PROVIDE OUT-OF-THE-WALL, GRILLE-ACCESS FIRE DAMPER. SEE DETAIL A1/M501 FOR DETAIL.
- 5. 6x6 OA DUCT FROM ABOVE. SEE SHEET MH102 FOR CONTINUATION.
- 6. 6x6 EA DUCT UP TO ABOVE. SEE SHEET MH102 FOR CONTINUATION.
- 7. 16x6 OA DUCT FROM ABOVE. SEE SHEET MH102 FOR CONTINUATION.
- 8. OA EMERGENCY SHUTOFF SWITCH.
- 9. INSTALL SS (OU) ON SUPPORT FRAME. SEE DETAIL C2/M-502. INSTALL WITH MANUFACTURER REQUIRED CLEARANCES. REFRIGERANT PIPING SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

NEW WORK NOTES: #

- 10. PROVIDE 4" Ø DRYER EXHAUST DUCT. DUCT SHALL TERMINATE AT WALL CAP. WALL CAP IS TO BE PROVIDED WITH BACKDRAFT DAMPER BUT NO SCREEN. INSTALL DRYER EXHAUST IN ACCORDANCE WITH IMC 2012 SECTION 504. SEE C1/M502 FOR DRYER DUCT DETAIL.
- 11. PROVIDE DUCT ACCESS PANEL TO SERVICE FIRE DAMPER. SEE A4/M-501 FOR DETAIL.
- 12. PROVIDE NEW HOT WATER PIPING ENCLOSURE TO MATCH EXISTING.
- 13. DOAS ALARM LIGHT. PROVIDE WALL MOUNTED RED LIGHT TO INDICATE DOAS ALARM. PROVIDE LABEL BELOW "HVAC SYSTEM ALARM, NOTIFY PWC IF BLINKING RED". CONNECT LIGHT TO DOAS AS INDICATED ON M1701.
- 14. 8x4 OA DUCT FROM ABOVE TRANSITIONING TO 10x4 OA AFTER PASSING THROUGH SLAB. SEE SHEET MH102 FOR CONTINUATION.
- 15. HHW PLANT ALARM LIGHT. PROVIDE WALL MOUNTED RED LIGHT TO INDICATE HHW PLANT ALARM. PROVIDE LABEL BELOW "HVAC SYSTEM ALARM, NOTIFY PWC IF BLINKING RED". CONNECT LIGHT TO HHW PLANT AS INDICATED ON M1703.

DATE	APPROVED
DESCRIPTION	FOR COMMANDER NAVFAC/B.L.T.L.
SCALE	ACTIVITY
DATE	PER SAT TO DOCUMENT FROM GERARD MONTANA (PI BRANCH HEAD) WITH FEED AT NAVAL STATION NEWPORT-NEWPORT, RI
DATE	SATISFACTORY TO DATE 4/20/16
DES	CWS
DRW	JR
CHK	BF
PM/DM	MLW/LEJ
BRANCH MANAGER	
CHIEF ENGINEER	DWG
FIRE PROTECTION	
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND
NORTH IPT	NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
NAVAL STATION NEWPORT	NEWPORT-RHODE ISLAND
RENOVATION OF NGIS, BUILDING 172	NEWPORT, RHODE ISLAND
FIRST FLOOR - HVAC PLAN	
SCALE: AS NOTED	
PROJECT NO. 13770079	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 12719524	
SHEET 139 OF 200	
MH101	
DRAWING REVISION: 10 MAY 2014	



PLAN NORTH
FIRST FLOOR - HVAC PLAN
 SCALE: 1/8" = 1'-0"



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 DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
 NORTH IPT
 NAVAL STATION NEWPORT
 NEWPORT, RHODE ISLAND
 RENOVATION OF NGIS, BUILDING 172
 FIRST FLOOR - HVAC PLAN

GENERAL NOTES:

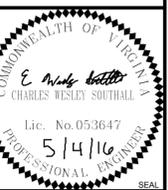
- 1. SEE M-001 FOR MECHANICAL LEGEND, ABBREVIATIONS, AND NOTES.
- 2. SEE M-801 FOR HHWS/R RISER AND BRANCH SIZES.
- 3. PTHP AND CUH HEATERS (THIS SHEET) SHALL BE CONNECTED AS SHOWN ON DETAIL C2/M-501.

NEW WORK NOTES: #

- 1. 6x8 EA FROM BELOW TRANSITION TO 4x10 EA AFTER PASSING THROUGH SLAB. TRANSITION BACK TO 6x8 EA THROUGH THIRD FLOOR SLAB. SEE SHEETS MH101 AND MH103 FOR CONTINUATION.
- 2. 4x10 OA DUCT FROM ABOVE AND DOWN. SEE SHEETS MH103 AND MH101 FOR CONTINUATION.
- 3. 10x10 OA DUCT FROM ABOVE AND DOWN. SEE SHEETS MH103 AND MH101 FOR CONTINUATION.
- 4. 6x6 EA DUCT AND UP TO ABOVE. SEE SHEETS MH101 AND MH103 FOR CONTINUATION.
- 5. PROVIDE OUT-OF-THE-WALL, GRILLE-ACCESS FIRE DAMPER. SEE DETAIL A1/M501 FOR DETAIL.
- 6. 6x6 OA DUCT FROM ABOVE AND DOWN. SEE SHEETS MH103 AND MH101 FOR CONTINUATION.
- 7. 16x6 OA DUCT FROM ABOVE AND DOWN. SEE SHEETS MH103 AND MH101 FOR CONTINUATION.

NEW WORK NOTES: #

- 8. PROVIDE 4" Ø DRYER EXHAUST DUCT. DUCT SHALL TERMINATE AT WALL CAP. WALL CAP IS TO BE PROVIDED WITH BACKDRAFT DAMPER BUT NO SCREEN. INSTALL DRYER DUCT EXHAUST IN ACCORDANCE WITH IMC 2012 SECTION 504. SEE C1/M502 FOR DRYER DUCT DETAIL.
- 9. PROVIDE DUCT ACCESS PANEL TO SERVICE FIRE DAMPER. SEE A4/M-501 FOR DETAIL.
- 10. PROVIDE NEW HOT WATER PIPING ENCLOSURE TO MATCH EXISTING.
- 11. 8x4 OA DUCT FROM ABOVE TRANSITIONING TO 10x4 OA AFTER PASSING THROUGH SLAB. SEE SHEET MH103 FOR CONTINUATION.
- 12. 8x4 OA FROM ABOVE TRANSITION TO 10x4 OA AFTER PASSING THROUGH SLAB. TRANSITION BACK TO 8x4 OA THROUGH THIRD FLOOR SLAB. SEE SHEETS MH103 AND MH101 FOR CONTINUATION.



1305 EXECUTIVE BLVD. SUITE 160 CHESAPEAKE, VA 23320

APPROVED

FOR COMMANDER NAVFAC/B.L.T.L.

ACTIVITY

PER SAT TO DOCUMENT FROM GERARD MONTANA (PMBRANCH HEAD) WITH FEED AT NAVAL STATION NEWPORT-NEWPORT, RI

SATISFACTORY TO DATE 4/20/16

DES CWS DRW JR CHK BF

PM/DM MLWLEJ

BRANCH MANAGER

CHIEF ENGINEER DWG

FIRE PROTECTION

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC

NORTH IPT

NEWPORT-RHODE ISLAND

NAVAL STATION NEWPORT

NEWPORT, RHODE ISLAND

RENOVATION OF NGIS, BUILDING 172

SECOND FLOOR - HVAC PLAN

SCALE: AS NOTED

EPROJCT NO. 13770079

CONSTR. CONTR. NO.

NAVFAC DRAWING NO. 12719525

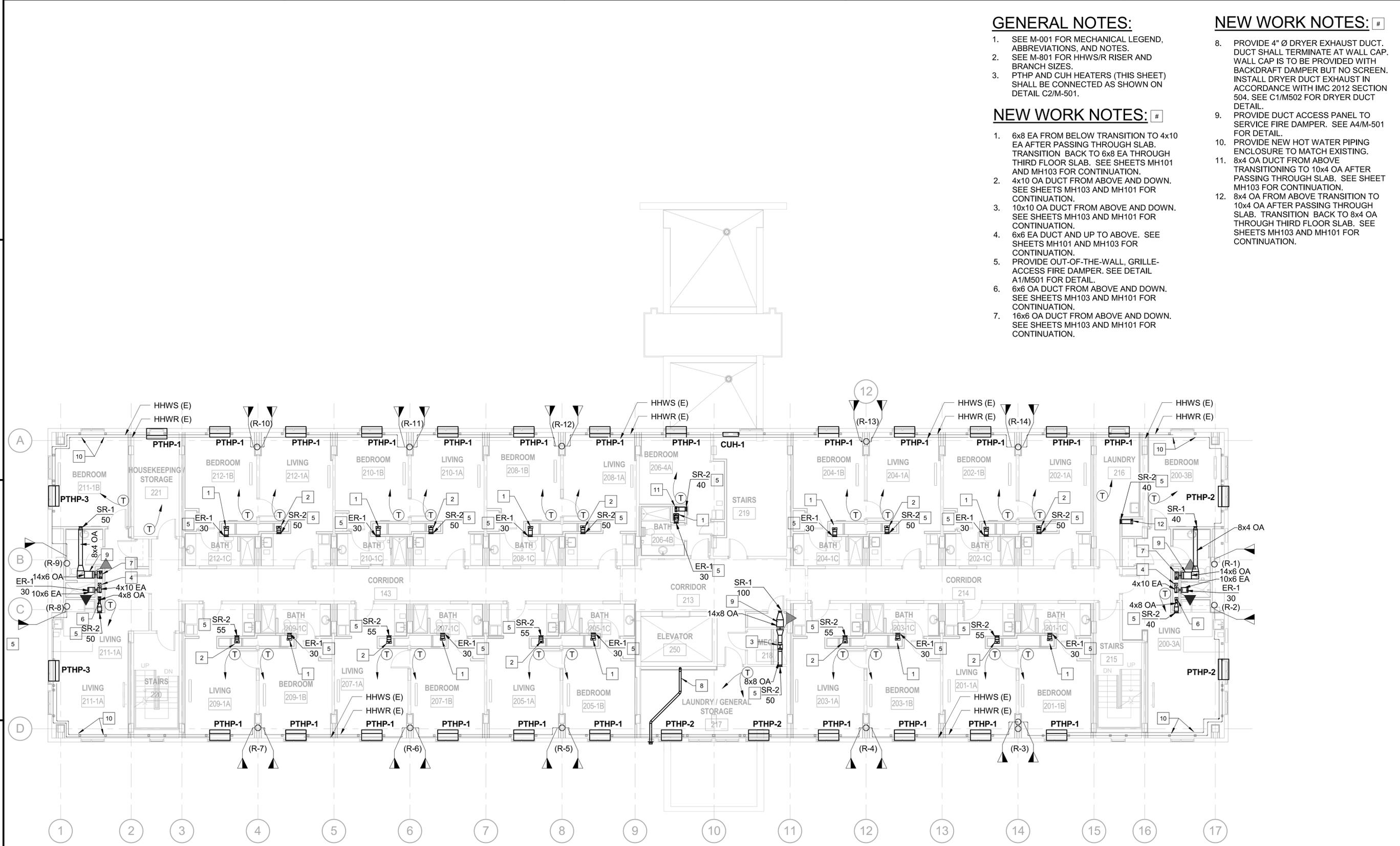
SHEET 140 OF 200

MH102

DRAWING REVISION: 10 MAY 2014

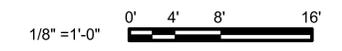
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PLAN NORTH SECOND FLOOR - HVAC PLAN SCALE: 1/8" = 1'-0"

GRAPHIC SCALE:



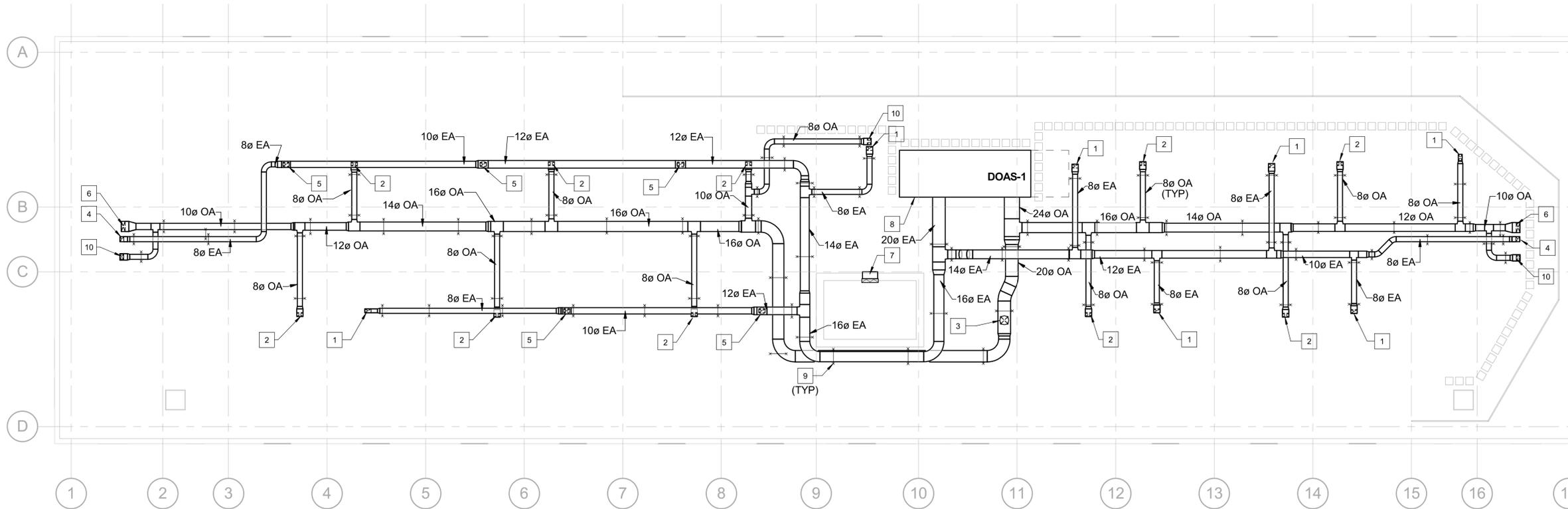
GENERAL NOTES:

- 1. SEE M-001 FOR MECHANICAL LEGEND, ABBREVIATIONS, AND NOTES.
- 2. ROOFTOP DUCT SHALL BE SUPPORTED AS SHOWN ON DETAIL A2/M-501. SUPPORTS SHALL BE A MAXIMUM OF 10'-0" APART BUT SHALL AS OFTEN AS REQUIRED BY FRAME DESIGNER.

NEW WORK NOTES:

- 1. 8"Ø OA TRANSITION TO 8x6 BEFORE PASSING DOWN THROUGH ROOF. SEE SHEET MH104 FOR CONTINUATION. SEE DETAIL A1/M-502 FOR ROOF PENETRATION DETAIL.
- 2. 8"Ø OA TRANSITION TO 6x10 OA BEFORE PASSING DOWN THROUGH ROOF. SEE SHEET MH104 FOR CONTINUATION. SEE DETAIL A1/M-502 FOR ROOF PENETRATION DETAIL.
- 3. 14"Ø OA TRANSITION TO 12x12 OA BEFORE PASSING DOWN THROUGH ROOF. SEE SHEET MH104 FOR CONTINUATION. SEE DETAIL A2/M-502 FOR ROOF PENETRATION DETAIL.
- 4. 8x6 EA DUCT UP FROM BELOW THROUGH ROOF, TRANSITION TO 8"Ø EA. SEE SHEET MH104 FOR CONTINUATION. SEE DETAIL A1/M-502 FOR ROOF PENETRATION DETAIL.
- 5. 8x6 EA DUCT UP FROM BELOW THROUGH ROOF INTO BOTTOM OF ROUND DUCT. SEE SHEET MH104 FOR CONTINUATION. SEE DETAIL A2/M-502 FOR ROOF PENETRATION DETAIL.
- 6. 10"Ø OA TRANSITION TO 16x6 OA BEFORE PASSING DOWN THROUGH ROOF. SEE SHEET MH104 FOR CONTINUATION. SEE DETAIL A1/M-502 FOR ROOF PENETRATION DETAIL.
- 7. NEW 42"x24" LOUVER. LOUVER SHALL HAVE MINIMUM FREE AREA OF 3.2 SF. ATTACH MOTORIZED DAMPER TO INTERIOR FACE OF LOUVER. DAMPER SHALL BE LOW LEAKAGE AS SPECIFIED AND SHALL FAIL OPEN UPON LOSS OF POWER.
- 8. DOAS-1 SHALL BE LOCATED SO UNIT AIR INTAKE IS 10'-0" FROM PLUMBING VENTS, 10'-0" FROM ELEVATOR HOISTWAY VENT, AND 15'-0" FROM COMBUSTION STACK. UNIT SHOWN MEETS CRITERIA.
- 9. STRUCTURAL SUPPORTS. SEE GENERAL NOTE 2 (THIS SHEET).
- 10. 8"Ø OA TRANSITION TO 8x6 OA BEFORE PASSING DOWN THROUGH ROOF. SEE SHEET MH104 FOR CONTINUATION. SEE DETAIL A1/M-502 FOR ROOF PENETRATION DETAIL.

DATE	APPROVED
DESCRIPTION	SEAL
 	
 1305 EXECUTIVE BLVD. SUITE 160 CHESAPEAKE, VA 23320	
APPROVED	DATE
FOR COMMANDER NAVFAC/B.L.T.L.	
ACTIVITY	
PER SA-TO DOCUMENT FROM GERARD MONTANA (PI BRANCH HEAD) WITH FEED AT NAVAL STATION NEWPORT/NEWPORT, RI	
SATISFACTORY DATE	4/20/16
DES	CWS
DRW	JR
CHK	BF
PM/DM	MLW/LEJ
BRANCH MANAGER	
CHIEF ENGINEER	DWG
FIRE PROTECTION	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC NORTH IPT NAVAL STATION NEWPORT NEWPORT, RHODE ISLAND RENOVATION OF NGIS, BUILDING 172 ROOF - HVAC PLAN	
SCALE:	AS NOTED
PROJECT NO.	13770079
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12719528
SHEET	143 OF 200
MH105	
DRAWING REVISION: 10 MAY 2014	



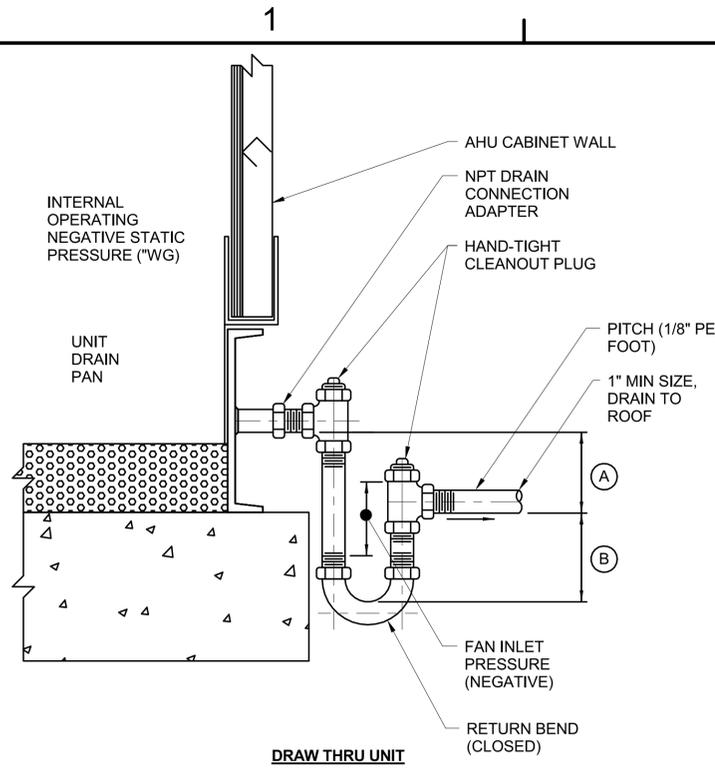
PLAN NORTH
ROOF - HVAC PLAN
 SCALE: 1/8" = 1'-0"



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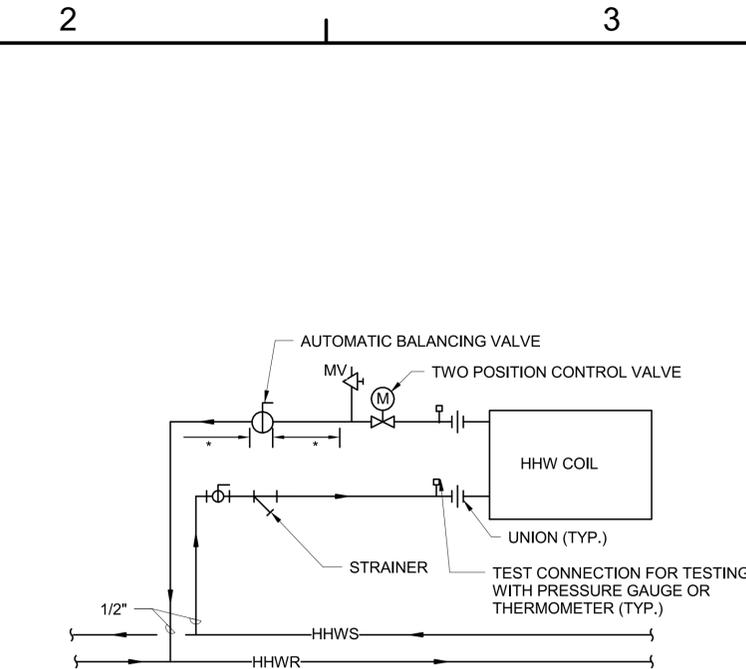
GENERAL NOTES:

1. REFER TO SHEET M-001 FOR MECHANICAL GENERAL NOTES, LEGEND, AND ABBREVIATIONS.



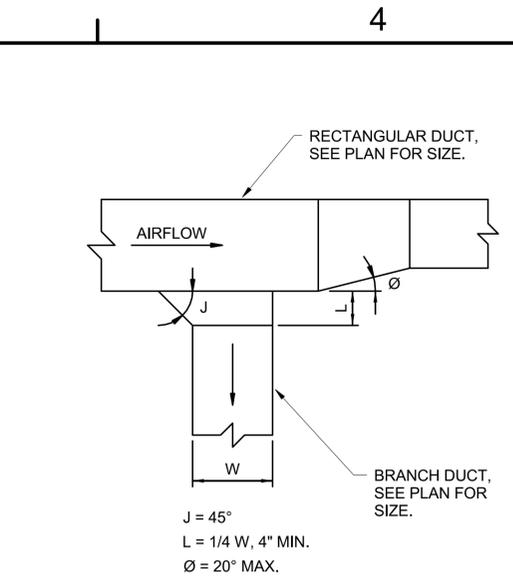
- NOTES:**
1. (A) DIMENSION EQUAL TO MAXIMUM FAN INLET PRESSURE (INCH WC) +1\"/>
 2. (B) DIMENSION EQUAL TO (A) /2 (MIN.)

C1 DOAS CONDENSATE TRAP DRAIN
SCALE: NOT TO SCALE



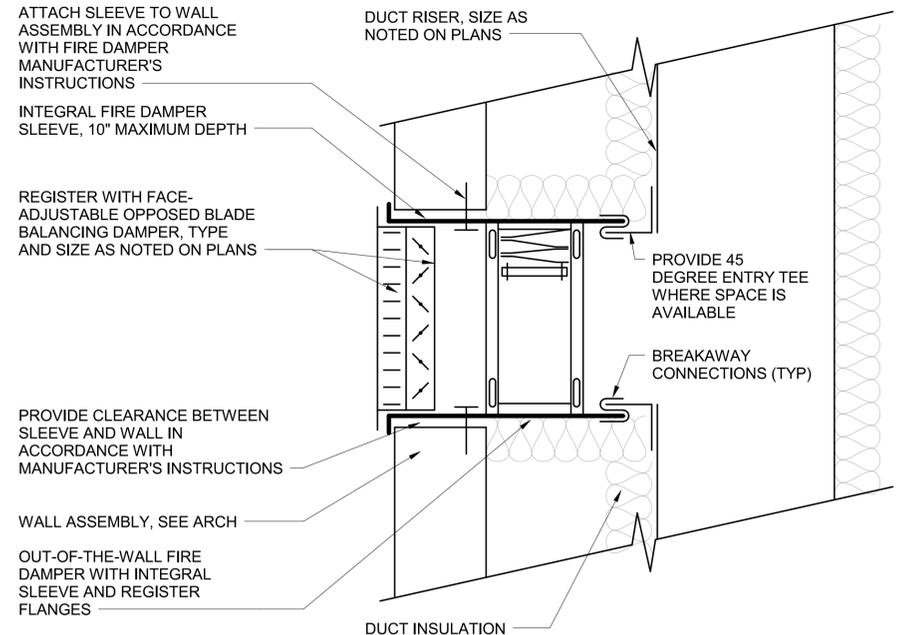
- NOTES:**
1. AUTOMATIC BALANCING VALVE SHALL FUNCTION AS A SERVICE VALVE AS IT SHALL HAVE A INTEGRAL SHUTOFF VALVE.
 2. DETAIL APPLIES TO PTHP/CUH UNIT HEATERS LOCATED ON FIRST AND SECOND FLOORS.
- *THE AUTOMATIC BALANCING VALVE SHALL BE INSTALLED BY THE CONTRACTOR IN CONFORMANCE WITH VALVE MFR'S RECOMMENDED SPACING UP/DOWNSTREAM FROM PIPE CHANGES IN DIRECTION AND/OR OTHER VALVES/COMPONENTS IN THE PIPING.

C2 PTHP/CUH HTG COIL PIPING (2-WAY VALVE)
SCALE: NOT TO SCALE

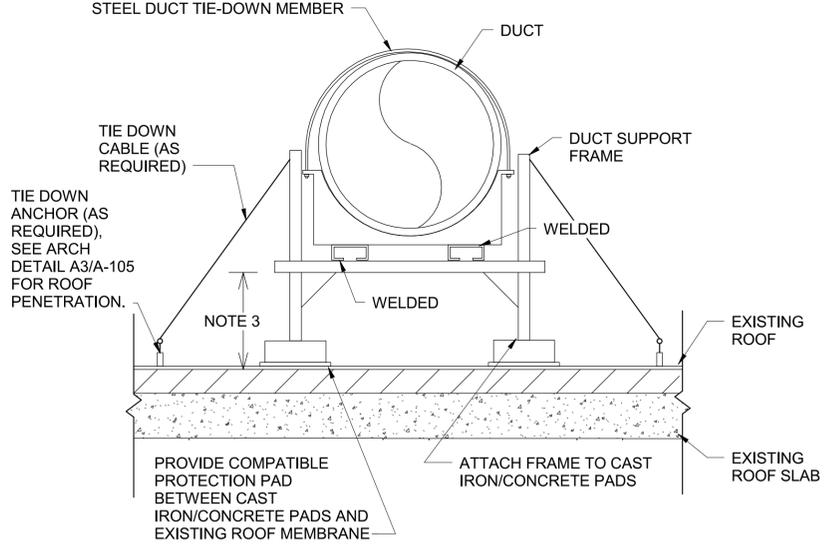


- NOTES:**
1. TAKEOFF ON BOTH SIDES OR SINGLE SIDE AS REQUIRED BY PLANS AND SUFFICIENT SPACE IS AVAILABLE FOR TAP-IN FITTING.
 2. SEE SMACNA MANUAL FOR TAP-IN DETAILS.
 3. WHEN FITTING HAS ONLY ONE SIDE SLOPED FOR A SINGLE SIDE TAKE-OFF, THE TAP-IN SHALL BE INSTALLED IN SLOPED SIDE.
 4. CLINCH LOCK CONNECTION TO DUCT SHALL HAVE CORNER SEALS. (SEE SMACNA MANUAL).
 5. EXTRACTORS, SCOOPS, DEFLECTORS OR DAMPERS THAT PROTRUDE INTO THE MAIN DUCT SHALL NOT BE USED.

C3 BRANCH DUCT TAKE-OFF
SCALE: NOT TO SCALE

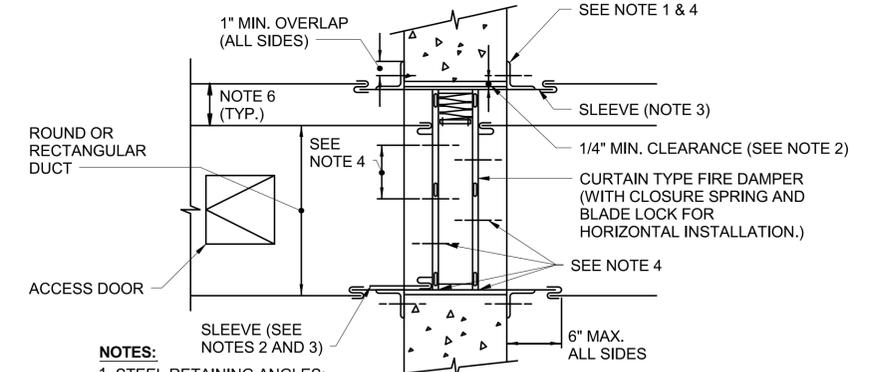


A1 FIRE DAMPER IN WALL TERMINATING W/ WALL REGISTER
SCALE: NOT TO SCALE



- DUCT SUPPORT FRAME NOTES:**
1. DESIGN SUPPORT FRAMES, FRAME ATTACHMENT TO CONCRETE/CAST IRON PADS, AND TIE-DOWN SYSTEM TO ROOF SLAB FOR WIND FORCES BASED ON THE CRITERIA INDICATED ON SHEET S-001. DESIGN SHALL BE APPROVED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 2. SPACE SUPPORT FRAMES AND SIZE CONCRETE/CAST IRON PADS TO LIMIT THE BEARING PRESSURE UNDER THE PADS TO 60 PSF. WHEN SIZING THE CONCRETE/CAST IRON PADS, USE THE NOMINAL DESIGN WIND SPEED WITH A SLIDING AND UPLIFT RESISTANCE FACTOR OF SAFETY OF 1.5.
 3. DUCT SUPPORT SHALL BE AS CLOSE TO THE ROOF AS POSSIBLE BUT NOT LESS THAN 18\"/>
 4. MEMBERS SHALL BE HOT-DIPPED GALVANIZED STEEL.
 5. SYSTEM SHALL NOT VOID EXISTING ROOF WARRANTY.
 6. ALTERNATIVES TO SUPPORT FRAME SHOWN ARE ACCEPTABLE IF SUPPORT MEETS REQUIREMENTS OF NOTE 1 ABOVE.

A2 ROOFTOP DUCT SUPPORT
SCALE: NOT TO SCALE



- NOTES:**
1. STEEL RETAINING ANGLES: MINIMUM 3\"/>
 2. CLEARANCE, DAMPER SLEEVE TO WALL OPENING: 1/8\"/>
 3. STEEL SLEEVE: SLEEVE GAUGE SHALL BE AT LEAST EQUAL TO GAUGE OF THE CONNECTING DUCT WHEN USING BREAKAWAY CONNECTIONS (PLAIN 'S', HEMMED 'S' SLIP, STANDING 'S' SLIP, INSIDE SLIP JOINT, OR DOUBLE 'S' SLIP) FOR RIGID CONNECTIONS, SLEEVE SHALL BE MINIMUM 16 GAUGE FOR DAMPERS UP TO 36\"/>
 4. SECURE RETAINING ANGLES TO SLEEVE, DAMPER TO SLEEVE AND MULTIPLE DAMPERS ON 8\"/>
 5. THIS DETAIL SHOWN FOR REFERENCE ONLY, FIRE DAMPER MANUFACTURERS INSTALLATION DETAILS AND INSTRUCTIONS AS TESTED AND APPROVED BY THE U.L. MUST BE USED IN LIEU OF THIS DETAIL WHERE APPLICABLE.
 6. DIMENSION VARIES FROM 0\"/>

A4 FIRE DAMPER W/ACCESS DOOR
SCALE: NOT TO SCALE

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DATE	APPROVED
DESCRIPTION	FOR COMMANDER NAVFAC/B.L.T.L.
SCALE	ACTIVITY
DATE	PER SAT-TO DOCUMENT FROM GERARD MONTANA (PMBRANCH HEAD) WITH HEAD AT NAVAL STATION NEWPORT-NEWPORT, RI
DATE	SATISFACTORY TO DATE
DES	CWS
DRW	CWS
CHK	BF
PM/DM	MLWLEJ
BRANCH MANAGER	NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC NEWPORT, RHODE ISLAND
CHIEF ENGINEER	NAVAL STATION NEWPORT
DWG	NEWPORT, RHODE ISLAND
FIRE PROTECTION	RENOVATION OF NGIS, BUILDING 172
MECHANICAL DETAILS	
SCALE	AS NOTED
EPROJCT NO.	13770079
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12719529
SHEET	144 OF 200
M-501	
DRAWING REVISION: 10 MAY 2014	

REV DATE: 4/29/2016 10:21:04 AM

FILE NAME: C:\Revit\Projects\16232-NGIS\16232-NGIS\16232-M_LowSouthall.rvt

GENERAL NOTES:

- REFER TO SHEET M-001 FOR MECHANICAL GENERAL NOTES, LEGEND, AND ABBREVIATIONS.

DEDICATED OUTDOOR AIR UNIT SCHEDULE 1 OF 2

MARK	SUPPLY FAN				EXHAUST FAN				DX COOLING COIL			GAS HEATING SECTION			ENERGY WHEEL - SUMMER CONDITIONS							
	CFM	EXTERNAL SP (IN WG)	TOTAL SP (IN WG)	MIN. MOTOR HP	CFM	EXTERNAL SP (IN WG)	TOTAL STATIC (IN WG)	MIN. MOTOR HP	EAT (DB/WB)	SENSIBLE CAPACITY (MBH)	TOTAL CAPACITY (MBH)	INPUT CAPACITY (MBH)	OUTPUT CAPACITY (MBH)	EAT	OUTSIDE SUPPLY CFM	OUTSIDE AIR EAT (DB/WB)	OUTSIDE AIR LAT (DB/WB)	SUPPLY PRESSURE DROP (IN WG)	ENTERING/ EXISTING EXHAUST CFM	ENTERING EXHAUST AIR EAT (DB/WB)	LEAVING AIR EAT (DB/WB)	EXHAUST PRESSURE DROP (IN WG)
DOAS-1	3850	0.9	2.8	4	1580	0.6	1.2	4	76.8 / 69.9	110.6	233.7	350	280	10.0	3850	78.0 / 74.0	76.8 / 69.9	0.85	1580	75.0 / 62.0	76.2 / 67.0	0.36

NOTES:

- | | |
|---|---|
| <ol style="list-style-type: none"> UNIT SHALL BE PROVIDED WITH UNIT MOUNTED DISCONNECT SWITCHES. COOLING COIL CAPACITIES ARE GROSS (CONTAIN FAN HEAT GAIN). CONDENSER PERFORMANCE IS BASED ON OUTSIDE AMBIENT TEMPERATURE OF 92°. PROVIDE UNIT WITH FACTORY VFD AND UNIT CONTROL PANEL. SEE M1701 FOR REQUIRED FACTORY MOUNTED AND TESTED SENSORS AND DEVICES. UNIT SHALL HAVE MERV 8 PRE-FILTER AND MERV 13 FINAL FILTER SECTION. UNIT SHALL HAVE HORIZONTAL DUCT DISCHARGE. | <ol style="list-style-type: none"> UNIT SHALL HAVE VARIABLE REFRIGERANT CAPACITY FOR PART LOAD OPERATION. ENERGY RECOVERY WHEEL SENSIBLE EFFECTIVENESS OF 0.92, LATENT EFFECTIVENESS OF 0.85. UNIT SHALL HAVE MODULATING HOT GAS REHEAT CAPABILITY OF HUMIDITY CONTROL. UNIT SHALL HAVE INDIRECT FIRED HEAT EXCHANGER (10:1 TURNDOWN). PROVIDE UNIT WITH GALVANIZED STEEL ROOF CURB FRAME. |
|---|---|

DEDICATED OUTDOOR AIR UNIT SCHEDULE 2 OF 2

MARK	ENERGY WHEEL - WINTER CONDITIONS						ELECTRICAL		
	OUTSIDE AIR EAT (DB/WB)	OUTSIDE AIR LAT (DB/WB)	SUPPLY PRESSURE DROP (IN WG)	ENTERING/ EXISTING EXHAUST CFM	ENTERING EXHAUST AIR EAT (DB/WB)	LEAVING EXHAUST AIR LAT (DB/WB)	EXHAUST AIR PRESSURE DROP (IN WG)	V/Hz/PH	FLA
DOAS-1	10.0 / 8.0	32.3 / 27.7	0.85	1580	70.0 / 53.0	45.1 / 38.0	0.36	208/60/3	107

DIFFUSER, REGISTER, & GRILLE SCHEDULE (DRG)

MARK	DESCRIPTION	MOUNTING	FACE SIZE	NECK SIZE	LOAD PRESS DROP (IN WC)
ER-1	EXHAUST REGISTER	SIDEWALL	8x8	8x8	0.05
SR-1	SUPPLY REGISTER	SIDEWALL	6x6	6x6	0.10
SR-2	SUPPLY REGISTER	SIDEWALL	8x8	8x8	0.10

PUMP SCHEDULE

MARK	TYPE	SERVICE	CAPACITY (GPM)	HEAD (FT WG)	MOTOR RPM	MOTOR HP	MOTOR TYPE	ELECTRICAL
HHWP-1	CLOSE COUPLED END SUCTION	HEATING HOT WATER	60	25	1760	1	ODP	208V/60HZ/3PH
HHWP-2	CLOSE COUPLED END SUCTION	HEATING HOT WATER	61	29	1760	1	ODP	208V/60HZ/3PH
HHWP-3	CLOSE COUPLED END SUCTION	HEATING HOT WATER	61	29	1760	1	ODP	208V/60HZ/3PH

NOTES:

- PROVIDE PUMP WITH SUCTION DIFFUSER AND VFD.
- MINIMUM PUMP FLOW AND ESTIMATED PRESSURE DROP OF 30 GPM @ 23 FT WG FOR HHWP-2,3 AND 28 GPM @ 21 FT WG FOR HHWP-1.

CABINET UNIT HEATER SCHEDULE

MARK	QTY	NOM. CFM	MBH	FAN MOTOR		HOT WATER HEATING COIL				EAT (F)
				POWER	ELECTRICAL	GPM	EW (F)	LWT (F)	MAX W.P.D (FT WG)	
CUH-1	1	170	9.1	15W	120V/60HZ/1PH	1.0	200	180	4.4	55
CUH-2	4	140	21.5	24W	120V/60HZ/1PH	2.0	200	180	3.9	55

PACKAGED TERMINAL HEAT PUMP SCHEDULE

MARK	QTY	LOCATION	UNIT CFM	DX COOLING COIL @ 95F AMBIENT			HEAT PUMP @ 47F AMBIENT			HOT WATER HEATING COIL				ELECTRICAL					
				TOTAL (MBH)	EAT (F) DB	EER	TOTAL (MBH)	EAT (F) DB	COP	CAPACITY (MBH)	EAT (F)	GPM	EW (F)	MAX W.P.D (FT WG)	VOLTS	PHASE	FLA		
PTHP-1	91	WALL MOUNTED	340	7.6	80	67	12.0	6.8	70	60	3.3	14.9	70	1.0	200	2.1	208V	1PH	3.9
PTHP-2	14	WALL MOUNTED	340	12.0	80	67	11.0	11.3	70	60	3.1	16.9	70	1.0	200	2.1	208V	1PH	5.8
PTHP-3	8	WALL MOUNTED	390	14.6	80	67	9.7	13.6	70	60	3.1	17.9	70	1.0	200	2.1	208V	1PH	7.0

DUCT CONSTRUCTION SCHEDULE

SYSTEM	LOCATION - GEOMETRY	DESCRIPTION	PRESSURE CLASS (IN WG)	LEAKAGE CLASS (CFM / 100 SF)		SEAL CLASS	DALT
				ROUND	RECTANGULAR		
SUPPLY	INTERIOR - RECTANGULAR	SINGLE WALL FIELD INSULATED	2.0	-	6	A	YES
	ROOFTOP - RECTANGULAR	SINGLE WALL FIELD INSULATED W/ ALUMINUM JACKET	2.0	-	6	A	YES
	ROOFTOP - ROUND	DOUBLE WALL SHOP FABRICATED	2.0	3	-	A	YES
EXHAUST	INTERIOR - RECTANGULAR	SINGLE WALL FIELD INSULATED	1.0	-	6	A	YES
	ROOFTOP - RECTANGULAR	SINGLE WALL FIELD INSULATED W/ ALUMINUM JACKET	1.0	-	6	A	YES
	ROOFTOP - ROUND	DOUBLE WALL SHOP FABRICATED	1.0	3	-	A	YES
DRYER EXHAUST	INTERIOR - ROUND	SINGLE WALL NOT INSULATED	1.0	3	-	A	NO

MINI-SPLIT SYSTEM AIR CONDITIONER SCHEDULE

MARK	INDOOR UNIT			OUTDOOR UNIT			ELECTRICAL			REFRIGERANT TYPE	NOTES
	FAN SPEEDS / AIRFLOWS	ELECTRICAL V/PH/Hz	FAN FLA	COOLING CAPACITY (BTUH)	HEATING CAPACITY (BTUH)	POWER (W)	MCA	VOLTS	PH		
SS/HP-1	140-380	208/1/60	0.76	9.0	10.9	710	12	208	1	R-410A	1, 2
SS/HP-2	200-500	208/1/60	0.67	15.0	18.0	1300	16	208	1	R-410A	1, 2

NOTES:

- PROVIDE UNIT WITH INTERNAL CONDENSATE PUMP AND INTERNAL HIGH WATER SHUTOFF SWITCH TO MEET IMC 2012 307.2.3.
- UNIT SHALL BE PROVIDE COOLING DOWN TO 14°F AND HEATING DOWN TO 0°F (OUTDOOR AMBIENT).

DATE

APPR

SYN DESCRIPTION




Lic. No. 053647
5/4/16



1305 EXECUTIVE BLVD.
SUITE 160
CHESAPEAKE, VA 23320

A/E INFO

APPROVED

FOR COMMANDER NAVFAC / B.L.T.L.

ACTIVITY
PER SA-TO DOCUMENT FROM GERARD MONTANA (PMBRANCH HEAD) WITH FEAD AT NAVAL STATION NEWPORT-NEWPORT, RI

SATISFACTORY TO DATE: 4/20/16

DES	CWS	DRW	JR	CHK	BF
PM / DM					MLWLEJ
BRANCH MANAGER					
CHIEF ENGINEER					
DWG					
FIRE PROTECTION					

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
 NORTH IPT
 NAVAL STATION NEWPORT
 NEWPORT, RHODE ISLAND
 NEWPORT, RHODE ISLAND
 RENOVATION OF NGIS, BUILDING 172
 MECHANICAL SCHEDULES

SCALE: AS NOTED

PROJECT NO. 13770079

CONSTR. CONTR. NO.

NAVFAC DRAWING NO. 12719531

SHEET 146 OF 200

M-601

DRAWING REVISION: 10 MAY 2014

FILE NAME: C:\Revit_Projects\180232-NGIS\180232-NGIS\180232_M_cwsouthall.rvt
 REV DATE: 4/29/2016 10:21:06 AM

DEDICATED OUTDOOR AIR HANDLING UNIT - DDC POINTS SCHEDULE

INPUTS		OUTPUTS	
AI1	HOT GAS REHEAT LVG TEMPERATURE**	AO1	NOT USED
AI2	NATURAL GAS VALVE (FEEDBACK)	AO2	OA ENERGY WHEEL BYPASS DAMPER**
AI3	INTAKE AIR RELATIVE HUMIDITY**	AO3	COMPRESSOR MODULATION**
AI4	INTAKE AIR TEMPERATURE**	AO4	SUPPLY FAN VFD SPEED CONTROL**
AI5	NOT USED	AO5	EA ENERGY WHEEL BYPASS DAMPER**
AI6	OA ENERGY BYPASS DAMPER (FEEDBACK)**	AO6	EXHAUST FAN VFD SPEED CONTROL**
AI7	OA ENERGY WHEEL LVG RELATIVE HUMIDITY**	AO7	NATURAL GAS VALVE (POSITION)
AI8	OA ENERGY WHEEL LVG TEMPERATURE**		
AI9	NOT USED		
AI10	COMPRESSOR SPEED FEEDBACK**		
AI11	DX COIL LVG TEMPERATURE**		
AI12	OA FLOWRATE**		
AI13	SUPPLY FAN VFD SPEED FEEDBACK**		
AI14	DISCHARGE AIR RELATIVE HUMIDITY**		
AI15	DISCHARGE AIR TEMPERATURE**		
AI16	EA TEMPERATURE**		
AI17	EA RELATIVE HUMIDITY**		
AI18	EA WHEEL BYPASS DAMPER (FEEDBACK)**		
AI19	EA WHEEL LVG TEMPERATURE**		
AI20	EA WHEEL LVG RELATIVE HUMIDITY**		
AI21	EA FLOWRATE**		
AI22	EXHAUST FAN VFD SPEED FEEDBACK**		
BI1	NOT USED	BO1	SUPPLY FAN START/STOP**
BI2	SUPPLY FAN STATUS**	BO2	EXHAUST FAN START/STOP**
BI3	SUPPLY FAN INTERNAL VFD ALARM**	BO3	ENERGY WHEEL START/STOP**
BI4	SA DUCT SMOKE DETECTOR*	BO4	NOT USED
BI5	EXHAUST FAN STATUS**	BO5	INTAKE AIR DAMPER**
BI6	EXHAUST FAN INTERNAL VFD ALARM**	BO6	EXHAUST AIR DAMPER**
BI7	NOT USED		
BI8	EMERGENCY SHUTDOWN SWITCH #1		
BI9	ENERGY WHEEL STATUS**		
BI10	INTAKE AIR DAMPER (FEEDBACK)**		
BI11	EXHAUST AIR DAMPER (FEEDBACK)**		
BI12	UNIT ALARM		
BI13	EA FILTER PRESSURE SWITCH**		
BI14	INTAKE PREFILTER PRESSURE SWITCH**		
BI15	INTAKE FINAL FILTER PRESSURE SWITCH**		
BI16	HIGH LIMIT PRESSURE SWITCH**		

* PROVIDE REDUNDANT SIGNAL IN SEPARATE CONDUIT TO FIRE ALARM PANEL
 **SENSORS/DEVICES SHALL BE MANUFACTURER'S STANDARD AND SHALL BE FACTORY INSTALLED AND TESTED.

SEQUENCE OF OPERATION - DOAS-1

GENERAL DESCRIPTION:

DOAS-1 WILL BE CONTROLLED BY FACTORY UNIT MOUNTED CONTROLLER. CONTROLLER SHALL HAVE CAPABILITY AND PRE-PROGRAMED SEQUENCES TO EXECUTE ALL FUNCTIONS SHOWN BELOW.

DOAS-1 SHALL BE ENABLED BY THE UNIT MOUNTED CONTROLLER. DOAS-1 IS EXPECTED TO OPERATE CONTINUOUSLY, 24 HOURS PER DAY, 365 DAYS PER YEAR, DURING WHICH IT WILL OPERATE IN THE OCCUPIED MODE.

THE DOAS SHALL HAVE A VARIABLE SPEED SUPPLY FAN, VARIABLE SPEED EXHAUST FAN, ENERGY WHEEL, DX COOLING COIL, HOT GAS RE-HEAT, AIR COOLED CONDENSER, INDIRECT GAS FIRED HEAT EXCHANGER, CONTROLLER, AND REQUIRED DAMPERS AND SENSORS.

OCCUPIED MODE:

WHEN THE UNIT IS IN THE OCCUPIED MODE THE OUTSIDE AIR AND EXHAUST DAMPERS SHALL OPEN. WHEN THE DAMPER POSITIONS ARE PROVEN OPEN THE SUPPLY AND EXHAUST FAN SHALL BE ENERGIZED. THE UNIT CONTROLS SHALL MODULATE THE SUPPLY FAN TO MAINTAIN CONSTANT OUTSIDE AIR FLOWRATE. THE EXHAUST FAN SHALL MODULATE TO MAINTAIN CONSTANT EXHAUST FLOWRATE.

TEMPERATURE CONTROL:

UNIT CONTROLLER SHALL MODULATE WHEEL BYPASS DAMPERS, ENERGIZE AND DE-ENERGIZE ENERGY RECOVERY WHEEL, PROVIDE VARIABLE DX COOLING CAPACITY, PROVIDE MODULATING HOT GAS REHEAT, AND MODULATE GAS FIRED HEAT TO MAINTAIN UNIT DISCHARGE HUMIDITY SETPOINT AND DISCHARGE AIR TEMPERATURE SETPOINT. BYPASS DAMPERS SHALL BE USED TO BYPASS ENERGY WHEEL IN ECONOMIZER MODE AND SHALL MODULATE TO MAINTAIN WHEEL DISCHARGE AIR CONDITIONS. ECONOMIZER MODE SHALL BE DEFINED AS THE TEMPERATURE AND ENTHALPY RANGE WHERE OPERATION OF THE ENERGY WHEEL WILL CONSUME MORE ENERGY THAN IT WILL SAVE. BYPASS DAMPERS SHALL BE MODULATED TO ENSURE ENERGY WHEEL DOES NOT DEVELOP FROST.

SETPOINTS:

- MAXIMUM UNIT DISCHARGE AIR DEW POINT TEMPERATURE (CALCULATED) IS 55°F.
- DISCHARGE AIR TEMPERATURE SHALL BE RESET PER THE DISCHARGE AIR RESET SCHEDULE BELOW. DISCHARGE AIR TEMPERATURE SHALL BE RAMPED LINEARLY WHEN OAT IS BETWEEN 35°F AND 70°F.

DISCHARGE AIR TEMPERATURE RESET SCHEDULE:

OAT	LAT
T<35°F	70°F (ADJUSTABLE)
T>80°F	55°F (ADJUSTABLE)

ATFP SHUTDOWN (EMERGENCY SHUTDOWN SWITCH #1):

UPON RECEIVING A SHUTDOWN SIGNAL FROM ESS (EMERGENCY SHUTDOWN SWITCH #1), DOAS SHALL BE DISABLED. AFTER THE DOAS IS OFF, THE OUTSIDE AND DISCHARGE AIR DAMPERS SHALL CLOSE.

SAFETY SHUTDOWN:

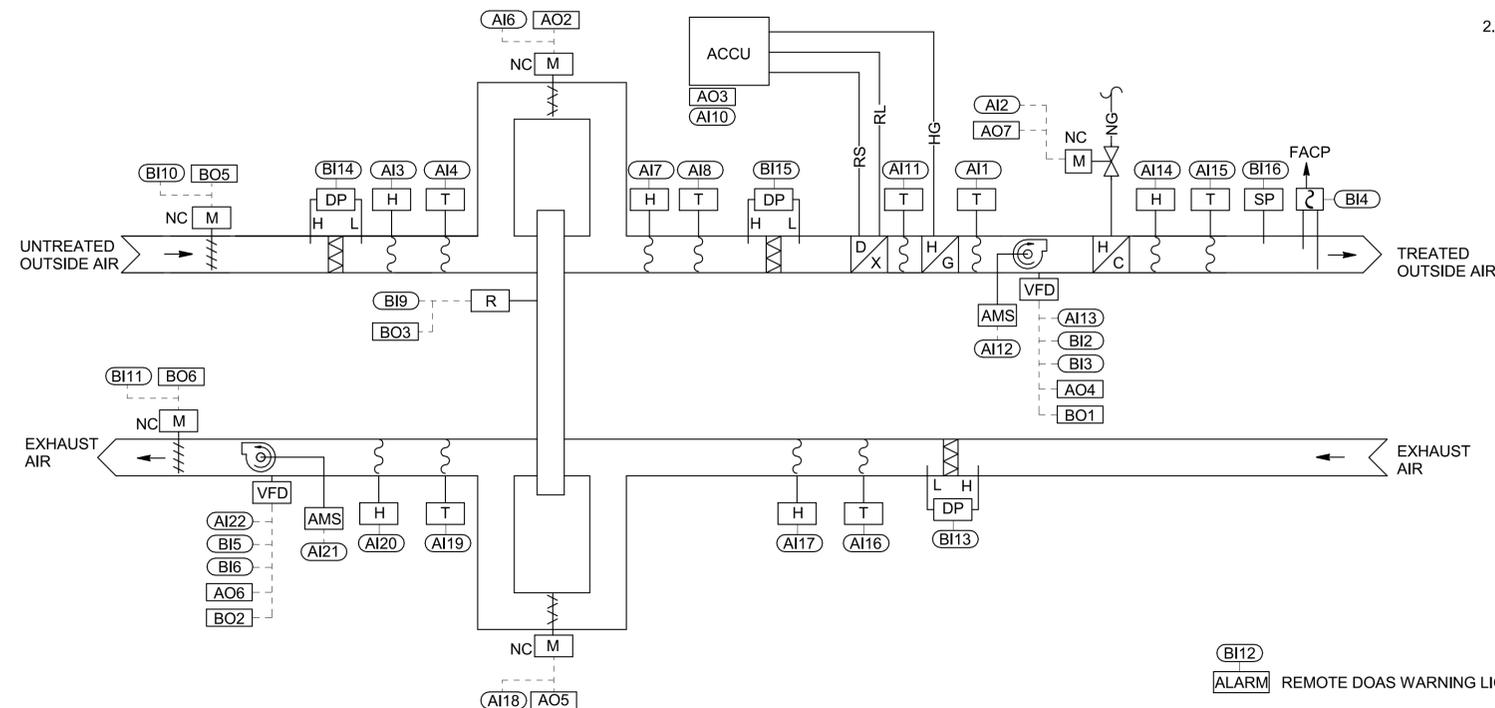
1. UPON DETECTING SMOKE VIA THE DUCT SMOKE DETECTOR(S), THE FAN SHALL SHUT DOWN AND ALL DAMPERS SHALL CLOSE. ADDITIONALLY, THE DUCT SMOKE DETECTOR SHALL SEND AN ALARM TO THE FACP INSTALLED AND WIRED BY DIVISION 28.
2. IF THE DISCHARGE AIR TEMPERATURE FALLS BELOW 48°F (ADJUSTABLE) THE FAN SHALL BE DE-ENERGIZED, THE DAMPERS SHALL CLOSE.
3. IF THE DUCT STATIC PRESSURE SENSOR DETECTS A STATIC PRESSURE HIGHER THAN 30% ABOVE FINAL TAB DUCT STATIC PRESSURE SETPOINT (ADJ.), BUT LESS THAN 2.0 IN WG H20, THE FAN SHALL STOP, THE DAMPERS SHALL CLOSE. AFTER A 5 MINUTE PERIOD (ADJUSTABLE) THE SYSTEM SHALL RESTART.

ALARMS:

AN ALARM SHALL BE DISPLAYED ON UNIT MOUNTED DDC CONTROL PANEL AND SHALL GENERATE A RED LIGHT AT THE ALARM LOCATED IN FIRST FLOOR LOBBY FOR THE FOLLOWING CONDITIONS:

- SUPPLY FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF
- SUPPLY FAN IN HAND: COMMANDED OFF, BUT STATUS IS ON
- EXHAUST FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF
- EXHAUST FAN IN HAND: COMMANDED OFF, BUT STATUS IS ON
- DAMPER COMMAND FAILURE
- DISCHARGE AIR TEMPERATURE +/- 3°F (ADJUSTABLE) FROM SETPOINT
- DISCHARGE AIR TEMPERATURE FALLS BELOW 48°F
- DISCHARGE AIR DEWPOINT TEMPERATURE IS + 5°F ABOVE SETPOINT
- HIGH STATIC PRESSURE
- DIRTY FILTERS
- WHEEL FAILURE
- FIRE ALARM

DEDICATED OUTDOOR AIR HANDLING UNIT



GENERAL NOTES:

1. REFER TO SHEET M-001 FOR MECHANICAL GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. SEE SHEET M1700 FOR CONTROLS LEGEND AND ABBREVIATIONS.

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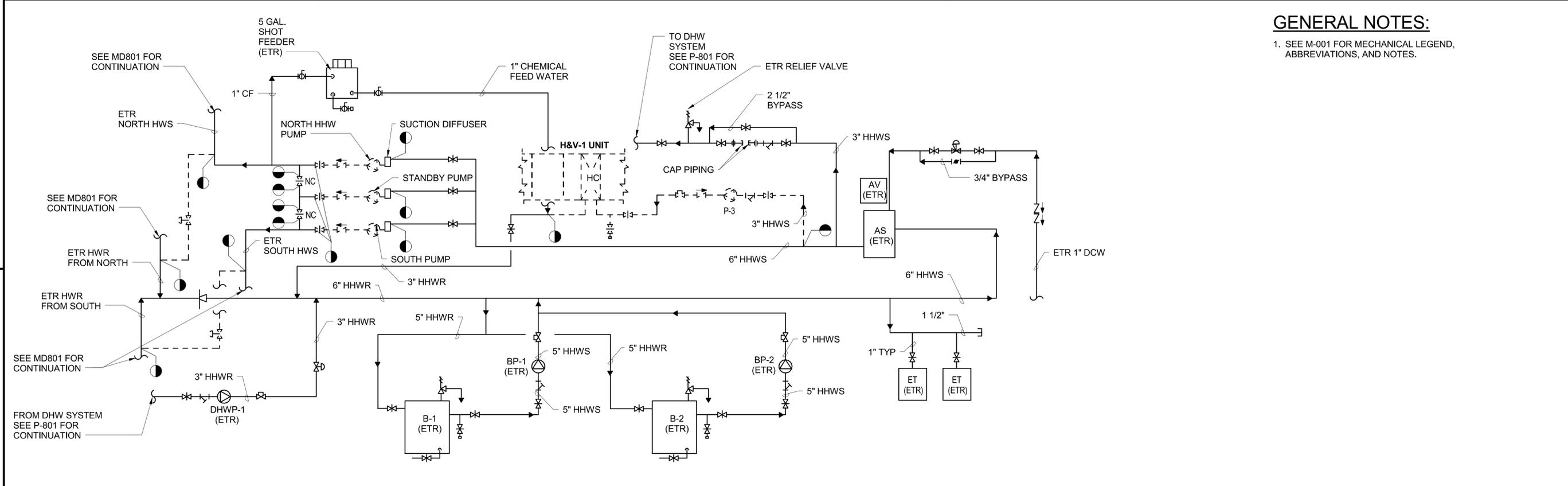
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DESCRIPTION	
SWR	
1305 EXECUTIVE BLVD. SUITE 160 CHESAPEAKE, VA 23320	
APPROVED	AE INFO
FOR COMMANDER NAVFAC/B.L.T.L.	
ACTIVITY	
PER SA-TO DOCUMENT FROM GERARD MONTANA (PMBRANCH HEAD) WITH HEAD AT NAVAL STATION NEWPORT-NEWPORT, RI	
SATISFACTORY TO DATE	
4/20/16	
DES	CWS
DRW	CWS
CHK	BF
PM/DM	MLWLEJ
BRANCH MANAGER	
CHIEF ENGINEER	
DWG	
FIRE PROTECTION	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC NEWPORT, RHODE ISLAND NAVAL STATION NEWPORT NEWPORT, RHODE ISLAND	
RENOVATION OF NGIS, BUILDING 172 HVAC CONTROLS AND SOO - DOAS-1	
SCALE:	AS NOTED
EPROJCT NO.	13770079
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	
12719533	
SHEET	148 OF 200
M1701 <small>DRAWING REVISION: 10 MAY 2014</small>	

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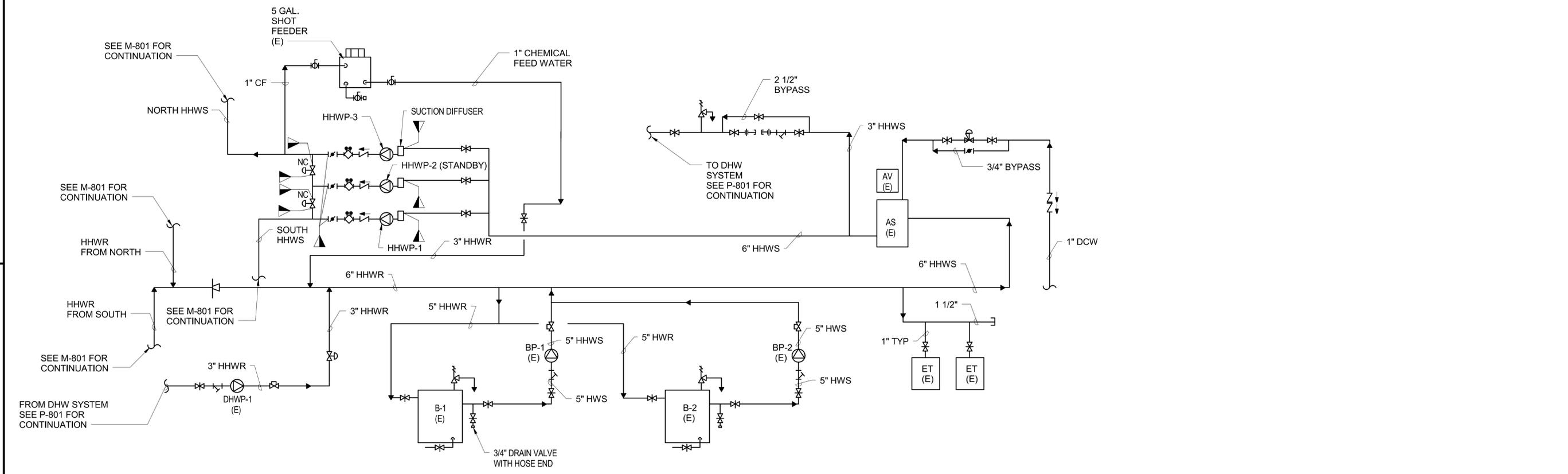
GENERAL NOTES:

- 1. SEE M-001 FOR MECHANICAL LEGEND, ABBREVIATIONS, AND NOTES.



BOILER PLANT SCHEMATIC - DEMOLITION / EXISTING

SCALE: NOT TO SCALE



BOILER PLANT SCHEMATIC - NEW WORK

SCALE: NOT TO SCALE

DATE	APPROVED
DESCRIPTION	
	
	
	
APPROVED FOR COMMANDER NAVFAC / B.L.T.L.	
ACTIVITY PER SAT-TO DOCUMENT FROM GERARD MONTANI (PMBRANCH HEAD) WITH FEED AT NAVAL STATION NEWPORT-NEWPORT, RI	
SATISFACTORY TO DATE 4/20/16	
DES	CWS
DRW	CWS
CHK	BF
PM / DM	MLWLEJ
BRANCH MANAGER CHIEF ENGINEER DWG	
FIRE PROTECTION	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC NORTH IPT NAVAL STATION NEWPORT NEWPORT, RHODE ISLAND	
RENOVATION OF NGIS, BUILDING 172 BOILER PLANT SCHEMATIC	
SCALE: AS NOTED	
EPROJCT NO. 13770079	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 12719537	
SHEET 152 OF 200	
M-802	
DRAWING REVISION: 10 MAY 2014	

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