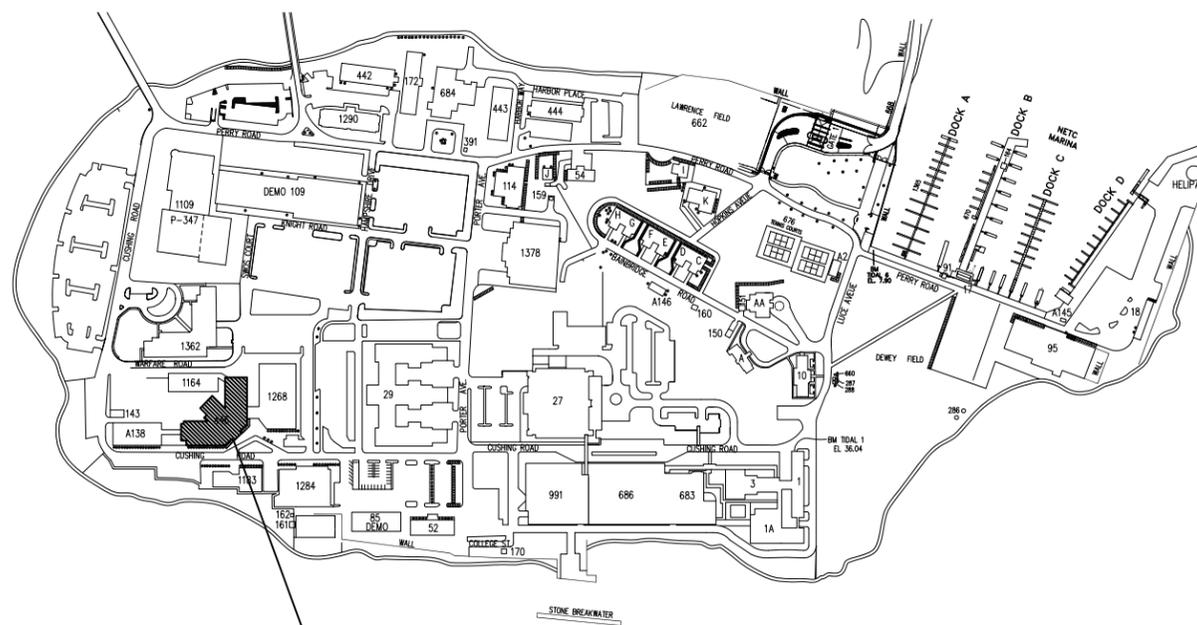
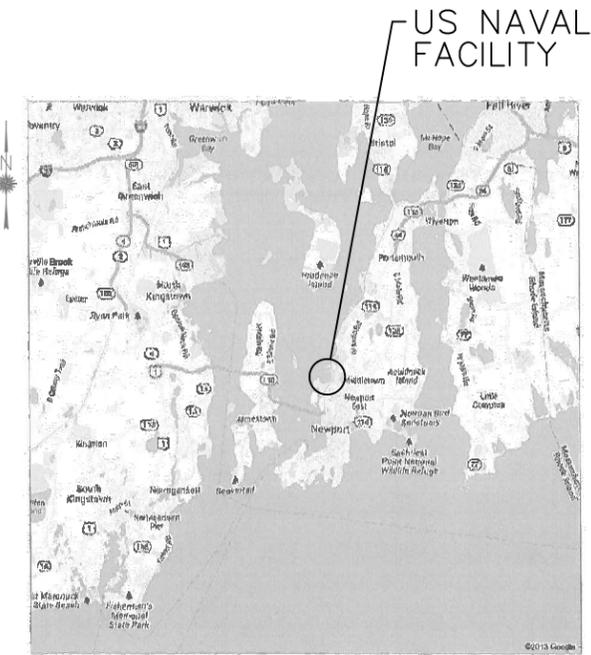


NAVAL STATION NEWPORT NEWPORT, RI BLDG. 446 HVAC REPLACEMENT CONTRACT NO. _____

LIST OF DRAWINGS

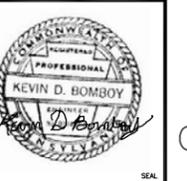
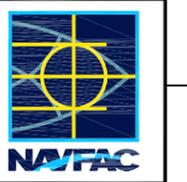
SHEET NO.	SHEET NO.	NAVFAc DWG. NO.	NAVSTA DWG. NO.	DRAWING TITLE	SHEET NO.	SHEET NO.	NAVFAc DWG. NO.	NAVSTA DWG. NO.	DRAWING TITLE
1	G-100	12684342	42235-390	COVER SHEET	25	M-201	12684366	42259-390	PARTIAL FIRST FLOOR PLAN - NEW PIPING
2	H-100	12684343	42236-390	ABATEMENT NOTES	26	M-202	12684367	42260-390	PARTIAL FIRST FLOOR PLAN - NEW PIPING
3	H-101	12684344	42237-390	PARTIAL FIRST FLOOR ABATEMENT PLAN	27	M-203	12684368	42261-390	PARTIAL SECOND FLOOR PLAN - NEW PIPING
4	H-102	12684345	42238-390	PARTIAL FIRST FLOOR ABATEMENT PLAN	28	M-204	12684369	42262-390	PARTIAL SECOND FLOOR PLAN - NEW PIPING
5	H-103	12684346	42239-390	PARTIAL SECOND FLOOR ABATEMENT PLAN	29	M-205	12684370	42263-390	ENLARGED MECHANICAL ROOM NEW WORK PLAN
6	H-104	12684347	42240-390	PARTIAL SECOND FLOOR ABATEMENT PLAN	30	M-501	12684371	42264-390	SCHEDULES
7	H-105	12684348	42241-390	PARTIAL ROOF ABATEMENT PLAN	31	M-601	12684372	42265-390	CONTROLS
8				NOT USED	32	M-602	12684373	42266-390	CONTROLS
9	S-001	12684350	42243-390	GENERAL STRUCTURAL NOTES AND LEGEND	33	M-701	12684374	42267-390	DETAILS
10	S-101	12684351	42244-390	PARTIAL FRAMING PLANS	34	M-702	12684375	42268-390	DETAILS
11	S-102	12684352	42245-390	DETAILS	35	E-001	12684376	42269-390	LEGEND AND GENERAL NOTES
12	M-100	12684353	42246-390	MECHANICAL LEGEND AND GENERAL NOTES	36	ED101	12684377	42270-390	PARTIAL FIRST FLOOR DEMOLITION PLAN
13	MD101	12684354	42247-390	PARTIAL FIRST FLOOR DEMOLITION PLAN	37	ED102	12684378	42271-390	PARTIAL FIRST FLOOR DEMOLITION PLAN
14	MD102	12684355	42248-390	PARTIAL FIRST FLOOR DEMOLITION PLAN	38	ED103	12684379	42272-390	PARTIAL SECOND FLOOR DEMOLITION PLAN
15	MD103	12684356	42249-390	PARTIAL SECOND FLOOR DEMOLITION PLAN	39	ED104	12684380	42273-390	PARTIAL SECOND FLOOR DEMOLITION PLAN
16	MD104	12684357	42250-390	PARTIAL SECOND FLOOR DEMOLITION PLAN	40	ED105	12684381	42274-390	PARTIAL ROOF DEMOLITION PLAN
17	MD105	12684358	42251-390	PARTIAL ROOF DEMOLITION PLAN	41	ED106	12684382	42275-390	PARTIAL ROOF DEMOLITION PLAN
18	MD106	12684359	42252-390	PARTIAL ROOF DEMOLITION PLAN	42	E-101	12684383	42276-390	PARTIAL FIRST FLOOR NEW WORK PLAN
19	MD107	12684360	42253-390	ENLARGED MECHANICAL ROOM DEMOLITION PLAN	43	E-102	12684384	42277-390	PARTIAL FIRST FLOOR NEW WORK PLAN
20	M-101	12684361	42254-390	PARTIAL FIRST FLOOR PLAN - NEW DUCTWORK	44	E-103	12684385	42278-390	PARTIAL SECOND FLOOR NEW WORK PLAN
21	M-102	12684362	42255-390	PARTIAL FIRST FLOOR PLAN - NEW DUCTWORK	45	E-104	12684386	42279-390	PARTIAL SECOND FLOOR NEW WORK PLAN
22	M-103	12684363	42256-390	PARTIAL SECOND FLOOR PLAN - NEW DUCTWORK	46	E-105	12684387	42280-390	PARTIAL ROOF NEW WORK PLAN
23	M-104	12684364	42257-390	PARTIAL SECOND FLOOR PLAN - NEW DUCTWORK	47	E-601	12684388	42281-390	PANEL SCHEDULES
24	M-105	12684365	42258-390	PARTIAL ROOF PLAN - NEW DUCTWORK					



SITE PLAN
SCALE: 1" = 300'

FINAL BID DOCUMENTS
01/16/15

REV	DATE	DESCRIPTION
0	01/16/15	FINAL BID DOCUMENTS
1	02/11/15	REVISED PER NAVFAC DESIGN REVIEW COMMENTS



APPROVED: _____
PER COMMANDER NAVFAC
ACTIVITY: _____

SATISFACTORY TO: _____ DATE: _____
DES: JMN | DRW: JWS | CHK: KDB
BRANCH MANAGER: _____
CHIEF ENG/ARCH: _____
DESIGN DIRECTOR: _____

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
PUBLIC WORKS DEPARTMENT
NAVAL STATION NEWPORT
NEWPORT, RHODE ISLAND
BUILDING 446 HVAC REPLACEMENT
COVER SHEET

SCALE: NO SCALE
EPROJCT NO.: 1312379
CONSTR. CONTR. NO.: _____
NAVFAC DRAWING NO.: 12684342
SHEET 1 OF 47
G-100

FILE NAME: I:\Projects\301643\301643_0001\90_CAD_Models_and_Sheets\00_General\0100.dwg LAYOUT NAME: G-001 PLOTTED: Friday, February 13, 2015 - 7:24am USER: sidsley

GENERAL SHEET NOTES

- REFER TO AND COORDINATE WITH ALL CONTRACT DOCUMENTS FOR LOCATION OF DEMOLITION WORK.
- THE ENVIRONMENTAL ABATEMENT SCOPE INCLUDES THE WORK REQUIRED BY THE SPECIFICATIONS, DRAWINGS, AND THE SURVEY REPORT. THE CONTRACTOR SHALL FIRST LOOK TO WHAT IS REQUIRED BY THE SPECIFICATIONS AND THEN COORDINATE THAT WITH WHAT IS REQUIRED BY THE DRAWINGS AND THE SURVEY REPORT. ORDER OF PRECEDENCE OF THE CONTRACT DOCUMENTS IS FIRST THE SPECIFICATIONS, SECOND THE DRAWINGS AND THIRD (FOR ENVIRONMENTAL INFORMATION PURPOSES ONLY) THE SURVEY REPORTS.
- THE CONTRACTOR SHALL SUBMIT PROOF OF TRAINING IN ACCORDANCE WITH THE REVISED OSHA HAZARD COMMUNICATION STANDARD "GLOBAL HARMONIZATION TRAINING" PRIOR TO COMMENCEMENT OF WORK.
- DRAWINGS ARE DIAGRAMMATIC ONLY. THE CONTRACTOR SHALL VERIFY ALL JOB SITE CONDITIONS, DIMENSIONS AND QUANTITIES.

ASBESTOS-CONTAINING MATERIALS

- ALL ASBESTOS ABATEMENT WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE SPECIFICATIONS, AND FEDERAL, STATE AND LOCAL LAWS INCLUDING BUT NOT LIMITED TO THE STATE OF RHODE ISLAND RULES AND REGULATIONS FOR ASBESTOS CONTROL (R23-24.5-ASB).
- PRIOR TO THE START OF WORK THE CONTRACTOR SHALL PROVIDE A DETAILED ASBESTOS REMOVAL AND DISPOSAL WORK PLAN IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS.
- THE ABATEMENT CONTRACTOR SHALL HOLD AND DOCUMENT A PRE-ABATEMENT SAFETY MEETING, WITH PROJECT MONITORS, APPROPRIATE REPRESENTATIVES OF THE OWNER, THE AUTHORITIES HAVING JURISDICTION, AND THE GC TO REVIEW SAFE WORK PRACTICES AND EMERGENCY COMMUNICATION PROGRAM FOR THE PROJECT. THE CONTRACTOR SHALL ENSURE PROPER FIRE EXTINGUISHING EQUIPMENT IS PRESENT, A COMPETENT PERSON IS KNOWLEDGEABLE IN THE USE OF FIRE EXTINGUISHING EQUIPMENT, AND EMERGENCY EXIT PLANS AND PHONE NUMBERS ARE POSTED IN THE IMMEDIATE VICINITY OF WORK AREAS.
- CONTRACTOR SHALL POST APPROVED "ASBESTOS WARNING" SIGNS. THE AREA SHALL BE DESIGNATED OFF LIMITS TO UNAUTHORIZED PERSONNEL.
- NO ASBESTOS-CONTAINING MATERIALS SHALL BE DISTURBED UNTIL ALL ENGINEERING CONTROLS ARE ESTABLISHED, ALL REQUIRED NOTICES ARE POSTED AND ALL REQUIRED APPROVALS ARE OBTAINED FROM THE AUTHORITIES HAVING JURISDICTION.
- CERTIFIED ASBESTOS WORKERS & SUPERVISORS SHALL WEAR 1/2 FACE NEGATIVE PRESSURE RESPIRATORS DURING PREPARATION WORK.
- CONTRACTOR SHALL INSTALL AND MAINTAIN PUBLIC PROTECTION DEVICES AND TEMPORARY SIGNAGE, AS REQUIRED.
- PROJECT PHASING WILL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND REPRESENTATIVES OF THE AUTHORITY HAVING JURISDICTION IN SUCH A WAY AS TO MINIMIZE DISRUPTION OF ONGOING OPERATIONS. ALL POWER TO THE WORK AREA SHALL BE GFCI PROTECTED.
- THESE ASBESTOS ABATEMENT DRAWINGS IDENTIFY ASBESTOS-CONTAINING MATERIALS AND SUSPECT ASBESTOS-CONTAINING MATERIALS THAT ARE EXPECTED TO BE AFFECTED WITHIN THE FOOTPRINT OF THE PROPOSED SCOPE.
- ASBESTOS-CONTAINING MATERIALS AND SUSPECT ASBESTOS-CONTAINING MATERIALS ARE KNOWN TO EXIST IN AREAS ADJACENT TO THE BOUNDARIES OF THE SCOPE AND HAVE POTENTIAL TO BE IMPACTED BY THE PROPOSED CONSTRUCTION ACTIVITIES. ASBESTOS ABATEMENT WORK PLANS SHALL BE PROVIDED BY THE CONTRACTOR, FOR APPROVAL BY THE OWNERS REPRESENTATIVE, IN DIRECT COORDINATION AND IN CONJUNCTION WITH THE PROPOSED RENOVATION WORK ASSOCIATED WITH THE PROPOSED PROJECT SCOPE.
- CONTRACTOR MUST HAVE ALL APPLICABLE APPROVED PERMITS AND PROOF OF REQUIRED NOTIFICATIONS IN HAND AND ON-SITE PRIOR TO START OF ANY ABATEMENT WORK AND HAVE ISSUED ALL NOTIFICATIONS AND COMPLIED WITH MANDATORY WAITING PERIODS.
- THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200.
- THE CONTRACTOR SHALL MANAGE, TRANSPORT AND DISPOSE OF ASBESTOS-CONTAINING WASTE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
- ALL ABATEMENT AND CONSTRUCTION WORK SHALL COMPLY WITH THE NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTION (NESHAP) (CITED AS 40 CFR PART 61 SUBPART M).
- THE ASBESTOS CONTRACTOR SHALL PROVIDE OSHA AIR SAMPLING FOR HIS PERSONNEL. THIS OSHA AIR SAMPLING SHALL BE PERFORMED IN THE WORKER'S BREATHING ZONE, AS REQUIRED BY CURRENT OSHA REGULATIONS.
- SHOULD THE CONTRACTOR PROCEED TO WORK WITHOUT NOTIFYING THE OWNER OF THESE KNOWN OR SUSPECT ASBESTOS-CONTAINING MATERIALS ENCOUNTERED OR OTHER DISCREPANCIES, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL COSTS ASSOCIATED WITH THE CONTAINMENT, CLEAN UP, AND OTHER COSTS AND DAMAGES RESULTING THEREFROM. THE OWNER RESERVES THE RIGHT TO UTILIZE ITS ASBESTOS CONTRACTORS TO CONDUCT ANY SUCH CLEAN-UP AT THE CONTRACTORS SOLE EXPENSE.
- THE CONTRACTOR SHALL NOT UNLAWFULLY IMPACT EXISTING LIFE SAFETY EQUIPMENT AND SYSTEMS THAT PASS THROUGH, ARE EXCLUSIVELY ACCESSIBLE FROM, AND/OR SERVE AREAS OF WORK.
- THE CONTRACTOR SHALL SEQUENCE WORK TO PREVENT CROSS CONTAMINATION IN ACCORDANCE WITH PROJECT SCHEDULE SO AS NOT TO DELAY OTHER SUBSEQUENT WORK.
- IF ANY AIR SAMPLES COLLECTED OUTSIDE CONTAINMENT AREA DURING ABATEMENT MEET OR EXCEED 0.01 FIBER PER CUBIC CENTIMETER OR THE BACKGROUND LEVEL, WHICHEVER IS GREATER, WORK SHALL BE STOPPED AND METHODS ALTERED TO REDUCE THE ASBESTOS FIBER CONCENTRATION TO THE AFOREMENTIONED LEVEL.
- THE CONTRACTOR SHALL FIELD VERIFY THE AMOUNT OF ACM AND FAMILIARIZE HIMSELF IN ALL VARIABLE FIELD CONDITIONS AT THE SITE BEFORE THE SUBMISSION OF THEIR BID. FAILURE TO FAMILIARIZE THEMSELVES WITH ACTUAL AND PLANNED CONDITIONS AFFECTING THE WORK SHALL NOT BE GROUNDS FOR ADDITIONAL COSTS OR TIME TO COMPLETE THE WORK.
- IN ADDITION TO THE AUTHORITIES HAVING JURISDICTION, THE OWNER'S REPRESENTATIVE AND THE OWNER'S ENVIRONMENTAL CONSULTANT SHALL HAVE THE AUTHORITY TO STOP THE ABATEMENT WORK AT ANY TIME A DETERMINATION IS MADE THAT CONDITIONS ARE NOT WITHIN SPECIFICATION AND APPLICABLE REGULATIONS. THE STOPPAGE OF WORK SHALL CONTINUE UNTIL CONDITIONS HAVE BEEN CORRECTED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AND OWNER'S ENVIRONMENTAL CONSULTANT. STANDBY TIME TO RESOLVE THE PROBLEMS SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE.

LEAD-CONTAINING MATERIALS

- THE CONTRACTOR SHALL PERFORM WORK THAT AFFECTS LEAD CONTAINING PAINT IN STRICT ACCORDANCE WITH THE CONTRACT SPECIFICATIONS, OSHA LEAD IN CONSTRUCTION STANDARD 29 CFR 1926.62, FEDERAL, STATE AND LOCAL LAWS.
- PRIOR TO THE START OF WORK THE CONTRACTOR SHALL PROVIDE A DETAILED LEAD MANAGEMENT WORK PLAN IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS.
- LEAD-CONTAINING PAINT IS EXPECTED TO BE AFFECTED WITHIN THE FOOTPRINT OF THE PROPOSED SCOPE OF WORK.
- THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200.
- THE CONTRACTOR SHALL CONTAIN THE LEAD WORK AREA IN ACCORDANCE WITH SSPC GUIDE 6 - GUIDE FOR CONTAINING DEBRIS GENERATED DURING PAINT REMOVAL OPERATIONS AND THE CONTRACT SPECIFICATIONS.
- ON ANY STRUCTURES WHERE TORCH CUTTING, OPEN FLAME BURNING, RIVET/BOLT BUSTING, WELDING, OR OTHER IMPACT WHICH MAY BE ASSUMED TO CAUSE LEAD PARTICULATE RELEASES, THE WORK SHALL BE PERMITTED ONLY AFTER ALL VISIBLE PAINT HAS BEEN REMOVED FROM ALL SIDES OF THE STRUCTURE DOWN TO THE SUBSTRATE SURFACE FOR A MINIMUM OF FOUR (4) INCHES ON BOTH SIDES OF THE CUT LINE WHERE CUTTING, BURNING, WELDING, OR RIVET/BOLT BUSTING WILL TAKE PLACE.
- THE CONTRACTOR SHALL DESIGNATE A COMPETENT PERSON WITH CREDENTIALS, CERTIFICATION AND EXPERIENCE AS DEFINED BY DISTURBANCE OF LEAD CONTAINING SURFACE COATINGS SPECIFICATION. CONTRACTORS COMPETENT PERSON SHALL ENFORCE OSHA LEAD REQUIREMENTS AND PERFORM DAILY INSPECTIONS OF THE WORK AREA.
- THE CONTRACTOR SHALL PROVIDE OSHA INITIAL EXPOSURE ASSESSMENT AIR SAMPLING FOR HIS PERSONNEL. THIS OSHA AIR SAMPLING SHALL BE PERFORMED IN THE WORKER'S BREATHING ZONE, AS REQUIRED BY CURRENT OSHA REGULATIONS.
- THE CONTRACTOR SHALL CLEAN ACCUMULATIONS OF DUST OR DEBRIS CONTAINING LEAD DAILY AND CONDUCT ALL CLEANING WITH HEPA (HIGH EFFICIENCY PARTICULATE AIR) FILTERED VACUUMS. CONTAINERIZE THE DEBRIS FOR PROPER DISPOSAL. LABEL BAGS AND CONTAINERS AS LEAD-CONTAINING WASTE.
- THE CONTRACTOR SHALL ESTABLISH RESTRICTED ZONES AROUND AREAS OR ACTIVITIES THAT MIGHT GENERATE AIRBORNE EMISSIONS OF LEAD IN EXCESS OF THE OSHA ACTION LEVEL AND POST CAUTION SIGNS AROUND EACH RESTRICTED ZONE.
- THE CONTRACTOR SHALL CONDUCT DAILY ASSESSMENTS OF VISIBLE EMISSIONS AND RELEASES FROM THE WORK AREA AND SHALL UNDERTAKE ALL NECESSARY CORRECTIVE ACTION TO CONTROL EMISSIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE COLLECTION, HANDLING, STORAGE, TRANSPORTATION AND DISPOSAL OF ALL HAZARDOUS WASTES GENERATED FROM THIS WORK.
- THE CONTRACTOR SHALL MANAGE, TRANSPORT AND DISPOSE OF LEAD-CONTAINING WASTE IN ACCORDANCE WITH CONTRACT DOCUMENTS, FEDERAL, STATE AND LOCAL REGULATIONS.
- THE CONTRACTOR SHALL NOT UNLAWFULLY IMPACT EXISTING LIFE SAFETY EQUIPMENT AND SYSTEMS THAT PASS THROUGH, ARE EXCLUSIVELY ACCESSIBLE FROM, AND/OR SERVE AREAS OF WORK.
- THE CONTRACTOR SHALL SEQUENCE WORK TO PREVENT CROSS CONTAMINATION IN ACCORDANCE WITH PROJECT SCHEDULE SO AS NOT TO DELAY OTHER SUBSEQUENT WORK.
- THE CONTRACTORS SCOPE OF WORK FOR LEAD-CONTAINING PAINT SHALL INCLUDE WORK AS NOTED ON DRAWINGS AND SPECIFICATIONS AND AS-NEEDED FOR THE PROTECTION OF WORKERS, GENERAL PUBLIC AND ENVIRONMENT TO IMPLEMENT DEMOLITION AND CONSTRUCTION WORK.

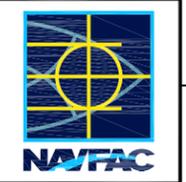
ASBESTOS CONTAINING MATERIALS QUANTITIES			
MATERIAL	ESTIMATED QUANTITY (NOTE 1)	REMOVAL METHOD	CONTAINMENT TYPE
REMOVE 2'X4' CEILING TILES (FIRST FLOOR)	18,236 SF	INTERIOR FRIABLE	FULL CONTAINMENT
REMOVE 2'X4' CEILING TILES AND DEBRIS ON TOP OF CEILING TILES (SECOND FLOOR)	18,236 SF	INTERIOR FRIABLE	FULL CONTAINMENT
CLEAN DUCTWORK AND UNIT VENTILATORS	1500 SF	HEPA VACUUM, WET CLEAN	FULL CONTAINMENT
REMOVE RED DUCT SEAM SEALANT	40 SF	INTERIOR NON-FRIABLE	NEGATIVE PRESSURE TENT ENCLOSURE
REMOVE WALLBOARD / JOINT COMPOUND	435 SF	INTERIOR FRIABLE	NEGATIVE PRESSURE TENT ENCLOSURE
REMOVE FLOOR TILE AND ASSOCIATED MASTIC	230 SF	INTERIOR NON-FRIABLE	NEGATIVE PRESSURE TENT ENCLOSURE
REMOVE BLACK ROOF FLASHING AND ROOF PITCH POCKETS	200 SF	EXTERIOR NON-FRIABLE	LIMITED CONTAINMENT
CLEAN AND STORE LIGHT FIXTURES (2ND FLOOR)	200 FIXTURES	HEPA VACUUM, WET CLEAN	FULL CONTAINMENT
CLEAN PIPING (2ND FLOOR)	450 LF	HEPA VACUUM, WET CLEAN	FULL CONTAINMENT
REMOVE SHOWER CEILING COATING	20 SF	INTERIOR FRIABLE	NEGATIVE PRESSURE TENT ENCLOSURE

NOTE:
1. QUANTITIES ARE APPROXIMATIONS AND SHOULD BE FIELD VERIFIED BY CONTRACTOR.

OSHA LEAD-CONTAINING PAINT QUANTITY TABLE				
COMPONENT	LOCATION	SUBSTRATE	COLOR	APPROXIMATE QUANTITY
WALLS	THROUGHOUT	WALL BOARD AND CMU	GREEN, WHITE, BEIGE, BLUE	435 SF
STRUCTURAL STEEL	ROOF FRAMING AND THROUGHOUT	METAL	RED, ORANGE	200 SF

UNIVERSAL WASTE			
HAZARDOUS MATERIAL	DESCRIPTION	LOCATION	TOTAL APPROXIMATE QUANTITY
MERCURY	THERMOSTAT	THROUGHOUT	45

DATE	01/16/15
DESCRIPTION	FINAL BID DOCUMENTS
SYN	0



STV
STV Incorporated
205 West Welsh Drive
Douglassville, PA 19318
610-385-8200
www.stvnc.com

APPROVED

FOR COMMANDER NAFAC
ACTIVITY

FACTORY TO DATE

DES DG | DRW JWS | CHK JZ

BRANCH MANAGER
CHIEF ENGINEER
DESIGN DIRECTOR

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
NAVAL STATION NEWPORT
NAVAL STATION NEWPORT - NEWPORT, RHODE ISLAND
BUILDING 446 HVAC REPLACEMENT
ABATEMENT NOTES

SCALE: NO SCALE
EPROJECT NO.: 1312379
CONSTR. CONTR. NO.

NAVFAC DRAWING NO. 12684343
SHEET 2 OF 47

H-100

FILE NAME: I:\Projects\301643\301643_0001\90_CAD_Models_and_Sheets\01_H_Hazardous Material\H-100.dwg LAYOUT NAME: H-100 PLOTTED: Thursday, January 15, 2015 - 1:41pm USER: sckkqj

ROOM SCHEDULE	
ROOM NUMBER	ROOM NAME
100	ENTRANCE VESTIBULE
101	LOBBY
102	STAIR A
103	O.D.
104	SAFETY ROOM
105	CPO MESS
106	LCS CST INSTRUCTOR OFFICE
107	E.M. INSTR. OFFICE
108	CORR. I
109	LCS-1 CST LAB
110	LCS-1 CST CR
111	CORR. H
113	CORR. G
116	LCS-2 CST LAB
117	LCS-2 CST CR
118	STORAGE CLOSET
119	CLASSROOM
120	DATA ROOM
121	STORAGE
123	E.M. CLASSROOM #5
124	STORAGE
125	E.M. TOILET #1

ROOM NUMBER	ROOM NAME
125A	JANITOR
126	C.P.O. TOILET #1
127	SHOWER ROOM
127A	STORAGE
128	CORR. A
129	SERVICE ROOM
130	CORR. J
131	LADIES
131A	SOUND ROOM
134	STORAGE ROOM
138	MAIL
140	CORRIDOR
144	ISWOS
146	ISWOS
159	AUDITORIUM

PHASING NOTES

1. WORK SHALL BE ACCOMPLISHED IN 2 PHASES, PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

GENERAL SHEET NOTES

1. FOR ABATEMENT NOTES SEE SHEET H-100.

SHEET KEYNOTES

- REMOVE 2'x4' CEILING TILES.
- REMOVE WALLBOARD/JOINT COMPOUND AS NEEDED.
- REMOVE FLOOR TILE AND ASSOCIATED MASTIC AS NEEDED.
- REMOVE RED DUCT SEAM SEALANT.
- REMOVE SHOWER CEILING COATING AS NEEDED.

DATE	01/16/15
DESCRIPTION	FINAL BID DOCUMENTS
SYN	0



STV
 STV Incorporated
 205 West Welsh Drive
 Douglassville, PA 19518
 610-385-8200
 www.stvnc.com

APPROVED

FOR COMMANDER NAVFAC

SATISFACTORY TO DATE

DES: DG DW: JWS CHK: JZ

BRANCH MANAGER

CHIEF ENG/ARCH

DESIGN DIRECTOR

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC

PUBLIC WORKS DEPARTMENT

NAVAL STATION NEWPORT

NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT

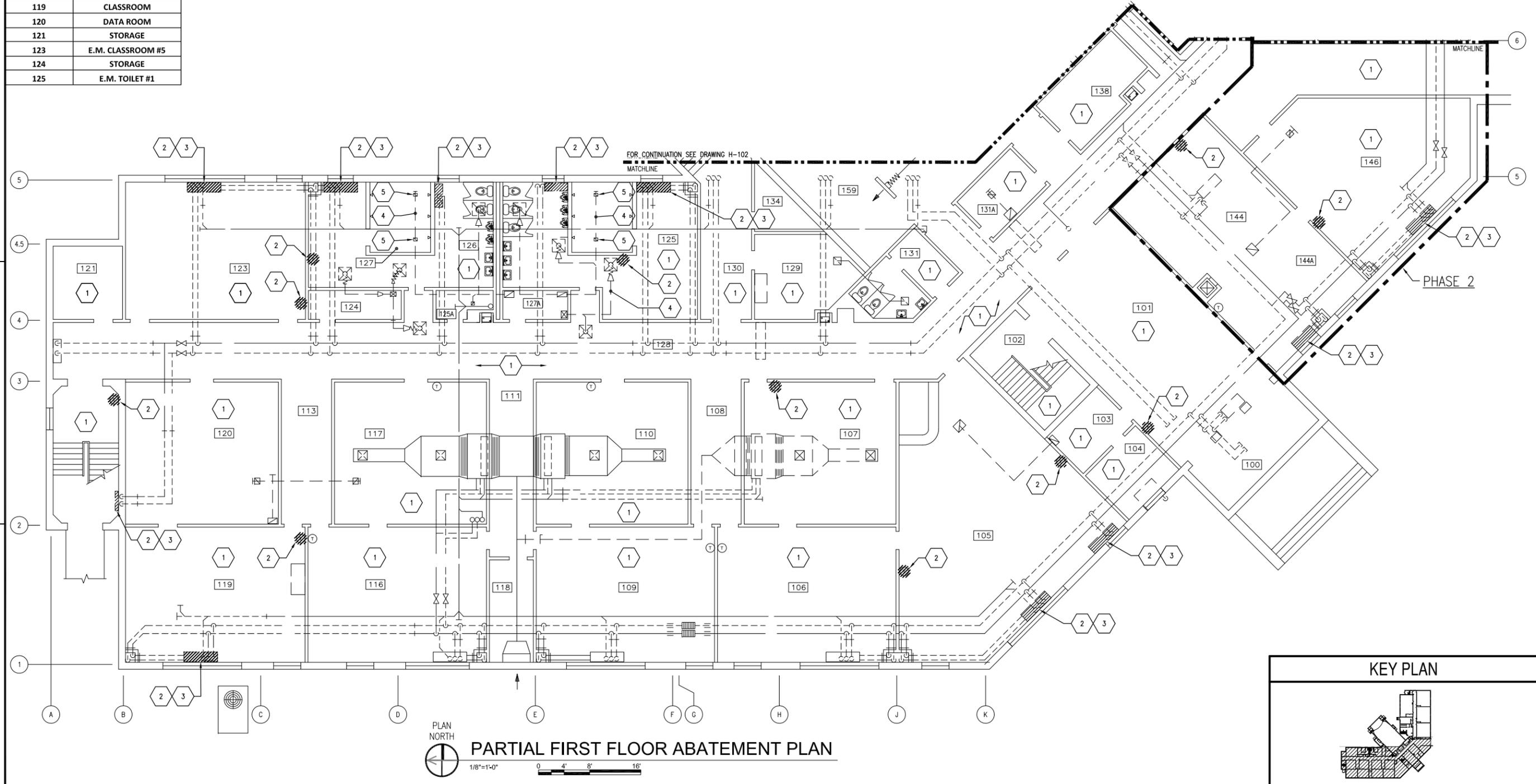
PARTIAL FIRST FLOOR ABATEMENT PLAN

SCALE: AS NOTED

PROJECT NO.: 1312379

CONSTR. CONTR. NO.

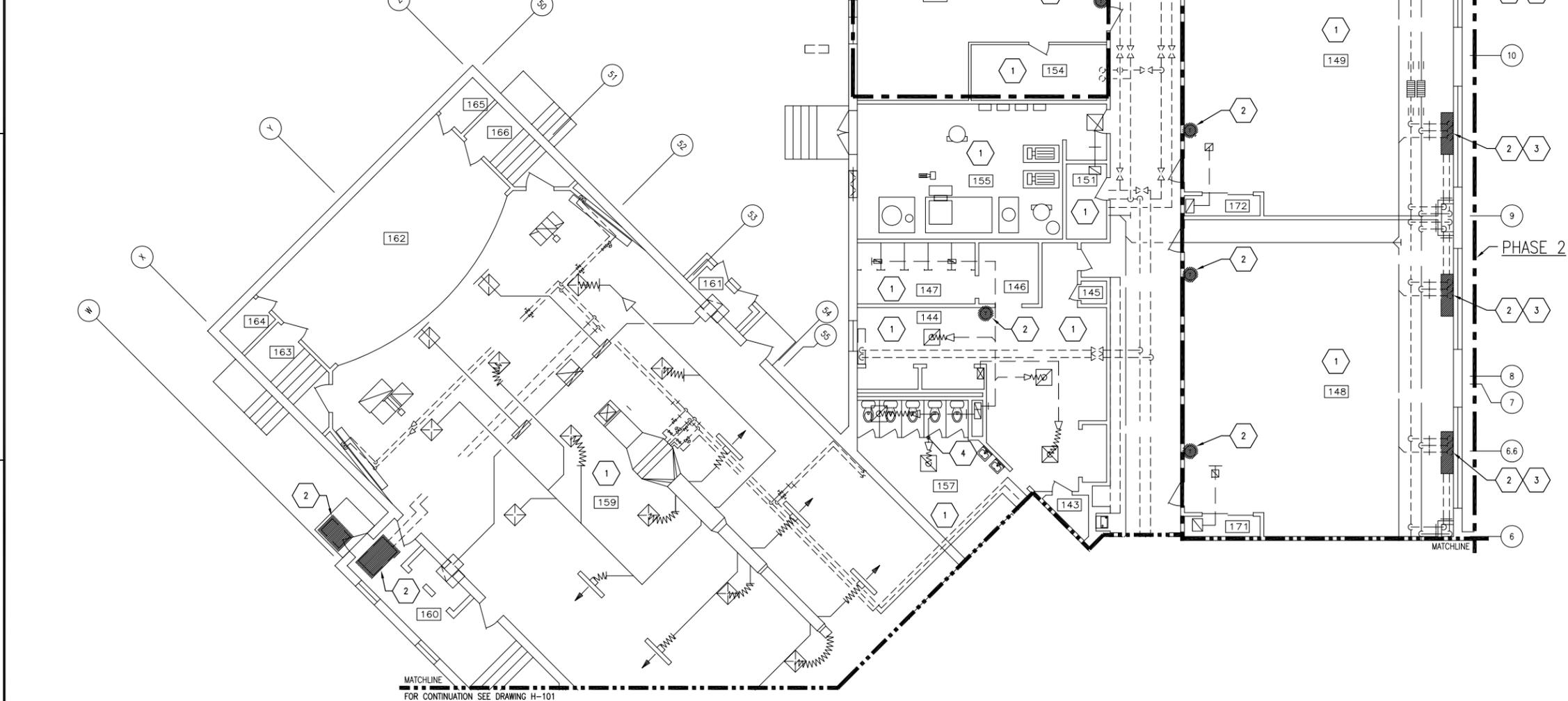
NAVFAC DRAWING NO. 12684344
 SHEET 3 OF 47
H-101
 DRAWING REVISION: 10 MARCH 2009
 NAVSTA DWG. NO. 42237-390



FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD Models and Sheets\01_H_Hazardous Material\H-101.dwg LAYOUT NAME: H-101 PLOTTED: Thursday, January 15, 2015 - 1:43pm USER: stcklye

FILE NAME: I:\Projects\301643\301643_0001\90_CAD_Models_and_Sheets\01_Hazardous_Material\H-102.dwg LAYOUT NAME: H-102 PLOTTED: Thursday, January 15, 2015 - 1:46pm USER: sckhjr

ROOM SCHEDULE	
ROOM NUMBER	ROOM NAME
141	CORRIDOR
143	CLOSET
144	OFFICERS LOCKER ROOM
145	CLOSET
146	DRYING ROOM
147	SHOWER ROOM
148	ISWOS N72
149	ISWOS N72
150	N74
151	JANITOR
152	STORAGE
153	VTT
154	LAN
155	MECH. ROOM
156	STAIR C
157	RESTROOM
159	AUDITORIUM
160	CORRIDOR "J"
161	CLOSET
162	STAGE
163	VEST. #1
164	CLOSET
165	CLOSET
166	VEST. #2
171	CLOSET
172	CLOSET
173	CLOSET



MATCHLINE
FOR CONTINUATION SEE DRAWING H-101



PARTIAL FIRST FLOOR ABATEMENT PLAN

GENERAL SHEET NOTES

1. FOR ABATEMENT NOTES SEE SHEET H-100.

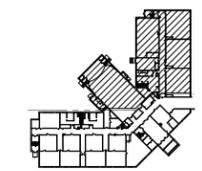
SHEET KEYNOTES

1. REMOVE 2'x4' CEILING TILES.
2. REMOVE WALLBOARD/JOINT COMPOUND AS NEEDED.
3. REMOVE FLOOR TILE AND ASSOCIATED MASTIC AS NEEDED.
4. REMOVE RED DUCT SEAM SEALANT.

PHASING NOTES

1. WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

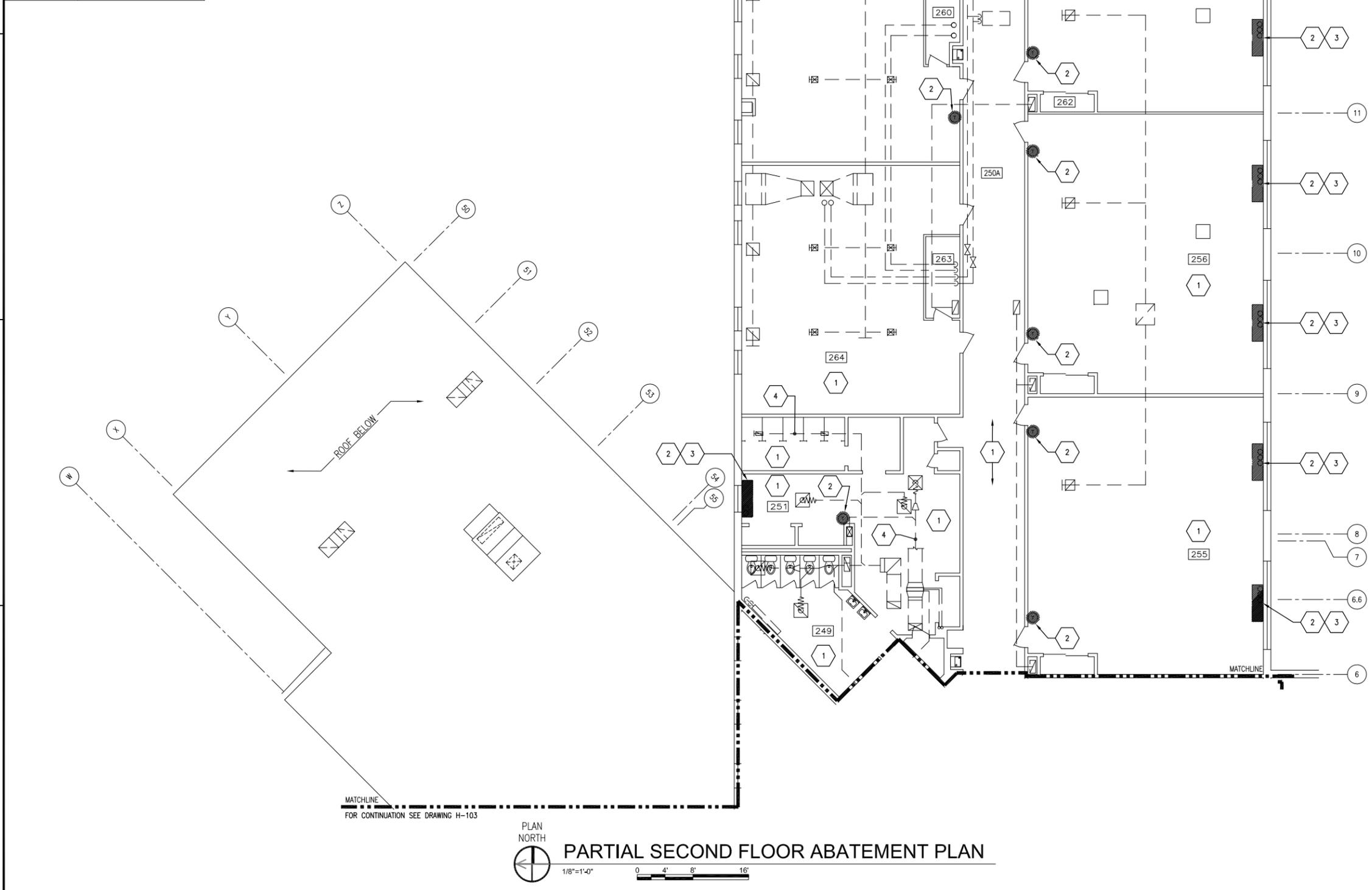
KEY PLAN



APPROVED	DATE	01/16/15
FOR COMMANDER NAVFAC	DESCRIPTION	FINAL BID DOCUMENTS
SATISFACTORY TO	DATE	
DES: DG	DRW: JWS	CHK: JZ
BRANCH MANAGER		
CHIEF ENGR/ARCH		
DESIGN DIRECTOR		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC PUBLIC WORKS DEPARTMENT NAVAL STATION NEWPORT NEWPORT, RHODE ISLAND		
BUILDING 446 HVAC REPLACEMENT PARTIAL FIRST FLOOR ABATEMENT PLAN		
SCALE:	AS NOTED	
EPROJECT NO.:	1312379	
CONSTR. CONTR. NO.		
NAVFAC DRAWING NO.	12684345	
SHEET	4 OF 47	
H-102		
DRAWN/REVISED: 10 MARCH 2009 NAVSTA DWG. NO. 42238-390		

FILE NAME: I:\Projects\301643\301643_0001\90_CAD_Models_and_Sheets\01_Hazardous_Material\H-104.dwg LAYOUT NAME: H-104 PLOTTED: Thursday, January 15, 2015 - 1:53pm USER: sckkyj*

ROOM SCHEDULE	
ROOM NUMBER	ROOM NAME
249	OFF TOILET #2
250	STAIR
250A	CORR. F
251	OFFICERS LOCKER ROOM #2
254	CLOSET
255	TRAINING REQ. (N9)
256	VTC
257	OMMS-NG (N72)
259	CLOSET
260	STORAGE
261	MCM
262	CLOSET
263	STORAGE
264	ADMIN (N1)



GENERAL SHEET NOTES

- FOR ABATEMENT NOTES SEE SHEET H-100.
- CLEAN EXISTING TO REMAIN DUCTWORK AND UNIT VENTILATORS.
- CLEAN AND STORE LIGHT FIXTURES.
- CLEAN PIPING.

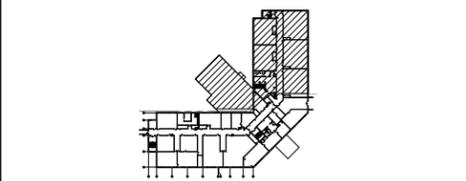
SHEET KEYNOTES

- REMOVE 2'x4' CEILING TILES AND DEBRIS ON TOP OF CEILING TILES.
- REMOVE WALLBOARD/JOINT COMPOUND AS NEEDED.
- REMOVE FLOOR TILE AND ASSOCIATED MASTIC AS NEEDED.
- REMOVE RED DUCT SEAM SEALANT.

PHASING NOTES

- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

KEY PLAN



DATE	01/16/15
APPR	
DESCRIPTION	FINAL BID DOCUMENTS
SYN	0




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SATISFACTORY TO: _____ DATE: _____
DES: DG | DRW: JWS | CHK: JZ
BRANCH MANAGER: <<PM/CM>>
CHIEF ENG/ARCH: _____
DESIGN DIRECTOR: _____

DEPARTMENT OF THE NAVY
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BUILDING 446 HVAC REPLACEMENT
PARTIAL SECOND FLOOR ABATEMENT PLAN

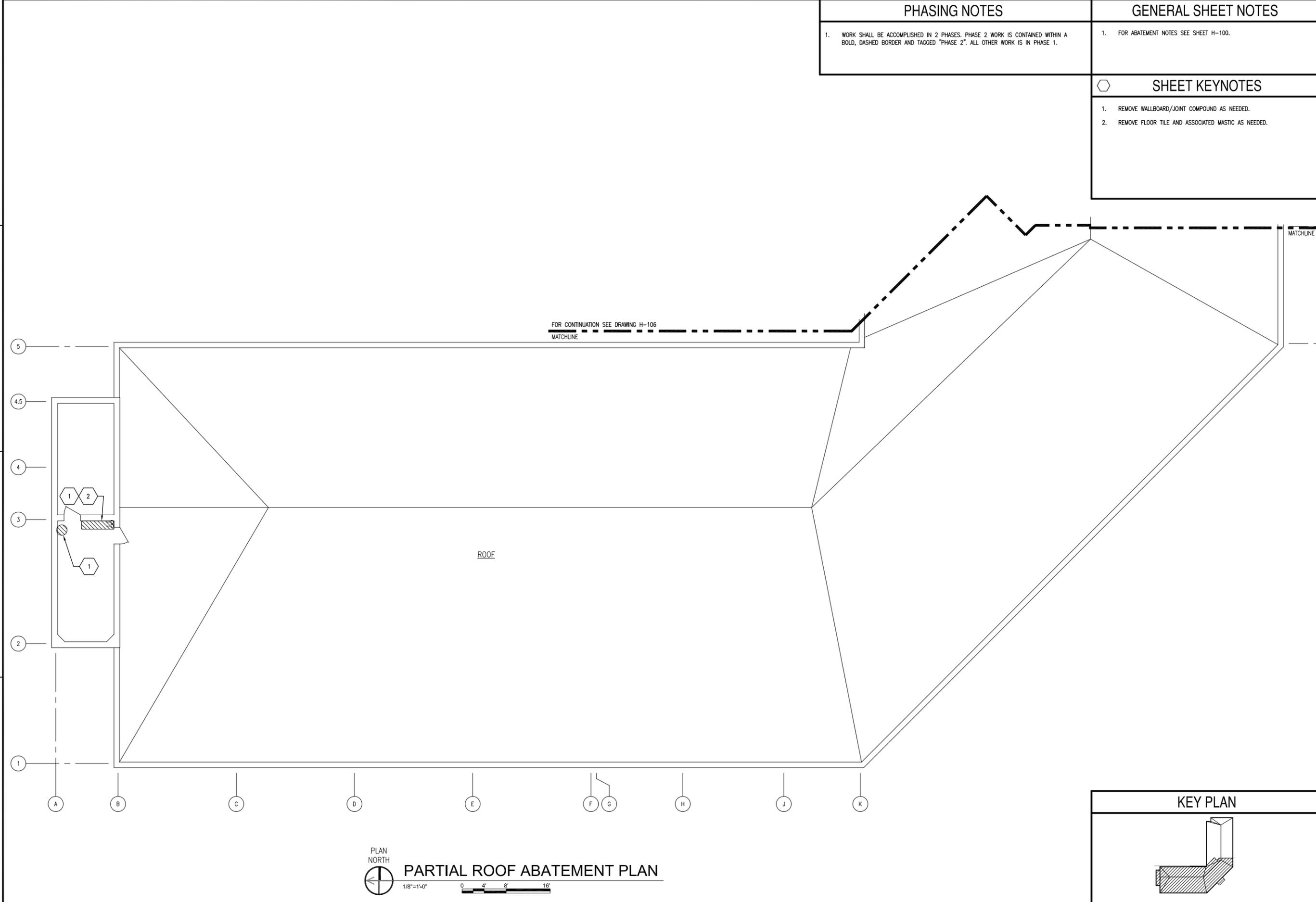
SCALE: AS NOTED
EPROJCT NO.: 1312379
CONSTR. CONTR. NO.: _____

NAVFAC DRAWING NO.: 12684347
SHEET 6 OF 47
H-104

DRAWN BY: _____
CHECKED BY: _____
DATE: _____

NAVSTA DWG. NO. 42240-390

FILE NAME: I:\Projects\301643\301643_0001\90_CAD Models and Sheets\01_Hazardous Material\H-105.dwg LAYOUT NAME: H-105 PLOTTED: Friday, February 13, 2015 7:12am USER: scdleyk



PHASING NOTES

1. WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

GENERAL SHEET NOTES

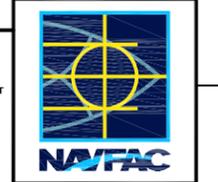
1. FOR ABATEMENT NOTES SEE SHEET H-100.

SHEET KEYNOTES

1. REMOVE WALLBOARD/JOINT COMPOUND AS NEEDED.

2. REMOVE FLOOR TILE AND ASSOCIATED MASTIC AS NEEDED.

SY#	DESCRIPTION	DATE	APP#
A	REVISD PER NAVFAC DESIGN REVIEW COMMENTS 01-21-15	02/11/15	
0	FINAL BID DOCUMENTS	01/16/15	



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ACTIVITY

SATISFACTORY TO DATE

DES	DG	DRW	JWS	CHK	JZ
-----	----	-----	-----	-----	----

BRANCH MANAGER

CHIEF ENG/ARCH

DESIGN DIRECTOR

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

BUILDING 446 HVAC REPLACEMENT

PARTIAL ROOF ABATEMENT PLAN

SCALE:	AS NOTED
EPROJECT NO.:	1312379
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12684348
SHEET	7 OF 47
H-105	

GENERAL STRUCTURAL NOTES

A. DESIGN INFORMATION

1. CODES
 - a. DESIGN CONFORMS TO INTERNATIONAL BUILDING CODE (IBC) 2012, AS AMENDED BY UFC 3-301-01, DATED JUNE 1, 2013.
 - b. AMERICAN CONCRETE INSTITUTE (ACI) - "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318-11.
 - c. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) - "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", AISC 360-10.
 - d. AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) - "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES", ASCE 7-10.
 - e. AMERICAN WELDING SOCIETY (AWS) - "STRUCTURAL WELDING CODE - STEEL", AWS D1.1-2010.
 2. LOADS
 - a. ROOF LIVE LOAD ----- 20 PSF
 - b. GROUND SNOW LOAD, P_g ----- 30 PSF
 - FLAT ROOF SNOW LOAD, P_f ----- 21 PSF
 - SNOW EXPOSURE FACTOR, C_e ----- 1.0
 - SNOW IMPORTANCE FACTOR, I ----- 1.0
 - THERMAL FACTOR, C_t ----- 1.0
 - c. WIND LOADS
 - BASIC WIND SPEED, V ----- 140 MPH
 - WIND OCCUPANCY CATEGORY ----- II
 - WIND EXPOSURE CATEGORY ----- C
 - WIND IMPORTANCE FACTOR ----- 1.0
- SEISMIC LOADS - ASCE 7 / 2010
- SEISMIC RISK CATEGORY ----- II
 - SEISMIC IMPORTANCE FACTOR, I_s ----- 1.0
 - SOIL SITE CLASS ----- D
 - 0.2 SEC SPECTRAL RESPONSE, S_s ----- 0.16
 - 1.0 SEC SPECTRAL RESPONSE, S₁ ----- 0.06
 - SITE COEFFICIENT SHORT PERIOD, F_a ----- 1.6
 - SITE COEFFICIENT LONG PERIOD, F_v ----- 2.4
 - S_{ms} ----- 6.2484
 - S_{m1} ----- 0.139
 - S_{ds} ----- 0.176
 - S_{d1} ----- 0.093
 - SEISMIC DESIGN CATEGORY ----- B
- e. ICE LOAD
 - NOMINAL ICE THICKNESS ----- 0.75 INCH
 - f. EQUIPMENT WEIGHT ----- SEE PLAN

B. DEMOLITION

1. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO STARTING DEMOLITION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN AND INSTALLATION OF ANY REQUIRED SHORING PRIOR TO DEMOLITION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN AND INSTALLATION OF ALL TEMPORARY DUST PROOFING AND WATERPROOFING REQUIRED TO PREVENT DEBRIS OR WATER FROM ENTERING OTHER AREAS OF THE STRUCTURE WHICH ARE NOT INCLUDED WITHIN THE WORK.
4. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF THE TEMPORARY DUST PROOFING AND WATER PROOFING WITH THE CONTRACTING OFFICER.
5. DAMAGE TO EXISTING STRUCTURE TO REMAIN AS A RESULT OF OR ASSOCIATED WITH THE DEMOLITION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS EXPENSE.
6. CONTRACTOR SHALL PREVENT DEBRIS FROM ENTERING OTHER AREAS OF THE STRUCTURE WHICH ARE NOT INCLUDED WITHIN THE WORK.
7. ALL MATERIALS FROM DEMOLITION SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

B. DEMOLITION (CONT.)

8. THE CONTRACTOR SHALL FIELD VERIFY ALL STRUCTURAL CONDITIONS, NEW AND EXISTING, AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
9. THE CONTRACTOR SHALL COORDINATE ALL DEMOLITION WITH THE CONTRACTING OFFICER.

C. STRUCTURAL STEEL

1. MATERIALS
 - a. STRUCTURAL STEEL ----- ASTM A992, GRADE 50 UNLESS NOTED
 - b. ANGLES, CHANNELS AND MISCELLANEOUS STEEL ----- ASTM A36
 - c. ANCHOR RODS ----- ASTM F1554, GRADE 36
 - d. HIGH STRENGTH BOLTS ----- ASTM A325 (3/4"Ø) UNLESS NOTED (OF NORTH AMERICAN MANUFACTURE)
 - e. WELDING ELECTRODES ----- AWS A5.1 (E70XX)
 - f. PIPE ----- ASTM A53, GRADE B
 - g. SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS (HSS) ----- ASTM A500, GRADE B
 - h. SAG RODS ----- ASTM A36
 - i. BASE PLATES GROUT (FLOWABLE) ----- 10,000 PSI
 - j. PLATES ----- ASTM A36 OR ASTM A572 GRADE 50 WHERE INDICATED
2. STEEL CONSTRUCTION SHALL CONFORM TO "SPECIFICATIONS FOR STRUCTURAL STEEL FOR BUILDINGS" AISC 360-10.
3. WELDING SHALL CONFORM TO "STRUCTURAL WELDING CODE" AWS D1.1
4. CONNECTIONS NOT SHOWN ON THE DRAWINGS SHALL BE DESIGNED BY THE STEEL FABRICATOR. CONNECTIONS SHALL BE DESIGNED IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" AND AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES". ALL BOLTED CONNECTIONS SHALL HAVE A MINIMUM OF 2 BOLTS. MINIMUM BOLT SIZE SHALL BE 3/4"Ø AND MINIMUM WELD SIZE SHALL BE 3/16". WT BRACING CONNECTIONS SHALL HAVE A MINIMUM OF 4 BOLTS. ALL WELDING SHALL CONFORM TO THE LATEST EDITION OF AWS D1.1.
5. ALL CLIP ANGLE CONNECTION MATERIALS AND GUSSETS SHALL BE 5/16" THICK MINIMUM. PROVIDE 3/8" STIFFENER PLATES LOCALLY AT ALL HANGERS AND POSTS. SHEAR TABS SHALL BE 3/8" THICK MINIMUM.
6. ALL SHEAR CONNECTIONS SHALL BE DESIGNED BY THE STEEL FABRICATOR FOR LOADS SHOWN ON PLANS UNLESS OTHERWISE INDICATED. SHEAR TABS ARE REQUIRED AT ALL FR MOMENT CONNECTIONS.
7. PROVIDE 3/4"Ø ASTM A325X FASTENERS AT ALL SHEAR TAB CONNECTIONS.
8. ALL LOADS SHOWN ON PLANS ARE SERVICE LOADS IN KIPS. WHERE NO LOADS ARE SHOWN, CONNECTIONS SHALL BE DESIGNED FOR A MINIMUM SHEAR OF 10 KIPS AND A MINIMUM TENSIONS OF 5 KIPS.
9. STEEL EXPOSED TO EXTERIOR ENVIRONMENT SHALL BE HOT-DIPPED GALVANIZED.
10. SHOP CONNECTIONS MAY BE BOLTED OR WELDED.
11. PROVIDE STIFFENER PLATES ON BOTH SIDES OF THE WEB OF BEAMS SUPPORTING COLUMNS OR RUNNING OVER THE TOPS OF COLUMNS. BEAMS SUPPORTING STAIR STRUTS AND STAIR HANGERS, ETC. MINIMUM STIFFENER PLATE THICKNESS SHALL BE 3/8", FLANGE THICKNESS OF COLUMN ABOVE OR BELOW BEAM, OR BEAM WEB THICKNESS, WHICHEVER IS GREATER.

C. STRUCTURAL STEEL (CONT)

12. STRUCTURAL STEEL CONTRACTOR SHALL PROVIDE ALL TEMPORARY BRACING OF THE STEEL FRAME REQUIRED TO MAINTAIN PLUMBNESS AND STABILITY DURING CONSTRUCTION.
13. STRUCTURAL STEEL CONTRACTOR SHALL PROVIDE DECK SUPPORT ANGLES AS REQUIRED.
14. ALL FIELD WELDS MUST BE INSPECTED BY AN AWS CERTIFIED WELD INSPECTOR.

D. MISCELLANEOUS

1. DIMENSIONS OF EQUIPMENT OPENINGS, SUPPORTS, PADS, SLAB DEPRESSIONS, FOUNDATIONS AND ANCHORAGE HAVE BEEN DETERMINED USING SPECIFIC MANUFACTURER'S EQUIPMENT. FINAL DIMENSIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT PURCHASED. DIMENSIONS SHALL BE CHANGED ONLY WITH APPROVAL OF THE ENGINEER.
2. SEE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SHEETS FOR ADDITIONAL OPENINGS, SLEEVES, EMBEDDED ITEMS, UNDERGROUND PIPING, AND ELECTRICAL GROUNDING NOT SHOWN ON STRUCTURAL SHEETS.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH WORK. VARIATIONS BETWEEN SHEET AND ACTUAL EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
4. COORDINATE FINAL DIMENSIONS OF DUCT OPENINGS, SLAB DEPRESSIONS, AND EQUIPMENT SUPPORTS WITH THE APPROPRIATE CONTRACTOR. DIMENSIONS WHERE SHOWN ON CONTRACT DOCUMENTS SHALL BE CHANGED ONLY WITH THE APPROVAL OF THE ENGINEER.
5. SEE OTHER DISCIPLINE DRAWINGS FOR LOCATION OF CURBS, CONCRETE PADS, FLOOR DEPRESSIONS, ROOF AND FLOOR DRAINS.
6. VERIFY FRAMING FOR SUPPORT OF MECHANICAL EQUIPMENT AND ANY MECHANICAL OPENINGS WITH MECHANICAL TRADES PRIOR TO SUBMISSION OF SHOP DRAWINGS.
7. NOTES, TYPICAL DETAILS, AND SCHEDULES APPLY TO ALL STRUCTURAL WORK UNLESS NOTED OTHERWISE. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS OF SIMILAR NATURE. VERIFY APPLICABILITY BY SUBMITTING SHOP DRAWINGS FOR REVIEW.
8. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH OTHER DISCIPLINES DRAWINGS. IF THERE IS A DISCREPANCY BETWEEN DRAWINGS IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE ENGINEER PRIOR TO PERFORMING WORK.
9. SEE OTHER DISCIPLINES DRAWINGS AND SPECIFICATIONS FOR WATERPROOFING / DAMPPROOFING AND FIREPROOFING DETAILS AND REQUIREMENTS.

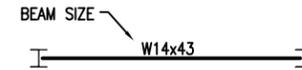
E. STRUCTURAL SPECIAL INSPECTIONS

1. IN ACCORDANCE WITH SECTION 1704 & 1705 OF THE INTERNATIONAL BUILDING CODE, AND ALL APPLICABLE STATE AND LOCAL REQUIREMENTS, AN INDEPENDENT APPROVED AGENCY SHALL MAKE PERIODIC AND/OR CONTINUOUS INSPECTIONS OF THE CONSTRUCTION PROGRESS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

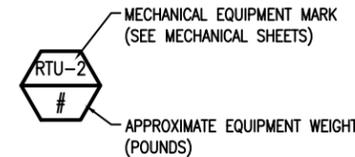
STEEL CONSTRUCTION
STRUCTURAL STEEL ----- SECTION 1705.2.1
AISC 360 - CHAPTER N

LEGEND

- NEW WORK
- - - - - EXISTING TO REMAIN
- - - - - EXISTING TO BE DEMOLISHED
- EX W14x43 TEXT WITH "EX" INDICATES EXISTING STRUCTURES AND/OR FEATURES



BEAM DESIGNATION (FRAMING PLANS)



TECHNICAL TERMS

ABBREVIATION	TERM
B TO B	BACK TO BACK
CNJ	CONNECTION JOINT
CONN	CONNECTION
CORP	CORPORATION
DWL	DOWEL
EMBD	EMBEDMENT
EOD	EDGE OF DECK
ES	EACH SIDE
GA	GAGE, GAUGE
GR	GUARD RAIL
HPT	HIGH POINT
HSS	HOLLOW STRUCTURAL SECTION
IJ	ISOLATION JOINT
JT	JOINT
NIC	NOT IN CONTRACT
PCP	PRECAST HOLLOW CORE PLANK
PL	PLATE
PMF	PREMOLDED FILLER
PROJ	PROJECTION
SPA	SPACES
STL	STEEL
VB	VERTICAL BRACE
WWR	WELDED WIRE REINFORCING

STATEMENT OF SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS SHALL BE PROVIDED BY SPECIAL INSPECTION AGENCY ACCORDING TO IBC 2012, CHAPTER 17
2. THE NAMES AND CREDENTIALS OF THE SPECIAL INSPECTORS TO BE USED SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AND CONTRACTING OFFICER FOR APPROVAL.
3. SPECIAL INSPECTION REPORTS SHALL BE PROVIDED TO THE ENGINEER OF RECORD AND CONTRACTING OFFICER.
4. STEEL CONSTRUCTION (STRUCTURAL STEEL), SECTION 1705.2.1, AISC - CHAPTER N.

DATE: 01/16/15
DESCRIPTION: FINAL BID DOCUMENTS
SYN: 0

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DES: KCB | DRW: TAW | CHK: JJC

BRANCH MANAGER: _____
CHIEF ENGINEER: _____
DESIGN DIRECTOR: _____

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BUILDING 446 HVAC REPLACEMENT

GENERAL STRUCTURAL NOTES & LEGEND

SCALE: AS NOTED
EPROJCT NO.: 1312379
CONSTR. CONTR. NO.: _____

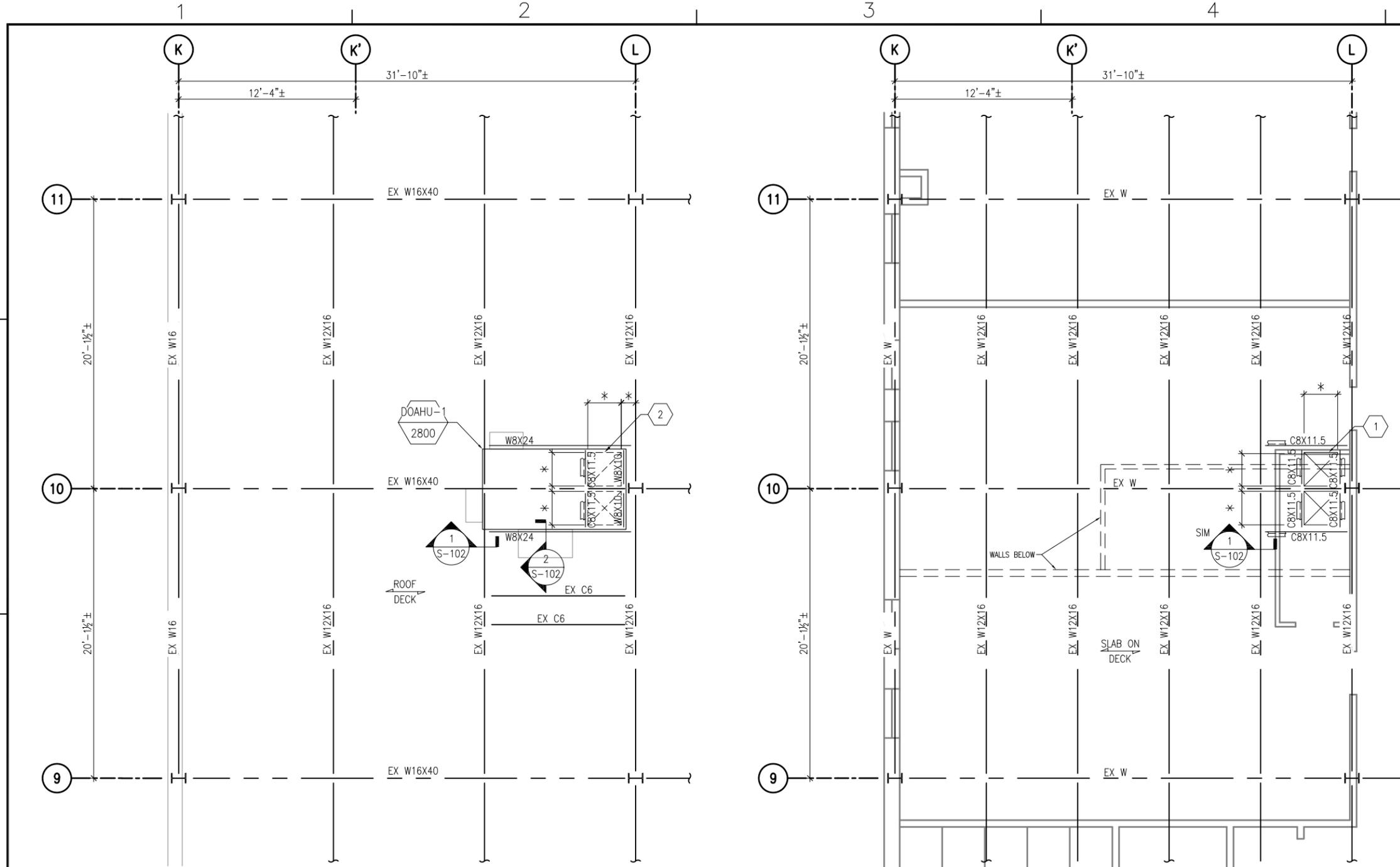
NAVFAC DRAWING NO.: 12684350
SHEET 9 OF 47

S-001

NAVSTA DWG. NO. 42243-390

FILE NAME: I:\projects\1312379\1312379_001\1312379_001.dwg
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 USER: JTB
 PLOTTED: Friday, January 16, 2015 - 2:29pm
 PLOTTER: HP DesignJet 5000PS
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 PLOTTED: Friday, January 16, 2015 - 2:29pm
 PLOTTER: HP DesignJet 5000PS

FILE NAME: I:\Projects\301643\301643_0001\90_CAD Models and Sheets\06_S_Structural\S-101.dwg LAYOUT NAME: S-101 PLOTTED: Friday, January 16, 2015 - 2:28pm USER: wsls



PLAN NORTH
PARTIAL ROOF FRAMING PLAN
 1/8"=1'-0" 0 4' 8' 16'

- * COORDINATE OPENING SIZE AND LOCATION WITH ACTUAL EQUIPMENT TO BE INSTALLED AND APPROVED DUCT SHOP DRAWINGS.
- EXISTING ROOF DECK IS 3" TYPE N METAL DECK.

PLAN NORTH
PARTIAL SECOND FLOOR FRAMING PLAN
 1/8"=1'-0" 0 4' 8' 16'

- * COORDINATE OPENING SIZE AND LOCATION WITH ACTUAL EQUIPMENT TO BE INSTALLED AND APPROVED DUCT SHOP DRAWINGS.
- EXISTING FLOOR IS CONSTRUCTED OF 6" CONCRETE ON 1 1/2" METAL DECK.

GENERAL SHEET NOTES

- FOR GENERAL STRUCTURAL NOTES AND LEGEND SEE DRAWING S-001.

PHASING NOTES

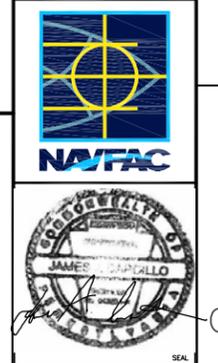
- WORK ON THIS DRAWING SHALL BE ACCOMPLISHED IN PHASE 1.

SHEET KEY NOTES

- SUPPORT CHANNELS MUST BE INSTALLED BEFORE OPENING IN SLAB IS CUT.
- SUPPORT BEAMS MUST BE INSTALLED BEFORE OPENING IN ROOF IS CUT.

APPR	DATE
	01/16/15

SY#	DESCRIPTION
0	FINAL BID DOCUMENTS



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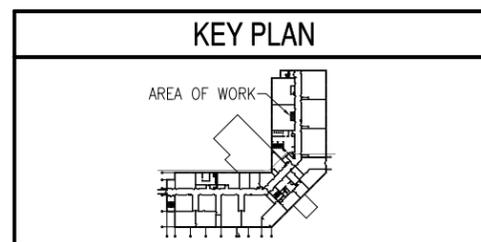
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SATISFACTORY TO	DATE
DES: KCB	DRW: TAW
CHK: JJC	

BRANCH MANAGER
 CHIEF ENGR/ARCH
 DESIGN DIRECTOR

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 NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
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BUILDING 446 HVAC REPLACEMENT
 PARTIAL FRAMING PLANS

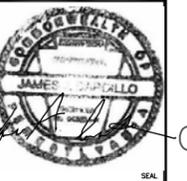
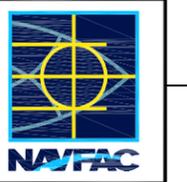


SCALE: AS NOTED
 EPROJCT NO.: 1312379
 CONSTR. CONTR. NO.
 NAVFAC DRAWING NO.: 12684351
 SHEET 10 OF 47
S-101

GENERAL SHEET NOTES

- FOR GENERAL STRUCTURAL NOTES AND LEGEND SEE DRAWING S-001.

APPR	
DATE	01/16/15
SYN	0
DESCRIPTION	FINAL BID DOCUMENTS

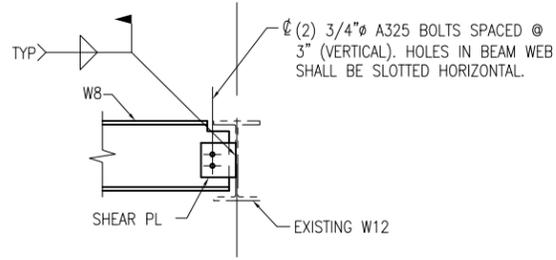


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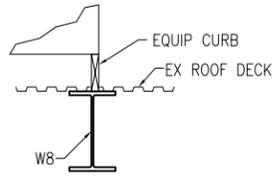
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FOR COMMANDER NAVFAC	
SATISFACTORY TO	DATE
DES: KCB	DRW: TAW
CHK: JJC	
BRANCH MANAGER	
CHIEF ENG/ARCH	
DESIGN DIRECTOR	

DEPARTMENT OF THE NAVY
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BUILDING 446 HVAC REPLACEMENT
 DETAILS

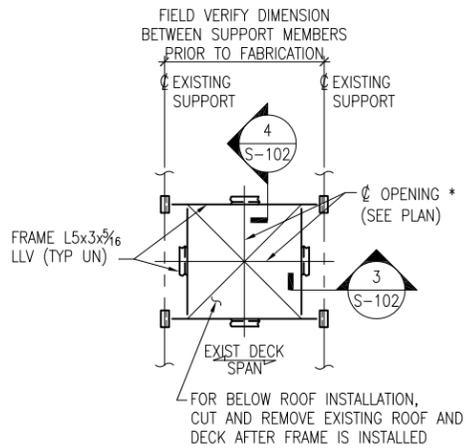
SCALE:	AS NOTED
PROJECT NO.:	1312379
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12684352
SHEET	11 OF 47
S-102	



1 SECTION
 S-101 NOT TO SCALE

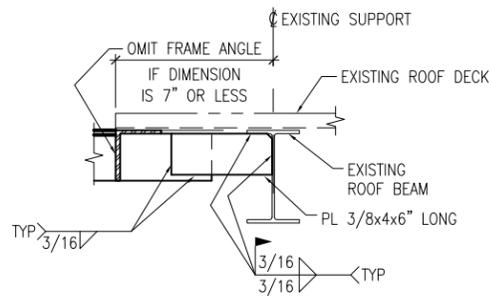


2 SECTION
 S-101 NOT TO SCALE

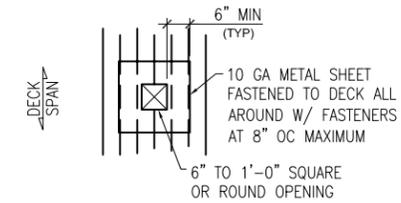


ROOF OPENING FRAME IN EXISTING CONSTRUCTION
 NOT TO SCALE

- * COORDINATE OPENING SIZE AND LOCATION WITH ACTUAL EQUIPMENT TO BE INSTALLED AND APPROVED DUCT SHOP DRAWINGS.
- FIELD VERIFY PLAN ORIENTATION OF EXISTING ROOF MEMBERS.

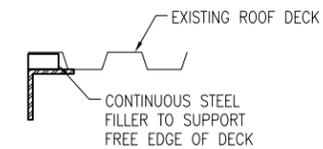


3 SECTION
 S-102 NOT TO SCALE



DECK SUPPORT AT OPENING DETAIL
 NOT TO SCALE

- DECK SUPPORT TYPICAL FOR ROOF OR FLOOR OPENING WHERE SUPPLEMENTAL FRAMING IS NOT SHOWN ON PLAN.
- PROVIDE SUPPLEMENTAL FRAMING ON (4) SIDES OF OPENINGS LARGER THAN 1'-0" IN ANY ONE DIRECTION.



4 SECTION
 S-102 NOT TO SCALE

- * PROVIDE UNDER EQUIPMENT CURB

HVAC ABBREVIATIONS LEGEND

SCALE: NTS

A	ABSOLUTE	G	GA	GAGE OR GAUGE	Q	QTY	QUANTITY
ABV	ABOVE	GAL	GALLON				
ACH	AIR CHANGES PER HOUR	GALV	GALVANIZED				
AD	ACCESS DOOR	GBD	GRAVITY BACKDRAFT DAMPER				
ADJ	ADJUSTABLE	GDH	GAS DUCT HEATER				
AF	ABOVE FINISHED FLOOR	GPD	GALLONS PER DAY				
AFG	ABOVE FINISHED GRADE	GPH	GALLONS PER HOUR				
AHU	AIR HANDLING UNIT	GPM	GALLONS PER MINUTE				
ALT	ALTITUDE	GPU	GALLONS PER USE				
AMB	AMBIENT	GUH	GAS UNIT HEATER				
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	GW	GREASE WASTE				
AP	ACCESS PANEL						
APD	AIR PRESSURE DROP						
APPROX	APPROXIMATE						
ARF	ABOVE RAISED FLOOR						
ASJ	ALL SERVICE JACKET						
ATC	AUTOMATIC TEMPERATURE CONTROL						
ATM	ATMOSPHERE						
AW	ACID WASTE						
AWS	ACID WASTE STACK						
AVS	ACID VENT STACK						
B							
B	BOILER						
BAS	BUILDING AUTOMATION SYSTEM						
BB	BASEBOARD HEATERS						
BDD	BACKDRAFT DAMPER						
B/F	BELOW FLOOR						
BHP	BRAKE HORSEPOWER						
BMS	BUILDING MANAGEMENT SYSTEM						
BOD	BOTTOM OF DUCT						
BOF	BOTTOM OF FAN						
BOL	BOTTOM OF LOUVER						
BOP	BOTTOM OF PIPE						
BOS	BOTTOM OF STEEL						
BTUH	BRITISH THERMAL UNIT PER HOUR						
C							
C	CELSIUS						
CD	CONDENSATE DRAIN LINE						
CFM	CUBIC FEET PER HOUR						
CFM	CUBIC FEET PER MINUTE						
CH	CHILLER						
CHP	CHILLED WATER PUMP						
CHS	CHILLED WATER SUPPLY						
CHR	CHILLED WATER RETURN						
CL	CENTER LINE						
CLG	CEILING						
CM	CENTIMETERS						
CMU	CONCRETE MASONRY UNIT						
CO	CLEANOUT						
COL	COLUMN						
CONN	CONNECT						
CONT	CONTINUED						
CP	CONTROL PANEL						
CU FT	CUBIC FEET						
CRU	COMPUTER ROOM UNIT						
CT	COOLING TOWER						
CUH	CABINET UNIT HEATER						
CV	CONSTANT VOLUME						
CWP	CONDENSER WATER PUMP						
CWR	CONDENSER WATER RETURN						
CWS	CONDENSER WATER SUPPLY						
D							
D	DUCTLESS SPLIT INDOOR UNIT						
DB	DRY BULB						
db	DECIBELS						
DCU	DUCTLESS SPLIT OUTDOOR UNIT						
DDC	DIRECT DIGITAL CONTROL						
DEG	DEGREES						
DIA	DIAMETER						
DN	DOWN						
DWG	DRAWING						
DX	DIRECT EXPANSION						
E							
E	ECONOMIZER						
EA	EACH / EXHAUST AIR						
EAT	ENTERING AIR TEMPERATURE						
ECU	EVAPORATIVE COOLING UNIT						
EDH	ELECTRIC DUCT HEATER						
ENER	ENERGY EFFICIENCY RATIO						
EF	EXHAUST FAN						
EL	ELEVATION						
ELEC	ELECTRICAL / ELECTRIC						
EQ	EQUIVALENT						
ERV	ENERGY RECOVERY VENTILATOR						
ESP	EXTERNAL STATIC PRESSURE						
ET	EXPANSION TANK						
ETR	EXISTING TO REMAIN						
EUH	ELECTRIC UNIT HEATER						
EWC	ELECTRIC WATER COOLER						
EW	ELECTRIC WALL HEATER						
EWS	EMERGENCY EYEWASH/SHOWER						
EWT	ENTERING WATER TEMPERATURE						
EXH	EXHAUST AIR						
EXP	EXPANSION						
EXIST	EXISTING						
F							
F	FAHRENHEIT						
FA	FIRE ALARM						
FC	FLEXIBLE CONNECTION						
FCO	FLOOR CLEANOUT						
FCU	FAN COIL UNIT						
FD	FIRE DAMPER/FLOOR DRAIN						
FL	FLOOR						
FLA	FULL LOAD AMPERES						
FLD	FLOOR DRAIN						
FOB	FLAT ON BOTTOM						
FPB	FAN POWERED VARIABLE AIR VOLUME BOX						
FPM	FEET PER MINUTE						
FPS	FEET PER SECOND						
FS	FLOOR SINK						
FSD	FIRE/SMOKE DAMPER						
FSK	FOIL SCRIM KRAFT						
FT	FEET OR FOOT						
FTG	FOOTING						
G							
GA	GAGE OR GAUGE						
GAL	GALLON						
GALV	GALVANIZED						
GBD	GRAVITY BACKDRAFT DAMPER						
GDH	GAS DUCT HEATER						
GPD	GALLONS PER DAY						
GPH	GALLONS PER HOUR						
GPM	GALLONS PER MINUTE						
GPU	GALLONS PER USE						
GUH	GAS UNIT HEATER						
GW	GREASE WASTE						
H							
HB	HOSE BIB						
HOA	HAND-OFF-AUTOMATIC SWITCH						
HP	HORSEPOWER						
HPU	HEAT PUMP UNIT						
HR	HOUR						
HWP	HOT WATER PUMP						
HWS	HOT WATER SUPPLY						
HWR	HOT WATER RETURN						
HX	HEAT EXCHANGER						
I							
ID	INSIDE DIAMETER						
I.E.	INVERT ELEVATION						
IN.	INCHES						
WG.	WATER GAUGE						
INV	INVERT						
J							
J	BRITISH THERMAL UNIT PER HOUR						
K							
KG	KILOGRAMS						
KPA	KILO PASCAL						
KW	KILOWATTS						
L							
L	LOUVER						
LAT	LEAVING AIR TEMPERATURE						
LBS	POUNDS						
LBS/HR	POUNDS PER HOUR						
LD	LINEAR DIFFUSER						
LQ	LENGTH						
LQ	LIQUID						
L/S	LITERS PER SECOND						
LWT	LEAVING WATER TEMPERATURE						
M							
MAU	MAKE-UP AIR UNIT						
MAX	MAXIMUM						
MBH	BTU PER HOUR (THOUSAND)						
MCA	MINIMUM CIRCUIT AMPS						
MCC	MOTOR CONTROL CENTER						
MD	MOTORIZED DAMPER						
MECH	MECHANICAL						
MEZZ	MEZZANINE						
MIN	MINIMUM						
MISC	MISCELLANEOUS						
M	METERS						
MM	MILLIMETERS						
MOC	MAXIMUM OVER-CURRENT PROTECTION						
MOC	MAXIMUM OVER-CURRENT PROTECTION						
MTD	MOUNTED						
MUW	MAKE-UP WATER						
N							
NC	NOISE CRITERIA						
N.C.	NORMALLY CLOSED						
NEG	NEGATIVE						
NIC	NOT IN CONTRACT						
NO.	NUMBER						
N.O.	NORMALLY OPEN						
NOM	NOMINAL						
NTS	NOT TO SCALE						
O							
OA	OUTSIDE AIR						
OAI	OUTSIDE AIR INTAKE						
OAT	OUTSIDE AIR TEMPERATURE						
OAU	OUTSIDE AIR UNIT						
OBD	OPPOSED BLADE DAMPER						
OC	ON CENTER						
OD	OUTSIDE DIAMETER						
OW	OILY WASTE						
OZ	OUNCE						
P							
P	PUMP						
PA	PASCAL						
PB	PUSH BUTTON						
PD	PRESSURE DROP (FEET OF WATER)						
PDI	PLUMBING DRAINAGE INSTITUTE						
PH	PHASE						
POC	POINT OF CONNECTION						
POS	POSITIVE						
PRI	PRIMARY						
PRESS	PRESSURE						
PSI	POUNDS PER SQUARE INCH						
PSIG	PSI GAGE						
PT	PRESSURE TREATED						
R							
RA	RETURN AIR						
RAD	REFRIGERATED AIR DRYER						
RD	ROOF DRAIN						
REF	REFERENCE						
REL.	RELIEF AIR						
RH	RELATIVE HUMIDITY						
RHC	REHEAT COIL						
RI	ROOF INTAKE						
RL	REFRIGERANT LIQUID/RAIN LEADER						
RO	ROOF OPENING						
RPM	REVOLUTIONS PER MINUTE						
RS	REFRIGERANT SUCTION						
S							
SA	SUPPLY AIR						
SCH	SCHEDULE						
SD	SMOKE DETECTOR						

ROOM SCHEDULE	
ROOM NUMBER	ROOM NAME
141	CORRIDOR
143	CLOSET
144	OFFICERS LOCKER ROOM
145	CLOSET
146	DRYING ROOM
147	SHOWER ROOM
148	ISWOS N72
149	ISWOS N72
150	N74
151	JANITOR
152	STORAGE
153	VTT
154	LAN
155	MECH. ROOM
156	STAIR C
157	RESTROOM
159	AUDITORIUM
160	CORRIDOR "J"
161	CLOSET
162	STAGE
163	VEST. #1
164	CLOSET
165	CLOSET
166	VEST. #2
171	CLOSET
172	CLOSET
173	CLOSET

GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE DRAWING M-100.
- ALL PIPING AND EQUIPMENT IS SHOWN DIAGRAMMATICALLY ONLY. GENERAL ORIENTATION IS SHOWN IN PLAN AND SECTIONAL DRAWINGS. EXACT LOCATION SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.
- REMOVE ACT AND GRID FROM ALL AREAS OF WORK EXCEPT ROOMS 159-166 AND STAIRWELLS. PROTECT CEILINGS TO REMAIN IN DURING DEMOLITION AND NEW WORK.

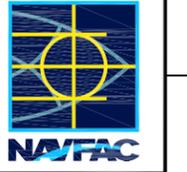
PHASING NOTES

- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1. CAP PIPING AND PROVIDE TEMPORARY FLEXIBLE PIPING (ROOM 144 TO ROOM 151) AS REQUIRED TO PRESERVE SERVICE TO PHASE 2.

SHEET KEYNOTES

- REMOVE DUCTWORK, INSULATION, HANGERS, AND AND SUPPORTS COMPLETE. ABANDON IN PLACE WHERE CONCEALED IN CHASES OR WALLS.
- REMOVE THERMOSTAT, CONTROL WIRING AND CONDUIT COMPLETE.
- REMOVE FLOOR MOUNTED UNIT VENTILATOR OR FAN COIL UNIT, SUPPORTS AND MOUNTINGS COMPLETE. EXTERIOR WALL LOUVER IS ETR.
- NOT USED.
- REMOVE WALL MOUNTED HOT WATER CABINET UNIT HEATER, SUPPORTS AND MOUNTINGS COMPLETE.
- DISCONNECT HOT WATER COIL FROM DTS/DTR MAIN. RETAIN CHILLED WATER COIL PIPING, COIL AND VALVE WORK.
- REMOVE SUSPENDED HOT WATER CABINET HEATER, MOUNTINGS AND SUPPORTS COMPLETE.
- REMOVE ROOF MOUNTED DUCTLESS SPLIT SYSTEM CONDENSING UNIT, SUPPORTS AND MOUNTINGS COMPLETE. APPROXIMATELY 1 TON. EVACUATE AND DISPOSE OF REFRIGERANT. ASSUME R-22 FOR BIDDING PURPOSES. REFER TO SPECIFICATION 01 57 19.00 20 "TEMPORARY ENVIRONMENTAL CONTROLS" FOR CONTRACTS AND SUBMITTAL REQUIREMENTS.
- REMOVE PIPING INSULATION COMPLETE.
- REMOVE PIPING, INSULATION, HANGERS, AND SUPPORTS COMPLETE. ABANDON IN PLACE WHERE CONCEALED IN CHASES OR WALLS.
- REMOVE SIDEWALL EXHAUST FAN, MOUNTINGS AND SUPPORTS COMPLETE.
- REMOVE WALL MOUNTED PIPE CHASE COMPLETE. SEE GENERAL NOTE 4 ON M-102 FOR NEW WORK.
- REMOVE GYPSUM WALLBOARD CEILING IN SHOWER AREA. SUPPORT FRAMING TO REMAIN.

REV	DATE	DESCRIPTION
A	02/11/15	REVISION PER NAIFAC DESIGN REVIEW COMMENTS
0	01/16/15	FINAL BID DOCUMENTS



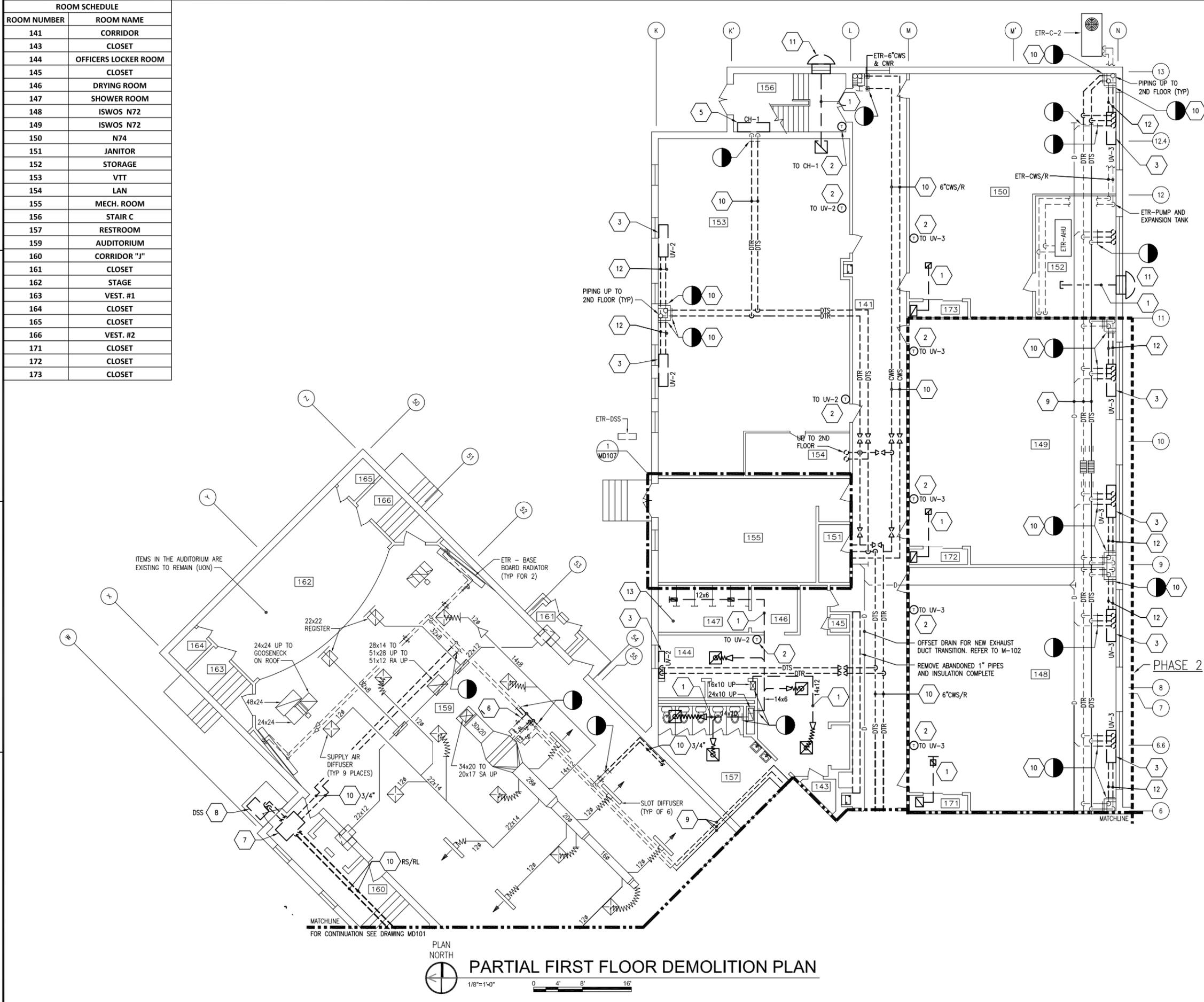
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APPROVED
 FOR COMMANDER NAIFAC
 ACTIVITY

SATISFACTORY TO	DATE
DES: JMN	DRW: JWS
CHK: KDB	
BRANCH MANAGER	
CHIEF ENG/ARCH	
DESIGN DIRECTOR	

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL STATION NEWPORT
 BUILDING 446 HVAC REPLACEMENT
 NEWPORT, RHODE ISLAND
 PARTIAL FIRST FLOOR DEMOLITION PLAN

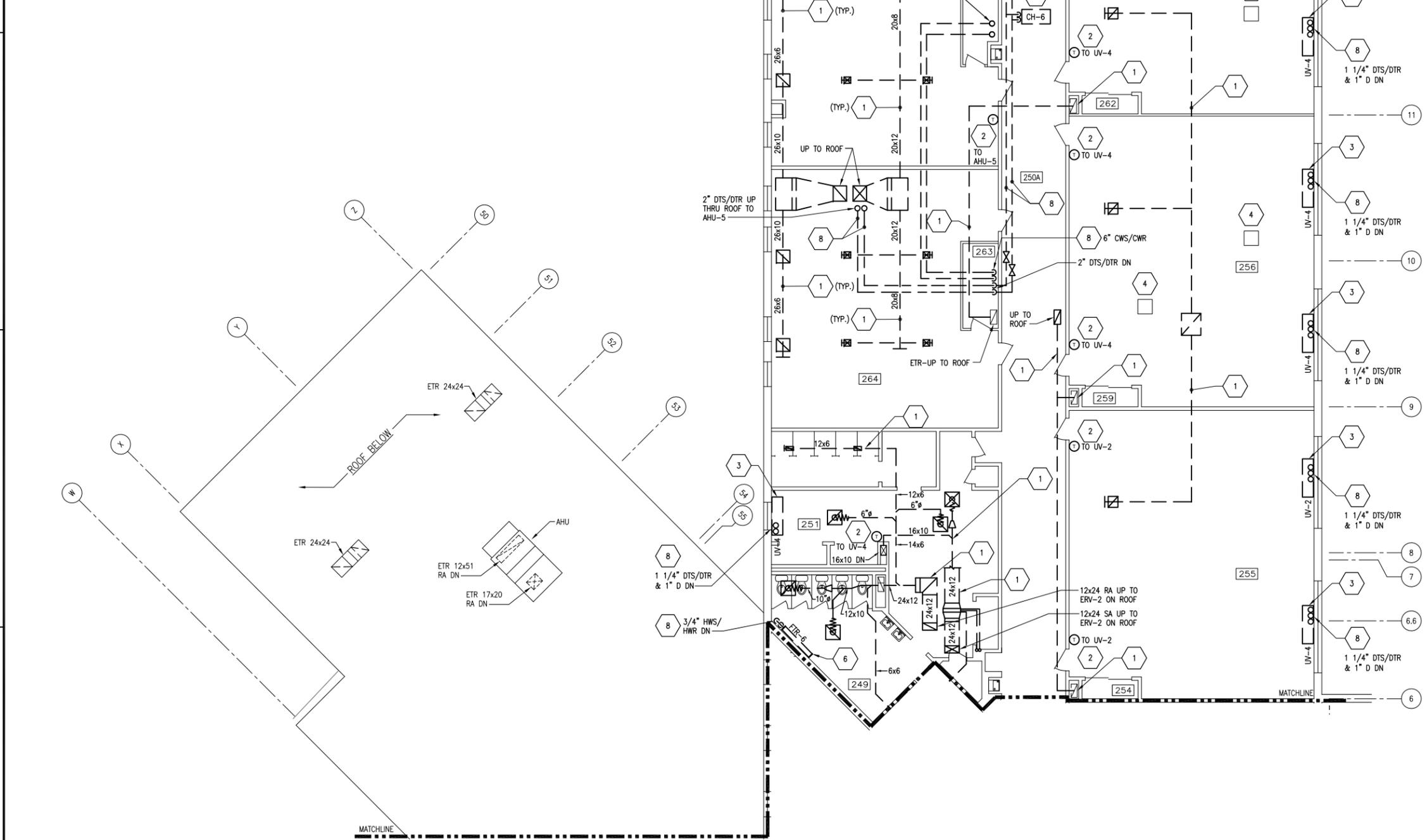
SCALE:	AS NOTED
EPROJCT NO.:	1312379
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12684355
SHEET	14 OF 47
MD102	



FILE NAME: I:\Projects\301643\301643_0001\90_CAD Models and Sheets\13_Mechanical\MD102.dwg LAYOUT NAME: MD-102 PLOTTED: Friday, February 13, 2015 - 7:35am USER: scdley

FILE NAME: I:\Projects\301643\301643_0001\90_CAD Models and Sheets\13_Mechanical\MD104.dwg LAYOUT NAME: MD-104 PLOTTED: Thursday, January 15, 2015 - 3:02pm USER: siddley

ROOM SCHEDULE	
ROOM NUMBER	ROOM NAME
249	OFF TOILET #2
250	STAIR
250A	CORR. F
251	OFFICERS LOCKER ROOM #2
254	CLOSET
255	TRAINING REQ. (N9)
256	VTC
257	OMMS-NG (N72)
259	CLOSET
260	STORAGE
261	MCM
262	CLOSET
263	STORAGE
264	ADMIN (N1)



GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE DRAWING M-100.
- ALL PIPING AND EQUIPMENT IS SHOWN DIAGRAMMATICALLY ONLY. GENERAL ORIENTATION IS SHOWN IN PLAN AND SECTIONAL DRAWINGS. EXACT LOCATION SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.
- REMOVE ACT AND GRID FROM ALL AREAS OF WORK EXCEPT STAIRWELLS. PROTECT ALL CEILINGS TO REMAIN DURING DEMOLITION AND NEW WORK.

PHASING NOTES

- WORK ON THIS DRAWING SHALL BE ACCOMPLISHED IN PHASE 1.

SHEET KEYNOTES

- REMOVE DUCTWORK, INSULATION, HANGERS, AND AND SUPPORTS COMPLETE. ABANDON IN PLACE WHERE CONCEALED IN CHASES OR WALLS.
- REMOVE TEMPERATURE SENSOR, CONTROL WIRING AND CONDUIT COMPLETE.
- REMOVE FLOOR MOUNTED UNIT VENTILATOR OR FAN COIL UNIT, SUPPORTS AND MOUNTINGS COMPLETE. EXTERIOR WALL LOUVER IS ETR.
- EXISTING TO REMAIN SUSPENDED DUCTLESS SPLIT SYSTEM, RS/RL AND DRAIN PIPING, HANGERS, MOUNTINGS AND SUPPORTS COMPLETE.
- REMOVE WALL MOUNTED HOT WATER CABINET UNIT HEATER OR FIN TUBE RADIATOR, SUPPORTS AND MOUNTINGS COMPLETE.
- REMOVE WALL MOUNTED FINNED TUBE RADIATOR MOUNTING AND SUPPORTS COMPLETE.
- REMOVE CEILING MOUNTED CABINET UNIT HEATER, HANGERS, MOUNTINGS AND SUPPORTS COMPLETE.
- REMOVE PIPING, INSULATION, HANGERS AND SUPPORTS COMPLETE. ABANDON IN PLACE WHERE CONCEALED IN CHASES OR WALLS.

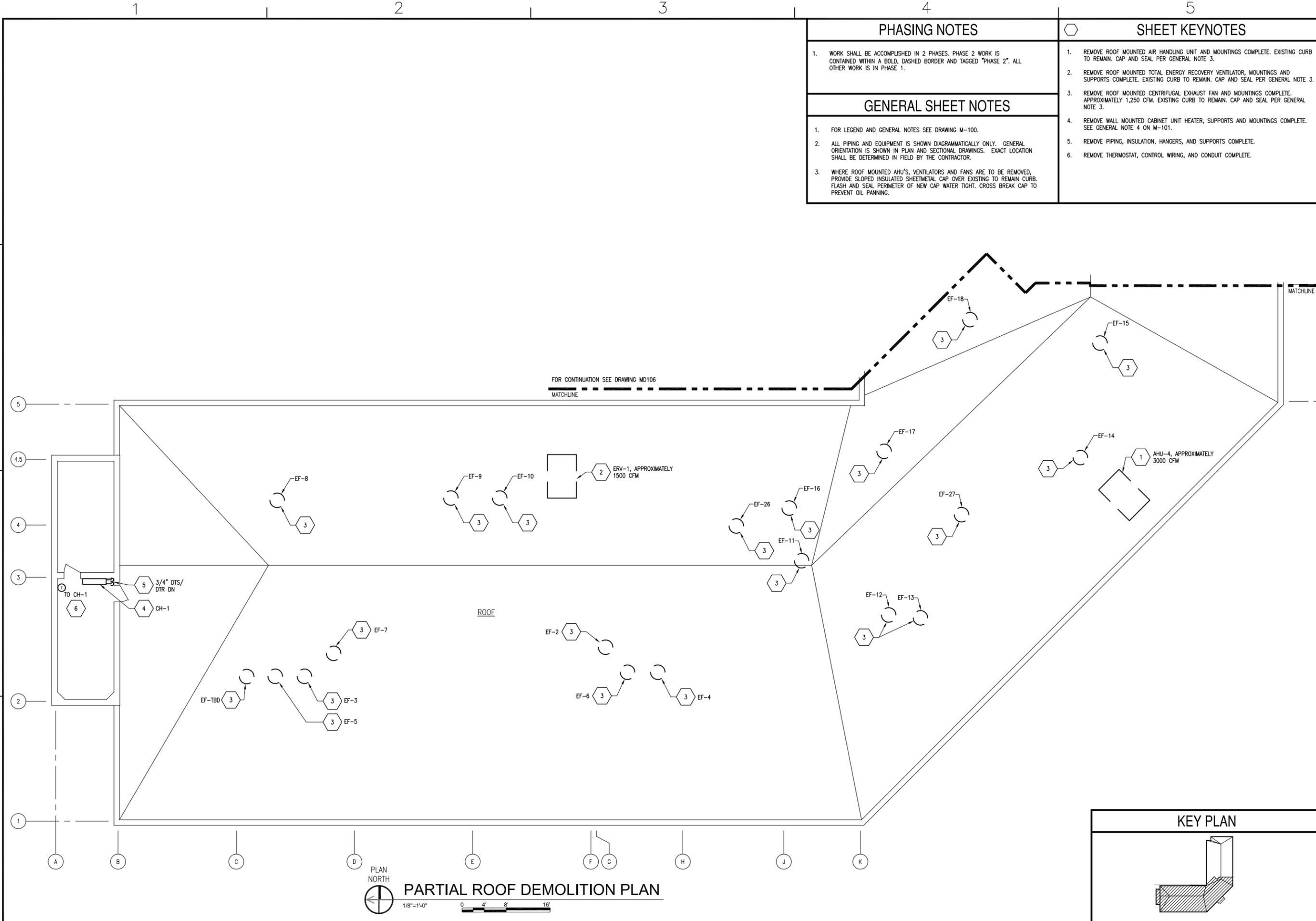
KEY PLAN

APPROVED	DATE
FOR COMMANDER NAVFAC	01/16/15
ACTIVITY	DATE
SATISFACTORY TO	DATE
DES JMN	CHK KDB
BRANCH MANAGER	
CHIEF ENGR/ARCH	
DESIGN DIRECTOR	
NAVAL FACILITIES ENGINEERING COMMAND	
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC	
PUBLIC WORKS DEPARTMENT	
NAVAL STATION NEWPORT	
NEWPORT, RHODE ISLAND	
BUILDING 446 HVAC REPLACEMENT	
PARTIAL SECOND FLOOR DEMOLITION PLAN	
SCALE: AS NOTED	
PROJECT NO.: 1312379	
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 12684357	
SHEET 16 OF 47	
MD104	
DRAWN/REVISED: 10 MARCH 2009	
NAVSTA DWG. NO. 42250-390	

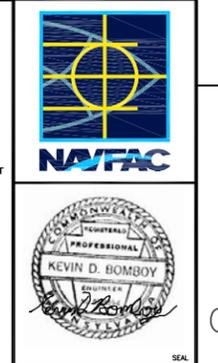
PLAN NORTH
PARTIAL SECOND FLOOR DEMOLITION PLAN
 1/8"=1'-0"
 0 4' 8' 16'

MATCHLINE
 FOR CONTINUATION SEE DRAWING MD103

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD_Models_and_Sheets\13_Mechanical\MD105.dwg LAYOUT NAME: MD-105 PLOTTED: Thursday, January 15, 2015 - 3:03pm USER: sckshjw



SYN	DESCRIPTION	DATE	APPR
0	FINAL BID DOCUMENTS	01/16/15	



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APPROVED	DATE
FOR COMMANDER NIFAC	
ACTIVITY	
SATISFACTORY TO	DATE
DES: JMN	DRW: JWS
CHK: KDB	
BRANCH MANAGER	
CHIEF ENG/ARCH	
DESIGN DIRECTOR	

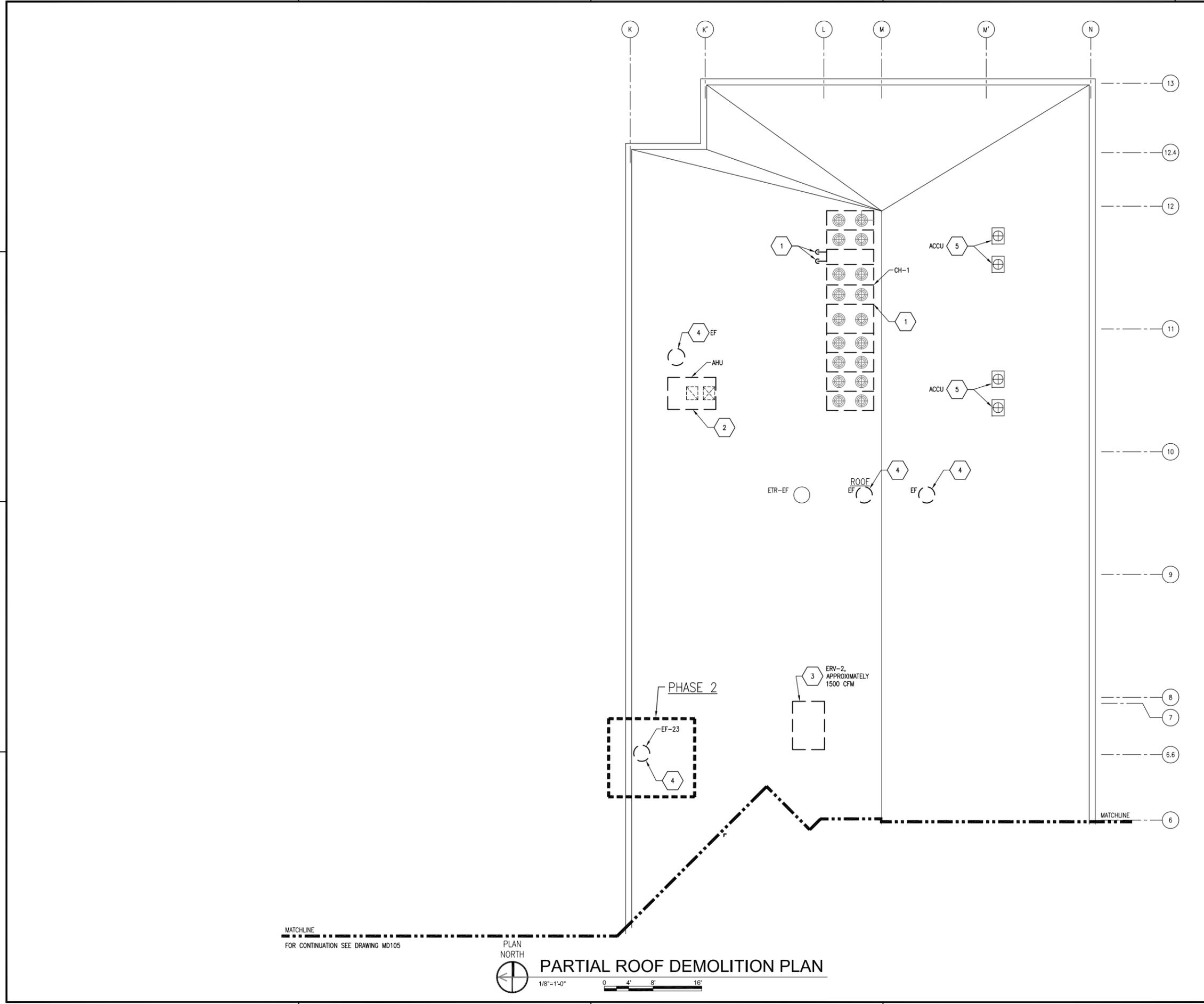
DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
 PUBLIC WORKS DEPARTMENT
 NAVAL STATION NEWPORT
 NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT
 PARTIAL ROOF DEMOLITION PLAN

SCALE: AS NOTED
 PROJECT NO.: 1312379
 CONSTR. CONTR. NO.
 NAVFAC DRAWING NO.: 12684358
 SHEET 17 OF 47
MD105

DRAWING REVISION: 10 MARCH 2009
 NAVSTA DWG. NO. 42251-390

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD_Models_and_Sheets\13_Mechanical\MD106.dwg LAYOUT NAME: MD-106 PLOTTED: Thursday, January 15, 2015 - 3:04pm USER: scklsjw



MATCHLINE
FOR CONTINUATION SEE DRAWING MD105



PARTIAL ROOF DEMOLITION PLAN

GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE DRAWING M-100.
- ALL PIPING AND EQUIPMENT IS SHOWN DIAGRAMMATICALLY ONLY. GENERAL ORIENTATION IS SHOWN IN PLAN AND SECTIONAL DRAWINGS. EXACT LOCATION SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.
- WHERE ROOF MOUNTED AHU'S, VENTILATORS AND FANS ARE TO BE REMOVED, PROVIDE SLOPED INSULATED SHEETMETAL CAP OVER EXISTING TO REMAIN CURB. FLASH AND SEAL PERIMETER OF NEW CAP WATER TIGHT. CROSS BREAK CAP TO PREVENT OIL PANNING.

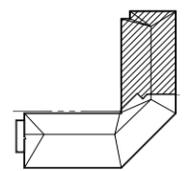
PHASING NOTES

- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

SHEET KEYNOTES

- REMOVE ROOF MOUNTED AIR COOLED CHILLER, PIPING AND HANGERS. APPROXIMATELY 210 TONS. EVACUATE AND DISPOSE OF REFRIGERANT. ASSUME R-22 FOR BIDDING PURPOSES. ELEVATED STEEL PLATFORM TO REMAIN.
- REMOVE ROOF MOUNTED AIR HANDLING UNIT COMPLETE. CURB MOUNTINGS AND SUPPORTS TO REMAIN. CAP AND SEAL PER GENERAL NOTE 3.
- REMOVE ROOF MOUNTED TOTAL ENERGY RECOVERY VENTILATOR COMPLETE. MOUNTINGS AND SUPPORTS TO REMAIN. CAP AND SEAL PER GENERAL NOTE 3.
- REMOVE ROOF MOUNTED CENTRIFUGAL EXHAUST FAN COMPLETE. APPROXIMATELY 1,250 CFM. ROOF CURB MOUNTINGS AND SUPPORTS TO REMAIN. CAP AND SEAL PER GENERAL NOTE 3.
- EXISTING TO REMAIN ROOF MOUNTED AIR COOLED CONDENSING UNIT, RS/RL AND DRAIN PIPING, UNIT SUPPORTS AND MOUNTINGS COMPLETE.

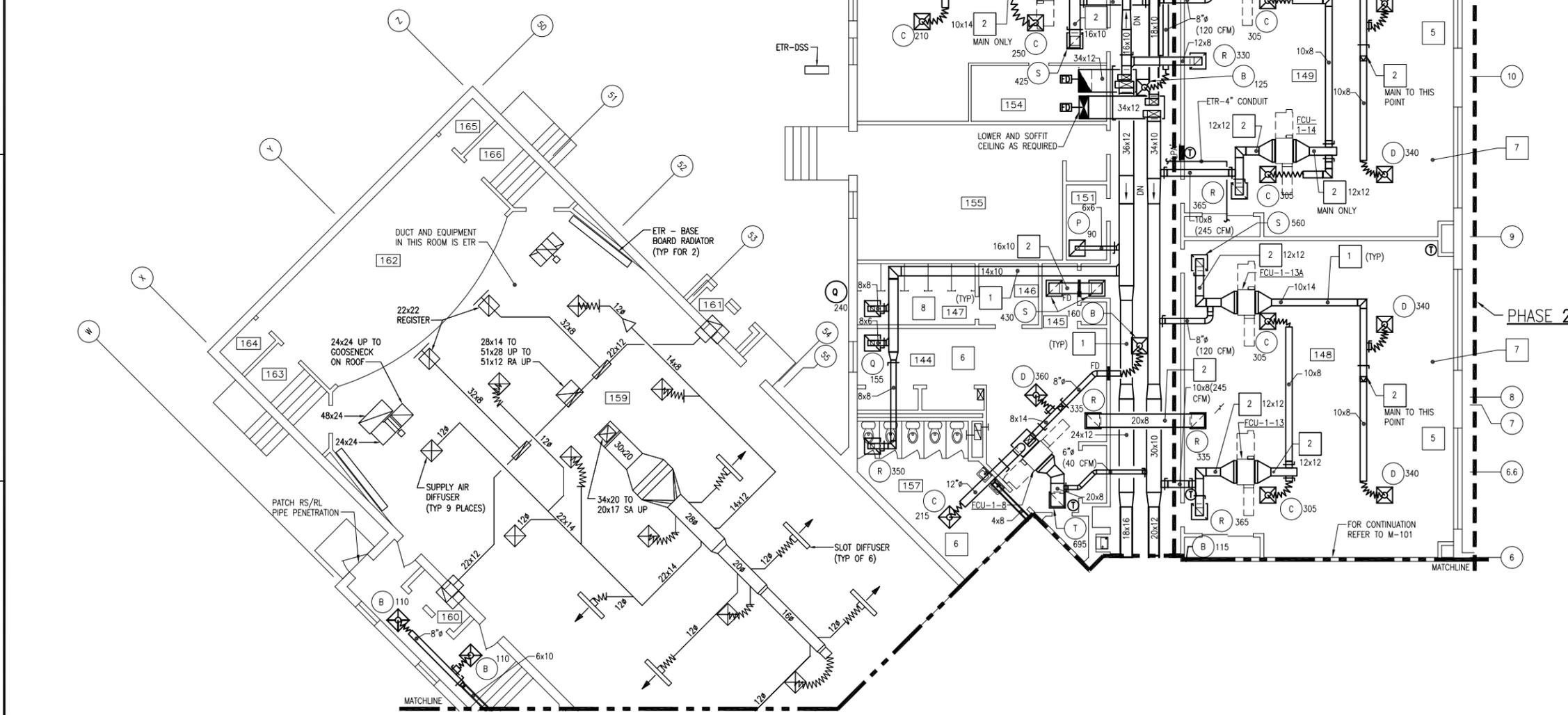
KEY PLAN



APPROVED	DATE	APP'R
FOR COMMANDER NAVFAC	01/16/15	
ACTIVITY	FINAL BID DOCUMENTS	
SATISFACTORY TO	DATE	
DES JMN DRW JWS CHK KDB		
BRANCH MANAGER		
CHIEF ENG/ARCH		
DESIGN DIRECTOR		
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC	NAVAL STATION NEWPORT - NEWPORT, RI	
PUBLIC WORKS DEPARTMENT	NAVAL STATION NEWPORT - NEWPORT, RHODE ISLAND	
NAVAL STATION NEWPORT	BUILDING 446 HVAC REPLACEMENT	
	PARTIAL ROOF DEMOLITION PLAN	
SCALE: AS NOTED	PROJECT NO.: 1312379	
EPROJCT NO.:	CONSTR. CONTR. NO.	
NAVFAC DRAWING NO. 12684359	SHEET 18 OF 47	
MD106		
DRAWN/REVISED: 10 MARCH 2009		
NAVSTA DWG. NO. 42252-390		

FILE NAME: I:\Projects\301643\301643_0001\90_CAD Models and Sheets\13_Mechanical\M-102.dwg LAYOUT NAME: M-102 PLOTTED: Friday, February 13, 2015 - 7:40am USER: sckdy#

ROOM SCHEDULE	
ROOM NUMBER	ROOM NAME
141	CORRIDOR
143	CLOSET
144	OFFICERS LOCKER ROOM
145	CLOSET
146	DRYING ROOM
147	SHOWER ROOM
148	ISWOS N72
149	ISWOS N72
150	N74
151	JANITOR
152	STORAGE
153	VTT
154	LAN
155	MECH. ROOM
156	STAIR C
157	RESTROOM
159	AUDITORIUM
160	CORRIDOR "J"
161	CLOSET
162	STAGE
163	VEST. #1
164	CLOSET
165	CLOSET
166	VEST. #2
171	CLOSET
172	CLOSET
173	CLOSET



PLAN NORTH
 1/8"=1'-0"
 0 4' 8' 16'
PARTIAL FIRST FLOOR PLAN - NEW DUCTWORK

GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE DRAWING M-100.
- ALL PIPING AND EQUIPMENT IS SHOWN DIAGRAMMATICALLY ONLY. GENERAL ORIENTATION IS SHOWN IN PLAN AND SECTIONAL DRAWINGS. EXACT LOCATION SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.
- AT LOCATIONS WHERE FLOOR MOUNTED UNIT VENTILATOR OR FAN COIL UNIT HAS BEEN REMOVED, PROVIDE INSULATED SHEETMETAL BLANK OFF PANEL BEHIND EXISTING LOUVER. PATCH FLOOR TO MATCH EXISTING ADJACENT SURFACE IN TEXTURE AND COLOR. SEE GENERAL NOTE 4 ON THIS SHEET.
- WHERE EQUIPMENT HAS BEEN REMOVED FROM WALL, PATCH SUBSTRATE AS REQUIRED TO MATCH EXISTING ADJACENT SUBSTRATE IN THICKNESS AND TEXTURE. PAINT WALL FROM FLOOR TO 4" ABOVE CEILING, CORNER TO CORNER TO MATCH ADJACENT WALL IN COLOR AND TEXTURE.
- PROVIDE FIRE STOPPING AT ALL EXISTING PENETRATIONS IN FIRE RATED PARTITIONS AND SLABS WHERE DUCTS OR PIPING HAS BEEN REMOVED AS PART OF DEMOLITION. FIRE RATED PARTITIONS ARE DEFINED AS CHASES, CORRIDOR, LOBBY, AND STAIRWELL WALLS. SECOND FLOOR SLAB IS DEFINED AS FIRE RATED.
- PROVIDE FIRE STOPPING AT ALL NEW DUCT OR PIPE PENETRATIONS THROUGH FIRE RATED PARTITIONS AND SLABS.
- PROVIDE 2x2 ACT AND GRID IN ALL AREAS OF WORK EXCEPT ROOMS 159-166 AND STAIRWELLS.

PHASING NOTES

- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

SHEET KEYNOTES

- PROVIDE DUCTWORK, INSULATION (WHERE SPECIFIED), HANGERS, AND SUPPORTS COMPLETE. ROUTE CONCEALED UNLESS OTHERWISE NOTED. SUSPENDED FROM OVERHEAD STRUCTURE. PROVIDE INTERMEDIATE STEEL ANGLE OR STEEL UNISTRUT SUPPORTS AS REQUIRED.
- PROVIDE ACOUSTICAL DUCT LINER.
- PROVIDE WALL MOUNTED TEMPERATURE SENSOR. MOUNT APPROXIMATELY 4'-0" AFF AND CENTERLINE WITH LIGHT SWITCHES. PROVIDE CONDUIT AND CONTROL WIRING AS REQUIRED. CONDUIT AND CONTROL WIRING SHALL BE CONCEALED.
- PROVIDE SUSPENDED, CONCEALED, 4-PIPE FAN COIL UNIT, HANGERS AND SUPPORTS COMPLETE. SUSPEND FROM OVERHEAD STRUCTURE WITH RUBBER IN SHEAR, 4-POINT, VIBRATION HANGER SYSTEM. PROVIDE INTERMEDIATE STEEL ANGLE (OR UNISTRUT) SUPPORTS AS REQUIRED. PROVIDE SECONDARY DRAIN PAN WITH MOISTURE SENSOR.
- LOWER CEILING IN THIS ROOM TO 8'-6" ABOVE RAISED FLOOR FROM 9'-3" ABOVE RAISED FLOOR.
- PROVIDE MOISTURE RESISTANT 2x2 ACT AND GRID IN TOILET ROOMS.
- INFILL OPENING IN RAISED ACCESS FLOORING TO MATCH EXISTING SYSTEM AND HEIGHT. PROVIDE CARPET TO MATCH EXISTING IN COLOR AND TEXTURE.
- PROVIDE MOISTURE RESISTANT GWB CEILING ATTACHED TO EXISTING CEILING SUPPORT IN SHOWER AREA.
- TOOTH IN BRICK AT EXTERIOR WALL. BRICK AND MORTAR TO MATCH EXISTING IN COLOR AND TEXTURE. INFILL INTERIOR WALL W/METAL STUBS, INSULATION AND GWB TO MATCH EXISTING WALL THICKNESS. SEE GENERAL NOTE 4 ON THIS SHEET.

KEY PLAN



DATE	02/11/15
APPR	01/16/15
DESCRIPTION	FINAL BID DOCUMENTS
REV	0
DATE	02/11/15
DESCRIPTION	REVISION PER NAFC DESIGN REVIEW COMMENTS





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 SATISFACTORY TO DATE: _____
 DES: JMN | DRW: JWS | CHK: KDB
 <<PM/DM>>
 BRANCH MANAGER: _____
 CHIEF ENGINEER: _____
 DESIGN DIRECTOR: _____

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 PUBLIC WORKS DEPARTMENT
 NAVAL STATION NEWPORT
 NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT
 PARTIAL FIRST FLOOR PLAN - NEW DUCTWORK

SCALE: AS NOTED
 EPROJCT NO.: 1312379
 CONSTR. CONTR. NO.: _____
 NAVFAC DRAWING NO.: 12684362
 SHEET 21 OF 47
M-102
 DRAWING REVISION: 10 MARCH 2009
 NAVSTA DWG. NO. 42255-390

ROOM SCHEDULE	
ROOM NUMBER	ROOM NAME
200	CO
201	CO'S CONFERENCE ROOM
202	PASSAGE
203	OFFICE
205	CORR. L
207	DHASO/DC
208	CORR. K
213	LPD-17
214	TRAINING AIDS AND STORAGE
215	CORR. J
216	CLASSROOM
217	E.M. CLASSROOM #6
221	FACILITIES (N3)
221A	STORAGE
221B	STORAGE
223	CORR. D
224	C.P.O. TOILET #2

ROOM NUMBER	ROOM NAME
226	JANITOR
227	STORAGE
228	COMPTROLLER (N8)/SUPPLY (N8)
230	VFO
231	ED OFFICE
232	CORRIDOR
233	STAIR A
234	STORAGE
235	OFFICER IN CHARGE
235A	CLOSET
240	RECEPTIONIST
241	XO OFFICE
244	CLOSET
247	LIBRARY
248	STORAGE

SHEET KEYNOTES

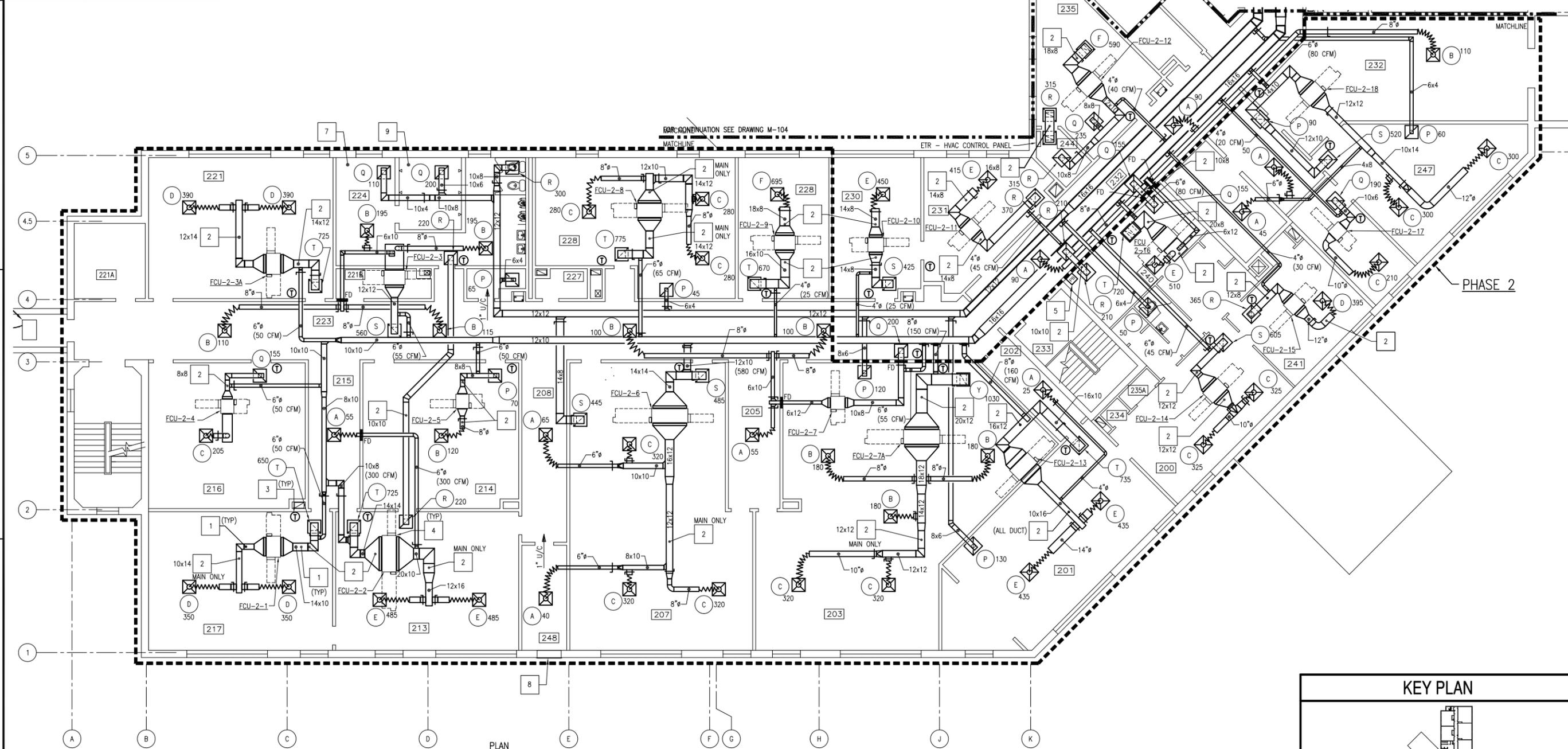
- PROVIDE DUCTWORK, INSULATION (WHERE SPECIFIED), HANGERS, AND SUPPORTS COMPLETE. ROUTE CONCEALED UNLESS OTHERWISE NOTED. SUSPEND FROM OVERHEAD STRUCTURE. PROVIDE INTERMEDIATE STEEL ANGLE OR STEEL UNISTRUT SUPPORTS AS REQUIRED.
- PROVIDE ACOUSTICAL DUCT LINER.
- PROVIDE WALL MOUNTED TEMPERATURE SENSOR. MOUNT APPROXIMATELY 4'-0" AFF AND CENTERLINE WITH LIGHT SWITCHES. PROVIDE CONDUIT AND CONTROL WIRING AS REQUIRED. CONDUIT AND CONTROL WIRING SHALL BE CONCEALED.
- PROVIDE SUSPENDED, CONCEALED, 4-PIPE FAN COIL UNIT, HANGERS AND SUPPORTS COMPLETE. SUSPEND FROM OVERHEAD STRUCTURE WITH RUBBER IN SHEAR, 4-POINT, VIBRATION HANGER SYSTEM. PROVIDE INTERMEDIATE STEEL ANGLE (OR UNISTRUT) SUPPORTS AS REQUIRED. PROVIDE SECONDARY DRAIN PAN WITH MOISTURE SENSOR.
- PROVIDE HVAC SYSTEM EMERGENCY STOP PUSH BUTTON.
- LOWER CEILING IN THIS ROOM TO 8'-6" ABOVE FINISHED FLOOR FROM 9'-9".
- PROVIDE MOISTURE RESISTANT 2x2 ACT AND GRID IN TOILET ROOMS..
- PROVIDE INSULATED BLANK OFF PANEL AND INFILL WALL OPENING W/METAL STUDS AND GWB TO MATCH EXISTING INTERIOR WALL. SEE GENERAL NOTE 4 ON THIS SHEET.
- PROVIDE MOISTURE RESISTANT GWB CEILING ATTACHED TO EXISTING CEILING SUPPORTS IN SHOWER AREA.

PHASING NOTES

- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE DRAWING M-100.
- ALL PIPING AND EQUIPMENT IS SHOWN DIAGRAMMATICALLY ONLY. GENERAL ORIENTATION IS SHOWN IN PLAN AND SECTIONAL DRAWINGS. EXACT LOCATION SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.
- AT LOCATIONS WHERE FLOOR MOUNTED UNIT VENTILATOR OR FAN COIL UNIT HAS BEEN REMOVED, PROVIDE INSULATED SHEETMETAL BLANK OFF PANEL BEHIND EXISTING LOUVER. PATCH FLOOR TO MATCH EXISTING ADJACENT SURFACE IN TEXTURE AND COLOR.
- WHERE EQUIPMENT HAS BEEN REMOVED FROM WALL, PATCH SUBSTRATE AS REQUIRED TO MATCH EXISTING ADJACENT SUBSTRATE IN THICKNESS AND TEXTURE. PAINT WALL FROM FLOOR TO 4" ABOVE CEILING, CORNER TO CORNER TO MATCH ADJACENT WALL IN COLOR AND TEXTURE.
- PROVIDE FIRE STOPPING AT ALL EXISTING PENETRATIONS IN FIRE RATED PARTITIONS AND SLABS WHERE DUCTS OR PIPING HAS BEEN REMOVED AS PART OF DEMOLITION. FIRE RATED PARTITIONS ARE DEFINED AS CHASES, CORRIDOR, LOBBY, AND STAIRWELL WALLS. SECOND FLOOR SLAB IS DEFINED AS FIRE RATED.
- PROVIDE FIRE STOPPING AT ALL NEW DUCT OR PIPE PENETRATIONS THROUGH FIRE RATED PARTITIONS AND SLABS.
- PROVIDE 2x2 ACT AND GRID IN ALL AREAS OF WORK EXCEPT ROOMS 221A AND STAIRWELLS.



PLAN NORTH
PARTIAL SECOND FLOOR PLAN - NEW DUCTWORK
1/8"=1'-0" 0 4' 8' 16'

DATE	01/16/15
DESCRIPTION	FINAL BID DOCUMENTS
SYN	0
APPR	





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FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE

DES JMN DRW JWS CHK KDB

BRANCH MANAGER

CHIEF ENGINEER

DESIGN DIRECTOR

NAVAL FACILITIES ENGINEERING COMMAND
MID-ATLANTIC
PUBLIC WORKS DEPARTMENT
NAVAL STATION NEWPORT
NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT

PARTIAL SECOND FLOOR PLAN - NEW DUCTWORK

SCALE: AS NOTED
PROJECT NO.: 1312379
CONSTR. CONTR. NO.

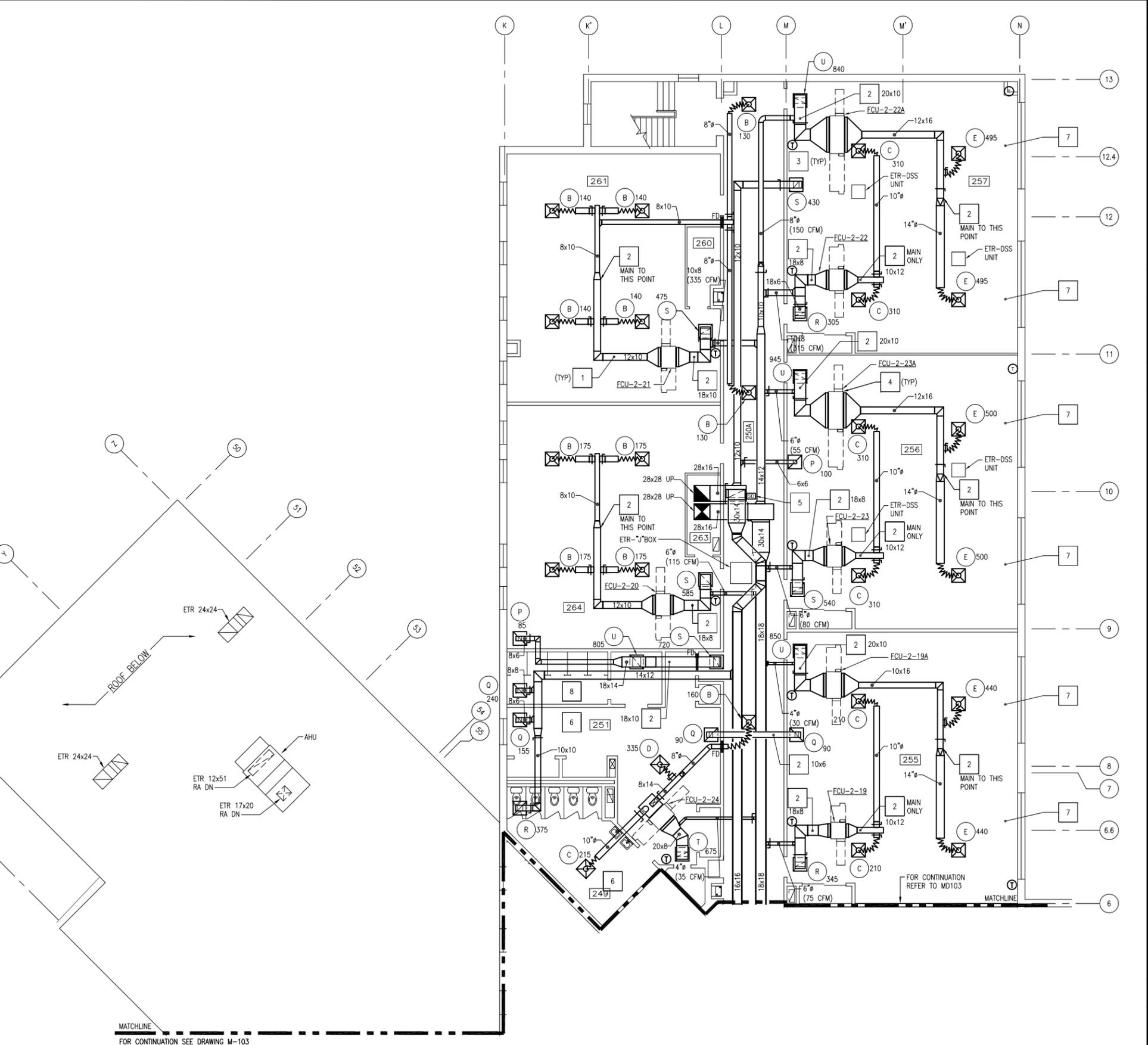
NAVFAC DRAWING NO. 12684363
SHEET 22 OF 47
M-103

DRAWN BY: 10 MARCH 2009
NAVFAC DWG. NO. 42256-390

FILE NAME: I:\Projects\3016446\3016446_0001\90_CAD Models and Sheets\13_Mechanical\M-103.dwg LAYOUT NAME: M-103 PLOTTED: Friday, February 13, 2015 - 7:40am USER: scb/kyr

FILE NAME: I:\Projects\301643\301643_0001\90_CAD Models and Sheets\13_Mechanical\M-104.dwg LAYOUT NAME: M-104 PLOTTED: Thursday, January 15, 2015 - 3:11pm USER: sldgjh

ROOM SCHEDULE	
ROOM NUMBER	ROOM NAME
249	OFF TOILET #2
250	STAIR
250A	CORR. F
251	OFFICERS LOCKER ROOM #2
254	CLOSET
255	TRAINING REQ. (N9)
256	VTC
257	OMMS-NG (N72)
259	CLOSET
260	STORAGE
261	MCM
262	CLOSET
263	STORAGE
264	ADMIN (N1)



MATCHLINE
FOR CONTINUATION SEE DRAWING M-103



PARTIAL SECOND FLOOR PLAN - NEW DUCTWORK

GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE DRAWING M-100.
- ALL PIPING AND EQUIPMENT IS SHOWN DIAGRAMMATICALLY ONLY. GENERAL ORIENTATION IS SHOWN IN PLAN AND SECTIONAL DRAWINGS. EXACT LOCATION SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.
- AT LOCATIONS WHERE FLOOR MOUNTED UNIT VENTILATOR OR FAN COIL UNIT HAS BEEN REMOVED, PROVIDE INSULATED SHEETMETAL BLANK OFF PANEL BEHIND EXISTING LOUVER. PATCH FLOOR TO MATCH EXISTING ADJACENT SURFACE IN TEXTURE AND COLOR. SEE NOTE 4 ON THIS SHEET.
- WHERE EQUIPMENT HAS BEEN REMOVED FROM WALL, PATCH SUBSTRATE AS REQUIRED TO MATCH EXISTING ADJACENT SUBSTRATE IN THICKNESS AND TEXTURE. PAINT WALL FROM FLOOR TO 4" ABOVE CEILING, CORNER TO CORNER TO MATCH ADJACENT WALL IN COLOR AND TEXTURE.
- PROVIDE FIRE STOPPING AT ALL EXISTING PENETRATIONS IN FIRE RATED PARTITIONS AND SLABS WHERE DUCTS OR PIPING HAS BEEN REMOVED AS PART OF DEMOLITION. FIRE RATED PARTITIONS ARE DEFINED AS CHASES, CORRIDOR, LOBBY, AND STAIRWELL WALLS. SECOND FLOOR SLAB IS DEFINED AS FIRE RATED.
- PROVIDE FIRE STOPPING AT ALL NEW DUCT OR PIPE PENETRATIONS THROUGH FIRE RATED PARTITIONS AND SLAB.
- PROVIDE 2x2 ACT AND GRID IN ALL AREAS OF WORK EXCEPT STAIRWELLS.

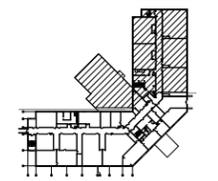
PHASING NOTES

- WORK ON THIS DRAWING SHALL BE ACCOMPLISHED IN PHASE 1.

SHEET KEYNOTES

- PROVIDE DUCTWORK, INSULATION (WHERE SPECIFIED), HANGERS, AND SUPPORTS COMPLETE. ROUTE CONCEALED UNLESS OTHERWISE NOTED. SUSPENDED FROM OVERHEAD STRUCTURE. PROVIDE INTERMEDIATE STEEL ANGLE OR STEEL UNISTRUT SUPPORTS AS REQUIRED.
- PROVIDE ACOUSTICAL DUCT LINER.
- PROVIDE WALL MOUNTED TEMPERATURE SENSOR. MOUNT APPROXIMATELY 4'-0" AFF AND CENTERLINE WITH LIGHT SWITCHES. PROVIDE CONDUIT AND CONTROL WIRING AS REQUIRED. CONDUIT AND CONTROL WIRING SHALL BE CONCEALED.
- PROVIDE SUSPENDED, CONCEALED, 4-PIPE FAN COIL UNIT, HANGERS AND SUPPORTS COMPLETE. SUSPEND FROM OVERHEAD STRUCTURE WITH RUBBER IN SHEAR, 4-POINT, VIBRATION HANGER SYSTEM. PROVIDE INTERMEDIATE STEEL ANGLE (OR UNISTRUT) SUPPORTS AS REQUIRED. PROVIDE SECONDARY DRAIN PAN WITH MOISTURE SENSOR.
- PROVIDE DUCT MOUNTED SMOKE DETECTOR.
- PROVIDE MOISTURE RESISTANT 2x2 ACT AND GRID IN TOILET ROOMS.
- INFILL OPENING IN RAISED ACCESS FLOORING TO MATCH EXISTING SYSTEM AND HEIGHT. PROVIDE CARPET TO MATCH EXISTING IN COLOR AND TEXTURE.
- PROVIDE MOISTURE RESISTANT GWB CEILING ATTACHED TO EXISTING CEILING SUPPORT IN SHOWER AREA.

KEY PLAN



DATE	01/16/15
DESCRIPTION	FINAL BID DOCUMENTS
SYN	0

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Douglassville, PA 19518
610-385-8200
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APPROVED: _____
FOR COMMANDER NAVFAC
ACTIVITY: _____

SATISFACTORY TO DATE: _____
DES: JMN DRW: JWS CHK: KDB
BRANCH MANAGER: _____
CHIEF ENG/ARCH: _____
DESIGN DIRECTOR: _____

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

BUILDING 446 HVAC REPLACEMENT

PARTIAL SECOND FLOOR PLAN - NEW DUCTWORK

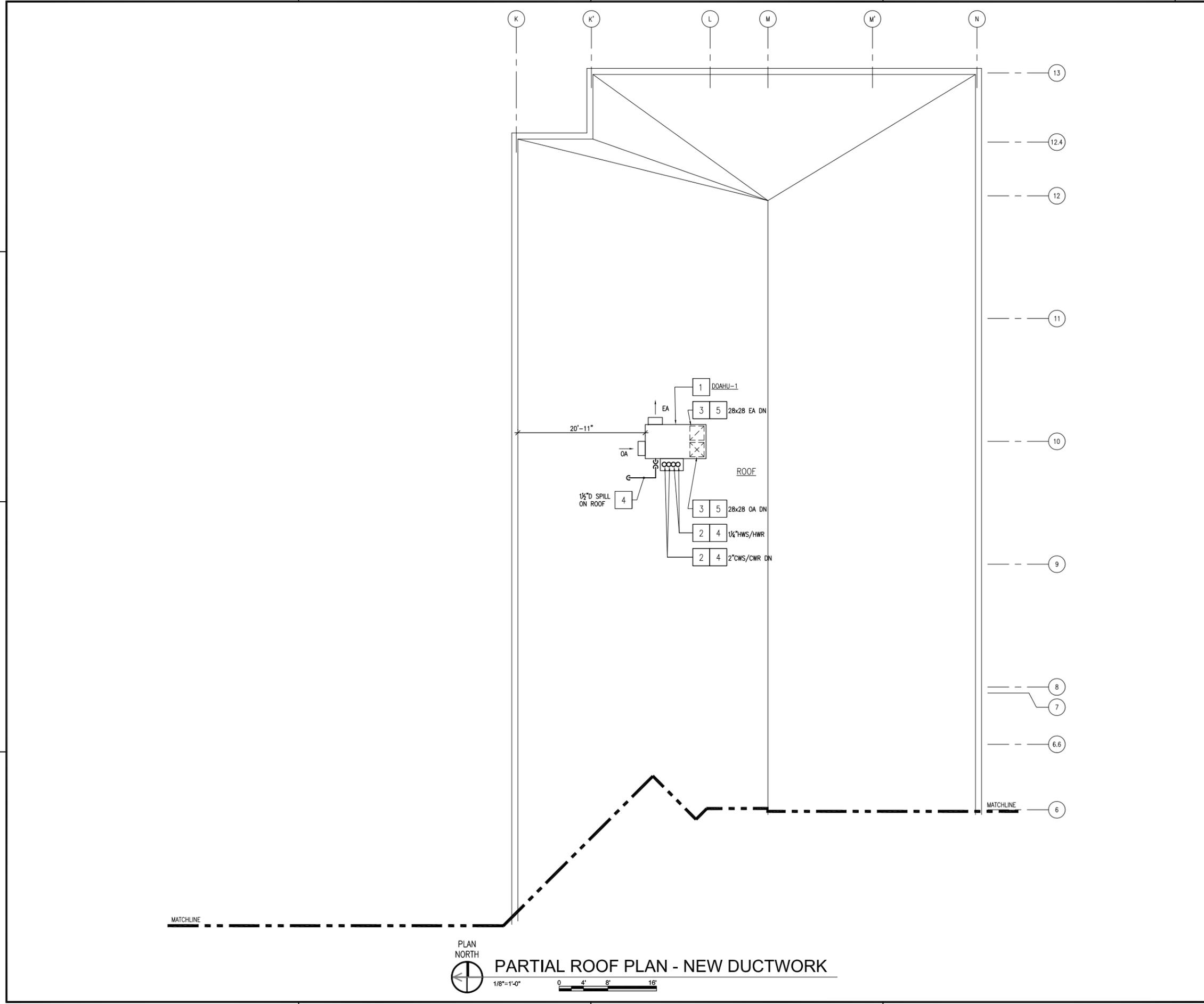
SCALE: AS NOTED
PROJECT NO.: 1312379
CONSTR. CONTR. NO.: _____

NAVFAC DRAWING NO.: 12684364
SHEET 23 OF 47

M-104

DRAWING REVISION: 10 MARCH 2009
NAVSTA DWG. NO. 42257-390

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD_Models_and_Sheets\3_Mechanical\M-105.dwg LAYOUT NAME: M - 105 PLOTTED: Thursday, January 15, 2015 - 3:12pm USER: sldkshw



GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE SHEET M001.
- ALL PIPING AND EQUIPMENT SHOWN DIAGRAMMATICALLY ONLY. GENERAL ORIENTATION SHOWN IN PLAN AND SECTIONAL DRAWINGS. EXACT LOCATION SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.

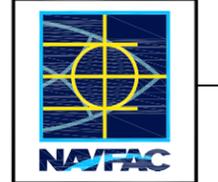
PHASING NOTES

- WORK ON THIS DRAWING SHALL BE ACCOMPLISHED IN PHASE 1.

SHEET KEYNOTES

- PROVIDE DEDICATED ROOFTOP OUTSIDE AIR UNIT AND SUPPORTS COMPLETE. PROVIDE AND MOUNT ON MANUFACTURER'S ACOUSTICAL CURB AND VIBRATION ISOLATION PACK.
- PENETRATE ROOF THRU DOAHU-1 PIPE ENCLOSURE.
- PROVIDE ACOUSTICAL DUCT LINER.
- PROVIDE PIPING, INSULATION AND SUPPORTS COMPLETE. PROVIDE HEAT TAPE FOR HOT AND CHILLED WATER PIPING ABOVE THE ROOF LINE. POWER FROM MAINTENANCE RECEPTACLE CIRCUIT.
- PROVIDE DUCTWORK, INSULATION AND SUPPORTS COMPLETE.

DATE	DESCRIPTION	BY	APPR
01/16/15	FINAL BID DOCUMENTS		
0			



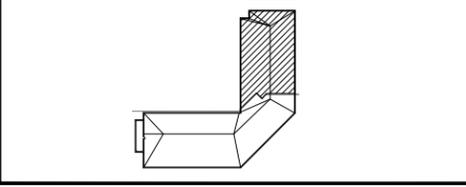
STV
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 Douglassville, PA 19518
 610-385-8200
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APPROVED
FOR COMMANDER NAFAC
ACTIVITY
SATISFACTORY TO DATE
DES: BPK DRW: BPK CHK: CHK
<<PM/CM>>
BRANCH MANAGER
CHIEF ENG/ARCH
DESIGN DIRECTOR

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
 PUBLIC WORKS DEPARTMENT
 NAVAL STATION NEWPORT
 NEWPORT, RHODE ISLAND
BUILDING 446 HVAC REPLACEMENT
 PARTIAL ROOF PLAN - NEW DUCTWORK

SCALE: AS NOTED
PROJECT NO.: 1312379
CONSTR. CONTR. NO.
NAFAC DRAWING NO. 12684365
SHEET 24 OF 47
M - 105

KEY PLAN



PLAN NORTH
PARTIAL ROOF PLAN - NEW DUCTWORK
 1/8"=1'-0" 0 4' 8' 16'

ROOM SCHEDULE	
ROOM NUMBER	ROOM NAME
141	CORRIDOR
143	CLOSET
144	OFFICERS LOCKER ROOM
145	CLOSET
146	DRYING ROOM
147	SHOWER ROOM
148	ISWOS N72
149	ISWOS N72
150	N74
151	JANITOR
152	STORAGE
153	VTT
154	LAN
155	MECH. ROOM
156	STAIR C
157	RESTROOM
159	AUDITORIUM
160	CORRIDOR "J"
161	CLOSET
162	STAGE
163	VEST. #1
164	CLOSET
165	CLOSET
166	VEST. #2
171	CLOSET
172	CLOSET
173	CLOSET

GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE DRAWING M-100.
- ALL PIPING AND EQUIPMENT IS SHOWN DIAGRAMMATICALLY ONLY. GENERAL ORIENTATION IS SHOWN IN PLAN AND SECTIONAL DRAWINGS. EXACT LOCATION SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.
- PROVIDE FIRE STOPPING AT ALL EXISTING PENETRATIONS IN FIRE RATED PARTITIONS AND SLABS WHERE DUCTS OR PIPING HAS BEEN REMOVED. FIRE RATED PARTITIONS ARE DEFINED AS CORRIDOR, LOBBY, AND STAIRWELL WALLS. SECOND FLOOR SLAB IS DEFINED AS FIRE RATED.
- PROVIDE FIRE STOPPING AT ALL NEW DUCT OR PIPE PENETRATIONS THROUGH FIRE RATED PARTITIONS AND SLABS.

PHASING NOTES

- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

SHEET KEYNOTES

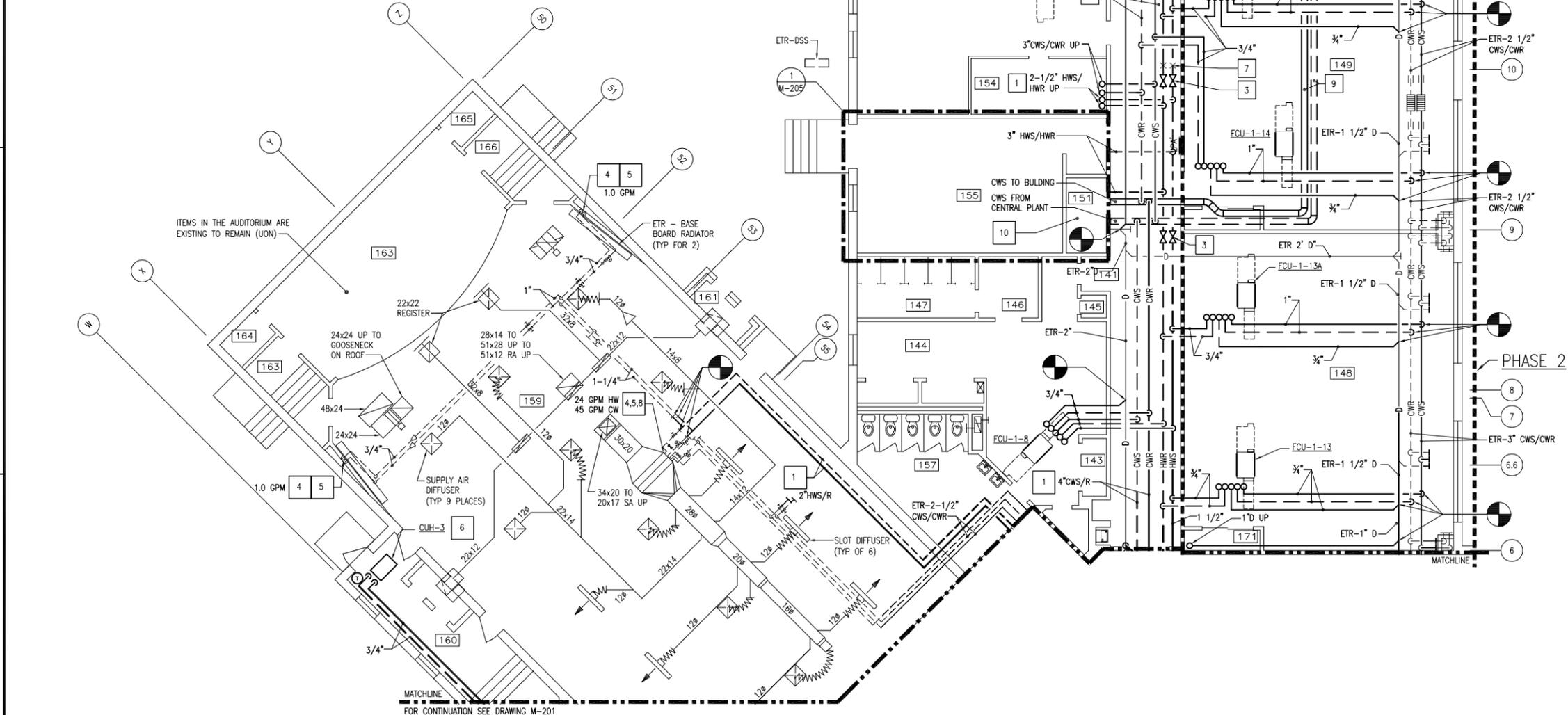
- PROVIDE HWS/HWR, CWS/CWR, AND D PIPING INSULATION, HANGERS AND SUPPORTS COMPLETE.
- INSULATE ETR CWS/CWR, HWS/HWR AND DRAIN (FORMERLY DTS/DTR PIPING) PIPING COMPLETE. INSULATE D PIPING COMPLETE.
- PROVIDE ISOLATION VALVE WITH 3/4" HOSE BIB DOWN STREAM OF VALVE.
- BALANCE TO GPM INDICATED.
- CONNECT EXISTING HOT WATER COIL TO NEW HWS/HWR PIPING.
- PROVIDE HOT WATER CABINET UNIT HEATER SUPPORTS, AND MOUNTINGS COMPLETE. SUSPEND FROM OVERHEAD STRUCTURE. PROVIDE INTERMEDIATE UNISTRUT SUPPORTS AS REQUIRED.
- PROVIDE PIPE ANCHOR.
- REPLACE HOT WATER AND CHILLED WATER COIL 2-WAY VALVES WITH 3-WAY MODULATING CONTROL VALVES, 3PSIG MAX PD.
- PROVIDE 6" CWS/R DURING PHASE 1.
- CAP PIPING AND PROVIDE TEMPORARY FLEXIBLE PIPING (ROOM 144 TO ROOM 151) AS REQUIRED TO PRESERVE SERVICE TO PHASE 2.

DATE	01/16/15
DESCRIPTION	FINAL BID DOCUMENTS
DATE	01/16/15
DESCRIPTION	0



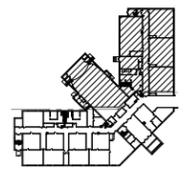


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PLAN NORTH
PARTIAL FIRST FLOOR PLAN - NEW PIPING
1/8"=1'-0"
0 4' 8' 16'

KEY PLAN



APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE

DES: JMN | DRW: JWS | CHK: KDB

BRANCH MANAGER

CHIEF ENGINEER

DESIGN DIRECTOR

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC

PUBLIC WORKS DEPARTMENT

NAVAL STATION NEWPORT

NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT

PARTIAL FIRST FLOOR PLAN - NEW PIPING

SCALE: AS NOTED

PROJECT NO.: 1312379

CONSTR. CONTR. NO.

NAVFAC DRAWING NO. 12684367

SHEET 26 OF 47

M-202

DRAWING REVISION: 10 MARCH 2009

NAVSTA DWG. NO. 42260-390

FILE NAME: I:\Projects\301643\301643_0001\90_CAD Models and Sheets\13_Mechanical\M-202.dwg LAYOUT NAME: M-202 PLOTTED: Thursday, January 15, 2015 - 3:15pm USER: sldkdw

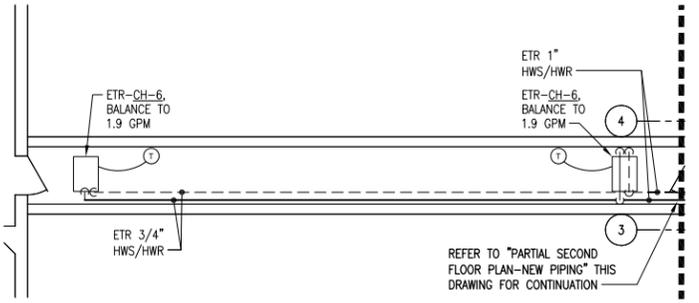
ROOM SCHEDULE	
ROOM NUMBER	ROOM NAME
200	CO
201	CO'S CONFERENCE ROOM
202	PASSAGE
203	OFFICE
205	CORR. L
207	DHASO/DC
208	CORR. K
213	LPD-17
214	TRAINING AIDS AND STORAGE
215	CORR. J
216	CLASSROOM
217	E.M. CLASSROOM #6
221	FACILITIES (N3)
221A	STORAGE
221B	STORAGE
223	CORR. D
224	C.P.O. TOILET #2

ROOM NUMBER	ROOM NAME
226	JANITOR
227	STORAGE
228	COMPTROLLER (N8)/SUPPLY (N8)
230	VFO
231	ED OFFICE
232	CORRIDOR
233	STAIR A
234	STORAGE
235	OFFICER IN CHARGE
235A	CLOSET
240	RECEPTIONIST
241	XO OFFICE
244	CLOSET
247	LIBRARY
248	STORAGE

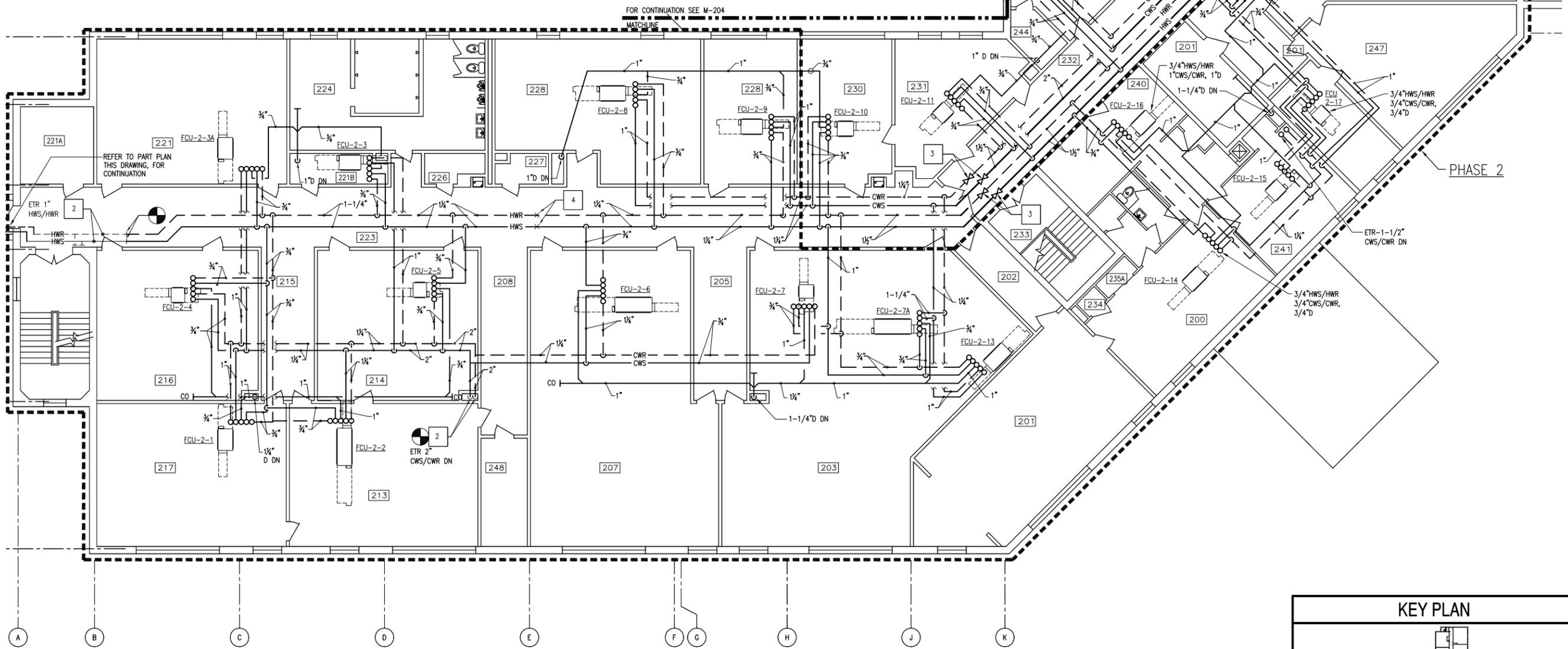
- ### PHASING NOTES
- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.
 - CAP PIPING AS REQUIRED TO PRESERVE SERVICE TO PHASE 2.

- ### SHEET KEYNOTES
- PROVIDE HWS/HWR, CWS/CWR, AND D PIPING INSULATION, HANGERS AND SUPPORTS COMPLETE.
 - INSULATE ETR CWS/CWR, HWS/HWR AND DRAIN (FORMERLY DTS/DTR PIPING) PIPING COMPLETE. INSULATE D PIPING COMPLETE.
 - PROVIDE ISOLATION VALVE WITH 3/4" HOSE BIB DOWN STREAM OF VALVE.
 - PROVIDE PIPE ANCHOR.

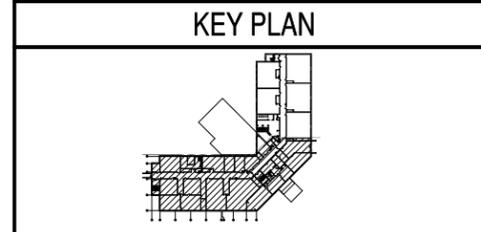
- ### GENERAL SHEET NOTES
- FOR LEGEND AND GENERAL NOTES SEE DRAWING M-100.
 - ALL PIPING AND EQUIPMENT IS SHOWN DIAGRAMMATICALLY ONLY. GENERAL ORIENTATION IS SHOWN IN PLAN AND SECTIONAL DRAWINGS. EXACT LOCATION SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.
 - PROVIDE FIRE STOPPING AT ALL EXISTING PENETRATIONS IN FIRE RATED PARTITIONS AND SLABS WHERE DUCTS OR PIPING HAS BEEN REMOVED. FIRE RATED PARTITIONS ARE DEFINED AS CORRIDOR, LOBBY, AND STAIRWELL WALLS. SECOND FLOOR SLAB IS DEFINED AS FIRE RATED.
 - PROVIDE FIRE STOPPING AT ALL NEW DUCT OR PIPE PENETRATIONS THROUGH FIRE RATED PARTITIONS AND SLABS.



PLAN NORTH
PART PLAN
1/8"=1'-0"
0 4' 8' 16'



PLAN NORTH
PARTIAL SECOND FLOOR PLAN - NEW PIPING
1/8"=1'-0"
0 4' 8' 16'



DATE	02/11/15
DATE	01/16/15
DESCRIPTION	REVISION PER NAFC DESIGN REVIEW COMMENTS 01-21-15
DATE	01/16/15
DESCRIPTION	FINAL BID DOCUMENTS
DATE	
DESCRIPTION	

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APPROVED

FOR COMMANDER NAFC

ACTIVITY

SATISFACTORY TO DATE

DES JMN | DRW JWS | CHK KDB

BRANCH MANAGER

CHIEF ENGINEER

DESIGN DIRECTOR

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

BUILDING 446 HVAC REPLACEMENT

PARTIAL SECOND FLOOR PLAN - NEW PIPING

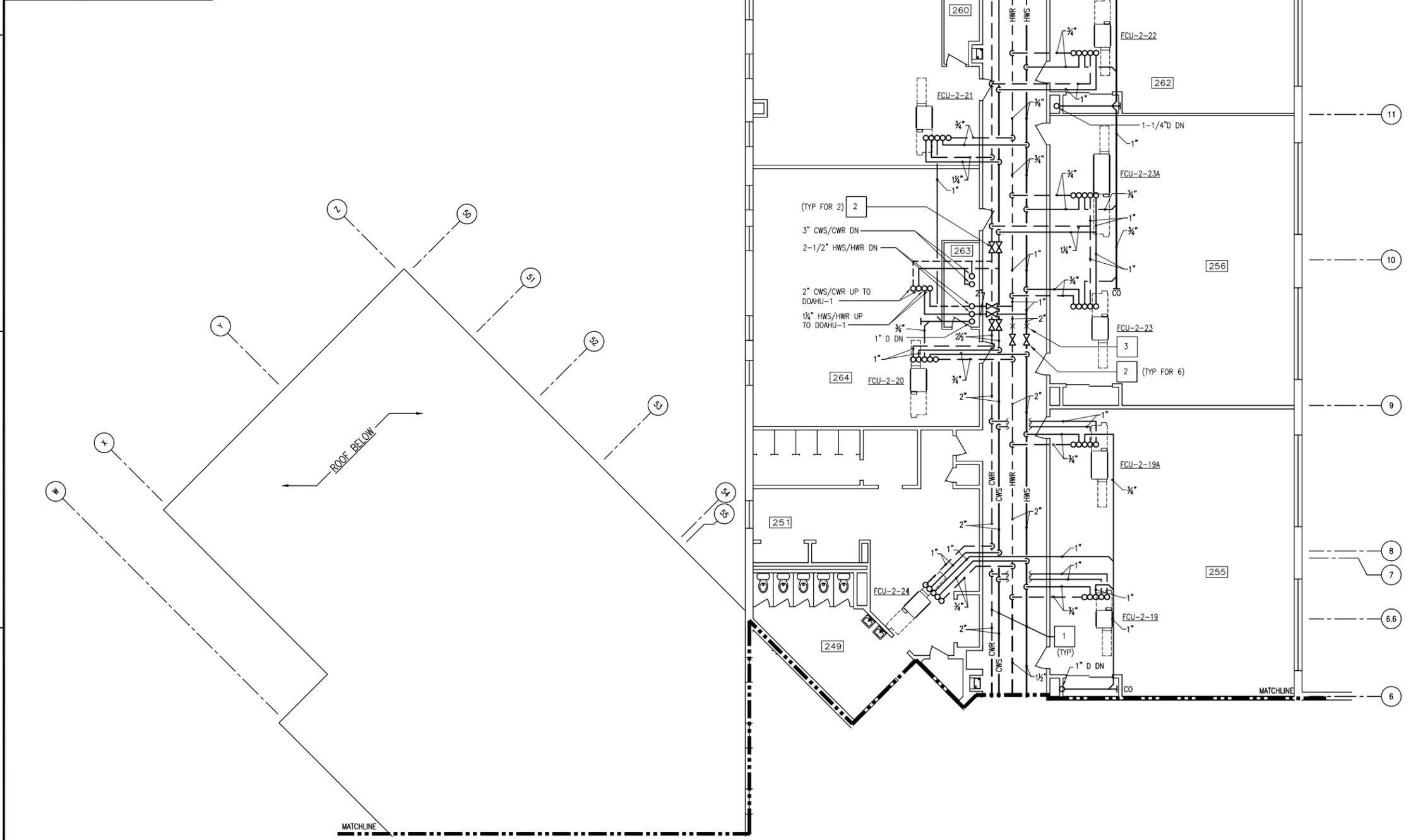
SCALE: AS NOTED
PROJECT NO.: 1312379
CONSTR. CONTR. NO.

NAVC DRAWING NO. 12684368
SHEET 27 OF 47
M-203

DRAWING REVISION: 10 MARCH 2009
NAVSTA DWG. NO. 42261-390

FILE NAME: I:\Projects\301643\301643_0001\90_CAD Models and Sheets\13_Mechanical\M-203.dwg LAYOUT NAME: M-203 PLOTTED: Friday, February 13, 2015 - 7:45am USER: scdcljw

ROOM SCHEDULE	
ROOM NUMBER	ROOM NAME
249	OFF TOILET #2
250	STAIR
250A	CORR. F
251	OFFICERS LOCKER ROOM #2
254	CLOSET
255	TRAINING REQ. (N9)
256	VTC
257	OMMS-NG (N72)
259	CLOSET
260	STORAGE
261	MCM
262	CLOSET
263	STORAGE
264	ADMIN (N1)



MATCHLINE
FOR CONTINUATION SEE M-203



PARTIAL SECOND FLOOR PLAN - NEW PIPING

GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE DRAWING M-100.
- ALL PIPING AND EQUIPMENT IS SHOWN DIAGRAMMATICALLY ONLY. GENERAL ORIENTATION IS SHOWN IN PLAN AND SECTIONAL DRAWINGS. EXACT LOCATION SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.
- PROVIDE FIRE STOPPING AT ALL EXISTING PENETRATIONS IN FIRE RATED PARTITIONS AND SLABS WHERE DUCTS OR PIPING HAS BEEN REMOVED. FIRE RATED PARTITIONS ARE DEFINED AS CORRIDOR, LOBBY, AND STAIRWELL WALLS. SECOND FLOOR SLAB IS DEFINED AS FIRE RATED.
- PROVIDE FIRE STOPPING AT ALL NEW DUCT OR PIPE PENETRATIONS THROUGH FIRE RATED PARTITIONS AND SLABS.

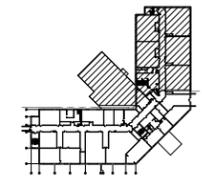
PHASING NOTES

- WORK ON THIS DRAWING SHALL BE ACCOMPLISHED IN PHASE 1.

SHEET KEYNOTES

- PROVIDE HWS/HWR, CWS/CWR, AND D PIPING INSULATION, HANGERS AND SUPPORTS COMPLETE.
- PROVIDE ISOLATION VALVE WITH 3/4" HOSE BIB DOWN STREAM OF VALVE.
- PROVIDE PIPE ANCHOR.

KEY PLAN



DATE	02/11/15
DATE	01/16/15
DESCRIPTION	FINAL BID DOCUMENTS
SYN	0
APPR	

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610-385-8200
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APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE

DES: JMN | DRW: JWS | CHK: KDB

BRANCH MANAGER

CHIEF ENG/ARCH

DESIGN DIRECTOR

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
PUBLIC WORKS DEPARTMENT
NAVAL STATION NEWPORT - NEWPORT, RI
NAVAL STATION NEWPORT
NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT

PARTIAL SECOND FLOOR PLAN - NEW PIPING

SCALE: AS NOTED
EPROJECT NO.: 1312379
CONSTR. CONTR. NO.

NAVFAC DRAWING NO. 12684369
SHEET 28 OF 47

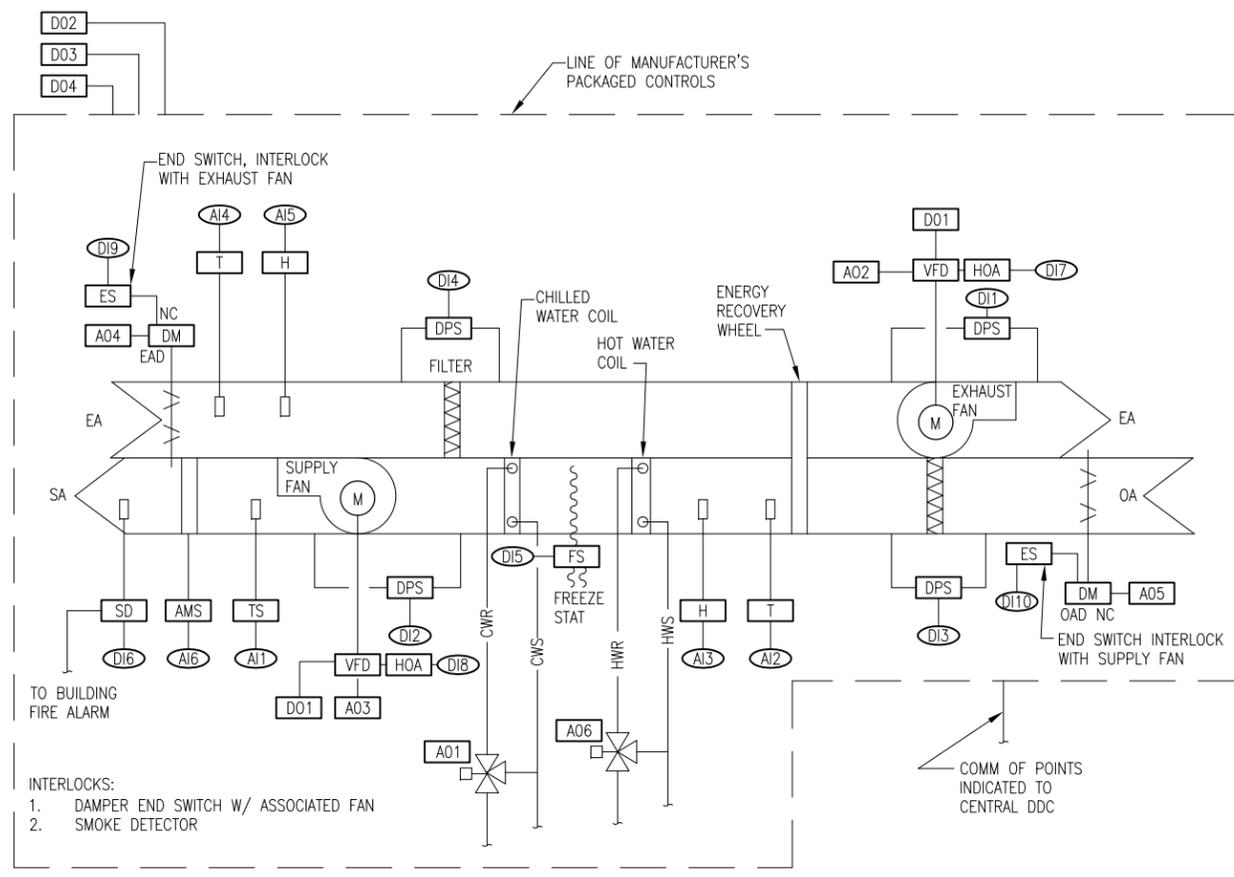
M-204

DRAWING REVISION: 10 MARCH 2009
NAVSTA DWG. NO. 42262-390

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD Models and Sheets\13_Mechanical\M-204.dwg LAYOUT NAME: M-204 PLOTTED: Friday, February 13, 2015 - 7:45am USER: sc44jw

FILE NAME: I:\Projects\3016446\3016446_0001\90_CAD Models and Sheets\13_Mechanical\M-602.dwg LAYOUT NAME: M-602 PLOTTED: Thursday, January 15, 2015 - 3:27pm USER: s6446

DOAHU-1	
DDC CONTROLLER	
INPUTS	
ANALOG	AI1 SUPPLY AIR TEMPERATURE
	AI2 OA (AFTER RECOVERY) TEMPERATURE
	AI3 OA (AFTER RECOVERY) HUMIDITY
	AI4 EA TEMPERATURE
	AI5 EA HUMIDITY
	AI6 SF AIR FLOW CFM
DIGITAL	DI1 EXHAUST FAN STATUS
	DI2 SUPPLY FAN STATUS
	DI3 FILTER DIFFERENTIAL PRESSURE
	DI4 FILTER DIFFERENTIAL PRESSURE
	DI5 FREEZESTAT
	DI6 DUCT SMOKE DETECTOR
	DI7 EF HAND/AUTO POSITION
	DI8 SF HAND/AUTO POSITION
	DI9 EA DAMPER OPEN
	DI10 OA DAMPER OPEN
OUTPUTS	
ANALOG	A01 COOLING CONTROL VALVE
	A02 EF VFD
	A03 SF VFD
	A04 EAD POSITION
	A05 OAD POSITION
	A06 HEATING CONTROL VALVE
DIGITAL	DO1 EF/SF START/STOP
	DO2 RUN SYSTEM IN HAND
	DO3 SYSTEM OFF
	DO4 RUN SYSTEM AUTO



DOAHU-1 CONTROL DIAGRAM

SCALE: NTS

DOAHU-1 SEQUENCE & OPERATION

OCCUPIED / UNOCCUPIED MODE:
THE SYSTEM SHALL BE PLACED IN OCCUPIED OR UNOCCUPIED MODE BY A USER ADJUSTABLE TIME OF DAY/WEEK/YEAR SCHEDULE. IN OCCUPIED MODE THE SUPPLY AND EXHAUST FANS SHALL RUN CONTINUOUSLY, THE HEAT WHEEL SHALL BE ENERGIZED AND THE EXHAUST AND SUPPLY DAMPERS SHALL OPEN. IN UNOCCUPIED MODE, THE OPPOSITE SHALL OCCUR.

COOLING:
THE SUPPLY FAN SHALL RUN CONTINUOUSLY WHEN THE SYSTEM IS INDEXED TO COOLING. WHEN THE SUPPLY TEMPERATURE RISES ABOVE THE SET POINT (55°F); THE CHILLED WATER CONTROL VALVE SHALL MODULATE TO MAINTAIN SETPOINT (ADJUSTABLE). WHEN THE SUPPLY TEMPERATURE DROPS BELOW THE SETPOINT, THE OPPOSITE SHALL OCCUR.

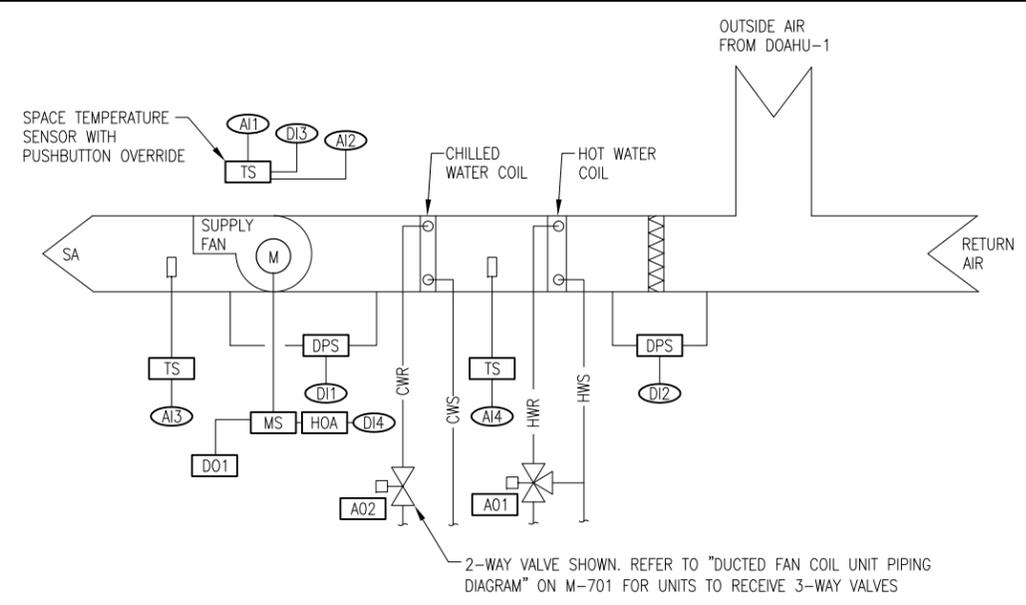
HEATING:
THE SUPPLY FAN SHALL RUN CONTINUOUSLY WHEN THE SYSTEM IS INDEXED TO HEATING. WHEN THE SUPPLY TEMPERATURE DROPS BELOW THE SET POINT (72°F); THE HOT WATER CONTROL VALVE SHALL MODULATE TO MAINTAIN SETPOINT (ADJUSTABLE). WHEN THE SUPPLY TEMPERATURE RISES ABOVE THE SETPOINT, THE OPPOSITE SHALL OCCUR.

FREEZE PROTECTION:
IF FREEZESTAT TEMPERATURE FALLS BELOW 40°F DURING HEATING MODE, THE SYSTEM SHALL CLOSE THE OUTSIDE AND EXHAUST AIR DAMPERS, DE-ENERGIZE THE SUPPLY AND EXHAUST AIR FANS AND FULLY OPEN THE HOT WATER VALVE TO THE COIL. MANUAL RESET SHALL BE REQUIRED.

SAFETY CONTROL:
UPON DETECTION OF THE PRODUCTS OF COMBUSTION BY THE DUCT SMOKE DETECTOR, THE SUPPLY AND ASSOCIATED EXHAUST FANS SHALL BE DE-ENERGIZED.

ALARMS:
ALARM FOR DIRTY FILTER: WHEN PRESSURE DROP EXCEEDS 0.5" WG ABOVE INITIAL PRESSURE DROP.
ALARM IF SUPPLY AIR TEMPERATURE EXCEEDS 60°F (ADJUSTABLE) IN COOLING MODE OR DROPS BELOW 65°F (ADJUSTABLE) IN HEATING MODE.
ALARM IF SUPPLY OR EXHAUST FAN FAILS TO START OR FAILS DURING OPERATION.
ALARM IF SUPPLY AIR FLOW FALLS BELOW 90 PERCENT OF SETPOINT.

FCU	
DDC CONTROLLER	
INPUTS	
ANALOG	AI1 SPACE TEMPERATURE
	AI2 SPACE TEMPERATURE SETPOINT
	AI3 SUPPLY AIR TEMPERATURE
	AI4 HW COIL DISCHARGE TEMPERATURE
DIGITAL	DI1 SUPPLY AIR FAN STATUS
	DI2 DIRTY FILTER
	DI3 UNOCCUPIED OVERRIDE
	DI4 SF HAND/AUTO POSITION
OUTPUTS	
ANALOG	A01 HW VALVE CONTROL
	A02 CW VALVE CONTROL
DIGITAL	DO1 SUPPLY AIR FAN START



FAN COIL UNIT (FCU) CONTROL DIAGRAM

SCALE: NTS

FCU SEQUENCE & OPERATION

OCCUPIED MODE:
WHEN THE SYSTEM IS INDEXED TO OCCUPIED BY TIME OF DAY SCHEDULE OR SYSTEM IS MANUALLY INDEXED FROM UNOCCUPIED MODE BY OVERRIDE BUTTON INTEGRAL TO SPACE TEMPERATURE SENSOR, THE RESPECTIVE CONTROL VALVE SHALL MODULATE TO MAINTAIN RESPECTIVE PROGRAMMED TEMPERATURE SETTINGS (75°F COOLING, 68°F HEATING). THE SUPPLY FAN SHALL RUN CONTINUOUSLY.

UNOCCUPIED MODE:
WHEN THE SYSTEM IS INDEXED TO UNOCCUPIED, THE RESPECTIVE CONTROL VALVE SHALL MODULATE TO MAINTAIN RESPECTIVE PROGRAMMED TEMPERATURE SETTINGS (80°F COOLING, 60°F HEATING). THE SUPPLY FAN SHALL CYCLE.

COOLING-OCCUPIED:
THE SUPPLY FAN SHALL BE ENERGIZED WHEN THE SYSTEM IS INDEXED TO COOLING AND THE SPACE TEMPERATURE RISES ABOVE THE SETPOINT (75°). THE 2-WAY OR 3-WAY CHILLED WATER CONTROL VALVE SHALL MODULATE TO MAINTAIN SETPOINT (ADJUSTABLE). WHEN THE SPACE TEMPERATURE DROPS BELOW THE SETPOINT, THE OPPOSITE SHALL OCCUR.

HEATING-OCCUPIED:
THE SUPPLY FAN SHALL BE ENERGIZED WHEN THE SYSTEM IS INDEXED TO HEATING AND THE SPACE TEMPERATURE DROPS BELOW THE SETPOINT (68°). THE 3-WAY HOT WATER CONTROL VALVE SHALL MODULATE TO MAINTAIN SETPOINT (ADJUSTABLE). WHEN THE SPACE TEMPERATURE RISES ABOVE THE SETPOINT, THE OPPOSITE SHALL OCCUR.

ALARMS:
ALARM FOR DIRTY FILTER: WHEN PRESSURE DROP EXCEEDS 0.5" WG ABOVE INITIAL PRESSURE DROP.
ALARM IF LEAVING AIR TEMPERATURE EXCEEDS 60°F IN COOLING MODE OR DROPS BELOW 50°F IN HEATING MODE.
ALARM IF SUPPLY FAN FAILS TO START OR FAILS DURING OPERATION.

APPR	DATE	01/16/15
DESCRIPTION	FINAL BID DOCUMENTS	
QTY	0	

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DES: JMN | DRW: JWS | CHK: KDB

BRANCH MANAGER

CHIEF ENGR/ARCH

DESIGN DIRECTOR

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

BUILDING 446 HVAC REPLACEMENT

CONTROLS

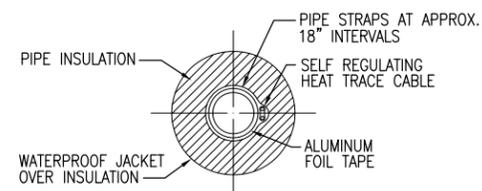
SCALE: AS NOTED
EPROJCT NO.: 1312379
CONSTR. CONTR. NO.

NAVFAC DRAWING NO. 12684373
SHEET 32 OF 47

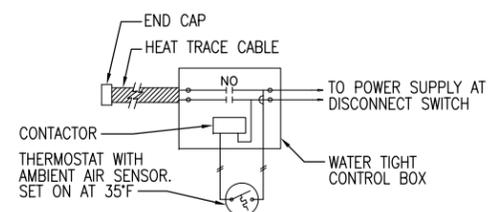
M-602

DRAWING REVISION: 10 MARCH 2009
NAVSTA DWG. NO. 42266-390

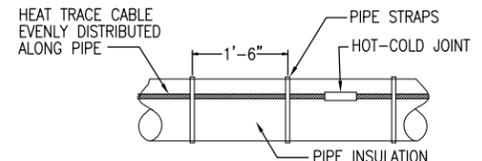
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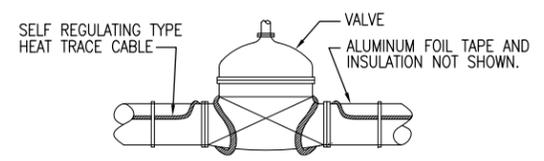
SECTION THRU PIPE
NO SCALE



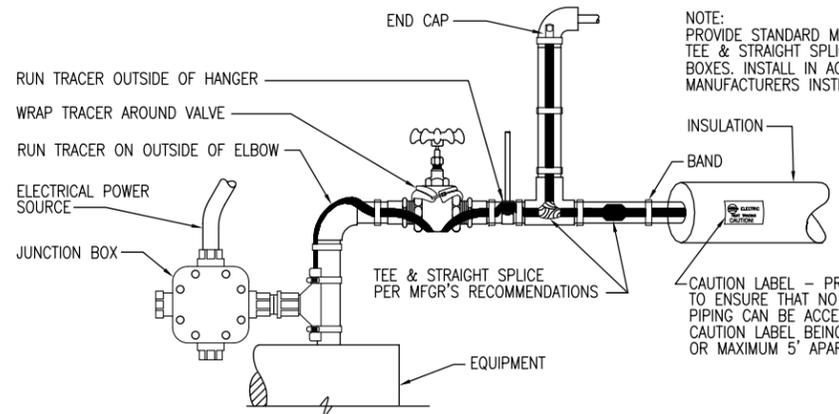
HEAT TRACE CONTROL BOX DIAGRAM
NO SCALE



INSTALLATION DETAIL
NO SCALE



INSTALLATION AT VALVES
NO SCALE

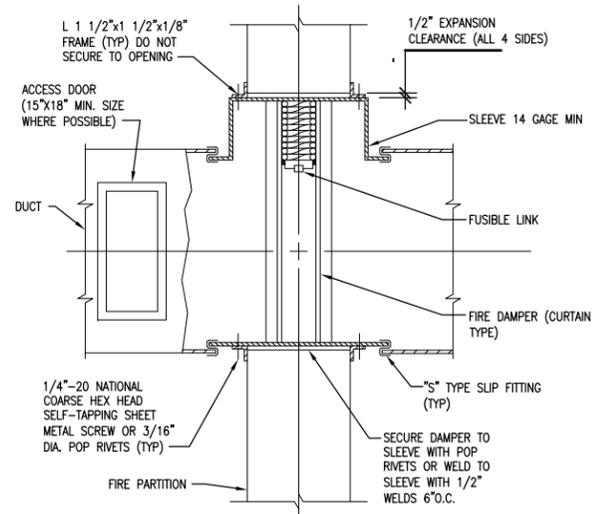


NOTE: PROVIDE STANDARD MANUFACTURERS END CAPS, TEE & STRAIGHT SPLICES, AND JUNCTION BOXES. INSTALL IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

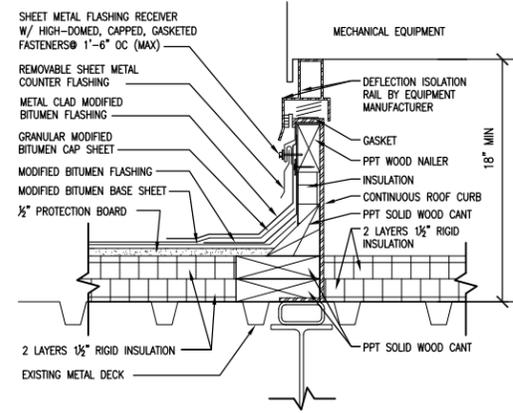
CAUTION LABEL - PROVIDE AS NECESSARY TO ENSURE THAT NO SECTION OF TRACED PIPING CAN BE ACCESSED WITHOUT A CAUTION LABEL BEING PROMINENTLY VISIBLE OR MAXIMUM 5' APART.

HEAT TRACING DETAILS

- NO SCALE
- NOTES:
1. PROVIDE WEATHER RESISTANT LABELING ON EXTERIOR OF JACKET IDENTIFYING PIPES AS BEING "ELECTRIC TRACED" WITH VOLTAGE INDICATED



VERTICAL FIRE DAMPER DETAIL
NO SCALE



EQUIPMENT SUPPORT CURB
1 1/2" = 1'-0" 0 1' 1'6"

DATE	01/16/15
DESCRIPTION	FINAL BID DOCUMENTS
SYN	0



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DES	JMN
DRW	JWS
CHK	KDB
BRANCH MANAGER	
CHIEF ENGR/ARCH	
DESIGN DIRECTOR	

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BUILDING 446 HVAC REPLACEMENT

DETAILS

SCALE:	AS NOTED
EPROJCT NO.:	1312379
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12684375
SHEET	34 OF 47
M-702	

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD_Models_and_Sheets\4_Electrical\E-001.dwg LAYOUT NAME: 3016436_0001 PLOTTED: Thursday, January 15, 2015 - 3:27pm USER: sckleijw

1 LEGEND

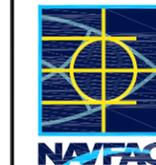
-  EXISTING DISCONNECT SWITCH
-  MANUAL MOTOR STARTER - MOUNT ON UNIT
-  FUSED DISCONNECT SWITCH - NUMBER OF POLES, AMPERE RATING, VOLTAGE AND NEMA TYPE AND FUSES AS INDICATED - MOUNT 4"-6" TO CENTERLINE OF HANDLE
-  BRANCH CIRCUIT EXPOSED
-  BRANCH CIRCUIT CONCEALED IN CEILING
-  BRANCH CIRCUIT RUN BELOW GRADE
-  HOMERUN TO PANEL
-  INDICATES #12 ONE OF WHICH IS GREEN GROUND WIRE. CONDUIT SIZE MINIMUM AS PER SPECIFICATIONS
-  CONDUIT TURNING UP
-  POWER PANEL
-  DISTRIBUTION PANEL

2 ABBREVIATIONS

- AFF ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE
- CND CONDUIT

5 GENERAL ELECTRICAL NOTES

1. CONTRACTOR SHALL PROVIDE BRANCH CIRCUIT WIRING TO ALL ITEMS THAT REQUIRE ELECTRICAL CONNECTIONS. WHERE BRANCH CIRCUIT WIRING IS NOT SHOWN, CONTRACTOR SHALL CONNECT ITEMS TO CIRCUITS INDICATED. EXACT ROUTING OF CONDUITS AND WIRING SHALL BE DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
2. CONTRACTOR SHALL USE ONLY THOSE WIRING METHODS ALLOWED IN THE SPECIFICATIONS.
3. A MAXIMUM OF THREE CIRCUITS SHALL BE RUN IN ONE CONDUIT. CIRCUITS MUST BE ON SEPERATE PHASES. SHARED NEUTRALS ARE NOT PERMITTED.
4. MINIMUM WIRE SIZE SHALL BE #12AWG. MINIMUM CONDUIT SIZE SHALL BE 3/4".
5. ALL WORK SHALL STRICTLY COMPLY WITH THE 2014 NATIONAL ELECTRICAL CODE.
6. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE PROCEEDING WITH WORK.
7. CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES TO AVOID INTERFERENCES.
8. LOCATION OF EQUIPMENT IS APPROXIMATE AND SHALL BE COORDINATED IN FIELD WITH INTERFERENCES. MAINTAIN PROPER CLEARANCES IN AVAILABLE SPACE AS REQUIRED BY THE NATIONAL ELECTRICAL CODE.
9. LOCATIONS AND MOUNTING HEIGHTS OF EQUIPMENT ARE APPROXIMATE. EXACT LOCATIONS SHALL SHALL BE COORDINATED IN FIELD WITH CONTRACTING OFFICE
10. HEAVY LINE WEIGHT ON PLANS INDICATES CONTRACTOR MUST PROVIDE EQUIPMENT AND ASSOCIATED CONDUITS, CONDUCTORS, SUPPORTS, FRAMES AND CLAMPS. LIGHT LINE WEIGHT ON PLANS INDICATES EXISTING EQUIPMENT OR EQUIPMENT SUPPLIED UNDER OTHER CONTRACTS.
11. ELECTRICAL EQUIPMENT LOCATIONS AND RACEWAY ROUTINGS ARE SHOWN DIAGRAMMATICALLY AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY. COORDINATE INSTALLATION OF ELECTRICAL EQUIPMENT AND RACEWAYS WITH EXISTING BUILDING STRUCTURE AND UTILITIES IN FIELD.
12. PERMISSION TO INTERRUPT UTILITY SERVICES SHALL BE REQUESTED IN WRITING A MINIMUM OF 15 CALANDER DAYS PRIOR TO THE DESIRED DATE OF INTERRUPTION. REQUESTS SHALL BE SUBMITTED TO THE CONTRACTING OFFICER.
13. RACEWAY ROUTING SHALL BE CONCEALED IN WALLS AND/OR ABOVE ACCESSIBLE CEILINGS. RACEWAY ROUTING SHALL NOT BE PERMITTED TO BE MOUNTED EXPOSED ON WALL AND/OR CEILINGS UNLESS OTHERWISE DIRECTED AND APPROVED BY THE CONTRACTING OFFICER.
14. CONTRACTOR SHALL LOCK-OUT AND TAG-OUT ENERGIZED EQUIPMENT PRIOR TO PERFORMING WORK ON EQUIPMENT.



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<<PW/DM>>

BRANCH MANAGER

CHIEF ENG/ARCH

DESIGN DIRECTOR

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BUILDING 446 HVAC REPLACEMENT

LEGEND AND GENERAL NOTES

SCALE: NTS

PROJECT NO.: 1312379

CONSTR. CONTR. NO.

NAVFAC DRAWING NO.

12684376

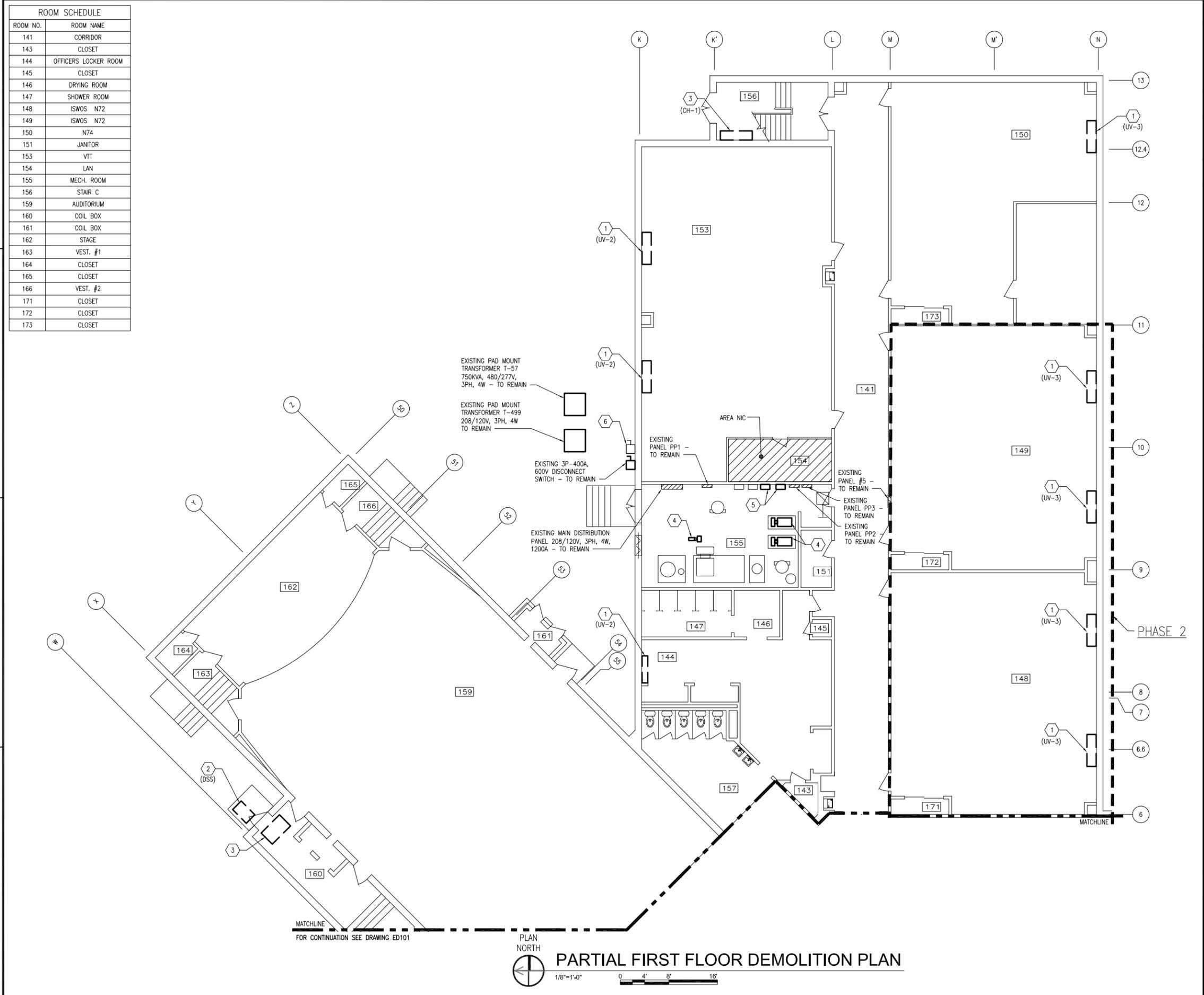
SHEET 35 OF 47

E-001

DRAWING REVISION: 10 MARCH 2009
 NAVSTA DWG. NO. 42269-390

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD Models and Sheets\14_Electrical\ED102.dwg LAYOUT NAME: 3016436_0001 PLOTTED: Friday, February 13, 2015 - 7:50am USER: sldkdw

ROOM NO.	ROOM NAME
141	CORRIDOR
143	CLOSET
144	OFFICERS LOCKER ROOM
145	CLOSET
146	DRYING ROOM
147	SHOWER ROOM
148	ISWOS N72
149	ISWOS N72
150	N74
151	JANITOR
153	VIT
154	LAN
155	MECH. ROOM
156	STAIR C
159	AUDITORIUM
160	COIL BOX
161	COIL BOX
162	STAGE
163	VEST. #1
164	CLOSET
165	CLOSET
166	VEST. #2
171	CLOSET
172	CLOSET
173	CLOSET



MATCHLINE
FOR CONTINUATION SEE DRAWING ED101



PARTIAL FIRST FLOOR DEMOLITION PLAN

GENERAL SHEET NOTES

- FOR GENERAL DEMOLITION NOTES SEE SHEET ED101.
- CONTRACTOR SHALL LOCK-OUT AND TAG-OUT ENERGIZED EQUIPMENT PRIOR TO PERFORMING WORK ON EQUIPMENT.
- ALL EXISTING SURFACES DAMAGED OR EXPOSED BY DEMOLITION OR REMOVAL OF EQUIPMENT SHALL BE PATCHED AND REPAIRED WITH MATERIALS AND FINISHES TO MATCH EXISTING ADJACENT SURFACES.

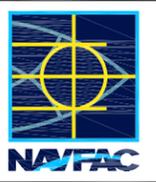
PHASING NOTES

- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

SHEET KEYNOTES

- DISCONNECT EXISTING UNIT VENTILATOR AND REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
- DISCONNECT EXISTING ROOF MOUNTING CONDENSING UNIT AND REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
- DISCONNECT CABINET UNIT HEATER AND REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
- DISCONNECT EXISTING PUMP. REMOVE ASSOCIATED WIRING AND CONDUIT IN THEIR ENTIRETY.
- DISCONNECT EXISTING VFD. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
- REMOVE 3P-400A DISCONNECT SWITCH SERVING EXISTING ROOF TOP CHILLER IN ITS ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO EXISTING TRANSFORMER T-57.

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A	02/11/15	REVISED PER NAVFAC DESIGN REVIEW COMMENTS
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CHIEF ENG/ARCH

DESIGN DIRECTOR

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NAVAL STATION NEWPORT - NEWPORT, RI
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NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT
PARTIAL FIRST FLOOR DEMOLITION PLAN

SCALE:	AS NOTED
PROJECT NO.:	1312379
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12684378
SHEET	37 OF 47
ED102	

DRAWING REVISION: 10 MARCH 2009
NAVSTA DWG. NO. 42271-390

KEY PLAN



ROOM SCHEDULE		ROOM SCHEDULE	
ROOM NO.	ROOM NAME	ROOM NO.	ROOM NAME
200	CO	224	C.P.O. TOILET #2
201	CO'S CONFERENCE ROOM	226	JANITOR
202	PASSAGE	227	STORAGE
203	OFFICE	228	SUPPLY (N8)
204		228	COMPTROLLER/SUPPLY (N8)
205	CORR. L	230	VFO
207	DHASO/DC	231	ED OFFICE
208	CORR. K	233	STAIR A
213	LPD-17	234	STORAGE
214	TRAINING AIDS AND STORAGE	235	OFFICER IN CHARGE
215	CORR. J	235A	CLOSET
217	E.M. CLASSROOM #6	240	RECEPTIONIST
221	FACILITIES (N3)	241	XO OFFICE
221A	STORAGE	244	CLOSET
221B	STORAGE	247	LIBRARY
223	CORR. D	248	STORAGE

- ### SHEET KEYNOTES
- DISCONNECT EXISTING UNIT VENTILATOR AND REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
 - DISCONNECT FAN COIL UNIT AND REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
 - DISCONNECT EXISTING WALL CABINET UNIT HEATER. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.

- ### GENERAL SHEET NOTES
- FOR GENERAL DEMOLITION NOTES SEE SHEET ED101.
 - CONTRACTOR SHALL LOCK-OUT AND TAG-OUT ENERGIZED EQUIPMENT PRIOR TO PERFORMING WORK ON EQUIPMENT.
 - ALL EXISTING SURFACES DAMAGED OR EXPOSED BY DEMOLITION OR REMOVAL OF EQUIPMENT SHALL BE PATCHED AND REPAIRED WITH MATERIALS AND FINISHES TO MATCH EXISTING ADJACENT SURFACES.

- ### PHASING NOTES
- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

REV	DATE	DESCRIPTION
A	02/11/15	REVISION PER NAIFAC DESIGN REVIEW COMMENTS
0	01/16/15	FINAL BID DOCUMENTS





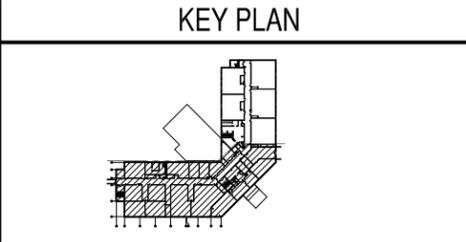
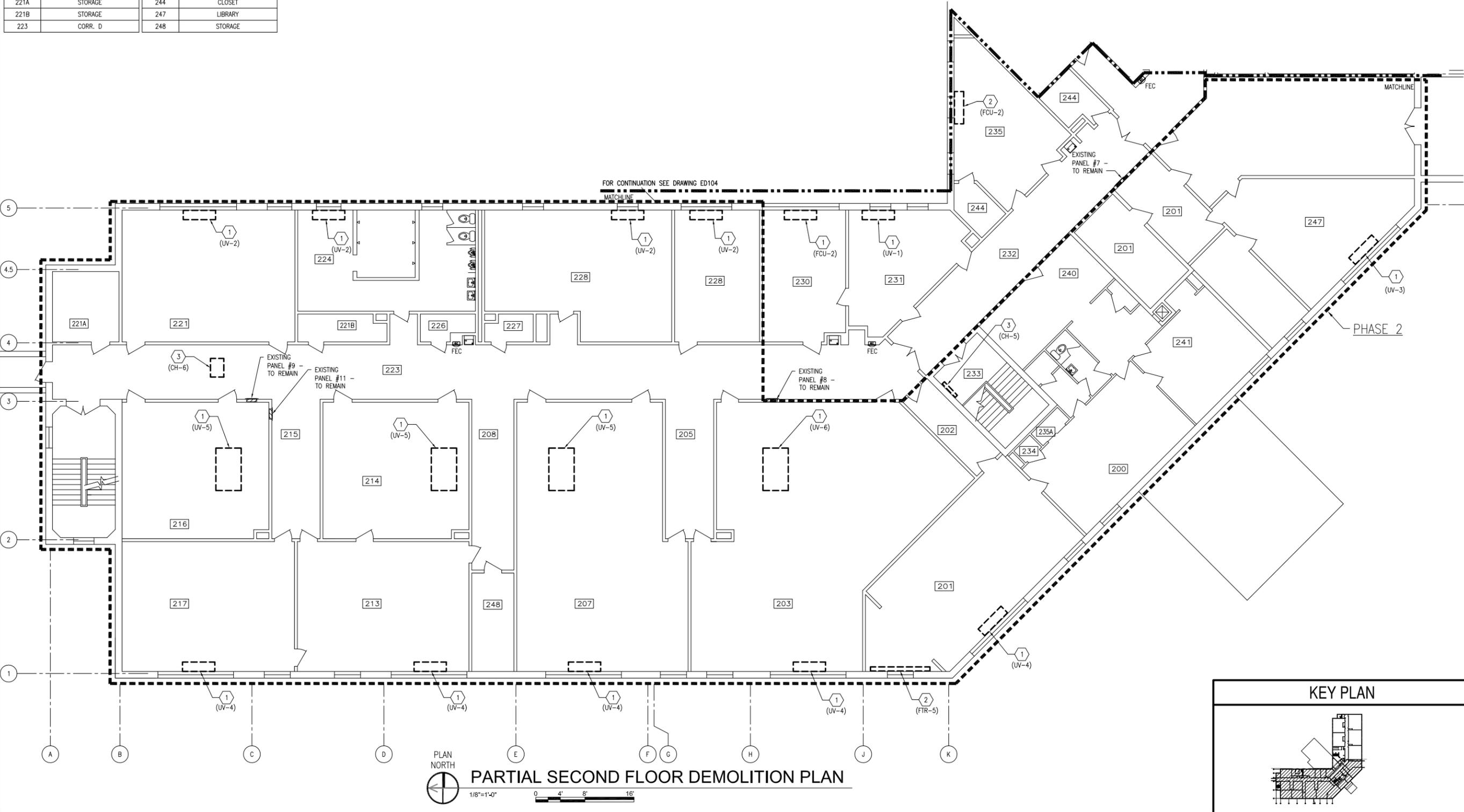
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DESIGN DIRECTOR	

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BUILDING 446 HVAC REPLACEMENT
PARTIAL SECOND FLOOR DEMOLITION PLAN

SCALE:	AS NOTED
PROJECT NO.:	1312379
CONSTR. CONTR. NO.	
NAIFAC DRAWING NO.	12684379
SHEET	38 OF 47
ED103	



PLAN NORTH

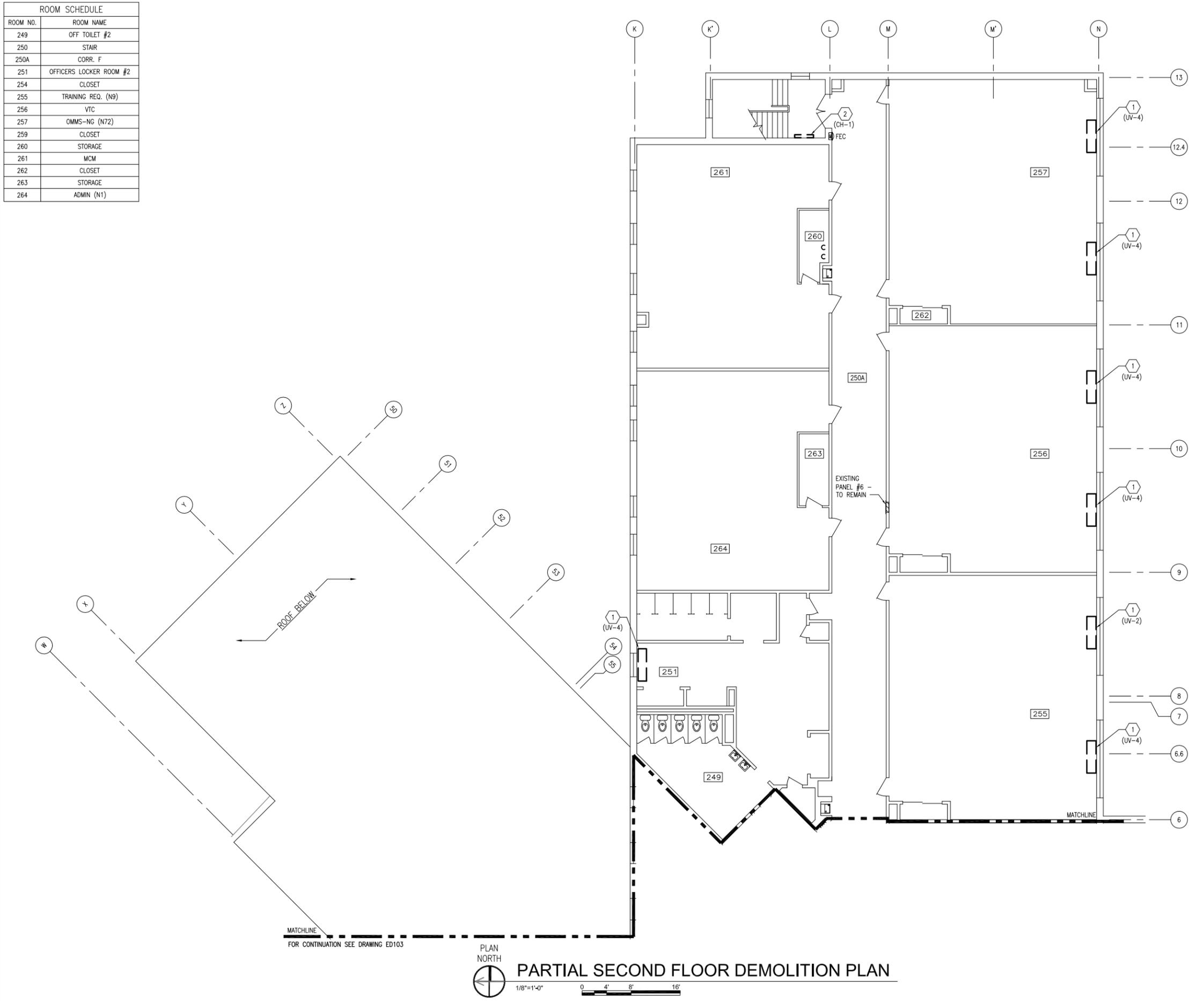
PARTIAL SECOND FLOOR DEMOLITION PLAN

1/8"=1'-0"

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD_Models_and_Sheets\14_Electrical\ED103.dwg LAYOUT NAME: 3016436_0001 PLOTTED: Friday, February 13, 2015 - 7:50am USER: sldkdw

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD Models and Sheets\4_Electrical\ED104.dwg LAYOUT NAME: 3016436_0001 PLOTTED: Friday, February 13, 2015 - 7:53am USER: sldkdw

ROOM NO.	ROOM NAME
249	OFF TOILET #2
250	STAIR
250A	CORR. F
251	OFFICERS LOCKER ROOM #2
254	CLOSET
255	TRAINING REQ. (N9)
256	VTC
257	OMMS-NG (N72)
259	CLOSET
260	STORAGE
261	MCM
262	CLOSET
263	STORAGE
264	ADMIN (N1)



GENERAL SHEET NOTES

- FOR GENERAL DEMOLITION NOTES SEE SHEET ED101.
- CONTRACTOR SHALL LOCK-OUT AND TAG-OUT ENERGIZED EQUIPMENT PRIOR TO PERFORMING WORK ON EQUIPMENT.
- ALL EXISTING SURFACES DAMAGED OR EXPOSED BY DEMOLITION OR REMOVAL OF EQUIPMENT SHALL BE PATCHED AND REPAIRED WITH MATERIALS AND FINISHES TO MATCH EXISTING ADJACENT SURFACES.

SHEET KEYNOTES

- DISCONNECT EXISTING UNIT VENTILATOR AND REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
- DISCONNECT EXISTING CABINET UNIT HEATER AND REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.

PHASING NOTES

- WORK SHOWN ON THIS SHEET SHALL BE ACCOMPLISHED IN PHASE 1.

REV	DATE	DESCRIPTION
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A	02/11/15	REVISED PER NAVFAC DESIGN REVIEW COMMENTS



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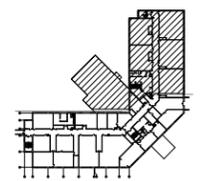
DES	SP	DRW	RMT	CHK	JH
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CHIEF ENG/ARCH					
DESIGN DIRECTOR					

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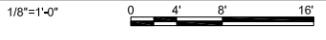
BUILDING 446 HVAC REPLACEMENT
 PARTIAL SECOND FLOOR DEMOLITION PLAN

SCALE:	AS NOTED
PROJECT NO.:	1312379
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12684380
SHEET	39 OF 47
ED104	

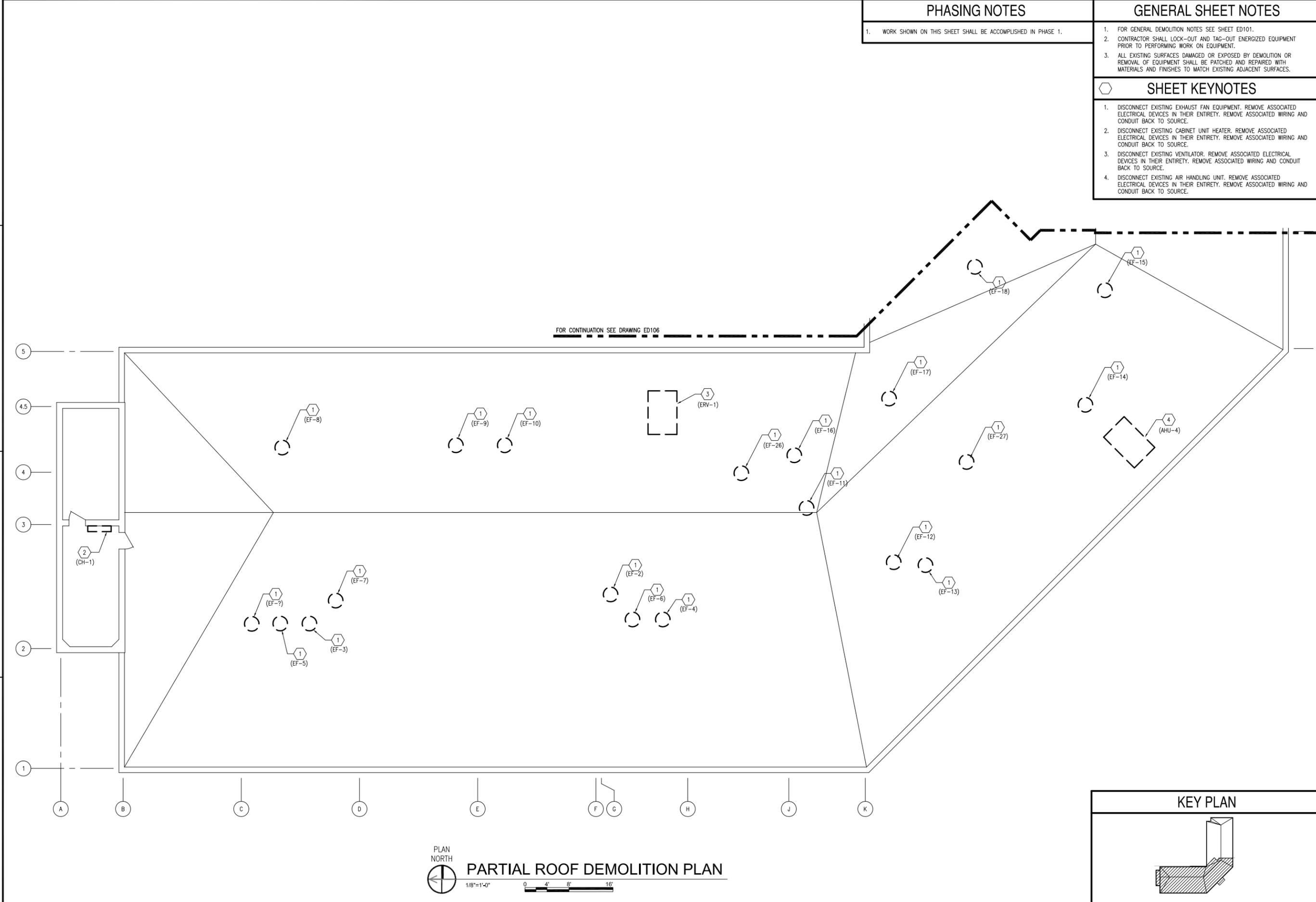
KEY PLAN



PARTIAL SECOND FLOOR DEMOLITION PLAN



FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD Models and Sheets\14_Electrical\ED105.dwg LAYOUT NAME: 3016436_0001 PLOTTED: Thursday, January 15, 2015 - 3:33pm USER: sickeljh

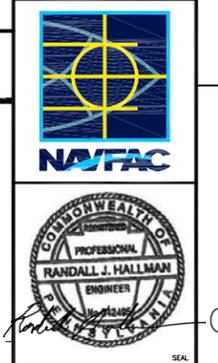


PHASING NOTES
 1. WORK SHOWN ON THIS SHEET SHALL BE ACCOMPLISHED IN PHASE 1.

GENERAL SHEET NOTES
 1. FOR GENERAL DEMOLITION NOTES SEE SHEET ED101.
 2. CONTRACTOR SHALL LOCK-OUT AND TAG-OUT ENERGIZED EQUIPMENT PRIOR TO PERFORMING WORK ON EQUIPMENT.
 3. ALL EXISTING SURFACES DAMAGED OR EXPOSED BY DEMOLITION OR REMOVAL OF EQUIPMENT SHALL BE PATCHED AND REPAIRED WITH MATERIALS AND FINISHES TO MATCH EXISTING ADJACENT SURFACES.

SHEET KEYNOTES
 1. DISCONNECT EXISTING EXHAUST FAN EQUIPMENT. REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
 2. DISCONNECT EXISTING CABINET UNIT HEATER. REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
 3. DISCONNECT EXISTING VENTILATOR. REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
 4. DISCONNECT EXISTING AIR HANDLING UNIT. REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.

REV	DATE	DESCRIPTION
0	01/16/15	FINAL BID DOCUMENTS

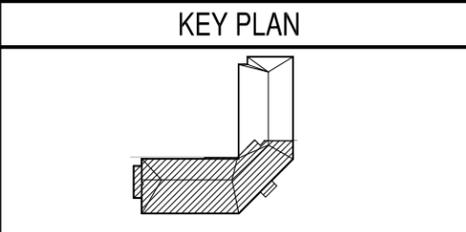


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APPROVED	FOR COMMANDER NAVFAC	
ACTIVITY		
SATISFACTORY TO	DATE	
DES SP	DRW RMT	CHK JH
<<PM/DM>>		
BRANCH MANAGER		
CHIEF ENG/ARCH		
DESIGN DIRECTOR		

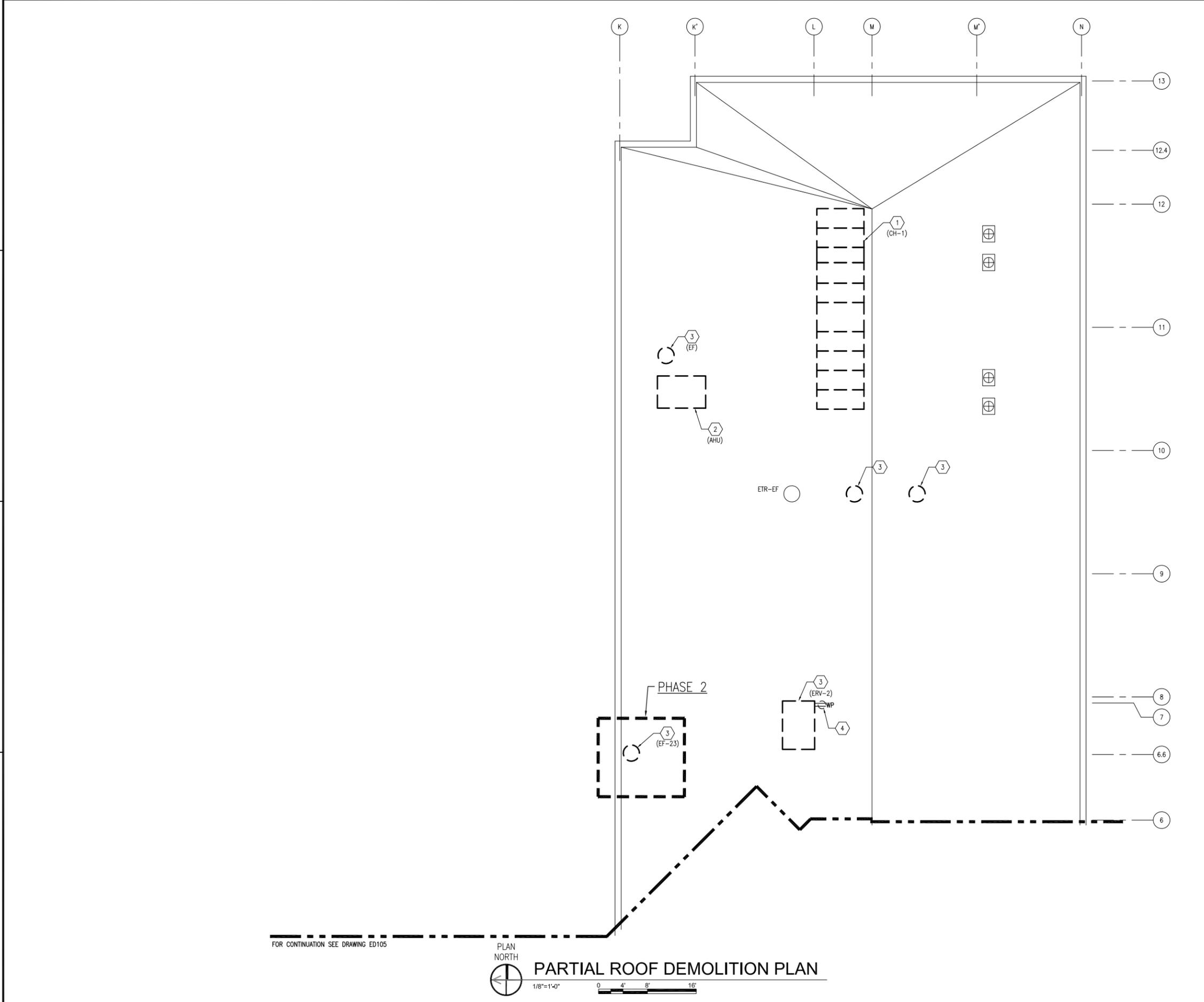
DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
 PUBLIC WORKS DEPARTMENT
 NAVAL STATION NEWPORT
 NEWPORT, RHODE ISLAND
BUILDING 446 HVAC REPLACEMENT
 PARTIAL ROOF DEMOLITION PLAN

SCALE:	AS NOTED
EPROJECT NO.:	1312379
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12684381
SHEET	40 OF 47
ED105	



PLAN NORTH
PARTIAL ROOF DEMOLITION PLAN
 1/8"=1'-0"
 0 4' 8' 16'

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD_Models_and_Sheets\14_Electrical\ED106.dwg LAYOUT NAME: 3016436_0001 PLOTTED: Thursday, January 15, 2015 - 3:34pm USER: sicklyw



GENERAL SHEET NOTES

- FOR GENERAL DEMOLITION NOTES SEE SHEET ED101.
- CONTRACTOR SHALL LOCK-OUT AND TAG-OUT ENERGIZED EQUIPMENT PRIOR TO PERFORMING WORK ON EQUIPMENT.
- ALL EXISTING SURFACES DAMAGED OR EXPOSED BY DEMOLITION OR REMOVAL OF EQUIPMENT SHALL BE PATCHED AND REPAIRED WITH MATERIALS AND FINISHES TO MATCH EXISTING ADJACENT SURFACES.

PHASING NOTES

- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

SHEET KEYNOTES

- DISCONNECT EXISTING CHILLER. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
- DISCONNECT EXISTING AIR HANDLING UNIT. REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
- DISCONNECT EXISTING EXHAUST FAN. REMOVE ASSOCIATED ELECTRICAL DEVICES IN THEIR ENTIRETY. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
- RELOCATE RECEPTACLE AS SHOWN ON SHEET E-105. RETAIN ASSOCIATED WIRING AND CONDUIT FOR EXTENSION AND RECONNECTION TO RECEPTACLE IN NEW LOCATION.

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE

DES	SP	DRW	RMT	CHK	JH
<<PM/DM>>					

BRANCH MANAGER

CHIEF ENG/ARCH

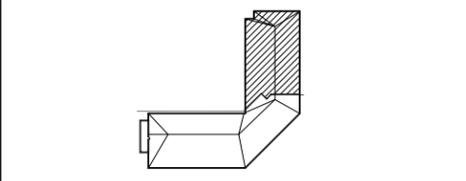
DESIGN DIRECTOR

NAVAL FACILITIES ENGINEERING COMMAND
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 PUBLIC WORKS DEPARTMENT
 NAVAL STATION NEWPORT
 NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT

PARTIAL ROOF DEMOLITION PLAN

KEY PLAN



APPR					
DATE	01/16/15				
DESCRIPTION	FINAL BID DOCUMENTS				
SYN	0				

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SCALE: AS NOTED
 PROJECT NO.: 1312379
 CONSTR. CONTR. NO.

NAVFAC DRAWING NO. 12684382
 SHEET 41 OF 47

ED106

DRAWING REVISION: 10 MARCH 2009
 NAVSTA DWG. NO. 42275-390

ROOM SCHEDULE		ROOM SCHEDULE	
ROOM NO.	ROOM NAME	ROOM NO.	ROOM NAME
100	ENTRANCE VESTIBULE	123	E.M. CLASSROOM #5
101	LOBBY	124	STORAGE
102	STAIR A	125	E.M. TOILET #1
103	O.D.	125A	JANITOR
104	SAFETY ROOM	126	C.P.O. TOILET #1
105	CPO MESS	127	SHOWER ROOM
106	LCS CST INSTRUCTOR OFFICE	127A	STORAGE
107	E.M. INSTR. OFFICE	128	CORR. A
108	CORR. I	129	SERVICE ROOM
109	LCS-1 CST LAB	130	CORR. J
110	LCS-1 CST CR	131	LADIES
113	CORR. G	131A	SOUND ROOM
116	LCS-2 CST LAB	134	STORAGE ROOM
117	LCS-2 CST CR	138	MAIL
118	STORAGE CLOSET	140	CORRIDOR
119	E.M. CLASSROOM #1	144	ISWOS
120	A.C.C. ROOM #1	144A	ISWOS OFFICE
121	STORAGE	146	ISWOS

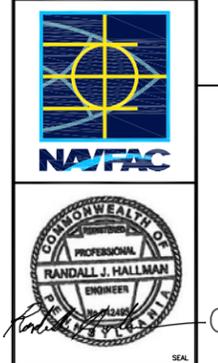
GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE SHEET E001.
- FOR PANEL SCHEDULES SEE SHEET E-601.

PHASING NOTES

- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

DATE	DESCRIPTION	BY
01/16/15	FINAL BID DOCUMENTS	SM
0		



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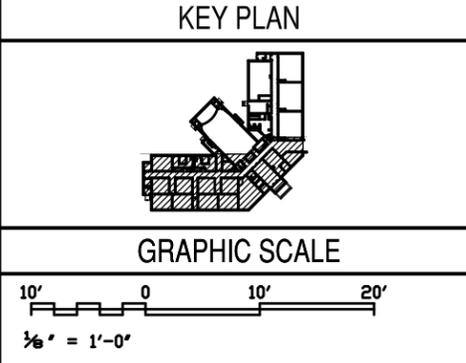
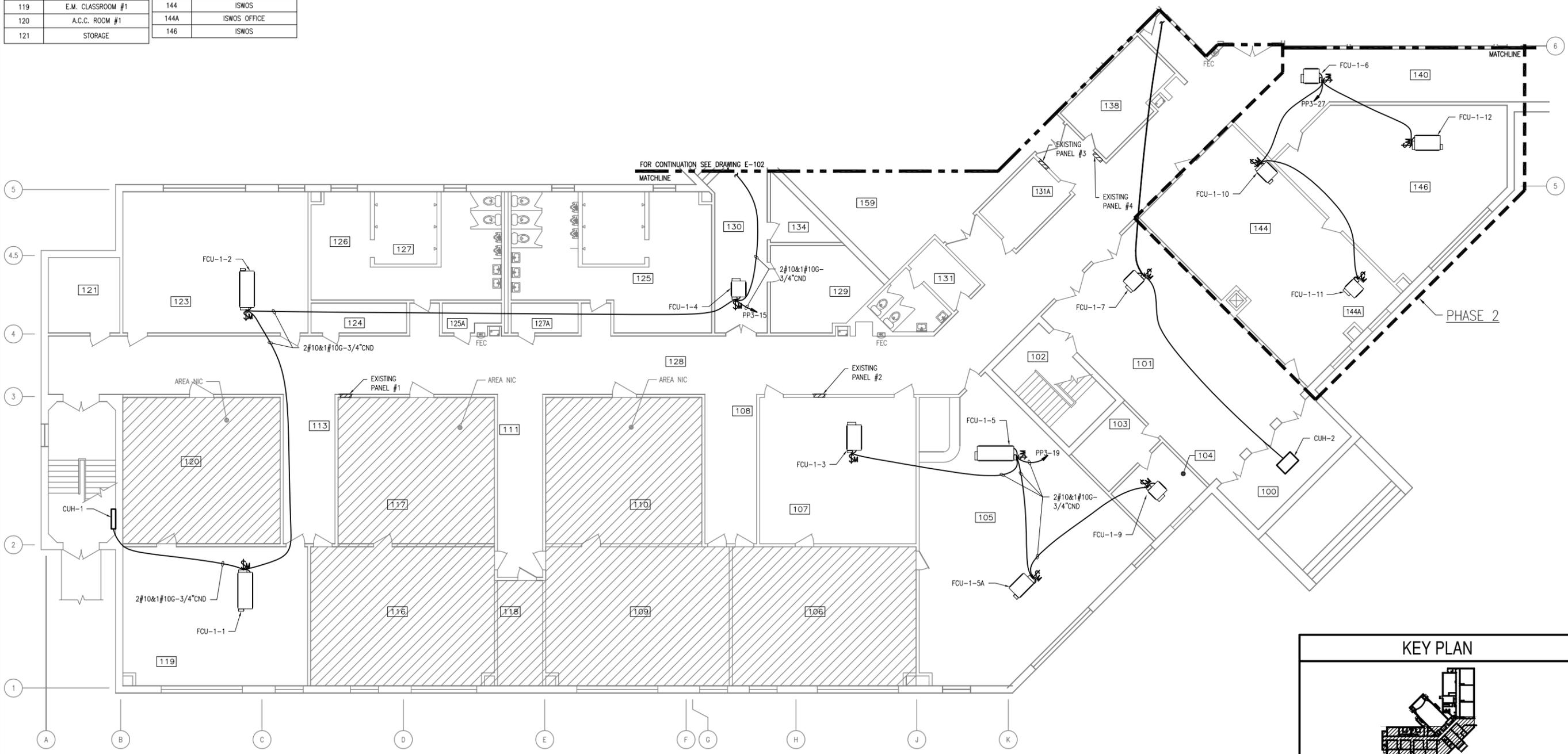
APPROVED	DATE
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO	DATE
DES SP	DRW RMT
CHK	JH
BRANCH MANAGER	
CHIEF ENGR/ARCH	
DESIGN DIRECTOR	

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

BUILDING 446 HVAC REPLACEMENT

PARTIAL FIRST FLOOR PLAN - NEW WORK

SCALE: AS NOTED
 PROJECT NO.: 1312379
 CONSTR. CONTR. NO.
 NAVFAC DRAWING NO. 12684383
 SHEET 42 OF 47
E-101

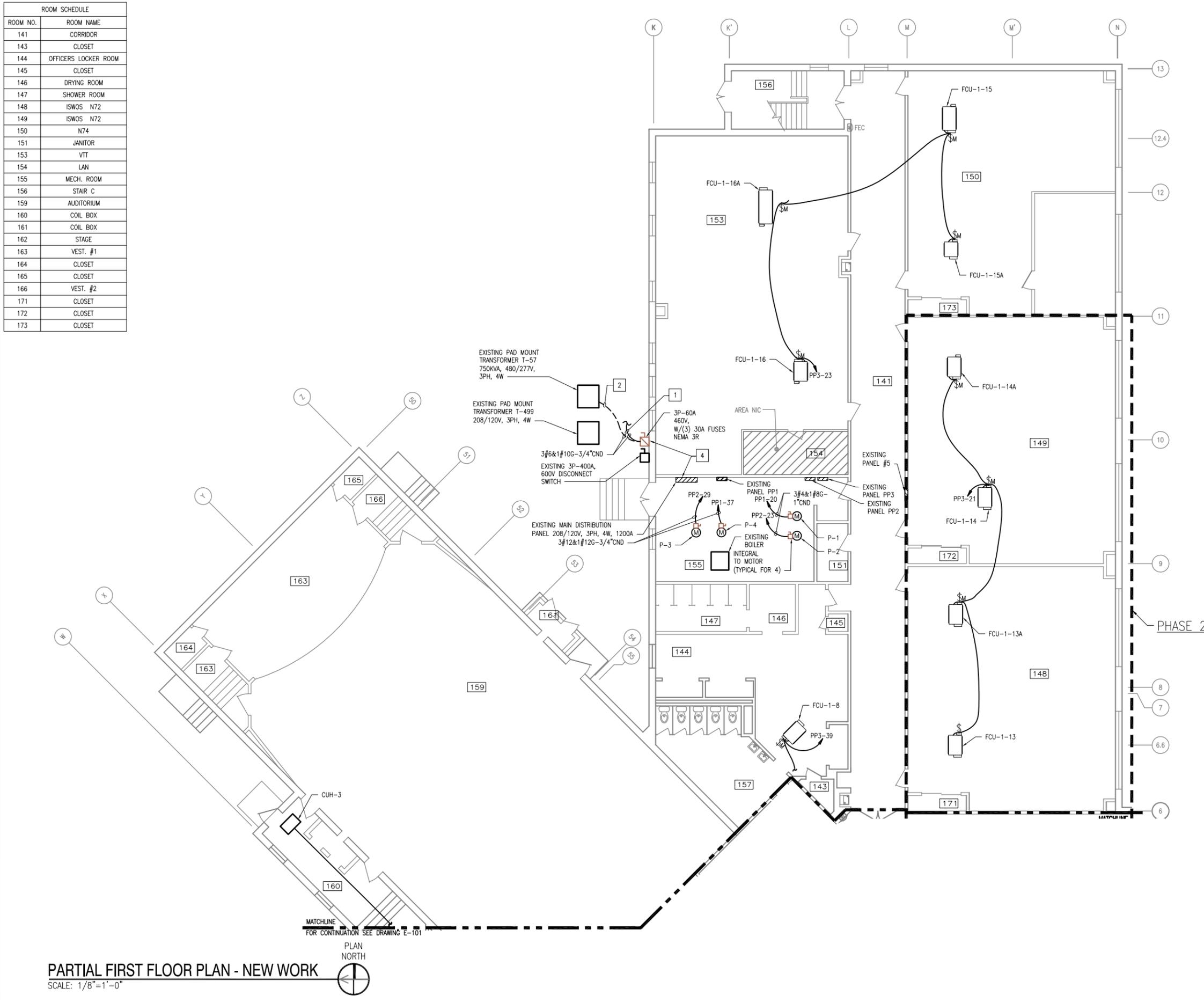


PARTIAL FIRST FLOOR PLAN - NEW WORK
 SCALE: 1/8" = 1'-0"

PLAN NORTH

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD Models and Sheets\14_Electrical\E-101.dwg LAYOUT NAME: 3016436_0001_PLOTTED: Thursday, January 15, 2015 - 3:35pm USER: schibny

ROOM NO.	ROOM NAME
141	CORRIDOR
143	CLOSET
144	OFFICERS LOCKER ROOM
145	CLOSET
146	DRYING ROOM
147	SHOWER ROOM
148	ISWOS N72
149	ISWOS N72
150	N74
151	JANITOR
153	VTT
154	LAN
155	MECH. ROOM
156	STAIR C
159	AUDITORIUM
160	COIL BOX
161	COIL BOX
162	STAGE
163	VEST. #1
164	CLOSET
165	CLOSET
166	VEST. #2
171	CLOSET
172	CLOSET
173	CLOSET



GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE SHEET E001.
- FOR PANEL SCHEDULES SEE SHEET E-601.

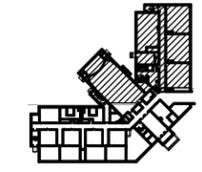
PHASING NOTES

- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

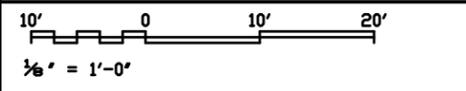
SHEET KEYNOTES

- SURFACE MOUNT CONDUIT ON EXTERIOR WALL UP TO AIR HANDLING UNIT. CONTRACTOR SHALL COORDINATE EXACT ROUTING IN FIELD.
- CONNECT TO LUG PREVIOUSLY SERVING REMOVED DISCONNECT SWITCH IN EXISTING TRANSFORMER T-57.
- EXTEND EXISTING WIRING AND CONDUIT PREVIOUSLY SERVING REMOVED PUMP AND CONNECT.
- CONTRACTOR SHALL PROVIDE A PERMANENT ENGRAVED AND WEATHERPROOF PLAQUE FOR EACH SERVICE WHICH READ:
 PLAQUE ON SERVICE #1 - MAIN DISTRIBUTION PANEL
 SERVICE #1 OF TWO (2) SERVICES;
 SERVICE #2 IS LOCATED ON THE EXTERIOR OF THE NORTH WALL ON THE BUILDING
 PLAQUE ON SERVICE #2 - SAFETY SWITCH
 SERVICE #2 OF TWO (2) SERVICES;
 SERVICE #1 IS LOCATED IN MECHANICAL ROOM 155

KEY PLAN



GRAPHIC SCALE



PARTIAL FIRST FLOOR PLAN - NEW WORK
SCALE: 1/8" = 1'-0"



APPR	
DATE	01/16/15
DESCRIPTION	FINAL BID DOCUMENTS
SYN	0

NAVFAC

PROFESSIONAL ENGINEER
RANDALL J. HALLMAN
ELECTRICAL

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FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE

DES	SP	DRW	RMT	CHK	JH
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BRANCH MANAGER

CHIEF ENGR/ARCH

DESIGN DIRECTOR

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
PUBLIC WORKS DEPARTMENT
NAVAL STATION NEWPORT - NEWPORT, RI
NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT

PARTIAL FIRST FLOOR PLAN - NEW WORK

SCALE: AS NOTED

PROJECT NO.: 1312379

CONSTR. CONTR. NO.

NAVFAC DRAWING NO. 12684384

SHEET 43 OF 47

E-102

DRAWING REVISION: 10 MARCH 2009
NAVSTA DWG. NO. 42277-390

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD Models and Sheets\14_Electrical\E-102.dwg LAYOUT NAME: 3016436_0001 PLOTTED: Thursday, January 15, 2015 - 3:37pm USER: schibler

ROOM SCHEDULE		ROOM SCHEDULE	
ROOM NO.	ROOM NAME	ROOM NO.	ROOM NAME
200	CO	224	C.P.O. TOILET #2
201	CO'S CONFERENCE ROOM	226	JANITOR
202	PASSAGE	227	STORAGE
203	OFFICE	228	SUPPLY (N8)
204		228	COMPTROLLER/SUPPLY (N8)
205	CORR. L	230	VFO
207	DHASO/DC	231	ED OFFICE
208	CORR. K	233	STAIR A
213	LPD-17	234	STORAGE
214	TRAINING AIDS AND STORAGE	235	OFFICER IN CHARGE
215	CORR. J	235A	CLOSET
217	E.M. CLASSROOM #6	240	RECEPTIONIST
221	FACILITIES (N3)	241	XO OFFICE
221A	STORAGE	244	CLOSET
221B	STORAGE	247	LIBRARY
223	CORR. D	248	STORAGE

GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE SHEET E001.
- FOR PANEL SCHEDULES SEE SHEET E-601.

PHASING NOTES

- WORK SHALL BE ACCOMPLISHED IN 2 PHASES. PHASE 2 WORK IS CONTAINED WITHIN A BOLD, DASHED BORDER AND TAGGED "PHASE 2". ALL OTHER WORK IS IN PHASE 1.

DATE	DESCRIPTION	BY
01/16/15	FINAL BID DOCUMENTS	





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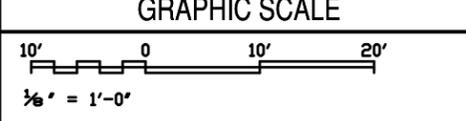
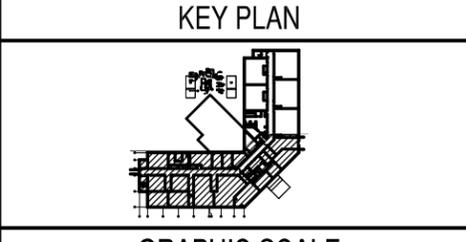
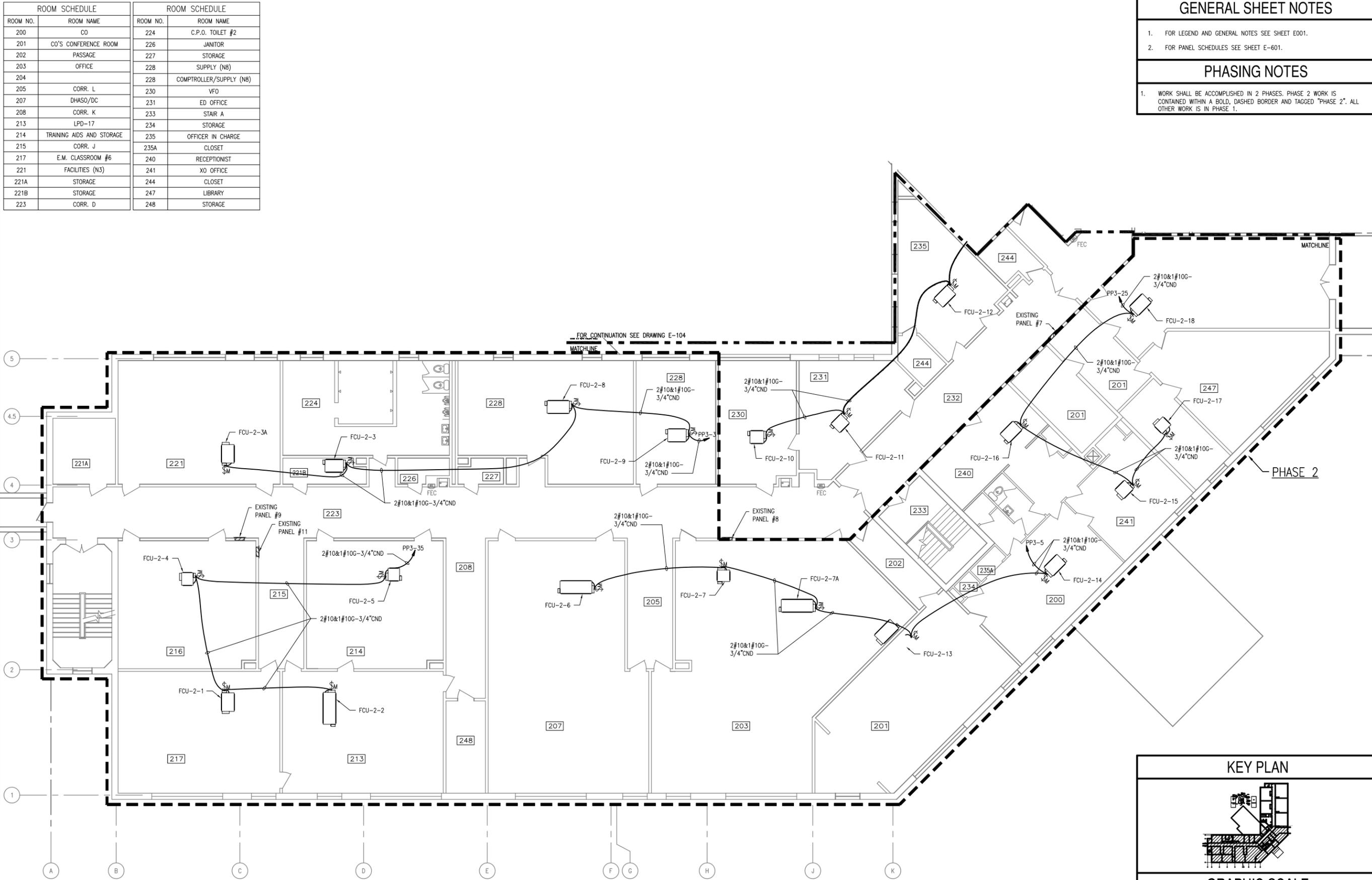
APPROVED	DATE
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO	DATE
DES SP	DRW RMT
CHK	JH
BRANCH MANAGER	
CHIEF ENG/ARCH	
DESIGN DIRECTOR	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
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BUILDING 446 HVAC REPLACEMENT

PARTIAL SECOND FLOOR PLAN - NEW WORK

SCALE:	AS NOTED
PROJECT NO.:	1312379
CONSTR. CONTR. NO.	
NAVFAC DRAWING NO.	12684385
SHEET	44 OF 47
E-103	



PARTIAL SECOND FLOOR PLAN - NEW WORK
SCALE: 1/8"=1'-0"



FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD Models and Sheets\14_Electrical\E-103.dwg LAYOUT NAME: 3016436_0001_PLOTTED: Thursday, January 15, 2015 - 3:39pm USER: scblbly

ROOM NO.	ROOM NAME
249	OFF TOILET #2
250	STAIR
250A	CORR. F
251	OFFICERS LOCKER ROOM #2
254	CLOSET
255	TRAINING REQ. (N9)
256	VTC
257	OMMS-NG (N72)
259	CLOSET
260	STORAGE
261	MCM
262	CLOSET
263	STORAGE
264	ADMIN (N1)

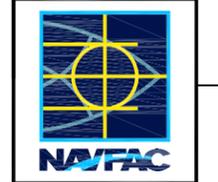
GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE SHEET E001.
- FOR PANEL SCHEDULES SEE SHEET E-601.

PHASING NOTES

- WORK SHOWN ON THIS SHEET SHALL BE ACCOMPLISHED IN PHASE 1.

DATE	DESCRIPTION	BY
01/16/15	FINAL BID DOCUMENTS	SM



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ACTIVITY

SATISFACTORY TO DATE

DES SP DRW RMT CHK JH

BRANCH MANAGER

CHIEF ENG/ARCH

DESIGN DIRECTOR

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC

PUBLIC WORKS DEPARTMENT

NAVAL STATION NEWPORT

NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT

PARTIAL SECOND FLOOR PLAN - NEW WORK

SCALE: AS NOTED

PROJECT NO.: 1312379

CONSTR. CONTR. NO.

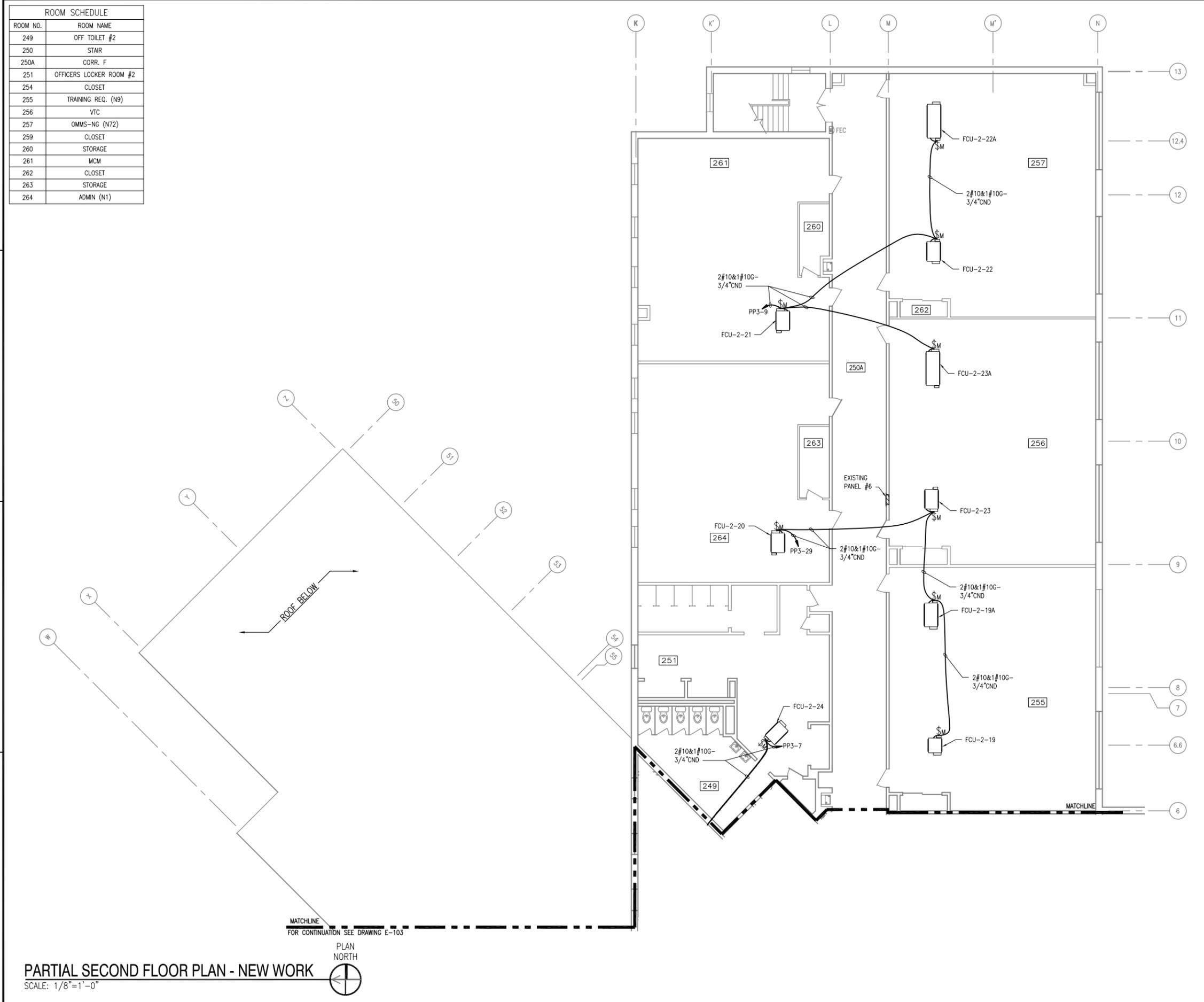
NAVFAC DRAWING NO. 12684386

SHEET 45 OF 47

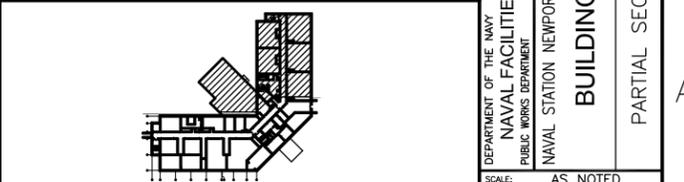
E-104

DRAWING REVISION: 10 MARCH 2009

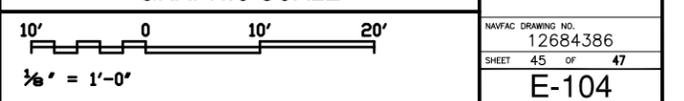
NAVSTA DWG. NO. 42279-390



KEY PLAN



GRAPHIC SCALE

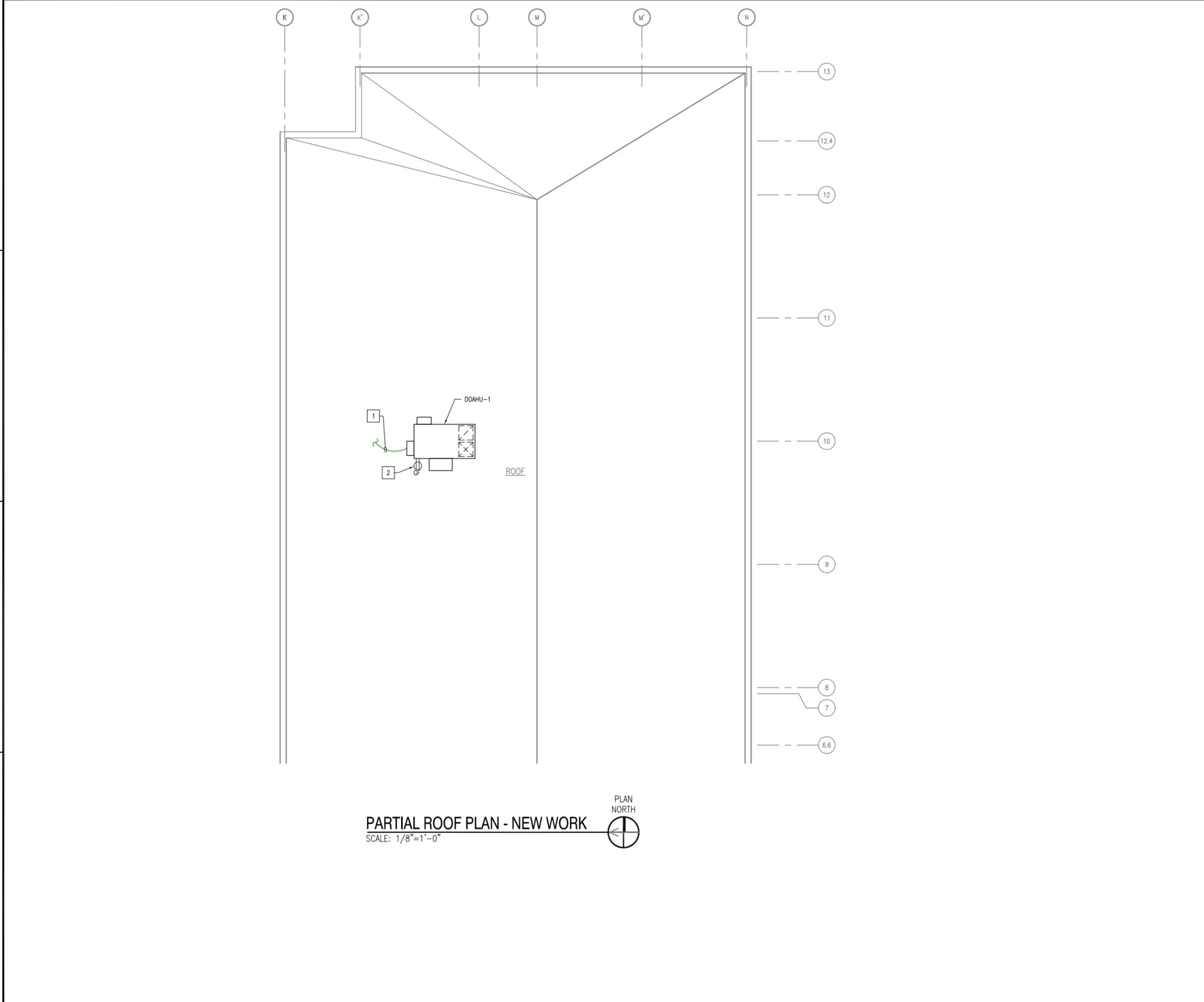


PARTIAL SECOND FLOOR PLAN - NEW WORK
 SCALE: 1/8"=1'-0"



FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD Models and Sheets\14_Electrical\E-104.dwg LAYOUT NAME: 3016436_0001 PLOTTED: Thursday, January 15, 2015 - 3:39pm USER: schidly#

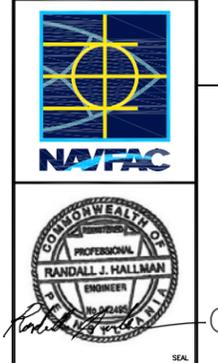
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GENERAL SHEET NOTES

- FOR LEGEND AND GENERAL NOTES SEE SHEET E001.
 - FOR PANEL SCHEDULES SEE SHEET E-601.
- SHEET KEYNOTES**
- TO DISCONNECT SWITCH MOUNTED ON EXTERIOR WALL. FOR CONTINUATION SEE SHEET E-102.
 - RELOCATED RECEPTACLE, MOUNT ON UNIT. EXTEND EXISTING WIRING AND CONDUIT PREVIOUSLY SERVING RECEPTACLE AND RECONNECT.

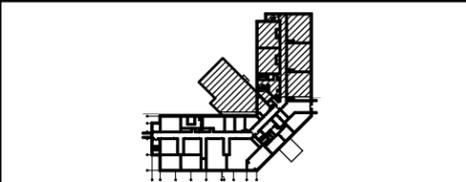
SY#	DESCRIPTION	DATE	APPR
0	FINAL BID DOCUMENTS	01/16/15	



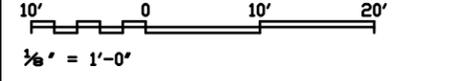
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DES	SP	DRW	RMT	CHK	JH
<<PM/DM>>					

KEY PLAN



GRAPHIC SCALE



DEPARTMENT OF THE NAVY
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PUBLIC WORKS DEPARTMENT
NAVAL STATION NEWPORT
NEWPORT, RHODE ISLAND

NAVAL FACILITIES ENGINEERING COMMAND - MID-ATLANTIC
NAVAL STATION NEWPORT - NEWPORT, RI
NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT
PARTIAL ROOF PLAN - NEW WORK

SCALE: AS NOTED
EPROJECT NO.: 1312379
CONSTR. CONTR. NO.

NAVFAC DRAWING NO. 12684387
SHEET 46 OF 47
E-105

DRAWING REVISION: 10 MARCH 2009
NAVSTA DWG. NO. 42280-390

FILE NAME: I:\Projects\3016436\3016436_0001\90_CAD Models and Sheets\14_Electrical\E-601.dwg LAYOUT NAME: 3016436_0001 PLOTTED: Thursday, January 15, 2015 - 3:41pm USER: schidj#

EXISTING PANEL "PP1" SCHEDULE

GE PANEL TYPE NLAB STYLE 3 WITH GE TOB CIRCUIT BREAKERS

100A, MCB, 208/120V, 3 PHASE, 4 WIRE SURFACE MOUNTED

LOAD SERVED	LOAD (AMPS)			BKR. TRIP	WIRE SIZE	CKT. NO.	PHASE			CKT. NO.	WIRE SIZE	BKR. TRIP	LOAD (AMPS)			LOAD SERVED
	A	B	C				A	B	C				A	B	C	
EXISTING CIRCUIT				60		1	●			2		20				EXISTING CIRCUIT
						3	●			4						
						5	●			6						
EXISTING CIRCUIT				20		7	●			8		20				EXISTING CIRCUIT
EXISTING CIRCUIT				15		9	●			10		20				EXISTING CIRCUIT
EXISTING CIRCUIT				15		11	●			12		20				SPARE
EXISTING CIRCUIT				15		13	●			14		20				SPARE
EXISTING CIRCUIT				20		15	●			16		20				SPARE
EXISTING CIRCUIT				20		17	●			18		20				EXISTING CIRCUIT
SPARE				15		19	●			20		100*				PUMP P-1
						21	●			22						
						23	●			24						
SPARE				20		25	●			26						
						27	●			28		20				EXISTING CIRCUIT
						29	●			30						
SPARE				25		31	●			32		20				EXISTING CIRCUIT
						33	●			34						
						35	●			36						
PUMP P-4				20*		37	●			38		15				
						39	●			40		20				EXISTING CIRCUIT
						41	●			42						
TOTAL																TOTAL

TOTAL CONNECTED AMPS: A= B= C=

*REMOVE EXISTING CIRCUIT BREAKER AND PROVIDE NEW CIRCUIT BREAKER, SIZE AS INDICATED.

EXISTING PANEL "PP2" SCHEDULE

200A, MLO, 208/120V, 3 PHASE, 4 WIRE SURFACE MOUNTED

LOAD SERVED	LOAD (AMPS)			BKR. TRIP	WIRE SIZE	CKT. NO.	PHASE			CKT. NO.	WIRE SIZE	BKR. TRIP	LOAD (AMPS)			LOAD SERVED
	A	B	C				A	B	C				A	B	C	
EXISTING CIRCUIT				20		1	●			2		15				EXISTING CIRCUIT
EXISTING CIRCUIT				20		3	●			4		15				EXISTING CIRCUIT
EXISTING CIRCUIT				20		5	●			6		15				EXISTING CIRCUIT
EXISTING CIRCUIT				20		7	●			8		15				EXISTING CIRCUIT
EXISTING CIRCUIT				20		9	●			10		15				EXISTING CIRCUIT
EXISTING CIRCUIT				20		11	●			12		15				EXISTING CIRCUIT
EXISTING CIRCUIT				20		13	●			14		20				EXISTING CIRCUIT
EXISTING CIRCUIT				20		15	●			16		20				EXISTING CIRCUIT
EXISTING CIRCUIT				20		17	●			18		20				EXISTING CIRCUIT
EXISTING CIRCUIT				20		19	●			20		20				EXISTING CIRCUIT
EXISTING CIRCUIT				20		21	●			22		20				EXISTING CIRCUIT
PUMP P-2				100*		23	●			24		20				EXISTING CIRCUIT
						25	●			26		30				EXISTING CIRCUIT
						27	●			28		30				EXISTING CIRCUIT
						29	●			30		30				EXISTING CIRCUIT
PUMP P-3				20*		31	●			32		20				EXISTING CIRCUIT
						33	●			34		20				EXISTING CIRCUIT
EXISTING CIRCUIT				20		35	●			36		15				EXISTING CIRCUIT
EXISTING CIRCUIT				15		37	●			38		15				EXISTING CIRCUIT
						39	●			40						
						41	●			42						
TOTAL																TOTAL

TOTAL CONNECTED AMPS: A= B= C=

*REMOVE EXISTING CIRCUIT BREAKER AND PROVIDE NEW CIRCUIT BREAKER, SIZE AS INDICATED.

EXISTING PANEL "PP3" SCHEDULE

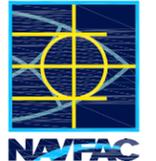
XXXA, MLO, 208/120V, 3 PHASE, 4 WIRE SURFACE MOUNTED

LOAD SERVED	LOAD (AMPS)			BKR. TRIP	WIRE SIZE	CKT. NO.	PHASE			CKT. NO.	WIRE SIZE	BKR. TRIP	LOAD (AMPS)			LOAD SERVED
	A	B	C				A	B	C				A	B	C	
EXISTING CIRCUIT				20		1	●			2		15				EXISTING CIRCUIT
FCU-2-3,3A,8,9-RM 221,221B,228	6.6			20		3	●			4						
FCU-2-6,7,7A,13,14-RM 200, 203, 207		9.4		20		5	●			6						
FCU-2-2,10,11,12-RM 213,230,231,235	5.6			20		7	●			8		20				EXISTING CIRCUIT
FCU-2-21,22,22A,23A-RM 256,257,261	7.4			20		9	●			10		20				EXISTING CIRCUIT
EXISTING CIRCUIT				20		11	●			12		20				EXISTING CIRCUIT
				20		13	●			14		20				EXISTING CIRCUIT
FCU-1,2,4,CUH-1,3-RM 119,123,130,160	7.4			20		15	●			16		20				EXISTING CIRCUIT
EXISTING CIRCUIT				20		17	●			18		20				EXISTING CIRCUIT
FCU-1-3,5,5A,9-RM 104, 105, 107	7.3			20		19	●			20		20				EXISTING CIRCUIT
FCU-1-13,13A,14,14A-RM 148, 149	6.4			20		21	●			22		20				EXISTING CIRCUIT
FCU-1-15,15A,16,16A-RM 150,153		6.7		20		23	●			24		20				EXISTING CIRCUIT
FCU-2-15,16,17,18-RM 240,241,232,247	6.2			20		25	●			26		20				EXISTING CIRCUIT
FCU-1-6,10,11,12-RM 140,144,144A,146		6.0		20		27	●			28		20				EXISTING CIRCUIT
FCU-2-19,19A,20,23-RM 255,256, 264		6.7		20		29	●			30		20				EXISTING CIRCUIT
				20		31	●			32		20				EXISTING CIRCUIT
				20		33	●			34		20				EXISTING CIRCUIT
FCU-2-1,2,4,5-RM 213, 214, 216, 217		7.3		20		35	●			36		20				EXISTING CIRCUIT
				20		37	●			38		15				EXISTING CIRCUIT
FCU-1-7,8, CUH-2-RM 100, 101, 144	4.6			20		39	●			40		20				EXISTING CIRCUIT
				20		41	●			42						
TOTAL																TOTAL

TOTAL CONNECTED AMPS: A= B= C=

APPROVED: [Signature] DATE: 01/16/15

FINAL BID DOCUMENTS




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DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
PUBLIC WORKS DEPARTMENT
NAVAL STATION NEWPORT - NEWPORT, RI
NAVAL STATION NEWPORT - NEWPORT, RHODE ISLAND

BUILDING 446 HVAC REPLACEMENT

PANEL SCHEDULES

SCALE: NTS
PROJECT NO.: 1312379
CONSTR. CONTR. NO.
NAVFAC DRAWING NO.: 12684388
SHEET 47 OF 47
E-601

DRAWING REVISION: 10 MARCH 2009
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