GENERAL NOTES

1. ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR ABOVE CEILING.
2. FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED.
3. ACCESS PANELS IN UN-ACCESSIBLE CEILINGS ARE REQUIRED FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, CONTROLS, ETC., AND SHALL BE FURNISHED AND INSTALLED UNDER ARCHITECTURAL SPECIFICATIONS.
4. TOTAL STATIC PRESSURE NOTED IN SCHEDULES INCLUDES DUCT SYSTEM, TERMINAL UNITS, FILTERS, COILS, ETC.
5. FOR TYPICAL STEAM AND WATER PIPING CONNECTIONS TO EQUIPMENT, SEE STANDARD DETAILS.
6. WATER PIPE CONNECTIONS TO AIR HEATING AND COOLING COILS SHALL BE MADE SO THERE WILL BE COUNTER FLOW BETWEEN WATER AND AIR.
7. ALL TEMPERATURE AND HUMIDITY CONTROLLERS SHALL BE PROVIDED WITH OPERATORS TO PROVIDE PROPER OPERATION OF VALVES.
8. PROVIDE ENERGY EFFICIENT MOTORS FOR ALL EQUIPMENT REQUIRING MOTORS 1.0 HP AND ABOVE. (EXCEPT MOTORS WITH VARIABLE SPEED CONTROL).
9. ALL EXISTING FLOOR AND WALL OPENINGS SHALL BE PATCHED AS DESCRIBED IN THE SPECIFICATION AND AS DETAILED ON THE DRAWINGS.
10. SET ALL FLOOR DRAINS AND FUNNEL DRAINS OVER P-TRAPS.
11. AT LOCATIONS INDICATED TO CONNECT NEW LINES, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION, SIZE, AND ELEVATION AT THE SITE BEFORE INSTALLATION OF NEW LINES.
12. AT LOCATIONS INDICATED TO CONNECT NEW WATER LINES TO EXISTING WATER LINES, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND SIZE OF THE EXISTING LINE AT THE SITE BEFORE INSTALLING NEW LINES.
13. THE CONTRACTOR SHALL PROVIDE AND INSTALL APPROVED PIPE SLEEVES AND FIRE STOPPING AT ALL NEW AND EXISTING FLOOR/ CEILING SLAB AND WALL PENETRATIONS WITHIN THE LIMITS OF THE CONTRACT WORK AREA TO MAINTAIN THE RATED CONSTRUCTION SPECIFIED. REFER TO DETAILS.
14. REFER TO ARCHITECTURAL SPECIFICATIONS AND DRAWINGS FOR PHASING OF CONSTRUCTION, ICRA REQUIREMENTS AND CONSTRUCTION AREA RESTRICTIONS/REQUIREMENTS.
15. REFER TO SPECIFICATIONS FOR PHASING OF CONSTRUCTION AND CONSTRUCTION AREA RESTRICTIONS/REQUIREMENTS.
16. DIFFUSER, REGISTER AND GRILLE SIZES SHOWN ON FLOOR PLANS ARE NECK SIZES.
17. WALL TYPE EXHAUST REGISTERS NOTED AS "BR" ON DRAWINGS ARE TO BE INSTALLED WITH BOTTOM ELEVATION OF REGISTER AT 7" [178mm] ABOVE FINISHED FLOOR.
18. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF CEILING DIFFUSERS, REGISTERS, AND GRILLES.

ABBREVIATIONS

AC	AIR CONDITIONING UNIT
ACCU	AIR COOLED CONDENSING UNIT
AD	ACCESS DOOR
AF	AIRFOIL
AFF	ABOVE FINISHED FLOOR
AFM	AIR FLOW MEASURING DEVICE
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
BI	BACKWARD INCLINED
BR	BOTTOM REGISTER (WALL TYPE MOUNT MIN 6" AFF)
CC	COOLING COIL
CD	CEILING DIFFUSER
CF	CENTRIFUGAL FAN
CO	CLEAN OUT
COTR	CONTRACTORS OFFICE TECHNICAL REPRESENTATIVE
CP	CONDENSATE PUMP
CR	CEILING REGISTER
CUH	CABINET UNIT HEATER
CVB	CONSTANT VOLUME BOX
CW	COLD WATER
D	AUTOMATIC DAMPER
DIA	DIAMETER
Db	DRY BULB TEMPERATURE
dB	DECIBELS
Dp	DEWPOINT TEMPERATURE
DDC	DIRECT DIGITAL CONTROL
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EER	ENERGY EFFICIENCY RATIO
ERC	EXHAUST REGISTER CEILING
ERCP	EXHAUST REGISTER CEILING PERFORATED
ERW	EXHAUST REGISTER WALL
EF	EXHAUST FAN
EWT	ENTERING WATER TEMPERATURE
EX	EXISTING
EXT	EXTERNAL
°F	FAHRENHEIT
FC	FLEXIBLE CONNECTION
FCD	FLOW CONTROL DEVICE
FCU	FAN COIL UNIT
FC	FORWARD CURVED
FLR	FLOOR
F.DPR.	FIRE DAMPER
FR	FROM
FT	FOOT
FO	FLAT OVAL
GPM	GALLONS PER MINUTE
HC	HEATING COIL
HP	HORSEPOWER
HPR	HIGH PRESSURE STEAM CONDENSATE RETURN
HPS	HIGH PRESSURE STEAM
HWH	HOT WATER HEATING
HWH	HOT WATER HEATING RETURN
HWH&R	HOT WATER HEATING & RETURN
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LF	LINEAL FOOT
LSD	LINEAR SLOT DIFFUSER
LPR	LOW PRESSURE STEAM CONDENSATE RETURN
LPS	LOW PRESSURE STEAM
LRA	LOCK ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
LBS/HR	POUNDS PER HOUR
MB	MIXING BOX
MBH	THOUSAND BTUH
MER	MECHANICAL ROOM
MPR	MEDIUM PRESSURE STEAM CONDENSATE RETURN
MPS	MEDIUM PRESSURE STEAM
MAX	MAXIMUM
MIN.	MINIMUM
NOM.	NOMINAL
OA	OUTDOOR AIR
P	PUMP
PC	PUMPED CONDENSATE
PD	PRESSURE DROP
PF	PRE-FILTER
PH	PREHEAT
PRV	PRESSURE REDUCING VALVE
QTY	QUANTITY
RA	RETURN AIR
RF	RETURN FAN
RH	REHEAT COIL
RH	RELATIVE HUMIDITY
RLA	RUNNING LOAD AMPS
RRC	RETURN REGISTER CEILING
RRCP	RETURN REGISTER CEILING PERFORATED
RV	POWER TYPE ROOF VENTILATOR
SA	SUPPLY AIR
SD	SMOKE DAMPER
SDC	SUPPLY DIFFUSER CEILING
SDCP	SUPPLY DIFFUSER CEILING PERFORATED
SP, GR.	SPECIFIC GRAVITY
SH	STEAM HUMIDIFIER
SP	STATIC PRESSURE
SPS	STATIC PRESSURE SENSOR
STR	STRAINER
TOT	TOTAL
V	VALVE
VD	VOLUME DAMPER (MANUAL OPPOSED BLADE)
VFD	VARIABLE FREQUENCY DRIVE
VR	VACUUM STEAM CONDENSATE RETURN
VVB	VARIABLE AIR VOLUME BOX
WB	WET BULB TEMPERATURE
WFMD	WATER FLOW MEASURING DEVICE
WPD	WATER PRESSURE DROP

GENERAL SYMBOLS

- DIRECTION OF PIPE PITCH (DOWN)
- DIRECTION OF FLOW
- ANCHOR
- REDUCER OR INCREASER
- ECCENTRIC REDUCER
- TOP CONNECTION, 45° OR 90°
- BOTTOM CONNECTION, 45° OR 90°
- SIDE CONNECTION
- CAPPED OUTLET
- RISE OR DROP IN PIPE
- UNION
- ORIFICE UNION
- POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
- LIMIT OF DEMOLITION
- STEAM TRAP SEE SPECIFICATIONS
- STRAINER
- THERMOMETER
- PRESSURE GAGE
- WATER FLOW MEASURING DEVICE
- EXISTING PIPE TO BE REMOVED
- T — DDC THERMOSTAT
- T — PNEUMATIC THERMOSTAT
- 1 — INDICATES KEYNOTE ON DRAWING
- 1 — INDICATES PHASING KEYNOTE ON DRAWING

DRAWING SYMBOLS

- 2 / H4 — DETAIL NUMBER; DRAWING NUMBER WHERE DRAWN
- A / H7 — SECTION LETTER; DRAWING NUMBER WHERE SHOWN
- 2-4-SE-AC-1 — EQUIPMENT ABBREVIATION (AIR CONDITIONING UNIT); UNIT NUMBER PER BUILDING, FLOOR WITHIN BUILDING QUADRANT; QUADRANT (SOUTH EAST) OF BUILDING ORIENTATION WHERE EQUIPMENT IS BEING LOCATED; FLOOR OF BUILDING WHERE EQUIPMENT IS LOCATED; BUILDING NUMBER WHERE EQUIPMENT IS LOCATED

DUCTWORK SYMBOLS

- UP / DN — SUPPLY DUCT (UP & DOWN)
- UP / DN — EXHAUST DUCT (UP & DOWN)
- CEILING DIFFUSERS
- SUPPLY TOP REGISTER OR GRILLE (WALL TYPE)
- EXHAUST OR RETURN CEILING REGISTER OR GRILLE
- EXHAUST OR RETURN BOTTOM REGISTER OR GRILLE (WALL TYPE)
- EXHAUST OR RETURN REGISTER OR TOP GRILLE (WALL TYPE)
- VANED ELBOW & AIR SPLIT TYPE DUCT TAKE-OFF
- CONNECT NEW DUCT TO EXISTING DUCT
- R — INCLINED RISE, IN DIRECTION OF AIR FLOW
- D — INCLINED DROP, IN DIRECTION OF AIR FLOW
- LIMIT OF DEMOLITION
- FC — FLEXIBLE CONNECTION
- VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EVEN IF SYMBOL IS MISSING)
- VANED ELBOW (SHORT RADIUS)
- STANDARD RADIUS ELBOW
- 10x8 — NEW DUCT (WIDTH x DEPTH)
- 10ø — ROUND DUCT (DIAMETER)
- 10/8 — FLAT OVAL (SHOWN / HIDDEN)
- 10x8 — DUCT (SHOWN x HIDDEN)
- FLEXIBLE DUCTWORK
- EXISTING DUCT TO REMAIN
- EXISTING DUCT TO BE REMOVED
- LOUVER (LOUVER SPECIFIED IN ARCHITECTURAL SECTION.)
- FLEXIBLE DUCTWORK (INSULATED)
- DUCT WITH SOUND LINING
- VD — MANUAL VOLUME DAMPER
- 10" SDCP-3 — NECK SIZE TAG - NUMBER OR THROWS ARROWS INDICATE DIRECTION OF THROW, NO ARROWS ARE INDICATED ON 4-WAY THROW

DUCTWORK SYMBOLS

- STAINLESS STEEL DUCT
- VAV BOX WITH COIL
- 45° SUPPLY; 45° RETURN — STANDARD BRANCH SUPPLY OR RETURN, NO SPLITTER (45° TAP)
- DUCT MOUNTED COIL (HOT WATER OR STEAM COIL)
- DUCT MOUNTED COIL (ELECTRIC)
- M — MOTOR OPERATED DAMPER
- F — FIRE DAMPER
- S — SMOKE DAMPER
- C — COMBINATION FIRE/SMOKE DAMPER

PIPING SYMBOLS

HEATING

- HIGH PRESSURE STEAM (60 PSIG AND ABOVE)
- HIGH PRESSURE STEAM CONDENSATE RETURN
- MEDIUM PRESSURE STEAM (16 PSIG THRU 59 PSIG)
- MEDIUM PRESSURE STEAM CONDENSATE RETURN
- LOW PRESSURE STEAM (15 PSIG AND BELOW)
- LOW PRESSURE STEAM CONDENSATE RETURN
- CONDENSATE PUMP DISCHARGE
- HWH — HOT WATER HEATING SUPPLY
- HWHR — HOT WATER HEATING RETURN
- V — VENT LINE

AIR CONDITIONING

- CH — CHILLED WATER SUPPLY
- CHR — CHILLED WATER RETURN

VALVE SYMBOLS

- VALVE REFER TO SPECIFICATION FOR TYPE
- GATE VALVE WITH 3/4 " HOSE ADAPTER
- CHECK VALVE
- BALANCING VALVE
- FLOW CONTROL DEVICE
- STRAIGHT-THRU MODULATING CONTROL VALVE
- THREE-WAY MODULATING CONTROL VALVE

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Revisions:	Date

CONSULTANTS:

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Drawing Title: SYMBOLS ABBREVIATIONS AND GENERAL NOTES

Approved:

Project Title: 5th Floor SAME DAY SURGERY RENOV. VA Medical Center

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Office of Construction and Facilities Management

Department of Veterans Affairs

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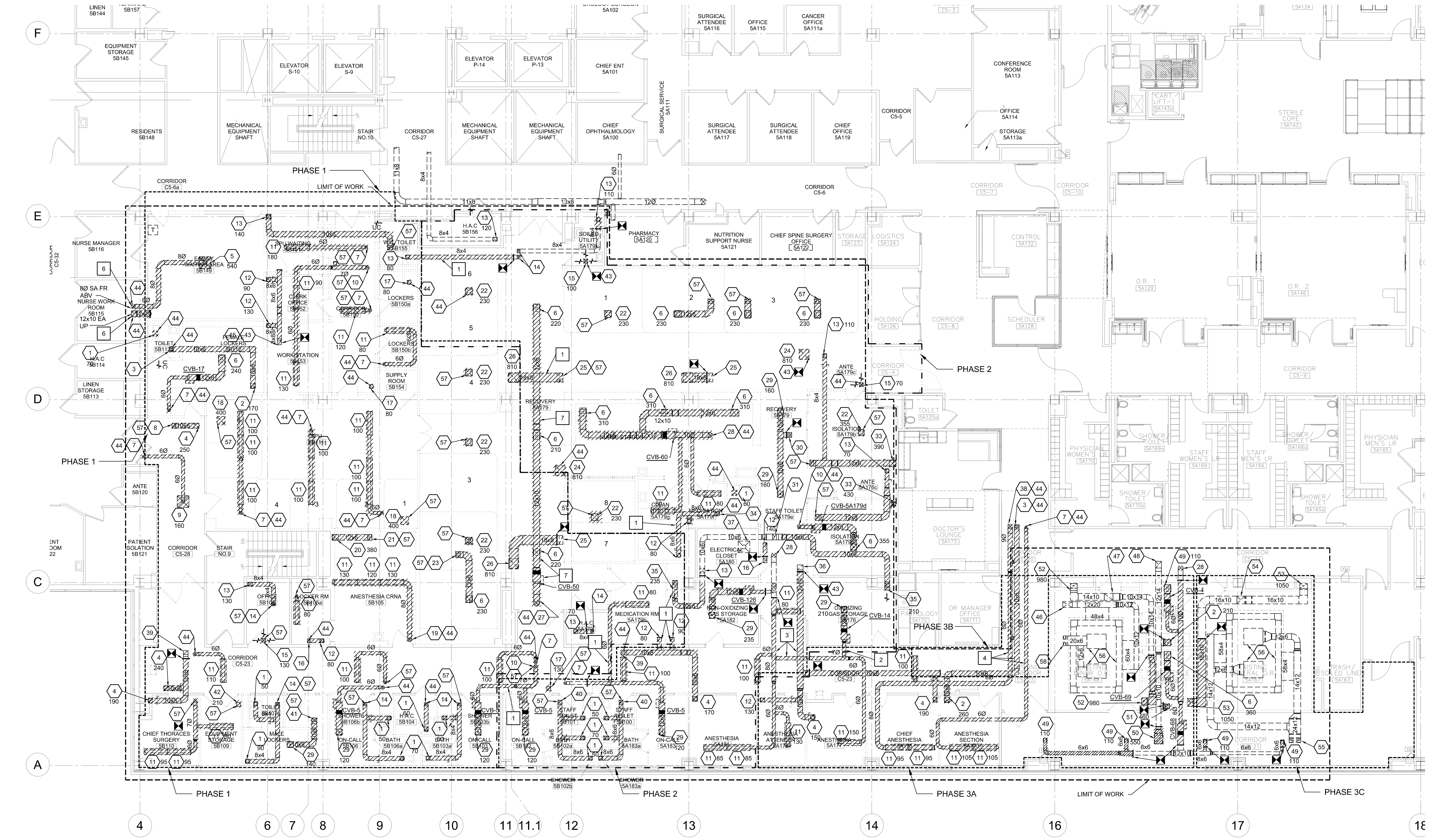


A — PARTIAL FIFTH FLOOR DEMOLITION PLAN - DUCTWORK

Scale: 1/8" = 1'-0"

PHASING KEYNOTES:

1. THIS DUCTWORK SERVES PHASE 1 AREA. CAP DUCTWORK AT PHASE LINE WALL. REMOVE THIS DUCTWORK DURING PHASE 2.
2. THIS DUCTWORK SERVES PHASE 2 AREA. CAP DUCTWORK AT PHASE LINE WALL. REMOVE THIS DUCTWORK DURING PHASE 3a.
3. THIS DUCTWORK SERVES PHASE 3a AREA. THIS DUCTWORK SHALL REMAIN IN SERVICE UNTIL PHASE 3a WORK STARTS. PROVIDE TEMPORARY FLEXIBLE DUCTWORK OF SAME SIZE, CAP BRANCH DUCTWORK THAT CROSS BETWEEN PHASE 2 & 3a AREAS TO KEEP PHASE 3a IN SERVICE. REMOVE THIS DUCTWORK DURING PHASE 3a, COORDINATE WORK WITH ALL TRADES AND VA FACILITY ENGINEERING GROUP TO COMPLETE PHASE 2 WORK DURING PHASE 3a.
4. THIS DUCTWORK SERVES PHASE 3a AREA. CAP DUCTWORK AT PHASE LINE WALL . REMOVE THIS DUCTWORK DURING PHASE 3b.
5. THIS DUCTWORK SERVES PHASE 3c AREA. THIS DUCTWORK SHALL REMAIN IN SERVICE UNTIL PHASE 3c WORK STARTS. REMOVE THIS DUCTWORK DURING PHASE 3c, COORDINATE WORK WITH ALL TRADES AND VA FACILITY ENGINEERING GROUP TO COMPLETE PHASE 3a WORK DURING PHASE 3c.
6. THIS IS OUT OF PROJECT PHASE LINE WORK AREA. THIS WORK SHALL BE PERFORMED DURING THE PHAE ITS ASSOCIATED WITH. COORDINATE ACCESS TO THE OUT OF PROJECT AREA WITH THE AFFECTED USER GROUPS AND FACILITY ENGINEERING GROUP, THIS SHALL BE SCHEDULED AS OFF-HOUR WORK.
7. THE CVB & DUCTWORK SERVES PHASE 2 WORK AREA. THIS CVB & DUCTWORK SHALL REMAIN IN SERVICE UNTIL PHASE 2 WORK STARTS. REMOVE DIFFUSER & DUCTWORK THAT SERVES PHASE 1 AND CAP AT MAIN. REMOVE THE CVB & DUCTWORK WITH ASSOCIATED HWH&HWHR PIPING DURING PHASE 2. COORDINATE WORK WITH ALL TRADES AND VA FACILITY ENGINEERING GROUP TO COMPLETE PHASE 1 WORK.

INFECTION CONTROL PROCEDURES (ICRA):

GENERAL NOTES:

1. BEFORE CONSTRUCTION BEGINS, COORDINATE THE ICRA PROCEDURE WITH THE FACILITY INFECTION CONTROL DEPARTMENT AND ARCHITECTURAL DRAWINGS.
2. COORDINATE WITH FACILITY DEPARTMENT FOR ANY PHASING PLAN REQUIREMENTS TO SCHEDULE SHUTDOWNS 48 HOURS IN ADVANCE, TEMPORARY RELOCATION OR CLOSED DOWN AREAS THAT MAY BE AFFECTED DUE TO THE RENOVATION OF THE SCHEDULED PROJECT.
3. CONTRACTOR TO TAKE AIRFLOW READINGS IN AREAS OUTSIDE OF CURRENT CONSTRUCTION PHASE PRIOR TO BEGINNING WORK & AFTER WORK IS COMPLETE TO MAKE SURE AREAS ARE OPERATING PROPERLY.

DURING CONSTRUCTION:

1. REMOVE OR ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM.
2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLYWOOD, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART W/PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE W/ HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS.
3. MAINTAIN NEGATIVE AIR PRESSURE W/IN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. CONTRACTOR SHALL MAINTAIN 0.001" NEGATIVE PRESSURE.
4. SEAL HOLES, PIPES, CONDUITS, AND PUNCTURES APPROPRIATELY.
5. CONSTRUCT ANTEROOM AND PROVIDE W/ WALK OFF STICKY MATS. REQUIRE ALL PERSONNEL TO PASS THROUGH THIS ROOM SO THEY CAN VACUUM CLEAN THEMSELVES BEFORE LEAVING THE WORK SITE. AN ALTERNATIVE TO THIS METHOD WOULD TO WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE THE WORK SITE.
6. ALL PERSONNEL ENTERING WORK SITE ARE REQUIRED TO WEAR SHOE COVERS. SHOE COVERS MUST BE CHANGED EACH TIME THE WORKER EXITS THE WORK SITE.
7. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS.
8. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVER SHUT UNLESS USING A SOLID LID.
9. CONTRACTOR IS TO MAINTAIN EXISTING QUANTITY (2) OF SMOKE COMPARTMENTS WITHIN AREA OF CONSTRUCTION DURING ALL CONSTRUCTION PHASES.
10. IF HEPA FILTER UNIT DISCHARGE DUCT MUST LEAVE THE ICRA CONTAINMENT AREA TO BE DISCHARGED TO THE OUTSIDE, THE DUCT SHALL BE SHEET METAL WHEN CROSSING THE ICRA BARRIER TO THE POINT OF DISCHARGE. A PLAN SHALL BE SUBMITTED AND REVIEWED WITH THE VA ENGINEER FOR OCCUPIED AREAS THAT THE DISCHARGED DUCT MUST TRAVERSE. FLEX DUCT IS PERMITTED INSIDE THE ICRA BARRIER AND OTHER LOCATIONS AS APPROVED BY THE VA. CONNECTIONS TO THE OUTSIDE DISCHARGE POINT SHALL BE MADE WITH SHEET METAL AND SHALL BE SECURE. CONNECTIONS SHALL NOT BE MADE WITH DUCT TAPE.
11. ANY MEP WORK OUTSIDE THE ICRA BARRIER DOES NOT REQUIRE FULL BARRIER WALL PROTECTION. LESS STRINGENT MEASURES SUCH AS PLASTIC SHEETING SHALL BE PERMITTED AS APPROVED BY THE VA ENGINEERING PERSONEL FOR THE AREAS OF SHORT TERM WORK.

POST CONSTRUCTION:

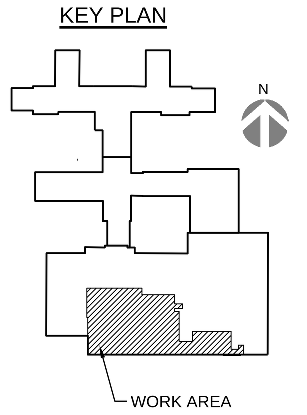
1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETE PROJECT IS INSPECTED BY THE OWNER'S PROJECT ENGINEER AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPARTMENT.
2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION.
3. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS.
4. WET MOP AREA WITH DISINFECTANT.
5. REMOVE ISOLATION OF HVAC SYSTEM IN AREAS WHERE WORK HAS BEEN PERFORMED.

KEYNOTES:

NOTE:
KEYNOTE DESCRIBES ITEM ON DRAWING, ANY ITEM ON THE DRAWING SHOWN WITH CROSSHATCHING SHALL BE REMOVED IN ITS ENTIRETY INCLUDING ALL ITS ASSOCIATED ACCESSORIES IN THEIR ENTIRETY UP TO THEIR ASSOCIATED MAINS OR DISCONNECT POINT.

1. 8x8 ERC WITH 8x8 EA DUCT UP, AT CFM NOTED.
2. 10x10 ERC, AT CFM NOTED.
3. 10x6 EA DUCT UP.
4. 10x10 RGC, AT CFM NOTED.
5. 8Ø SDC, AT CFM NOTED.
6. 12x12 SDC, AT CFM NOTED.
7. 6Ø SA DUCT FR ABV.
8. 10x6 RA DUCT UP.
9. 6Ø SDC, AT CFM NOTED.
10. 7Ø SA DUCT FR ABV.
11. MODULINE SUPPLY DIFFUSER AT CFM LISTED.
12. 8x8 RGC, AT CFM NOTED.
13. 8x8 ERC, AT CFM NOTED.
14. 8x4 EA DUCT UP.
15. 6x6 SDC WITH 6x6 SA DUCT FR ABV, AT CFM NOTED.
16. 8x4 RA DUCT UP.
17. 8x8 RGC WITH 8x8 RA DUCT UP, AT CFM NOTED.
18. 14x14 RGC WITH 14x14 RA DUCT UP, AT CFM NOTED.
19. 8Ø SA DUCT FR ABV.
20. 12x12 RGC, AT CFM NOTED.
21. 12x6 RA DUCT UP.
22. 12x12 SDC WITH 12x12 SA DUCT FR ABV, AT CFM NOTED.
23. 12x6 SA DUCT FR ABV.
24. 18x18 RGC WITH 18x18 RA DUCT UP, AT CFM NOTED.
25. 18x8 RA DUCT UP.
26. 18x18 RGC, AT CFM NOTED.
27. 12Ø SA DUCT FR ABV.
28. 10Ø SA DUCT FR ABV.
29. 9x9 SDC, AT CFM NOTED.
30. 10x6 SA DUCT FR ABV.
31. 12x8 EA DUCT UP.
32. 9x9 SDC WITH 10x10 SA DUCT FR ABV, AT CFM NOTED.
33. 12x12 ERC, AT CFM NOTED.
34. 8x6 RA DUCT UP.
35. 10x6 BR / EA, AT CFM NOTED.
36. 12x10 RA DUCT UP.
37. 8Ø SDC, WITH 8Ø SA DUCT FR ABV ? CFM.
38. 9Ø SA DUCT FR ABV.
39. 10x8 RA DUCT UP.
40. 8x6 EA DUCT UP.
41. 10x8 SA DUCT FR ABV.
42. 10x10 RGC WITH 10x10 RA DUCT UP, AT CFM NOTED.
43. DISCONNECT DUCTWORK 1'-0" BELOW INTERSTITIAL FLOOR LEVEL
44. PATCH INTERSTITIAL FLOOR AT REMOVED DUCT PENETRATION.
45. 8x8 RA DUCT UP.
46. 20x12 SS SA DUCT FR ABV 1470 CFM.
47. 18x14 EA UP 1960 CFM.
48. 14x12 EA UP 1220 CFM.
49. 6x6 SDC, AT CFM NOTED.
50. 16x16 ERC, AT CFM NOTED.
51. 10X6 EA DUCT CONN TO CANOPY HOOD
52. 14X28 EA WALL REGISTER AT CFM LISTED.
53. 16X26 EA WALL REGISTER AT CFM LISTED.
54. 16x16 EA UP 2100 CFM.
55. 24x12 SS SA DUCT FR ABV 2530 CFM.
56. SS LAMINAR AIR DIFFUSERS ABV OR TABLE AND SS SLOT DIFFUSERS AROUND PERIMETER OF OR TABLE.
57. REVISE INTERSTITIAL FLOOR OPENING AT REMOVED DUCT PENETRATION TO SUITE NEW DUCT PENETRATION, SEE M101 & M201 THIS LOCATION FOR NEW WORK.
58. 20x6 SS SA DUCT FR ABV 740 CFM.

KEY PLAN



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Revisions	Date

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Approved:	
Project Title	5th Floor SAME DAY SURGERY RENOV. VA Medical Center
Location:	Philadelphia, Pennsylvania
Date:	04.28.16
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Building Number:	TWO
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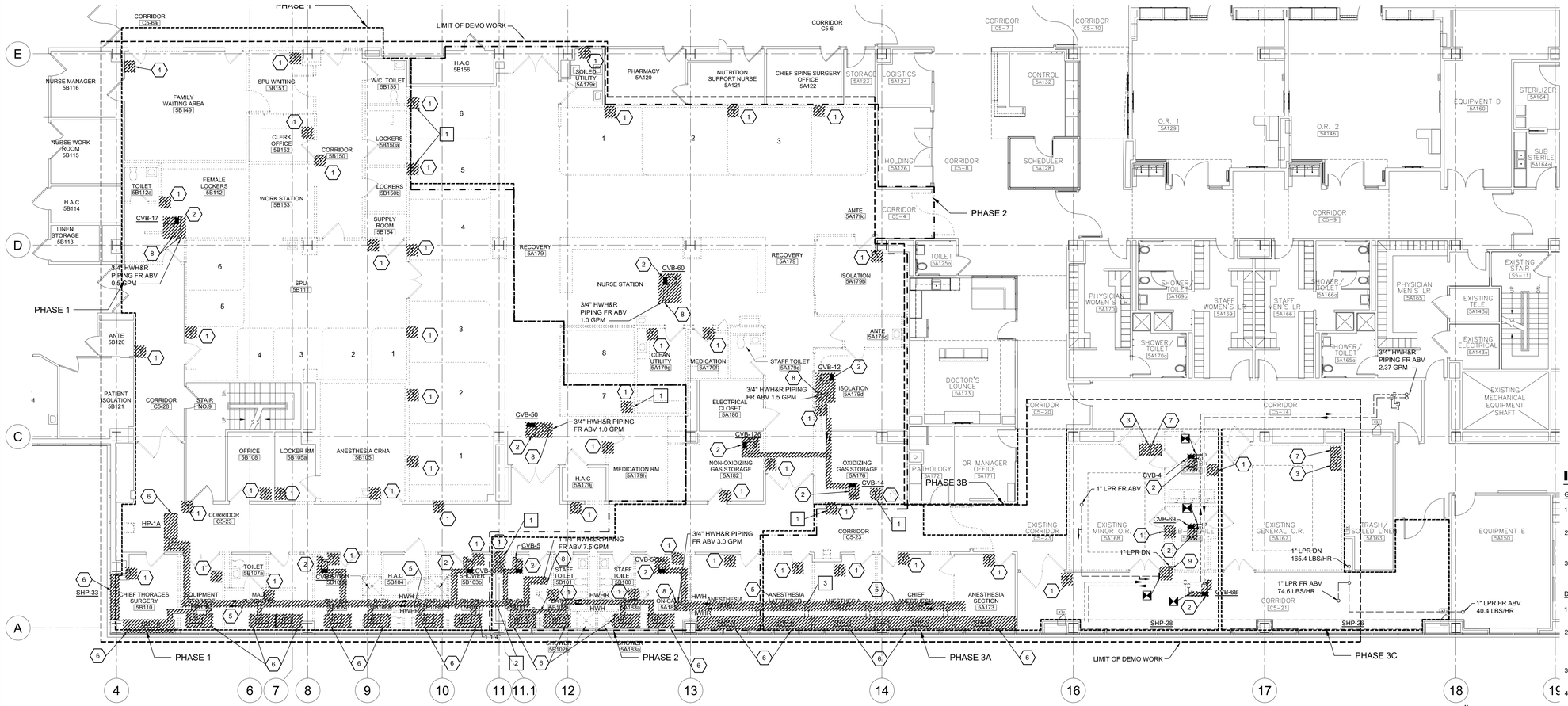
Dwg.	23 of 61

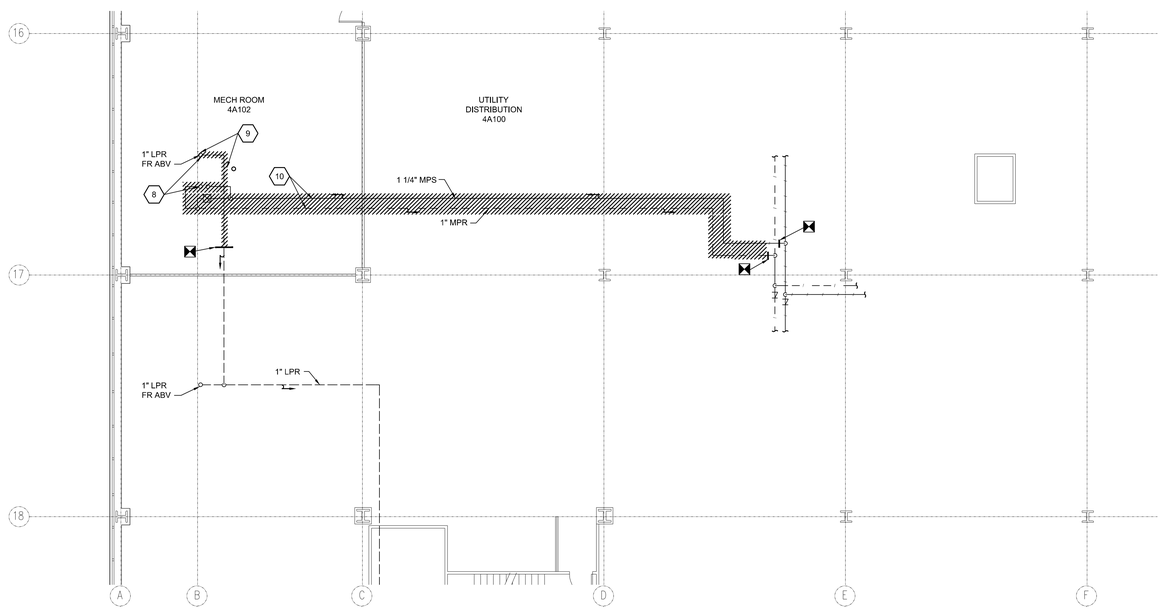
Office of Construction and Facilities Management

Department of Veterans Affairs



A PARTIAL FIFTH FLOOR DEMOLITION PLAN - PIPING

Scale: 1/8" = 1'-0"



B PARTIAL FOURTH FLOOR DEMOLITION PLAN - PIPING

Scale: 1/8" = 1'-0"

NOTE:
THIS FLOOR PLAN IS ROTATED TO FIT IN SPACE AVAILABLE SEE NORTH ARROW AT END OF TITLE FOR ORIENTATION.

NOTE:
1. THIS IS AN UTILITY DISTRIBUTION FLOOR (INTERSTITIAL SPACE) BETWEEN THE 3RD AND 5TH FLOOR LEVELS. THE FLOOR IS LIGHT WEIGHT VIRMICULITE INSULATING CONCRETE AND IS SUSPENDED FROM THE 5TH FLOOR FRAMING VIA HANGER RODS. PROVIDE PLANKING ACROSS THE CHANNELS FOR TRANSPORTING TOOL CHEST, EQUIPMENT, AND HEAVY ITEMS. THE PLANKING MUST BE OF NON-COMBUSTIBLE MATERIAL IF PLANKING IS TO REMAIN WHEN NO-ONE IS PRESENT, OTHERWISE ANY COMBUSTIBLE PLANKING MUST BE REMOVED AND STORED WHERE SPRINKLERS EXIST DURING TIMES WHEN NO ONE IS PRESENT IN THE CONSTRUCTION AREA. THE DUCTWORK AND PIPING SHALL BE INSTALLED IN A NEAT MANNER AND SHALL BE INSTALLED IN A SIMILAR MANNER AS THE EXISTING. TAKE TIME TO NOTE WHERE DESIGNATED WALKWAY ARE LOCATED TO GAIN ACCESS TO THE MECHANICAL ROOMS. THESE WALK-WAYS SHALL NOT BE COMPROMISED WHEN INSTALLING THE DUCTWORK OR PIPING. OFFSET UP AND DOWN AS NECESSARY TO MAINTAIN A USABLE WALKWAY. BEFORE INSTALLING DUCTWORK OR PIPING VERIFY WITH FACILITY ENGINEERING GROUP AND ENGINEER OF RECORD FOR APPROVAL.
2. STORAGE OF MATERIAL ARE NOT PERMITTED WITHIN THE INTERSTITIAL SPACE.

KEYNOTES:

1. REMOVE EXISTING PNEUMATIC THERMOSTAT SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ITS ASSOCIATED PNEUMATIC TUBING, CAP TUBING AT MAIN.
2. REMOVE EXISTING AIR TERMINAL BOX SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ASSOCIATED HWH & HWHR PIPING CONTROLS WITH ACCESSORIES.
3. REMOVE EXISTING HUMIDITY SENSOR SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ITS ASSOCIATED ACCESSORIES TERMINATE AND CAP AT MAIN.
4. REMOVE EXISTING ELECTRONIC DDC THERMOSTAT SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ITS ASSOCIATED ACCESSORIES.
5. REMOVE EXISTING HWH & HWHR PIPING SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ITS ASSOCIATED ACCESSORIES.
6. REMOVE EXISTING RADIANT CEILING PANEL SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ASSOCIATED HWH & HWHR PIPING, CONTROLS WITH ACCESSORIES.
7. REMOVE EXISTING TEMPERATURE SENSOR SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ITS ASSOCIATED ACCESSORIES TERMINATE AND CAP AT MAIN.
8. PATCH INTERSTITIAL FLOOR AT REMOVED PIPING PENETRATION.
9. REMOVE EXISTING LPR PIPING SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ITS ASSOCIATED ACCESSORIES. THE 1" LPR SERVES THE STEAM HUMIDIFIERS LOCATED IN MECH ROOM 6A103. KEEP LPR ACTIVE DURING WALL DEMOLITION AND UNTIL THE REPLACEMENT LPR LINE IS INSTALLED AND READY FOR CONNECTION. AFTER THE FINAL TIE IN OF THE LPR IS COMPLETE THEN REMOVE THE EXISTING RISER INCLUDING APPROXIMATELY 20 LINEAR FEET OF 1" LPR IN THE 4TH FLOOR INTERSTITIAL SPACE BELOW, PATCH FLOOR TO MATCH EXISTING CONSTRUCTION.
10. REMOVE EXISTING MPS, MPR PIPING SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING AL ASSOCIATED ACCESSORIES. PATCH THE 5TH FLOOR LEVEL AT REMOVED PIPING PENETRATIC

PHASING KEYNOTES:

1. THERMOSTAT IS MOUNTED ON A PHASE WALL. THIS THERMOSTAT SHALL REMAIN IN SERVICE THRU OUT THE PHASE WORK WHERE LOCATED IN. PROVIDE TEMPORARY SUPPORTS, PNEUMATIC TUBING AS REQUIRED.
2. THIS HWH & HWHR PIPING SERVES PHASE 1 AREA. CAP PIPING AT PHASE WALL. REMOVE THIS PIPING DURING PHASE 2.
3. THIS HWH & HWHR PIPING SERVES PHASE 3a AREA. THIS PIPING SHALL REMAIN IN SERVICE UNTIL PHASE 3a WORK STARTS. REMOVE AND CAP BRANCH PIPING THAT SERVES PHASE 2 WORK AREA. REMOVE THIS PIPING DURING PHASE 3a WORK. COORDINATE WITH ALL TRADES AND VA FACILITY ENGINEERING GROUP TO COMPLETE PHASE 2 WORK.

INFECTION CONTROL PROCEDURES (ICRA):

GENERAL NOTES:

1. BEFORE CONSTRUCTION BEGINS, COORDINATE THE ICRA PROCEDURE WITH THE FACILITY INFECTION CONTROL DEPARTMENT AND ARCHITECTURAL DRAWINGS.
2. COORDINATE WITH FACILITY DEPARTMENT FOR ANY PHASING PLAN REQUIREMENTS TO SCHEDULE SHUTDOWNS 48 HOURS IN ADVANCE, TEMPORARY RELOCATION OR CLOSED DOWN AREAS THAT MAY BE AFFECTED DUE TO THE RENOVATION OF THE SCHEDULED PROJECT.
3. CONTRACTOR TO TAKE AIRFLOW READINGS IN AREAS OUTSIDE OF CURRENT CONSTRUCTION PHASE PRIOR TO BEGINNING WORK & AFTER WORK IS COMPLETE TO MAKE SURE AREAS ARE OPERATING PROPERLY.

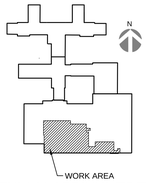
DURING CONSTRUCTION:

1. REMOVE OR ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM.
2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLYWOOD, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART W/PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE W/ HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS.
3. MAINTAIN NEGATIVE AIR PRESSURE W/IN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. CONTRACTOR SHALL MAINTAIN 0.001" NEGATIVE PRESSURE.
4. SEAL HOLES, PIPES, CONDUITS, AND PUNCTURES APPROPRIATELY.
5. CONSTRUCT ANTEROOM AND PROVIDE W/ WALK OFF STICKY MATS. REQUIRE ALL PERSONNEL TO PASS THROUGH THIS ROOM SO THEY CAN VACUUM CLEAN THEMSELVES BEFORE LEAVING THE WORK SITE. AN ALTERNATIVE TO THIS METHOD WOULD TO WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE THE WORK SITE.
6. ALL PERSONNEL ENTERING WORK SITE ARE REQUIRED TO WEAR SHOE COVERS. SHOE COVERS MUST BE CHANGED EACH TIME THE WORKER EXITS THE WORK SITE.
7. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS.
8. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVER SHUT UNLESS USING A SOLID LID.
9. CONTRACTOR IS TO MAINTAIN EXISTING QUANTITY (2) OF SMOKE COMPARTMENTS WITHIN AREA OF CONSTRUCTION DURING ALL CONSTRUCTION PHASES.
10. IF HEPA FILTER UNIT DISCHARGE DUCT MUST LEAVE THE ICRA CONTAINMENT AREA TO BE DISCHARGED TO THE OUTSIDE. THE DUCT SHALL BE SHEET METAL WHEN CROSSING THE ICRA BARRIER TO THE POINT OF DISCHARGE. A PLAN SHALL BE SUBMITTED AND REVIEWED WITH THE VA ENGINEER FOR OCCUPIED AREAS THAT THE DISCHARGED DUCT MUST TRAVERSE. FLEX DUCT IS PERMITTED INSIDE THE ICRA BARRIER AND OTHER LOCATIONS AS APPROVED BY THE VA. CONNECTIONS TO THE OUTSIDE DISCHARGE POINT SHALL BE MADE WITH SHEET METAL AND SHALL BE SECURE. CONNECTIONS SHALL NOT BE MADE WITH DUCT TAPE.
11. ANY MEP WORK OUTSIDE THE ICRA BARRIER DOES NOT REQUIRE FULL BARRIER WALL PROTECTION. LESS STRINGENT MEASURES SUCH AS PLASTIC SHEETING SHALL BE PERMITTED AS APPROVED BY THE VA ENGINEERING PERSONEL FOR THE AREAS OF SHORT TERM WORK.

POST CONSTRUCTION:

1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETE PROJECT IS INSPECTED BY THE OWNER'S PROJECT ENGINEER AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPARTMENT.
2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION.
3. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS.
4. WET MOP AREA WITH DISINFECTANT.
5. REMOVE ISOLATION OF HVAC SYSTEM IN AREAS WHERE WORK HAS BEEN PERFORMED.

KEY PLAN



FULLY SPRINKLERED
100% FINAL SUBMISSION

Revisions	Date

CONSULTANTS:

ARCHITECT/ENGINEERS:

levelHEADS architects + integrators

H.F. LENZ COMPANY

Drawing Title: FOURTH & FIFTH FLOOR MECHANICAL DEMOLITION PLAN - PIPING

Approved:

Project Title: 5th Floor SAME DAY SURGERY RENOV. VA Medical Center

Location: Philadelphia, Pennsylvania

Date: 04.28.16 | Checked By: TME | Drawn By: NJB

Project Number: 642-11-120

Building Number: TWO

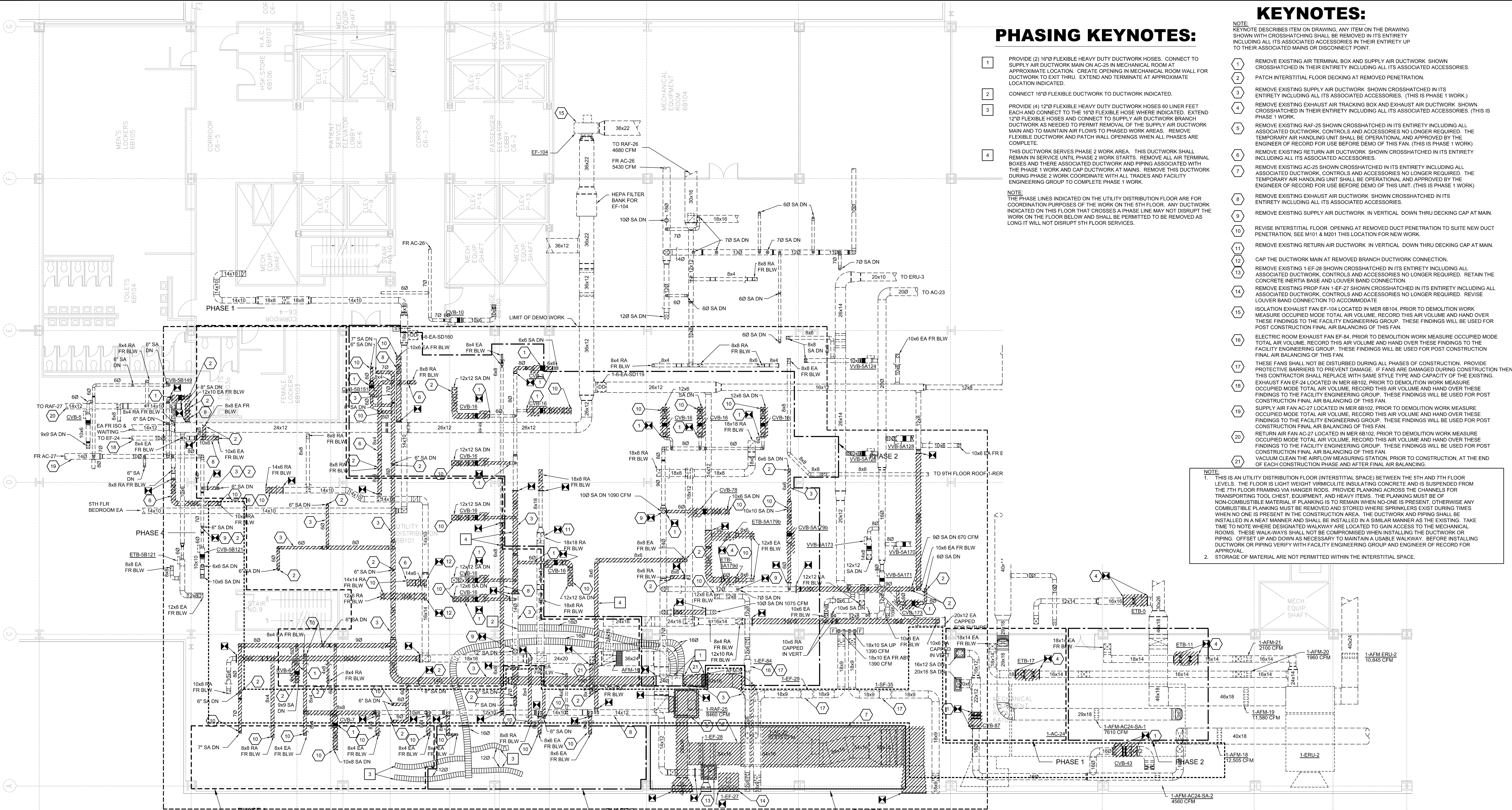
Drawing Number: M102

Dwg. 24 of 61

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



A — PARTIAL SIXTH FLOOR DEMOLITION PLAN - DUCTWORK

Scale: 1/8" = 1'-0"

PHASING KEYNOTES:

1. PROVIDE (2) 16"Ø FLEXIBLE HEAVY DUTY DUCTWORK HOSES. CONNECT TO SUPPLY AIR DUCTWORK MAIN ON AC-25 IN MECHANICAL ROOM AT APPROXIMATE LOCATION. CREATE OPENING IN MECHANICAL ROOM WALL FOR DUCTWORK TO EXIT THRU. EXTEND AND TERMINATE AT APPROXIMATE LOCATION INDICATED.
2. CONNECT 16"Ø FLEXIBLE DUCTWORK TO DUCTWORK INDICATED.
3. PROVIDE (4) 12"Ø FLEXIBLE HEAVY DUTY DUCTWORK HOSES 60 LINER FEET EACH AND CONNECT TO THE 16"Ø FLEXIBLE HOSE WHERE INDICATED. EXTEND 12"Ø FLEXIBLE HOSES AND CONNECT TO SUPPLY AIR DUCTWORK BRANCH DUCTWORK AS NEEDED TO PERMIT REMOVAL OF THE SUPPLY AIR DUCTWORK MAIN AND TO MAINTAIN AIR FLOWS TO PHASED WORK AREAS. REMOVE FLEXIBLE DUCTWORK AND PATCH WALL OPENINGS WHEN ALL PHASES ARE COMPLETE.
4. THIS DUCTWORK SERVES PHASE 2 WORK AREA. THIS DUCTWORK SHALL REMAIN IN SERVICE UNTIL PHASE 2 WORK STARTS. REMOVE ALL AIR TERMINAL BOXES AND THERE ASSOCIATED DUCTWORK AND PIPING ASSOCIATED WITH THE PHASE 1 WORK AND CAP DUCTWORK AT MAINS. REMOVE THIS DUCTWORK DURING PHASE 2 WORK COORDINATE WITH ALL TRADES AND FACILITY ENGINEERING GROUP TO COMPLETE PHASE 1 WORK.

NOTE:
THE PHASE LINES INDICATED ON THE UTILITY DISTRIBUTION FLOOR ARE FOR COORDINATION PURPOSES OF THE WORK ON THE 5TH FLOOR. ANY DUCTWORK INDICATED ON THIS FLOOR THAT CROSSES A PHASE LINE MAY NOT DISRUPT THE WORK ON THE FLOOR BELOW AND SHALL BE PERMITTED TO BE REMOVED AS LONG IT WILL NOT DISRUPT 5TH FLOOR SERVICES.

KEYNOTES:

NOTE:
KEYNOTE DESCRIBES ITEM ON DRAWING, ANY ITEM ON THE DRAWING SHOWN WITH CROSSHATCHING SHALL BE REMOVED IN ITS ENTIRETY INCLUDING ALL ITS ASSOCIATED ACCESSORIES IN THEIR ENTIRETY UP TO THEIR ASSOCIATED MAINS OR DISCONNECT POINT.

1. REMOVE EXISTING AIR TERMINAL BOX AND SUPPLY AIR DUCTWORK SHOWN CROSSHATCHED IN THEIR ENTIRETY INCLUDING ALL ITS ASSOCIATED ACCESSORIES.
2. PATCH INTERSTITIAL FLOOR DECKING AT REMOVED PENETRATION.
3. REMOVE EXISTING SUPPLY AIR DUCTWORK SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ITS ASSOCIATED ACCESSORIES. (THIS IS PHASE 1 WORK.)
4. REMOVE EXISTING EXHAUST AIR TRACKING BOX AND EXHAUST AIR DUCTWORK SHOWN CROSSHATCHED IN THEIR ENTIRETY INCLUDING ALL ITS ASSOCIATED ACCESSORIES. (THIS IS PHASE 1 WORK.
5. REMOVE EXISTING RAF-25 SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ASSOCIATED DUCTWORK, CONTROLS AND ACCESSORIES NO LONGER REQUIRED. THE TEMPORARY AIR HANDLING UNIT SHALL BE OPERATIONAL AND APPROVED BY THE ENGINEER OF RECORD FOR USE BEFORE DEMO OF THIS FAN. (THIS IS PHASE 1 WORK)
6. REMOVE EXISTING RETURN AIR DUCTWORK SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ITS ASSOCIATED ACCESSORIES.
7. REMOVE EXISTING AC-25 SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ASSOCIATED DUCTWORK, CONTROLS AND ACCESSORIES NO LONGER REQUIRED. THE TEMPORARY AIR HANDLING UNIT SHALL BE OPERATIONAL AND APPROVED BY THE ENGINEER OF RECORD FOR USE BEFORE DEMO OF THIS UNIT. (THIS IS PHASE 1 WORK)
8. REMOVE EXISTING EXHAUST AIR DUCTWORK SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ITS ASSOCIATED ACCESSORIES.
9. REMOVE EXISTING SUPPLY AIR DUCTWORK IN VERTICAL DOWN THRU DECKING CAP AT MAIN.
10. REVISE INTERSTITIAL FLOOR OPENING AT REMOVED DUCT PENETRATION TO SUITE NEW DUCT PENETRATION, SEE M101 & M201 THIS LOCATION FOR NEW WORK.
11. REMOVE EXISTING RETURN AIR DUCTWORK IN VERTICAL DOWN THRU DECKING CAP AT MAIN.
12. CAP THE DUCTWORK MAIN AT REMOVED BRANCH DUCTWORK CONNECTION.
13. REMOVE EXISTING 1-EF-28 SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ASSOCIATED DUCTWORK, CONTROLS AND ACCESSORIES NO LONGER REQUIRED. RETAIN THE CONCRETE INERTIA BASE AND LOUVER BAND CONNECTION.
14. REMOVE EXISTING PROP FAN 1-EF-27 SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ASSOCIATED DUCTWORK, CONTROLS AND ACCESSORIES NO LONGER REQUIRED. REVISE LOUVER BAND CONNECTION TO ACCOMMODATE
15. ISOLATION EXHAUST FAN EF-104 LOCATED IN MER 6B104, PRIOR TO DEMOLITION WORK MEASURE OCCUPIED MODE TOTAL AIR VOLUME, RECORD THIS AIR VOLUME AND HAND OVER THESE FINDINGS TO THE FACILITY ENGINEERING GROUP. THESE FINDINGS WILL BE USED FOR POST CONSTRUCTION FINAL AIR BALANCING OF THIS FAN.
16. ELECTRIC ROOM EXHAUST FAN EF-84, PRIOR TO DEMOLITION WORK MEASURE OCCUPIED MODE TOTAL AIR VOLUME, RECORD THIS AIR VOLUME AND HAND OVER THESE FINDINGS TO THE FACILITY ENGINEERING GROUP. THESE FINDINGS WILL BE USED FOR POST CONSTRUCTION FINAL AIR BALANCING OF THIS FAN.
17. THESE FANS SHALL NOT BE DISTURBED DURING ALL PHASES OF CONSTRUCTION. PROVIDE PROTECTIVE BARRIERS TO PREVENT DAMAGE. IF FANS ARE DAMAGED DURING CONSTRUCTION THEN THIS CONTRACTOR SHALL REPLACE WITH SAME STYLE TYPE AND CAPACITY OF THE EXISTING.
18. EXHAUST FAN EF-24 LOCATED IN MER 6B102, PRIOR TO DEMOLITION WORK MEASURE OCCUPIED MODE TOTAL AIR VOLUME, RECORD THIS AIR VOLUME AND HAND OVER THESE FINDINGS TO THE FACILITY ENGINEERING GROUP. THESE FINDINGS WILL BE USED FOR POST CONSTRUCTION FINAL AIR BALANCING OF THIS FAN.
19. SUPPLY AIR FAN AC-27 LOCATED IN MER 6B102, PRIOR TO DEMOLITION WORK MEASURE OCCUPIED MODE TOTAL AIR VOLUME, RECORD THIS AIR VOLUME AND HAND OVER THESE FINDINGS TO THE FACILITY ENGINEERING GROUP. THESE FINDINGS WILL BE USED FOR POST CONSTRUCTION FINAL AIR BALANCING OF THIS FAN.
20. RETURN AIR FAN AC-27 LOCATED IN MER 6B102, PRIOR TO DEMOLITION WORK MEASURE OCCUPIED MODE TOTAL AIR VOLUME, RECORD THIS AIR VOLUME AND HAND OVER THESE FINDINGS TO THE FACILITY ENGINEERING GROUP. THESE FINDINGS WILL BE USED FOR POST CONSTRUCTION FINAL AIR BALANCING OF THIS FAN.
21. VACUUM CLEAN THE AIRFLOW MEASURING STATION, PRIOR TO CONSTRUCTION, AT THE END OF EACH CONSTRUCTION PHASE AND AFTER FINAL AIR BALANCING.

NOTE:
1. THIS IS AN UTILITY DISTRIBUTION FLOOR (INTERSTITIAL SPACE) BETWEEN THE 5TH AND 7TH FLOOR LEVELS. THE FLOOR IS LIGHT WEIGHT VIRMICULITE INSULATING CONCRETE AND IS SUSPENDED FROM THE 7TH FLOOR FRAMING VIA HANGER RODS. PROVIDE PLANKING ACROSS THE CHANNELS FOR TRANSPORTING TOOL CHEST, EQUIPMENT, AND HEAVY ITEMS. THE PLANKING MUST BE OF NON-COMBUSTIBLE MATERIAL IF PLANKING IS TO REMAIN WHEN NO-ONE IS PRESENT, OTHERWISE ANY COMBUSTIBLE PLANKING MUST BE REMOVED AND STORED WHERE SPRINKLERS EXIST DURING TIMES WHEN NO ONE IS PRESENT IN THE CONSTRUCTION AREA. THE DUCTWORK AND PIPING SHALL BE INSTALLED IN A NEAT MANNER AND SHALL BE INSTALLED IN A SIMILAR MANNER AS THE EXISTING. TAKE TIME TO NOTE WHERE DESIGNATED WALKWAY ARE LOCATED TO GAIN ACCESS TO THE MECHANICAL ROOMS. THESE WALK-WAYS SHALL NOT BE COMPROMISED WHEN INSTALLING THE DUCTWORK OR PIPING. OFFSET UP AND DOWN AS NECESSARY TO MAINTAIN A USABLE WALKWAY. BEFORE INSTALLING DUCTWORK OR PIPING VERIFY WITH FACILITY ENGINEERING GROUP AND ENGINEER OF RECORD FOR APPROVAL.
2. STORAGE OF MATERIAL ARE NOT PERMITTED WITHIN THE INTERSTITIAL SPACE.

INFECTION CONTROL PROCEDURES (ICRA):

GENERAL NOTES:

1. BEFORE CONSTRUCTION BEGINS, COORDINATE THE ICRA PROCEDURE WITH THE FACILITY INFECTION CONTROL DEPARTMENT AND ARCHITECTURAL DRAWINGS.
2. COORDINATE WITH FACILITY DEPARTMENT FOR ANY PHASING PLAN REQUIREMENTS TO SCHEDULE SHUTDOWNS 48 HOURS IN ADVANCE, TEMPORARY RELOCATION OR CLOSED DOWN AREAS THAT MAY BE AFFECTED DUE TO THE RENOVATION OF THE SCHEDULED PROJECT.
3. CONTRACTOR TO TAKE AIRFLOW READINGS IN AREAS OUTSIDE OF CURRENT CONSTRUCTION PHASE PRIOR TO BEGINNING WORK & AFTER WORK IS COMPLETE TO MAKE SURE AREAS ARE OPERATING PROPERLY.

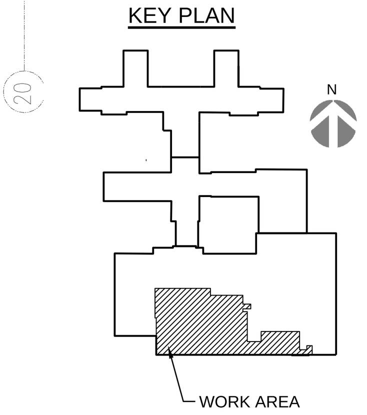
DURING CONSTRUCTION:

1. REMOVE OR ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM.
2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLYWOOD, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART W/PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE W/ HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS.
3. MAINTAIN NEGATIVE AIR PRESSURE W/IN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. CONTRACTOR SHALL MAINTAIN 0.001" NEGATIVE PRESSURE.
4. SEAL HOLES, PIPES, CONDUITS, AND PUNCTURES APPROPRIATELY.
5. CONSTRUCT ANTEROOM AND PROVIDE W/ WALK OFF STICKY MATS. REQUIRE ALL PERSONNEL TO PASS THROUGH THIS ROOM SO THEY CAN VACUUM CLEAN THEMSELVES BEFORE LEAVING THE WORK SITE. AN ALTERNATIVE TO THIS METHOD WOULD TO WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE THE WORK SITE.
6. ALL PERSONNEL ENTERING WORK SITE ARE REQUIRED TO WEAR SHOE COVERS. SHOE COVERS MUST BE CHANGED EACH TIME THE WORKER EXITS THE WORK SITE.
7. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS.
8. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVER SHUT UNLESS USING A SOLID LID.
9. CONTRACTOR IS TO MAINTAIN EXISTING QUANTITY (2) OF SMOKE COMPARTMENTS WITHIN AREA OF CONSTRUCTION DURING ALL CONSTRUCTION PHASES.
10. IF HEPA FILTER UNIT DISCHARGE DUCT MUST LEAVE THE ICRA CONTAINMENT AREA TO BE DISCHARGED TO THE OUTSIDE, THE DUCT SHALL BE SHEET METAL WHEN CROSSING THE ICRA BARRIER TO THE POINT OF DISCHARGE. A PLAN SHALL BE SUBMITTED AND REVIEWED WITH THE VA ENGINEER FOR OCCUPIED AREAS THAT THE DISCHARGED DUCT MUST TRAVERSE. FLEX DUCT IS PERMITTED INSIDE THE ICRA BARRIER AND OTHER LOCATIONS AS APPROVED BY THE VA. CONNECTIONS TO THE OUTSIDE DISCHARGE POINT SHALL BE MADE WITH SHEET METAL AND SHALL BE SECURE. CONNECTIONS SHALL NOT BE MADE WITH DUCT TAPE.
11. ANY MEP WORK OUTSIDE THE ICRA BARRIER DOES NOT REQUIRE FULL BARRIER WALL PROTECTION. LESS STRINGENT MEASURES SUCH AS PLASTIC SHEETING SHALL BE PERMITTED AS APPROVED BY THE VA ENGINEERING PERSONEL FOR THE AREAS OF SHORT TERM WORK.

POST CONSTRUCTION:

1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETE PROJECT IS INSPECTED BY THE OWNER'S PROJECT ENGINEER AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPARTMENT.
2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION.
3. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS.
4. WET MOP AREA WITH DISINFECTANT.
5. REMOVE ISOLATION OF HVAC SYSTEM IN AREAS WHERE WORK HAS BEEN PERFORMED.

KEY PLAN



FULLY SPRINKLERED
100% FINAL SUBMISSION

Revisions	Date

CONSULTANTS:

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — TIMOTHY M. EARHART — No. PE041287-E

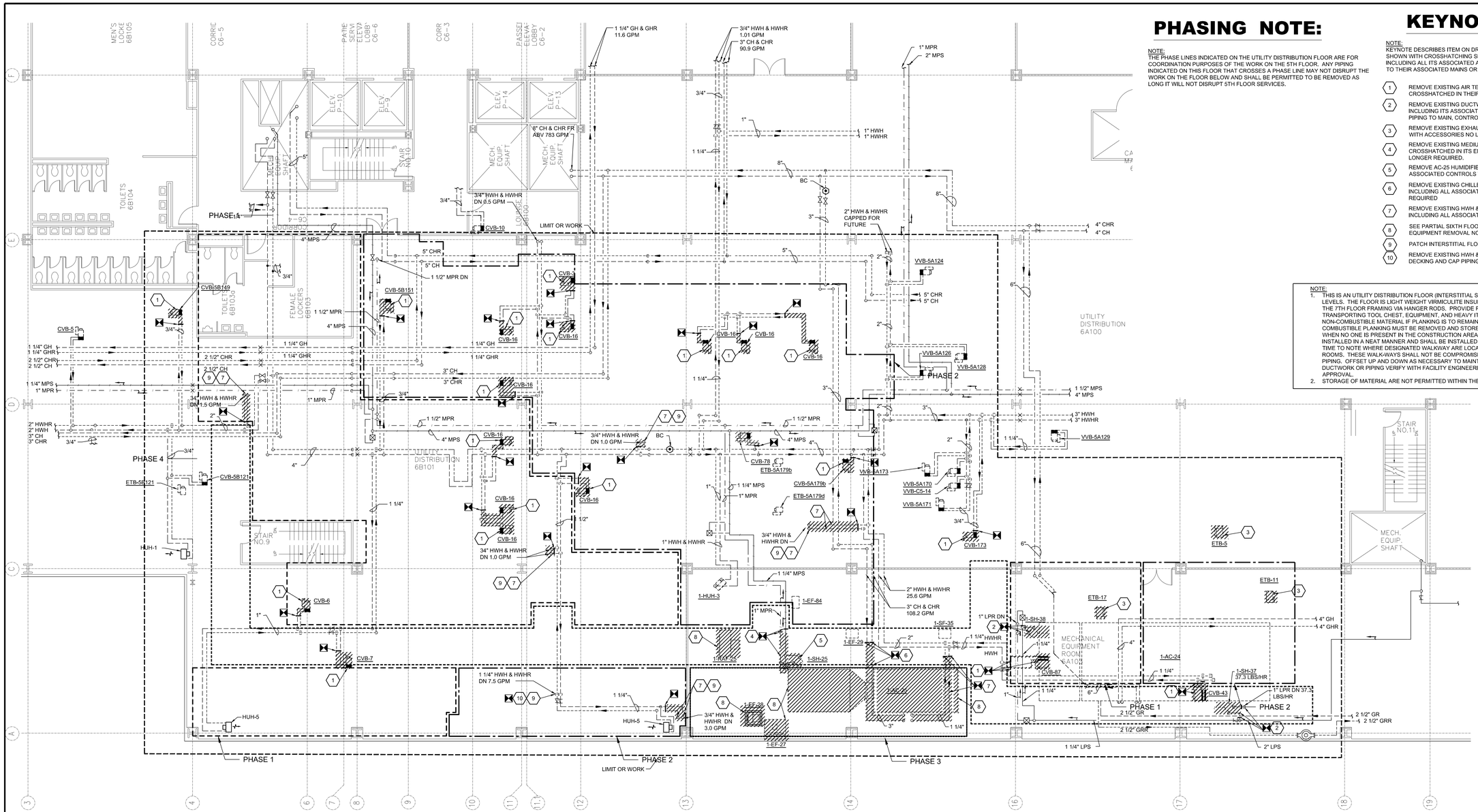
ARCHITECT/ENGINEERS:

levelHEADS architects + integrators

H.F. LENZ COMPANY

Drawing Title: SIXTH FLOOR MECHANICAL DEMOLITION PLAN - DUCTWORK	Project Title: 5th Floor SAME DAY SURGERY RENOV. VA Medical Center	Project Number: 642-11-120	Office of Construction and Facilities Management
		Building Number: TWO	
Approved:	Location: Philadelphia, Pennsylvania	Drawing Number: M103	Department of Veterans Affairs
	Date: 04.28.16 / Checked By: TME / Drawn By: NJB	Dwg. 25 of 61	

VA FORM 08-6231



PHASING NOTE:

NOTE:
THE PHASE LINES INDICATED ON THE UTILITY DISTRIBUTION FLOOR ARE FOR COORDINATION PURPOSES OF THE WORK ON THE 5TH FLOOR. ANY PIPING INDICATED ON THIS FLOOR THAT CROSSES A PHASE LINE MAY NOT DISRUPT THE WORK ON THE FLOOR BELOW AND SHALL BE PERMITTED TO BE REMOVED AS LONG IT WILL NOT DISRUPT 5TH FLOOR SERVICES.

KEYNOTES:

NOTE:
KEYNOTE DESCRIBES ITEM ON DRAWING, ANY ITEM ON THE DRAWING SHOWN WITH CROSSHATCHING SHALL BE REMOVED IN ITS ENTIRETY INCLUDING ALL ITS ASSOCIATED ACCESSORIES IN THEIR ENTIRETY UP TO THEIR ASSOCIATED MAINS OR DISCONNECT POINT.

1. REMOVE EXISTING AIR TERMINAL BOX AND HWH & HWHR PIPING SHOWN CROSSHATCHED IN THEIR ENTIRETY INCLUDING ALL ITS ASSOCIATED ACCESSORIES.
2. REMOVE EXISTING DUCTWORK MOUNTED STEAM HUMIDIFIER SHOWN CROSSHATCHED INCLUDING ITS ASSOCIATED STEAM BRANCH LOW PRESSURE SUPPLY AND RETURN PIPING TO MAIN, CONTROLS AND ACCESSORIES NO LONGER REQUIRED.
3. REMOVE EXISTING EXHAUST TRACKING BOX INCLUDING ALL ITS ASSOCIATED CONTROLS WITH ACCESSORIES NO LONGER REQUIRE.
4. REMOVE EXISTING MEDIUM PRESSURE STEAM SUPPLY AND RETURN PIPING SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING CONTROLS AND ACCESSORIES NO LONGER REQUIRED.
5. REMOVE AC-25 HUMIDIFIER SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ITS ASSOCIATED CONTROLS WITH ACCESSORIES.
6. REMOVE EXISTING CHILLED WATER PIPING SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ASSOCIATED VALVES, CONTROLS WITH ACCESSORIES NO LONGER REQUIRED
7. REMOVE EXISTING HWH & HWHR PIPING SHOWN CROSSHATCHED IN ITS ENTIRETY INCLUDING ALL ASSOCIATED VALVES AND ACCESSORIES NO LONGER REQUIRED
8. SEE PARTIAL SIXTH FLOOR DEMOLITION PLAN - DUCTWORK DRAWING M103 FOR EQUIPMENT REMOVAL NOTE.
9. PATCH INTERSTITIAL FLOOR DECKING AT REMOVED PENETRATION.
10. REMOVE EXISTING HWH & HWHR PIPING IN VERTICAL THRU INTERSTITIAL FLOOR DECKING AND CAP PIPING AT MAINS.

NOTE:
1. THIS IS AN UTILITY DISTRIBUTION FLOOR (INTERSTITIAL SPACE) BETWEEN THE 5TH AND 7TH FLOOR LEVELS. THE FLOOR IS LIGHT WEIGHT VIRMICULITE INSULATING CONCRETE AND IS SUSPENDED FROM THE 7TH FLOOR FRAMING VIA HANGER RODS. PROVIDE PLANKING ACROSS THE CHANNELS FOR TRANSPORTING TOOL CHEST, EQUIPMENT, AND HEAVY ITEMS. THE PLANKING MUST BE OF NON-COMBUSTIBLE MATERIAL IF PLANKING IS TO REMAIN WHEN NO-ONE IS PRESENT, OTHERWISE ANY COMBUSTIBLE PLANKING MUST BE REMOVED AND STORED WHERE SPRINKLERS EXIST DURING TIMES WHEN NO ONE IS PRESENT IN THE CONSTRUCTION AREA. THE DUCTWORK AND PIPING SHALL BE INSTALLED IN A NEAT MANNER AND SHALL BE INSTALLED IN A SIMILAR MANNER AS THE EXISTING. TAKE TIME TO NOTE WHERE DESIGNATED WALKWAY ARE LOCATED TO GAIN ACCESS TO THE MECHANICAL ROOMS. THESE WALK-WAYS SHALL NOT BE COMPROMISED WHEN INSTALLING THE DUCTWORK OR PIPING. OFFSET UP AND DOWN AS NECESSARY TO MAINTAIN A USABLE WALKWAY. BEFORE INSTALLING DUCTWORK OR PIPING VERIFY WITH FACILITY ENGINEERING GROUP AND ENGINEER OF RECORD FOR APPROVAL.
2. STORAGE OF MATERIAL ARE NOT PERMITTED WITHIN THE INTERSTITIAL SPACE.

A PARTIAL SIXTH FLOOR DEMOLITION PLAN - PIPING

Scale: 1/8" = 1'-0"

INFECTION CONTROL PROCEDURES (ICRA):

GENERAL NOTES:

1. BEFORE CONSTRUCTION BEGINS, COORDINATE THE ICRA PROCEDURE WITH THE FACILITY INFECTION CONTROL DEPARTMENT AND ARCHITECTURAL DRAWINGS.
2. COORDINATE WITH FACILITY DEPARTMENT FOR ANY PHASING PLAN REQUIREMENTS TO SCHEDULE SHUTDOWNS 48 HOURS IN ADVANCE. TEMPORARY RELOCATION OR CLOSED DOWN AREAS THAT MAY BE AFFECTED DUE TO THE RENOVATION OF THE SCHEDULED PROJECT.
3. CONTRACTOR TO TAKE AIRFLOW READINGS IN AREAS OUTSIDE OF CURRENT CONSTRUCTION PHASE PRIOR TO BEGINNING WORK & AFTER WORK IS COMPLETE TO MAKE SURE AREAS ARE OPERATING PROPERLY.

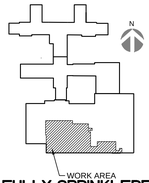
DURING CONSTRUCTION:

1. REMOVE OR ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM.
2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLYWOOD, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART W/PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE W/ HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS.
3. MAINTAIN NEGATIVE AIR PRESSURE W/IN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. CONTRACTOR SHALL MAINTAIN 0.001" NEGATIVE PRESSURE.
4. SEAL HOLES, PIPES, CONDUITS, AND PUNCTURES APPROPRIATELY.
5. CONSTRUCT ANTEROOM AND PROVIDE W/ WALK OFF STICKY MATS. REQUIRE ALL PERSONNEL TO PASS THROUGH THIS ROOM SO THEY CAN VACUUM CLEAN THEMSELVES BEFORE LEAVING THE WORK SITE. AN ALTERNATIVE TO THIS METHOD WOULD TO WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE THE WORK SITE.
6. ALL PERSONNEL ENTERING WORK SITE ARE REQUIRED TO WEAR SHOE COVERS. SHOE COVERS MUST BE CHANGED EACH TIME THE WORKER EXITS THE WORK SITE.
7. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS.
8. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVER SHUT UNLESS USING A SOLID LID.
9. CONTRACTOR IS TO MAINTAIN EXISTING QUANTITY (2) OF SMOKE COMPARTMENTS WITHIN AREA OF CONSTRUCTION DURING ALL CONSTRUCTION PHASES.
10. IF HEPA FILTER UNIT DISCHARGE DUCT MUST LEAVE THE ICRA CONTAINMENT AREA TO BE DISCHARGED TO THE OUTSIDE, THE DUCT SHALL BE SHEET METAL WHEN CROSSING THE ICRA BARRIER TO THE POINT OF DISCHARGE. A PLAN SHALL BE SUBMITTED AND REVIEWED WITH THE VA ENGINEER FOR OCCUPIED AREAS THAT THE DISCHARGED DUCT MUST TRAVERSE. FLEX DUCT IS PERMITTED INSIDE THE ICRA BARRIER AND OTHER LOCATIONS AS APPROVED BY THE VA. CONNECTIONS TO THE OUTSIDE DISCHARGE POINT SHALL BE MADE WITH SHEET METAL AND SHALL BE SECURE. CONNECTIONS SHALL NOT BE MADE WITH DUCT TAPE.
11. ANY MEP WORK OUTSIDE THE ICRA BARRIER DOES NOT REQUIRE FULL BARRIER WALL PROTECTION. LESS STRINGENT MEASURES SUCH AS PLASTIC SHEETING SHALL BE PERMITTED AS APPROVED BY THE VA ENGINEERING PERSONEL FOR THE AREAS OF SHORT TERM WORK.

POST CONSTRUCTION:

1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETE PROJECT IS INSPECTED BY THE OWNER'S PROJECT ENGINEER AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPARTMENT.
2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION.
3. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS.
4. WET MOP AREA WITH DISINFECTANT.
5. REMOVE ISOLATION OF HVAC SYSTEM IN AREAS WHERE WORK HAS BEEN PERFORMED.

KEY PLAN



FULLY SPRINKLERED
100% FINAL SUBMISSION

Revisions:	Date

CONSULTANTS:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER TIMOTHY M. EAGLEARY

ARCHITECT/ENGINEERS:

levelHEADS architects + integrators

H.F. LENZ COMPANY

Drawing Title: SIXTH FLOOR MECHANICAL DEMOLITION PLAN - PIPING

Approved:

Project Title: 5th Floor SAME DAY SURGERY RENOV. VA Medical Center

Location: Philadelphia, Pennsylvania

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Project Number: 642-11-120

Building Number: TWO

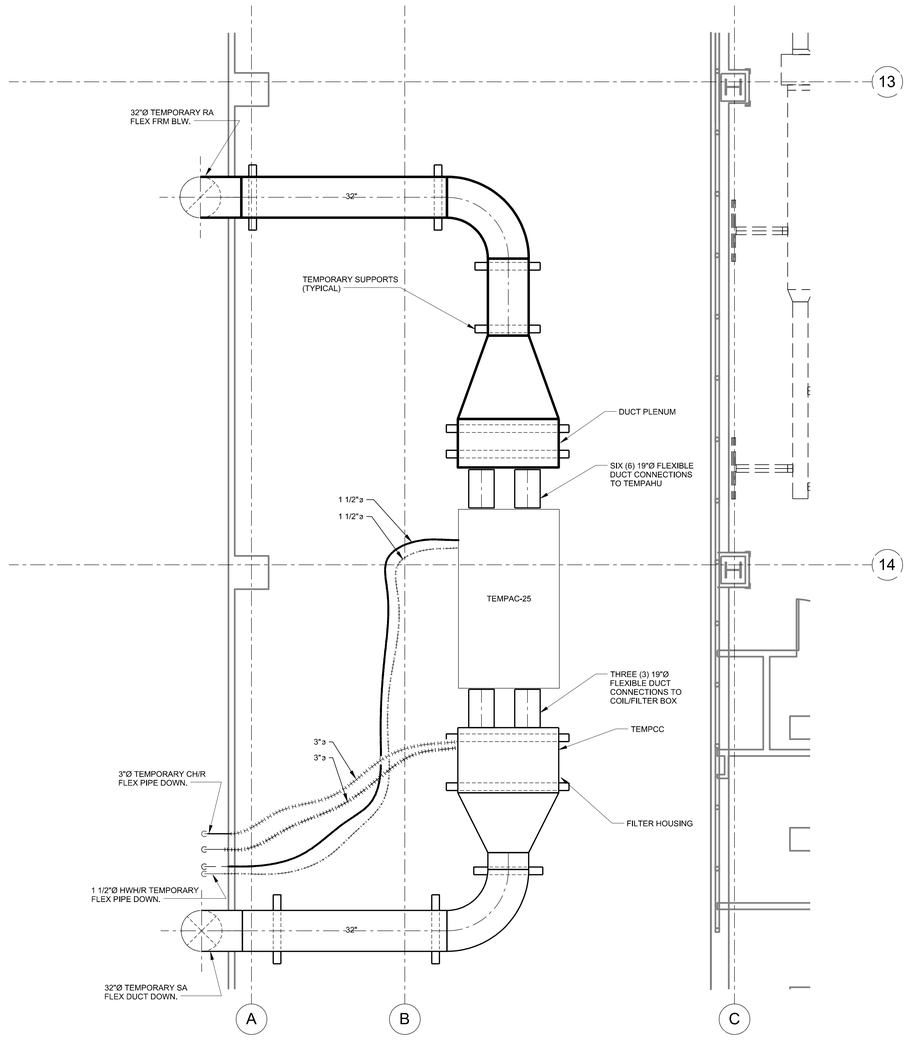
Drawing Number: M104

Dwg. 26 of 61

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



1 PARTIAL SIXTH FLOOR ROOF PLAN UNIT "A" MECHANICAL - TEMPORARY UNIT PHASE 1 WORK

SCALE: 1/4" = 1'-0"

GENERAL NOTES THIS DRAWING:

1. ALL CRANE LIFTS ASSOCIATED WITH ALL PHASES OF WORK, INCLUDING BUT NOT LIMITED TO DELIVERY OF TEMPORARY UNITS, REMOVAL OF EXISTING UNITS, AND DELIVERY OF NEW UNITS SHALL BE PERFORMED ON WEEKENDS.
2. ANY UNIT SHUT-DOWNS REQUIRED SHALL BE SCHEDULED IN ADVANCE WITH FACILITIES ENGINEERING GROUP.
3. MEASURE AND RECORD AIRFLOWS OF UNITS PRIOR TO DEMOLITION.
4. CONTRACTOR SHALL VERIFY THAT NOT MORE THAN EXISTING AC AND RAF SYSTEMS ARE CONNECTED TO THE EXISTING ATC PANELS BEFORE DEMOLITION. PANEL SHALL REMAIN IN PLACE IF OTHER EQUIPMENT NOT DEMOLISHED UNDER THIS PROJECT IS SERVED FROM THIS PANEL.
5. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A SCHEDULE FOR THE ENTIRE PROJECT INDICATING TOTAL LENGTH OF TIME FOR THE PROJECT, ESTIMATED AREA SHUT DOWNS, AND PHASES OF WORK.

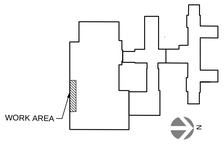
GENERAL DEMOLITION NOTES THIS DRAWING:

1. DISCONNECT AND REMOVE EXISTING LOUVER AND SUPPORT MEMBERS TO FACILITATE REMOVAL OF EXISTING AIR HANDLING UNITS AND INSTALLATION OF NEW AIR HANDLING UNIT SECTIONS. REINSTALL AT COMPLETION OF WORK TO MATCH EXISTING.
2. TEMPORARY SUPPLY AND RETURN DUCTS AND FLEXIBLE WATER HOSES SHALL PENETRATE EXTERIOR WALL THRU EXISTING LOUVER SYSTEM. WHERE REQUIRED, THE EXISTING LOUVERED WALL SECTION, METAL PANELS AND INSULATION SHALL BE REMOVED AND STORED FOR FUTURE RE-INSTALLATION. WHERE DUCT OR HOSES PENETRATE EXTERIOR WALL, THESE PENETRATIONS SHALL BE SEALED AND INSULATED . AFTER TEMPORARY DUCTS AND HOSES ARE NO LONGER REQUIRED, THE PENETRATIONS SHALL BE CLOSED OFF, SEALED, AND INSULATED TO MATCH EXISTING CONDITIONS. EXISTING LOUVER SHALL BE RE-INSTALLED.
3. EXISTING SMOKE DETECTOR TO BE RELOCATED TO TEMPORARY DUCTING DURING PHASED CONSTRUCTION. UPON COMPLETION OF NEW DUCTWORK, NEW SMOKE DETECTOR TO BE PLACED IN NEW DUCTWORK, REFER TO NEW WORK PLAN FOR LOCATION.

GENERAL TEMPORARY UNIT NOTES THIS DRAWING:

1. EXISTING AIR HANDLING UNIT 1-AC-25 MUST REMAIN FULLY OPERATIONAL UNTIL THE TEMPORARY AIR HANDLING UNIT 1-TEMPAC-25 IS IN PLACE AND IS READY FOR THE SWITCH OVER FROM THE EXISTING UNIT TO THE TEMPORARY UNIT. THE SWITCH OVER WILL BE PERFORMED AS WEEKEND WORK, AND MUST BE COMPLETED BEFORE HOSPITAL OPERATING HOURS START ON MONDAY MORNING. SWITCH OVER TO BE COORDINATED WITH FACILITIES ENGINEERING GROUP.
2. THE 1 1/2" HEATING HOT WATER VALVES WILL REMAIN CLOSED DURING THE OPERATION AND USE OF 1-TEMPAC-25 UNLESS HEATING IS A PRIORITY. IN THAT CASE, THE TEMPORARY 1 1/2" WATER FLEX HOSES WILL BE CONNECTED TO THE 1 1/2" HWH&R PIPING AND VALVES SHALL BE OPENED. WHEN IN THE HEATING MODE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FREEZE PROTECTION OF PIPING. THE CONTRACTOR SHALL FURNISH A HEAT EXCHANGER, PUMP, GLYCOL FILL AND ALL OTHER REQUIRED COMPONENTS. THE MECHANICAL CONTRACTOR SHALL ADJUST VALVING TO MAINTAIN A LEAVING AIR TEMPERATURE OF 55°F.
3. THE 3" CHILLED WATER VALVES WILL REMAIN OPEN DURING THE OPERATION AND USE OF 1-TEMPAC-25 UNLESS HEATING IS A PRIORITY. IN THAT CASE, THE VALVES WILL BE CLOSED. THE MECHANICAL CONTRACTOR SHALL ADJUST VALVING TO MAINTAIN A LEAVING AIR TEMPERATURE OF 55°F.
4. SUPPORT OF THE TEMPORARY UNIT SHALL NOT DAMAGE THE EXISTING ROOF. ANY DAMAGE TO THE EXISTING ROOF BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND TO MATCH EXISTING CONDITIONS APPROVED BY THE FACILITIES ENGINEERING GROUP.
5. TEMPORARY FINAL FILTER HOUSING WITH SIDE ACCESS. FILTER HOUSING WILL HOUSE (6) 24x24x12 99.97%% VA GRADE HEPA CARTRIDGE TYPE FILTERS. THE HOUSING WILL BE FITTED WITH ONE (1) 32Ø DUCT COLLAR CONNECTIONS. THE HOUSING WILL BE SECURED WITH SUPPORT RAILS THAT WILL REST ON THE BUILDING ROOF.

KEY PLAN



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CONSULTANTS:

COMMONWEALTH OF PENNSYLVANIA
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TIMOTHY M. EASHARY
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ARCHITECT/ENGINEERS:

levelHEADS architects + integrators

H.F. LENZ COMPANY

Drawing Title: SIXTH FLOOR MECHANICAL ROOF PLAN - TEMP-AC-25

Approved:

Project Title: 5th Floor SAME DAY SURGERY RENOV. VA Medical Center

Location: Philadelphia, Pennsylvania

Date: 04.28.16 | Checked By: TME | Drawn By: NJB

Project Number: 642-11-120

Building Number: TWO

Drawing Number: M105

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Office of Construction and Facilities Management

Department of Veterans Affairs

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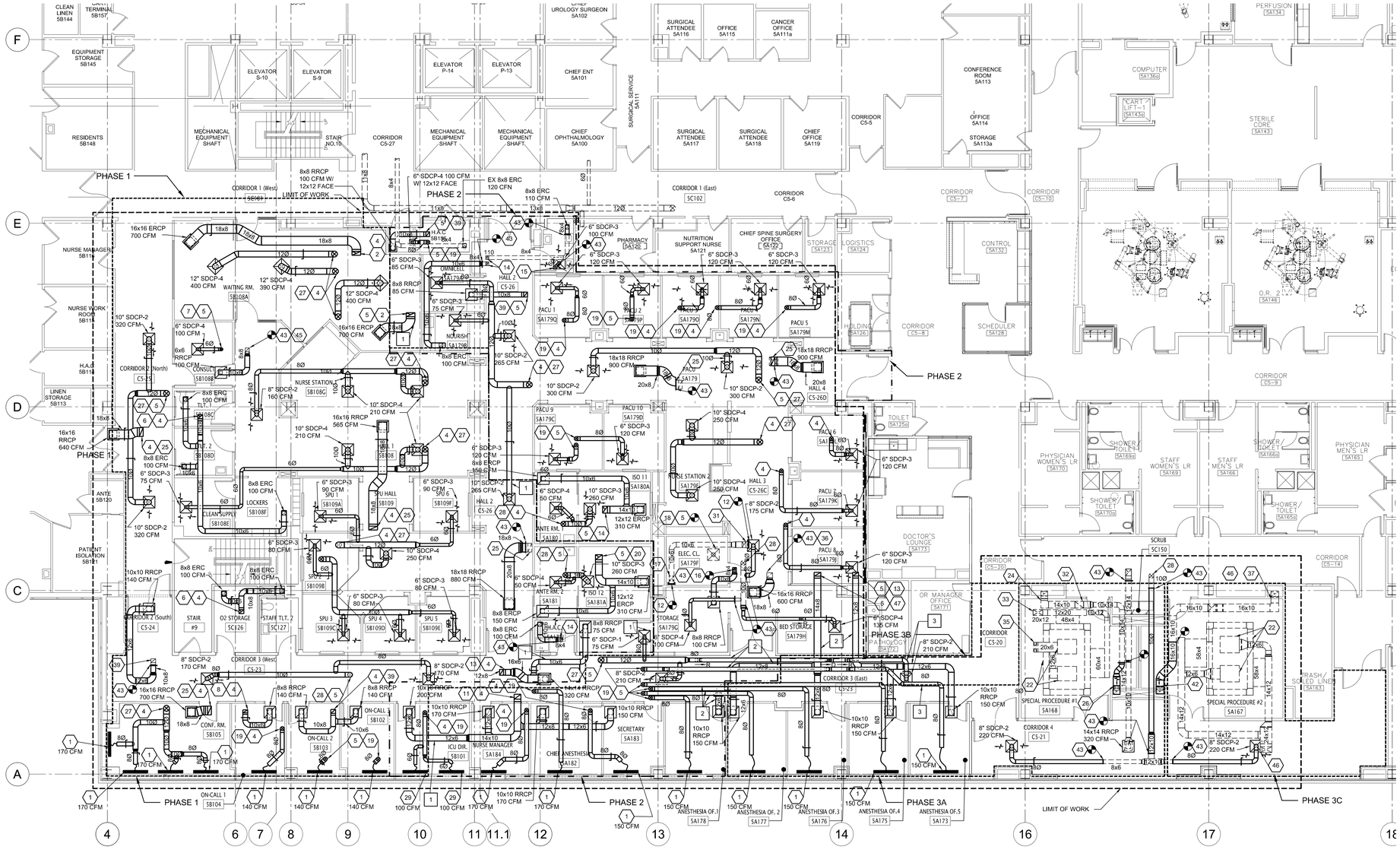


A PARTIAL FIFTH FLOOR PLAN - DUCTWORK

Scale: 1/8" = 1'-0"

KEYNOTES:

1. 48" LSD W/ PLENUM. (2) 3/4" SLOTS W/ 8Ø INLET AT CFM INDICATED AT KEYNOTE. CENTER SLOT DIFFUSER ABOVE GLASS.
2. 18x8 HEPA FILTERED EA DUCT UP 700 CFM.
3. 10x6 EA DUCT UP.
4. REVISE EX INTERSTITIAL FLOOR OPNG TO ACCOMMODATE DUCT.
5. CREATE AN INTERSTITIAL FLOOR OPNG TO ACCOMMODATE DUCT.
6. 10x8 EA DUCT UP.
7. 6Ø SA DUCT FR ABV.
8. 10x6 RA DUCT UP.
9. 6x6 RA DUCT UP.
10. 7Ø SA DUCT FR ABV.
11. 14x10 RA DUCT UP.
12. PROVIDE CAP.
13. 12x8 RA DUCT UP.
14. 8x4 EA DUCT UP.
15. 6Ø SA DUCT FR SDCP UP AND CONNECT TO EX SA DUCT IN VERT ABV.
16. 8x4 RA DUCT UP.
17. 10x10 ERC 165 CFM.
18. 8Ø SA DUCT FR SDCP UP, BALANCE DIFFUSER TO 165 CFM.
19. 8Ø SA DUCT FR ABV.
20. 14x10 EA DUCT UP.
21. 12x6 RA DUCT UP.
22. EX SS LAMINAR AIR DIFFUSERS ABV OR TABLE AND SS SLOT DIFFUSERS AROUND PERIMETER OF OR TABLE TO REMAIN. PROVIDE AN AIRTIGHT SEAL AROUND DIFFUSER AND GRILLES BEFORE AND DURING CONSTRUCTION. CLEAN AND STERILIZE, DUCTWORK DIFFUSERS AND GRILLES POST CONSTRUCTION.
23. 12x6 SA DUCT FR ABV.
24. EX 14x28 ERW B.R. 980 CFM
25. 18x8 RA DUCT UP.
26. 14x28 ERW B.R. 8" AFF 980 CFM
27. 12Ø SA DUCT FR ABV.
28. 10Ø SA DUCT FR ABV.
29. 48" LSD W/ PLENUM. (2) 1/2" SLOTS W/ 8Ø INLET AT CFM INDICATED AT KEYNOTE.
30. 10x6 SA DUCT FR ABV.
31. 12x8 EA DUCT UP.
32. EX 18x14 EA UP 1960 CFM.
33. EX 20x12 SS SA DUCT FR ABV 1470 CFM.
34. 8x6 RA DUCT UP.
35. EX 20x6 SS SA DUCT FR ABV 740 CFM.
36. 12x10 RA DUCT UP.
37. EX 16x26 ERW B.R. 1050 CFM
38. 9Ø SA DUCT FR ABV.
39. 10x8 RA DUCT UP.
40. 8x6 EA DUCT UP.
41. 10x8 SA DUCT FR ABV.
42. 16x26 ERW B.R. 1050 CFM
43. CONNECT NEW TO EXISTING DUCTWORK WHERE INDICATED, PROVIDE TRANSITION AS REQUIRED.
44. PATCH INTERSTITIAL FLOOR AT REMOVED DUCT PENETRATION. REFER TO DETAIL DRAWINGS.
45. 8x8 RA DUCT UP.
46. EX 16x16 EA UP 2100 CFM.
46. EX 24x12 SS SA DUCT FR ABV 2530 CFM.
47. 14x8 RA DUCT UP.

PHASING KEYNOTES:

1. THIS PHASE 1 WORK CROSSES INTO THE PHASE 2 WORK AREA, AND SHALL BE INSTALLED IN THE PHASE 2 AREA IN PHASE 1. COORDINATE THIS WORK WITH ALL TRADES, USER GROUPS AND FACILITY ENGINEERING GROUP. PROVIDE CAPS AND TEMPORARY DUCT CONNECTION AND ALL OTHER ACCESSORIES REQUIRED TO CONTINUE THIS WORK.
2. THIS PHASE 2 WORK CROSSES INTO PHASE 3a WORK AREA. PROVIDE CAPS ON DUCTWORK A FEW FEET INTO THE PHASE 3a WORK AREA, WHEN PHASE 3a WORK STARTS THEN REMOVE TEMPORARY CAPS AND COMPLETE PHASE 3a WORK.
3. THIS PHASE 2 WORK CROSSES INTO PHASE 3a WORK AREA. PROVIDE CAPS ON DUCTWORK A FEW FEET INTO THE PHASE 3a WORK AREA, WHEN PHASE 3a WORK STARTS THEN REMOVE TEMPORARY CAPS AND COMPLETE PHASE 3a WORK.
4. THIS PHASE 3c WORK IS IN THE PHASE 3a WORK AREA, INSTALL DUCTWORK THAT IS TO SERVE PHASE 3c THAT IS IN THE PHASE 3a WORK AREA DURING PHASE 3a UP TO THE PHASE 3c PHASE WALL AND PROVIDE CAP. WHEN PHASE 3c WORK IS TO START REMOVE CAP AND COMPLETE PHASE 3c WORK.

NOTE:
COORDINATE ALL CEILING WORK WITH THE ARCHITECTURAL REFLECTIVE CEILING PLANS.

INFECTION CONTROL PROCEDURES (ICRA):

GENERAL NOTES:

1. BEFORE CONSTRUCTION BEGINS, COORDINATE THE ICRA PROCEDURE WITH THE FACILITY INFECTION CONTROL DEPARTMENT AND ARCHITECTURAL DRAWINGS.
2. COORDINATE WITH FACILITY DEPARTMENT FOR ANY PHASING PLAN REQUIREMENTS TO SCHEDULE SHUTDOWNS 48 HOURS IN ADVANCE, TEMPORARY RELOCATION OR CLOSED DOWN AREAS THAT MAY BE AFFECTED DUE TO THE RENOVATION OF THE SCHEDULED PROJECT.
3. CONTRACTOR TO TAKE AIRFLOW READINGS IN AREAS OUTSIDE OF CURRENT CONSTRUCTION PHASE PRIOR TO BEGINNING WORK & AFTER WORK IS COMPLETE TO MAKE SURE AREAS ARE OPERATING PROPERLY.

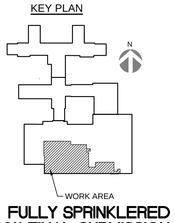
DURING CONSTRUCTION:

1. REMOVE OR ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM.
2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLYWOOD, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART W/PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE W/ HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS.
3. MAINTAIN NEGATIVE AIR PRESSURE W/IN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. CONTRACTOR SHALL MAINTAIN 0.001" NEGATIVE PRESSURE.
4. SEAL HOLES, PIPES, CONDUITS, AND PUNCTURES APPROPRIATELY.
5. CONSTRUCT ANTEROOM AND PROVIDE W/ WALK OFF STICKY MATS. REQUIRE ALL PERSONNEL TO PASS THROUGH THIS ROOM SO THEY CAN VACUUM CLEAN THEMSELVES BEFORE LEAVING THE WORK SITE. AN ALTERNATIVE TO THIS METHOD WOULD TO WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE THE WORK SITE.
6. ALL PERSONNEL ENTERING WORK SITE ARE REQUIRED TO WEAR SHOE COVERS. SHOE COVERS MUST BE CHANGED EACH TIME THE WORKER EXITS THE WORK SITE.
7. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS.
8. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVER SHUT UNLESS USING A SOLID LID.
9. CONTRACTOR IS TO MAINTAIN EXISTING QUANTITY (2) OF SMOKE COMPARTMENTS WITHIN AREA OF CONSTRUCTION DURING ALL CONSTRUCTION PHASES.
10. IF HEPA FILTER UNIT DISCHARGE DUCT MUST LEAVE THE ICRA CONTAINMENT AREA TO BE DISCHARGED TO THE OUTSIDE, THE DUCT SHALL BE SHEET METAL WHEN CROSSING THE ICRA BARRIER TO THE POINT OF DISCHARGE. A PLAN SHALL BE SUBMITTED AND REVIEWED WITH THE VA ENGINEER FOR OCCUPIED AREAS THAT THE DISCHARGED DUCT MUST TRAVERSE. FLEX DUCT IS PERMITTED INSIDE THE ICRA BARRIER AND OTHER LOCATIONS AS APPROVED BY THE VA. CONNECTIONS TO THE OUTSIDE DISCHARGE POINT SHALL BE MADE WITH SHEET METAL AND SHALL BE SECURE. CONNECTIONS SHALL NOT BE MADE WITH DUCT TAPE.
11. ANY MEP WORK OUTSIDE THE ICRA BARRIER DOES NOT REQUIRE FULL BARRIER WALL PROTECTION. LESS STRINGENT MEASURES SUCH AS PLASTIC SHEETING SHALL BE PERMITTED AS APPROVED BY THE VA ENGINEERING PERSONEL FOR THE AREAS OF SHORT TERM WORK.

POST CONSTRUCTION:

1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETE PROJECT IS INSPECTED BY THE OWNER'S PROJECT ENGINEER AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPARTMENT.
2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION.
3. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS.
4. WET MOP AREA WITH DISINFECTANT.
5. REMOVE ISOLATION OF HVAC SYSTEM IN AREAS WHERE WORK HAS BEEN PERFORMED.

KEY PLAN



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100% FINAL SUBMISSION

Revisions:	Date

CONSULTANTS:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER TIMOTHY M. EMHART No. PE037361-E

ARCHITECT/ENGINEERS:

levelHEADS architects + integrators

H.F. LENZ COMPANY

Drawing Title: FIFTH FLOOR MECHANICAL PLAN - DUCTWORK

Approved:

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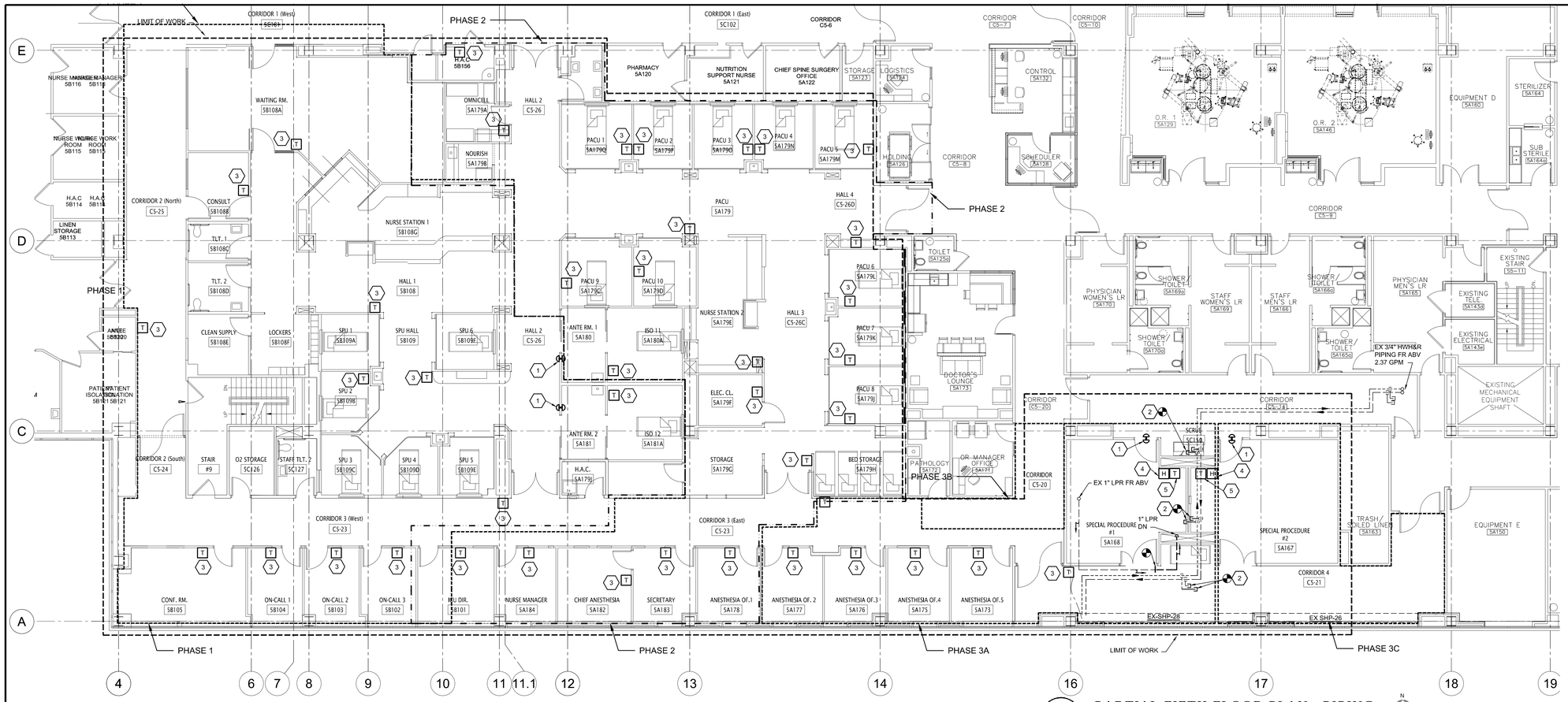
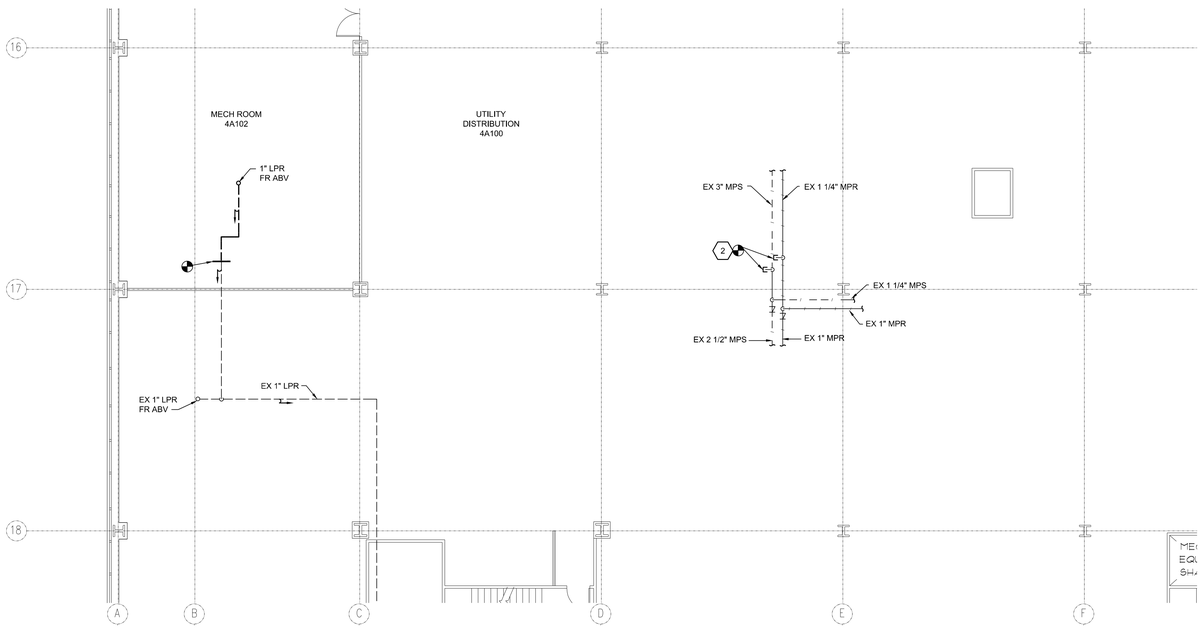


A PARTIAL FIFTH FLOOR PLAN - PIPING

Scale: 1/8" = 1'-0"



A PARTIAL FOURTH FLOOR PLAN - PIPING

Scale: 1/8" = 1'-0"

NOTE:
THIS FLOOR PLAN IS ROTATED TO FIT IN SPACE AVAILABLE SEE NORTH ARROW AT END OF TITLE FOR ORIENTATION.

NOTE:

1. THIS IS AN UTILITY DISTRIBUTION FLOOR (INTERSTITIAL SPACE) BETWEEN THE 3RD AND 5TH FLOOR LEVELS. THE FLOOR IS LIGHT WEIGHT VIRMICULITE INSULATING CONCRETE AND IS SUSPENDED FROM THE 5TH FLOOR FRAMING VIA HANGER RODS. PROVIDE PLANKING ACROSS THE CHANNELS FOR TRANSPORTING TOOL CHEST, EQUIPMENT, AND HEAVY ITEMS. THE PLANKING MUST BE OF NON-COMBUSTIBLE MATERIAL IF PLANKING IS TO REMAIN WHEN NO-ONE IS PRESENT, OTHERWISE ANY COMBUSTIBLE PLANKING MUST BE REMOVED AND STORED WHERE SPRINKLERS EXIST DURING TIMES WHEN NO ONE IS PRESENT IN THE CONSTRUCTION AREA. THE DUCTWORK AND PIPING SHALL BE INSTALLED IN A NEAT MANNER AND SHALL BE INSTALLED IN A SIMILAR MANNER AS THE EXISTING. TAKE TIME TO NOTE WHERE DESIGNATED WALKWAY ARE LOCATED TO GAIN ACCESS TO THE MECHANICAL ROOMS. THESE WALK-WAYS SHALL NOT BE COMPROMISED WHEN INSTALLING THE DUCTWORK OR PIPING. OFFSET UP AND DOWN AS NECESSARY TO MAINTAIN A USABLE WALKWAY. BEFORE INSTALLING DUCTWORK OR PIPING VERIFY WITH FACILITY ENGINEERING GROUP AND ENGINEER OF RECORD FOR APPROVAL.
2. STORAGE OF MATERIAL ARE NOT PERMITTED WITHIN THE INTERSTITIAL SPACE.

KEYNOTES:

1. VISUAL AND DIGITAL POSITIVE ROOM PRESSURE MONITOR.
2. PROVIDE CAP.
3. DDC THERMOSTAT TO CONTROL TERMINAL BOX LOCATED ON THE 6TH FLOOR INTERSTITIAL THAT IS TAGGED WITH THE SAME ROOM NUMBER THIS DDC THERMOSTAT IS LOCATED IN. COORDINATE T'STAT LOCATION WITH ARCHITECTURAL DRAWINGS.
4. DDC THERMOSTAT TO CONTROL TERMINAL BOX LOCATED ON THE 6TH FLOOR INTERSTITIAL IN MER 6A100 THAT IS TAGGED WITH THE SAME ROOM NUMBER THIS DDC THERMOSTAT IS LOCATED IN. COORDINATE T'STAT LOCATION WITH ARCHITECTURAL DRAWINGS.
5. DDC HUMIDISTAT TO CONTROL TERMINAL BOX LOCATED ON THE 6TH FLOOR INTERSTITIAL IN MER 6A100 THAT IS TAGGED WITH THE SAME ROOM NUMBER THIS DDC HUMIDISTAT IS LOCATED IN.

INFECTION CONTROL PROCEDURES (ICRA):

GENERAL NOTES:

1. BEFORE CONSTRUCTION BEGINS, COORDINATE THE ICRA PROCEDURE WITH THE FACILITY INFECTION CONTROL DEPARTMENT AND ARCHITECTURAL DRAWINGS.
2. COORDINATE WITH FACILITY DEPARTMENT FOR ANY PHASING PLAN REQUIREMENTS TO SCHEDULE SHUTDOWNS 48 HOURS IN ADVANCE, TEMPORARY RELOCATION OR CLOSED DOWN AREAS THAT MAY BE AFFECTED DUE TO THE RENOVATION OF THE SCHEDULED PROJECT.
3. CONTRACTOR TO TAKE AIRFLOW READINGS IN AREAS OUTSIDE OF CURRENT CONSTRUCTION PHASE PRIOR TO BEGINNING WORK & AFTER WORK IS COMPLETE TO MAKE SURE AREAS ARE OPERATING PROPERLY.

DURING CONSTRUCTION:

1. REMOVE OR ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM.
2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLYWOOD, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART W/PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE W/ HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS.
3. MAINTAIN NEGATIVE AIR PRESSURE W/IN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. CONTRACTOR SHALL MAINTAIN 0.001" NEGATIVE PRESSURE.
4. SEAL HOLES, PIPES, CONDUITS, AND PUNCTURES APPROPRIATELY.
5. CONSTRUCT ANTEROOM AND PROVIDE W/ WALK OFF STICKY MATS. REQUIRE ALL PERSONNEL TO PASS THROUGH THIS ROOM SO THEY CAN VACUUM CLEAN THEMSELVES BEFORE LEAVING THE WORK SITE. AN ALTERNATIVE TO THIS METHOD WOULD TO WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE THE WORK SITE.
6. ALL PERSONNEL ENTERING WORK SITE ARE REQUIRED TO WEAR SHOE COVERS. SHOE COVERS MUST BE CHANGED EACH TIME THE WORKER EXITS THE WORK SITE.
7. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS.
8. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVER SHUT UNLESS USING A SOLID LID.
9. CONTRACTOR IS TO MAINTAIN EXISTING QUANTITY (2) OF SMOKE COMPARTMENTS WITHIN AREA OF CONSTRUCTION DURING ALL CONSTRUCTION PHASES.
10. IF HEPA FILTER UNIT DISCHARGE DUCT MUST LEAVE THE ICRA CONTAINMENT AREA TO BE DISCHARGED TO THE OUTSIDE, THE DUCT SHALL BE SHEET METAL WHEN CROSSING THE ICRA BARRIER TO THE POINT OF DISCHARGE. A PLAN SHALL BE SUBMITTED AND REVIEWED WITH THE VA ENGINEER FOR OCCUPIED AREAS THAT THE DISCHARGED DUCT MUST TRAVERSE. FLEX DUCT IS PERMITTED INSIDE THE ICRA BARRIER AND OTHER LOCATIONS AS APPROVED BY THE VA. CONNECTIONS TO THE OUTSIDE DISCHARGE POINT SHALL BE MADE WITH SHEET METAL AND SHALL BE SECURE. CONNECTIONS SHALL NOT BE MADE WITH DUCT TAPE.
11. ANY MEP WORK OUTSIDE THE ICRA BARRIER DOES NOT REQUIRE FULL BARRIER WALL PROTECTION. LESS STRINGENT MEASURES SUCH AS PLASTIC SHEETING SHALL BE PERMITTED AS APPROVED BY THE VA ENGINEERING PERSONEL FOR THE AREAS OF SHORT TERM WORK.

POST CONSTRUCTION:

1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETE PROJECT IS INSPECTED BY THE OWNER'S PROJECT ENGINEER AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPARTMENT.
2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION.
3. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS.
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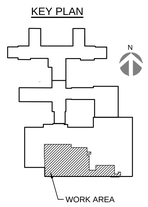
KEY PLAN



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Revisions:	Date

CONSULTANTS:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL TIMOTHY M. EARHART NO. PE041283-E

ARCHITECT/ENGINEERS:

levelHEADS architects + integrators

H.F. LENZ COMPANY

Drawing Title: FOURTH & FIFTH FLOOR MECHANICAL PLAN - PIPING

Approved:

Project Title: 5th Floor SAME DAY SURGERY RENOV. VA Medical Center

Location: Philadelphia, Pennsylvania

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Project Number: 642-11-120

Building Number: TWO

Drawing Number: M202

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Office of Construction and Facilities Management

Department of Veterans Affairs

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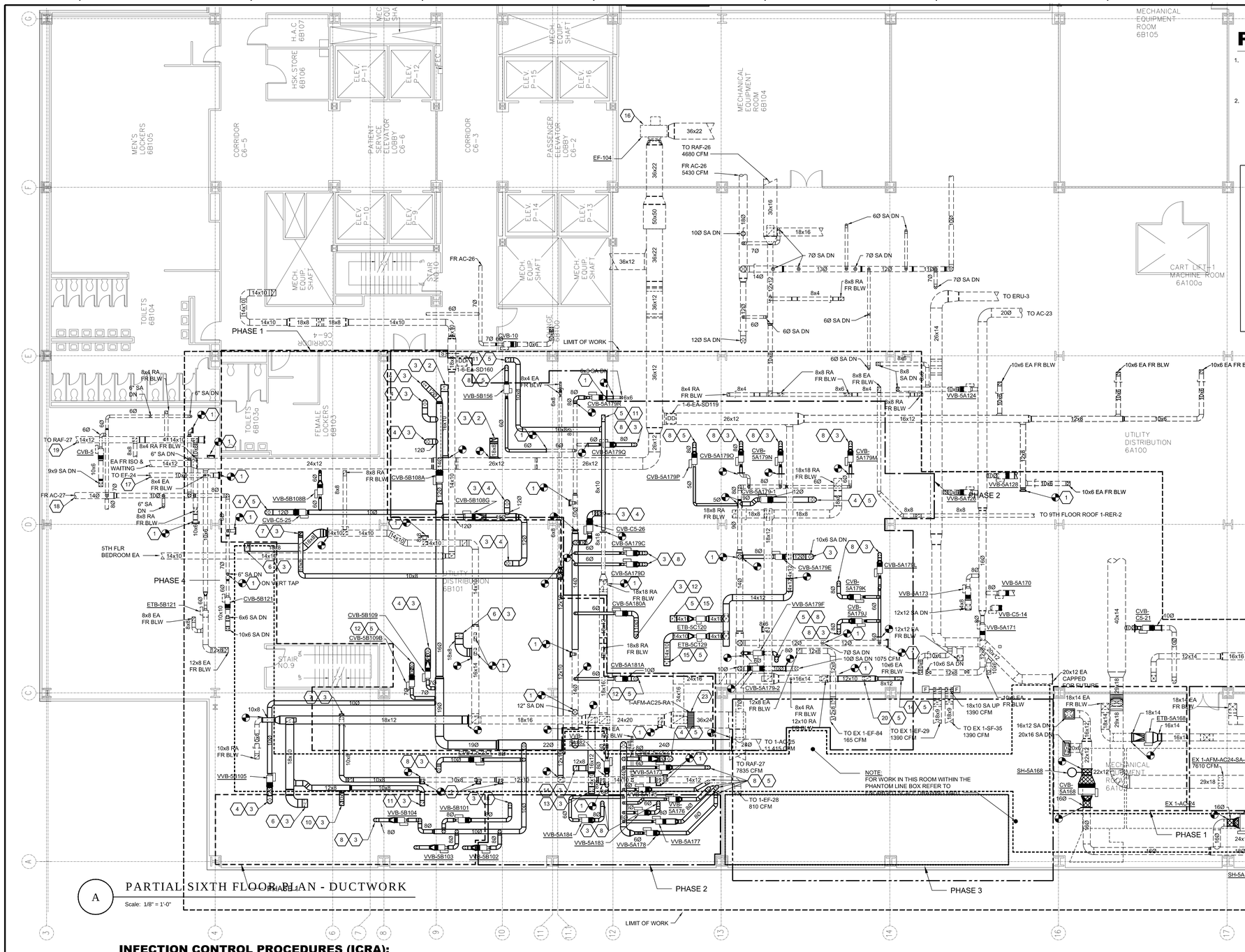

A PARTIAL SIXTH FLOOR PLAN - DUCTWORK

Scale: 1/8" = 1'-0"

PHASING NOTES:

1. THE PHASE LINES INDICATED ON THE UTILITY DISTRIBUTION FLOOR ARE FOR COORDINATION PURPOSES OF THE WORK ON THE 5TH FLOOR. ANY DUCTWORK INDICATED ON THIS FLOOR THAT CROSSES A PHASE LINE MAY NOT DISRUPT THE WORK ON THE FLOOR BELOW AND SHALL BE PERMITTED TO BE INSTALLED AS LONG AS THAT WORK WILL NOT DISRUPT THE CURRENT WORK PHASE.
2. TEMPORARY FLEXIBLE HEAVY DUTY DUCTWORK HOSES SHALL BE UTILIZED TO PERMIT THE NEW DUCTWORK INSTALLATIONS. REFER TO DEMO DRAWING M101 FOR ROUTING, SIZES AND QUANTITY OF DUCTWORK REQUIRED. NUMEROUS CONNECTIONS BETWEEN NEW AND EXISTING SYSTEMS SHALL BE REQUIRED SO THERE WILL NOT BE A DISRUPTION OF SYSTEMS AND SERVICES.

NOTE:
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2. STORAGE OF MATERIAL ARE NOT PERMITTED WITHIN THE INTERSTITIAL SPACE.

KEYNOTES:

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KEYNOTE DESCRIBES ITEM ON DRAWING. ANY ITEM ON THE DRAWING SHOWN WITH CROSSHATCHING SHALL BE REMOVED IN ITS ENTIRETY INCLUDING ALL ITS ASSOCIATED ACCESSORIES IN THEIR ENTIRETY UP TO THEIR ASSOCIATED MAINS OR DISCONNECT POINT.

1. PROVIDE CAP.
2. 18x8 HEPA FILTERED EA DUCT FR BLW 700 CFM.
3. REVISE EX INTERSTITIAL FLR OPNG TO ACCOMMODATE DUCT.
4. 12Ø SA DUCT DN.
5. CREATE INTERSTITIAL FLR OPNG TO ACCOMMODATE DUCT.
6. 18x8 RA DUCT FR BLW.
7. 10X8 EA DUCT FR BLW.
8. 8Ø SA DUCT DN.
9. 6x6 RA DUCT FR BLW.
10. 10X6 RA DUCT FR BLW.
11. 10X8 RA DUCT FR BLW.
12. 10Ø SA DUCT DN.
13. 14x10 RA DUCT FR BLW.
14. 12x8 RA DUCT FR BLW.
15. 14x10 EA DUCT FR BLW.
16. BALANCE EX TB ISOLATION EXHAUST FAN EF-104 LOCATED IN MER 6B104 TO PROVIDE AN ADDITIONAL 400 CFM THEN WHAT WAS MEASURED AND RECORDED IN THE AIR BALANCING REPORT TAKEN PRIOR TO DEMO WORK. PROVIDE BELTS, SHEAVES, DRIVES AND PULLEY'S AS REQUIRED TO OBTAIN AIR QUANTITY.
17. BALANCE EX EXHAUST FAN EF-24 LOCATED IN MER 6B102 TO PROVIDE AN SUBTRACTION OF 240 CFM THEN WHAT WAS MEASURED AND RECORDED IN THE AIR BALANCING REPORT TAKEN PRIOR TO DEMO WORK. PROVIDE BELTS, SHEAVES, DRIVES AND PULLEY'S AS REQUIRED TO OBTAIN AIR QUANTITY.
18. BALANCE EX SUPPLY AIR FAN AC-27 LOCATED IN MER 6B102 TO PROVIDE AN SUBTRACTION OF 800 CFM THEN WHAT WAS MEASURED AND RECORDED IN THE AIR BALANCING REPORT TAKEN PRIOR TO DEMO WORK. PROVIDE BELTS, SHEAVES, DRIVES AND PULLEY'S AS REQUIRED TO OBTAIN AIR QUANTITY.
19. BALANCE EX RETURN AIR FAN RAF-27 LOCATED IN MER 6B102 TO PROVIDE AN SUBTRACTION OF 250 CFM THEN WHAT WAS MEASURED AND RECORDED IN THE AIR BALANCING REPORT TAKEN PRIOR TO DEMO WORK. PROVIDE BELTS, SHEAVES, DRIVES AND PULLEY'S AS REQUIRED TO OBTAIN AIR QUANTITY.
20. 14x8 RA DUCT FR BLW.
21. DUCTWORK ASSOCIATED WITH THE OPERATING ROOM'S VAV BOX'S ARE TO BE STAINLESS STEEL CONSTRUCTION.
22. EXISTING AIR FLOW STATION TO BE VACUUMED AND CLEANED.
23. VACUUM CLEAN THE AIRFLOW MEASURING STATION PRIOR TO CONS

INFECTION CONTROL PROCEDURES (ICRA):

GENERAL NOTES:

1. BEFORE CONSTRUCTION BEGINS, COORDINATE THE ICRA PROCEDURE WITH THE FACILITY INFECTION CONTROL DEPARTMENT AND ARCHITECTURAL DRAWINGS.
2. COORDINATE WITH FACILITY DEPARTMENT FOR ANY PHASING PLAN REQUIREMENTS TO SCHEDULE SHUTDOWNS 48 HOURS IN ADVANCE, TEMPORARY RELOCATION OR CLOSED DOWN AREAS THAT MAY BE AFFECTED DUE TO THE RENOVATION OF THE SCHEDULED PROJECT.
3. CONTRACTOR TO TAKE AIRFLOW READINGS IN AREAS OUTSIDE OF CURRENT CONSTRUCTION PHASE PRIOR TO BEGINNING WORK & AFTER WORK IS COMPLETE TO MAKE SURE AREAS ARE OPERATING PROPERLY.

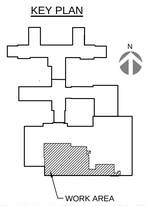
DURING CONSTRUCTION:

1. REMOVE OR ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM.
2. COMPLETE ALL CRITICAL BARRIERS I.E, SHEETROCK, PLYWOOD, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART W/PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE W/ HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS.
3. MAINTAIN NEGATIVE AIR PRESSURE W/IN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. CONTRACTOR SHALL MAINTAIN 0.001" NEGATIVE PRESSURE.
4. SEAL HOLES, PIPES, CONDUITS, AND PUNCTURES APPROPRIATELY.
5. CONSTRUCT ANTEROOM AND PROVIDE W/ WALK OFF STICKY MATS. REQUIRE ALL PERSONNEL TO PASS THROUGH THIS ROOM SO THEY CAN VACUUM CLEAN THEMSELVES BEFORE LEAVING THE WORK SITE. AN ALTERNATIVE TO THIS METHOD WOULD TO WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE THE WORK SITE.
6. ALL PERSONNEL ENTERING WORK SITE ARE REQUIRED TO WEAR SHOE COVERS. SHOE COVERS MUST BE CHANGED EACH TIME THE WORKER EXITS THE WORK SITE.
7. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS.
8. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVER SHUT UNLESS USING A SOLID LID.
9. CONTRACTOR IS TO MAINTAIN EXISTING QUANTITY (2) OF SMOKE COMPARTMENTS WITHIN AREA OF CONSTRUCTION DURING ALL CONSTRUCTION PHASES.
10. IF HEPA FILTER UNIT DISCHARGE DUCT MUST LEAVE THE ICRA CONTAINMENT AREA TO BE DISCHARGED TO THE OUTSIDE, THE DUCT SHALL BE SHEET METAL WHEN CROSSING THE ICRA BARRIER TO THE POINT OF DISCHARGE. A PLAN SHALL BE SUBMITTED AND REVIEWED WITH THE VA ENGINEER FOR OCCUPIED AREAS THAT THE DISCHARGED DUCT MUST TRAVERSE. FLEX DUCT IS PERMITTED INSIDE THE ICRA BARRIER AND OTHER LOCATIONS AS APPROVED BY THE VA. CONNECTIONS TO THE OUTSIDE DISCHARGE POINT SHALL BE MADE WITH SHEET METAL AND SHALL BE SECURE. CONNECTIONS SHALL NOT BE MADE WITH DUCT TAPE.
11. ANY MEP WORK OUTSIDE THE ICRA BARRIER DOES NOT REQUIRE FULL BARRIER WALL PROTECTION. LESS STRINGENT MEASURES SUCH AS PLASTIC SHEETING SHALL BE PERMITTED AS APPROVED BY THE VA ENGINEERING PERSONEL FOR THE AREAS OF SHORT TERM WORK.

POST CONSTRUCTION:

1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETE PROJECT IS INSPECTED BY THE OWNER'S PROJECT ENGINEER AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPARTMENT.
2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION.
3. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS.
4. WET MOP AREA WITH DISINFECTANT.
5. REMOVE ISOLATION OF HVAC SYSTEM IN AREAS WHERE WORK HAS BEEN PERFORMED.

KEY PLAN



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Revisions	Date

CONSULTANTS:

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER TIMOTHY W. EARHART No. 041287-E

ARCHITECT/ENGINEERS:

levelHEADS architects + integrators

H.F. LENZ COMPANY

Drawing Title: SIXTH FLOOR MECHANICAL PLAN - DUCTWORK

Approved:

Project Title: 5th Floor SAME DAY SURGERY RENOV. VA Medical Center

Location: Philadelphia, Pennsylvania

Date: 04.28.16 | Checked By: TME | Drawn By: NJB

Project Number: 642-11-120

Building Number: TWO

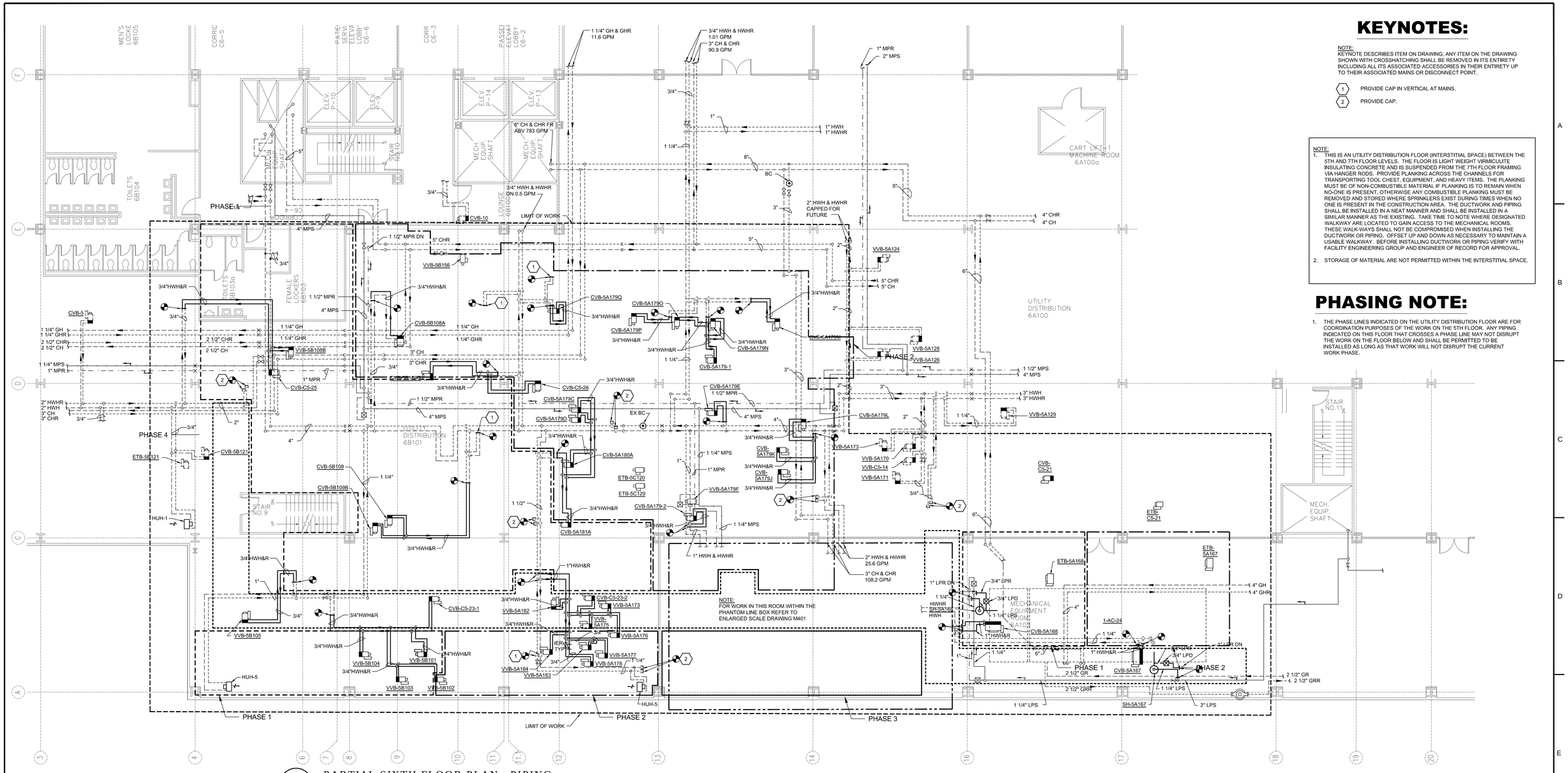
Drawing Number: M203

Dwg. 30 of 61

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



A PARTIAL SIXTH FLOOR PLAN - PIPING

Scale: 1/8" = 1'-0"

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PHASING NOTE:

1. THE PHASE LINES INDICATED ON THE UTILITY DISTRIBUTION FLOOR ARE FOR COORDINATION PURPOSES OF THE WORK ON THE 5TH FLOOR. ANY PIPING INDICATED ON THIS FLOOR THAT CROSSES A PHASE LINE MAY NOT DISRUPT THE WORK ON THE FLOOR BELOW AND SHALL BE PERMITTED TO BE INSTALLED AS LONG AS THAT WORK WILL NOT DISRUPT THE CURRENT WORK PHASE.

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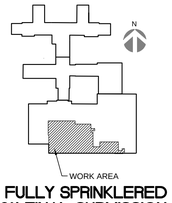

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Revisions:	Date

CONSULTANTS:

COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
TIMOTHY M. EAGHART
No. PE059403-E

ARCHITECT/ENGINEERS:

levelHEADS architects + integrators

H.F. LENZ COMPANY

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Project Number: 642-11-120

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Office of Construction and Facilities Management

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