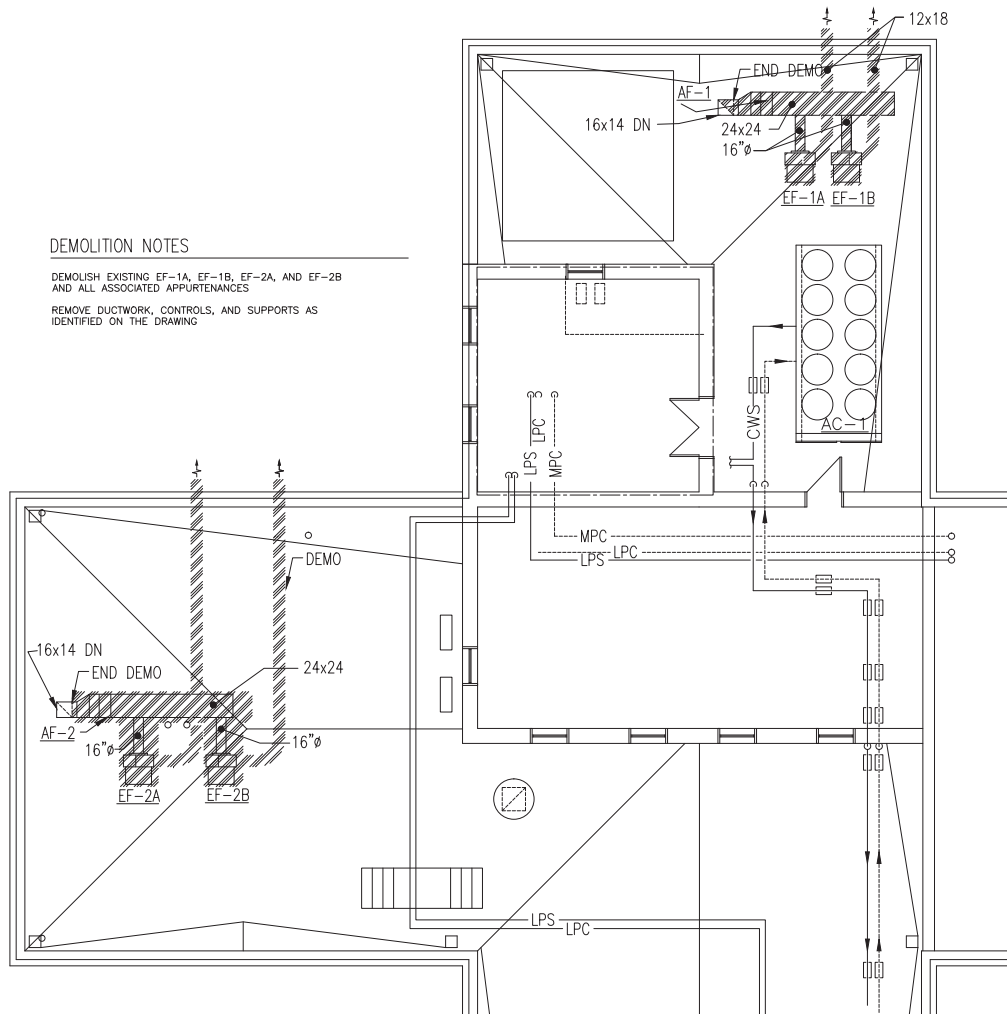


DEMOLITION NOTES

DEMOLISH EXISTING EF-1A, EF-1B, EF-2A, AND EF-2B AND ALL ASSOCIATED APPURTENANCES

REMOVE DUCTWORK, CONTROLS, AND SUPPORTS AS IDENTIFIED ON THE DRAWING



PARTIAL MECHANICAL DEMOLITION ROOF PLAN
SCALE: NOT TO SCALE

GENERAL NOTES

DEMOLITION

EXISTING HVAC PIPING, DUCTWORK, AND EQUIPMENT SHOWN IS BASED ON EXISTING PLANS AND FIELD OBSERVATION WITHOUT DEMOLITION. AFTER DEMOLITION, ANY CLARIFICATION REQUIRED TO DETERMINE SCOPE OF WORK SHALL BE BROUGHT TO THE ATTENTION OF THE COR.

THE CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS.

DRAWINGS DO NOT SHOW EVERY EXISTING PIPE, CONDUIT, DUCT, ETC. CONTRACTOR SHALL TAKE CARE TO REMOVE ONLY ITEMS REQUIRED TO BE REMOVED AND VERIFY PIPES, DUCTS, ETC. BEFORE REMOVAL.

REMOVAL OF ITEMS SHALL INCLUDE ASSOCIATED HANGERS, ANCHOR BOLTS AND OTHER APPURTENANCES, WHERE SUCH REMOVAL RESULTS IN OPEN HOLES, Voids OR EXPOSURE OF DAMAGED SURFACES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND FINISHING THE SURFACE TO MATCH ADJACENT CONDITIONS.

BUILDING IS TO REMAIN OCCUPIED DURING CONSTRUCTION. REMOVAL OR SHUT-DOWN OF EQUIPMENT THAT AFFECTS AN OCCUPIED AREA'S AIR CONDITIONING OR HEATING SHALL ONLY BE DONE AS APPROVED OR TEMPORARY AIR CONDITIONING OR HEATING SHALL BE PROVIDED AT CONTRACTOR'S EXPENSE. THIS MAY REQUIRE NIGHT AND WEEKEND WORK TO KEEP BUILDING IN OPERATION.

REMOVE EXISTING DUCTWORK NOT TO BE REUSED COMPLETELY FROM THE SITE AND PROPERLY DISPOSED OF.

ALL MATERIALS REMOVED UNDER DEMOLITION, NOT TO BE RELOCATED OR DESIGNATED TO BE TURNED OVER TO THE OWNER, SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED, AND SHALL BE REMOVED COMPLETELY FROM THE SITE.

GENERAL ITEMS

GENERAL NOTES ON THIS DRAWING ARE APPLICABLE TO EACH HVAC DRAWING OF THIS SET. SEE EACH DRAWING FOR SPECIFIC NOTES APPLICABLE TO THAT DRAWING.

COORDINATE THAT OUTSIDE AIR INTAKE OPENINGS FOR VENTILATION AIR ARE LOCATED AT LEAST 25 FEET MEASURED IN ANY DIRECTION FROM ANY FLUES, VENTS, CHIMNEYS, GAS METERS, GAS REGULATORS, PLUMBING VENTS UNLESS TOP OF SUCH INTAKE OPENING IS 10 FEET BELOW ANY OF THE LISTED ITEMS.

EQUIPMENT ON THE ROOF SHALL BE INSTALLED SO AT LEAST 10 FEET OF CLEARANCE IS MAINTAINED BETWEEN EQUIPMENT AND THE ROOF EDGE (EXCEPT WHERE THE EXISTING ROOF PARAPET PRECLUDES THIS REQUIREMENT).

ARRANGE PIPING AND DUCTWORK, PARTICULARLY ABOVE CEILING AS REQUIRED TO CLEAR STRUCTURE, DUCTS, CONDUITS, ETC., ALLOWING SPACE FOR PIPE HANGERS, EXPANSION LOOPS AND ACCESS TO VALVES, FILTERS, AND MAINTENANCE OF EQUIPMENT.

EQUIPMENT WITH FILTERS SHALL BE INSTALLED SO THAT FILTERS CAN BE EASILY REMOVED AND REPLACED.

COORDINATE LOCATION AND INSTALLATION OF EQUIPMENT WITH OTHER TRADES.

PIPING, DUCTWORK, VENTS, ETC., EXTENDING THROUGH EXTERIOR WALLS AND ROOF SHALL BE FLASHED AND COUNTER-FLASHED IN A WEATHERPROOF MANNER.

LOCATE AND SIZE CONCRETE PADS AND CURBS FOR MECHANICAL EQUIPMENT IN ACCORDANCE WITH ACTUAL EQUIPMENT PURCHASED.

SHEET METAL

PROVIDE ACCESS DOORS (12x12 MIN.) IN DUCTWORK WHERE INDICATED OR REQUIRED FOR ACCESS TO SYSTEM COMPONENTS INCLUDING THE FOLLOWING:

- DAMPER MOTORS AND/OR MOTOR OPERATED DAMPERS
- FILTERS
- HEATING AND COOLING COILS
- FAN BEARINGS ENCLOSED IN DUCTS OR PLENUMS
- FIRE DAMPERS AND SMOKE DAMPERS

PROVIDE A MINIMUM OF THREE TIMES THE FAN DIAMETER OF STRAIGHT DUCTWORK OFF THE FAN DISCHARGE BEFORE ANY TAKEOFFS OR ELBOWS.

CONSULTANTS:

ARCHITECT/ENGINEERS

Drawing Title

DEMOLITION PLAN

Approved Project Director

Project Title

BLDG. 110 ICU FANS REPLACEMENT

Location

HAMPTON MEDICAL CENTER

Date

NOV 20, 2013

Checked

VNF

Project Number

590-13-139

Building Number

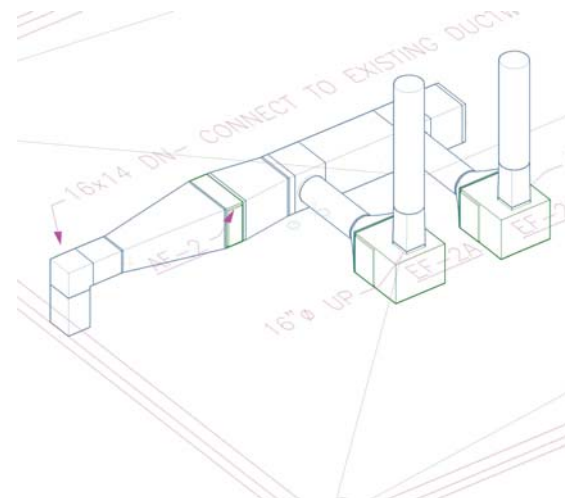
BLDG. 110

Drawing Number

Dep 1 of 4


Office of
Construction and
Facilities
Management

23



NEW WORK NOTES

- 1 EF, ETR.
- 2 ROOF MTD. DUCT SUPPORT, SEE DETAIL
- 3 RUN EXHAUST DUCT VERTICALLY 10 FEET OR HIGHER. COVER OPEN END WITH BIRDSCREEN AND WEATHER CAP.

		CONSULTANTS:				ARCHITECT/ENGINEERS:		Drawing Title NEW WORK		Project Title BLDG. 110 ICU FANS REPLACEMENT		Project Number 590-13-139		Office of Construction and Facilities Management 			
								Approved Project Director HAMPTON MEDICAL CENTER		Location HAMPTON MEDICAL CENTER		Building Number BLDG. 110				Drawing Number Dep 2 of 4	
Revision Date										Date NOV 20, 2013		Checked VNF		Drawn VNF			



CONTROLS LEGEND

AC-1	AIR COOLED CHILLER DESIGNATION	AFMS	AIR FLOW MEASURING STATION
B-1	BOILER DESIGNATION	AI1	ANALOG INPUT POINT
BCS	BUILDING CONTROL SYSTEM	AO1	ANALOG OUTPUT POINT
CMR	CHILLED WATER RETURN	DI1	DIGITAL INPUT
CMS	CHILLED WATER SUPPLY	CSR	CURRENT SENSING RELAY
D-1	MOTORIZED DAMPER	DM	DAMPER MOTOR ACTUATOR
EA	EXHAUST AIR	DO1	DIGITAL OUTPUT
EF	EXHAUST FAN	DPS	DIFFERENTIAL PRESSURE SENSOR
HC	HOT WATER COIL	FS	FLOW SWITCH
HMR	HOT WATER RETURN	H	HUMIDITY SENSOR
HWS	HOT WATER SUPPLY	LS	LIMIT SWITCH
LPS	LOW PRESSURE STEAM	M	ACTUATOR
N.C.	NORMALLY CLOSED	PS	PRESSURE SENSOR
N.O.	NORMALLY OPEN	SD	SMOKE DETECTOR
OA	OUTSIDE AIR	SPS	STATIC PRESSURE SWITCH
OAD	OUTSIDE AIR DAMPER	TS	TEMPERATURE SENSOR
P-1	PUMP DESIGNATION	TL	TEMPERATURE LOW LIMIT
R.H.	RELATIVE HUMIDITY	VFD	VARIABLE FREQUENCY DRIVE
RTU-1	ROOF TOP UNIT DESIGNATION	☒	MOTOR STARTER
SA	SUPPLY AIR	—	SENSING BULB
SAF	SUPPLY AIR FAN		
TYP	TYPICAL		
UH-1	UNIT HEATER DESIGNATION		

CONTROL SEQUENCE OF OPERATION

CONTROL SEQUENCE FOR TWO THREE-POSITION SWITCHABLE ISOLATION ROOMS WITH A SHARED ANTEROOM (TYP. OF 2).

SEQUENCE OF OPERATION:

INDIVIDUAL TWO-POSITION SUPPLY AIR TERMINAL UNITS SHALL MAINTAIN TWO FIXED (HIGH AND LOW) SUPPLY VOLUME SETPOINTS FOR CONTROL OF THE VOLUME INTO THE PATIENT ROOMS AND COMMON ANTEROOM. INDIVIDUAL TWO-POSITION EXHAUST AIR VALVES SHALL MAINTAIN TWO FIXED (HIGH AND LOW) EXHAUST VOLUME SETPOINTS FOR CONTROL OF THE VOLUME OUT OF THE PATIENT ROOMS AND ANTEROOM.

INFECTIOUS MODE

THE EXHAUST AIR VALVE IN EACH PATIENT ROOM SHALL BE SWITCHED TO ITS HIGH FLOW SETPOINT, AND THE EXHAUST AIR VALVE IN THE ANTEROOM SWITCHED TO ITS LOW FLOW SETPOINT. THE SUPPLY AIR TERMINAL UNIT IN THE PATIENT ROOMS AND ANTEROOM SHALL BE SWITCHED TO THEIR HIGH FLOW SETPOINTS.

THE OFFSET CREATED BY SETTING THE PATIENT ROOM EXHAUST AIR VOLUMES GREATER THAN THE PATIENT ROOM SUPPLY AIR VOLUMES SHALL PRODUCE A NEGATIVE PRESSURE IN THE PATIENT ROOMS RELATIVE TO THE ANTEROOM. THE OFFSET CREATED BY SETTING THE ANTEROOM EXHAUST AIR VOLUME EQUAL TO THE ANTEROOM'S HIGH SUPPLY AIR VOLUME, MINUS THE OFFSET AIR VOLUME INTO THE PATIENT ROOMS, SHALL MAKE THE ANTEROOM POSITIVE TO THE PATIENT ROOMS AND NEUTRAL TO THE CORRIDOR.

NEUTRAL MODE

THE EXHAUST AIR VALVES IN THE PATIENT ROOMS AND ANTEROOM SHALL BE SWITCHED TO THEIR LOW FLOW SETPOINTS. THE SUPPLY AIR TERMINAL UNITS IN THE PATIENT ROOMS AND ANTEROOM SHALL BE SWITCHED TO THEIR LOW FLOW SETPOINTS.

THE OFFSET CREATED BY SETTING THE PATIENT ROOM EXHAUST AIR VOLUMES EQUAL TO THE PATIENT ROOM SUPPLY AIR VOLUMES SHALL PRODUCE A NEUTRAL PRESSURE IN THE PATIENT ROOMS RELATIVE TO THE ANTEROOM. THE OFFSET CREATED BY SETTING THE ANTEROOM EXHAUST AIR VOLUME EQUAL TO THE ANTEROOM SUPPLY AIR VOLUME SHALL MAKE THE ANTEROOM NEUTRAL TO THE PATIENT ROOMS AND NEUTRAL TO THE CORRIDOR.

PROTECTIVE MODE

THE EXHAUST AIR VALVE IN THE PATIENT ROOMS SHALL BE SWITCHED TO ITS LOW FLOW SETPOINT, AND THE EXHAUST AIR VALVE IN THE ANTEROOM SWITCHED TO ITS HIGH FLOW SETPOINT. THE SUPPLY AIR TERMINAL UNITS IN THE PATIENT ROOMS AND ANTEROOM SHALL BE SWITCHED TO THEIR HIGH FLOW SETPOINTS.

THE OFFSET CREATED BY SETTING THE PATIENT ROOM EXHAUST AIR VOLUMES LESS THAN THE PATIENT ROOM SUPPLY AIR VOLUMES SHALL PRODUCE A POSITIVE PRESSURE IN THE PATIENT ROOMS RELATIVE TO THE ANTEROOM. THE OFFSET CREATED BY SETTING THE ANTEROOM EXHAUST AIR VOLUME EQUAL TO THE ANTEROOM'S HIGH SUPPLY AIR VOLUME, PLUS THE OFFSET AIR VOLUME FROM THE PATIENT ROOMS, SHALL MAKE THE ANTEROOM NEGATIVE TO THE PATIENT ROOMS AND NEUTRAL TO THE CORRIDOR.

EACH PATIENT ROOM THERMOSTAT SHALL MODULATE THE SUPPLY AIR TERMINAL UNIT REHEAT COIL VALVE TO MAINTAIN PROPER ROOM TEMPERATURE.

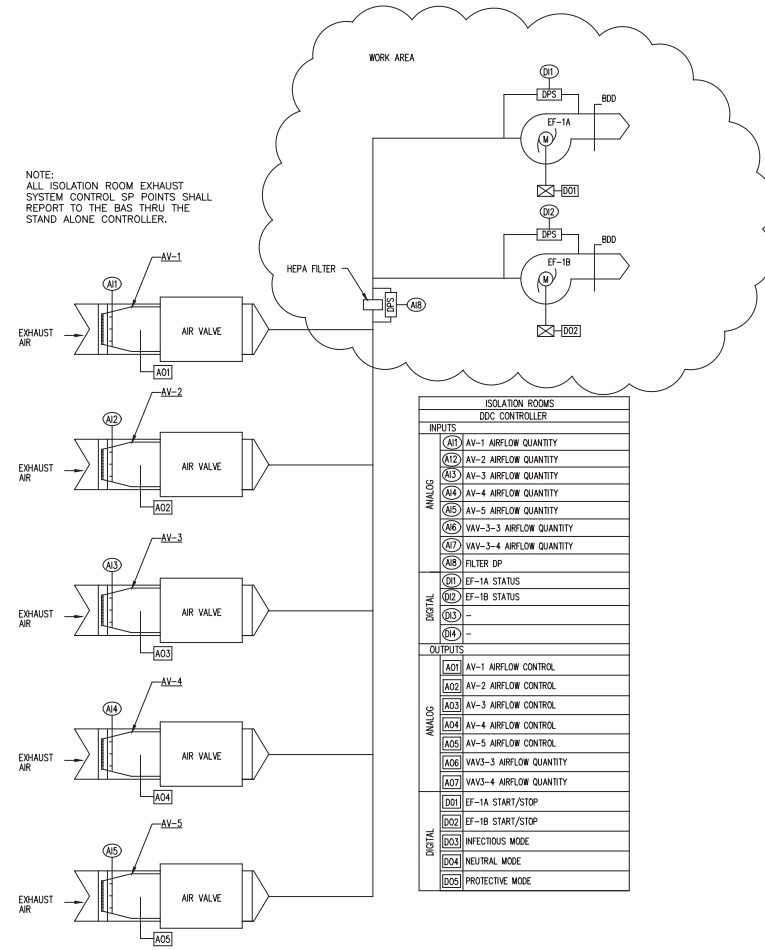
AN ISOLATION ROOM MONITOR SHALL BE INSTALLED IN THE ANTEROOM. THREE VISUAL ICONS WITH INDIVIDUAL GREEN STATUS LIGHTS SHALL INDICATE THE ISOLATION MODE (INFECTIOUS, NEUTRAL, OR PROTECTIVE). A THREE-POSITION KEY SWITCH SHALL SET UP THE ROOMS WITHIN THIS SUITE FOR EITHER AN INFECTIOUS, NEUTRAL, OR PROTECTIVE ISOLATION MODE BY SWITCHING THE PATIENT AND ANTEROOM EXHAUST AND SUPPLY AIR VALVES BETWEEN THEIR HIGH AND LOW VOLUME SETPOINTS. A RED ISOLATION ALARM LIGHT SHALL FLASH AND AN AUDIBLE ALARM SHALL SOUND UPON LOSS OF SPECIFIED AIRFLOW OR VARIANCES IN PATIENT OR ANTEROOM OFFSETS. A PATIENT OR ANTEROOM OFFSET ALARM SHALL OCCUR WHEN THE DIFFERENCE BETWEEN THE RESPECTIVE SUPPLY AND EXHAUST FLOW FEEDBACKS FALLS BELOW THE RESPECTIVE PRESET, ABSOLUTE VALUE, TRIP POINT. A MUTE BUTTON SHALL SILENCE THE AUDIBLE PORTION OF EITHER ALARM.

UNDER LOSS OF POWER, THE TWO-POSITION PATIENT ROOM EXHAUST VALVES WILL FAIL OPEN, THE TWO-POSITION PATIENT ROOM SUPPLY AIR TERMINAL UNIT WILL FAIL CLOSED, AND THE TWO-POSITION ANTEROOM EXHAUST WILL FAIL CLOSED AND THE TWO-POSITION ANTEROOM SUPPLY VALVE WILL FAIL OPEN. THIS ISOLATION SUITE FALLS IN AN INFECTIOUS CONTAINMENT MODE WITH AN INCREASED OFFSET VOLUME BETWEEN THE PATIENT ROOMS AND THE ANTEROOM. THE ANTEROOM BECOMES-NEGATIVE TO THE CORRIDOR.

EF-1A, 1B, 2A AND 2B

THE ISOLATION ROOM EXHAUST SYSTEM IS COMPOSED OF A LEAD/LAG EXHAUST FAN SYSTEM WITH HEPA FILTRATION. EXHAUST FANS SHALL BE CYCLED THRU THE BAS. SELECTION OF LEAD FAN SHALL BE BASED ON RUN TIME. AIR PRESSURE DIFFERENTIAL ACROSS THE HEPA FILTER SHALL REPORT TO THE BAS.

NOTE:
ALL ISOLATION ROOM EXHAUST SYSTEM CONTROL SP POINTS SHALL REPORT TO THE BAS THRU THE STAND ALONE CONTROLLER.



ISOLATION ROOM EXHAUST CONTROL DIAGRAM (TYPICAL OF TWO)

NO SCALE

CONSULTANTS:

ARCHITECT/ENGINEERS:

Drawing Title
DIGITAL CONTROLS

Approved Project Director

Project Title
BLDG. 110 ICU FANS REPLACEMENT

Location
HAMPTON MEDICAL CENTER

Date
NOV 20, 2013

Checked
VNF

Drawn
VNF

Project Number
590-13-139

Building Number
BLDG. 110

Drawing Number
4 of 4

Office of
Construction and
Facilities
Management

23