

VA



U.S. Department of Veterans Affairs

Veterans Affairs Medical Center

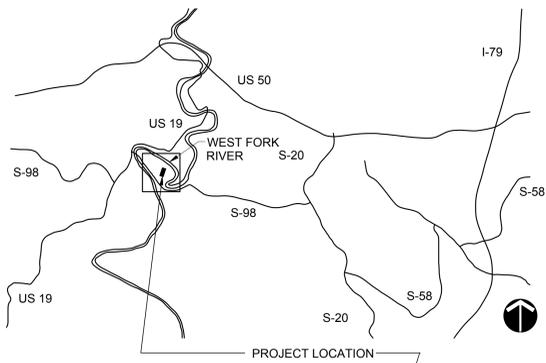
1 Medical Center Drive, Clarksburg, WV 26301

NEC COMPLIANCE IN BUILDING 7 SWITCHGEAR ROOM

PROJECT NUMBER: 540-16-304

SUBMITTAL FOR: BID SET

LOCATION MAP:



DRAWING INDEX:

GENERAL	
1-X1	COVER SHEET
MECHANICAL	
M0.1	HVAC GENERAL NOTES, DETAILS, AND SYMBOL LEGEND
M1.1	HVAC - PARTIAL FLOOR PLAN - DEMONNEW WORK

CODE DATA:

PER INTERNATIONAL BUILDING CODE (2009) AND NFPA 101 (2012). NOTE: ITEMS INDICATED AS NFPA 5000 ARE BY CROSS-REFERENCE FROM NFPA 101.

BUILDING CODE SUMMARY

NFPA 101 2012 EDITION BUILDING CODE AND IBC 2009 (WHERE APPLICABLE)

CHAPTER 3 - USE GROUP:
USE GROUP: FACTORY INDUSTRIAL F-1

CHAPTER 7 - FIRE-RESISTANCE-RATED CONSTRUCTION:
SHAFT ENCLOSURES: 2 HRS
EXIT ENCLOSURES: 2 HRS
EXIT PASSAGEWAYS: 2 HRS
BUILDING SEPARATION: N/A

ALLOWABLE HEIGHT AND BUILDING AREA:
EXISTING CONSTRUCTION TYPE: IIB
EXISTING BUILDING HEIGHT ALLOWABLE: 3 STORIES
BUILDING AREA ALLOWABLE: 23,000 SF PER FLOOR

CHAPTER 8 - INTERIOR FINISHES:
EXIT ENCLOSURES & PASSAGEWAYS: CLASS A
CORRIDORS: CLASS A
ROOMS & ENCLOSED SPACES: CLASS A
INTERIOR FLOOR FINISH: MINIMUM CLASS A

SEPARATION OF OCCUPANCIES - TABLE 508.3.3:
NO SEPARATION REQUIRED

CHAPTER 9 - FIRE PROTECTION SYSTEMS:
SPRINKLER SYSTEM: FULLY SUPPRESSED
FIRE ALARM SYSTEM: PARTIAL
FIRE EXTINGUISHERS:
TYPE: 2A
MAXIMUM AREA: 11,250 SF
MAXIMUM TRAVEL DISTANCE: 75 FEET

FIRE-RESISTANCE RATINGS REQUIREMENTS - TABLE 601:
CONSTRUCTION TYPE: IIB

STRUCTURAL FRAME: 0 HRS
BEARING WALLS:
EXTERIOR: 0 HRS
INTERIOR: 0 HRS
NON BEARING WALLS & PARTITIONS:
EXTERIOR: 0 HRS
INTERIOR: 0 HRS
FLOOR CONSTRUCTION: 0 HRS
ROOF CONSTRUCTION: 0 HRS

Veterans Technical Services, LLC
McMurray, Pennsylvania

Scheeser Buckley Mayfield, LLC
Mechanical & Electrical Engineers Uniontown, Ohio

Revisions BID SET 10/24/17 100% SUBMISSION 10/06/17 35% SUBMISSION 09/22/17	CONSULTANTS:	SEAL 	KEY PLAN 	ARCHITECTS/ENGINEERS: ARCHITECTURAL PROJECT # 540-16-304 SCHEESER BUCKLEY MAYFIELD LLC CONSULTING ENGINEERS 1540 CORPORATE WOODS PARKWAY UNIONTOWN, OHIO 44685-8797 PHONE: (330) 526-2700 FAX: (330) 896-9180	Drawing Title COVER SHEET	Project Title VA CLARKSBURG NEC COMPLIANCE IN SWITCHGEAR ROOM	Project Number 540-16-304 Building Number 7	Office of Construction and Facilities Management	
					Approved: Project Director	Location 1 Medical Center Drive, Clarksburg, WV 26301	Date 10/24/2017	Checked Date	Drawn Date

HVAC SYMBOL LEGEND

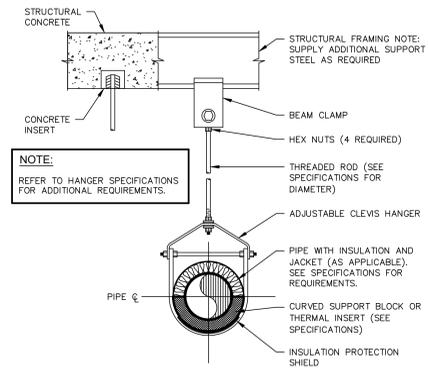
ABBREVIATION	SYMBOL	DESCRIPTION
CWS	—CWS—	CHILLED WATER SUPPLY
CWR	—CWR—	CHILLED WATER RETURN
D	—D—	INDIRECT DRAIN
SAN	—SAN—	SANITARY SEWER ABOVE FLOOR
DS	—DS—	DOWNSPOUT ABOVE FLOOR (WITHIN BUILDING SPACE)
		BALL VALVE
		PIPE SLEEVE (SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)
		CODED NOTE (SEE SCHEDULE)
E.C.	E.C.	ELECTRICAL CONTRACTOR
F.P.C.	F.P.C.	FIRE PROTECTION CONTRACTOR
G.C.	G.C.	GENERAL CONTRACTOR
H.C.	H.C.	HVAC CONTRACTOR
P.C.	P.C.	PLUMBING CONTRACTOR
T.C.C.	T.C.C.	TEMPERATURE CONTROL SUB-CONTRACTOR
A.D.	A.D.	ACCESS DOOR
A.F.F.	A.F.F.	ABOVE FINISHED FLOOR
A.L.	A.L.	ACTIVE LENGTH
MFR.	MFR.	MANUFACTURER
N.O.	N.O.	NORMALLY OPEN
N.C.	N.C.	NORMALLY CLOSED
TYP.	TYP.	TYPICAL
		FLOW DIRECTION INDICATOR (LIQUID)
		INDICATES TIE INTO EXISTING
		INDICATES REMOVE TO POINT FOR RECONNECTION
		INDICATES REMOVE TO POINT AND CAP

HVAC NEW WORK GENERAL NOTES

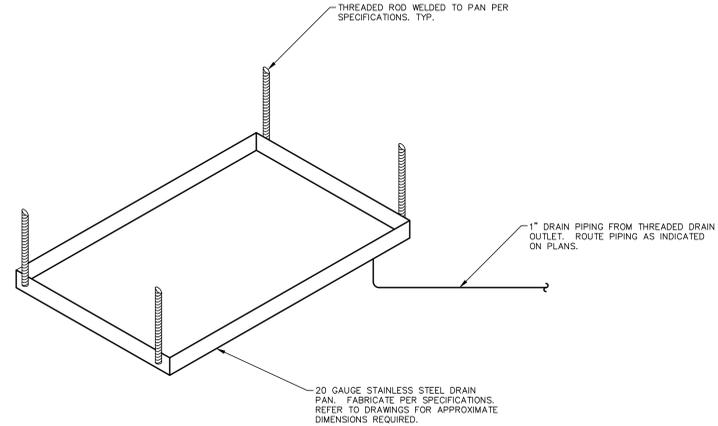
- THE GENERAL NOTES LISTED HERE APPLY TO ALL HVAC DRAWINGS IN ADDITION TO ANY ADDITIONAL DRAWING NOTES ON THE INDIVIDUAL DRAWINGS.
- REFER ALSO TO DUCTWORK MATERIAL SCHEDULE AND NOTES FOR ADDITIONAL GENERAL NOTES APPLICABLE TO DUCTWORK.
- SEE CODED NOTES ON INDIVIDUAL DRAWING SHEETS FOR SPECIFIC INSTRUCTIONAL NOTES.
- FIELD VERIFY EXISTING CONDITIONS.
- COORDINATE WITH GENERAL TRADES WORK, PLUMBING WORK, FIRE PROTECTION WORK, ELECTRICAL WORK AND OTHER WORK.
- IT IS RECOGNIZED THAT DRAWINGS MAY BE PLOTTED AT DIFFERENT SCALES, SUCH THAT PLOTTED DRAWINGS MAY VARY FROM ACTUAL OR INTENDED DIMENSIONS. THEREFORE, DRAWINGS ARE DIAGRAMMATIC AND ARE NOT TO BE SCALED. SBM TAKES NO RESPONSIBILITY FOR ERRORS REGARDING DISCREPANCIES FROM THE ORIGINAL DRAWINGS DRAWN AT THE PROPER SCALE AND THOSE DRAWINGS THAT HAVE BEEN PLOTTED.
- THE MECHANICAL DESIGN DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EXACT LOCATION OF EQUIPMENT, PIPING AND DUCTWORK UNLESS DIMENSIONS ARE GIVEN OR OTHERWISE IMPLIED FOR CLEARANCES, ETC. PIPING, DUCTWORK AND MECHANICAL EQUIPMENT ARE TO BE INSTALLED ALONG THE GENERAL PLANS SHOWN ON THE DRAWINGS, BUT KEEPING IN MIND ACTUAL BUILDING CONDITIONS WHICH MUST BE CONFORMED WITH IN THE ACTUAL WORK. CONTRACTORS IN THEIR BIDS ARE REQUIRED TO INCLUDE ALL LABOR AND MATERIALS AND OTHER RELATED WORK NECESSARY TO PROVIDE MINOR OFFSETS IN MECHANICAL WORK AS REQUIRED TO AVOID CONFLICT WITH OTHER WORK ON THIS PROJECT, OR AS REQUIRED IN ORDER TO OBTAIN MAXIMUM HEAD ROOM OR EQUIPMENT ACCESS IN SPACES.
- COORDINATE SHUT-DOWN OF ANY UTILITY IN ADVANCE WITH THE OWNER. ACCOMPLISH DRAIN DOWN AND RE-FILL OF PIPING SYSTEMS AS REQUIRED. UNLESS OTHERWISE SPECIFICALLY INDICATED, EXISTING CHILLED WATER SYSTEMS SHALL NOT BE DISRUPTED DURING THE COOLING SEASON, AND HEATING SYSTEMS SHALL NOT BE DISRUPTED WHEN REQUIRED FOR OCCUPANT COMFORT OR BUILDING FREEZE PROTECTION.
- MAINTAIN REQUIRED RIGGING ACCESS CLEARANCES. COORDINATE CLEARANCE REQUIREMENTS WITH OTHER TRADES.
- UNLESS OTHERWISE INDICATED, ALL PIPING TO RUN GENERALLY BELOW DUCTWORK FOR ACCESS TO VALVING. DO NOT OBSTRUCT EQUIPMENT OR ACCESS DOORS. AVOID DUCTWORK OVER LIGHTS WHEREVER POSSIBLE.
- NOT ALL AIR VENTS AND DRAINS HAVE BEEN SHOWN ON PIPING AS THEIR REQUIRED LOCATION DEPENDS ON THE PIPING INSTALLATION. REFER TO SPECIFICATIONS FOR REQUIREMENTS OF PIPING AIR VENTS AND DRAINS. PROVIDE AIR VENTS IN ALL HIGH POINTS AND DRAIN VALVES AT ALL LOW POINTS IN PIPING SYSTEM.
- NO "BULL-HEAD" TEES ARE PERMITTED IN PIPING. FLOW IS NOT PERMITTED TO BE IN OPPOSING DIRECTIONS IN THE SAME TEE FITTING.

HVAC DEMOLITION GENERAL NOTES

- THE GENERAL NOTES LISTED HERE APPLY TO ALL HVAC DEMOLITION DRAWINGS IN ADDITION TO ANY ADDITIONAL DEMOLITION DRAWING NOTES ON THE INDIVIDUAL DEMOLITION DRAWINGS.
- SEE CODED NOTES ON INDIVIDUAL DRAWING SHEETS FOR SPECIFIC INSTRUCTIONAL NOTES.
- FIELD VERIFY EXISTING CONDITIONS.
- COORDINATE WITH GENERAL TRADES WORK, PLUMBING WORK, FIRE PROTECTION WORK, ELECTRICAL WORK AND OTHER WORK.
- IT IS RECOGNIZED THAT DRAWINGS MAY BE PLOTTED AT DIFFERENT SCALES, SUCH THAT PLOTTED DRAWINGS MAY VARY FROM ACTUAL OR INTENDED DIMENSIONS. THEREFORE, DRAWINGS ARE DIAGRAMMATIC AND ARE NOT TO BE SCALED. SBM TAKES NO RESPONSIBILITY FOR ERRORS REGARDING DISCREPANCIES FROM THE ORIGINAL DRAWINGS DRAWN AT THE PROPER SCALE AND THOSE DRAWINGS THAT HAVE BEEN PLOTTED.
- COORDINATE SHUT-DOWN OF ANY UTILITY IN ADVANCE WITH THE OWNER. ACCOMPLISH DRAIN DOWN AND RE-FILL OF PIPING SYSTEMS AS REQUIRED. UNLESS OTHERWISE SPECIFICALLY INDICATED, EXISTING CHILLED WATER SYSTEMS SHALL NOT BE DISRUPTED DURING THE COOLING SEASON, AND HEATING SYSTEMS SHALL NOT BE DISRUPTED WHEN REQUIRED FOR OCCUPANT COMFORT OR BUILDING FREEZE PROTECTION.
- DARK, DASHED LINES INDICATE PIPING, DUCTWORK AND EQUIPMENT TO BE REMOVED.
- SEE SPECIFICATIONS FOR GENERAL CUTTING AND PATCHING REQUIREMENTS REQUIRED UNDER DEMOLITION. ALSO SEE DRAWINGS FOR MORE SPECIFIC REQUIREMENTS.
- SEE SPECIFICATIONS FOR SALVAGE RIGHTS TO ANY EQUIPMENT OR MATERIALS BEING REMOVED.
- REMOVE ALL HANGERS AND SUPPORTS SERVING PIPING, DUCTWORK AND EQUIPMENT BEING DEMOLISHED. PROVIDE AND/OR ADJUST EXISTING HANGERS TO SUPPORT ANY REMAINING PIPING, DUCTWORK, OR EQUIPMENT ADJACENT TO DEMOLISHED.
- CAP ALL REMAINING ACTIVE PIPING WITH SIMILAR MATERIALS TO MATCH EXISTING WATERTIGHT. PIPE ENDS INDICATED TO BE CAPPED ARE NOT TO BE CRIMPED. INSULATED PIPING SHALL BE INSULATED AT CAP WITH MATERIALS SPECIFIED FOR NEW WORK.
- THE HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL/REINSTALLATION OF CEILING ASSOCIATED WITH DEMOLITION PIPING, DUCTWORK, AND EQUIPMENT. THE HVAC CONTRACTOR SHALL TEMPORARILY SUPPORT ALL ASSOCIATED CEILING EQUIPMENT SUCH AS LIGHTS, SMOKE DETECTORS, ETC. AS REQUIRED FOR THIS WORK.



(FOR MEDIUM LOWER THAN AMBIENT TEMPERATURE)
CLEVIS HANGER PIPE SUPPORT
 N.T.S.



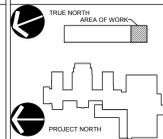
DRAIN PAN
 N.T.S.

CONSULTANTS:

Revisions	Date
BID SET	10/24/17
100% SUBMISSION	10/06/17
35% SUBMISSION	09/22/17
Revisions	Date



KEY PLAN



ARCHITECTS/ENGINEERS:

ARCHITECTURAL PROJECT # 540-16-304

SCHAESEER BUCKLEY MAYFIELD LLC
 CONSULTING ENGINEERS

1540 CORPORATE WOODS PARKWAY
 UNIONTOWN, OHIO 44685-8797
 PHONE: (330) 526-2700
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Drawing Title
HVAC - GENERAL NOTES, DETAILS, AND SYMBOL LEGENDS

Approved: Project Director

Project Title
**VA CLARKSBURG
 NEC COMPLIANCE IN
 SWITCHGEAR ROOM**

Location
 1 Medical Center Drive, Clarksburg, WV 26301

Date
 10/24/2017

Checked
 CJS

Drawn
 SRP

Project Number
540-16-304
 Building Number
7

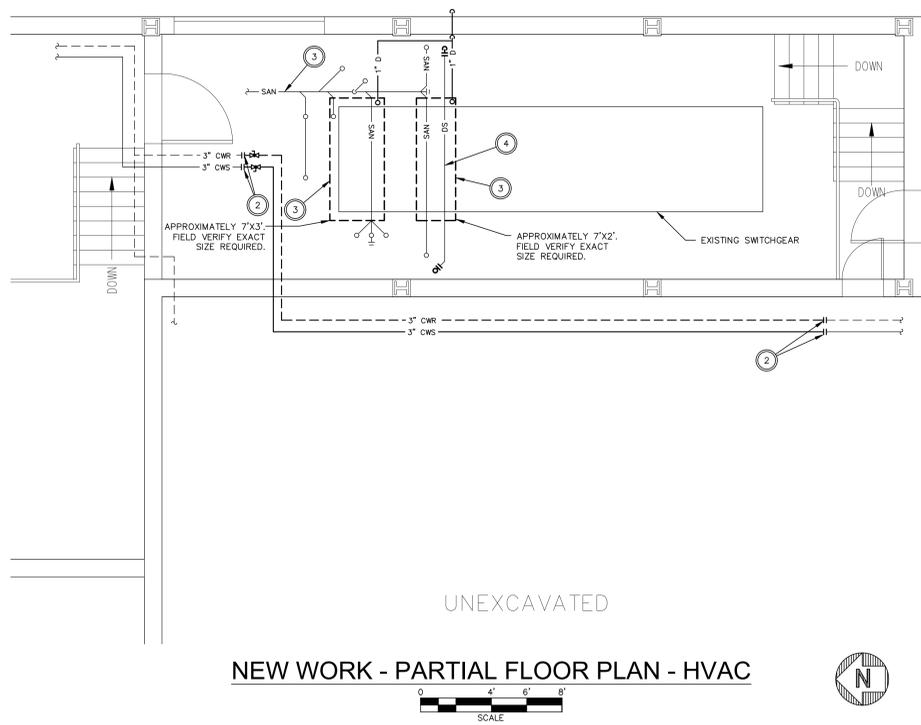
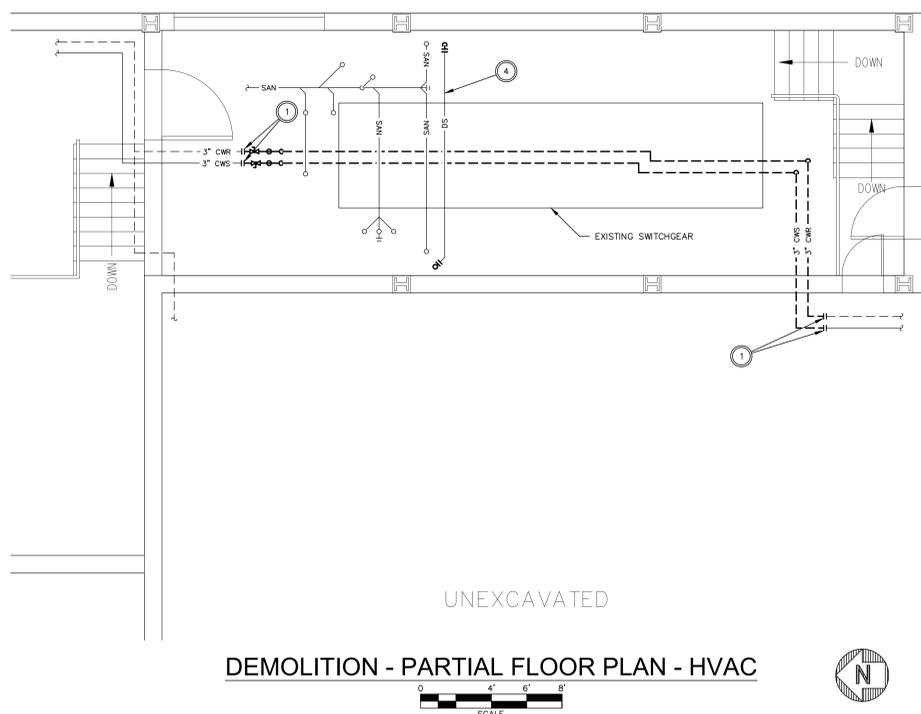
Drawing Number
M0.1
 Dwg. of

Office of
 Construction
 and Facilities
 Management



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three inches = one foot
 one and one-half inches = one foot
 one inch = one foot
 three-quarters inch = one foot
 one-half inch = one foot
 three-eighths inch = one foot
 one-quarter inch = one foot
 one-eighth inch = one foot

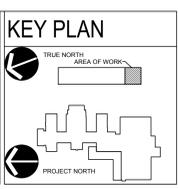


- PLAN NOTES**
- A. ALL EXISTING PIPING, VALVES, ETC. TO REMAIN UNLESS NOTED OTHERWISE.
 - B. COORDINATE ALL REQUIRED SHUTDOWNS WITH VA FACILITIES A MINIMUM OF 48 HOURS IN ADVANCE.
 - C. ALL EXISTING PIPING TO REMAIN UNLESS NOTED OTHERWISE.
 - D. EXISTING SWITCHGEAR SHALL REMAIN OPERATION AND BE PROTECTED THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS.
 - E. THE CONTRACTOR SHALL SCHEDULE AND PERFORM DEMOLITION AND INSTALLATION OF NEW PIPING AS TO ALLOW FOR MINIMUM SHUTDOWN OF CHILLED WATER AND RECONNECTION OF PIPING.

- CODED NOTES**
- 1. DEMOLISH EXISTING CHILLED WATER SUPPLY AND RETURN PIPING BACK TO POINT INDICATED FOR EXTENSION AND RECONNECTION UNDER NEW WORK. EXISTING CHILLED WATER PIPING TAKEOFFS DOWN THROUGH CEILING AND ALONG NORTH WALL SHALL BE DEMOLISHED IN THEIR ENTIRETY. EXISTING CHILLED WATER SHUTOFF VALVES SHALL BE DEMOLISHED FOR REPLACEMENT.
 - 2. INSTALL NEW CHILLED WATER SUPPLY AND RETURN SHUTOFF VALVES. EXTEND CHILLED WATER SUPPLY AND RETURN PIPING AS INDICATED AND TIE IN TO EXISTING PIPING WHERE INDICATED.
 - 3. CONTRACTOR SHALL FABRICATE 20 GAUGE SHEET METAL DRAIN PANS PER SPECIFICATIONS AND INSTALL TIGHT TO THE UNDERSIDE OF THE EXISTING PIPING. APPROXIMATE DIMENSIONS ARE INDICATED. CONTRACTOR SHALL FIELD VERIFY EXACT DRAIN PAN DIMENSIONS REQUIRED. EXTEND DRAIN PAN EDGES TO BEYOND SWITCHGEAR BY A MINIMUM OF 6". PROVIDE 1" DRAIN CONNECTION AND ROUTE PIPING TO TIE IN TO DRAIN OUT THROUGH EXTERIOR WALL TO SPILL IN A VISIBLE LOCATION. TERMINATE EXTERIOR PIPING WITH DOWN TURNED ELBOW. CONTRACTOR SHALL SEAL PENETRATION PER SPECIFICATIONS.
 - 4. EXISTING STORM PIPING SHALL BE CUT AT EACH ELBOW AND RAISED AS MUCH AS POSSIBLE USING EXISTING CLEVIS HANGERS. CONTRACTOR SHALL RECONNECT PIPING FOLLOWING THE RAISING OF THE PIPING.

CONSULTANTS:	
BID SET	10/24/17
100% SUBMISSION	10/06/17
35% SUBMISSION	09/22/17
Revisions	Date

CONSULTANTS:



ARCHITECTS/ENGINEERS: ARCHITECTURAL PROJECT # 540-16-304

Drawing Title	HVAC - PARTIAL FLOOR PLAN - DEMO/NEW WORK
Approved: Project Director	

Project Title	VA CLARKSBURG NEC COMPLIANCE IN SWITCHGEAR ROOM
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Dwg. of	

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