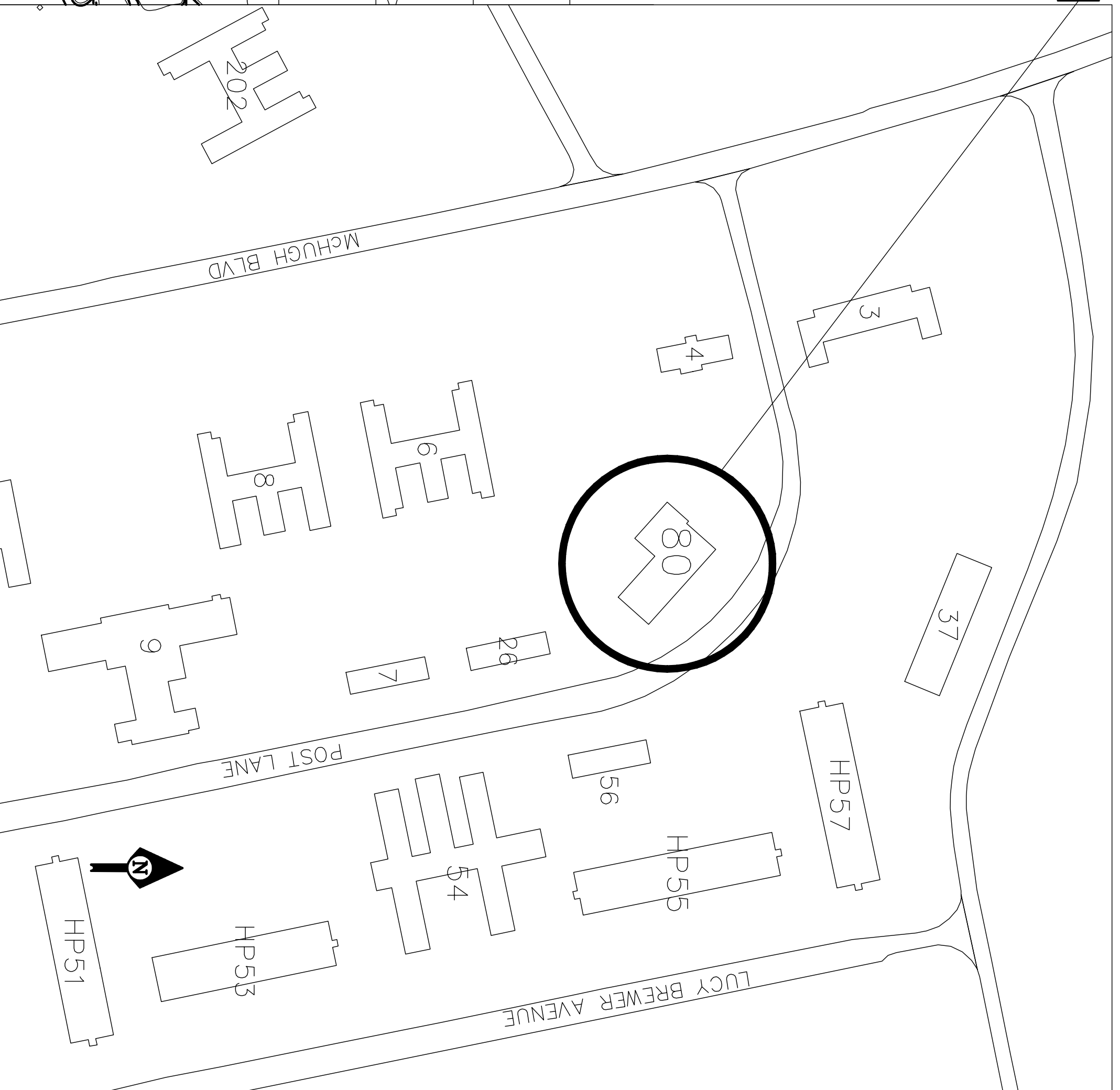
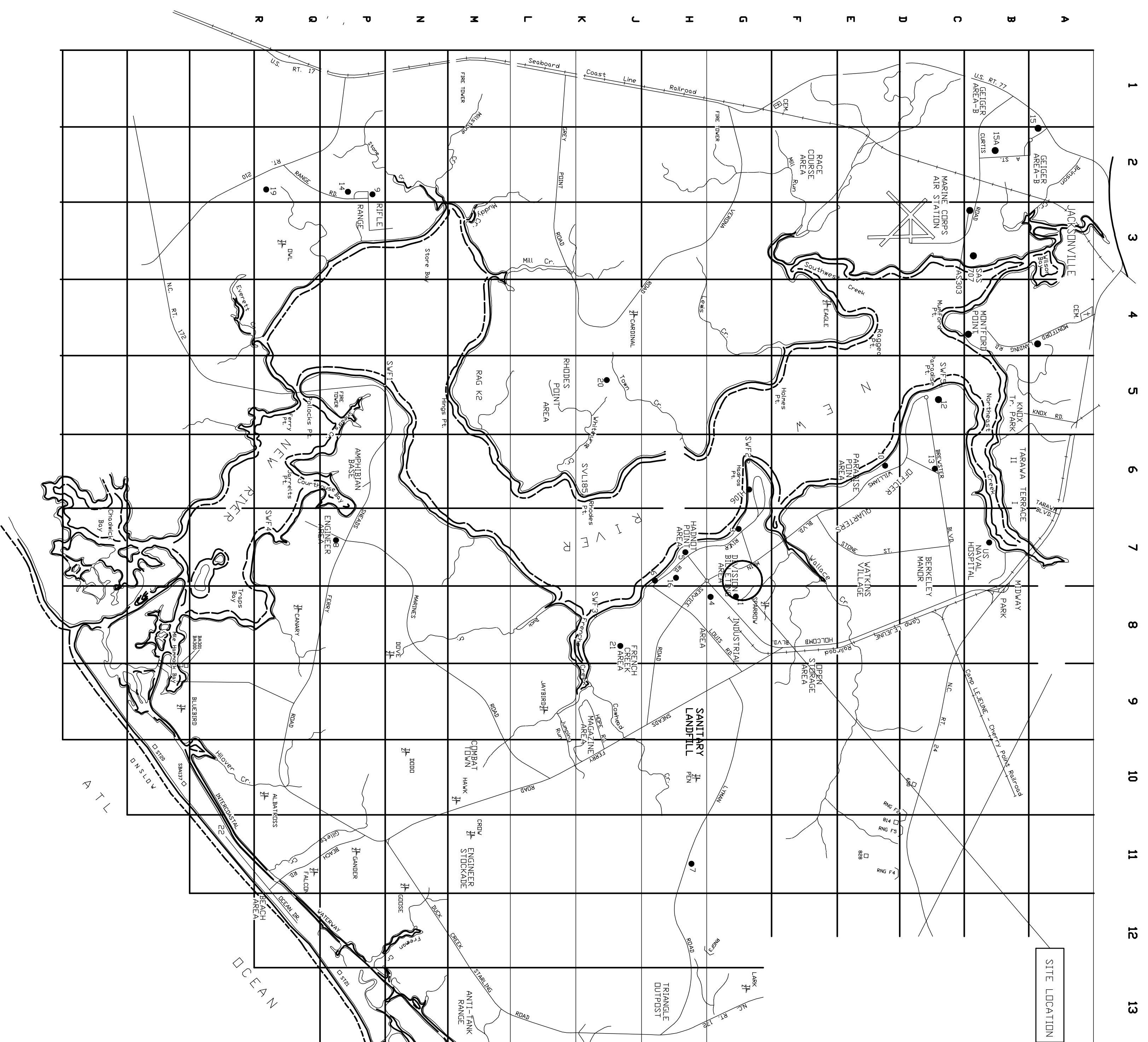


REVISIONS		DATE	APPROVED
SYM			

CONTRACT 11-0110

MECHANICAL REPAIRS BLDG 80



DRAWING #	CONTRACT #	PLATE #	DESCRIPTION
60010581	11-0110	T1	TITLE SHEET
60010582	11-0110	M1	MECHANICAL DEMOLITION
60010583	11-0110	M2	MECHANICAL NEW WORK & NOTES
60010584	11-0110	M3	MECHANICAL ROOM DEMOLITION AND NEW WORK
60010585	11-0110	M4	MECHANICAL SCHEDULES
60010586	11-0110	M5	MECHANICAL CONTROLS
60010587	11-0110	M6	MECHANICAL DETAILS
60010588	11-0110	M7	MECHANICAL UTILITIES
60010589	11-0110	M8	TEMPORARY HEATING, COOLING, AND NOTES
60010590	11-0110	E1	ELECTRICAL PLAN, DEMOLITION & LEGEND
60010591	11-0110	E2	ELECTRICAL PLAN, NEW, ELECTRICAL NOTES & DETAILS
60010592	11-0110	E3	ELECTRICAL PLAN, DEMOLITION, NEW PLAN & DETAILS
60010593	11-0110	E4	TEMPORARY COOLING, ELECTRICAL PLAN & DETAILS

DISCLOSURE OF INFORMATION:

- CONTRACTOR SHALL COMPLY AS FOLLOWS:
- THE CONTRACTOR SHALL NOT RELEASE TO ANYONE OUTSIDE THE CONTRACTOR'S COMPANY ANY INFORMATION (E.G. FIRM NAME, DOCUMENT), PERTAINING TO ANY PART OF THIS CONTRACT OR ANY PROGRAM RELATED TO THIS CONTRACT, UNLESS--
 - THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL; OR
 - THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.
- B. REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE METHOD TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT ITS REQUEST FOR APPROVAL TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.
- C. THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.

THERE IS NO ASBESTOS WORK ASSOCIATED WITH THIS CONTRACT.

T1

DEPARTMENT OF THE NAVY
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

MECHANICAL REPAIRS

BLDG 80

DES. M. B. BEUNING	DATE	NAVFAC DRAWING NO.
DR. M. B. BEUNING	28JUNE12	60010581
CHK. J. A. ELLIOTT	DATE	CONSTR. CONTR. N40085-11-B-0110
SUBMITTED BY: M. B. BEUNING	DATE	
DESIGN DR: B. R. MARSHBURN, P.E.	DATE	
APPROVED: PWO OR OICC	DATE	
28JUNE12	DATE	
F 80091	SCALE: NOTES	SHEET 1 OF 13
	SPEC. 05-11-0110	

LOCATION MAP - U.S. MARINE CORPS BASE - CAMP LEJEUNE, NC. AND NEW RIVER AIR STATION
NOT TO SCALE

REVISITONS	DATE	APPROVED
SYM		

GENERAL DEMOLITION NOTES FOR ATTIC SPACE:

DEMOLISH ALL STEAM AND CONDENSATE PIPE AND ASSOCIATED COMPONENTS FROM ATTIC SPACE UNLESS OTHERWISE NOTED.

DEMOLISH DUCT AS SHOWN AND SPECIFIED. UNLESS SPECIFICALLY STATED, SUPPLY DIFFUSERS AND RETURN GRILLES TO REMAIN.

DEMOLISH ALL PNEUMATIC, ELECTRIC, AND ELECTRONIC CONTROLS COMPONENTS. PATCH DUCT WHERE CONTROLS COMPONENTS ARE REMOVED AND DUCT PENETRATION IS NOT USED.

DEMOLITION KEYED NOTES:

- ① DEMOLISH FLEXIBLE DUCT, PATCH, SEAL, AND INSULATE DUCT. PROVIDE 24"x24" LAY-IN CEILING TILE TO MATCH. RELOCATE SUPPLY DIFFUSER.
- ② DEMOLISH DUCT, EXHAUST FAN, AND GRILLE. PATCH ROOF TO MATCH. PROVIDE 24"x24" LAY-IN CEILING TILE TO MATCH EXISTING.
- ③ DEMOLISH DUCT CONNECTING GRILLES.
- ④ DEMOLISH THE FOLLOWING: THE EXISTING AHU, STEAM AND CONDENSATE PIPE ASSOCIATED WITH AHU, STEAM HORIZONTAL AND ALL ASSOCIATED COMPONENTS. DUCT AS NECESSARY TO ACCOMPLISH NEW WORK. ALL CONTROL PIPING AIR PASSAGE AND CONDENSATE PIPING AND RETURN DUCT ASSOCIATED WITH AHU-5, ALL SUPPLY AND RETURN GRILLE IN ROOM 102. CAP, SEAL, AND INSULATE DUCT MAIN SUPPLY DUCT.
- ⑤ SAME AS KEYED NOTE NUMBER FOUR. IN ADDITION DEMOLISH THE FOLLOWING: PREHEAT STEAM COIL AND ASSOCIATED PIPE AND COMPONENTS. ALL SUPPLY AND RETURN DUCT ASSOCIATED WITH AHU-5. ALL SUPPLY LAY-IN CEILING TILES TO MATCH.
- ⑥ SAME AS KEYED NOTE NUMBER FOUR.
- ⑦ SAME AS KEYED NOTE NUMBER FOUR.
- ⑧ DEMOLISH DUCT AND EXHAUST FAN. PATCH ROOF TO MATCH. SUPPLY DIFFUSER TO REMAIN.
- ⑨ DEMOLISH DIFFUSER/GRILLE AND FLEXIBLE DUCT. PROVIDE CEILING TILE TO MATCH.
- ⑩ DEMOLISH FLEXIBLE DUCT, TAKE-OFF, AND MANUAL DAMPER. SUPPLY DIFFUSER TO REMAIN.
- ⑪ DEMOLISH FAN HOOD AND ROOF CURB. PATCH ROOF TO MATCH EXISTING.
- ⑫ DEMOLISH 6X10 AND 8X10 DUCT THAT SERVES MALE AND FEMALE HEADS AND ROOMS 101 AND 102. SUPPLY DIFFUSERS IN HEADS TO REMAIN. DUCT RISERS SERVING HEADS TO REMAIN. DEMOLISH SUPPLY AND RETURN GRILLE IN ROOM 102. CAP, SEAL, AND INSULATE DUCT MAIN SUPPLY DUCT.
- ⑬ DEMOLISH DUCT AND DIFFUSER/GRILLE. PROVIDE 24"x24" LAY-IN CEILING TILE TO MATCH. CAP, SEAL, AND INSULATE SUPPLY/RETURN DUCT.
- ⑭ DEMOLISH DUCT AND RETURN GRILLE. PROVIDE 24"x24" LAY-IN CEILING TILE TO MATCH. CAP, SEAL, AND RELOCATE SUPPLY DIFFUSER.
- ⑮ DEMOLISH STEAM AND CONDENSATE PIPE.
- ⑯ DEMOLISH DUCT.
- ⑰ DEMOLISH STEAM AND CONDENSATE PIPE.
- ⑱ DEMOLISH FLEXIBLE DUCT SERVING ROOM 113.
- ⑲ DEMOLISH DUCT AND SUPPLY DIFFUSER. CAP, SEAL, AND INSULATE SUPPLY DUCT. PATCH CEILING TO MATCH.
- ⑳ DEMOLISH OUTDOOR AIR DUCT.
- ㉑ DEMOLISH 2" AND 2" CHILLED WATER PIPE.
- ㉒ DEMOLISH INSULATION ON RETURN DUCT.
- ㉓ DEMOLISH WALL THERMOSTAT AND HUMIDISTAT. PROVIDE PLATE OR PATCH WALL.
- ㉔ DEMOLISH SHORT SECTION OF DUCT. DUCT DOWNSTREAM OF THIS SECTION TO BE RAISED. SEE NEW WORK FOR DETAILS.
- ㉕ DEMOLISH DUCT. SUPPLY DIFFUSER TO REMAIN.

DISCLOSURE OF INFORMATION:

CONTRACTOR SHALL COMPLY AS FOLLOWS:

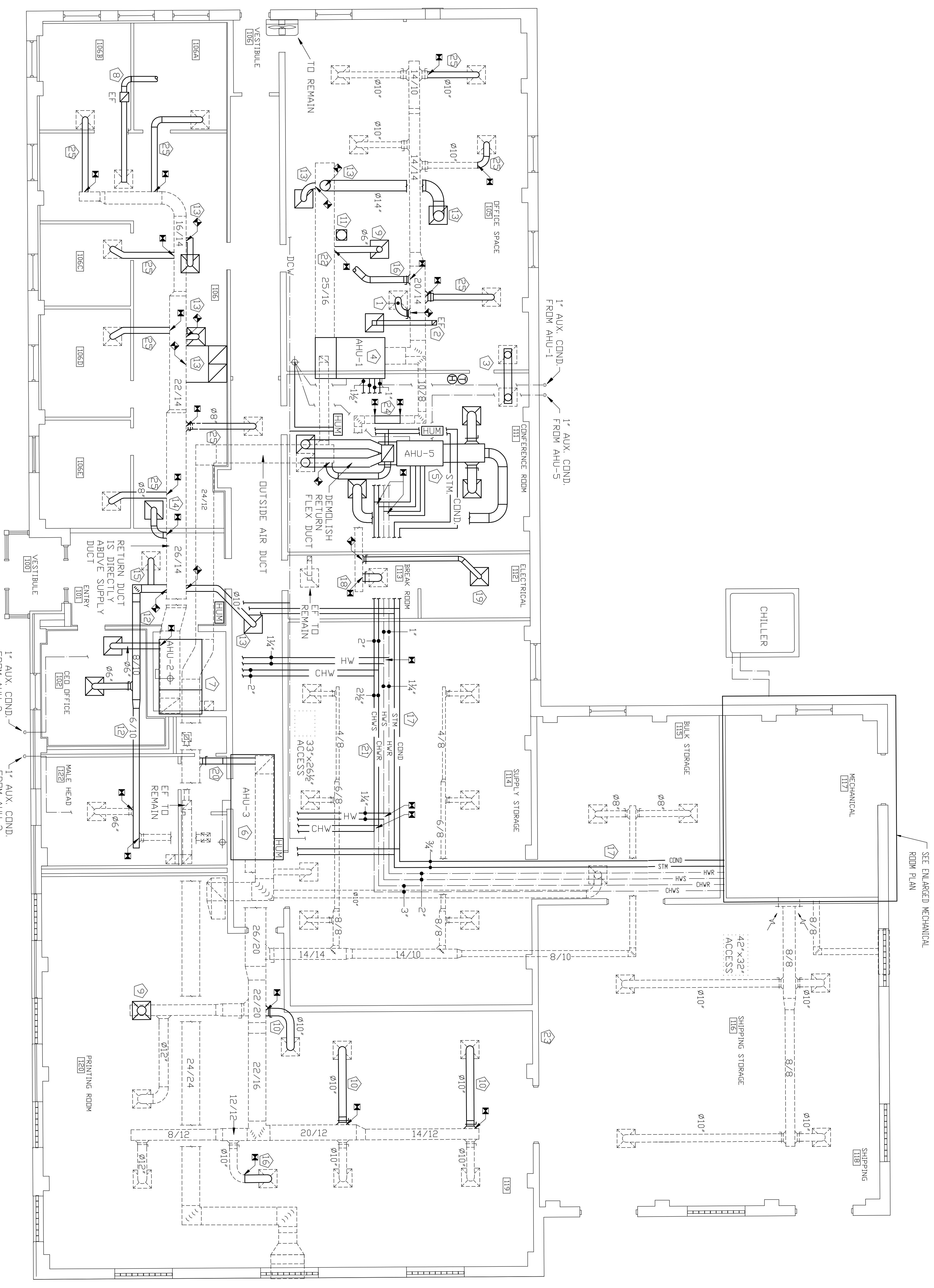
A. THE CONTRACTOR SHALL NOT RELY ON ANY INFORMATION NOT RELAYED TO ANYONE OUTSIDE THE CONTRACTOR'S ORGANIZATION ANY UNCLASSIFIED INFORMATION, REGARDLESS OF MEDIUM (E.G. FILM, TAPE DOCUMENT), PERTAINING TO ANY PART OF THIS CONTRACT OR ANY PROGRAM RELATED TO THIS CONTRACT, UNLESS:

1. THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL, OR

2. THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.

B. REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE METHOD TO BE USED, AND THE PURPOSE FOR THE RELEASES. THE METHOD TO BE USED SHALL BE REQUESTED TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.

C. THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.



NOTE: THERE ARE TWO ATTIC ACCESS POINTS: ROOM 116 AND ROOM 114.

MECHANICAL DEMOLITION

3/16"=1'-0"

- LEGEND
- ➔ DEMOLISH TO THIS POINT; CAP, SEAL, AND INSULATE
 - CONNECT NEW TO EXISTING
 - ⊖ DEMOLISH TO THIS POINT
 - ⊕ THERMOSTAT
 - EXISTING DUCT/DIFFUSER/GRILLE TO REMAIN
 - DEMOLITION
 - EXISTING PIPE TO REMAIN

<p>MECHANICAL DEMOLITION</p> <p>BLDG 80</p>	
<p>8" 4" 0 8" 16" 24"</p>	
<p>3/16"=1'-0"</p>	
<p>SCALE: NOTES</p>	
<p>SHEET 2 OF 13</p>	
<p>DATE: 28JUN12</p>	
<p>APPROVED: PWO OR OIC</p>	
<p>DESIGN: DR-B R. MARSHBURN P.E.</p>	
<p>CHK: J.A. ELLIOTT</p>	
<p>DR: M.B. BEJNING</p>	
<p>DES: M.B. BEJNING</p>	
<p>DATE: 28JUN12</p>	
<p>SIZE CODE IDENT: NO</p>	
<p>NAVFAC DRAWING NO: 60010582</p>	
<p>MECHANICAL DEMOLITION</p>	
<p>80091</p>	
<p>CONSTR. CONTR. N40085-11-B-0110</p>	
<p>SANSACTORY TO:</p>	

M1

DEPARTMENT OF THE NAVY
MARINE CORPS BASE
 CAMP LEJEUNE, NORTH CAROLINA
MECHANICAL REPAIRS
 BLDG 80

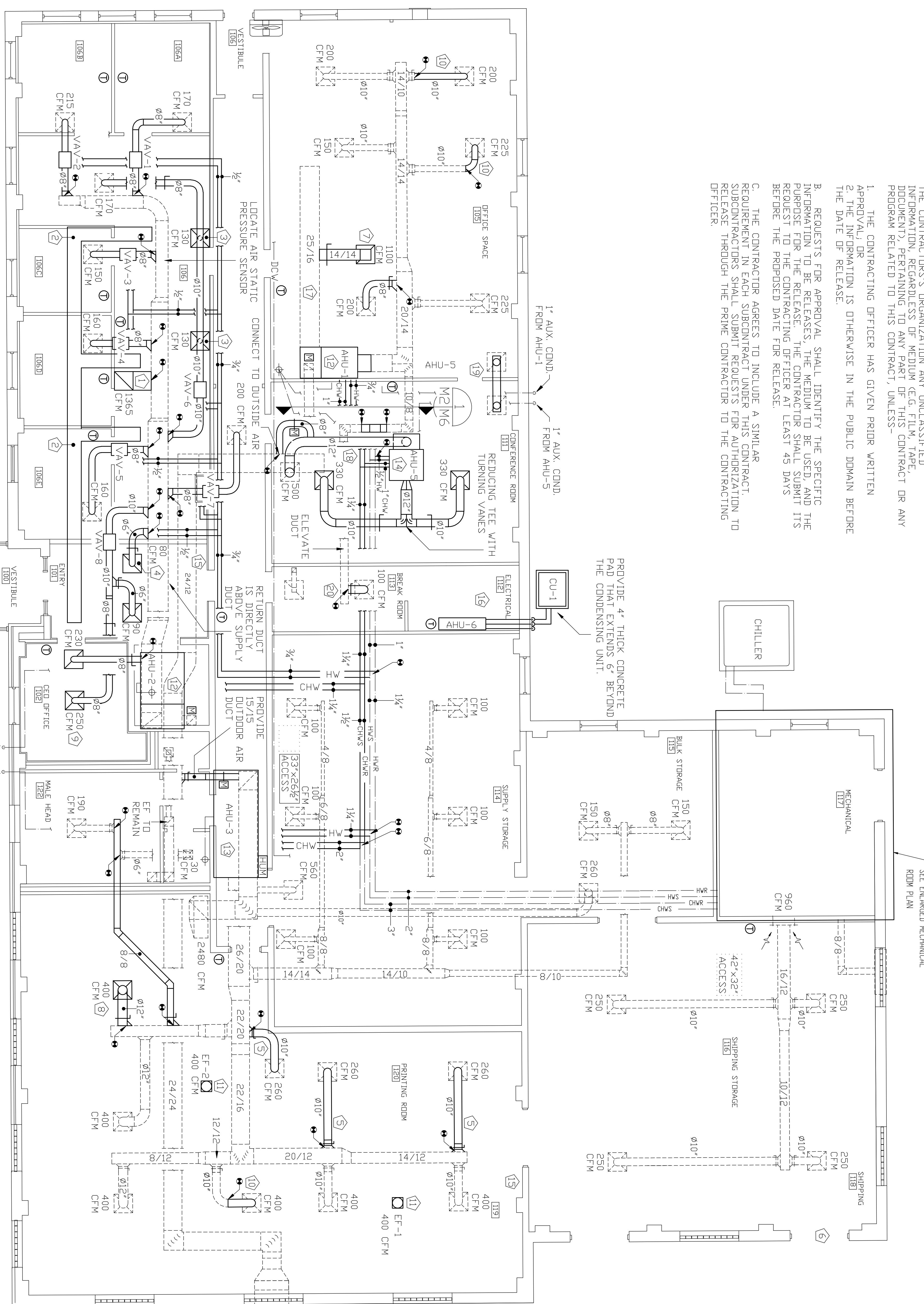
ATTIC NEW WORK KEYED NOTES:

- ① PROVIDE 16"x18" RETURN DUCT. PROVIDE 24"x24" LAY-IN ½" EGG GRATE RETURN GRILLE. PROVIDE MANUAL BALANCING DAMPER IN RETURN DUCT.
- ② PROVIDE PERMANENT 18" WIDE WOOD WALKWAY/GRATEWAY TO FACILITATE INSTALLATION, BALANCING, AND MAINTENANCE.
- ③ PROVIDE 96" RISER WITH 45 DEGREE TAKE-OFF AND MANUAL BALANCING DAMPER. PROVIDE THREE-WAY SUPPLY DIFFUSER (30 CFM, MAX. 0.2 IN. W.G. PRESSURE DROP).
- ④ PROVIDE RETURN GRILLE AND RETURN RISER. PROVIDE 24"x24" LAY-IN ½" EGG GRATE RETURN GRILLE.
- ⑤ PROVIDE NEW HARD DUCT, HARD 90 DEGREE ELBOWS, MANUAL BALANCING DAMPER, AND 45 DEGREE TAKE-OFF.
- ⑥ PROVIDE OVERLAPPING ASTRAGAL AT EXISTING DOUBLE DOORS. ASTRAGAL TO BE 2"x½"x84" LONG, SHOP 3575P. AT BOTTOM OF DOOR, PROVIDE SILL PROTECTION SWEEP 1½"x36" OF CLEAR ANODIZED ALUMINUM WITH ½" THICK SOLID NEOPRENE SWEEP. SWEEP SHOULD BE SIMILAR TO PERKO 39.
- ⑦ BALANCING DAMPER IN RETURN DUCT. PROVIDE 24"x24" LAY-IN 1" EGG GRATE RETURN GRILLE. PROVIDE MANUAL BALANCING DAMPER IN RETURN DUCT.
- ⑧ PROVIDE 24"x24" LAY-IN SUPPLY DIFFUSER (400 CFM, MAX. 0.2 IN. W.G. PRESSURE DROP).
- ⑨ PROVIDE 24"x24" LAY-IN SUPPLY DIFFUSER (250 CFM, MAX. 0.2 IN. W.G. PRESSURE DROP). PROVIDE 24"x24" LAY-IN ½" EGG GRATE RETURN GRILLE. PROVIDE FOUR 24"x24" LAY-IN CEILING TILES TO REPLACE DISCOLORED TILES. TILES TO MATCH EXISTING.
- ⑩ PROVIDE HARD DUCT AND HARD 90 DEGREE ELBOWS. FLEX DUCT MAY BE USED FOR RISER ONLY.
- ⑪ PROVIDE EXHAUST FAN, 96" HARD DUCT, 24"x24" LAY-IN EGG GRATE EXHAUST GRILLE (400 CFM, MAX. 0.1 IN. W.G. PRESSURE DROP).
- ⑫ PROVIDE NEW AHU RETURN AIR RETURN MANUAL OUTDOOR AIR DAMPER, SUPPLY DUCT AS NECESSARY TO CONNECT TO EXISTING, NEW CHILLED AND HOT WATER PIPING AS NECESSARY TO CONNECT TO EXISTING OR NEW, AND PIPE COMPONENTS. REUSE EXISTING OR PROVIDE NEW AUXILIARY DRAIN PAN TO MEET NC MECHANICAL CODE. CONNECT COIL CONDENSATE DRAIN TO EXISTING.
- ⑬ PROVIDE NEW AHU RETURN AIR MIXING BOX, MANUAL OUTDOOR AIR DAMPER, OUTDOOR AIR DUCT, SUPPLY AIR DUCT AS NECESSARY TO CONNECT TO EXISTING, NEW CHILLED AND HOT WATER PIPING AS NECESSARY TO MEET NC MECHANICAL CODE. CONNECT COIL CONDENSATE DRAIN TO EXISTING. PROVIDE HUMIDIFIER. CONNECT HUMIDIFIER TO DOMESTIC COLD WATER. PROVIDE DRAIN PIPE FROM HUMIDIFIER TO EXISTING PLUMBING DRAIN.
- ⑭ PROVIDE NEW AHU RETURN AND SUPPLY DUCT, MOTORIZED OUTDOOR AIR DAMPER, NEW CHILLED AND HOT WATER PIPING AS NECESSARY TO CONNECT TO EXISTING OR NEW, AND PIPE COMPONENTS. EXTEND WOODEN PLATFORM AS NECESSARY TO ACCOMPLISH WORK AND SUPPORT AIR HANDLER. REUSE EXISTING OR PROVIDE NEW AUXILIARY DRAIN PAN TO MEET NC MECHANICAL CODE. CONNECT COIL CONDENSATE DRAIN TO EXISTING.
- ⑮ LOCATION OF OCCUPANCY OVERRIDE SWITCH. LOCATION OF AHU EMERGENCY SHUT OFF SWITCH.
- ⑯ PROVIDE DUCTLESS MINI SPLIT AIR CONDITIONER. REMOVE REFRIGERANT AND CONDENSATE PIPE DOWN THE INTERIOR WALL BEFORE PENETRATING TO THE OUTSIDE. PROVIDE TRAP IN CONDENSATE PIPE.
- ⑰ PROVIDE INSULATION AND JACKET ON EXISTING DUCT AS SPECIFIED IN GENERAL NEW WORK NOTES.
- ⑱ PROVIDE 24" WIDE WOODEN WALKWAY FROM EXISTING WALKWAY TO AHU-5 PLATFORM TO FACILITATE MAINTENANCE.
- ⑳ PROVIDE TWO 6" HARD 90 DEGREE ELBOWS AND 96" FLEXIBLE DUCT. CONNECT DUCT TO GRILLES.
- ㉑ PROVIDE 96" DUCT AND BALANCING DAMPER SERVING ROOM 113.

GENERAL NEW WORK NOTES:

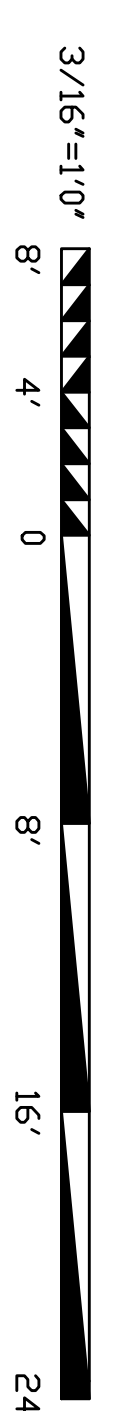
1. TEST, ADJUST, AND BALANCE ENTIRE AIR DISTRIBUTION SYSTEMS DEPICTED ON DRAWING. PROPORTIONALLY BALANCE HOT/CHILLED WATER SYSTEM.
2. ALL NEW DUCT SHALL BE SEALED TO SMACNA CLASS A LEVEL. (ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS, AND DUCT WALL PENETRATIONS SHALL BE SEALED).
3. ALL NEW DUCT WORK SHALL BE INSULATED WITH A BLANKET FLEXIBLE MINERAL FIBER INSULATION CONFORMING TO ASTM C 553, TYPE 1, CLASS B-3, 0.75 POUND PER CUBIC FOOT NOMINAL, 3.0 INCHES THICK, MINIMUM INSTALLED R9. PROVIDE VAPOR BARRIER AND ALL PURPOSE JACKET ON HVAC DUCT INSULATION, BOTH SUPPLY AND RETURN DUCT.
4. PROVIDE FULL RADIUS ELBOWS WHERE DELETED AND WHERE THERE IS SUFFICIENT ROOM. FULL RADIUS ELBOWS ARE PREFERRED. ALL NEW SQUARE ELBOWS IN RECTANGULAR DUCT SHALL HAVE SINGLE THICKNESS TURNING VANES.
5. THE LOCATION OF ALL DUCT AND EQUIPMENT SHALL BE ADJUSTED TO ACCOMMODATE UNDISCOVERED INTERFERENCES. THESE PLANS ARE PARTIALLY DIAGRAMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS.
5. SEAL ANY BUILDING PENETRATIONS CREATED DURING DEMOLITION AND NOT RE-USED IN INSTALLATION. MATCH EXTERIOR FINISH.
7. MOUNT THERMOSTATS AND/OR TEMPERATURE SENSORS 5' AFF UNLESS OTHERWISE SPECIFIED.
8. INSULATE NEW DOMESTIC COLD WATER PIPE WITH 1" OF EITHER POLYISOCYANURATE OR POLYSTYRENE INSULATION. ALL COLD WATER PIPE SHALL ALSO HAVE A VAPOR BARRIER APPLIED. INSULATE NEW HOT WATER PIPE WITH EITHER 1" OF POLYISOCYANURATE OR 1.5" OF MINERAL FIBER. PROVIDE ALL PURPOSE JACKET. ALL NEW CHILLED WATER PIPE SHALL BE INSULATED WITH 1.5" OF EITHER POLYISOCYANURATE OR POLYSTYRENE AND PROTECTED WITH A VAPOR BARRIER. EXTERIOR PIPE SHALL BE PROVIDED WITH AN ALUMINUM OR STAINLESS STEEL JACKET.
9. PROVIDE SCHEDULE 40 STEEL PIPE FOR HOT WATER AND CHILLED WATER PIPE.
10. MECHANICAL PIPE JOINTS ARE NOT ACCEPTABLE. ALL JOINTS SHALL BE WELDED, THREADED, OR FLANGES.
11. PROVIDE FLEXIBLE DUCT CONNECTORS FOR ALL AHUS FOR BOTH SUPPLY AND RETURN DUCT.
12. INSTALL FAN ROOF CURB IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
13. PRESERVE AND PROTECT ALL COMMUNICATIONS CABLING AND EQUIPMENT. DO NOT REMOVE OR DISCONNECT ANY WORK ITEMS UNLESS SPECIFICALLY NOTED. ALL WORK SHALL BE APPROVED BY THE CONTRACTOR'S APPROVED COMMUNICATIONS PATHWAY SUPERVISOR AND BEFORE NEW CABLING IS INSTALLED. ANY AND ALL OLD CABLING THAT IS NOT TERMINATED AT BOTH ENDS IS CONSIDERED ABANDONED AND SHALL BE REMOVED.
14. NATURAL GAS PIPE SHALL BE PAINTED YELLOW AND MARKED AS GAS PIPE. GAS PIPE SHALL BE SCHEDULE 40 STEEL PIPE.
15. ALL SUPPLY DIFFUSERS AND GRILLES SHALL BE ALUMINUM AND WHITE IN COLOR.
16. ALL RETURN AND EXHAUST DUCT SHALL BE HARD. ALL SUPPLY DUCT SHALL BE HARD UNLESS NOTED OTHERWISE (EXCEPTION THE LAST SIX FEET MAY BE FLEXIBLE DUCT PROVIDED THAT ALL TURNS ARE MADE WITH HARD DUCT AND THE FLEXIBLE DUCT IS PULLED TIGHT).
17. AHU-2 AND AHU-3 HAVE RETURN AND OUTDOOR AIR DUCT RUN TIGHT ALONG THE TOP OF THEM. DUCT MAY NEED TO BE REMOVED AND REINSTALLED TO FACILITATE REMOVAL AND INSTALLATION OF AHUS.
18. USE EITHER ONE INCH POLYISOCYANURATE OR 1½ INCH POLYSTYRENE INSULATION ON EXTERIOR REFRIGERATION LINES. INSULATE INTERIOR AND ATTIC REFRIGERATION LINES WITH EITHER ONE INCH POLYISOCYANURATE OR POLYSTYRENE INSULATION. PROVIDE VAPOR BARRIER ON ALL INTERIOR AND ATTIC SPACE REFRIGERATION LINES. PROVIDE ALUMINUM JACKET ON EXTERIOR REFRIGERATION LINES.

- DISCLOSURE OF INFORMATION:
1. THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL, OR
 2. THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.
- B. REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT ITS REQUEST TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.
- C. THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.



MECHANICAL NEW WORK

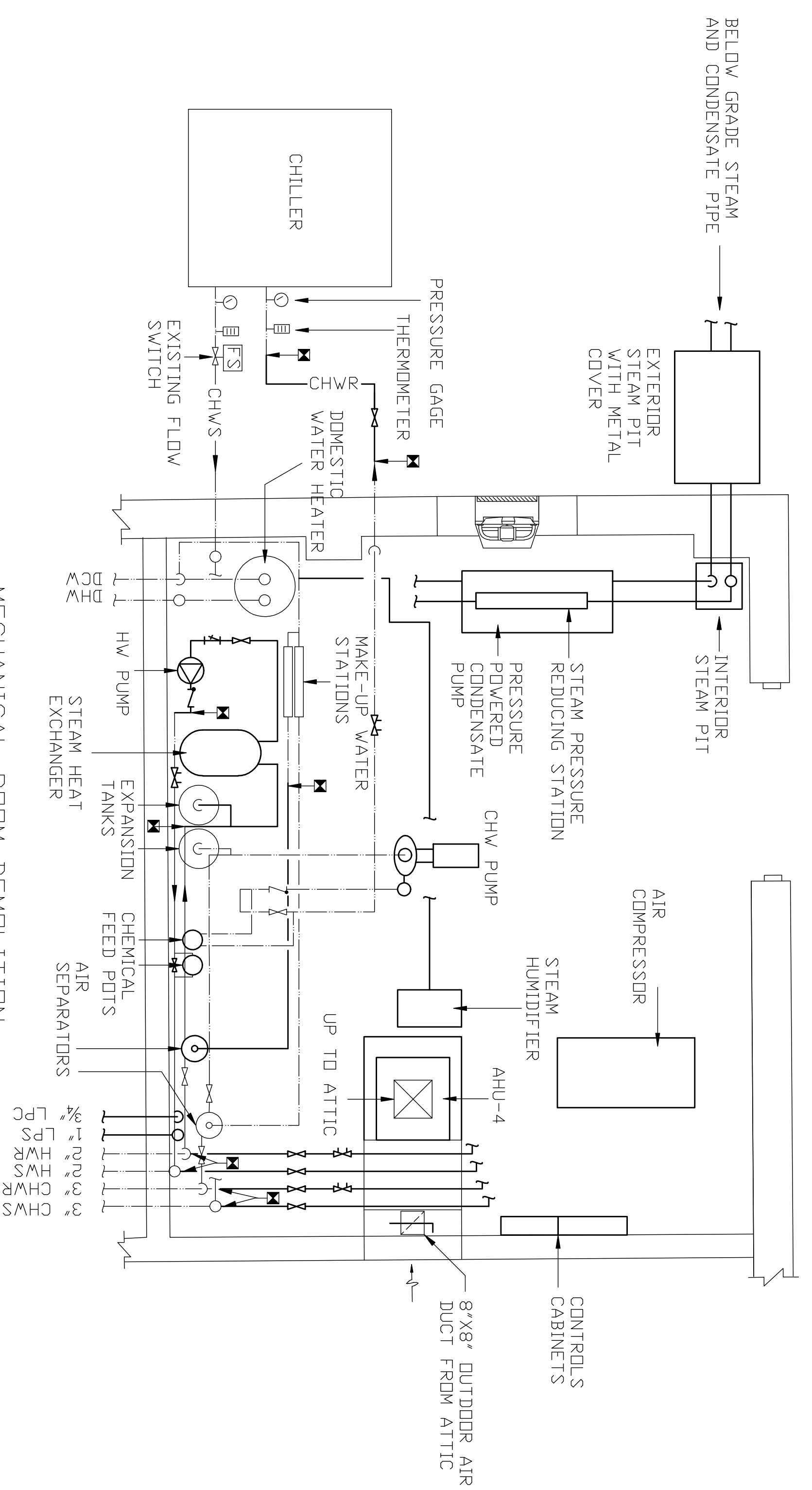
- LEGEND
- MANUAL BALANCING DAMPER
 - CONNECT NEW TO EXISTING
 - ⊙ THERMOSTAT/TEMP. SENSOR
 - EXISTING DUCT TO REMAIN
 - NEW WORK
 - EXISTING PIPE TO REMAIN
 - ⊠ MOTORIZED DAMPER



M2	
DIVISION OF THE NAVY MARINE CORPS BASE CAMP LEFLORE, NORTH CAROLINA	
MECHANICAL REPAIRS	
BLDG 80	
DESIGNED BY: M. B. BEUNING	MECHANICAL NEW WORK & NOTES
CHKD. BY: J. A. ELLIOTT	SIZE CODE IDENT. NO. 60010583
DESIGN DRG. BY: R. MARCHBURN, P.E.	DATE 28 JUNE 12
APPROVED: PWO DR OICC	DATE 28 JUNE 12
CONSTR. CNTR. N40085-11-B-0110	SCALE: NOTES
SATISFACTORY TO:	SHEET 3 OF 13

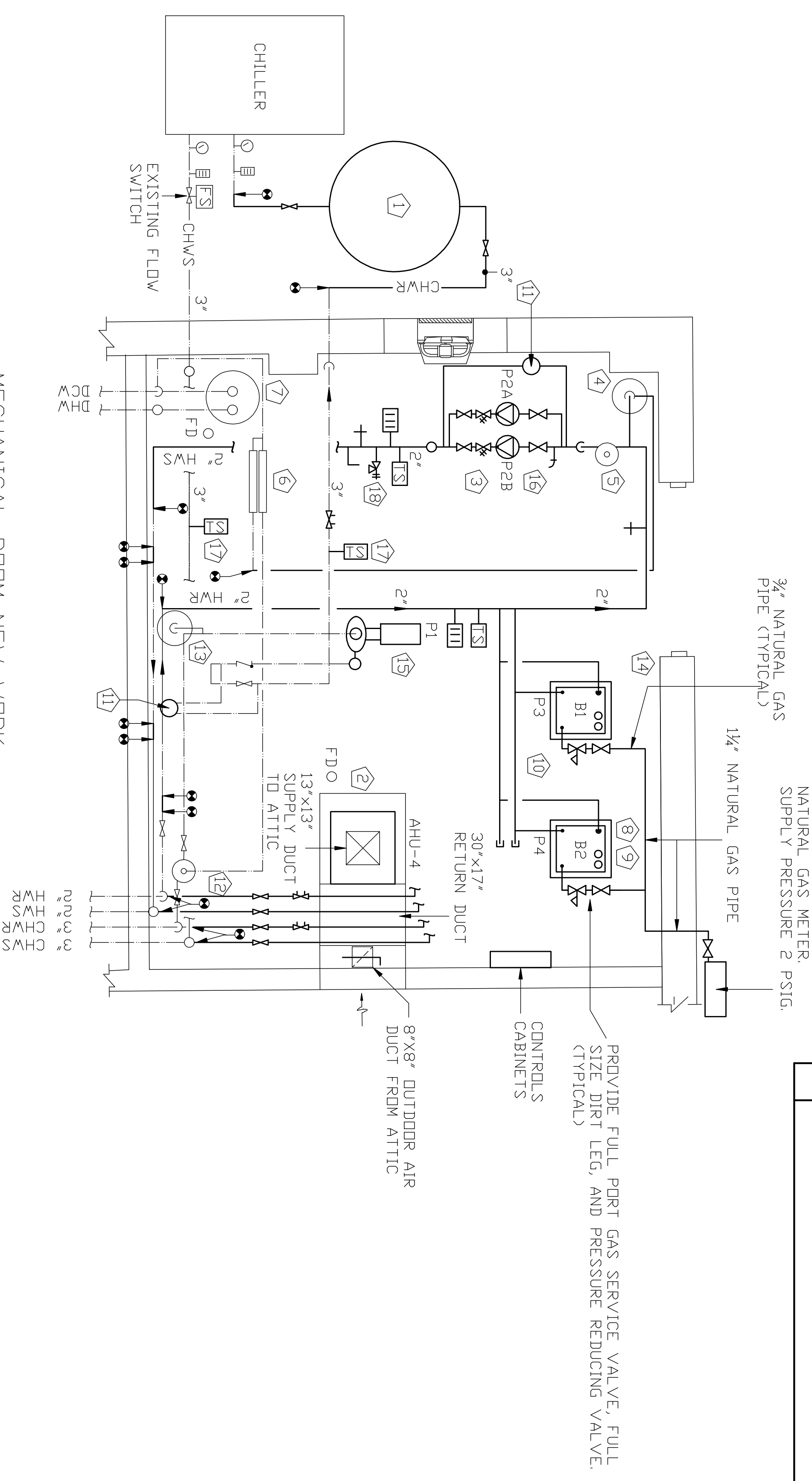
REV	DATE	APPROVED

REVISITNS	DATE	APPROVED
SYM		



DEMOLITION NOTES FOR MECHANICAL ROOM:

- DEMOLISH ALL STEAM AND CONDENSATE PIPE, STEAM COMPONENTS, AND ALL APPURTENANCES. PATCH ROOF WHERE STEAM VENTS PENETRATE. PATCH TO MATCH.
- DEMOLISH AIR COMPRESSOR AND ALL ASSOCIATED COMPONENTS. DEMOLISH CONCRETE PAD SERVING THE AIR COMPRESSOR AND PROVIDE FLOOR FINISH TO MATCH.
- DEMOLISH CHILLED WATER PUMP, FLEXIBLE PIPE CONNECTORS, AND BALANCING VALVE.
- DEMOLISH HOT WATER PUMP.
- DEMOLISH AHU-4.
- DEMOLISH AHU-4 OUTDOOR AIR DAMPER AND 24" OF OUTDOOR AIR DUCT (8'X8')
- DEMOLISH STEAM HUMIDIFIER AND ALL ASSOCIATED COMPONENTS. DEMOLISH DCW LINE SERVING HUMIDIFIER. CAP, SEAL AND INSULATE DCW PIPE WHERE DISCONNECTION IS MADE.
- DEMOLISH STEAM PIPE AND EQUIPMENT FROM INTERIOR STEAM PIT. WALLS AND FLOOR TO REMAIN. FILL WITH SAND AND CAP WITH 4" OF CONCRETE.
- DEMOLISH HOT WATER PIPE AS NECESSARY TO ACCOMPLISH NEW WORK.
- DEMOLISH EXTERIOR CHILLED WATER PIPE TO ALLOW ADDITION OF THERMAL INERTIA TANK.
- DEMOLISH THREE-WAY CONTROL VALVES, SERVICE VALVES, AND BALANCING VALVES ASSOCIATED WITH AHU-4. DEMOLISH HOT WATER AND CHILLED WATER BRANCHES.
- DEMOLISH METAL COVER AND A MINIMUM OF THE TOP 18" OF CONCRETE WALLS OF EXTERIOR STEAM PIT ADJACENT TO MECHANICAL ROOM (APPROXIMATELY 48'X36" AND 48" DEEP). FLOOR MAY REMAIN. REMOVE AND DISPOSE OF INTERIOR MECHANICAL EQUIPMENT. PROVIDE FILL AND SDD.
- ABANDON BELOW GRADE STEAM AND CONDENSATE PIPE.
- DEMOLISH CONTROLS CABINETS.
- DEMOLISH ALL PNEUMATIC, ELECTRONIC, AND ELECTRIC CONTROLS AND ASSOCIATED COMPONENTS.
- REMOVE HOT WATER AIR SEPARATOR AND EXPANSION TANK. BOTH ARE TO BE REUSED.
- DEMOLISH BOTH CHEMICAL SHOT FEEDERS. DEMOLISH VALVE IN HOT WATER SUPPLY LINE ASSOCIATED WITH HOT WATER SHOT FEEDER.
- DEMOLISH BALANCING VALVE IN HOT WATER SUPPLY PIPE.
- DEMOLISH MAKE-UP WATER PRESSURE REDUCING VALVES.
- DEMOLISH HOT WATER SUPPLY AND RETURN BRANCH PIPE SERVING AHU-4.



NEW WORK KEYED NOTES FOR MECHANICAL ROOM:

- ① PROVIDE 450 GALLON BARFIED THERMAL INERTIA TANK WITH DRAIN VALVE. PROVIDE APPROXIMATELY SEVEN CUBIC YARDS OF FILL TO COMPENSATE FOR ELEVATION DIFFERENCE. 4" CONCRETE PAD WITH REBAR THAT EXTENDS 12" BEYOND THE TANK AND SDD AND 18" FILL. PROVIDE WITH SERVICE VALVES ON BOTH SIDES OF TANK. INSULATE WITH 2" OF EITHER POLYISOCYANURATE, POLYSTYRENE, OR CELLULAR GLASS. PROVIDE ALUMINUM OR STAINLESS STEEL JACKET.
- ② PROVIDE AHU-4. PROVIDE NEW MANUAL (ALUMINUM OR STAINLESS STEEL) OUTDOOR AIR DAMPER, THREE-WAY MODULATING CONTROL VALVES, AND FLEXIBLE DUCT CONNECTORS. CONNECT TO EXISTING DUCT. PROVIDE OUTDOOR AIR DUCT AS NECESSARY TO INSTALL NEW DAMPER. PIPE CONDENSATE TO NEAREST FLOOR DRAIN. PROVIDE AUXILIARY DRAIN PAN TO MEET NORTH CAROLINA MECHANICAL CODE.
- ③ LOCATE HOT WATER PUMPS AT AN ELEVATION TO FACILITATE MAINTENANCE (BETWEEN 24" AND 60" AFT)
- ④ REUSE EXISTING PARTIAL ACCEPTANCE EXPANSION TANK. PROVIDE NEW BUTYL RUBBER BLADDER. CHARGE TO 16 PSI. EXISTING TANK IS A WHEATLY WPA-030.
- ⑤ REUSE EXISTING TANGENTIAL AIR SEPARATOR.
- ⑥ PROVIDE TWO MAKE-UP WATER PRESSURE REDUCING VALVES. SET HOT WATER: 16 PSIG. SET CHILLED WATER: 16 PSIG.
- ⑦ PROVIDE WATER CATCH FUNNEL AND DRAIN PIPE FOR EXISTING PRZ. PIPE TO WITHIN 12" OF FLOOR.
- ⑧ DIRECT VENT BOILER THROUGH THE ROOF (TYPICAL). FOLLOW MANUFACTURER'S RECOMMENDED PROCEDURE.
- ⑨ PROVIDE 4" CONCRETE PAD FOR BOILER. EXTEND BEYOND BOILER FOOT PRINT A MINIMUM OF SIX INCHES. (TYPICAL)
- ⑩ PROVIDE BOILER AND NECESSARY PIPING COMPONENTS. SEE DETAIL FOR BOILER ISOMETRIC ON DRAWING M6. PIPING SYSTEM SHALL BE PRIMARY/SECONDARY SYSTEM.
- ⑪ PROVIDE NEW CHEMICAL SHOT FEEDER. SEE DRAWING M6 FOR DETAIL.
- ⑫ PROVIDE NEW 3/4" HOT WATER SUPPLY AND RETURN PIPE AND NEW 1" CHILLED WATER SUPPLY AND RETURN PIPE SERVING AHU-4. PROVIDE BALANCING VALVE, CONTROL VALVES, AND SERVICE VALVES.
- ⑬ RECHARGE EXISTING PARTIAL ACCEPTANCE EXPANSION TANK. CHARGE TO 16 PSIG. EXISTING TANK IS A WHEATLY WPA-030.
- ⑭ PROVIDE REMOTELY OPERATED EMERGENCY GAS SHUTOFF VALVE. THERE SHALL BE A LABELED, RED PUSH BUTTON SWITCH LOCATED NEXT TO THE DOOR.
- ⑮ PROVIDE CHILLED WATER PUMP, FLEXIBLE PIPE CONNECTORS, SUCTION DIFFUSER, AND BALANCING VALVE. LOCATE BALANCING VALVE WHERE EXISTING WAS REMOVED.
- ⑯ PROVIDE HOT WATER PIPE, HOT WATER PUMPS, CONTROLS COMPONENTS, AND ALL PIPE COMPONENTS.
- ⑰ PROVIDE TEMPERATURE SENSORS IN CHILLED WATER SUPPLY AND RETURN PIPES.
- ⑱ PIPE PRESSURE RELIEF VALVE TO NEAREST FLOOR DRAIN. SECURE PIPE TO FLOOR.

LEGEND

- ◇— BALANCING VALVE
- ◇— SERVICE VALVE
- ◇— TRIPLE DUTY VALVE
- ◇— PRESSURE/TEMP. TEST PRT
- ◇— MANUAL AIR VENT
- ◇— PRESSURE RELIEF VALVE (45 PSIG)
- ◇— THERMOMETER
- ◇— ANALOG TEMPERATURE SENSOR
- ◇— DRAIN VALVE WITH HOSE BIBB
- ◇— FLOOR DRAIN
- ◇— DEMOLISH TO THIS POINT, CAP, SEAL, AND INSULATE
- ◇— CONNECT NEW TO EXISTING
- ◇— DEMOLISH TO THIS POINT
- ◇— THERMOSTAT
- ◇— EXISTING DUCT TO REMAIN
- ◇— DEMOLITION/NEW WORK
- ◇— EXISTING PIPE TO REMAIN



DISCLOSURE OF INFORMATION

CONTRACTOR SHALL COMPLY AS FOLLOWS:

A. THE CONTRACTOR SHALL NOT RELEASE TO ANYONE OUTSIDE THE CONTRACTOR'S ORGANIZATION ANY UNCLASSIFIED INFORMATION, REGARDLESS OF MEDIUM (E.G. FILM, TAPE, DOCUMENT), PERTAINING TO ANY PART OF THIS CONTRACT OR ANY PROGRAM RELATED TO THIS CONTRACT, UNLESS:

1. THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL; OR

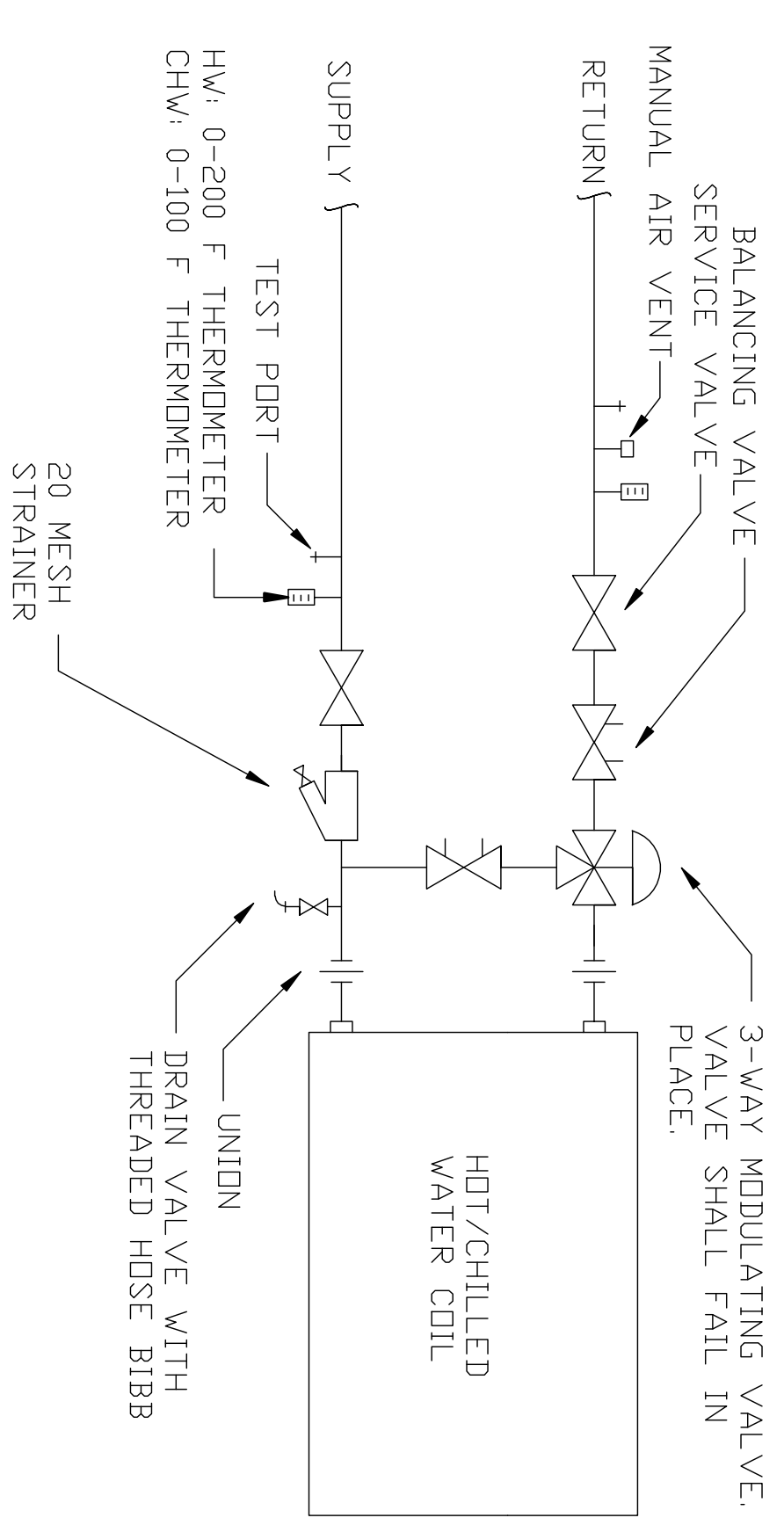
2. THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.

B. REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT REQUEST TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.

C. THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.

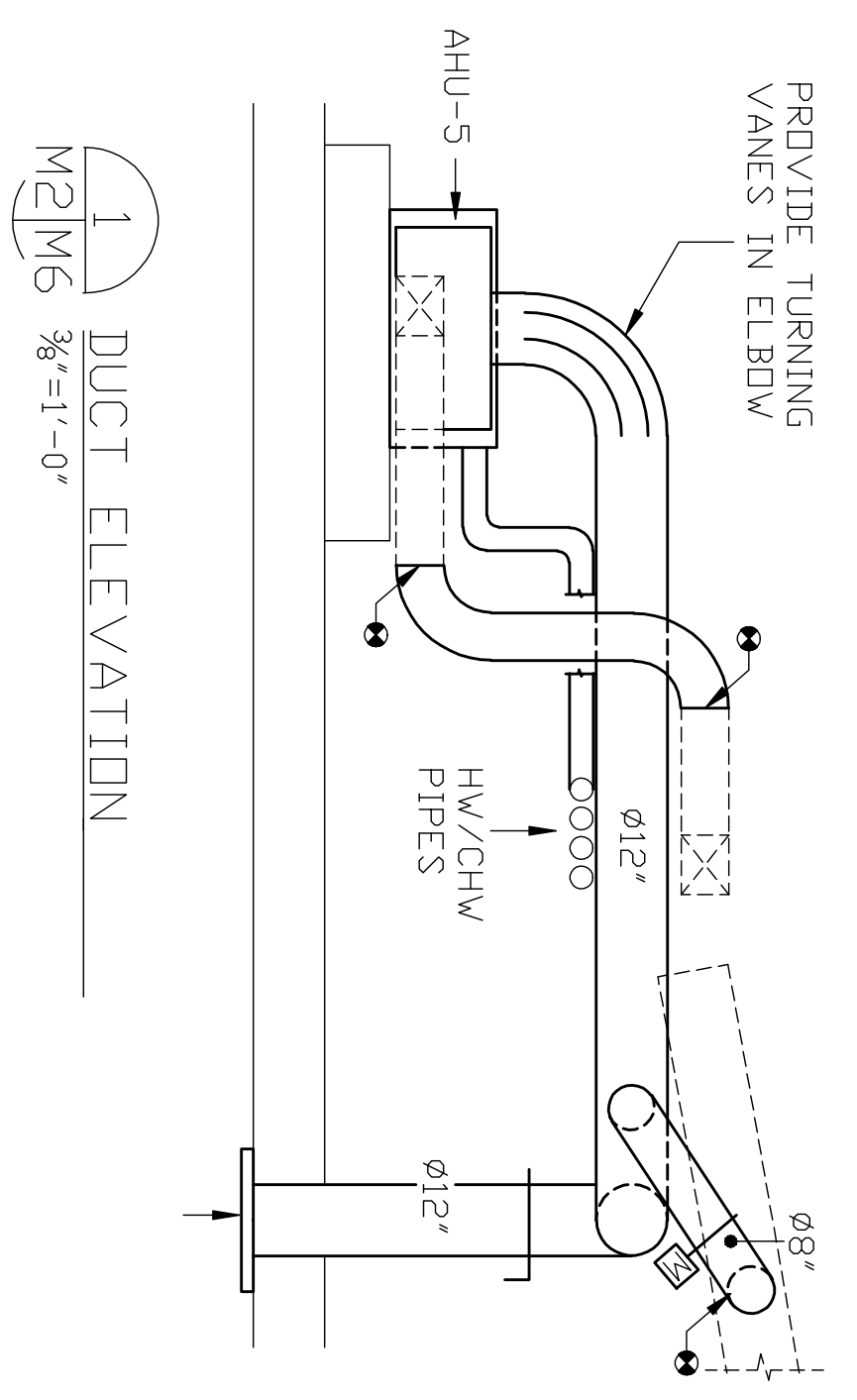
DIVISION OF THE NAVY MARINE CORPS BASE CAMP LEJUNE, NORTH CAROLINA MECHANICAL REPAIRS BLDG 80	
M3	MECHANICAL ROOM DEMOLITION & NEW WORK DRAWING NO. 60010584 DATE 28JUN12 DESIGNED BY: R. MARSHBURN CHECKED BY: M. B. BEJNING SUBMITTED BY: M. B. BEJNING DATE 28JUN12 APPROVED: PWO OR OIC F 80091 DATE SANSICATORY TO:
SCALE: NOTES 05-11-0110	SHEET 4 OF 13

REV	SYN	DATE	APPROVED

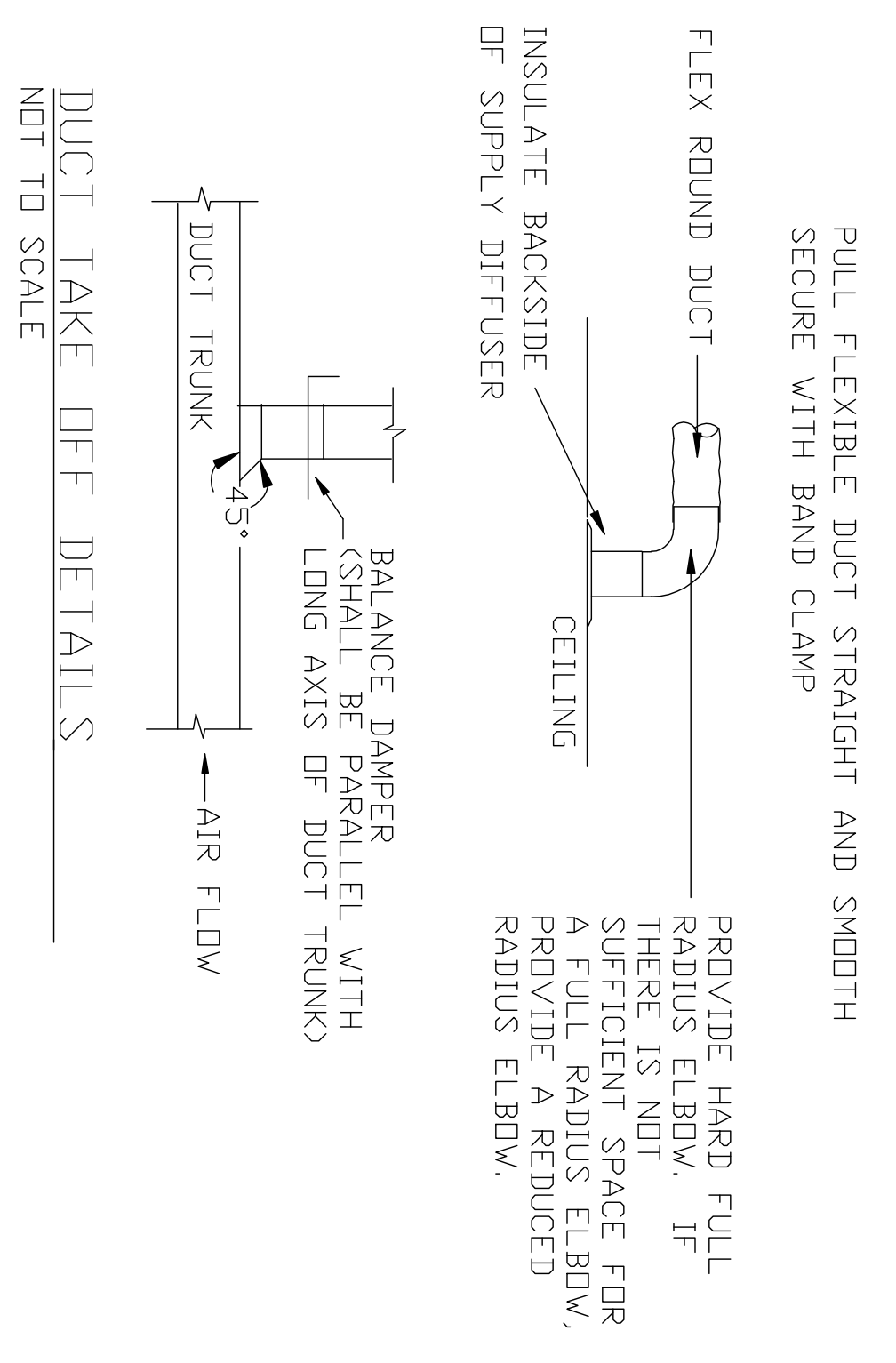


TYPICAL COIL PIPING
NOT TO SCALE

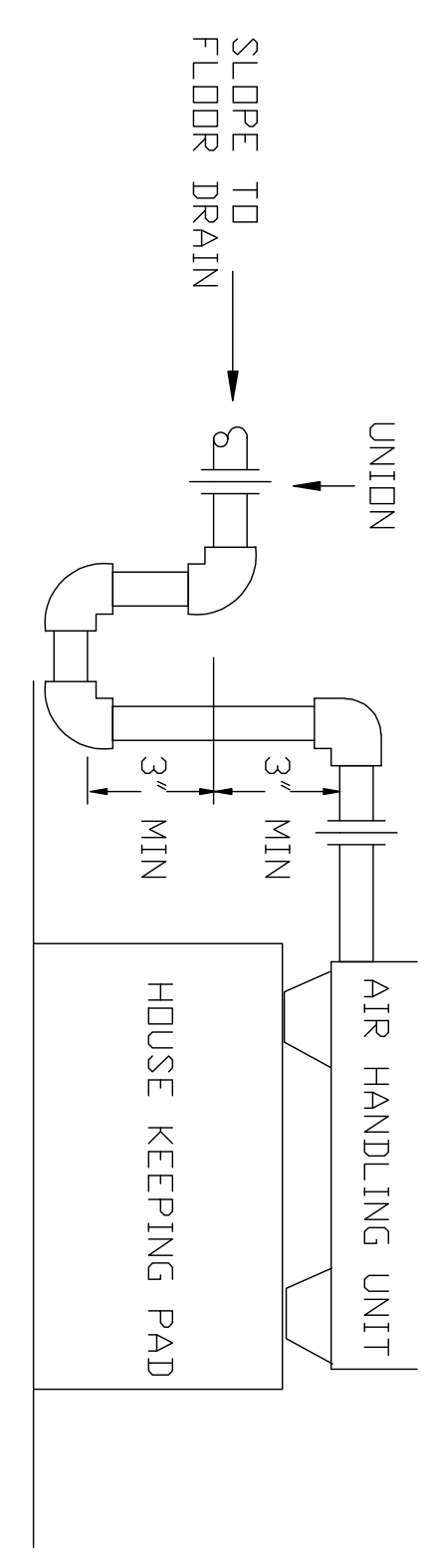
NOTE: SEE OTHER DETAIL FOR VAV HOT WATER COIL.



DUCT ELEVATION
NOT TO SCALE

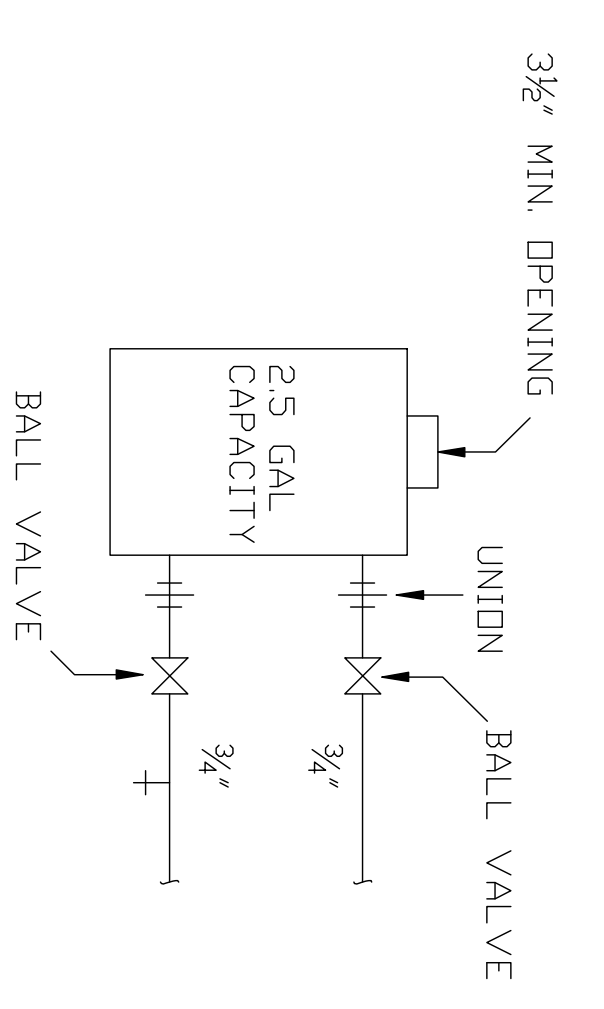


DUCT TAKE OFF DETAILS
NOT TO SCALE



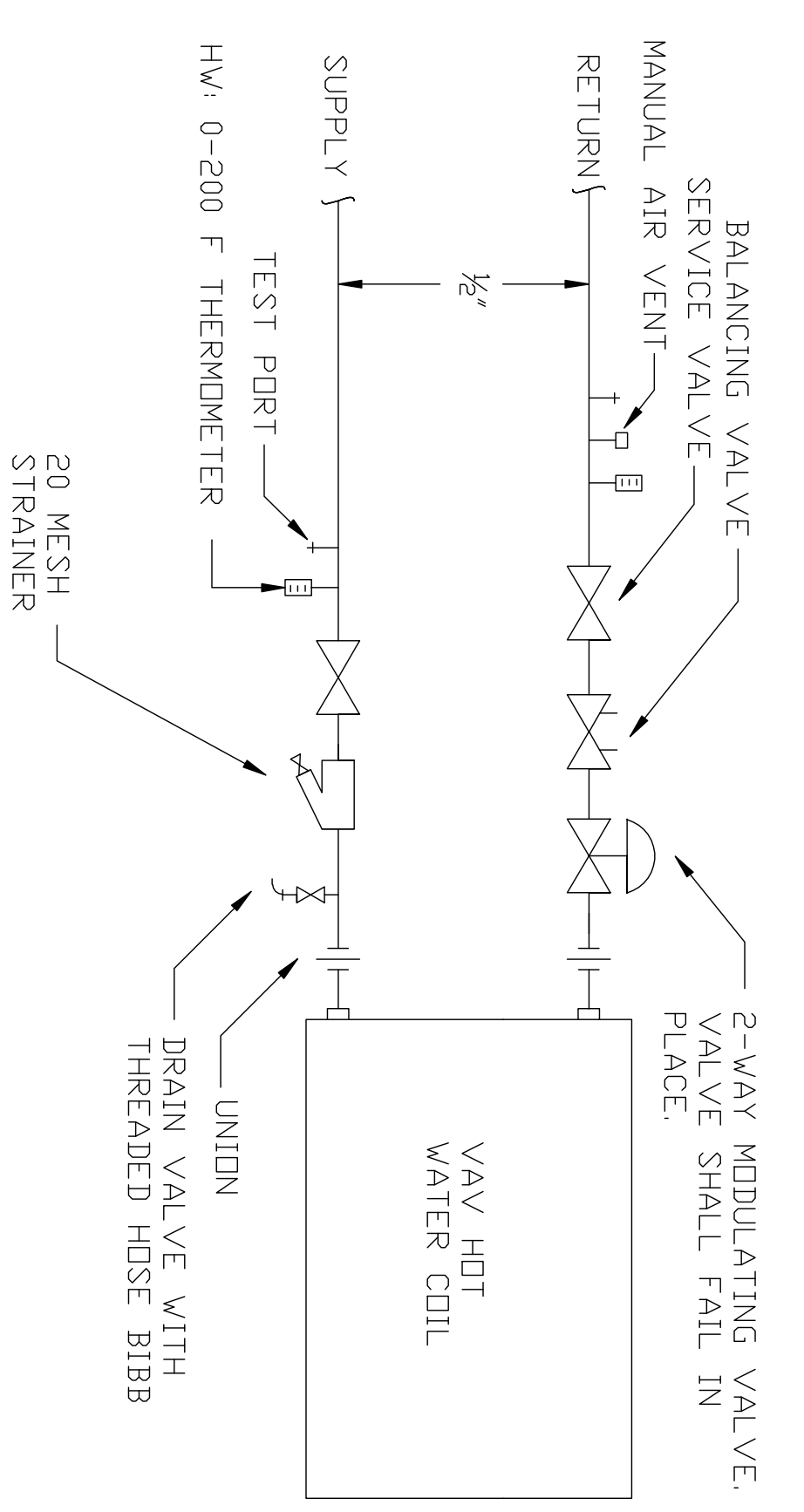
CONDENSATE DRAIN
NOT TO SCALE

NOTE: USE MANUFACTURER'S RECOMMENDED PIPE SIZE.

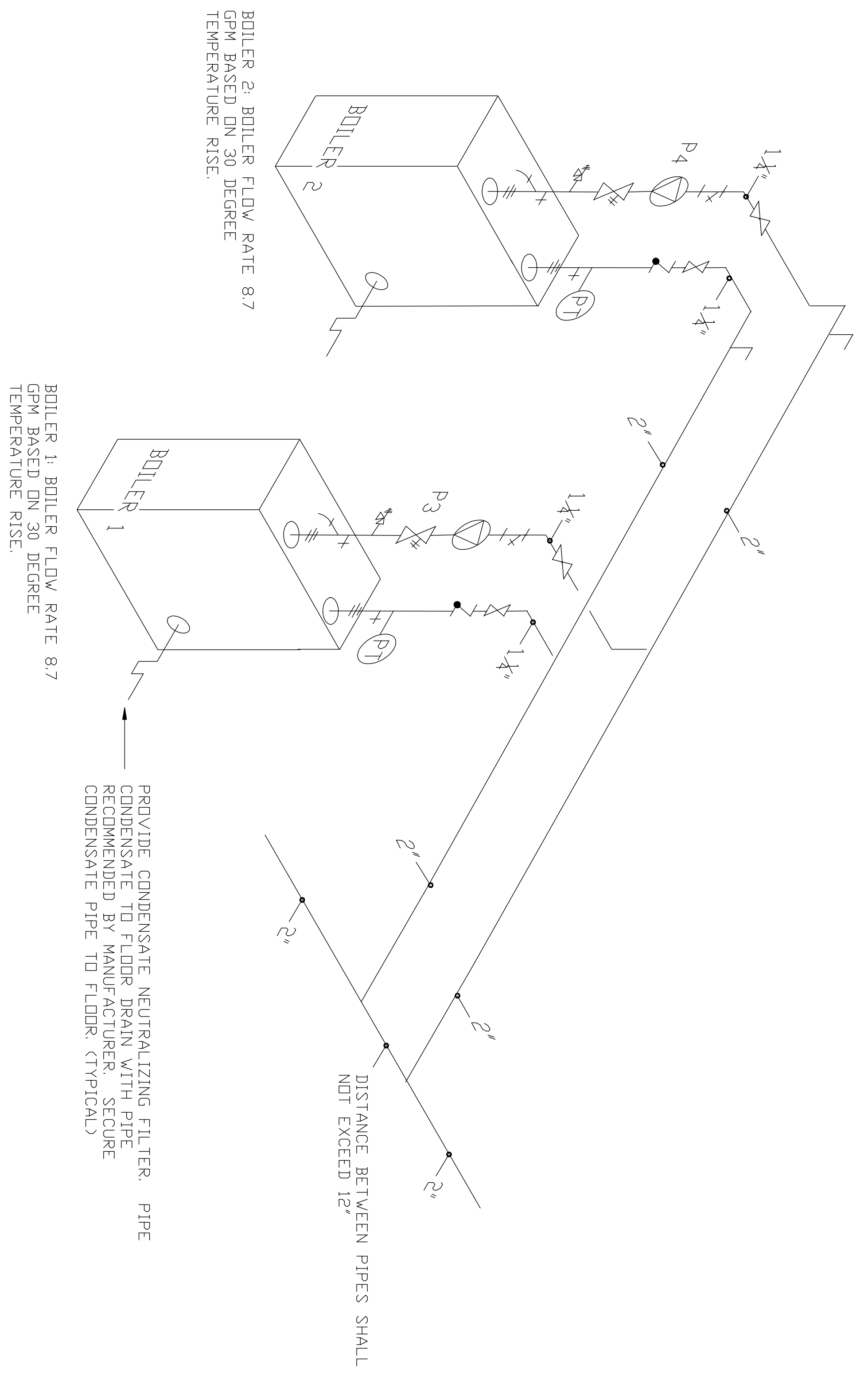


BUILDING HOT WATER SHOT FEEDER
NOT TO SCALE

NOTE: SHALL BE RATED FOR MINIMUM 150 PSIG, SUCH AS NEPTUNE FILTER FEEDER. PUT FEEDER SHALL BE SECURED TO THE FLOOR.



VAV HOT WATER COIL PIPING
NOT TO SCALE



BOILER PIPING ISOMETRIC
NOT TO SCALE

BOILER 1: BOILER FLOW RATE 8.7 GPM BASED ON 30 DEGREE TEMPERATURE RISE.

BOILER 2: BOILER FLOW RATE 8.7 GPM BASED ON 30 DEGREE TEMPERATURE RISE.

PROVIDE CONDENSATE NEUTRALIZING FILTER. PIPE CONDENSATE TO FLOOR DRAIN WITH PIPE RECOMMENDED BY MANUFACTURER. SECURE CONDENSATE PIPE TO FLOOR. (TYPICAL)

DISTANCE BETWEEN PIPES SHALL NOT EXCEED 12"

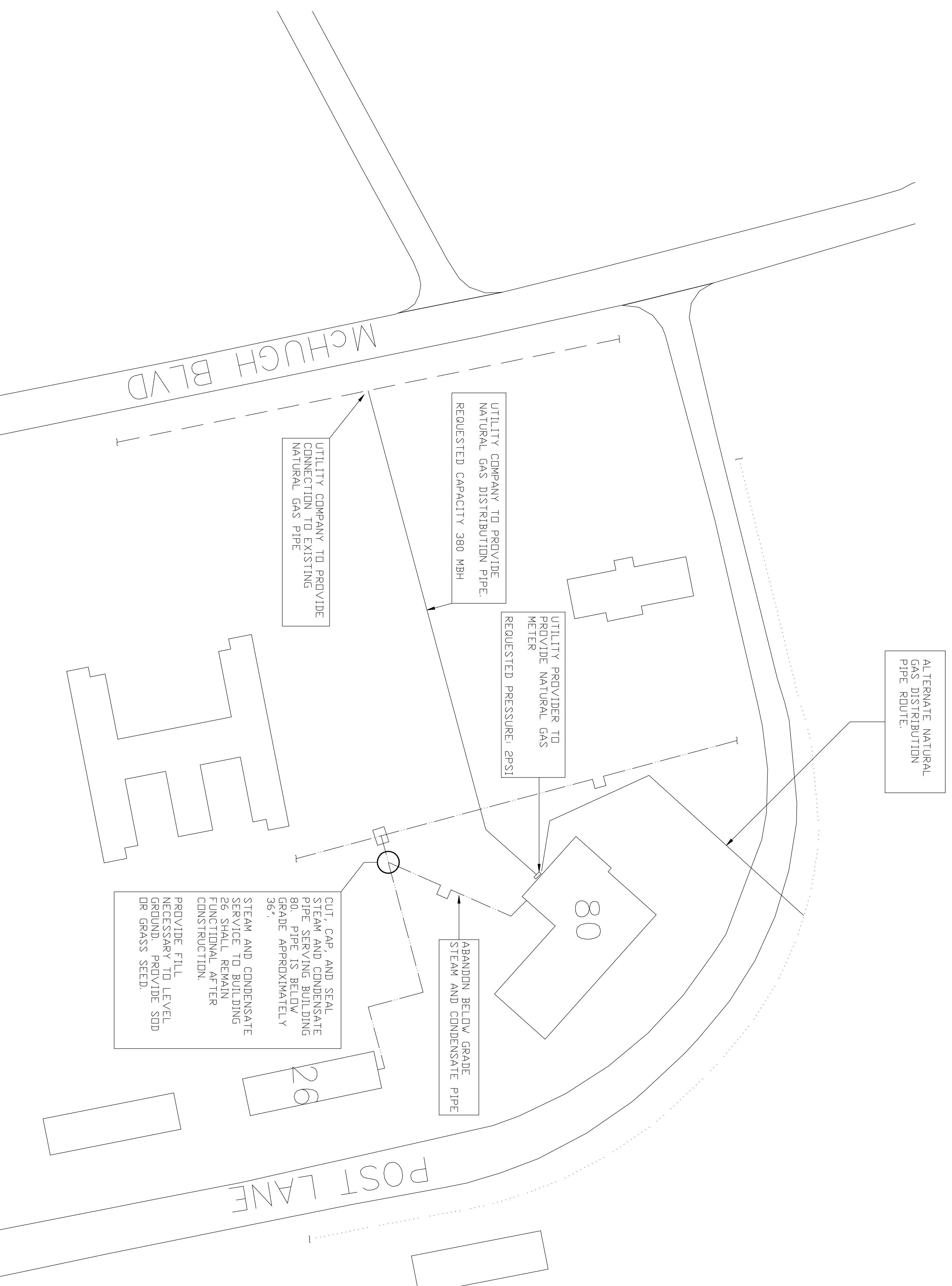
- LEGEND
- CHECK VALVE
 - DRAIN VALVE WITH HOSE THREADS
 - PRESSURE RELIEF VALVE
 - FULL PORT TRIPLE DUTY VALVE
 - FULL PORT SERVICE VALVE
 - MANUAL AIR RELIEF VALVE
 - 20 MESH STRAINER
 - PRESSURE/TEMPERATURE GAGE
 - PRESSURE/TEMPERATURE TEST PORT



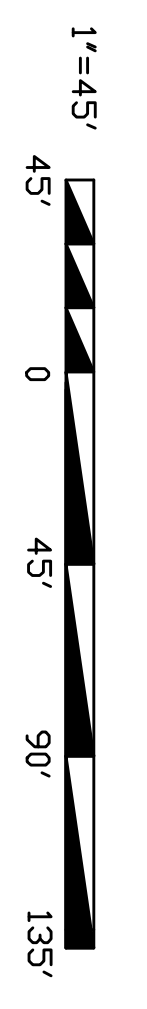
DISCLOSURE OF INFORMATION:
CONTRACTOR SHALL COMPLY AS FOLLOWS:
A. THE CONTRACTOR SHALL NOT RELEASE TO ANYONE OUTSIDE THE CONTRACTOR'S ORGANIZATION ANY UNCLASSIFIED INFORMATION, REGARDLESS OF MEDIUM (E.G. FILM, TAPE, DOCUMENT), PERTAINING TO ANY PART OF THIS CONTRACT OR ANY PROGRAM RELATED TO THIS CONTRACT, UNLESS:
1. THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL; OR
2. THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.
B. REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT ITS REQUEST TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.
C. THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.

DIVISION OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA		M6
MECHANICAL REPAIRS BLDG 80		
DES. M. B. BEUNING	DATE	MECHANICAL DETAILS DRAWING NO. 60010587 SIZE CODE IDENT. NO. 80091
CHK. J. A. ELLIOTT	28 JUNE 12	
SUBMITTED BY: M. B. BEUNING	DATE	CONSTRUCTION CENTER N40085-11-B-0110 SHEET 7 OF 13
DESIGN DR. B. R. MARSHBURN, P.E.	DATE	
APPROVED: PWO OR OIC	DATE	SCALE: NOTES
SANITIZATION TO:	DATE	SPEC. 05-11-0110

REVISIONS		
SYM	DATE	APPROVED



--- EXISTING HIGH PRESSURE STEAM AND CONDENSATE
 --- EXISTING NATURAL GAS DISTRIBUTION PIPE
 PROPOSED NATURAL GAS DISTRIBUTION PIPE



DISCLOSURE OF INFORMATION:
 CONTRACTOR SHALL COMPLY AS FOLLOWS:
 A. THE CONTRACTOR SHALL NOT RELEASE TO ANYONE OUTSIDE THE CONTRACTOR'S ORGANIZATION ANY UNCLASSIFIED INFORMATION, REGARDLESS OF MEDIUM (E.G. FILM, TAPE, DOCUMENT), PERTAINING TO ANY PART OF THIS CONTRACT OR ANY PROGRAM RELATED TO THIS CONTRACT, UNLESS--

1. THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL; OR
 2. THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.
- B. REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT ITS REQUEST TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.

C. THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT AND TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.

DIRECTOR OF THE NAVY MARINE CORPS BASE <small>CAMP LEFLOUNE, NORTH CAROLINA</small>		
MECHANICAL REPAIRS BLDG 80		
DES. M. B. BEUNING	DATE	NAVFAC DRAWING NO.
CHK. M. B. BEUNING	28JUN12	50010588
CHK. J. A. ELLIOTT	DATE	CONSTR. CONTR. N40085-11-B-0110
SUBMITTED BY: M. B. BEUNING	SIZE CODE IDENT. NO.	
DESIGN DIR: B. R. MARSHBURN P.E.	NAVFAC	
APPROVED: PWO OR OICC	80091	
SATISFACTORY TO:	SCALE: NOTES	SHEET 8 OF 13

REV	SYN	DATE	APPROVED

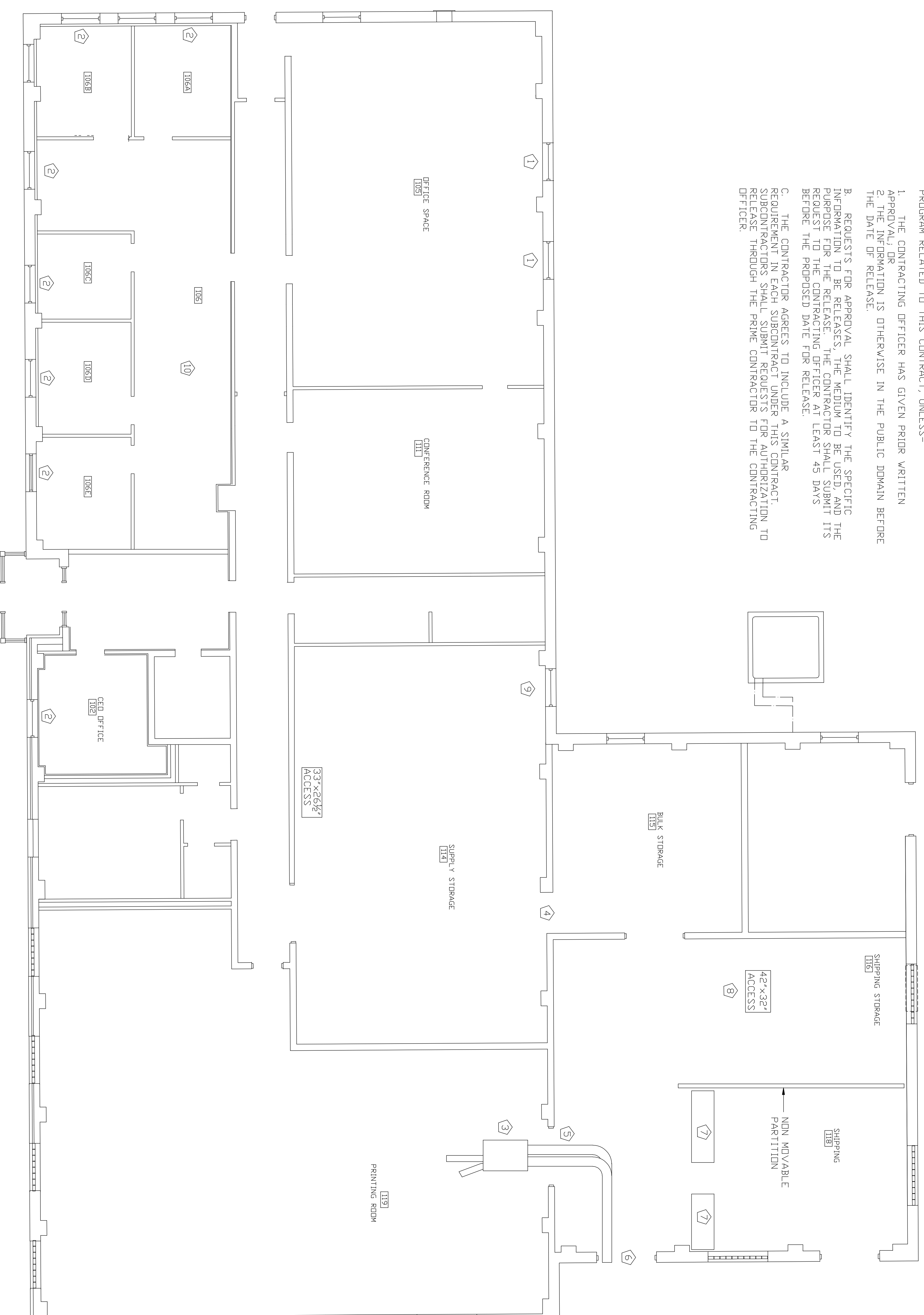
REVISITONS

DISCLOSURE OF INFORMATION:

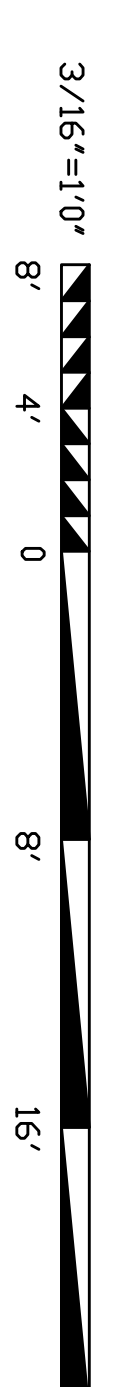
- CONTRACTOR SHALL COMPLY AS FOLLOWS:
- THE CONTRACTOR SHALL NOT RELEASE TO ANYONE OUTSIDE THE CONTRACTOR'S ORGANIZATION ANY UNCLASSIFIED INFORMATION, REGARDLESS OF MEDIUM (E.G. FILM, TAPE, DOCUMENT), PERTAINING TO ANY PART OF THIS CONTRACT OR ANY PROGRAM RELATED TO THIS CONTRACT, UNLESS-
- THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL; OR
 - THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.
- REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT ITS REQUEST TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.
- THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.

TEMPORARY HEATING/COOLING KEVED NOTES:

- PROVIDE 18,000 BTU/HR PORTABLE HEAT PUMP. 115V/1ϕ. 141 AMPS. PROVIDE AIR NOZZLES TO DIRECT SUPPLY AIR. REMOVE OPENABLE PORTION OF THE PUSHOUT AWNING WINDOW. PROVIDE CONDENSER AIR DUCT TO THE OUTSIDE FOR CONDENSATE PUMP TO THE OUTDOORS. REMOVE UNIT AFTER CONSTRUCTION IS COMPLETE.
 - PROVIDE 5,000 BTU/HR WINDOW AIR CONDITIONER. 115V/1ϕ. 4.8 AMPS. REMOVE OPENABLE PORTION OF THE PUSHOUT AWNING WINDOW TO ALLOW INSTALLATION OF WINDOW UNIT. DO NOT REMOVE THE WINDOW FRAME OR WINDOW ENTIRELY. PROVIDE WOOD FRAME TO SECURELY HOLD WINDOW UNIT IN WINDOW FRAME. CAULK SEAMS AS NECESSARY TO PREVENT WATER PENETRATION. REMOVE WINDOW UNIT AND REINSTALL WINDOW AFTER CONSTRUCTION IS COMPLETE. WINDOW OPENING WILL BE 45 $\frac{3}{8}$ " WIDE AND 14" HEIGHT.
 - PROVIDE 60,000 BTU/HR PORTABLE HEAT PUMP. 208V/1ϕ. 32 AMPS. PROVIDE DUCT TO THE OUTSIDE FOR CONDENSER AIR. PROVIDE SUPPLY DUCT/NOZZLES TO DIRECT SUPPLY AIR. PROVIDE AUTOMATIC CONDENSATE PUMP TO THE OUTDOORS. REMOVE UNIT AFTER CONSTRUCTION IS COMPLETE.
 - PROVIDE PLASTIC AIR BARRIER TO ISOLATE ROOM 115 FROM ROOM 114. PROVIDE WOOD FRAME TO SUPPORT PLASTIC AIR BARRIER.
 - PROVIDE PLASTIC AIR BARRIER TO ISOLATE ROOM 119 FROM ROOM 118. PROVIDE WOOD FRAME TO SUPPORT PLASTIC AIR BARRIER AND DUCT.
 - PROVIDE TEMPORARY WOOD FRAME WHERE EXISTING DOOR IS IN ORDER TO SECURE TEMPORARY HEAT PUMP CONDENSER AIR DUCT.
 - TEMPORARY RELOCATE WOODEN COUNTER AND SHELVES AS NECESSARY TO ACCOMPLISH WORK. REINSTALL AFTER CONSTRUCTION IS COMPLETE.
 - PREFERRED ATTIC ACCESS TO BE USED. ROOM 114 IS USED TO STORE PAPER.
 - PROVIDE 12,000 BTU/HR PORTABLE AIR CONDITIONER. 115V/1ϕ. 11.9 AMPS. PROVIDE WITH NOZZLE KIT TO DIRECT SUPPLY AIR AWAY FROM PAPER STORAGE. REMOVE OPENABLE PORTION OF THE PUSHOUT AWNING WINDOW TO ALLOW EXHAUST OF CONDENSER AIR. DO NOT REMOVE THE WINDOW FRAME OR WINDOW ENTIRELY. PROVIDE WOOD FRAME TO SECURELY HOLD WINDOW UNIT IN WINDOW FRAME. CAULK SEAMS AS NECESSARY TO PREVENT WATER PENETRATION. PROVIDE WINDOW UNIT AND REINSTALL WINDOW AFTER CONSTRUCTION IS COMPLETE. WINDOW OPENING WILL BE 45 $\frac{3}{8}$ " WIDE AND 14" HEIGHT.
 - TEMPORARY RELOCATE DESK TO FACILITATE DEMOLITION AND INSTALLATION OF NEW DUCT. COORDINATE NEW LOCATION WITH BUILDING OCCUPANTS.
- GENERAL NOTES:
- ALL OFFICE ROOMS (102, 105, 106, 106A-C) ARE TO REMAIN OCCUPIED DURING CONSTRUCTION.
 - THE PRINTING ROOM (ROOM 119) AND SUPPLY STORAGE ROOM (ROOM 114) ARE TO REMAIN IN USE THROUGHOUT THE CONSTRUCTION PERIOD.
 - ROOMS 111, 115, 116, AND 118 WILL NOT BE OCCUPIED DURING CONSTRUCTION BUT MAY REQUIRE PERIODIC USE BY BUILDING OCCUPANTS.
 - PROVIDE OPERATIONAL TEMPORARY HEATING/COOLING SYSTEMS PRIOR TO TAKING EXISTING SYSTEM OFF LINE.
 - PROVIDE LABBR NECESSARY TO TEMPORARY RELOCATE DESKS AND OTHER OFFICE FURNITURE TO FACILITATE INSTALLATION OF TEMPORARY HEATING/COOLING SYSTEMS AND MODIFICATION TO EXISTING SYSTEM. DESKS AND OFFICE FURNITURE TO BE STORED IN THE PRINTING ROOM, RATHER THAN MOVED AROUND WITHIN THE EXISTING ROOMS. COORDINATE WITH BUILDING OCCUPANTS.
 - FACILITY WILL BE AVAILABLE FOR CONSTRUCTION DURING REGULAR BUSINESS HOURS: APPROXIMATELY MONDAY-FRIDAY, 0700-1630. COORDINATE EXACT TIMES WITH CONSTRUCTION MANAGER.



TEMPORARY COOLING/HEATER
3/8"=1'-0"



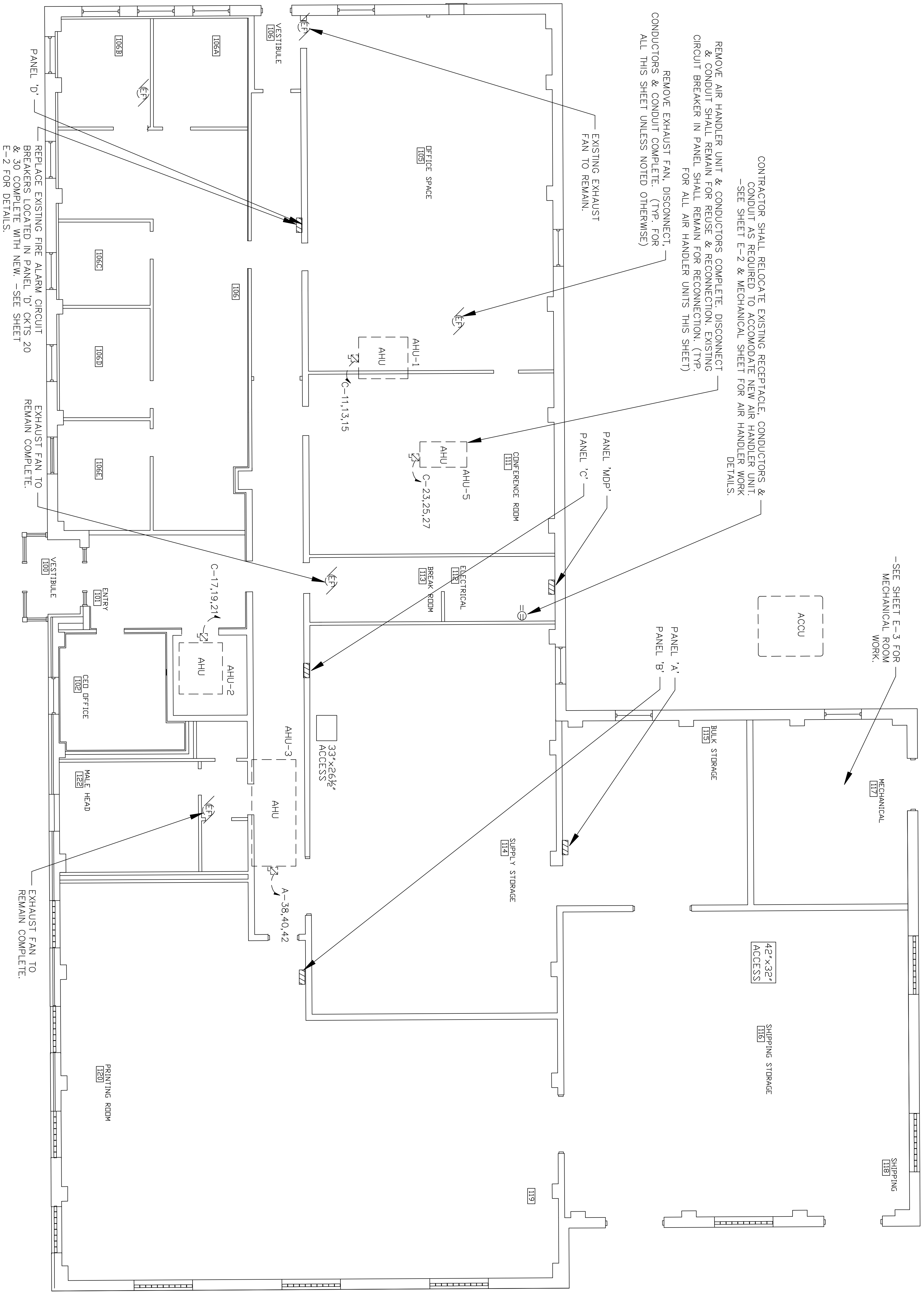
DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LELAND, NORTH CAROLINA		M8
MECHANICAL REPAIRS BLDG 80		
DES. M. B. BEUNING	DATE	TEMPORARY HEATING, COOLING, & NOTES
DR. M. B. BEUNING	DATE	NAVJAG DRAWING NO.
CHK. J. A. ELLIOTT	DATE	60010589
SUBMITTED BY: M. B. BEUNING	DATE	80091
DESIGN DR: B. R. MARSHBURN, P.E.	DATE	CONSTR. CONTR. N40085-11-B-0110
APPROVED: PWO OR OICC	DATE	SHEET 9 OF 13
SATISFACTORY TO:	SCALE: NOTES	SPEC. 05-11-0110

REVISIONS		DATE	APPROVED
SYM			

SYMBOL

SYMBOL	DESCRIPTION
	FLUORESCENT LUMINAIRE: EXISTING. -SEE SHEET E-3 FOR DETAILS.
	SINGLE POLE SWITCH: EXISTING. -SEE SHEET E-3 FOR DETAILS.
	SINGLE POLE SWITCH: NEW, 20A, 120V. -SEE SHEET E-3 FOR DETAILS.
	RECEPTACLE: EXISTING. -SEE SHEET E-2 & E-3 FOR DETAILS.
	RECEPTACLE: NEW, 20A, 120V. ALPHANUMERICS INDICATE PANELBOARD & CIRCUIT NUMBER. -SEE SHEET E-4 FOR DETAILS.
	RECEPTACLE: NEW, 20A, 120V, GFCI. ALPHANUMERICS INDICATE PANELBOARD & CIRCUIT NUMBER. -SEE SHEET E-2 & E-3 FOR DETAILS.
	HOMERUN TO PANEL: EXISTING. ALPHANUMERICS INDICATE PANELBOARD & CIRCUIT NUMBER. -SEE SHEET THIS SHEET & SHEET E-2 FOR DETAILS.
	HOMERUN TO PANEL: NEW, 3/4" CONDUIT, (2)-#12 AND (1)-#12 EGC, ALPHANUMERICS INDICATE PANELBOARD & CIRCUIT NUMBER. -SEE SHEET E-2, E-3 & E-4 FOR DETAILS.
	BRANCH CIRCUIT CONDUIT & CONDUCTORS: NEW, RECESSED 3/4" CONDUIT, (2)-#12 AND (1)-#12 EGC. HASH MARKS (///) INDICATE NUMBER OF CURRENT CARRYING CONDUCTORS MORE THAN TWO. -SEE SHEET E-3 FOR DETAILS.
	PANEL FEEDER ROUTE: NEW. -SEE SHEET E-2 & E-4 FOR DETAILS
	PANELBOARD: EXISTING. -SEE THIS SHEET, SHEETS E-2, E-3, & E-4 FOR DETAILS.
	PANELBOARD: NEW. -SEE SHEETS E-2, E-3 & E-4 FOR DETAILS.
	DISCONNECT SWITCH: EXISTING. -SEE THIS SHEET, SHEET E-2 & SHEET E-3 FOR DETAILS.
	DISCONNECT SWITCH: NEW. -SEE SHEETS E-2, E-3 & E-4 FOR DETAILS.
	AIR COOLED CHILLER UNIT: EXISTING. -SEE THIS SHEET, SHEETS E-2, E-3 & MECHANICAL SHEETS FOR DETAILS.
	AIR COOLED CHILLER UNIT: NEW. -SEE THIS SHEET SHEET E-3 & MECHANICAL SHEETS FOR DETAILS.
	AIR HANDLER UNIT: EXISTING. -SEE SHEETS E-2, E-3 & MECHANICAL SHEETS FOR DETAILS.
	AIR HANDLER UNIT: NEW. -SEE SHEETS E-2, E-3 & MECHANICAL SHEETS FOR DETAILS.
	AIR COOLED HEAT PUMP CONDENSING UNIT: NEW. -SEE SHEETS E-2 & MECHANICAL SHEETS FOR DETAILS.
	DUCTLESS AIR HANDLER UNIT: NEW. -SEE SHEETS E-2, E-4 & MECHANICAL SHEETS FOR DETAILS.
	PORTABLE HEAT PUMP UNIT: NEW. -SEE SHEETS E-4 & MECHANICAL SHEETS FOR DETAILS.
	ELECTRIC IMMERSION TYPE HUMIDIFIER UNIT: NEW. -SEE SHEETS E-3, E-4 & MECHANICAL SHEETS FOR DETAILS.
	HOT WATER BOILER UNIT: NEW. -SEE SHEETS E-3 & MECHANICAL SHEETS FOR DETAILS.
	EXHAUST FAN: EXISTING. -SEE THIS SHEET, SHEET E-3 & MECHANICAL SHEETS FOR DETAILS.
	EXHAUST FAN: NEW. -SEE SHEETS E-2, E-3 & MECHANICAL SHEETS FOR DETAILS.
	PUMP: EXISTING. -SEE SHEET E-3 & MECHANICAL SHEETS FOR DETAILS.
	PUMP: NEW. -SEE SHEET E-3, E-4 & MECHANICAL SHEETS FOR DETAILS.
	MOTOR: EXISTING. -SEE SHEET E-3, E-4 & MECHANICAL SHEETS FOR DETAILS.
	ELECTRIC HOT WATER HEATER: EXISTING. -SEE SHEET E-3 & MECHANICAL SHEETS FOR DETAILS.

LEGEND



ELECTRICAL PLAN: DEMOLITION
SCALE 1/8" = 1'-0"

DISCLOSURE OF INFORMATION

CONTRACTOR SHALL COMPLY AS FOLLOWS:

(A) THE CONTRACTOR SHALL NOT RELEASE TO ANYONE OUTSIDE THE CONTRACTOR'S ORGANIZATION ANY UNCLASSIFIED INFORMATION, REGARDLESS OF MEDIUM (E.G., FILM, TAPE, DOCUMENT), PERTAINING TO ANY PART OF THIS CONTRACT OR ANY PROGRAM RELATED TO THIS CONTRACT, UNLESS--

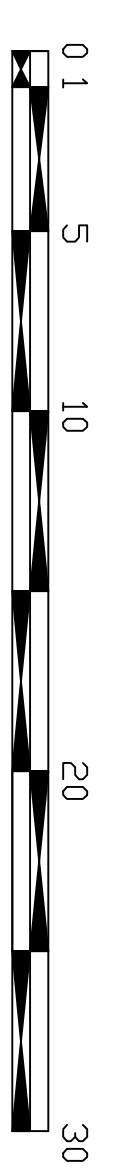
(1) THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL; OR

(2) THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.

(B) REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT ITS REQUEST TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.

(C) THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.

GRAPHIC SCALE
1/8" = 1'-0"



DESIGNER OF THE DRAWING		MARINE CORPS BASE	
DR. W. JONES		CAMB. LEIDENING, NORTH CAROLINA	
CHK. E. TAYLOR		MECHANICAL REPAIRS,	
SUBMITTED BY: W. BUENING		BLDG 80	
DESIGN DIR: B.R. MARSHBURN, PE	ELECTRICAL PLAN: DEMOLITION & LEGEND	DATE	SIZE
APPROVED: P.M.O. OR OIC	DATE	6-26-12	F
SATISFACTORY TO:	DATE	80091	80091
	SCALE: NOTED	SPEC.	05-11-0110
			SHEET 10 OF 13

DISCLOSURE OF INFORMATION

CONTRACTOR SHALL COMPLY AS FOLLOWS:
 (A) THE CONTRACTOR SHALL NOT RELEASE TO ANYONE OUTSIDE THE CONTRACTOR'S ORGANIZATION ANY UNCLASSIFIED INFORMATION, REGARDLESS OF MEDIUM (E.G., FILM, TAPE, DOCUMENT), PERTAINING TO ANY PART OF THIS CONTRACT OR ANY PROGRAM RELATED TO THIS CONTRACT, UNLESS--
 (1) THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL; OR
 (2) THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.
 (B) REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT ITS REQUESTS TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.
 (C) THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.

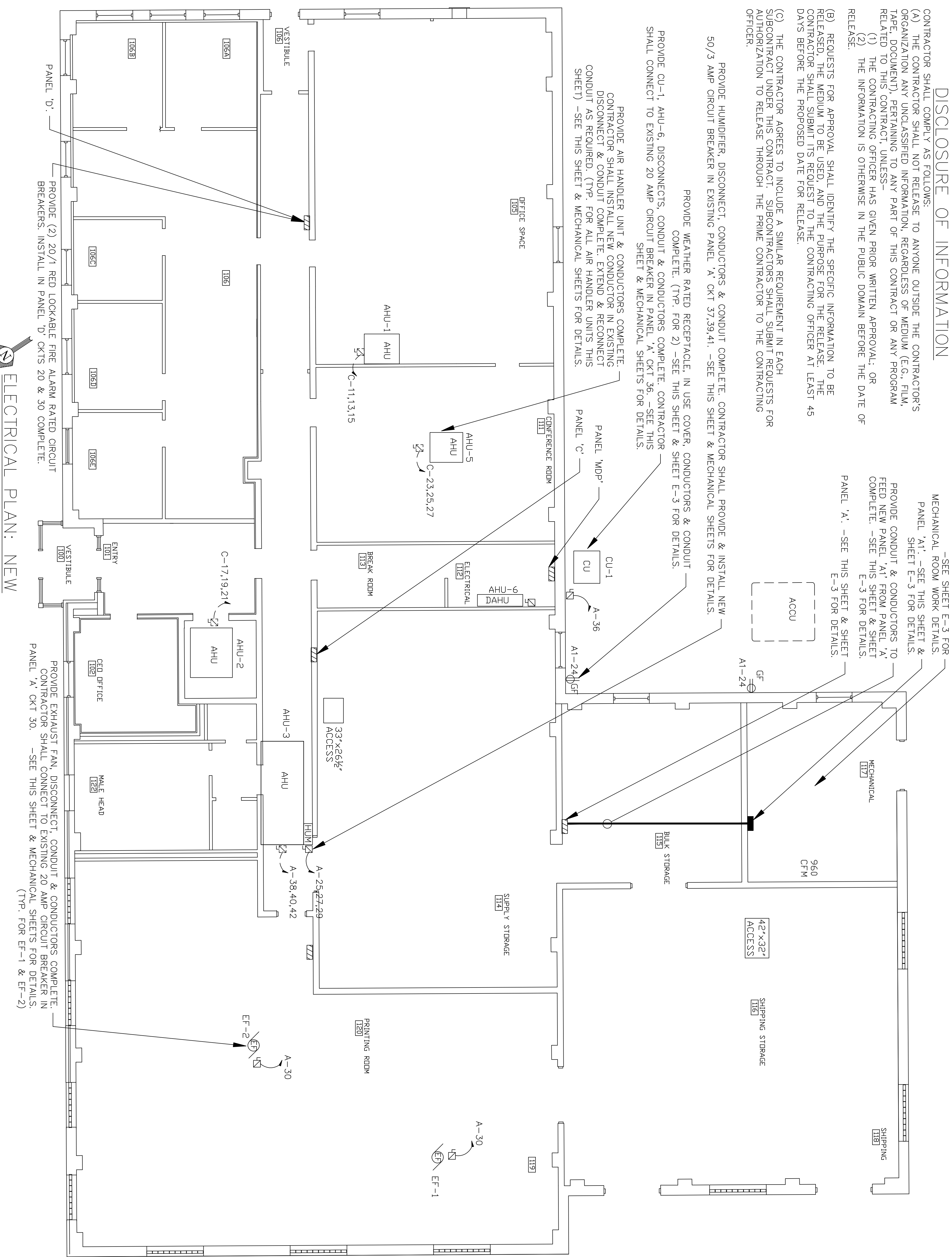
PROVIDE HUMIDIFIER, DISCONNECT, CONDUCTORS & CONDUIT COMPLETE. CONTRACTOR SHALL PROVIDE & INSTALL NEW 50/3 AMP CIRCUIT BREAKER IN EXISTING PANEL 'A, OKT 37,39,41. -SEE THIS SHEET & MECHANICAL SHEETS FOR DETAILS.
 PROVIDE WEATHER RATED RECEPTACLE IN USE COVER, CONDUCTORS & CONDUIT COMPLETE (TYP. FOR 2) -SEE THIS SHEET & SHEET E-3 FOR DETAILS.
 SHALL CONNECT TO EXISTING 20 AMP CIRCUIT BREAKER IN PANEL 'A, OKT 36. -SEE THIS SHEET & MECHANICAL SHEETS FOR DETAILS.

PROVIDE AIR HANDLER UNIT & CONDUCTORS COMPLETE. CONTRACTOR SHALL INSTALL NEW CONDUIT IN EXISTING CONDUIT AS REQUIRED. (TYP. FOR ALL AIR HANDLER UNITS THIS SHEET) -SEE THIS SHEET & MECHANICAL SHEETS FOR DETAILS.

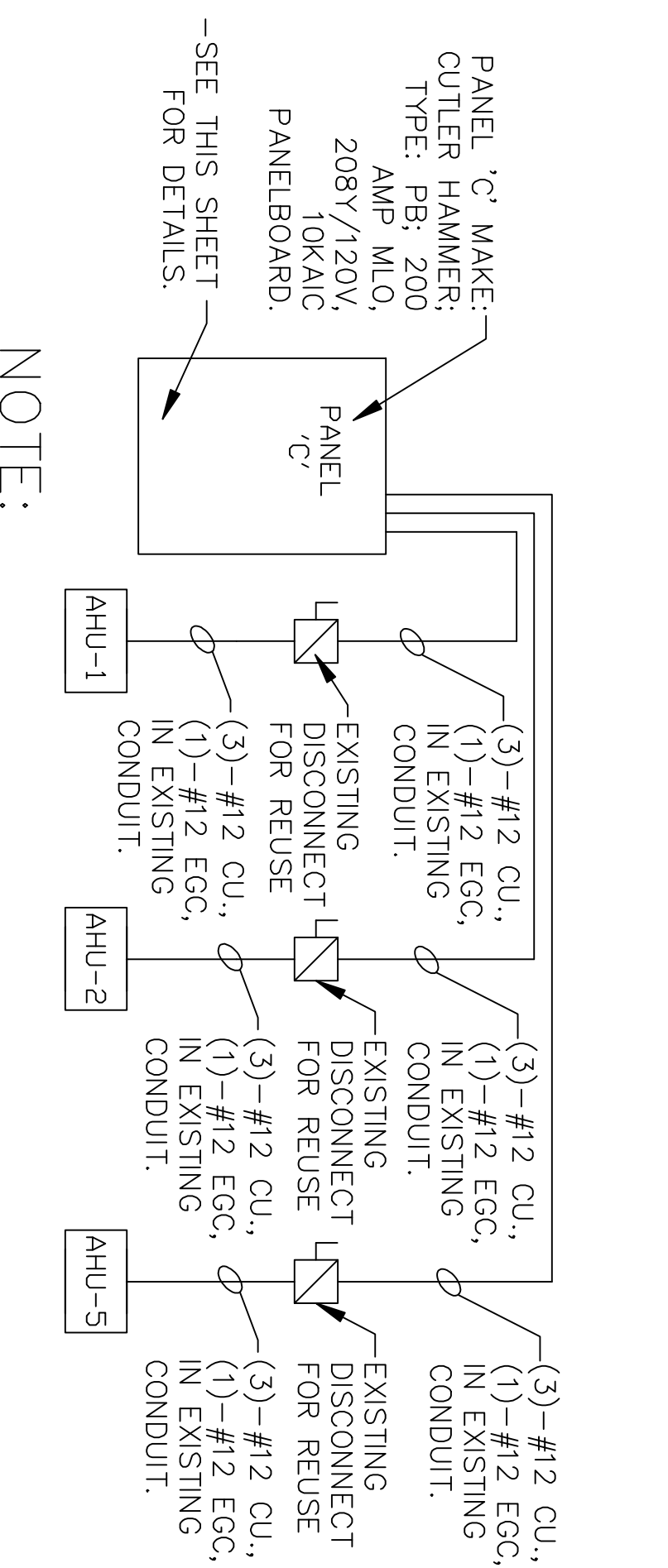
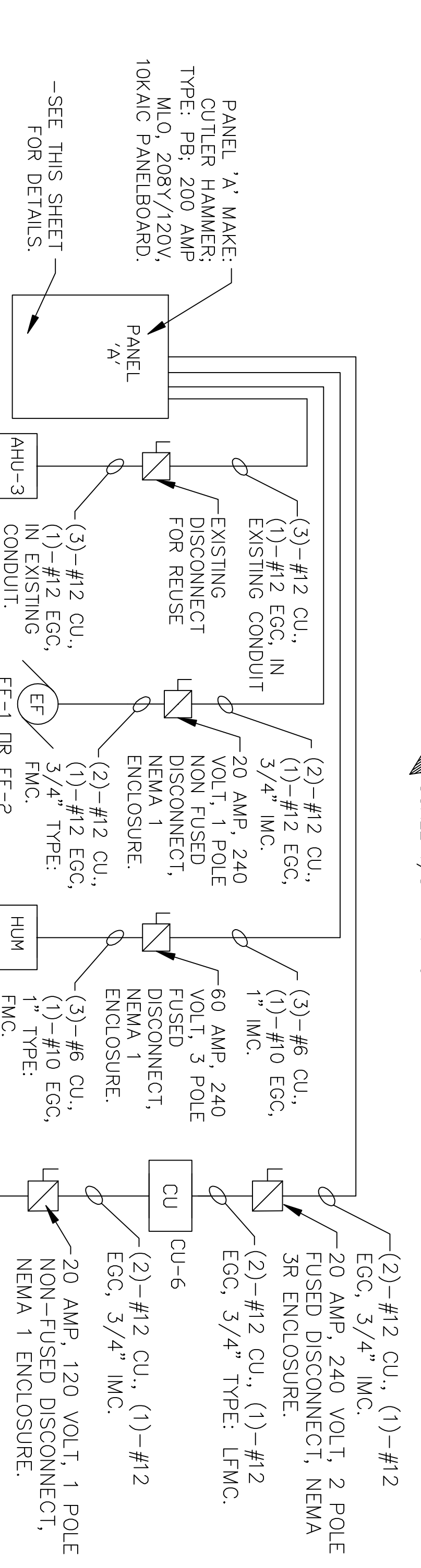
-SEE SHEET E-3 FOR MECHANICAL ROOM WORK DETAILS.
 PANEL 'A1' -SEE THIS SHEET & SHEET E-3 FOR DETAILS.
 PROVIDE CONDUIT & CONDUCTORS TO FEED NEW PANEL 'A1' FROM PANEL 'A' COMPLETE. -SEE THIS SHEET & SHEET E-3 FOR DETAILS.

PANEL 'A' -SEE THIS SHEET & SHEET E-3 FOR DETAILS.

PROVIDE EXHAUST FAN, DISCONNECT, CONDUIT & CONDUCTORS COMPLETE. CONTRACTOR SHALL CONNECT TO EXISTING 20 AMP CIRCUIT BREAKER IN PANEL 'A, OKT 30. -SEE THIS SHEET & MECHANICAL SHEETS FOR DETAILS. (TYP. FOR EF-1 & EF-2)



ELECTRICAL PLAN: NEW
 SCALE 1/8" = 1'-0"

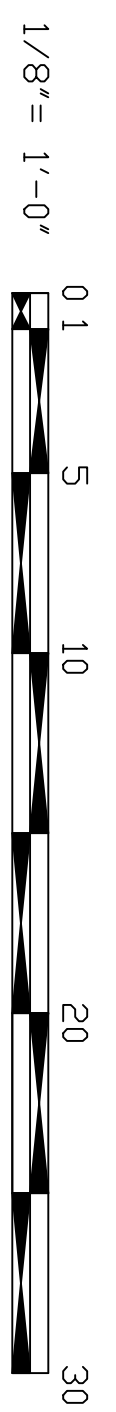


NOTE:
 FUSE DISCONNECTS PER MECHANICAL EQUIPMENT MANUFACTURERS REQUIREMENTS. (TYP. FOR ALL MECH. EQUIPMENT)

NOTE:
 FUSE DISCONNECTS PER MECHANICAL EQUIPMENT MANUFACTURERS REQUIREMENTS. (TYP. FOR ALL MECH. EQUIPMENT)

PARTIAL POWER RISER DIAGRAM: PANEL 'A'
 ND SCALE

PARTIAL POWER RISER DIAGRAM: PANEL 'C'
 ND SCALE



ELECTRICAL NOTES

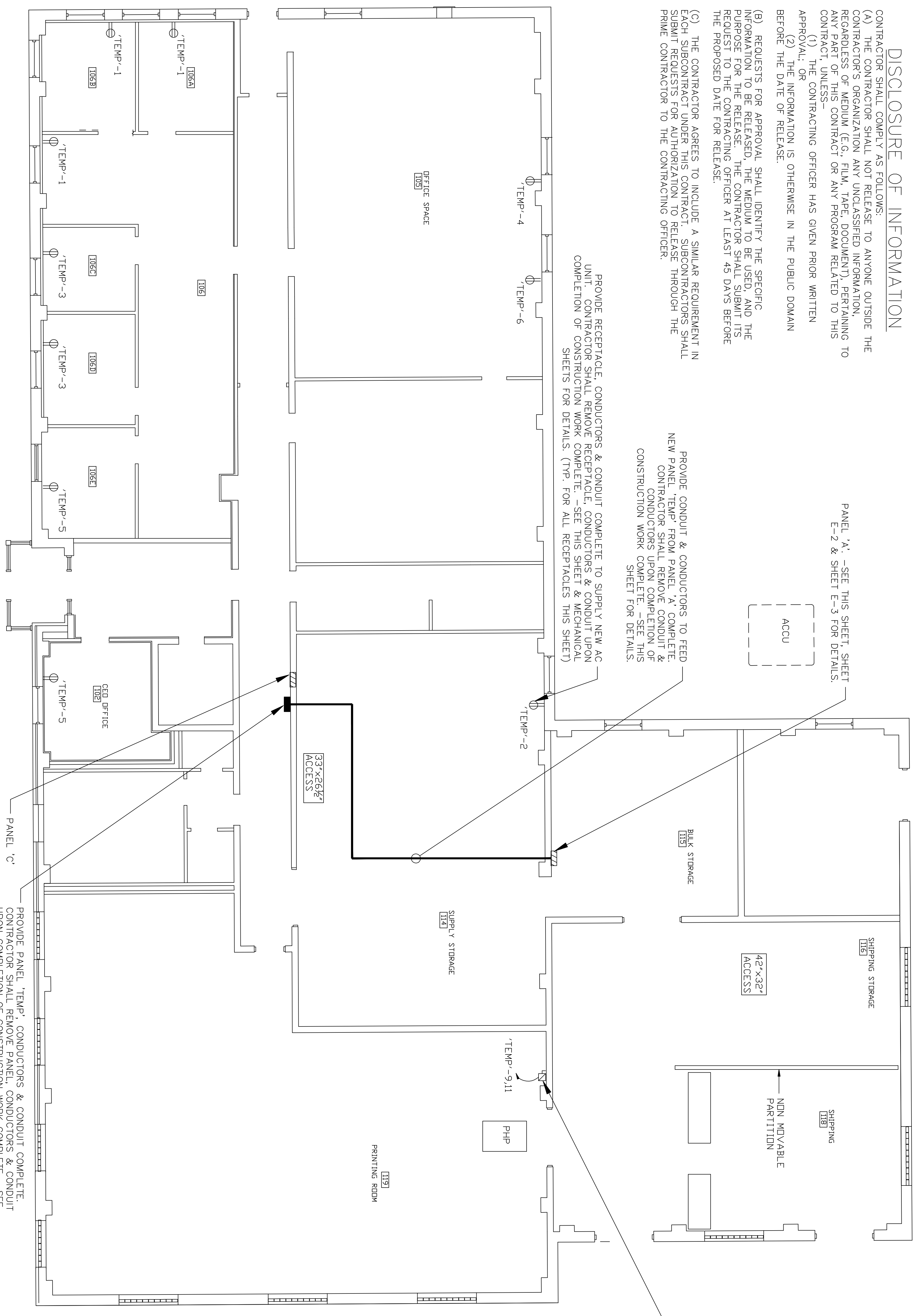
1. ALL WORK & MATERIALS, UNLESS NOTED OTHERWISE AS EXISTING, ARE NEW & SHALL BE PROVIDED BY THE CONTRACTOR. ELECTRICAL INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF NFPA 70, & REQUIREMENTS SPECIFIED HEREIN. WORK PLACE SHALL MEET REQUIREMENTS OF NFPA 70E.
2. EXISTING EQUIPMENT IS TO REMAIN UNLESS NOTED OTHERWISE.
3. ALL EXISTING MATERIAL & EXISTING EQUIPMENT THAT IS INDICATED TO BE REMOVED, & NOT REUSED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR & SHALL BE REMOVED FROM GOVERNMENT PROPERTY.
4. ELECTRICAL PLANS ARE PARTIALLY DIAGRAMATIC. REFER TO ARCHITECTURAL & MECHANICAL DRAWINGS FOR GUIDANCE ON DIMENSIONS, CEILING HEIGHTS, ROOM FINISHES, & ARCHITECTURAL DETAILS. LOCATION OF DUCTS, PIPES, AND STRUCTURAL SUPPORTS & BUILDING ORIENTATION. INSTALL ELECTRICAL SYSTEMS WITHOUT INTERFERING WITH EXISTING DUCTS, PIPES, STRUCTURES, OR OTHER SYSTEMS.
5. WHERE CONDUIT & WIRING HAS NOT BEEN SHOWN ON DRAWINGS, THE ARRANGEMENT & ROUTING OF THE BRANCH CIRCUITS WILL BE AT CONTRACTOR'S DISCRETION IN ACCORDANCE WITH GENERALLY ACCEPTED GOOD PRACTICE FOR COMMERCIAL WORK & N.E.C. CODE REQUIREMENTS.
6. ALL REMAINING EXISTING CONDUIT NOT REUSED SHALL BE REMOVED BY CONTRACTOR.
7. PROVIDE ADDITIONAL SUPPORTS FOR SWITCHES, RACEWAYS, & OTHER ELECTRICAL EQUIPMENT WHEREVER THE BUILDING STRUCTURE IS NOT SUITABLE FOR DIRECT MOUNTING. PROVIDE MINIMUM 1/4 INCH AIR SPACE BETWEEN CONCRETE/MASONRY SURFACE & ELECTRICAL DEVICES & OUTLETS. VERIFY ALL EQUIPMENT CHARACTERISTIC & MOUNTING REQUIREMENTS PRIOR TO ROUGH-IN.
8. VERIFY ALL EQUIPMENT CHARACTERISTICS & MOUNTING REQUIREMENTS PRIOR TO ROUGH-IN. PROVIDE PROPER MOUNTING ACCESSORIES, TRIMS, ETC., TO SUIT THE FLOOR, WALL & CEILING SYSTEMS.
9. ON ELECTRICAL PLANS, A NUMERAL BESIDE A BRANCH CIRCUIT OUTLET HOMERUN SYMBOL INDICATES LETTER BESIDE AN OUTLET INDICATES THE SWITCH LEG CONNECTION.
10. CUT EXISTING SURFACES AS REQUIRED TO INSTALL CONDUIT, RACEWAYS & OTHER ELECTRICAL WORK. REPAIR ALL DAMAGE CAUSED BY WORK CUTTING SHALL BE DONE BY SAWING ALONG STRAIGHT LINES. THE AMOUNT OF CUTTING SHALL BE THE MINIMUM NECESSARY TO ACCOMMODATE THE NEW WORK. NO FLAME CUTTING SHALL BE PERMITTED WITHOUT THE WRITTEN PERMISSION OF THE CONTRACTING OFFICER. HOLES SHALL BE ROTARY DRILLED & THE SIZE SHALL BE THE MINIMUM NECESSARY TO ACCOMMODATE THE WORK.
11. CHECK THE NAMEPLATE BRANCH-CIRCUIT SELECTION CURRENT OF EACH MOTOR DRIVEN UNIT DELIVERED TO THE SITE & PROVIDE PROPERLY SIZED OVERCURRENT / SHORT-CIRCUIT PROTECTION IN EACH RELATED PROTECTIVE DEVICE.
12. PANELBOARDS SHALL BE EQUIPPED WITH THERMAL MAGNETIC TYPE BOLT-IN BRANCH BREAKERS. PROVIDE NEW PANELBOARD DIRECTORIES IN EXISTING PANELBOARDS. ASCRIBATE NEW & EXISTING LOAD SERVED BY EACH NEW & EXISTING CIRCUIT OF PANELBOARDS.
13. ALL CONDUCTORS SHALL BE COPPER. PROVIDE INSULATED CONDUCTORS WITH EQUIPMENT GROUNDING (E.G.) CONDUCTOR IN CONDUIT & RACEWAYS. WIRE & CONDUIT SIZES AS INDICATED. COLOR CODING OF 208Y/120 VOLT SYSTEM UNGROUNDED CONDUCTORS: PHASE A - BLACK; PHASE B - RED; PHASE C - BLUE; NEUTRAL - WHITE. INSULATION SHALL BE 600-VOLT, TYPE THW/THHN/THHN EXCEPT TYPE TW FOR GROUNDING CONDUCTOR.
14. PROVIDE INSULATED CONDUCTORS INSTALLED IN RIGID STEEL OR INTERMEDIATE METAL CONDUIT, OR ELECTRICAL METAL TUBING (EMT) EXCEPT PROVIDE FLEXIBLE METAL CONDUIT OR LIQUIDTIGHT FLEXIBLE METAL CONDUIT BETWEEN 3 & 6 FEET IN LENGTH FOR RECESSED & SEMI-RECESSED LIGHTING FIXTURES & FOR EQUIPMENT & MOTORS SUBJECT TO VIBRATION OR MOVEMENT. PROVIDE SEPARATE EQUIPMENT GROUNDING CONDUCTOR ACROSS FLEXIBLE CONNECTIONS. RESTRICTIONS APPLICABLE TO EMT - DO NOT EXPOSE UNLESS A MINIMUM OF 10-FEET ABOVE FLOOR. DO NOT INSTALL UNDERGROUND. DO NOT ENCASE IN CONCRETE OR OTHER CEMENTITIOUS MATERIALS. DO NOT USE IN AREAS SUBJECT TO SEVERE PHYSICAL DAMAGE. USE OUTDOORS.
15. SEAL ALL CONDUIT & RACEWAY PENETRATIONS. PROVIDE CONDUIT BODIES WITH NON-HARDENING CAULKING COMPOUND & SEAL CONDUITS THAT ENTER CONDITIONED AREAS FROM NON-CONDITIONED AREAS.
16. PROVIDE GROUNDING BUSHINGS, WEDGES & JUMPERS AS REQUIRED TO BOND ELECTRICAL SYSTEMS.
17. VERIFY & DE-ENERGIZE CIRCUITS PRIOR TO BEGINNING WORK. WIRING AND CONDUIT MAY VARY FROM THAT SHOWN.
18. EXISTING WIRING TO BE REMOVED SHALL BE DISCONNECTED FROM ITS SOURCE & REMOVED. REMOVE INSULATED ELECTRICAL OUTLETS. PROVIDE BRANCH CIRCUIT BREAKERS FOR ALL ABANDONED AND DISCONNECTED CIRCUITS. REMOVE EXISTING WIRING/CONDUIT/RECESSED LIGHTING FIXTURES FOR CLARITY. WIRING & CONDUIT TO BE REMOVED SHALL BE IDENTIFIED BY RED STRIPE AT DRAWINGS FOR CONSTRUCTION & EQUIPMENT TO BE REMOVED. REMOVE ASSOCIATED WIRING & DISTRIBUTION EQUIPMENT.
19. CONNECT BRANCH CIRCUIT NEUTRAL TO RECEPTACLE TERMINAL BY MEANS OF A SHORT "Pigtail" PERMANENTLY SPLICED TO THE NEUTRAL.
20. FOR CLARITY, WIRING & CONDUITS ARE NOT SHOWN.
21. ONLY EXISTING ELECTRICAL SYSTEM AFFECTING THIS CONTRACT IS SHOWN.
22. PROVIDE UNGROUNDED, NEUTRAL (GROUNDED) & EQUIPMENT GROUNDING (EGG) CONDUCTORS FOR EACH BRANCH CIRCUIT. IDENTIFY OTHER NEUTRAL WITH COLORED STRIPE WHENEVER MORE THAN ONE NEUTRAL IS IN SAME RACEWAY.
23. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING CONDITIONS.
24. WHERE POWER OUTTAKE IS NECESSARY FOR COMPLETING CONTRACTED WORK, CONTRACTOR SHALL COORDINATE SUCH REQUEST WITH THE ARJCC. POWER OUTTAGS SHALL BE MINIMAL AND PREARRANGED WITH ARJCC & TENANT.

MECHANICAL REPAIRS,
 BLDG 80
 ELECTRICAL PLAN: NEW, ELECTRICAL NOTES & DETAILS

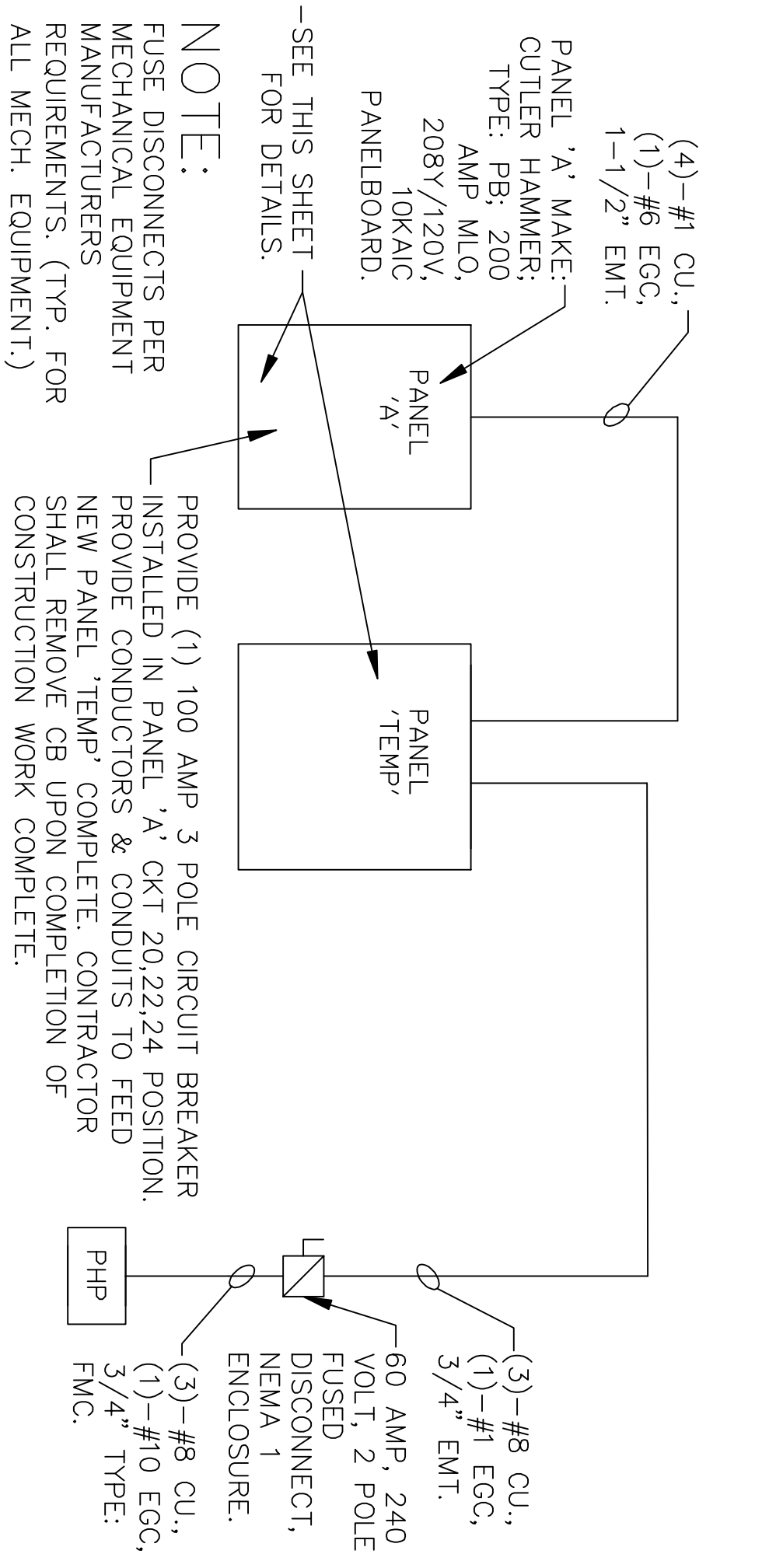
DES. W. JONES	DR. W. JONES	CHK. E. TAYLOR	SUBMITTED BY: W. GUENING	DESIGN DIR. B.R. MARSHBURN, PE	DATE: 6-26-12	DATE: 6-26-12	DATE: 6-26-12
MARINE CORPS BASE				NAVFAC DRAWING NO. 60010591			
CAMP LEIDING, NORTH CAROLINA				CONSTR. CONTR. NO. N40805-11-3-010			
SATISFACTORY TO:				SCALE: NOTED SPEC.			
				SHEET 11 OF 13			

DISCLOSURE OF INFORMATION

- CONTRACTOR SHALL COMPLY AS FOLLOWS:
- (A) THE CONTRACTOR SHALL NOT RELEASE TO ANYONE OUTSIDE THE CONTRACTOR'S ORGANIZATION ANY UNCLASSIFIED INFORMATION, RECORDS OF ANY MEDIUM (E.G., FILM, TAPE, DOCUMENT), PERTAINING TO THIS CONTRACT UNLESS:
 - (1) THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL; OR
 - (2) THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.
 - (B) REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT ITS REQUEST TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.
 - (C) THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.



TEMPORARY COOLING PLAN: ELECTRICAL
SCALE 1/8" = 1'-0"

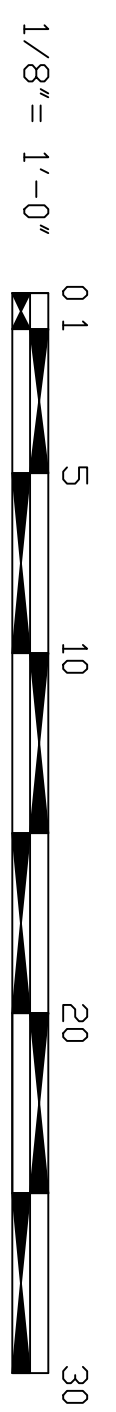


PARTIAL POWER RISER DIAGRAM: PANEL 'TEMP'
SCALE

PANEL BOARD 'TEMP' SCHEDULE									
LOAD SERVED	WIRE SIZE	TRIP	CKT	POLE	NO.	AMP/PHASE	WIRE SIZE	LOAD SERVED	
REC	#12	NO.	A	B	C	NO.	POLE	WIRE SIZE	LOAD SERVED
REC 106/A&B	#12	20/1	1	11/9	14/4	2	15/1	#12	REC 114
REC 106/B&D	#12	20/1	3	14/1	9/6	4	20/1	#12	REC 105
REC 106/G&F	#12	20/1	5	14/1	9/6	6	20/1	#12	REC 105
AC RM 119	#8	40/2	7		32	8			SPACE
SPACE			9			10			SPACE
SPACE			11			32			SPACE
SPACE			13			14			SPACE
SPACE			15			16			SPACE
SPACE			17			18			SPACE

208Y/120V, 100 AMP M.O., 10KALC, 3ø, 4W, SURFACE MOUNTED, NEMA 1 LOCKABLE
NEW PANEL 'TEMP'

GRAPHIC SCALE



REV	DATE	APPROVED

E-4

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND

MARINE CORPS BASE
CAMB. LEISURE, NORTH CAROLINA

MECHANICAL REPAIRS,
BLDG 80

TEMPORARY COOLING ELECTRICAL PLAN & DETAILS

DES. W. JONES
CHK. E. TAYLOR
SUBMITTED BY: M. BUENING
DESIGN DIR: B.R. MARSHBURN, PE
APPROVED: P.W. OR DICC
DATE: 6-26-12
DATE: F
NAVFAC DRAWING NO. 600105593
CONSTR. CONTR. NO. N42005-11-3-010
SCALE: NOTED
SHEET 13 OF 13