



A PROJECT FOR:



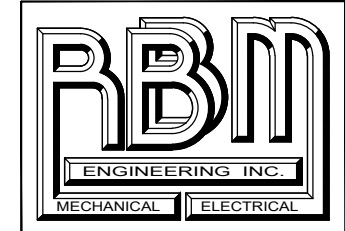
NEW MEXICO STATE UNIVERSITY

DONA ANA COMMUNITY COLLEGE

5160 DACC HEALTH BUILDING-UPGRADE

COMPRESSED AIR AND VACUUM SYSTEMS

LAS CRUCES, NEW MEXICO



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PRELIMINARY
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November 27, 2024

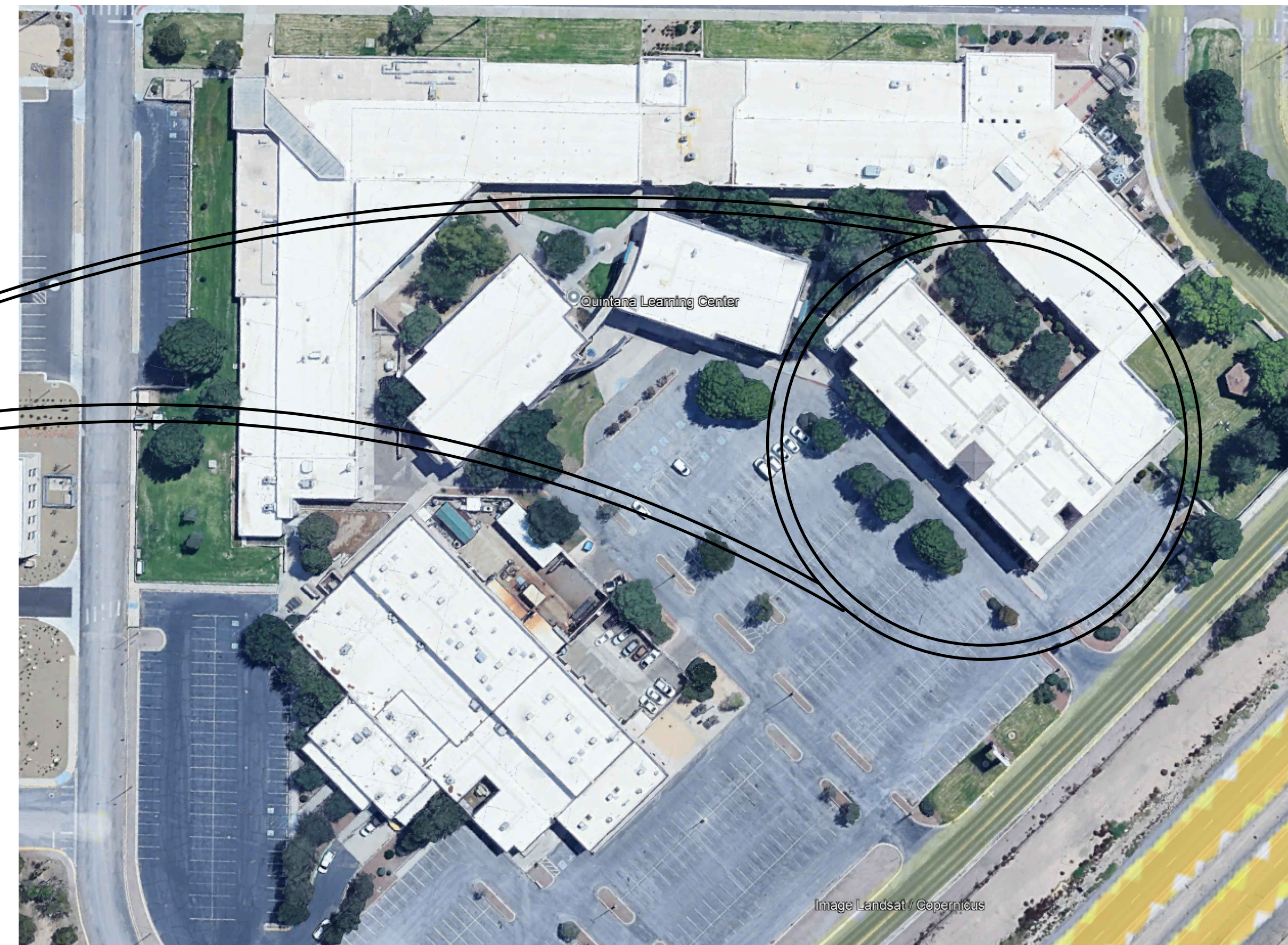
PROJECT NO: 24086
 DESIGN BY: RBM
 DRAWN BY: CAD
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MARK	DATE	DESCRIPTION

PROJECT NAME
 5160 DACC HEALTH BUILDING
 UPGRADE COMPRESSED AIR &
 VACUUM SYSTEMS
 DONA ANA, NEW MEXICO

SHEET TITLE
 COVER SHEET

SHEET NO.



PROJECT LOCATION
 NMSU 5160
 5160 DACC HEALTH BUILDING
 SOUTH ESPINA STREET
 LAS CRUCES, NEW MEXICO



INDEX OF DRAWINGS:

- COVER SHEET
- M0.1 - HVAC GENERAL NOTES, LEGEND AND SCHEDULES
- M0.2 - HVAC SCHEMATICS, DETAILS AND SCHEDULES
- M1.0 - HVAC NEW WORK PLAN - 1ST FLOOR
- M1.1 - HVAC NEW WORK PLAN - 2ND FLOOR
- P1.0 - PLUMBING DEMOLITION & NEW WORK PLAN - 1ST FLOOR
- E0.1 - ELECTRICAL GENERAL NOTES, LEGEND AND 2ND FLOOR POWER PLAN
- E1.0 - POWER DEMOLITION AND NEW WORK PLAN - 1ST FLOOR

REVIEW SET

DATE: 11-27-24

MECHANICAL SYMBOL LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
O.P.C.I.	OWNER PROVIDED, CONTRACTOR INSTALLED		RETURN OR EXHAUST DUCT UP.
	HVAC EQUIPMENT		SUPPLY DUCT DOWN.
	ROOF MOUNTED EXHAUST FAN.		RETURN OR EXHAUST DUCT DOWN.
	CEILING MOUNT EXHAUST FAN.		SIDEWALL SUPPLY AIR OUTLET
	VOLUME DAMPER.		SIDEWALL RETURN OR EXHAUST AIR OUTLET
	FIRE DAMPER.		CEILING DIFFUSER WITH FLEXIBLE DUCT
	THERMOSTAT.		CEILING RETURN OR EXHAUST GRILLE.
	CONTROL SWITCH.		LONG RADIUS ELBOW WITH VANES.
	FLEXIBLE DUCTWORK.		NEW TO EXISTING CONNECTION
	RIGID DUCTWORK.		KEYED NOTES
	DUCT TRANSITION.		EQUIPMENT DESIGNATION
	SUPPLY AIR DUCT UP.	ExACU	EXISTING EQUIPMENT
G	NEW GAS LINE	ExVTR	EXISTING VENT-THRU-ROOF
ExG	EXISTING GAS LINE		TO BE DEMOLISHED
CD	NEW CONDENSATE DRAIN LINE		TO BE ABANDONED
V	NEW VACUUM LINE		PIPE ELBOW DOWN
ExV	EXISTING VACUUM LINE		PIPE TEE
O	NEW OXYGEN LINE		EQUIPMENT GAS REGULATOR
ExO	EXISTING OXYGEN LINE		GAS UNION
A	NEW AIR LINE		
ExA	EXISTING AIR LINE		

DOCUMENT GENERAL NOTES:

- DRAWINGS ARE DIAGRAMMATIC. THEY ARE TO BE USED AS A GENERAL GUIDE AND ARE NOT INTENDED TO BE SPECIFIC INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL CONSTRUCT ACCORDING TO CODE AND/OR MANUFACTURERS INSTALLATION INSTRUCTIONS.
- DRAWINGS ARE BASED UPON ORIGINAL BUILDING PLANS AND/OR FIELD OBSERVATIONS. CONTRACTOR MUST FIELD VERIFY EXACT LOCATIONS AND ROUTING OF: SEWER, GAS, AND WATER LINES.
- CONTRACTOR SHALL EXPECT TO MAKE SOME ROUTING ADJUSTMENTS DURING THE COURSE OF CONSTRUCTION. COORDINATE CHANGES WITH ARCHITECT AND KEEP RECORD OF CHANGES FOR FUTURE USE.

GENERAL NOTES:

- IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE ITEMS ON THESE PLANS WITH ANY/ALL SUB-CONTRACTORS. ITEMS LISTED ON PLANS SHALL BE PROVIDED & INSTALLED BY GENERAL CONTRACTOR AND/OR SUBCONTRACTOR. ITEMS LISTED AS "BY OTHERS" DOES NOT MEAN BY OWNER.
- CONTRACTOR FAILURE TO NOT FOLLOW ALL LISTED NOTES AND/OR MEET THE REQUIREMENTS OF CODE REQUIREMENTS AND/OR MANUFACTURERS INSTALLATION GUIDELINES CAN AND MAY RESULT IN ADDITIONAL FEES/SURCHARGES TO THE CONTRACTOR(S) BY/TO OWNER-ARCHITECT-ENGINEER. IF CONTRACTOR(S) HAVE ANY QUESTIONS AND/OR VALUE ENGINEERING ITEMS THAT WOULD LIKE TO BE INCORPORATED INTO PLANS, SUCH ITEMS SHALL BE FORWARDED TO ARCHITECT FOR REVIEW AND ARE REQUIRED TO BE ISSUED PRIOR TO ANY BIDDING OR PRICE-QUOTE DEADLINES. ANY DISCREPANCIES AFTER AWARD/DURING CONSTRUCTION WILL RESULT THAT THE CONTRACTOR FOLLOW THE MORE STRINGENT INSTALLATION METHOD AND/OR MATERIAL TYPES AND SIZES, ETC., ETC.

MECHANICAL GENERAL NOTES:

- COMPLY WITH ALL LOCAL, COUNTY, STATE AND FEDERAL CODES, ORDINANCE, RULES AND REGULATIONS.
- ALL MECHANICAL WORK MUST BE COORDINATED WITH ARCHITECT, STRUCTURAL, AND ELECTRICAL PRIOR TO INSTALLATION.
- ALL BRANCH DUCTS SHALL BE FITTED WITH BALANCING DAMPERS.
- ALL DUCT ELBOWS TO BE PROVIDED WITH RADIUS FITTINGS UNLESS SHOWN. WHERE RADIUS FITTINGS WILL NOT FIT, TURNING VANES SHALL BE PROVIDED IN ALL SQUARE FITTINGS.
- TEST AND BALANCE ALL NEW EXHAUST SYSTEMS SHOWN ON PLANS PER NEBB STANDARDS.
- DUCTWORK TO BE GALVANIZED STEEL SHEETS IN ACCORDANCE WITH "ASHRAE GUIDE AND SMACNA STANDARDS."
- SEAL ALL DUCT JOINTS WITH HIGH PRESSURE DUCT SEALER OR HARD CAST.
- EXISTING DUCTWORK INSULATION TO REMAIN.
- EXISTING DUCTWORK TO BE REUSED SHALL BE CLEANED, REFER TO SPECIFICATION SECTION 233100 FOR REQUIREMENTS.
- DUCT SIZES SHOWN ARE "CLEAR INSIDE" DIMENSIONS.
- CONTRACTOR TO VERIFY LOCATION OF ALL AIR EQUIPMENT SO THAT NO INTERFERENCES ARE ENCOUNTERED WITH OTHER EQUIPMENT OR WITH THE STRUCTURAL ELEMENTS.
- MECHANICAL CONTRACTOR TO VERIFY THAT ALL DUCTWORK WILL FIT WHERE INDICATED WITHOUT INTERFERENCES.
- ALL HVAC EQUIPMENT TO BE MOUNTED LEVEL ON EQUIPMENT CURBS UNLESS OTHERWISE NOTED. GROUND MOUNTED EQUIPMENT SHALL BE PROVIDED WITH AN EQUIPMENT PAD.
- ALL EQUIPMENT SHALL BE SELECTED AND EQUIPPED FOR OPERATION AT SITE ALTITUDE. DEMONSTRATE ALTITUDE CORRECTIONS IN EQUIPMENT SUBMITTALS. (4,000 FT.)
- ILLUSTRATIONS SHOWN GENERALLY PROVIDED TO CONVEY CONCEPT AND ARE NOT INTENDED FOR AND DO NOT INCLUDE ALL DETAILS FOR ANY SPECIFIC INSTALLATION. ALL INSTALLATIONS MUST COMPLY WITH ALL APPLICABLE CODES.
- ALL EQUIPMENT AND SUBSYSTEM SHALL BE PROVIDED WITH ISOLATION VALVES. PROVIDE UNIONS AS REQUIRED FOR REMOVAL OF MAJOR VALVES, CONTROL VALVES, AND EQUIPMENT WITHOUT CUTTING PIPE.
- VERIFY ACCESS REQUIREMENTS OF ALL EQUIPMENT PRIOR TO FABRICATING DUCTWORK OR PIPING. ANY ITEM INTERFERING WITH UNIT ACCESSED SHALL BE MOVED AT THE CONTRACTORS EXPENSES.
- NEW DUCTWORK SHOWN SHALL BE SUPPORTED WITH APPROVED HANGERS AT INTERVALS NOT EXCEEDING 10 FEET IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. FLEXIBLE AND OTHER FACTORY MADE DUCTS SHALL BE SUPPORTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- NEW AND/OR EXISTING EQUIPMENT INDICATED ON THIS DRAWING IS SHOWN IN APPROXIMATE POSITION(S). CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS INCLUDING EQUIPMENT LOCATIONS, P.O.C.'S AND STRUCTURAL MEMBERS PRIOR TO INSTALLATION. IN ALL CASES, ADEQUATE ACCESS (PER MANUFACTURER'S RECOMMENDATIONS AND CODE COMPLIANCE) FOR MAINTENANCE AND REPLACEMENT OF EQUIPMENT SHALL BE PROVIDED.
- ALL DISSIMILAR METALLIC PIPING AND ACCESSORIES SHALL BE SEPARATED WITH DIELECTRIC FITTINGS AND 10 MIL POLY TAPE.
- CONTRACTOR SHALL PROVIDE ACCESS DOORS (MIN. 18"x18") FOR ALL CONTROLS, MAINTENANCE ITEMS, AND VALVES BEHIND RIGID WALL OR CEILING MATERIALS. CONTRACTOR TO COORDINATE WITH ARCHITECT PRIOR TO PLACEMENT/INSTALLATION - ACCESS DOORS TO BE INSTALLED IN INCONSPICUOUS AREAS WHENEVER POSSIBLE.
- ALL PIPING SHALL BE SUPPORTED APPROPRIATELY IN WALLS, CEILING, AND BELOW FLOORS. SEE SPECIFICATIONS AND/OR SCHEMATICS FOR DETAILS.
- ALL WORK SHALL BE IN ACCORDANCE WITH:
 - INTERNATIONAL BUILDING CODE (IBC 2015)
 - NM PLUMBING CODE WITH UNIFORM PLUMBING CODE (UPC 2021)
 - NM MECHANICAL CODE WITH UNIFORM MECHANICAL CODE (UMC 2021)
 - INTERNATIONAL ENERGY CONSERVATION CODE (IECC 2018)
 - INTERNATIONAL FUEL GAS CODE (IFGC 2009)
 - AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI 2003)
 - NFPA 101 LIFE SAFETY CODE (2000)

AIR COMPRESSOR SCHEDULE									
MARK	MANUFACTURER MODEL NO.	CFM	DELIVERY PRESSURE	UNIT WEIGHT LBS.	MOTOR				REMARKS
					HP	VOLTS	PHASE	AMPS	
AC	POWEREX STS030132HP	7.1	50	455	3	208	3	9.0	SIMPLEX COMPRESSOR 30 GALLON RECEIVER HORIZONTAL. COOL 15 REFRIGERATOR DRYER 115V/1 PHASE.

VACUUM PUMP SCHEDULE									
MARK	MANUFACTURER MODEL NO.	CFM	PRESSURE	UNIT WEIGHT LBS.	MOTOR				REMARKS
					HP	VOLTS	PHASE	AMPS	
VAC	PATTON 63-12-036	17	-	450	3	208	3	9.5	SIMPLEX VAC. PUMP 60 GALLON VERTICAL RECEIVER.

PLUMBING GAS FITTING SCHEDULE			
MARK	MANUFACTURER MODEL NO.	SERVICE	REMARKS
VAC-1	T&S BRASS BL-4203-02	VACUUM	TABLE TOP VAC TURRET WITH 1 VALVE
VAC-2	T&S BRASS BL-4203-01	VACUUM	TABLE TOP VAC TURRET WITH 2 VALVES @ 1800

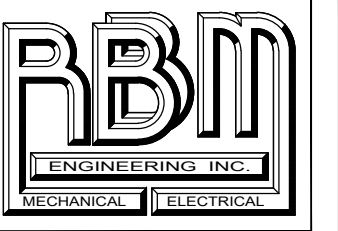
EXHAUST FAN SCHEDULE									
MARK	MANUFACTURER MODEL NO.	CFM	ESP	SONES	UNIT WEIGHT LBS.	MOTOR			REMARKS
						HP	VOLTS	PHASE	
EF-2	COOK GC-542	200	.50"	-	27	1/4	115	1	FORWARD CURVED GALVANIZED STEEL CORROSION RESISTANT GALVANIZED STEEL HOUSING. FAN SPEED CONTROLLER 5A 120V PREWIRED.

FUME HOOD FAN SCHEDULE										
MARK	MANUFACTURER MODEL NO.	TYPE	CFM	ESP	SONES	UNIT WEIGHT LBS.	MOTOR			REMARKS
							HP	VOLTS	PHASE	
EF-1	COOK 100 CPV (VF)	FUME EXHAUST	700	2.0"	--	99	3/4	208	3	UTILITY VENT SET, HORIZONTAL DISCHARGE, DIRECT DRIVE, SPEED CONTROL ON FAN, NEMA 3 DISCONNECT EPOXY COATING WEATHER COVER.

MINIMUM PIPE MATERIAL SCHEDULE			
SERVICE TYPE	LOCATION	MATERIAL REQUIRED	COMMENTS
DOMESTIC WATER FOR COLD AND HOT	ABOVE GRADE/SLAB WITHIN BUILDING	COPPER TUBING TYPE "L" HARD DRAWN	
NATURAL GAS	ABOVE GRADE AND/OR WITHIN BUILDING	BLACK STEEL SCHEDULE 40	
AIR AND VACUUM	LAB ROOMS FUME HOODS	COPPER TUBING TYPE "L" HARD DRAWN	SEE COMMENT 1

PIPE MATERIAL NOTES:

- MEDICAL GRADE FACTORY CLEANED PIPING ONLY. ALL AIR PIPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH UNIFORM PLUMBING CODE AS ADOPTED BY THE STATE OF NEW MEXICO. BRAZING TO BE COMPLETED USING CONTINUOUS NITROGEN PURGE BY A LICENSE PLUMBER. CERTIFIED VACUUM AND AIR PIPING SYSTEMS ARE NOT REQUIRED FOR THIS PROJECT.



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APPROVED BY: RBM

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PROJECT NAME
5160 DACC HEALTH BUILDING
UPGRADE COMPRESSED AIR &
VACUUM SYSTEMS
NEW MEXICO
DONA ANA.

SHEET TITLE:
MECHANICAL
GENERAL NOTES,
LEGEND, AND SCHEDULES

SHEET NO.

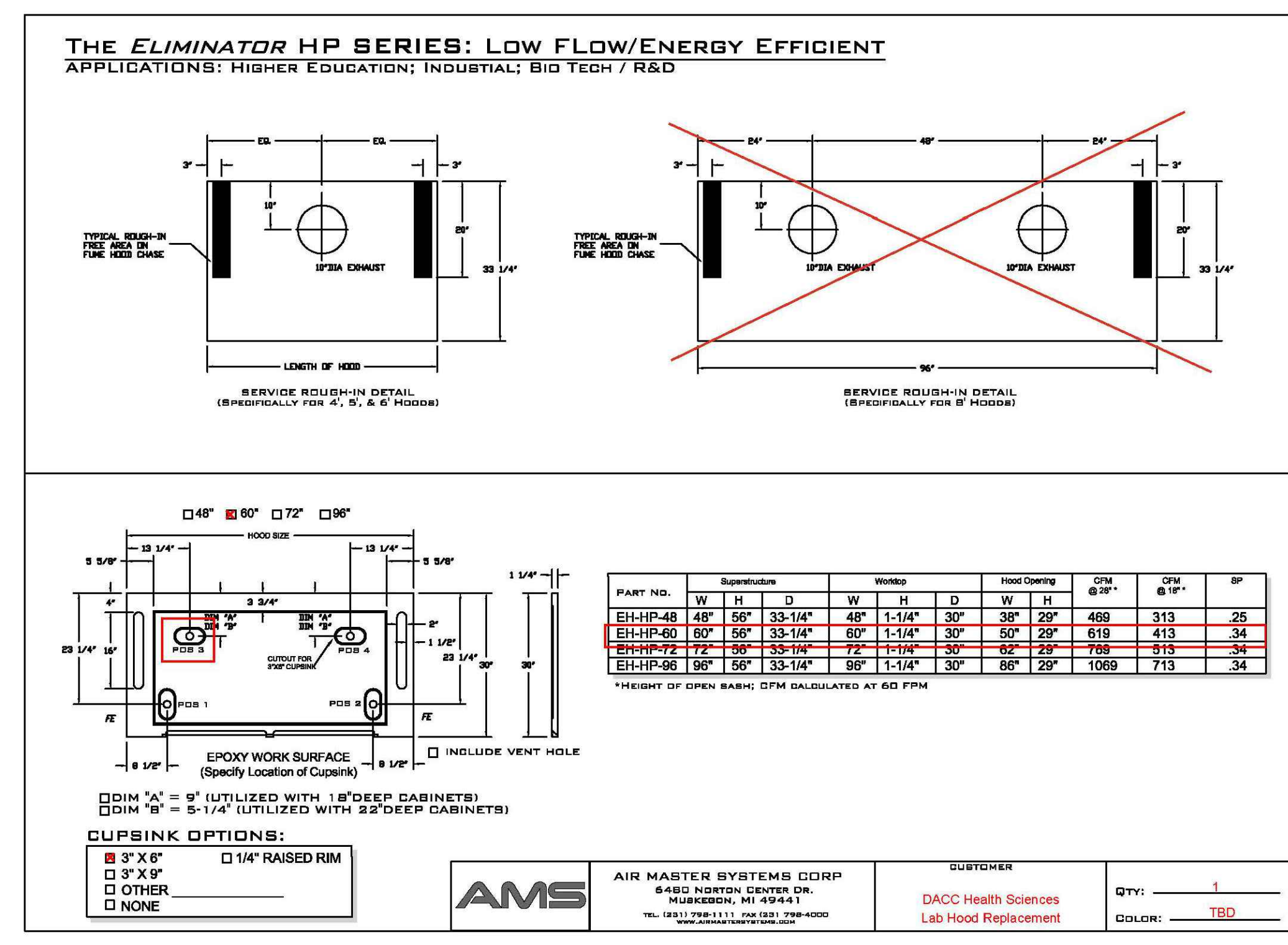
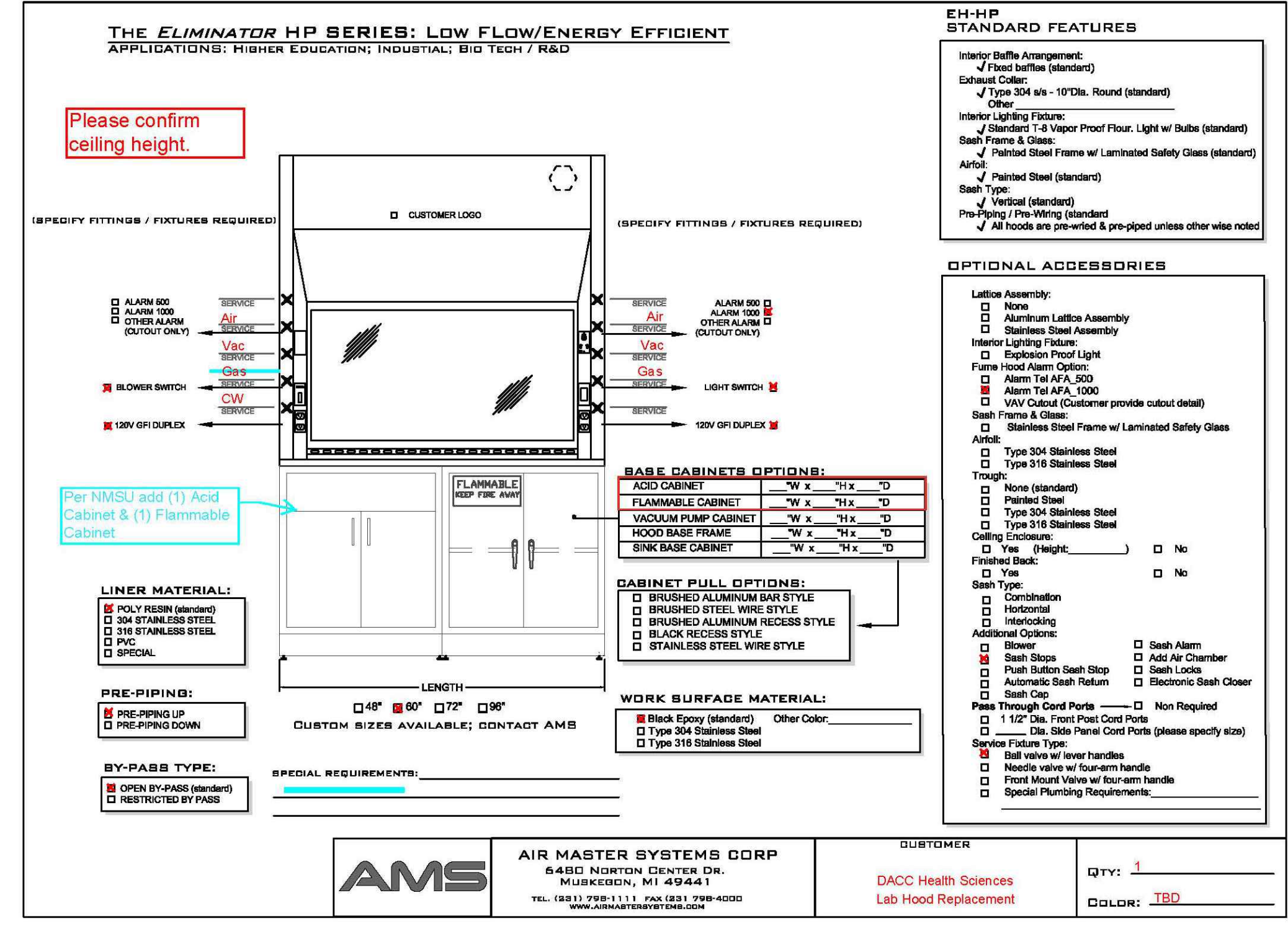
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SHEET TITLE:
MECHANICAL SCHEMATICS
DETAILS & SCHEDULES

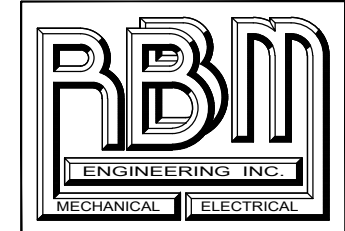
SHEET NO.
M0.2



1 **FUME HOOD SELECTION**
M0.2 N.T.S.



2 **EXISTING FUME SCHEMATIC**
M0.2 N.T.S.



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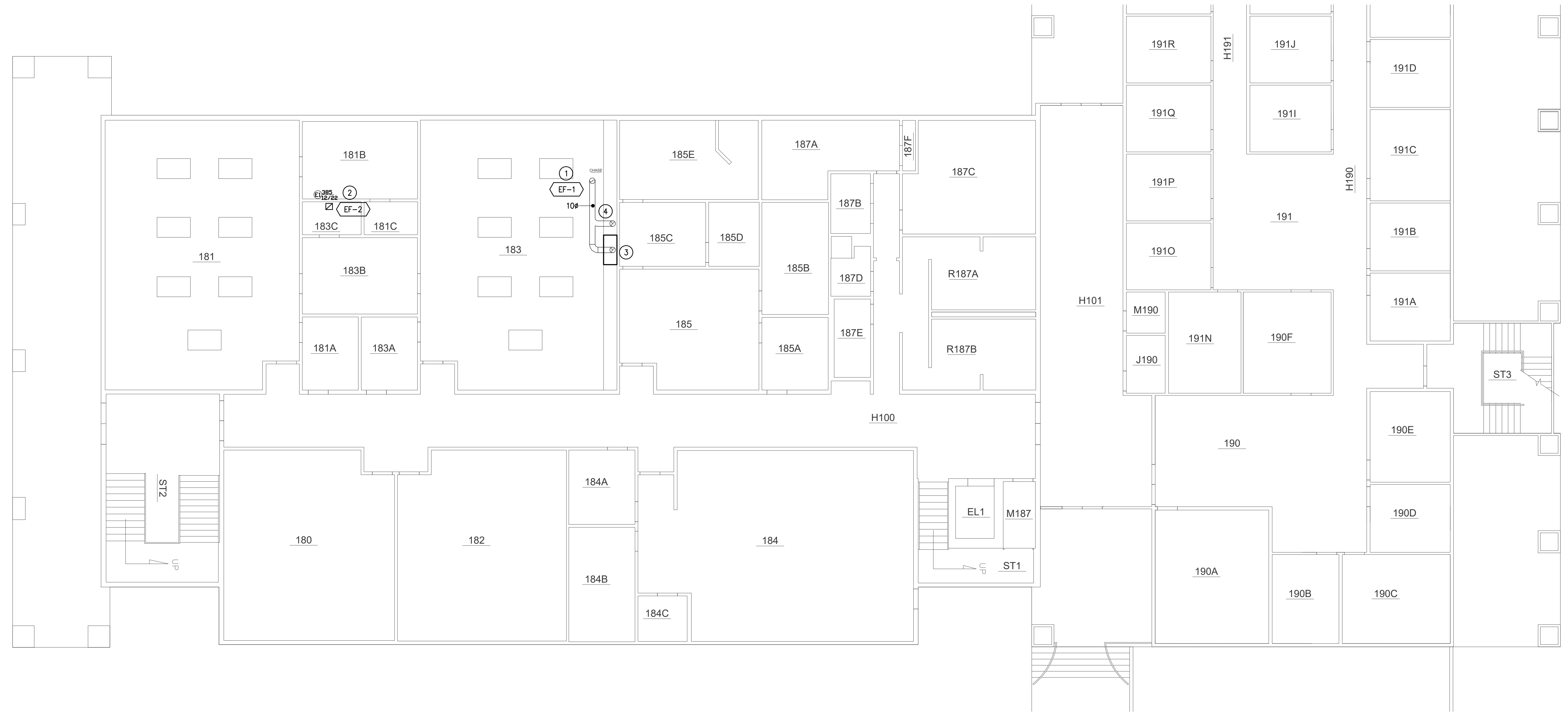
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SHEET TITLE:
 HVAC DEMOLITION PLAN -
 1ST FLOOR

SHEET NO:

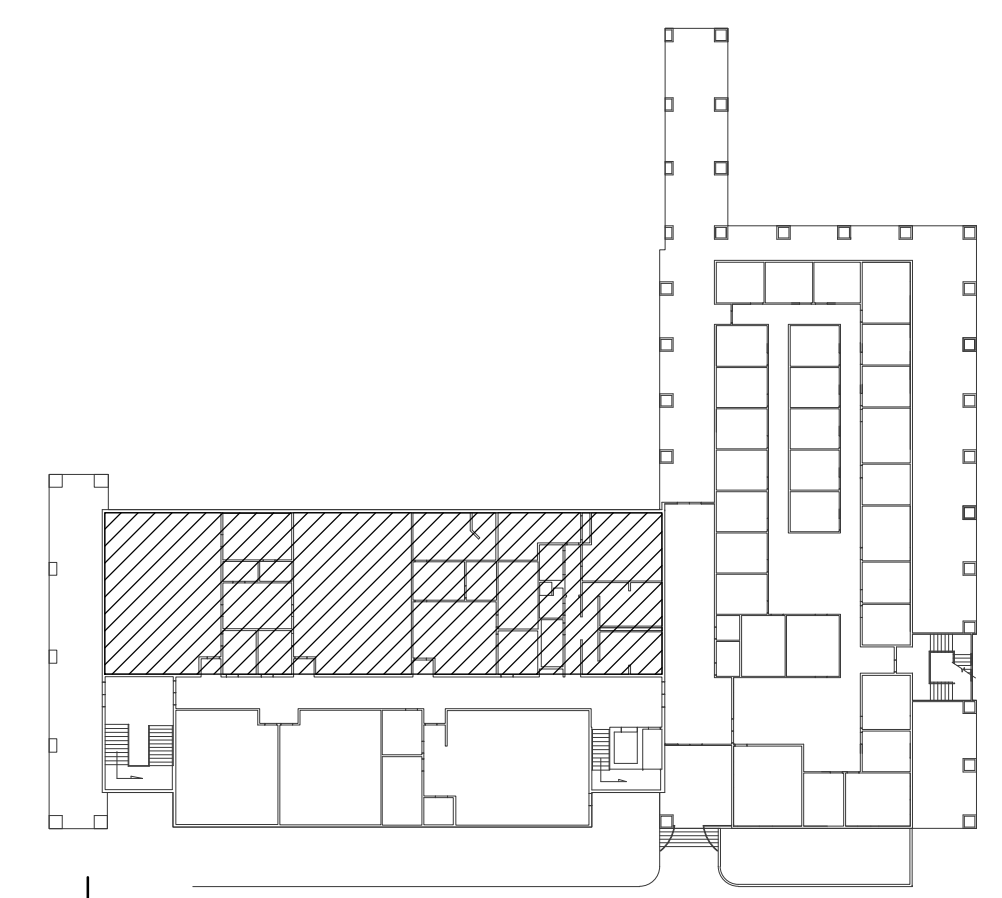
M1.0



 1
 M1.0 HVAC NEW WORK PLAN - 1ST FLOOR
 SCALE: 1/8"=1'-0"

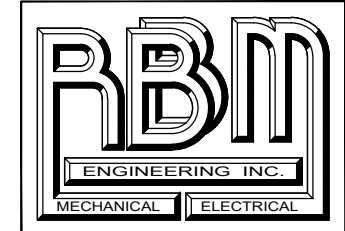
DRAWING KEYED NOTES:

- ① REPLACE EXISTING EF ON ROOF FOR FUME HOOD. INSTALL NEW FUME HOOD EF-1 AS SCHEDULED.
- ② REPLACE EXISTING EF FOR STORAGE ROOM. CONNECT NEW DUCT TO EXISTING.
- ③ REMOVE EXISTING FUME HOOD COMPLETELY.
- ④ EXISTING 10" DUCT DROP IN CEILING SPACE. REBUILD DUCTWORK TO ACCOMMODATE NEW FUME HOOD INSTALLATION.



 KEY PLAN
 N.T.S.

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SHEET TITLE
**HVAC DEMOLITION PLAN -
 2ND FLOOR**

SHEET NO:

M1.1



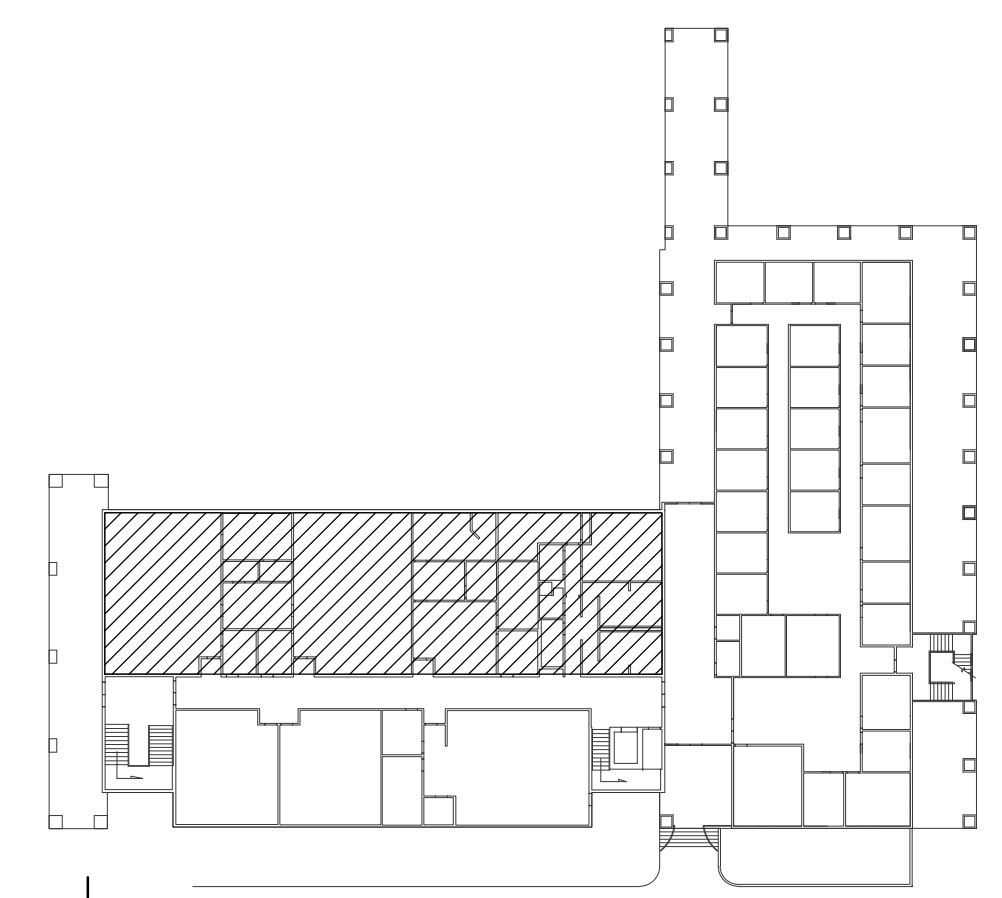
1
HVAC NEW WORK PLAN - 2ND FLOOR
 SCALE: 1/8"=1'-0"

DRAWING KEYED NOTES:

- ① REPLACE EXISTING EF ON ROOF FOR FUME HOOD. INSTALL NEW FUME HOOD EF-1 AS SCHEDULED.
- ② REMOVE EXISTING EXHAUST FAN SECTION. REBUILD DROP TO ROOF AND INSTALL NEW EXHAUST FAN ON SKID.
- ③ REBUILD RECTANGULAR TO ROUND DUCT AS REQUIRED TO ACCOMMODATE NEW EXHAUST FAN.

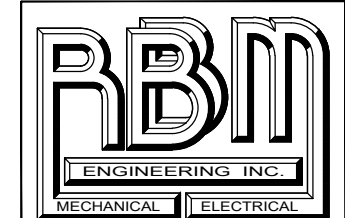


2
EXISTING FUME HOOD SCHEMATIC
 N.T.S.



KEY PLAN
 N.T.S.

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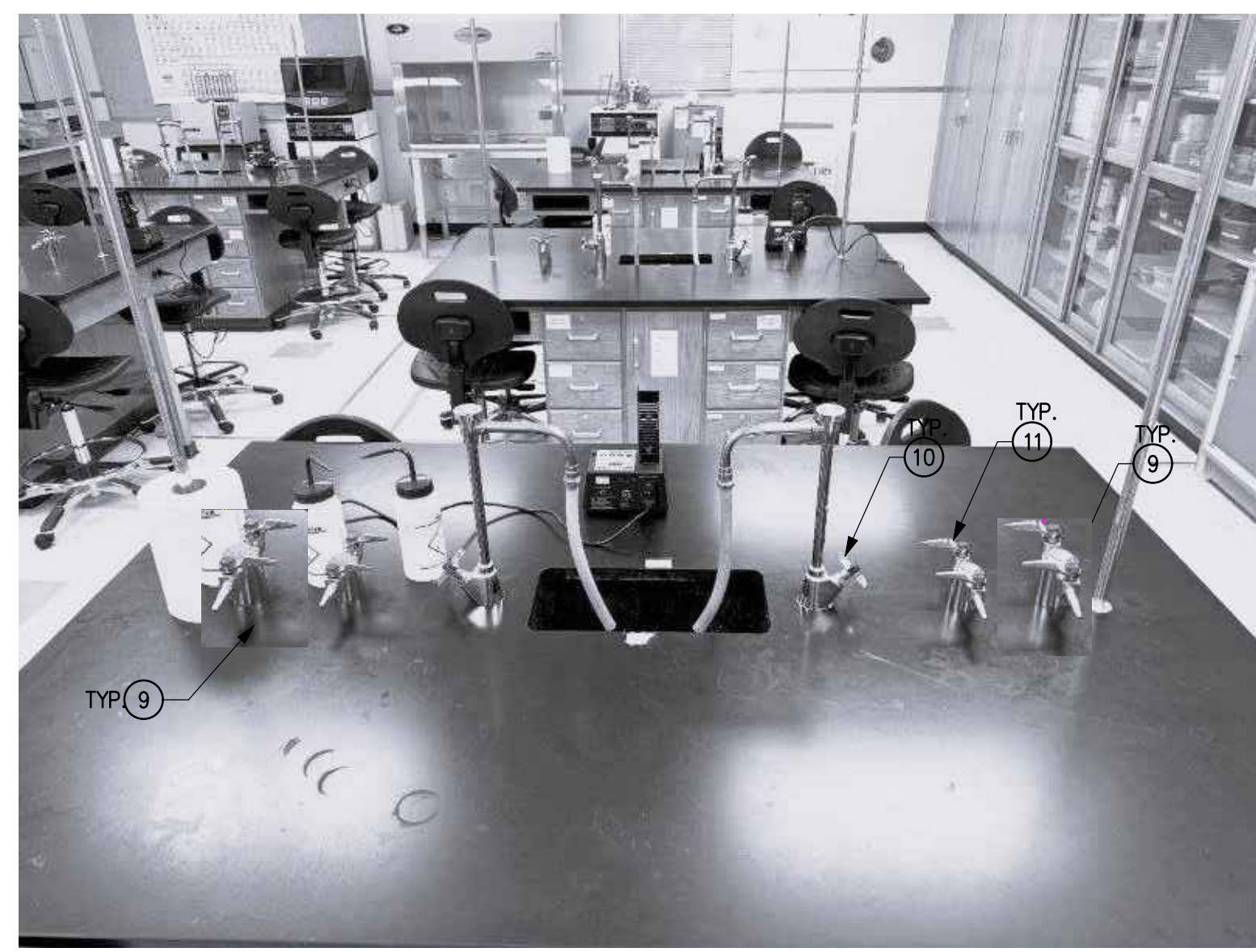
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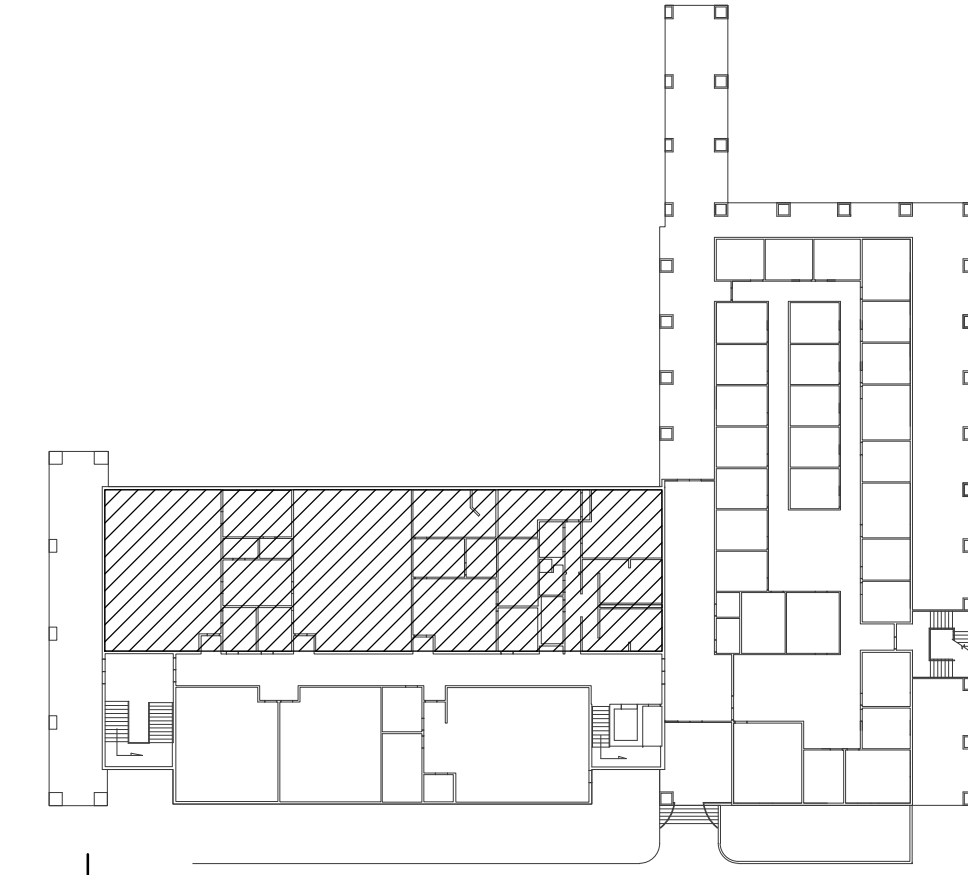
SHEET TITLE:
PLUMBING DEMOLITION &
NEW WORK PLAN
1ST FLOOR
SHEET NO:
P1.0

DRAWING KEYED NOTES:

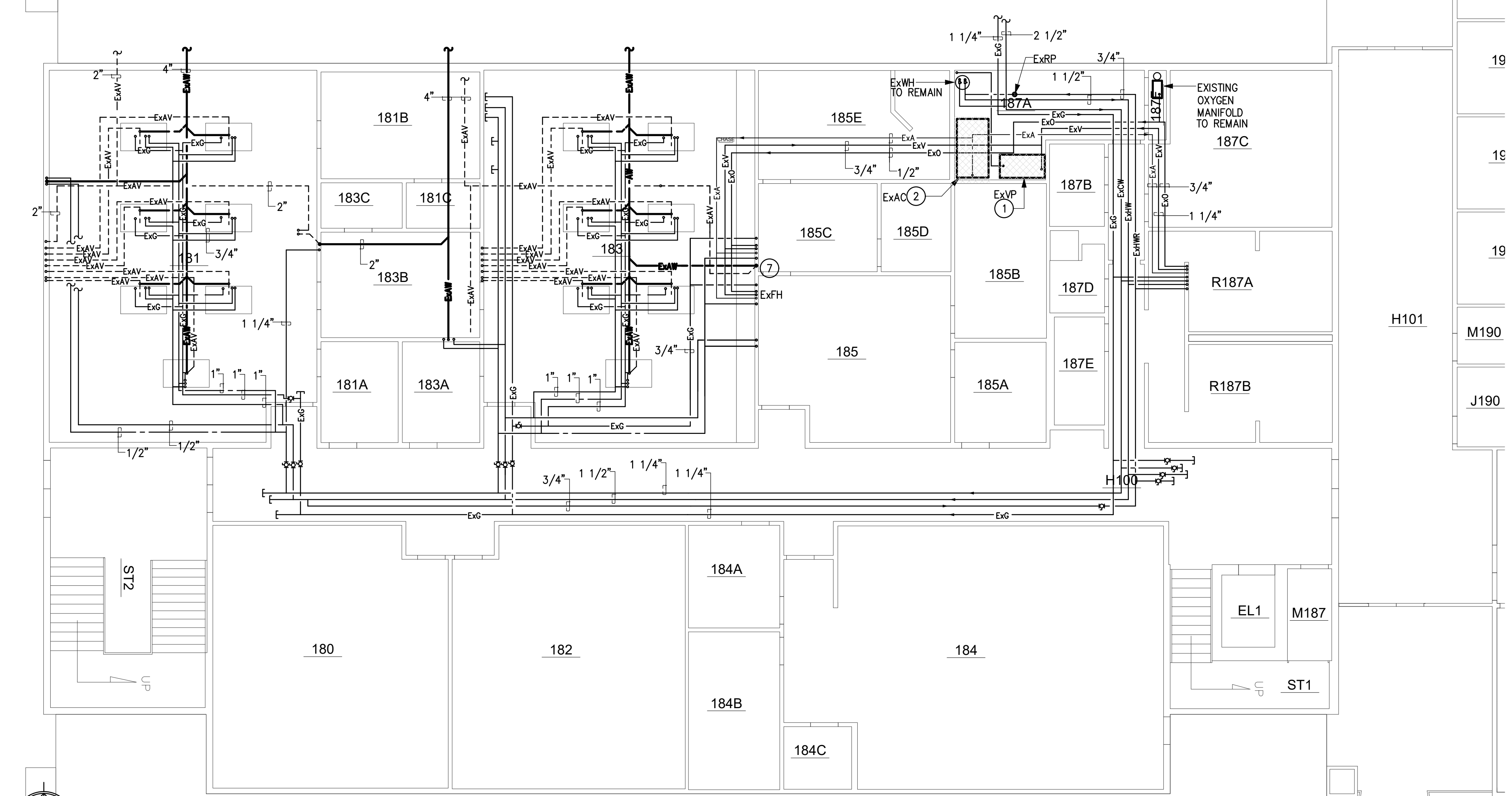
- 1 REMOVE EXISTING VACUUM PUMP AND INSTALL NEW VACUUM PUMP (VP) AT SAME LOCATION.
- 2 REMOVE EXISTING COMPRESSOR AND INSTALL NEW COMPRESSOR (AC) AT SAME LOCATION.
- 3 INSTALL NEW 1 1/4" VACUUM LINE. CONNECT TO EXISTING MAIN 1 1/4" LINE IN MECHANICAL ROOM. EXTEND ACROSS ADJACENT ROOM TO CORRIDOR.
- 4 EXTEND VACUUM LINE TO WALL IN CLASSROOM AND DROP ADJACENT TO EXISTING VALVE BOX. INSTALL NEW BALL VALVE AND WALL ACCESS PANEL NEXT TO EXISTING. EXTEND VACUUM LINE (1") DOWN WALL INTO FLOOR TRENCH. PATCH AND REPAIR WALL TO MATCH EXISTING.
- 5 EXTEND 1" VACUUM LINE IN FLOOR TRENCH TO EACH LAB TABLE AND INSTRUCTORS TABLE.
- 6 NOT USED.
- 7 REMOVE EXISTING FUME HOOD. DISCONNECT 10" DIAMETER EXHAUST DUCT CONNECTION 1/2" GAS, 1/2" CW, 1/2" V, 1/2" A, 1/2" O2.
- 8 INSTALL NEW 6FT. FUME HOOD TO REPLACE EXISTING. CONNECT 10" DIAMETER EXHAUST DUCT, 1/2" CW, ACID WASTE, 1/2" AIR, 1/2" G, 1/2" VAC, 1/2" AIR.
- 9 INSTALL VACUUM TURRET FITTINGS IN EACH LAB TABLE. CONNECT VACUUM PIPING FROM FLOOR TRENCH UP IN TABLE ACCESS SPACE TO TURRET.
- 10 EXISTING WATER TURRET TO REMAIN UNDISTURBED. PROTECT IN PLACE.
- 11 EXISTING GAS TURRET TO REMAIN UNDISTURBED. PROTECT IN PLACE.



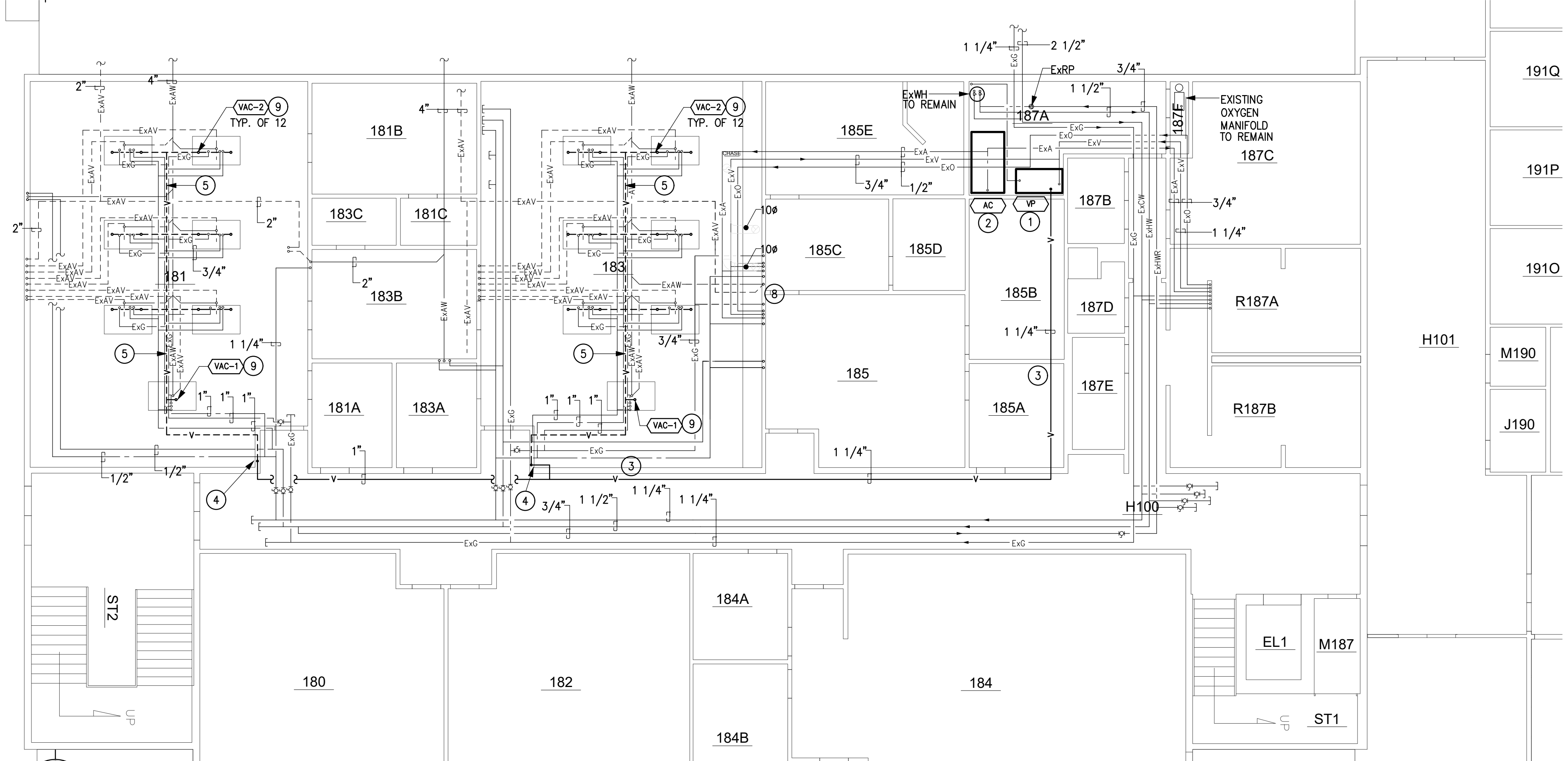
3 P1.0 LAB TABLE LAYOUT SCHEMATIC
N.T.S.



KEY PLAN
N.T.S.



1 P1.0 PLUMBING DEMOLITION PLAN - 1ST FLOOR
SCALE: 1/8"=1'-0"



2 P1.0 PLUMBING NEW WORK PLAN - 1ST FLOOR
SCALE: 1/8"=1'-0"

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ELECTRICAL SYMBOL LEGEND

LIGHT FIXTURE	WIRING DEVICES	HEIGHTS NOTED ARE TO CENTER LINE FROM FLOOR.
<p> JUNCTION BOX INSTALLED ABOVE AN ACCESSIBLE CEILING WITH FLEXIBLE CONDUIT CONNECTION TO LAY-IN FIXTURES. MAXIMUM 6'-0" LENGTH OF CONDUIT WITH REQUIRED CONDUCTORS ALONG WITH GREEN WIRE GROUND.</p> <p> STRIP LED FIXTURE, SUSPENDED OR CEILING MOUNTED. TYPE AS INDICATED IN FIXTURE SCHEDULE.</p> <p> SURFACE MOUNT LED FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.</p> <p> WALL MOUNTED LED FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE. MOUNT PER ARCH. DRAWINGS.</p> <p> WALL-MOUNTED COMBO EXIT LED LIGHT. BOTTOM OF LIGHT 6" ABOVE DOOR FRAME, OR BOTTOM OF LIGHT 84" ABOVE FLOOR WHEN MOUNTED ON BARE WALL OR AS NOTED.</p> <p> SELF-CONTAINED TWO-HEAD EMERGENCY PACK FIXTURE. TYPE AS INDICATED IN FIXTURE SCHEDULE.</p>	<p>AS THE CONTRACTED AND LICENSED INSTALLER ON THE PROJECT NOTED ON THE TITLE BLOCK THIS CONTRACTOR WARRANTS AND GUARANTEES THAT ALL CONTROL AND OPERATING MECHANISMS HE/SHE INSTALLS WILL COMPLY WITH THE ACCESSIBILITY STANDARD AS ADOPTED AND MODIFIED BY THE STATE, WHETHER THE STANDARD IS ADAAG, LATEST EDITION OR ICC/ANSI A 117.1, LATEST EDITION. REACH RANGES SHALL BE COMPLIED WITH. THESE INCLUDE FORWARD REACH AND SIDE REACH, BOTH UNOBSTRUCTED AND OBSTRUCTED. THIS GUARANTEE SHALL EXTEND FOR THE TIME PERIOD AS NECESSARY FOR THE STATE ACCESSIBILITY INSPECTOR TO MAKE THE FINAL ON SITE ACCESSIBILITY INSPECTION. IN ANY CASE THE TIME PERIOD SHALL NOT EXCEED 36 MONTHS BEYOND THE DATE OF SUBSTANTIAL COMPLETION. ANY DEFICIENCIES FOUND BY THE ACCESSIBILITY STATE INSPECTOR ON THE ACCESSIBILITY FINAL INSPECTION SHALL BE CORRECTED WITHIN 30 DAYS BY THIS CONTRACTOR WITHOUT ADDITIONAL COST TO THE OWNER. THE HEIGHTS CALLED FOR BY THE LEGEND AND AS SHOWN ON THE PLANS ARE SO SELECTED TO BE IN COMPLIANCE, HOWEVER CONSTRUCTION ADJUSTMENTS OCCUR IN THE FIELD OFTEN WITH OUT THE KNOWLEDGE OF THE ENGINEER. WHEN THIS HAPPENS THE CONTRACTOR IS AUTHORIZED AND EXPECTED TO ADJUST THE DEVICE HEIGHT IN THE FIELD AS NECESSARY.</p> <p> SINGLE POLE WALL SWITCH, 2 INDICATES 2 POLE, 3 INDICATES 3 WAY, 4 INDICATES 4 WAY, P INDICATES WITH PILOT LIGHT, D INDICATES LED DIMMER, EF INDICATES EXHAUST FAN. MOUNT AT +44" OR AS NOTED.</p> <p> DUPLEX RECEPTACLE—20A, 125V, 2P, 3W (NEMA 5-20R) IN WALL +18" OR AS NOTED.</p> <p> DOUBLE DUPLEX (QUAD) RECEPTACLE —20A, 125V, 2P, 3W (NEMA 5-20R) 18" OR AS NOTED.</p> <p> DUPLEX RECEPTACLE—20A, 125V, 2P, 3W (NEMA 5-20R) UP WALL 4" ABOVE COUNTER OR BACK SPLASH. SINGLE DUPLEX OUTLETS SHALL BE MOUNTED HORIZONTALLY. DOUBLE DUPLEX (QUAD) OUTLETS SHALL BE MOUNTED VERTICALLY. IN ANY CASE TO COMPLY WITH ADA ACCESSIBILITY THE OUTLET BOX CENTERLINE MAY NOT EXCEED 42".</p> <p> GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE—20A, 125V, 2P, 3W—IN WALL +18" OR AS NOTED.</p> <p> SIMPLEX POWER RECEPTACLE—250V, 1P, 2P, 3W—20A, 30A, OR 50A NUMBER AT OUTLET INDICATES AMPERE RATING (NEMA 6-20R, 6-30R, 6-50R) IN WALL +18" OR AS NOTED.</p> <p> JUNCTION OR OUTLET BOX IN WALL. HEIGHT AS NOTED. ALL BOXES SHALL BE ACCESSIBLE.</p> <p> JUNCTION OR OUTLET BOX IN CEILING. ALL BOXES SHALL BE ACCESSIBLE.</p>	
CONDUIT, RACEWAYS, AND WIRING		
<p>----- CONDUIT EXPOSED. RIGID, IMC, EMT OR PVC SCH 80. SEE SPECS.</p> <p>———— CONDUIT CONCEALED IN WALLS OR CEILING CONSTRUCTION RIGID, IMC OR EMT. SEE SPECS.</p> <p>———— HOME RUN TO PANELBOARD—NUMBER OF ARROWS INDICATES NUMBER OF BREAKER HANDLES.</p> <p> SWITCH LEG</p> <p>WHITE NEUTRAL PHASE (HOT) GREEN GRD. WIRE</p> <p>DASHES ACROSS CONDUIT OR CABLE INDICATE THREE (3) OR MORE WIRES #12 AWG SOLID COPPER UNLESS NOTED OTHERWISE.</p> <p>—UG— UNDERGROUND ELECTRICAL. 3'-0" MIN. BELOW GRADE. RIGID, IMC, PVC SCH 40 OR PVC SCH 80. SEE SPECS.</p> <p> CONDUIT TURNED UP</p> <p> CONDUIT TURNED DOWN</p> <p> GROUND</p>		
MISCELLANEOUS		
<p> MECHANICAL EQUIPMENT DESIGNATION— SEE MECHANICAL EQUIPMENT SCHEDULE.</p> <p> KEYED NOTE</p> <p>WP WEATHERPROOF</p> <p>AFF ABOVE FINISH FLOOR</p> <p>UNO UNLESS NOTED OTHERWISE</p> <p>GFCI GROUND FAULT CIRCUIT INTERRUPTER</p>	<h3 style="text-align: center;">EQUIPMENT</h3> <p> MOTOR OUTLET AND CONNECTION. EQUIPMENT TYPE AS NOTED.</p> <p> SAFETY SWITCH, PROVIDED AND INSTALLED UNDER DIV. 16. TO HAVE POLES AND RATING REQUIRED. NEMA 3R IF INSTALLED OUTDOORS.</p> <p> MOTOR CONTROLLER INTEGRAL WITH EQUIPMENT.</p> <p> PANELBOARD SURFACE MOUNTED.</p> <p> SPECIAL CABINET OR EQUIPMENT AS NOTED, SURFACE MOUNTED.</p>	

STATE OF NM GEN. NOTES

- A. THE MOUNTING HEIGHT OF WIRING OR CONTROL DEVICES (SWITCHES, OUTLETS, CONTROLS, DATA JACKS, PHONE JACKS, THERMOSTATS, FIRE ALARM, ELECTRIC DOOR PUSH BUTTONS, ETC.) MUST BE MOUNTED TO COMPLY WITH THE STATE OF NEW MEXICO STANDARDS FOR ACCESSIBILITY. SPECIFICALLY, OUTLETS MUST BE MOUNTED AT MINIMUM 18" A.F.F. TO THE BOTTOM OF THE BOX, AND SWITCHES AND OTHER CONTROLS AT 44" A.F.F. TO THE BOTTOM OF THE BOX UNLESS NOTED OTHERWISE. DEVICES ABOVE COUNTER TOPS AND OBSTRUCTIONS SHALL COMPLY WITH ANSI 117.1.
- B. THE DESIGN OF THE PROJECT IS BASED ON COPPER WIRE, #12 AWG AS THE MINIMUM SIZE. THE BRANCH CIRCUIT WIRING SYSTEM SHALL LIMIT VOLTAGE DROP TO 5% AT THE FURTHEST OUTLET. THE CONTRACTOR SHALL UTILIZE LARGER WIRE SIZES AS NEEDED TO MAINTAIN THIS LIMIT. IT WILL NOT BE UNCOMMON FOR #10 AWG TO BE REQUIRED. AS A RULE OF THUMB, BRANCH CIRCUIT CONDUCTOR LENGTHS LONGER THAN 80' MAY REQUIRE #10 AWG WIRING. CONTRACTOR SHALL UPGRADE WIRING AS NEEDED WHETHER SHOWN ON THE PLANS OR NOT TO COMPLY WITH THE STATE OF NEW MEXICO STANDARDS FOR VOLTAGE DROP.
- C. THE CONTRACTOR MAY INSTALL UP TO 6 CURRENT CARRYING CONDUCTORS IN A CONDUIT. LOADINGS ARE BASED ON DERATINGS FOR UP TO 6 CONDUCTORS AND AN AMBIENT TEMPERATURE OF 122 DEGREES F. THE CONTRACTOR MUST REVISE AMPACITIES FOR OTHER CONDITIONS. CONTACT THE ENGINEER IF NECESSARY.

SCOPE OF WORK:

- A. REMOVE AND REPLACE EXISTING EQUIPMENT AIR COMPRESSOR, VACUUM PUMP, EXHAUST FANS AND FUME HOOD.
- B. EXTEND EXISTING BRANCH CIRCUITS TO NEW EQUIPMENT.

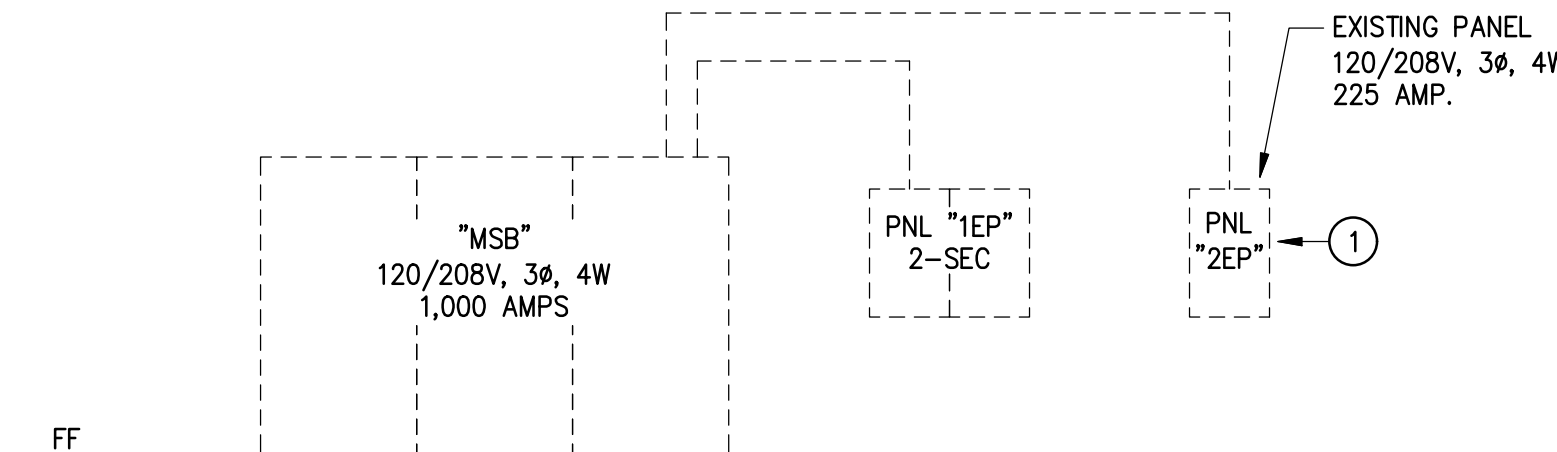
GENERAL NOTES

- A. CONTRACTOR SHALL KEEP CIRCUITS MAINTAINED DURING DEMOLITION.

KEYED NOTES

- 1 EXISTING 20A/3P CIRCUIT ZEP—1,3,5 FEEDS "AIR COMPRESSOR".
- 1 EXISTING 20A/3P CIRCUIT ZEP—7,9,11 FEEDS "VACUUM PUMP".

LEGEND	
	NEW
	EXISTING TO REMAIN
	EXISTING TO BE REMOVE



ELECTRICAL RISER DIAGRAM

1 E0.1 N.T.S.



1
E0.1
SCALE: 1/8"=1'-0"

POWER NEW WORK PLAN - 2ND FLOOR

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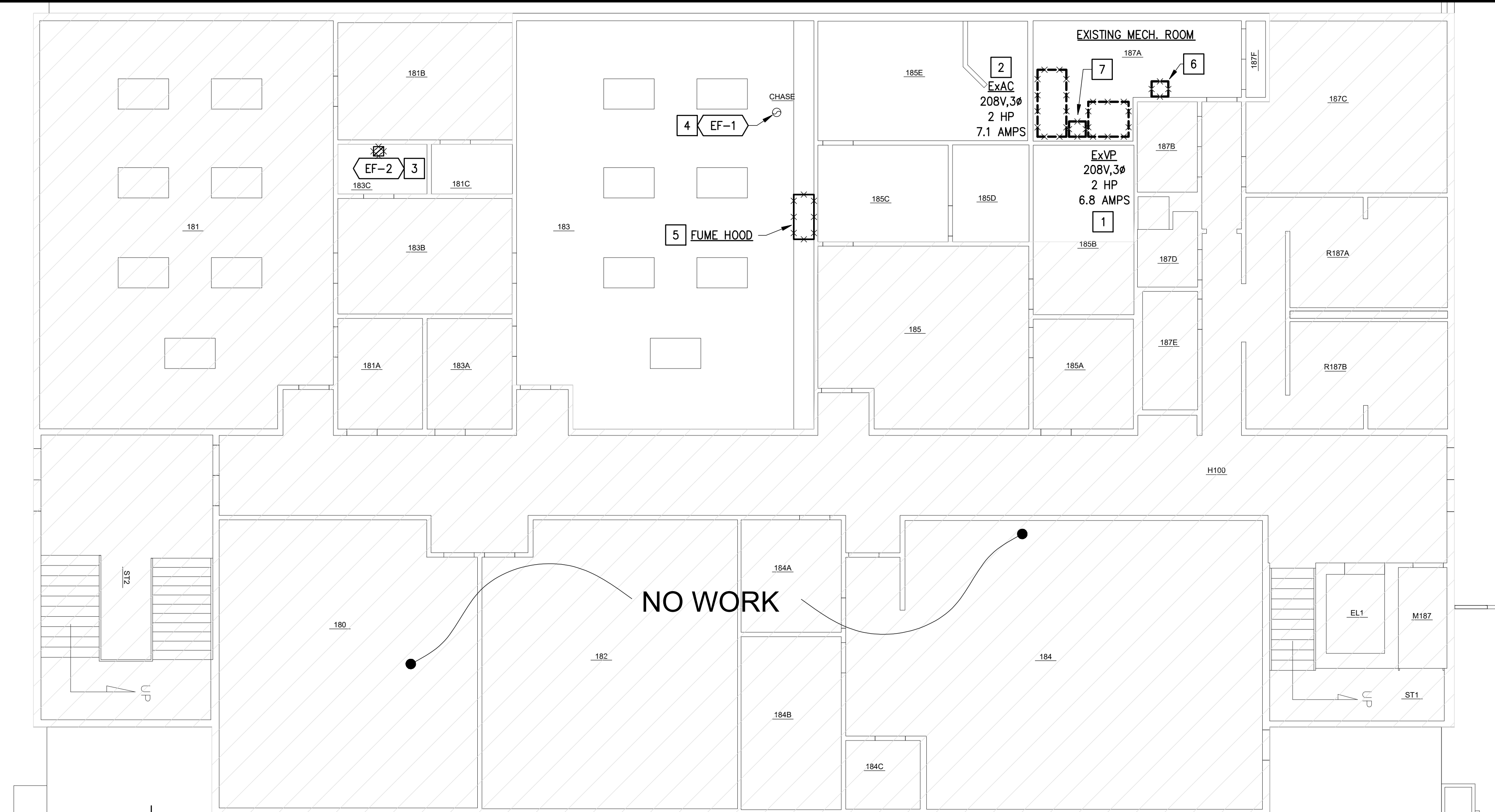
PROJECT NO.	24086
DESIGN BY:	RBM
DRAWN BY:	CAD
CHECKED BY:	RBM
APPROVED BY:	RBM

MARK	DATE	DESCRIPTION
		ISSUE: November 27, 2024

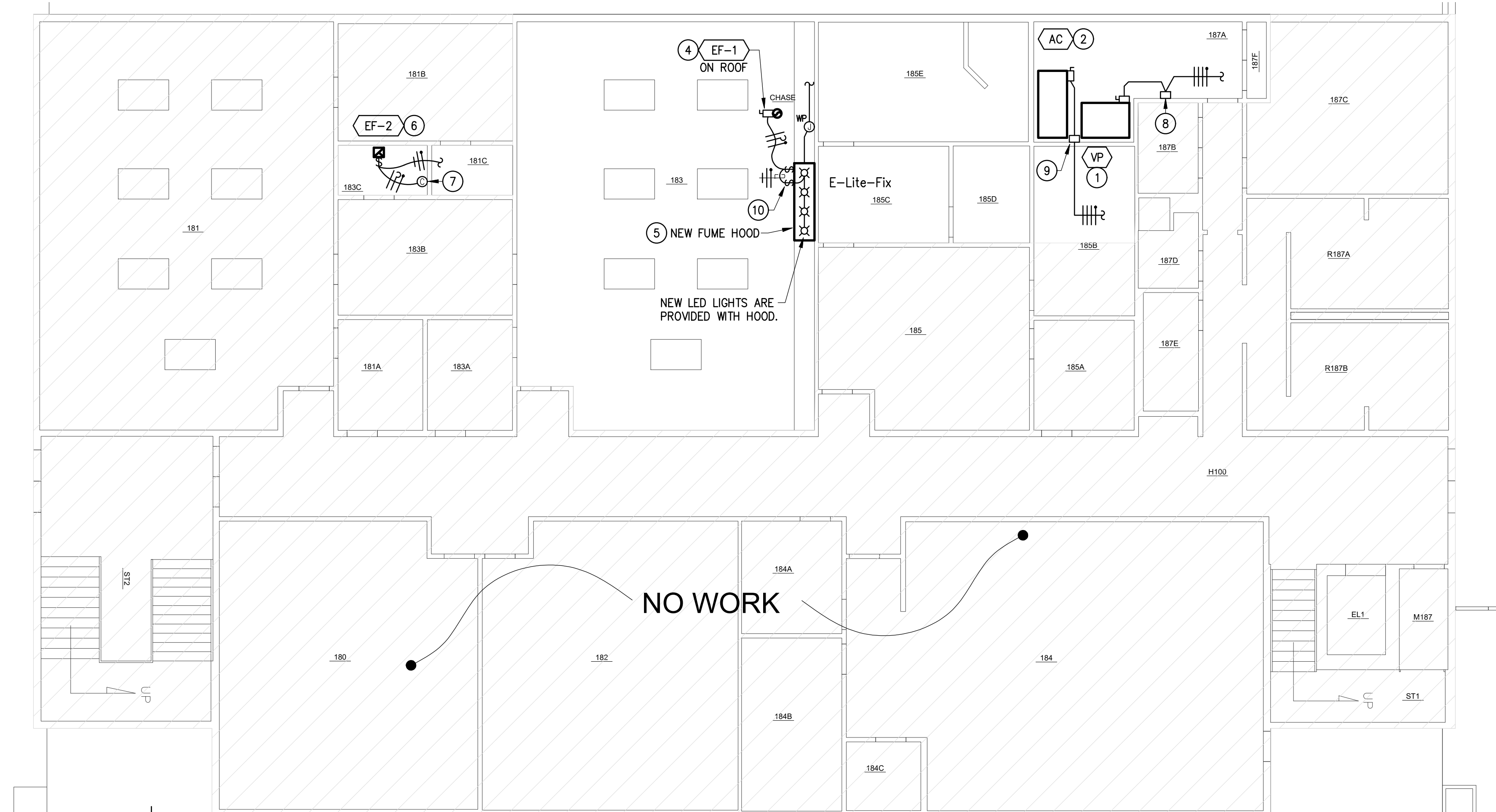
PROJECT NAME
**5160 DACC HEALTH BUILDING
 UPGRADE COMPRESSED AIR &
 VACUUM SYSTEMS**
 NEW MEXICO
 DONA ANA.

SHEET TITLE:
**ELECTRICAL GENERAL
 NOTES, LEGEND AND
 2ND FLOOR POWER PLAN**

SHEET NO:
E0.1



1 POWER DEMOLITON PLAN - 1ST FLOOR
 E1.0 SCALE: 1/8"=1'-0"



2 POWER NEW WORK PLAN - 1ST FLOOR
 E1.0 SCALE: 1/8"=1'-0"

GENERAL DEMOLITION NOTES:

- A. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL LIGHTING, OUTLETS, SWITCHES, WIREMOLD, EXPOSED CONDUIT, DATA OUTLETS, HVAC ELECTRICAL CONNECTIONS, ETC. NOTED ON THIS SHEET TO BE DEMOLISHED OR SHOWN ON A WALL BEING DEMOLISHED. COORDINATE WITH THE ARCHITECTURAL PLANS AS TO WHAT IS TO REMAIN IN PLACE AND WHAT IS TO BE PART OF DEMOLITION PRIOR TO ANY WORK.
- B. ANY EQUIPMENT SHOWN TO BE REMOVED THAT IS CONNECTED TO EQUIPMENT NOTED TO REMAIN (LIGHTING, HVAC ELECTRICAL CONNECTIONS, OUTLETS, ETC.), CONTRACTOR IS RESPONSIBLE FOR PROVIDING SPLICE BOXES ABOVE EXISTING/NEW ACCESSIBLE CEILINGS TO MAINTAIN CIRCUITRY AND FUNCTIONALITY OF THOSE ITEMS. REROUTE AND/OR RELOCATE EXISTING CIRCUITS AS NECESSARY TO ACCOMMODATE NEW WORK SHOWN AND NOTED ON THESE PLANS.
- C. DEMOLITION OF WIRING, DISCONNECTS, AND/OR EQUIPMENT THAT IS SUBJECT TO REMAIN OR BE RE-LOCATED, CONTRACTOR IS RESPONSIBLE FOR RE-CONNECTION OF THAT EQUIPMENT IMMEDIATELY AND MAKE OPERATIONAL.
- D. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL UN-USED EXISTING LOW VOLTAGE CABLING, WIRING, AND/OR CONDUIT (CCTV, PA, INTERCOM, DATA/PHONE, SPECIAL SYSTEMS, ETC.) BACK TO THE POINT OF SOURCE OR TO THE POINT WHERE EXISTING EQUIPMENT WILL REMAIN IN OPERATION. ANY EXISTING LOW VOLTAGE CABLING, WIRING, AND/OR CONDUIT TAGGED TO REMAIN SHALL BE PROPERLY SUPPORTED FROM THE STRUCTURE WITH J-HOOKS OR CONDUIT. COORDINATE WITH OWNER PRIOR TO ANY WORK. SALVAGE ANY SPECIAL SYSTEM DEVICES REMOVED TO THE OWNER.
- E. CONTRACTOR SHALL RE-USE EXISTING CONDUIT PENETRATIONS AND CONDUIT SYSTEMS WHERE APPLICABLE. IF NOT RE-USED, PATCH, PAINT, AND REPAIR AS REQUIRED. IN ALL CASES, CUT, PATCH, PAINT, AND REPAIR TO MATCH EXISTING CONDITIONS AND/OR AS SHOWN ARCHITECTURAL DRAWINGS. BLANK PLATES WILL NOT BE MEANS OF PATCHING.
- F. CONTRACTOR SHALL KEEP EXISTING CIRCUITS MAINTAINED DURING DEMOLITION.
- G. ALL EXISTING EQUIPMENT CIRCUITS ARE FED FROM EXISTING PANELS LOCATED ON THE 2ND FLOOR IN THE ELECTRICAL ROOM.

DEMOLITION KEYED NOTES

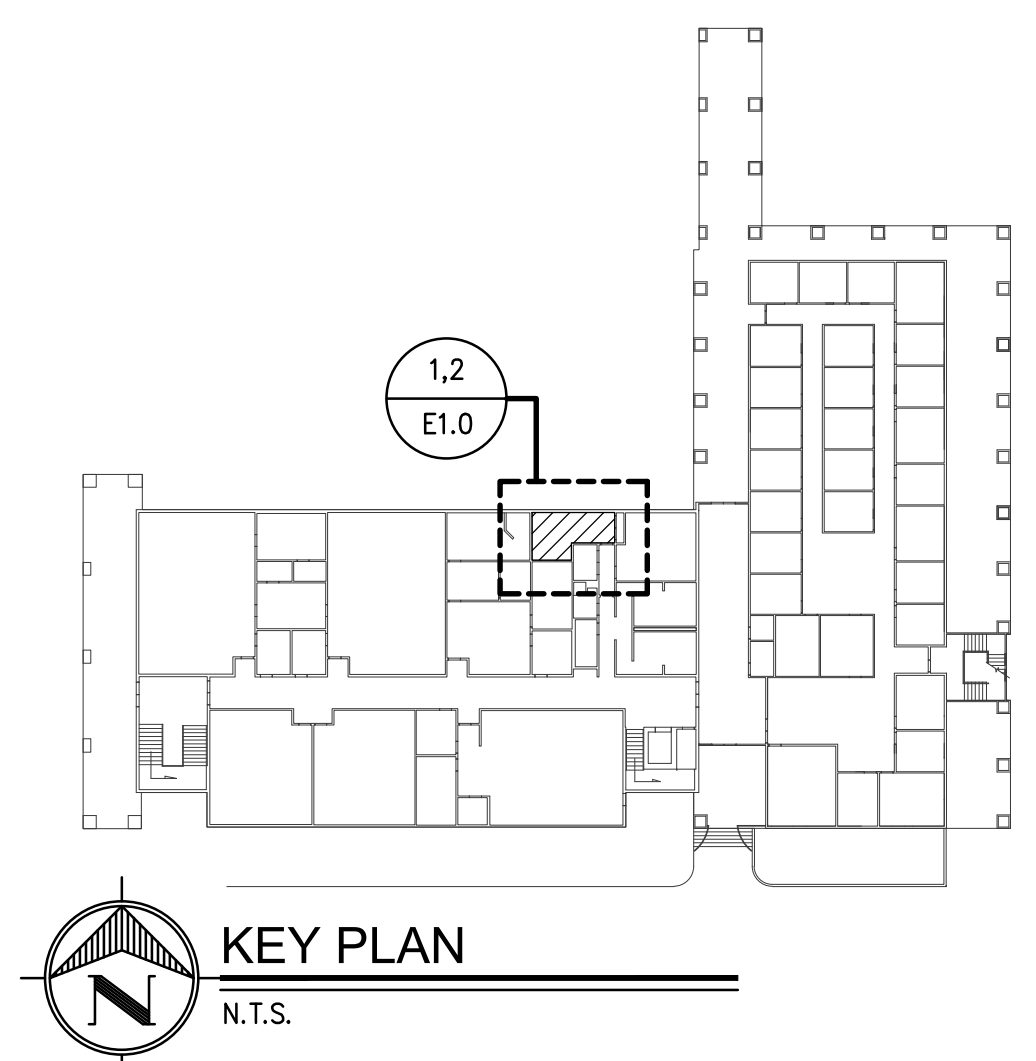
- 1 EXISTING VACUUM PUMP IS SCHEDULED TO BE REMOVED AND REPLACED WITH NEW CONTRACTOR SHALL DISCONNECT EXISTING. CONTRACTOR SHALL KEEP CIRCUIT MAINTAINED DURING DEMOLITION.
- 2 EXISTING AIR COMPRESSION IS SCHEDULED TO BE REMOVED AND REPLACED WITH NE CONTRACTOR SHALL DISCONNECT EXISTING CONTRACTOR SHALL KEEP CIRCUIT MAINTAINED DURING DEMOLITION.
- 3 EXISTING EXHAUST FAN TO BE REMOVED, DISCONNECTED AND REPLACED WITH NEW. CONTRACTOR SHALL KEEP CIRCUIT MAINTAINED DURING DEMOLITION.
- 4 EXISTING EXHAUST FAN TO BE REMOVED, DISCONNECTED AND REPLACED WITH NEW. CONTRACTOR SHALL KEEP CIRCUIT MAINTAINED DURING DEMOLITION.
- 5 EXISTING FUME HOOD IS SCHEDULED TO BE REMOVED AND REPLACED WITH NEW.
- 6 EXISTING 30A DISCONNECT SWITCH WITH HOA STARTER FOR VACUUM PUMP TO BE REMOVED AND REPLACED WITH NEW.
- 7 EXISTING 30A COMBINATION DISCONNECT SWITCH WITH HOA STARTER FOR AIR COMPRESSOR TO BE REMOVED AND REPLACED WITH NEW.

NEW WORK KEYED NOTES

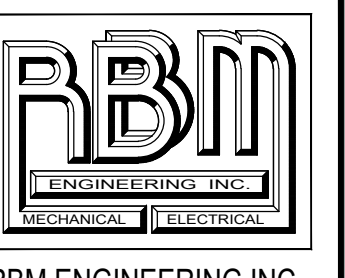
- 1 NEW VACUUM PUMP. CONTRACTOR SHALL CONNECT AS REQUIRED IN THE SAME FASHION IT WAS DISCONNECTED. CONTRACTOR SHALL CONNECT TO EXISTING 208V, 3φ CIRCUIT SPARED BY DEMOLITION. EXTEND CONDUIT AND WIRE AS REQUIRED.
- 2 NEW AIR COMPRESSOR. CONTRACTOR SHALL CONNECT IN THE SAME FASHION IT WAS DISCONNECTED. CONTRACTOR SHALL CONNECT TO EXISTING 208V, 3φ BRANCH CIRCUIT SPARED BY DEMOLITION. EXTEND CONDUIT AND WIRE AS REQUIRED.
- 3 TO EXISTING 3φ CIRCUIT SPARED BY DEMOLITION.
- 4 NEW EXHAUST FAN ON ROOF. CONTRACTOR SHALL CONNECT AS REQUIRED IN THE SAME FASHION IT WAS DISCONNECTED. CONTRACTOR SHALL CONNECT TO EXISTING SPARED BRANCH CIRCUIT. EXTEND CONDUIT AND WIRE AS REQUIRED.
- 5 NEW FUME HOOD PROVIDED WITH EXHAUST FAN, LED LIGHTS, EF-1 CONTROLS AND LED LIGHT CONTROLS. CONTRACTOR SHALL CONNECT TO EXISTING CIRCUIT SPARED BY DEMOLITION.
- 6 NEW EXHAUST FAN. CONTRACTOR SHALL CONNECT AS REQUIRED IN THE SAME FASHION IT WAS DISCONNECTED. CONTRACTOR SHALL CONNECT TO EXISTING SPARED 120V BRANCH CIRCUIT SPARED BY DEMOLITION. EXTEND CONDUIT AND WIRE AS REQUIRED.
- 7 EXHAUST FAN TO BE CONTROLLED THRU NEW FAN SPEED CONTROLLER IN ROOM.
- 8 NEW NEMA 1, 3HP, 208V, 3φ COMBINATION HOA STARTER WITH FUSIBLE DISCONNECT SWITCH FOR VACUUM PUMP. CONTRACTOR SHALL CONNECT TO NEW VACUUM PUMP AS REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM.
- 9 NEW NEMA 1, 3 HP, 208V, 3φ COMBINATION HOA STARTER WITH FUSIBLE DISCONNECT SWITCH FOR AIR COMPRESSOR. CONTRACTOR SHALL CONNECT TO NEW AIR COMPRESSOR AS REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM.
- 10 CONTROL SWITCHES FOR EXHAUST FAN, LIGHTING ARE INTEGRAL WITH FUME HOOD.

MECHANICAL EQUIPMENT LIST

MARK (x)	DESCRIPTION	VOLTAGE	HP
AC	AIR COMPRESSOR	208V, 3φ	3
VAC	VACUUM PUMP	208V, 3φ	3
EF-1	EXHAUST FAN	208V, 3φ	3/4
EF-2	EXHAUST FAN	120V, 1φ	1/4



KEY PLAN
 N.T.S.



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November 27, 2024

PROJECT NO. 24086
 DESIGN BY: RBM
 DRAWN BY: CAD
 CHECKED BY: RBM
 APPROVED BY: RBM

MARK	DATE	DESCRIPTION	ISSUE

PROJECT NAME
 5160 DACC HEALTH BUILDING
 UPGRADE COMPRESSED AIR &
 VACUUM SYSTEMS
 NEW MEXICO
 DONA ANA.

SHEET TITLE:
 POWER DEMOLITION AND
 NEW WORK PLAN - 1ST FLOOR

SHEET NO.:

E1.0