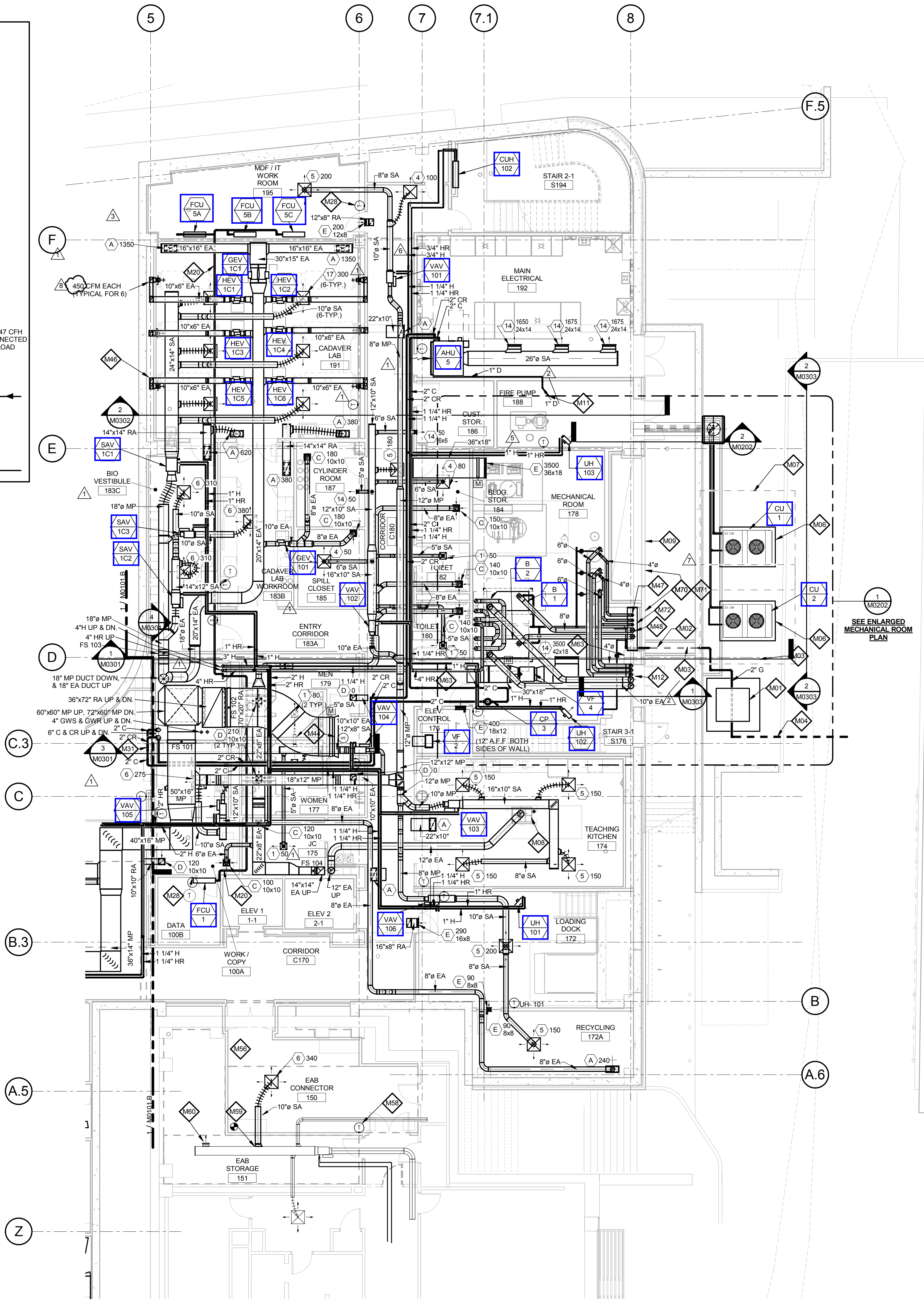
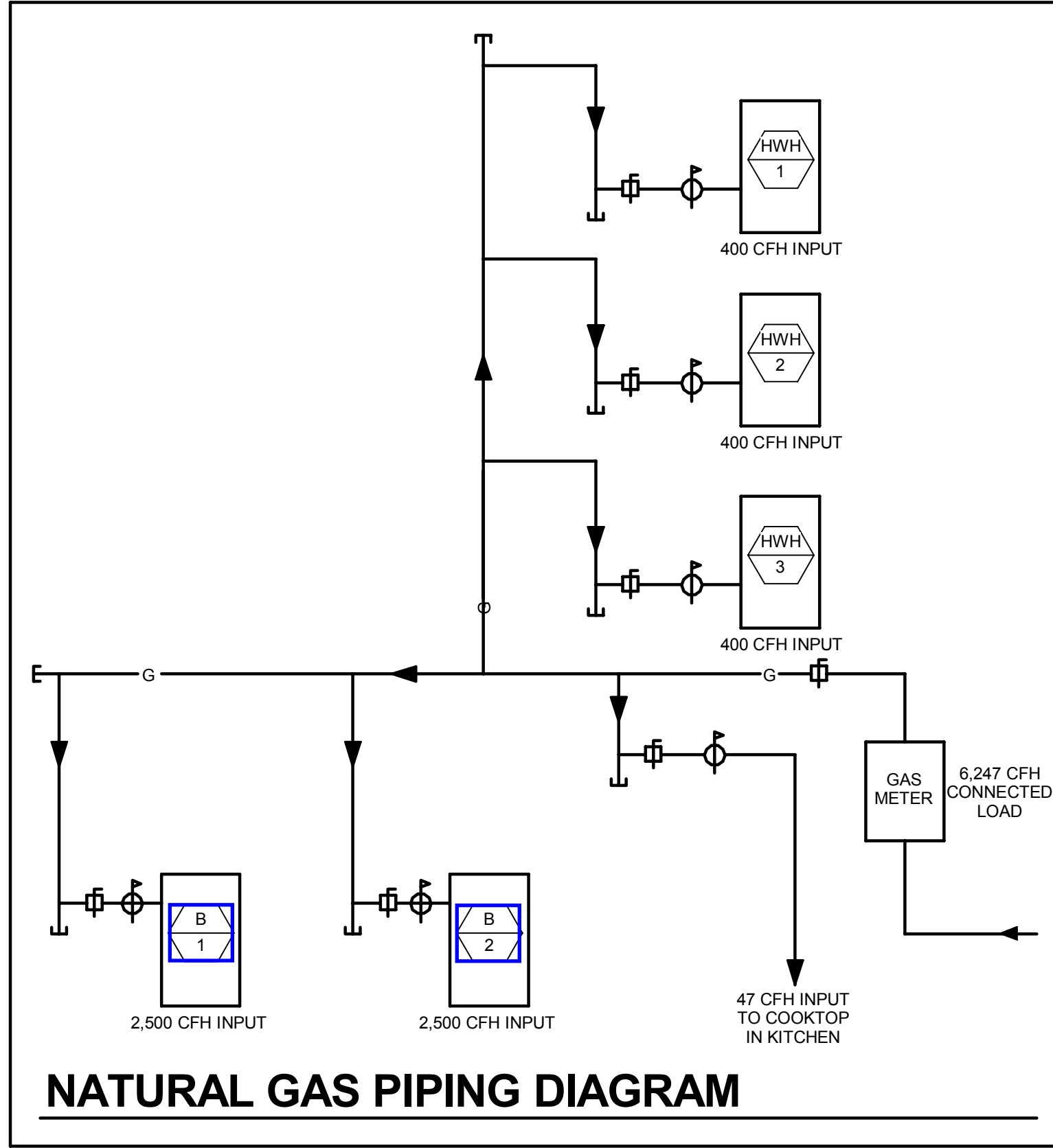




1 LEVEL 01 - AREA A - MECHANICAL PLAN
1/8" = 1'-0"

GENERAL NOTES:

- Because of the limited space available to install all of the mechanical work, coordination between the various trades is of the utmost importance. This contractor shall coordinate with all other trades prior to the fabrication and installation of any work.
- Refer to the reflected ceiling plans for ceiling construction, ceiling grid layout, ceiling mounted devices, and coordinate exact location and mounting type of all air devices.
- All ductwork upstream of terminal units shall be Medium Pressure (MP). All ductwork downstream of terminal units shall be Low Pressure (LP). Refer to specifications.
- All ductwork dimensions indicated on plans are sheet metal sizes. All medium pressure ductwork shall be unlined, externally insulated. All low pressure ductwork shall be lined. See specifications.
- All mitered 90° rectangular elbows shall be furnished with turning vanes having maximum $c = 0.12$. All smooth radius rectangular elbows shall have a throat radius greater than one half the duct width, unless furnished with splitter vanes. Under no circumstances shall the throat radius be less than one third the duct width. Unless otherwise noted or specified.
- Contractor shall furnish and install volume dampers for each duct take-off unless otherwise noted. See detail.
- Maximum length of Low Pressure (LP) flexible ductwork shall be 8'-0". Round LP duct of lengths greater than 8'-0" shall be rigid round. Flexible duct sizes on plans shall be neck size of diffusers or as indicated. See specifications.
- Maximum length of Medium Pressure (MP) flexible ductwork shall be 2'-0". Round MP duct of lengths greater than 2'-0" shall be rigid round. Flexible duct sizes on plans shall be air Terminal Unit inlet size or as indicated. See specifications.
- All ductwork runouts to Air Terminal Units and diffusers shall be the connection size unless otherwise noted.
- Piping runouts to terminal units shall be 3/4" unless otherwise noted. Refer to reheat box schedule.
- Verify exact location of thermostats, humidistats, BAS sensors, and other exposed control sensors with architectural elevations and drawings before installation.
- Schedule systems or equipment shut downs required for new construction with owner two weeks in advance. Some premium time work may be required.
- Refer to piping details for final connections to equipment.
- Provide service shut-off valves in major piping branch lines. All connections to risers and each building wing. A & B.

KEYED NOTES

- M01 PROPOSED GAS METER LOCATION: COORDINATE WITH LOCAL NATURAL GAS UTILITY COMPANY FOR METER SET SIZED FOR A TOTAL CONNECTED LOAD OF 6,247-CFH WITH A DELIVERY PRESSURE OF 2-PSIG. PROVIDE CONCRETE METER PAD PER THE LOCAL GAS COMPANY'S REQUIREMENTS AND SIZE.
- M02 2-INCH MAIN BUILDING NATURAL GAS LINE ABOVE GRADE WITH SHUT-OFF VALVE.
- M03 2-INCH NATURAL GAS LINE IN OPEN TRENCH WITH STEEL GRATING. SEE CIVIL DRAWINGS. SUPPORT PIPING WITH STAINLESS STEEL UNISTRUT FRAMING, MINIMUM 2-INCHES ABOVE TRENCH FLOOR.
- M04 NATURAL GAS MAIN EXTENSION BELOW GRADE BY LOCAL GAS COMPANY.
- M06 CONCRETE BASE FOR MECHANICAL EQUIPMENT, SEE CIVIL DRAWINGS. VERIFY SIZE WITH APPROVED SHOP DRAWINGS.
- M07 DASHED LINES INDICATE RECOMMENDED SERVICE, COIL PULLING SPACE, FILTER REMOVAL SPACE, AND/OR AIRFLOW CLEARANCES.
- M08 3/4-INCH NATURAL GAS LINE BELOW SLAB WITHIN VENTED SLEEVE. SEE LOWER LEVEL FLOOR PLAN FOR CONTINUATION. PROVIDE GAS SHUT-OFF VALVE AND FLEXIBLE HOSE ADAPTER. FINAL CONNECTION TO COOK TOP BY KITCHEN EQUIPMENT INSTALLER.
- M09 OUTSIDE AIR INTAKE LOUVER, SEE ARCHITECTURAL DRAWINGS.
- M11 TERMINATE COOLING COIL DRAIN LINE OVER NEAREST FLOOR DRAIN OR INDIRECT WASTE. PROVIDE TRAP AS INDICATED ON PIPING DETAIL.
- M12 BOILER AND DOMESTIC WATER HEATER FLUES UP THROUGH ROOF.
- M20 REFRIGERANT LIQUID AND SUCTION PIPING BETWEEN DX COOLING COILS AND CONDENSING UNITS. COORDINATE PIPE SIZES WITH MANUFACTURER. PROVIDE 3/4" DRAIN LINE. ROUTE WITH REFRIGERANT PIPING AND TERMINATE DRAINS FROM FCU-1, 2, 5A, 5B, AND 5C OVER FLOOR DRAIN IN LOWER LEVEL MECHANICAL ROOM. TERMINATE DRAINS FROM FCU-3 AND 4 OVER SERVICE SINK IN JANITORS CLOSET 375.
- M28 BAS TEMPERATURE SENSOR TO MONITOR IT/TCOM SPACES. FCU CONTROLLED BY UNIT MOUNTED THERMOSTAT.
- M31 3-WAY CONTROL VALVE, SEE CHILLED WATER PIPING DIAGRAM.
- M44 AIRFLOW MEASURING STATION. KELE MODEL KOAMS FURNISHED WITH INLET BELL FOR PLENUM APPLICATIONS LOCATED IN MINIMUM OA DUCT OR RETURN AIR INLET ON EACH FLOOR.
- M46 EXHAUST DUCT DOWN THROUGH CHASE FOR DOWNDRAFT TABLE. VERIFY DUCT CONNECTION SIZE AND LOCATION. PROVIDE MANUAL DAMPER AND CONNECTION ADAPTER TO TABLE.
- M47 CONNECT DOMESTIC WATER HEATER COMBUSTION AIR DUCTS TO TOP OF PLENUM BOX AT LOUVER.
- M48 CONNECT HEATING HOT WATER BOILER COMBUSTION AIR DUCTS TO TOP OF PLENUM BOX AT LOUVER.
- M56 MODIFY EXISTING LOW PRESSURE SUPPLY DUCTWORK IN THIS AREA FOR NEW WALLS. REMOVE EXISTING DUCT MOUNTED AIR DEVICES AND PATCH DUCTWORK AIR-TIGHT. INSTALL NEW CEILING DIFFUSERS AND RETURN AIR GRILLE AS SHOWN AND AS REQUIRED FOR NEW CEILINGS.
- M57 REMOVE EXISTING DUCT MOUNTED AIR DEVICE AND CAP WITH SHEETMETAL. SEAL AIR-TIGHT.
- M58 NEW LOCATION FOR EXISTING TEMPERATURE SENSOR.
- M59 NEW CONNECTION TO EXISTING DUCTWORK.
- M60 EXISTING AIR DEVICE TO REMAIN. BALANCE TO 60-CFM.
- M61 RELOCATION EXISTING TEMPERATURE SENSOR.
- M63 INSTALL BOILER SAFETY SWITCH AND SIGN. COORDINATE LOCATION WITH OWNER, ARCHITECT, AND ALL OTHER TRADES.
- M70 REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL LOUVER INFORMATION.
- M71 BLANK OFF ALL UNUSED PORTIONS OF LOUVER WITH INSULATED METAL PANEL PAINTED BLACK BEHIND LOUVER.
- M72 PROVIDE 78"x18" INSULATED PLENUM BOX AT LOUVER FOR COMBUSTION AIR INTAKES. SLOPE BOTTOM OF PLENUM PER DETAIL ON SHEET M0501.

THE SEALS(S) AND SIGNATURE(S) APPLY ONLY TO THE DOCUMENT TO WHICH THEY ARE AFFIXED, AND EXPRESSLY DISCLAIM ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE ARCHITECTURAL OR ENGINEERING PROJECT.

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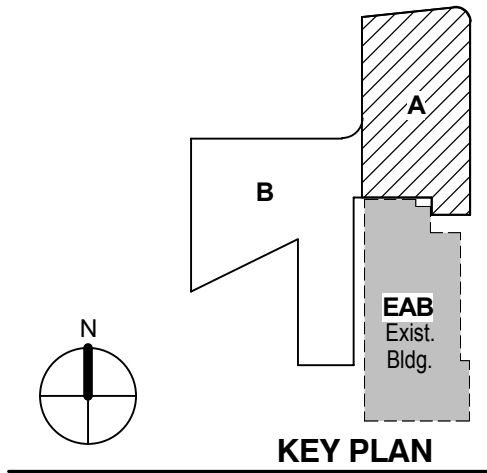
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8	ASH-067	16 FEB 2017
7	ASH-050	20 DEC 2016
6	ASH-043	04 NOV 2016
5	ASH-034	18 OCT 2016
4	ASH-032	24 MAY 2016
3	ADDENDUM 2-4	19 APRIL 2016
2	ADDENDUM 2-2	17 MAR 2016
1	ADDENDUM 2-1	01 MAR 2016
- ISSUED FOR CONSTRUCTION (BP2)		

No.	Description	Date
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Drawing Title:
**LEVEL 01 AREA A FLOOR
PLAN - MECHANICAL**

Project No.: 04561.01 Checked by:

M0101.A