GRILLE SIZING SCHEDULE

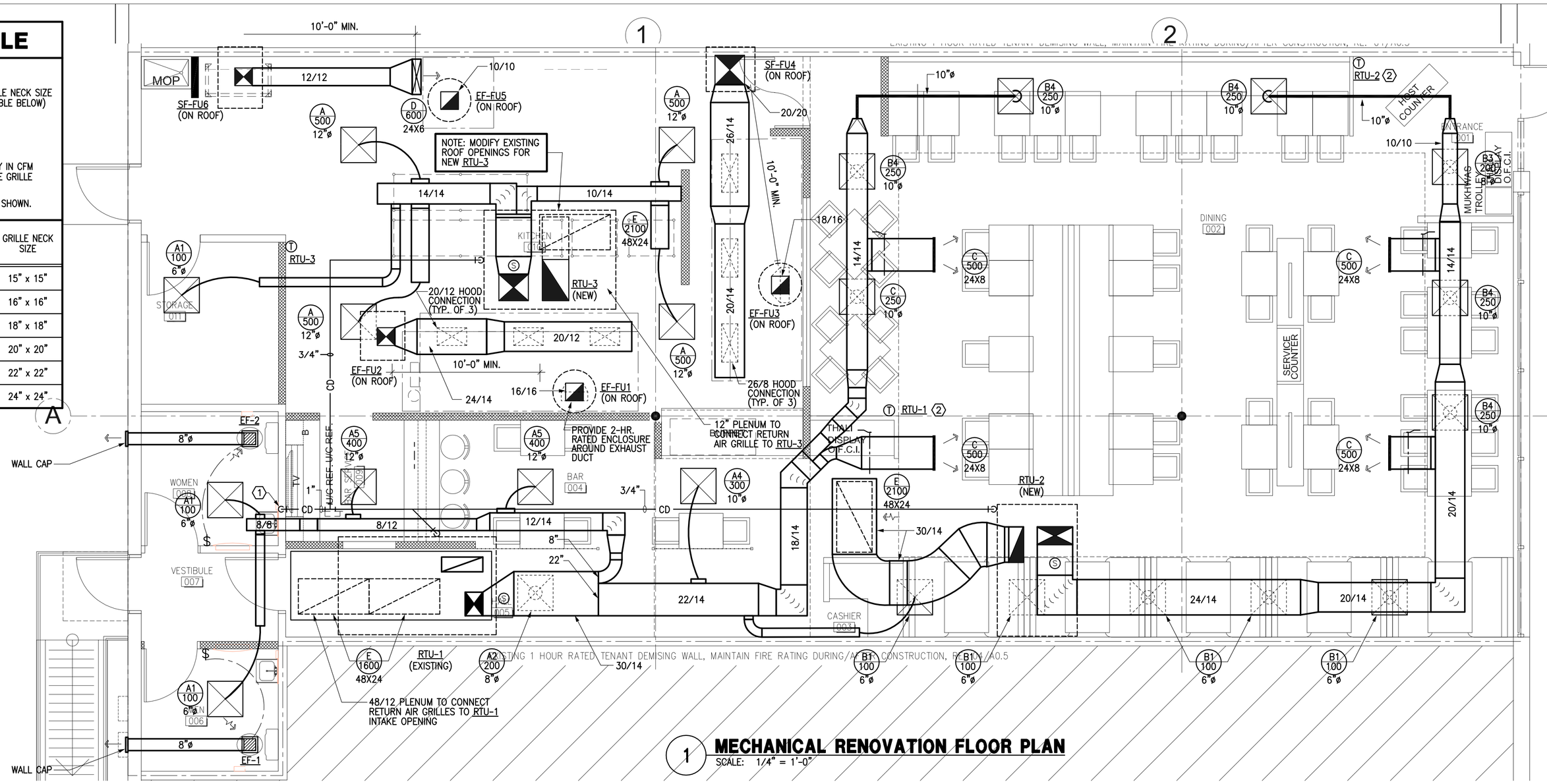
STANDARD GRILLE

DESIGNATES GRILLE TYPE (REFERENCE GRILLE SCHEDULE) — A1 100 — DESIGNATES GRILLE NECK SIZE (REFERENCE TABLE BELOW)

SIZE OF FLEX OR RIGID DUCT CONNECTING GRILLE TO DUCTWORK — 6" ø — AIR QUANTITY IN CFM TO TRAVERSE GRILLE

ALL GRILLES SHOWN SHALL BE FOUR-WAY THROW UNLESS OTHERWISE SHOWN.

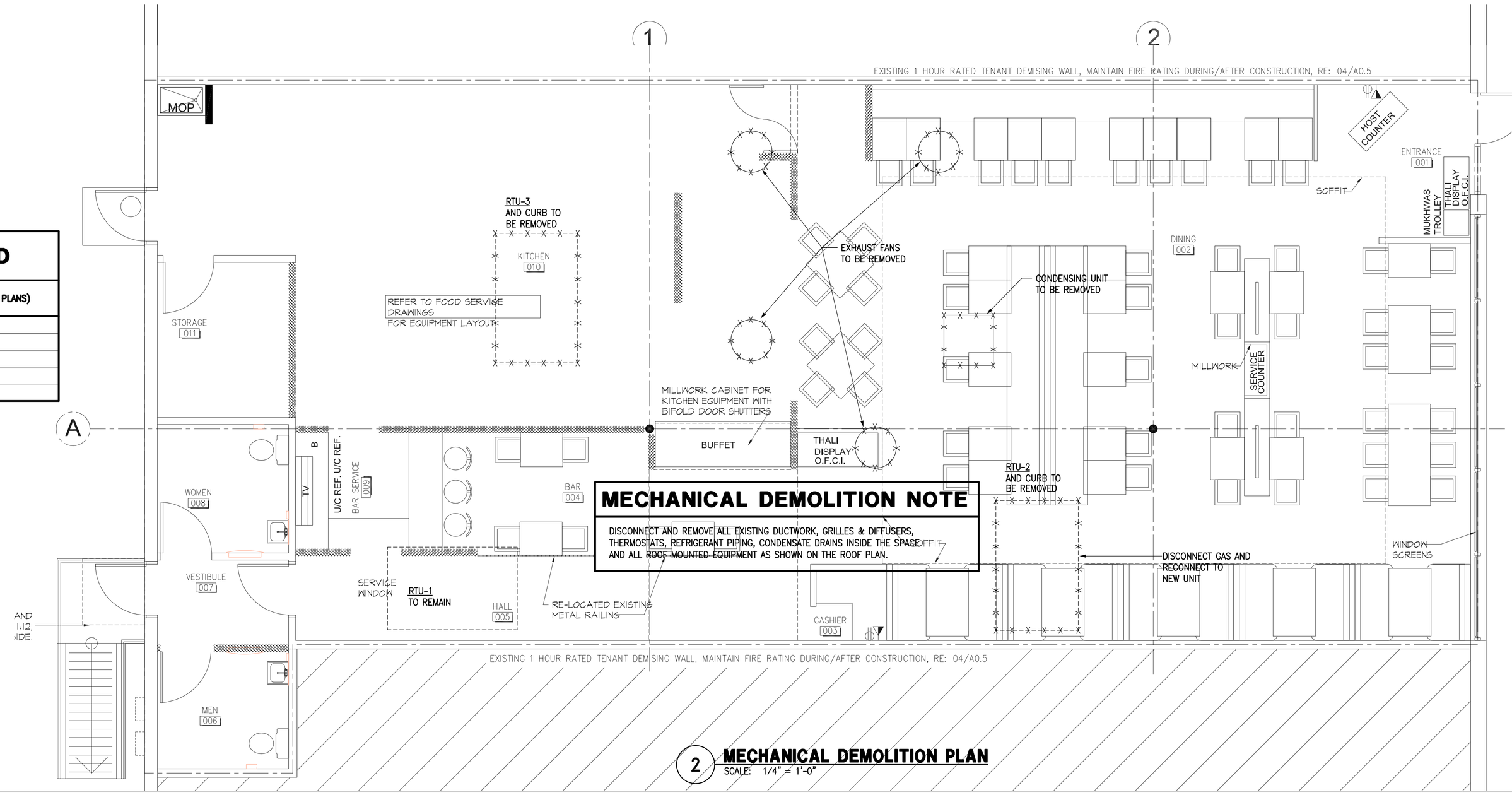
GRILLE SIZE DESIGNATION	GRILLE NECK SIZE	GRILLE SIZE DESIGNATION	GRILLE NECK SIZE
1	6" x 6"	7	15" x 15"
2	8" x 8"	8	16" x 16"
3	9" x 9"	9	18" x 18"
4	10" x 10"	10	20" x 20"
5	12" x 12"	11	22" x 22"
6	14" x 14"	12	24" x 24"



1 **MECHANICAL RENOVATION FLOOR PLAN**
SCALE: 1/4" = 1'-0"

DEMOLITION LEGEND

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
GENERAL	
———	PIPING TO REMAIN
×—×—×	PIPING TO BE REMOVED
▨	EQUIPMENT TO REMAIN
▨	EQUIPMENT TO BE REMOVED



MECHANICAL DEMOLITION NOTE

DISCONNECT AND REMOVE ALL EXISTING DUCTWORK, GRILLES & DIFFUSERS, THERMOSTATS, REFRIGERANT PIPING, CONDENSATE DRAINS INSIDE THE SPACE/OFFIT AND ALL ROOF MOUNTED EQUIPMENT AS SHOWN ON THE ROOF PLAN.

2 **MECHANICAL DEMOLITION PLAN**
SCALE: 1/4" = 1'-0"

MECHANICAL KEYED NOTES

1. ROUTE CONDENSATE DOWN WALL TO SINK FITTING. RE: PLUMBING DWGS.
2. PROVIDE A 7-DAY PROGRAMMABLE THERMOSTAT.

MECHANICAL GENERAL NOTES

1. CODES, RULES AND REGULATIONS - DESIGN OF SYSTEM
   - A) ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES AND CODES. CODES.
   - B) WHEN THE DRAWINGS CALL FOR MATERIALS OR CONSTRUCTION OF A BETTER QUALITY OR LARGER SIZES THAN REQUIRED BY THE ABOVE MENTIONED CODES AND RULES, WORK SHALL BE AS SPECIFIED OR SHOWN RATHER THAN AS REQUIRED BY CODE. ALL ITEMS OR FEATURES OF THE MECHANICAL SYSTEMS REQUIRED BY CODE SHALL BE INCLUDED, EVEN THOUGH NOT SPECIFIED HEREIN.
   - C) INSTALLATION OF THE SYSTEMS SHALL BE IN ACCORDANCE WITH THE ABOVE MENTIONED CODES AND REGULATIONS AND ALSO SHALL CONFORM TO GOOD, ACCEPTED MECHANICAL PRACTICES.
2. PROVIDE AND INSTALL VOLUME DAMPERS IN ALL BRANCH DUCTS.
3. FLEXIBLE CONNECTIONS AT SUPPLY AND RETURN AIR OPENINGS OF ALL AIR HANDLING UNITS.
4. FLEXIBLE DUCTS TO BE GLASS-FLEX 8'-0", MAXIMUM IN LENGTH, WHERE APPLICABLE.
5. COORDINATE EXACT LOCATION OF ALL AIR OUTLETS AND INLETS (DIFFUSERS, REGISTERS AND GRILLES) WITH APPROPRIATE ARCHITECTURAL PLAN, AND VERIFY THEIR LOCATION WITH ARCHITECT ON THE JOB SITE BEFORE INSTALLATION. COLOR AS DIRECTED BY OWNER.
6. AUTOMATIC TEMPERATURE CONTROL DEVICE FOR REGULATION OF SPACE TEMPERATURE SHALL BE CAPABLE OF BEING SET FROM 55 TO 85'F, AND HAVE THE ABILITY TO OPERATE THE HEATING AND COOLING IN SEQUENCE. CONTROL SHALL BE ADJUSTABLE TO PROVIDE A RANGE OF UP TO 5'F BETWEEN FULL HEATING AND FULL COOLING AND HAVE CAPABILITY OF TERMINATING ALL HEATING AT A TEMPERATURE NO MORE THAN 70'F, AND COOLING AT A TEMPERATURE NOT LESS THAN 78'F.
7. APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE FASTENED IN PLACE.
8. A MAINTENANCE LABEL SHALL BE AFFIXED TO MECHANICAL EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED FOR THE OWNERS USE.
9. PROVIDE ACCESS PANEL FOR ALL CEILING MOUNTED EQUIPMENT & VOLUME DAMPERS.
10. PROVIDE MIN. 10'-0" SEPARATION BETWEEN POINT OF EXHAUST AND ANY FRESH AIR INTAKE, OR AIR HANDLING UNIT OSA INTAKE.
11. PROVIDE FIRE DAMPER OR SMOKE/FIRE DAMPER WHERE DUCT PENETRATES FIRE RATED CEILING OR WALL IF APPLICABLE.
12. TRANSVERSE JOINTS FOR ALL AIR SUPPLY DUCTS INSTALLED WHERE AIR LEAKAGE WOULD BE NON-BENEFICIAL TO THE OCCUPIED AREA, TEMPERATURE REQUIREMENTS SHALL BE SEALED WITH APPROVED MASTIC OR TAPE.
13. ALL DUCT SIZES SHOWN ON THE FLOOR PLANS ARE CLEAR INSIDE DIMENSIONS. CONTRACTOR SHALL ENLARGE DUCT SIZE IN ORDER TO ACCOMMODATE LINING INSIDE OF DUCT IF REQUIRED.
14. THE MECHANICAL CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS AND FEES.
15. THE PROJECT SHALL BE AIR BALANCED AND A COPY OF THE FINAL REPORT SHALL BE PRESENTED TO THE TENANT AND OWNER.
16. ENERGY CONSERVATION STANDARDS FOR NEW NONRESIDENTIAL BUILDINGS HAVE BEEN REVIEWED AND DESIGN SUBSTANTIALLY CONFORMS TO THEM.
17. EACH SINGLE SYSTEM PROVIDING HEATING OR COOLING AIR IN EXCESS OF 2,000 CFM SHALL BE EQUIPPED WITH AN AUTOMATIC SHUT-OFF. THE SMOKE DETECTOR SHALL BE INSTALLED IN THE MAIN SUPPLY AIR DUCT DOWNSTREAM OF THE FILTERS OR THEY MAY BE INSTALLED IN EACH ROOM OR SPACE SERVED BY THE SUPPLY AIR DUCT. DETECTORS SHALL ALSO BE INSTALLED IN THE MAIN RETURN DUCT (IF REQ'D. BY THE LOCAL CODE) AHEAD OF OSA INTAKE. SEE CODE FOR EXEMPTIONS AND LOCAL AUTHORITY FOR CODE INTERPRETATION, OR AS INDICATED ON PLAN.
18. ALL EQUIPMENT AND APPLIANCES ARE LISTED PRODUCTS, AND WILL BE INSTALLED ACCORDING TO THEIR LISTING, AND ALL LISTING INFORMATION WILL BE AVAILABLE FOR INSPECTION.
19. DUCTWORK CONSTRUCTION DETAILS:
    - A) SUPPLY AND RETURN MATERIAL: INSULATED DUCTBOARD (R-8) WITH HEAVY DUTY ALUMINUM TAPE.
    - B) KITCHEN EXHAUST MATERIAL: MINIMUM 16 GAUGE BLACK STEEL WITH WELDED JOINTS.
    - C) DISHWASHER EXHAUST MATERIAL: STAINLESS STEEL WITH WELDED JOINTS.
    - D) KITCHEN MAKEUP MATERIAL: GALVANIZED STEEL.
20. REFER TO DETAILS OR GUIDELINES FOR MECHANICAL CONSTRUCTION REQUIRMENTS. INSTALL IN FULL ACCORDANCE WITH PROPER CODES AND GUIDELINES.
21. COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND (ARCHITECTUAL) REFLECTED CEILING PLAN.
22. ALL EXTERIOR BRACKETS, CLAMPS, AND HANGERS SHALL BE HOT DIPPED GALVANIZED. COAT ALL CUT ENDS AND WELDS WITH "ZRC" COLD GALVANIZING COMPOUND.
23. SHOP PRIME ALL MISCELLANEOUS INTERIOR BRACKETS AND HANGERS UNLESS GALVANIZED OR STAINLESS STEEL.
24. DUCTWORK INSULATION DETAILS:
    - A) SUPPLY AND RETURN MATERIAL: INSULATED DUCTBOARD (R-8) WITH HEAVY DUTY ALUMINUM TAPE.
    - B) KITCHEN EXHAUST MATERIAL: ENCLOSED IN TWO HOUR FIRE RATED CHASE TO COMPLY WITH NFPA 96.
    - C) DISHWASHER EXHAUST MATERIAL: EXTERNAL R5 FIBERGLASS INSULATION WITH VAPOR BARRIER.
    - D) KITCHEN MAKEUP MATERIAL: EXTERNAL R5 FIBERGLASS INSULATION WITH VAPOR BARRIER.
    - E) EXHAUST MATERIAL: EXTERNAL R5 FIBERGLASS INSULATION WITH VAPOR BARRIER.

RANDALL S. HOLSTE
95561
REGISTERED
PROFESSIONAL ENGINEER
02/16/12

ISSUE	
01/25/12	ISSUED FOR PERMIT
02/16/12	ISSUE FOR BID

HARRELL ARCHITECTS, LP
9575 Katy Frwy., #200
Houston, Texas 77024
tel: 713.722.7071
fax: 713.722.7072

CONSULTANTS

Holste & Associates, Inc.
Consulting Engineers - Texas Reg. F-5443
6671 Southwest Frwy., Suite 850
Houston, Texas 77074 (713) 995-1351
www.holstemep.com
Contact: Kris Odom (832) 643-0368

PROJECT NAME

Maharaja Bhog

PROJECT ADDRESS

8338 Southwest Freeway
Houston, Texas 77074

PROJECT NUMBER

11078

SHEET NAME

MECHANICAL FLOOR PLAN

SHEET NUMBER

M1.1