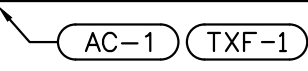

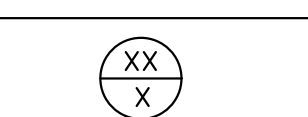


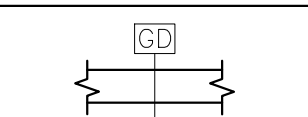
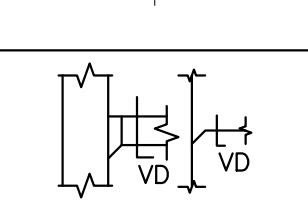
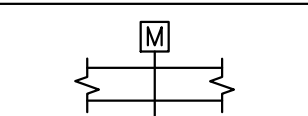
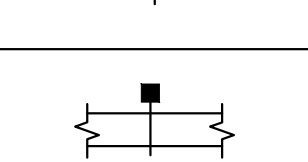
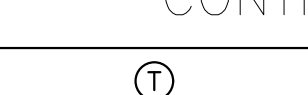
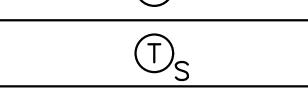
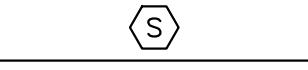
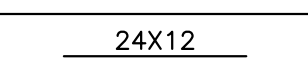
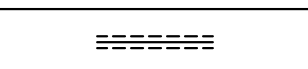



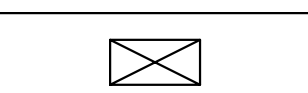
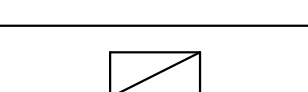
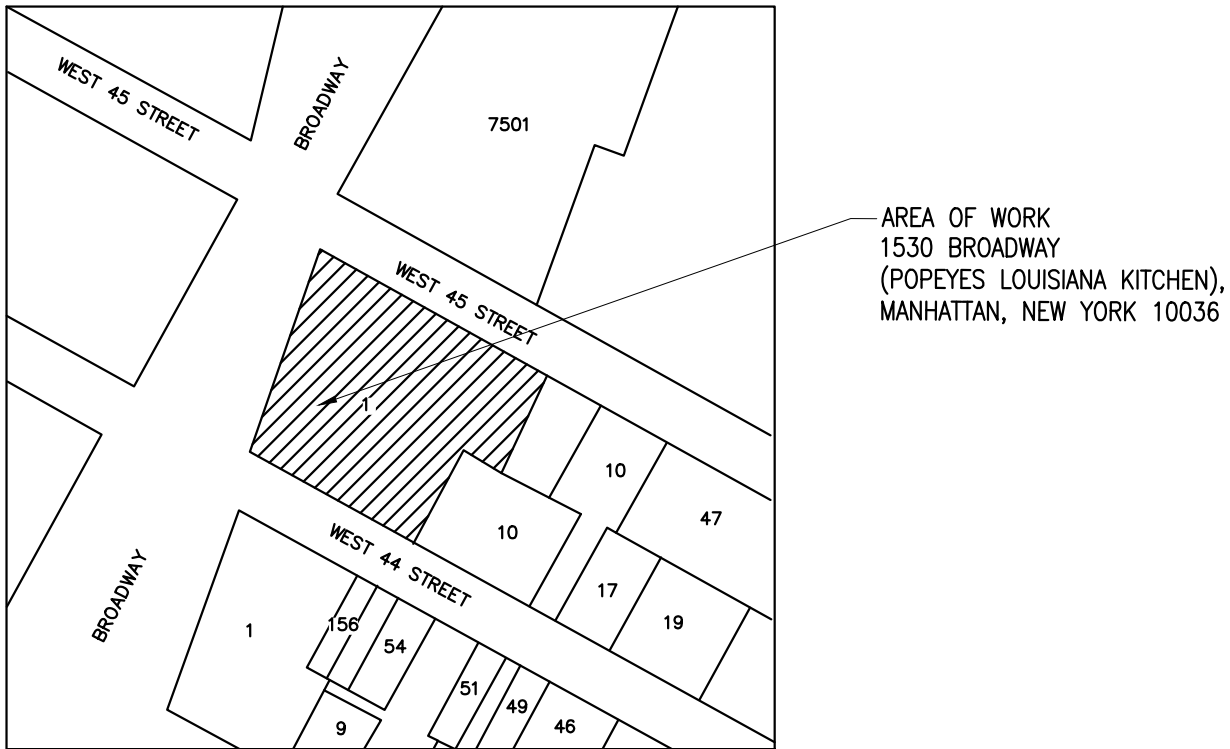


MECHANICAL SYMBOLS LIST

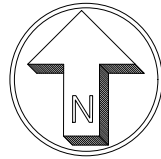
 	EQUIPMENT SYMBOL
	RISER SYMBOL
AIR DEVICES	
	CEILING DIFFUSER SUPPLY
	CEILING DIFFUSER RETURN
DUCT ACCESSORIES	
	GRAVITY DAMPER
	VOLUME DAMPER W/ ACCESS DOOR
	MOTORIZED DAMPER W/ ACCESS DOOR
	FIRE SMOKE DAMPER W/ ACCESS PANEL
CONTROLS AND SENSORS	
	THERMOSTAT
	TEMPERATURE SENSOR
	SMOKE DETECTOR
DUCTWORK	
	RECTANGULAR DUCT (WIDTH X DEPTH)
	AIR DUCT W/ 1.5" ACOUSTICAL LINING
	FLEXIBLE CONNECTION
	ROUND DUCT (DIAMETER)
	ROUND DUCT CROSS SECTION
	SUPPLY AIR RECTANGULAR DUCT GOING UP/DOWN
	RETURN AIR RECTANGULAR DUCT GOING UP/DOWN

PLOT PLAN
SCALE: N.T.S.



PROJECT INFORMATION

POPEYES LOUISIANA KITCHEN, 1530 BROADWAY, MANHATTAN, NEW YORK, 10036
BLOCK: 997
LOT: 1
ZONE: C6-7T
MAP: 8D
NO OF BUILDINGS: 1
NO OF FLOORS: 4
OCCUPANCY: K2



MECHANICAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AL	ACOUSTIC LINING
GD	DRAVITY DAMPER
CFM	CUBIC FEET OF AIR PER MINUTE
CD	CONDENSATE DRAIN PIPE
DN	DOWN
EER	ENERGY EFFICIENCY RATIO
FC	FLEXIBLE CONNECTION
FD/AD	FIRE DAMPER W/ACCESS DOOR
FD	FIRE DAMPER W/FUSIBLE LINK
HWHT	HOT WATER HEATER
IEER	INTEGRATED ENERGY EFFICIENCY RATIO
KEF	KITCHEN EXHAUST FAN
SEER	SEASONAL ENERGY EFFICIENCY RATIO
TXF	TOILET EXHAUST FAN
VD	VOLUME DAMPER
W.M.S.	WIRE MESH SCREEN
CDS	CEILING DIFFUSER SUPPLY
CDR	CEILING DIFFUSER RETURN
SAE	SAME AS EXISTING
AHU	AIR HANDLER UNIT
ESD	EXISTING SPIRAL DIFFUSER
PU	PRECIPITATOR UNIT
OAF	OUTSIDE AIR FAN
EDH	ELECTRIC DUCT HEATER
BOD	BOTTOM OF DUCT
BOE	BOTTOM OF EQUIPMENT

NEW YORK BUILDING DEPARTMENT NOTES

ALL WORK SHALL COMPLY WITH APPLICABLE SECTIONS OF THE CITY OF NEW YORK BUILDING CODE, EFFECTIVE JULY 1, 2014 AND ALL AMENDMENTS AND RULES AND REGULATIONS OF THE DEPARTMENT OF BUILDINGS TO DATE.

- THE CONTRACTOR SHALL ENGAGE THE THE SERVICES OF A PROFESSIONAL ENGINEER TO PROVIDE THE REQUIRED SPECIAL INSPECTIONS AND TESTS.
- TESTS WILL BE CONDUCTED UNDER DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT OR OTHER PERSON HAVING NOT LESS THAN FIVE (5) YEARS EXPERIENCE SUPERVISING THE INSTALLATION OF SUCH MECHANICAL SYSTEMS. THE TESTS WILL SHOW COMPLIANCE WITH 2014 BUILDING CODE REQUIREMENTS AS OUTLINES IN SECTION [BC 1704].
- THE LICENSED PROFESSIONAL ENGINEER, ARCHITECT OR OTHER PERSON HAVING NOT LESS THAN FIVE (5) YEARS EXPERIENCE SUPERVISING THE INSTALLATION OF SUCH MECHANICAL SYSTEMS AND CONDUCTING SUCH TESTS WILL FILE DOCUMENTATION AND REPORTS OF TESTS THAT THE SYSTEM COMPLIES WITH THE CONSTRUCTION DOCUMENTS AND APPLICABLE LAWS.
- TESTS OF MECHANICAL SYSTEMS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION MC 107 AND THE FOLLOWING SECTIONS OF THE 2014 NEW YORK CITY MECHANICAL CODE:
 - VENTILATION SYSTEM BALANCING MC 403.8
 - NYC NOISE CONTROL CODE: 24-227
 - DUCT CONSTRUCTION AND INSTALLATION- MC 603
 - AIR INTAKES, EXHAUSTS AND RELIEFS - MC 401.5
 - AIR FILTERS - MC 605
 - SMOKE DETECTORS AND FIRE AND SMOKE DAMPERS - MC 606 & 607 RESPECTIVELY
- THE FOLLOWING WORK ITEMS, COMPONENTS, MATERIALS, CAPACITIES, ETC. SHALL COMPLY WITH THE REFERENCED CODE OR STANDARD:
 - STANDARDS OF HEATING - MC 309.1
 - NYC NOISE CONTROL CODE: 24-227
 - DUCT CONSTRUCTION AND INSTALLATION- MC 603
 - AIR INTAKES, EXHAUSTS AND RELIEFS - MC 401.5
 - AIR FILTERS - MC 605
 - SMOKE DETECTORS AND FIRE AND SMOKE DAMPERS - MC 606 & 607 RESPECTIVELY
- MINIMUM TEMPERATURE TO BE MAINTAINED IN OCCUPIED SPACES DURING HEATING SEASON: 68 DEG. FAHRENHEIT.
- VENTILATION FOR ALL AREA SHALL COMPLY WITH MC 401.
- A STATEMENT SHALL BE FILED BY THE OWNER OR TENANT IN POSSESSION THAT THE VENTILATION SYSTEM WILL BE KEPT IN CONTINUOUS OPERATION AT ALL TIMES DURING THE NORMAL OCCUPANCY OF THE STRUCTURE AS REQUIRED BY MC 403.3
- ALL FIRE DAMPERS SHALL BE ACCEPTED FOR USE BY THE NEW YORK CITY DEPARTMENT OF BUILDINGS. FIRE DAMPERS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH UL 555, STANDARDS FOR FIRE DAMPERS AND CEILING DAMPERS.
- COMBINATION FIRE/SMOKE DAMPERS AND SMOKE DAMPERS SHALL BE ACCEPTED FOR USE BY NEW YORK CITY DEPARTMENT OF BUILDINGS AND SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH UL 555S.
- SMOKE DETECTION SYSTEMS SHALL BE INSTALLED AND SEQUENCED TO FOLLOW CONTROLS OPERATIONS WITH THE REQUIREMENTS OF SECTION MC 606 TO CLOSE DAMPERS AND AUTOMATICALLY STOP THE FAN.
- FIRE DAMPERS, SMOKE DAMPERS, COMBINATION FIRE/SMOKE DAMPERS AND CEILING DAMPERS LOCATED WITHIN THE AIR DISTRIBUTION AND SMOKE CONTROL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION MC 607.
- REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED FIRE-RATED WALL AND SMOKE WALL CONSTRUCTION AND LOCATION.
- THESE PLANS ARE APPROVED ONLY FOR THE WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.
- SMOKE DETECTOR SHALL MEET UL268A.
- ALL HEATING AND COOLING LOADS CALCULATED PER ASHRAE/ACCA 183.
- CERTIFICATE OF COMPLIANCE SHALL BE OBTAINED FOR EQUIPMENT PER BC110.6.
- THESE PLANS ARE APPROVED ONLY FOR THE WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.
- MECHANICAL SYSTEMS SHALL BE COMMISSIONED PER 2020 NYCECC C408.2.1, C408.2.5.4. FINAL COMMISSIONING REPORT SHALL BE DUE WITHIN 90 DAYS OF RECEIPT OF CERTIFICATE OF OCCUPANCY.
- SPECIAL INSPECTIONS: (TR-1)

REFER TR-1 TABLE ON THIS SHEET
- ENERGY CODE PROGRESS INSPECTIONS: (TR-8)

REFER TR-8 TABLE ON THIS SHEET

MECHANICAL DRAWING LIST

M-001.00	MECHANICAL GENERAL NOTES, SYMBOLS LIST & ABBREVIATIONS
M-002.00	MECHANICAL SPECIFICATIONS (1 OF 3)
M-003.00	MECHANICAL SPECIFICATIONS (2 OF 3)
M-004.00	MECHANICAL SPECIFICATIONS (3 OF 3)
M-100.00	MECHANICAL FLOOR PLAN - FIRST FLOOR
M-101.00	MECHANICAL FLOOR PLAN - SECOND FLOOR
M-102.00	MECHANICAL FLOOR PLAN - ROOF
M-500.00	MECHANICAL DETAILS (1 OF 4)
M-501.00	MECHANICAL DETAILS (2 OF 4)
M-502.00	MECHANICAL DETAILS (3 OF 4)
M-503.00	MECHANICAL DETAILS (4 OF 4)
M-600.00	MECHANICAL SCHEDULES
H-100.00	KITCHEN VENTILATION EQUIPMENT DETAILS (1 OF 2)
H-101.00	KITCHEN VENTILATION EQUIPMENT DETAILS (2 OF 2)

TR8 PROGRESS INSPECTIONS		
YES	NO	INSPECTION LIST
X		VENTILATION AND AIR DISTRIBUTION SYSTEM
X		SHUTOFF DAMPER
X		HVAC-R AND SERVICES WATER HEATING EQUIPMENTS
X		HVAC-R AND SERVICES WATER HEATING SYSTEM CONTROL
X		HVAC-R AND SERVICES WATER PIPING DESIGN AND INSULATION
X		MAINTENANCE INFORMATION

TABLE REFERENCE 1RCNY

\$5000-01(H) (1)AND(2)

(IB2)

(IIB2)

(IIB3) , (IIB3)

(IB4) , (IIB4)

(IB5) , (IIB5)

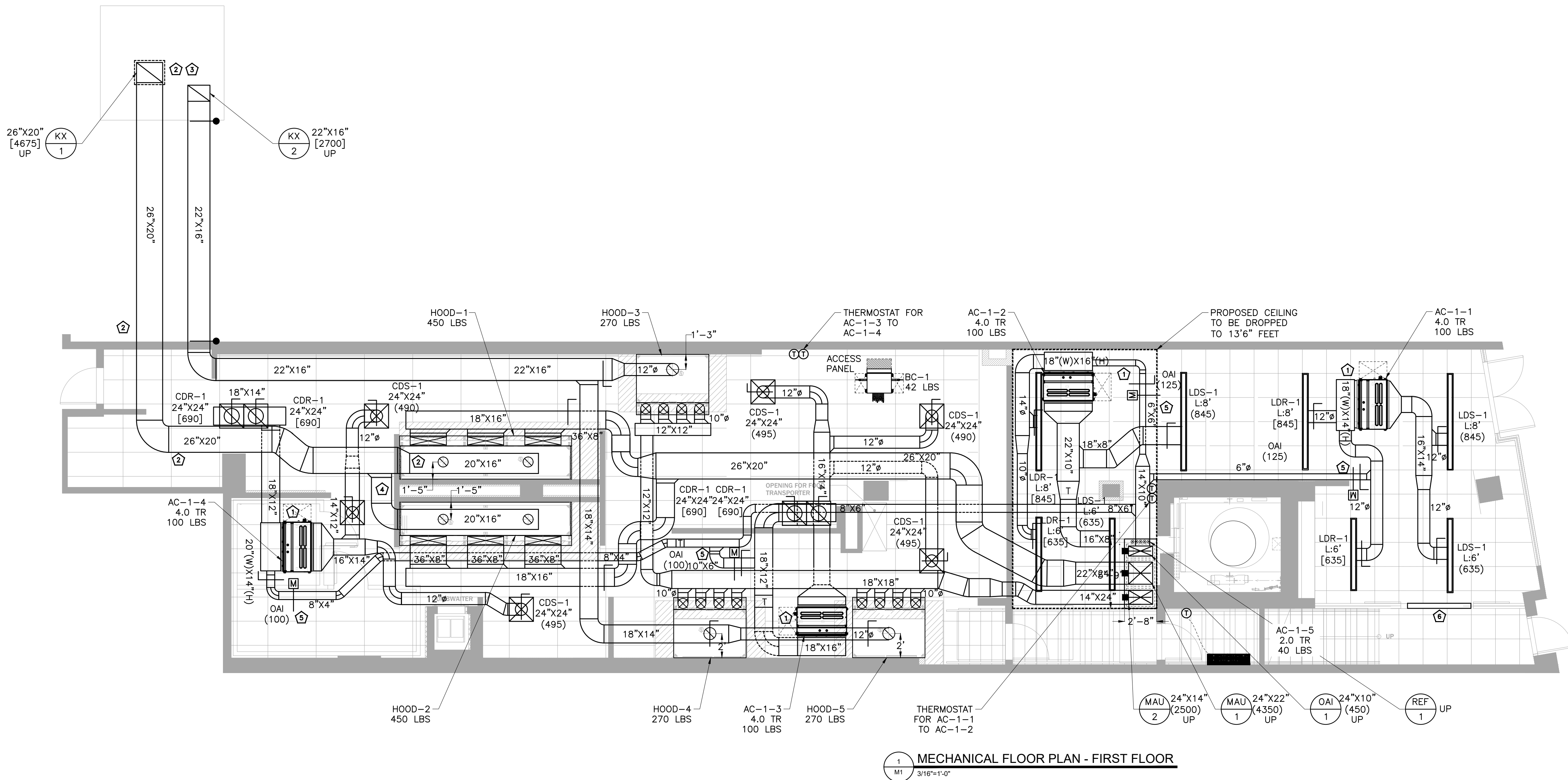
(ID1) , (IID1)

TR1 SPECIAL INSPECTIONS

YES	NO	INSPECTION	NYC BC 2014
X		MECHANICAL SYSTEMS	BC 1704.16
X		FIRE RESISTANT PRENENTRATION AND JOINTS	BC 1704.27
X		POST INSTALLED ANCHORS	BC 1704.32

ENERGY CONSERVATION CODE OF
NEW YORK CITY COMPLIANCE

TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND JUDGEMENT, THESE PLANS AND SPECIFICATION ARE IN COMPLIANCE WITH THE ENERGY CONSERVATION CODE OF NEW YORK CITY 2020



KITCHEN EXHAUST SYSTEM NOTES :

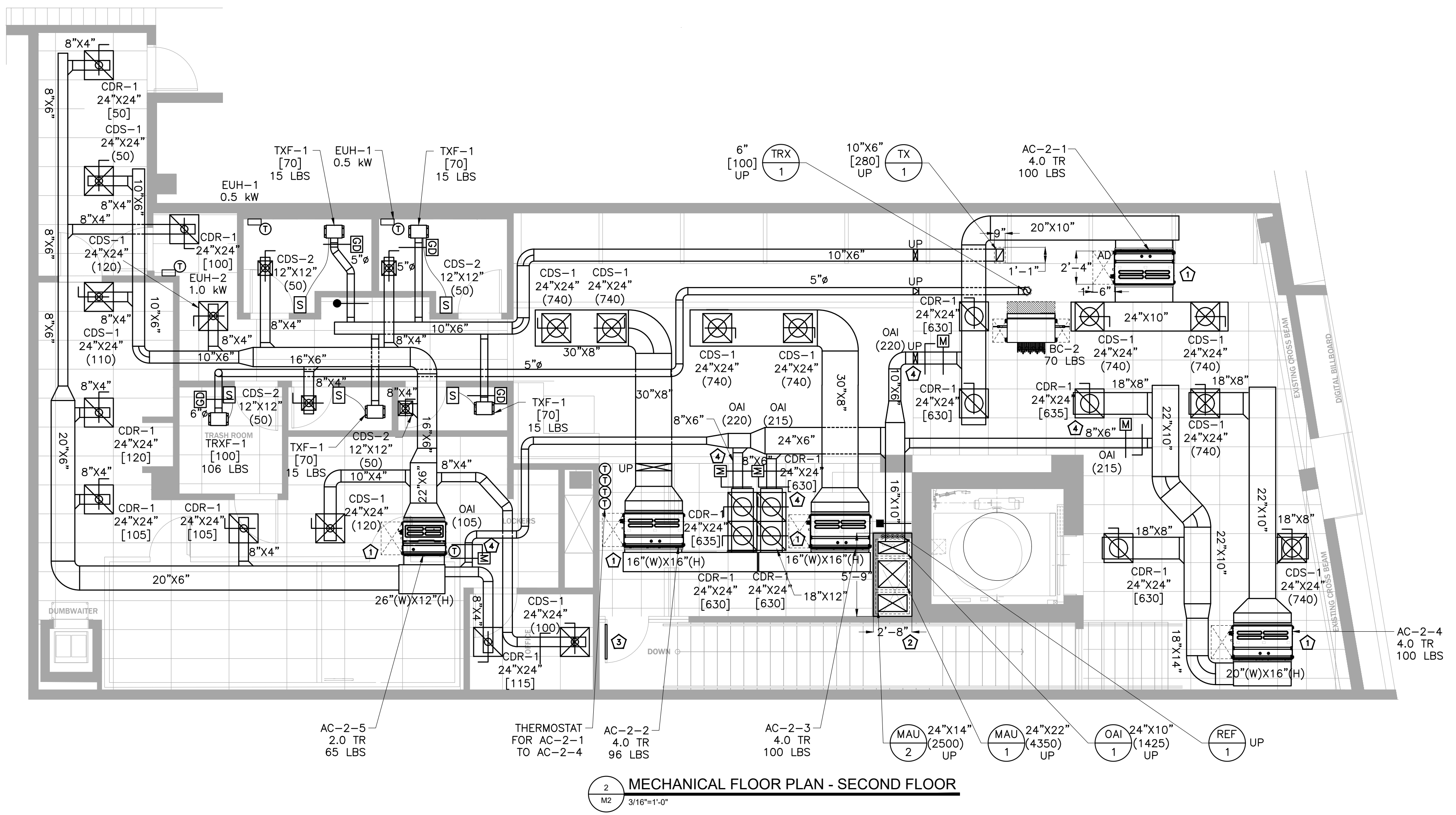
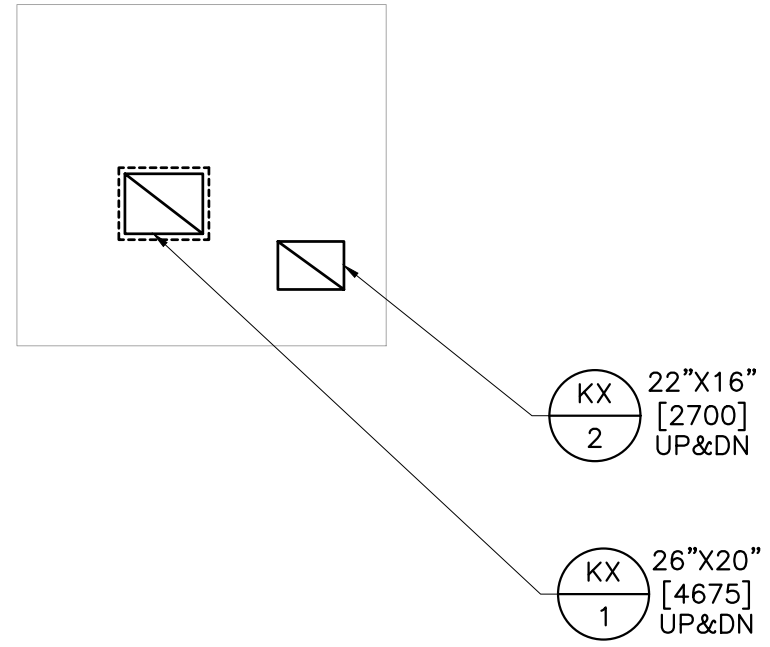
- PROVIDE CLEAN OUT AT ALL ELBOWS AND BOTTOM OF RISER AND EVERY 15 FEET HORIZONTAL KITCHEN EXHAUST DUCT.
- COMMERCIAL KITCHEN GREASE DUCTS SHALL BE DESIGNED FOR THE TYPE OF COOKING APPLIANCE AND HOOD SERVED.
- JOINTS, SEAMS AND PENETRATIONS OF GREASE DUCTS SHALL BE MADE WITH A CONTINUOUS LIQUID TIGHT WELD OR BRAZE MADE IN THE EXTERNAL SURFACE IF THE DUCT SYSTEMS.
- DUCT TO EXHAUST FAN CONNECTIONS SHALL BE FLANGED, GASKETED AND BOLTED TO THE INLET AND OUTLET OF THE FAN FOR INLINE FANS. APPROVED FLEXIBLE CONNECTIONS MAY BE PROVIDED.
- A VIBRATION ISOLATION CONNECTOR FOR CONNECTING A DUCT TO A FAN SHALL CONSIST OF NON-COMBUSTIBLE PACKING IN A METAL SLEEVE JOINT OF APPROVED DESIGN OR SHALL BE A COATED-FABRIC FLEXIBLE DUCT CONNECTOR LISTED AND LABELED FOR THE APPLICATION. VIBRATION ISOLATION CONNECTORS SHALL BE INSTALLED ONLY AT THE CONNECTION OF A DUCT TO A FAN INLET OR OUTLET.
- PRIOR TO THE USE OR CONCEALMENT OF ANY PORTION OF A GREASE DUCT SYSTEM, A LEAKAGE TEST SHALL BE PERFORMED. DUCT SHALL BE CONSIDERED TO BE CONCEALED WHERE INSTALLED IN SHAFTS OR COVERED BY COATINGS OR WRAPS THAT PREVENT THE DUCTWORK FROM VISUALLY INSPECTED ON ALL SIDE. THE DUCT INSTALLER SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY EQUIPMENT AND PERFORMING THE GREASE DUCT LEAKAGE TEST. THE DUCT LEAKAGE TEST SHALL BE PERFORMED FOR ALL THE DUCT SYSTEMS, INCLUDING THE DUCT-TO-DUCT CONNECTION. THE DUCTWORK SHALL BE PERMITTED TO BE TESTED IN SECTIONS, PROVIDED THAT EVERY JOINT IS TESTED (IF TEST IS FAILED, CONTRACTOR TO PROVIDE NEW KITCHEN EXHAUST DUCT).
- PROVIDE SMOKE TEST TO PROOF TIGHTNESS OF THE GREASE DUCT.
- GREASE DUCT BRACING AND SUPPORTS SHALL BE OF NON-COMBUSTIBLE MATERIAL SECURELY ATTACHED TO THE STRUCTURE AND DESIGNED TO CARRY GRAVITY AND SEISMIC LOADS WITHIN THE STREET LIMITATIONS OF THE NEW YORK CITY BUILDING CODE. BOLTS, SCREWS, RIVETS AND OTHER MECHANICAL FASTENERS SHALL NOT PENETRATE DUCT WALLS.
- PROVIDE A FUSIBLE LINK FIRE DAMPER OF THE SAME GAGE AS THE HOOD EXHAUST DUCT SHALL BE ADDED AT THE POINT OF CONNECTION OF THE BRANCH DUCT TO THE EXHAUST DUCT. THE FIRE DAMPER SHALL BE CLOSED AUTOMATICALLY UPON THE PENETRATION OF THE FIRE-EXTINGUISHING SYSTEM, AND THE BRANCH DUCT SHALL BE MADE IN EITHER THE TOP OR SIDES OF THE MAIN DUCT IN A MANNER TO PREVENT GREASE FROM FLOWING INTO THE BRANCH DUCT.
- A RESIDUE TRAP SHALL BE PROVIDED AT THE BASE OF EACH VERTICAL RISER WITH PROVISION FOR CLEANOUT IN ACCORDANCE WITH NFPA 96.
- CLEANOUT OPENINGS SHALL BE PROVIDED AT EVERY CHANGE IN DIRECTION, WITHIN 3 FEET OF THE EXHAUST FAN.
- CLEANOUT OPENINGS SHALL BE EQUIPPED WITH TIGHT-FITTING DOORS CONSTRUCTED OF STEEL HAVING A THICKNESS NOT LESS THAN THAT REQUIRED FOR THE DUCT. DOORS SHALL BE EQUIPPED WITH A SUBSTANTIAL METHOD OF LATCHING, SUFFICIENT TO HOLD THE DOOR TIGHTLY CLOSED. DOOR ASSEMBLIES SHALL HAVE A GASKET OR SEALANT THAT IS NON-COMBUSTIBLE AND LIQUID TIGHT AND SHALL NOT HAVE FASTENERS THAT PENETRATED THE DUCT.
- THE CLEANOUTS FOR HORIZONTAL GREASE DUCT SHALL BE LOCATED ON THE SIDE OF THE DUCT WITH THE OPENING NOT LESS THAN 1.5" ABOVE THE BOTTOM OF THE DUCT AND NOT LESS THAN 1" BELOW THE TOP OF THE DUCT.
- A GREASE DUCT SERVING THE TYPE-1 HOOD THAT PENETRATED A CEILING, WALL OR FLOOR SHALL BE ENCLOSED FROM THE FIRE POINT OF PENETRATION TO THE OUTLET TERMINAL. DUCT ENCLOSURES SHALL HAVE A FIRE-RESISTANCE RATING NOT LESS THAN THAT OF THE FIRE-RESISTANCE RATED ASSEMBLY PENETRATED BUT NEED NOT EXCEED 2 HOURS.
- KITCHEN-EXHAUST OUTLETS SHALL BE LOCATED NOT LESS THAN 10 FEET HORIZONTALLY FROM PARTS OF THE SAME OR CONTIGUOUS BUILDINGS, ADJACENT BUILDINGS AND ADJACENT PROPERTY LINE. THIS EXHAUST OUTLETS SHALL BE LOCATED NOT LESS THAN 10 FEET HORIZONTALLY FROM AND NOT LESS THAN 3 FEET ABOVE AIR INTAKE OPENINGS INTO ANY BUILDING.
- PROVIDE TYPE-I EXHAUST DUCT FOR HOOD-1&2 EXHAUST, IN COMPLIANCE WITH NYC MC 2014.

MECHANICAL GENERAL NOTES

- A. CONTRACTOR SHALL BALANCE EACH DEVICE WITH THE CFM SHOWN ON PLAN.
- B. NEW DUCTWORK SHOWN ON PLAN ARE SCHEMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR PIPING AND DUCTWORK ROUTING, OFFSET AND RUN PIPING, DUCTWORK INSIDE THE STRUCTURE IF REQUIRED. PROVIDE ANY EXTRA PIPING, DUCTWORK, FITTINGS, INSULATIONS AND OTHER ACCESSORIES IN ORDER TO COMPLETE THE INSTALLATION.
- C. EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
- D. DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
- E. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
- F. CONTRACTOR SHALL COORDINATE EQUIPMENT WEIGHTS AND SUPPORTS BASED ON ACTUAL EQUIPMENT SELECTED.
- G. COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
- H. ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.
- I. MOUNT DUCTWORK AS HIGH AS POSSIBLE.
- J. TEST AND BALANCE AIR SYSTEMS. PROVIDE REPORT TO G.C AND OWNER.
- K. ALL EXPOSED ROUND DUCTWORK SHALL BE INTERNALLY LINED. ALL DUCTWORK DIMENSIONS ARE INSIDE CLEAR.
- L. NEW DUCTWORK IN CONCEALED AREAS MAY BE RECTANGULAR WITH EQUIVALENT CROSS SECTIONAL FLOW AREA.
- M. PROVIDE 1.5" ACOUSTICAL LINING UP TO 20' OF DUCT RUN FROM AC UNITS IN SUPPLY AND RETURN DUCTS. PROVIDE 1.5" THERMAL INSULATION AFTER 20' OF DUCT RUN FROM AC UNITS. R-8(2" THICK) INSULATION TO BE PROVIDED TO OA DUCT.
- N. GREASE DUCT SYSTEM SHALL SLOPE NOT LESS THAN ONE-FOURTH UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE) TOWARDS THE HOOD OR GREASE RESERVOIR. PROVIDE GREASE RESERVOIR IN DUCTS, WHERE HORIZONTAL DUCT RUN EXCEED 75 FEET. COORDINATE WITH ARCHITECT FOR GREASE RESERVOIR LOCATION AND ACCESS.
- O. RESIDUE TRAP TO BE PROVIDED AT THE BASE OF EACH VERTICAL RISER OF GREASE EXHAUST DUCT FOR CLEANOUT, IN ACCORDANCE WITH NFPA 96.

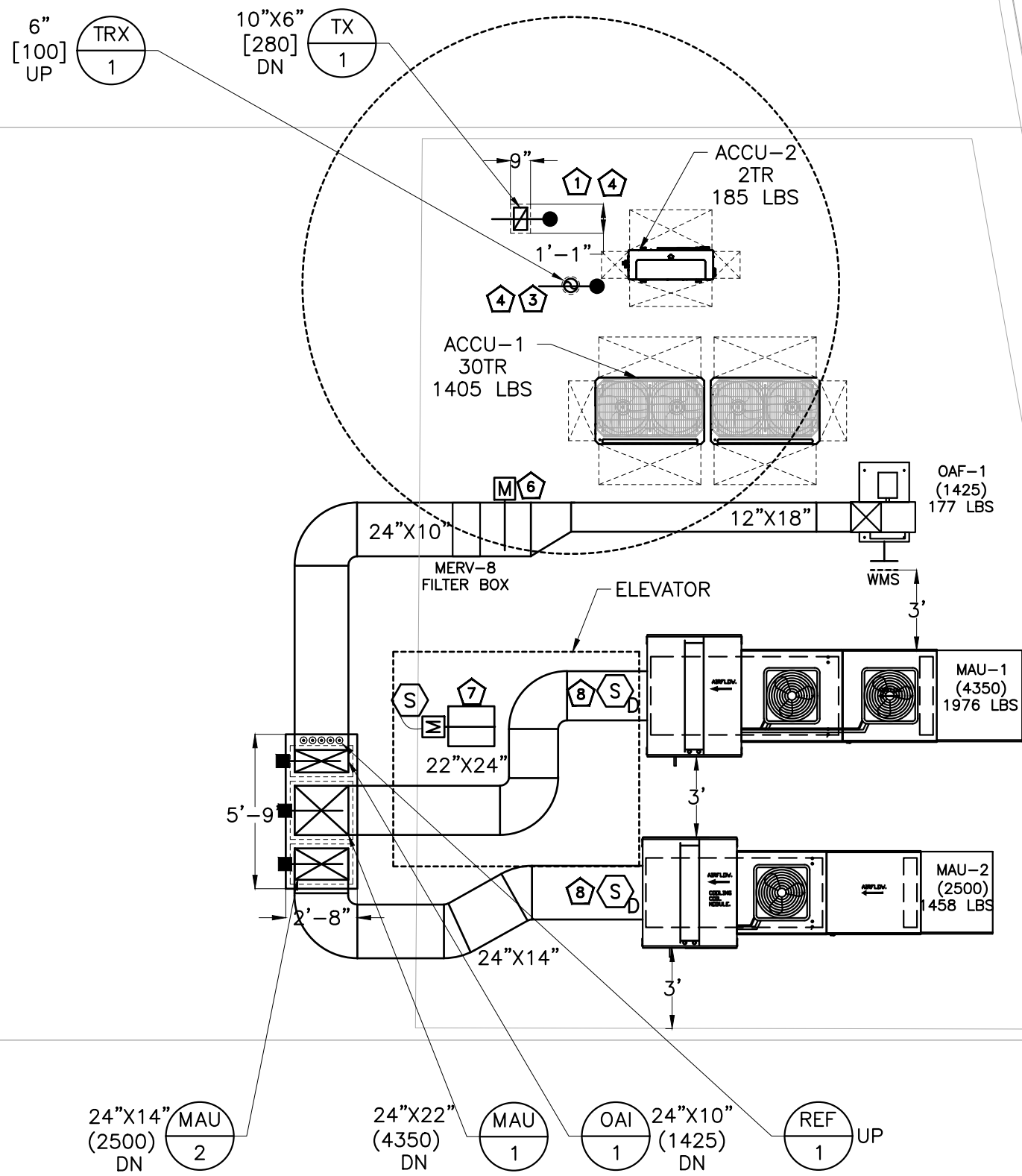
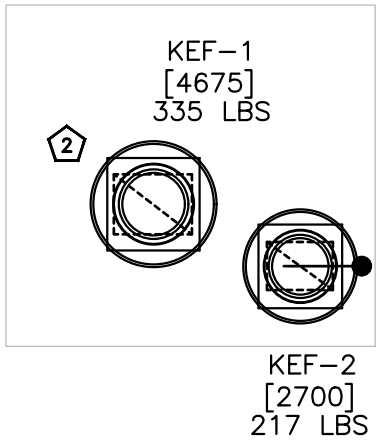
KEY NOTES:

- 1" CD TO BATHROOM SANITARY UNDER LAVATORY W/ AIR GAP FITTING COORDINATE W/PLUMBING DRAWING. ALSO PROVIDE DRAIN PAN AS PER DETAILS #5 ON M-501.
- CLEAN-OUT OPENINGS SHALL BE PROVIDED AT EVERY CHANGE IN DIRECTION. TIGHT-FITTING DOORS CONSTRUCTED OF STEEL HAVING A THICKNESS NOT LESS THAN THAT REQUIRED FOR THE DUCT. OPENING DOOR ASSEMBLIES SHALL HAVE A GASKET OR SEALANT THAT IS NONCOMBUSTIBLE AND LIQUID TIGHT, AND SHALL NOT HAVE FASTENERS THAT PENETRATE THE DUCT. THE OPENING DIMENSIONS SHALL BE 12X12 INCHES ON ACCESSIBLE SIDE OF DUCT. SPACING BETWEEN CLEAN OUT OPENING SHALL NOT BE MORE THAN 12 FEET. THE CLEANOUTS SHALL BE LOCATED ON THE SIDE OF THE DUCT WITH THE OPENING NOT LESS THAN 1.5 INCHES (38 MM) ABOVE THE BOTTOM OF THE DUCT, AND NOT LESS THAN 1 INCH (25 MM) BELOW THE TOP OF THE DUCT. WHERE THE DIMENSIONS OF THE SIDE OF THE DUCT PROHIBIT THE CLEAN-OUT INSTALLATION PRESCRIBED HEREIN, THE OPENINGS SHALL BE ON THE TOP OF THE DUCT OR THE BOTTOM OF THE DUCT. WHERE LOCATED ON THE TOP OF THE DUCT, THE OPENING EDGES SHALL BE A MINIMUM OF 1 INCH (25 MM) FROM THE EDGES OF THE DUCT. WHERE LOCATED IN THE BOTTOM OF THE DUCT, CLEAN-OUT OPENINGS SHALL BE DESIGNED TO PROVIDE INTERNAL DAMMING AROUND THE OPENING, SHALL BE PROVIDED WITH GASKETING TO PRECLUDE GREASE LEAKAGE, SHALL PROVIDE FOR DRAINAGE OF GREASE DOWN THE DUCT AROUND THE DAM, AND SHALL BE APPROVED FOR THE APPLICATION.
- PROVIDE GREASE TRAP AT BOTTOM OF GREASE EXHAUST DUCT RISER. CONTRACTOR TO COORDINATE WITH ARCHITECT TO PROVIDE ACCESS FOR GREASE TRAP AT BOTTOM OF KITCHEN EXHAUST DUCT RISER.
- PROVIDE GREASE RESERVOIR AT THE LOWEST POINT IN GREASE EXHAUST DUCT OF DUCT RUN. GREASE EXHAUST DUCT TO HAVE 2% SLOPE TOWARDS THE GREASE RESERVOIR. COORDINATE WITH ARCHITECT FOR GREASE RESERVOIR ACCESS.
- MOTORIZED DAMPER INTERLOCK WITH RESPECTIVE INDOOR UNITS.
- PROVIDE A 1.5 SOFT FIRE RATED DOOR LOUVER WITH FLUSIBLE LINK DAMPER. COORDINATE WITH ARCHITECT FOR LOCATION.



- KEY NOTES:**
- 1" CD TO BATHROOM SANITARY UNDER LAVATORY W/ AIR GAP FITTING COORDINATE W/PLUMBING DRAWING. ALSO PROVIDE DRAIN PAN AS PER DETAILS #5 ON M-501.
 - PROVIDE FIRE RATED ENCLOSURE FOR SHAFT AS MARKED IN DRAWING.
 - PROVIDE A 1.5 SQFT FIRE RATED DOOR LOUVER WITH FLUSIBLE LINK DAMPER. COORDINATE WITH ARCHITECT FOR LOCATION.
 - MOTORIZED DAMPER INTERLOCK WITH RESPECTIVE INDOOR UNITS.
 - PROVIDE MIN. 3. S.F. VENT WITH LOUVER/HATCH AT THE SIDE OF ELEVATOR. CONFIRM EXACT SIZE W/ARCH. & ELEVATOR CONSULTANT. PROVIDE MOTORIZED DAMPER AT LOUVER/HATCH &CONNECT TO SMOKE DETECTOR ON TOP OF STAIR SHAFT TO 100% FULLY OPEN WHEN SMOKE DETECTOR IS TRIGGERED. CLASS I MOTORIZED WITH AIR LEAKAGE RATE NOT GREATER THAN 4 CFM/SQFT AT 1" OF WG IN ACCORDANCE TO AMCA 500D TO BE USED.

- MECHANICAL GENERAL NOTES**
- A. CONTRACTOR SHALL BALANCE EACH DEVICE WITH THE CFM SHOWN ON PLAN.
 - B. NEW DUCTWORK SHOWN ON PLAN ARE SCHEMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR PIPING AND DUCTWORK ROUTING. OFFEST AND RUN PIPING, DUCTWORK INSIDE THE STRUCTURE IF REQUIRED. PROVIDE ANY EXTRA PIPING, DUCTWORK, FITTINGS, INSULATIONS AND OTHER ACCESSORIES IN ORDER TO COMPLETE THE INSTALLATION.
 - C. EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
 - D. DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
 - E. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
 - F. CONTRACTOR SHALL COORDINATE EQUIPMENT WEIGHTS AND SUPPORTS BASED ON ACTUAL EQUIPMENT SELECTED.
 - G. COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
 - H. ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.
 - I. MOUNT DUCTWORK AS HIGH AS POSSIBLE.
 - J. TEST AND BALANCE AIR SYSTEMS. PROVIDE REPORT TO G.C AND OWNER.
 - K. ALL EXPOSED ROUND DUCTWORK SHALL BE INTERNALLY LINED. ALL DUCTWORK DIMENSIONS ARE INSIDE CLEAR.
 - L. NEW DUCTWORK IN CONCEALED AREAS MAY BE RECTANGULAR WITH EQUIVALENT CROSS SECTIONAL FLOW AREA.
 - M. EXTEND FULL SIZE SUPPLY & RETURN DUCTWORK FROM EXISTING AHU TO SPACE. EXTEND AS SHOWN. ACOUSTICALLY LINE THE FIRST 10'-0" OF BOTH SUPPLY AND RETURN MAIN DUCTS.
 - N. PROVIDE 1.5" ACOUSTICAL LINING UP TO 20' OF DUCT RUN FROM AC UNITS IN SUPPLY AND RETURN DUCTS. PROVIDE 1.5" THERMAL INSULATION AFTER 20' OF DUCT RUN FROM AC UNITS. R-8 (2" THICK) INSULATION TO BE PROVIDED TO OA DUCT.



3 MECHANICAL FLOOR PLAN - ROOF
M3 3/16"=1'-0"

ROOF PLAN NOTES:

- 10"X6" EXHAUST DUCT UP THROUGH ROOF WITH TALL CONE FLASHING, WEATHER SKIRT, AND VENT CAP. MAINTAIN A MINIMUM OF 10'-0" FROM ALL OUTSIDE AIR INTAKES AND TERMINATE 36" ABOVE ROOF.
- CLEAN-OUT OPENINGS SHALL BE PROVIDED AT EVERY CHANGE IN DIRECTION. TIGHT-FITTING DOORS CONSTRUCTED OF STEEL HAVING A THICKNESS NOT LESS THAN THAT REQUIRED FOR THE DUCT. OPENING DOOR ASSEMBLIES SHALL HAVE A GASKET OR SEALANT THAT IS NONCOMBUSTIBLE AND LIQUID TIGHT, AND SHALL NOT HAVE FASTENERS THAT PENETRATE THE DUCT. THE OPENING DIMENSIONS SHALL BE 12X12 INCHES ON ACCESSIBLE SIDE OF DUCT. SPACING BETWEEN CLEAN OUT OPENING SHALL NOT BE MORE THAN 12 FEET. THE CLEANOUTS SHALL BE LOCATED ON THE SIDE OF THE DUCT WITH THE OPENING NOT LESS THAN 1.5 INCHES (38 MM) ABOVE THE BOTTOM OF THE DUCT, AND NOT LESS THAN 1 INCH (25 MM) BELOW THE TOP OF THE DUCT. WHERE THE DIMENSIONS OF THE SIDE OF THE DUCT PROHIBIT THE CLEAN-OUT INSTALLATION PRESCRIBED HEREIN, THE OPENINGS SHALL BE ON THE TOP OF THE DUCT OR THE BOTTOM OF THE DUCT. WHERE LOCATED ON THE TOP OF THE DUCT, THE OPENING EDGES SHALL BE A MINIMUM OF 1 INCH (25 MM) FROM THE EDGES OF THE DUCT. WHERE LOCATED IN THE BOTTOM OF THE DUCT, CLEAN-OUT OPENINGS SHALL BE DESIGNED TO PROVIDE INTERNAL DAMMING AROUND THE OPENING. SHALL BE PROVIDED WITH GASKETING TO PRECLUDE GREASE LEAKAGE, SHALL PROVIDE FOR DRAINAGE OF GREASE DOWN THE DUCT AROUND THE DAM, AND SHALL BE APPROVED FOR THE APPLICATION.
- 6" EXHAUST DUCT UP THROUGH ROOF WITH TALL CONE FLASHING, WEATHER SKIRT, AND VENT CAP. MAINTAIN A MINIMUM OF 10'-0" FROM ALL OUTSIDE AIR INTAKES AND TERMINATE 36" ABOVE ROOF.
- CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING RTU & INTAKE AIR FANS. AND HENCE THESE TOILET & TRASH ROOM EXHAUST DUCTS TO BE TERMINATED 10' AWAY FROM ANY AIR INTAKES.
- THE OAF-1 SHALL BE ON 24HR CIRCUIT BREAKER. INTERLOCK THE FAN OPERATION WITH AIR HANDLING UNITS START-STOP. CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED CONTROL WIRING AND EQUIPMENT FOR THE INTERLOCK.
- MOTORIZED DAMPER INTERLOCK WITH OAF-1.
- PROVIDE MIN. 3 S.F. FREE VENT AREA WITH LOUVER/HATCH AT THE TOP OF ELEVATOR. CONFIRM EXACT SIZE W/ARCH. & ELEVATOR CONSULTANT. PROVIDE MOTORIZED DAMPER AT LOUVER/HATCH &CONNECT TO SMOKE DETECTOR ON TOP OF ELEVATOR SHAFT TO 100% FULLY OPEN WHEN SMOKE DETECTOR IS TRIGGERED. CLASS 1 MOTORIZED WITH AIR LEAKAGE RATE NOT GREATER THAN 4 CFM/SQFT AT 1" OF WG IN ACCORDANCE TO AMCA 500D TO BE USED.
- SMOKE DETECTOR INTERLOCK WITH RESPECTIVE MAU

GENERAL NOTES FOR ROOF:

CONTRACTOR TO PROVIDE DUNNAGE FOR ALL MECHANICAL EQUIPMENT, MOUNTED ON ROOF. DUNNAGE TO BE COORDINATED AND INSTALLED ABOVE BUILDING STRUCTURAL MEMBERS IN CONSULTATION WITH A STURACTURAL ENGINEER.