FIRE ALARM SPECIFICATIONS:

1. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE FIRE ALARM SYSTEM. INSTALLATION. SYSTEM SHALL COMPLY WITH ALL CURRENT APPLICABLE CODES, INCLUDING LOCAL LAWS AND PER AUTHORITY HAVING JURISDICTION FIRE ALARM INSTALLATION SHALL CONFORM TO BUILDING STANDARDS. COORDINATE ALL WORK WITH BUILDING MANAGEMENT, BASE BUILDING FIRE ALARM SYSTEM VENDOR AND OTHER TRADES.

2. CONTRACTOR SHALL SUBMIT FIVE COPIES OF WIRING DIAGRAMS AND CATALOG CUTS FOR ALL FIRE ALARM WORK FOR REVIEW PRIOR TO THE START OF ANY WORK.

3. FIRE ALARM DEVICES INSTALLATION:
   A. PROVIDE FIRE ALARM DEVICES - FIRE ALARM SMOKE DETECTOR, STROBE LIGHT, SPEAKER UNITS AND OTHER DEVICES AS INDICATED ON THE PLAN. EXACT LOCATION OF DEVICES SHALL BE COORDINATED WITH ARCHITECTS AND FIELD CONDITIONS.

   B. FIRE ALARM SPEAKER, STROBE AND COMBINATION SPEAKER/STROBE SHALL BE RED HOUSING SIMILAR TO BASE BUILDING SYSTEM TYPE. STROBE LIGHTS SHALL MATCH BASE BUILDING SYSTEM CAPABLE OF DELIVERING 100,000 PEAK CANDLE POWER, 24/12 VDC, 90 MA AND SYNCHRONIZED TYPE.

      1) THE LAMP SHALL BE A XENON STROBE TYPE.

      2) THE LENS SHALL BE UNFILTERED OR CLEAR FILTERED WHITE LIGHT.

      3) THE MAXIMUM PULSE DURATION SHALL BE TWO-TENTHS OF ONE SECOND (0.2 SEC) WITH A MAXIMUM DUTY CYCLE OF 40 PERCENT. THE PULSE DURATION IS DEFINED AS THE TIME INTERVAL BETWEEN INITIAL AND FINAL POINTS OF 10 PERCENT OF MAXIMUM SIGNAL.

      4) THE INTENSITY SHALL BE A MINIMUM OF 75 CANDELA.

      5) THE FLASH RATE SHALL BE A MINIMUM OF 1 HZ AND A MAXIMUM OF 2 HZ.

      6) THE STROBE SHALL BE WALL MOUNTED 80 INCHES ABOVE THE HIGHEST FLOOR LEVEL WITHIN THE SPACE, OR 6 INCHES BELOW THE CEILING, WHICHEVER IS LOWER.

      7) OPERATING VOLTAGE OF SPEAKER UNITS SHALL BE COMPATIBLE WITH EXISTING BASE BUILDING FIRE ALARM SYSTEM.

   C. SPACE SMOKE DETECTORS SHALL BE PHOTOELECTRIC TYPE MATCHING THE STANDARD BUILDING SYSTEM. PROVIDE DUAL CHAMBER IONIZATION TYPE FOR ELEVATOR LOBBIES AND ELEVATOR MACHINE ROOMS AND DUCT MOUNTED DETECTORS WITH REMOTE INDICATOR LED AND KEY TEST SWITCH.

   D. BASE BUILDING FIRE ALARM VENDOR SHALL MAKE FINAL CONNECTIONS, MODIFICATIONS TO AND REPROGRAMMING OF THE FIRE COMMAND STATION.

   E. ALL EXISTING DEVICES WILL BE REINSTALLED IN THEIR ORIGINAL LOCATIONS OR AS NOTED ON PLAN AFTER NEW CEILING IS IN PLACE AND WALL FINISHES ARE COMPLETE. PROVIDE TEMPORARY SUPPORT FOR DEVICES AND KEEP OPERATIONAL DURING CONSTRUCTION.

   F. AS A MINIMUM, PROVIDE NO. 12 AWG. TEFLON CABLE FOR HORN CIRCUIT AND NO. 14 AWG. MULTI-CONDUCTOR CABLE FOR STROBE LIGHT CIRCUIT. EXTEND SYSTEM ZONE OR ADDRESSABLE CIRCUITS WITH TYPE AND SIZE MATCHING THE EXISTING SYSTEM. ALL CABLES SHALL BE TYPE 'FPLP' HAVING 150C AND COMPLY WITH FIRE DEPARTMENT REQUIREMENTS. CABLE SIZE AND CONFIGURATION (SHIELDED/NON) SHALL MATCH EXISTING.

4. PERMITS, STANDARDS AND APPROVALS:
   A. OBTAIN PERMISSION FROM BUILDING MANAGEMENT FOR CONNECTIONS OF TENANT SPEAKER LOOPS TO EXISTING BUILDING ALARM SPEAKER LOOPS ON THE FLOORS.

   B. ALL ROUTING AND TERMINATIONS OF CABLES SHALL BE DIRECTED AND APPROVED BY BUILDING MANAGEMENT. NO TERMINATIONS SHALL BE MADE WITHOUT PRIOR APPROVAL OF BUILDING MANAGEMENT.

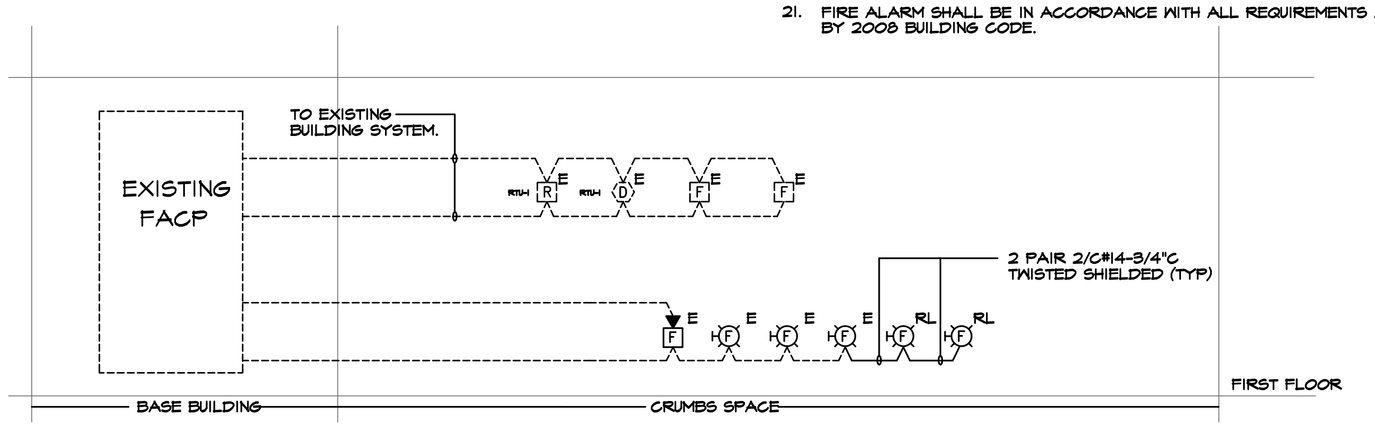
   C. ELECTRICAL CONTRACTOR SHALL INCLUDE ALL FEES, COSTS, ETC. FOR FILING, APPROVALS, FINAL CONNECTIONS, SYSTEM REPROGRAMMING, PRE-TESTING AND FIRE DEPARTMENT TESTING AND SIGNOFF.

5. SEQUENCE OF OPERATION:
   A. EXISTING SEQUENCE OF OPERATION TO REMAIN. EXISTING DEVICES ARE BEING RELOCATED ONLY.

   B. BASE BUILDING SEQUENCE OF OPERATION SHALL BE TAKE PRECEDENCE, FOR ALL SEQUENCING.

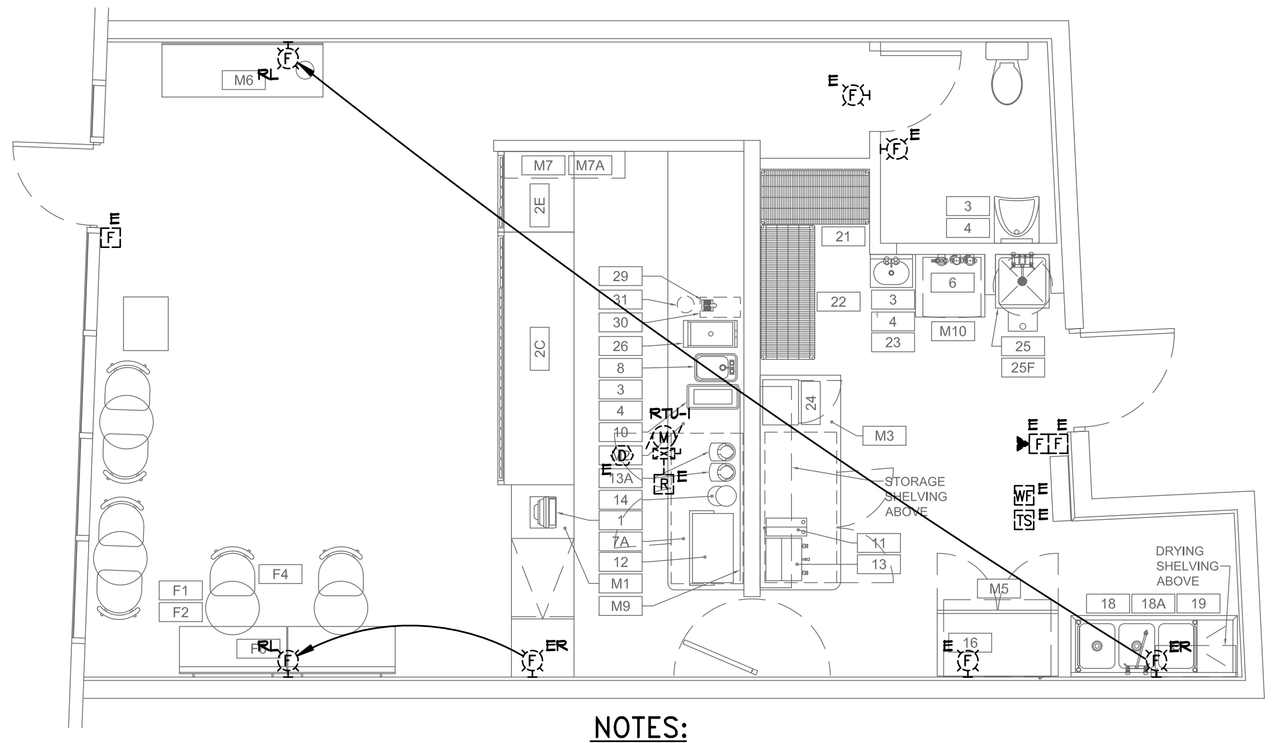
FIRE ALARM RISER DIAGRAM NOTES:

1. PROVIDE NEW STROBE PANELS, POWER SUPPLIES AND SYNCHRONIZING HARDWARE FOR NEW STROBES.
2. FOR LOCATIONS AND QUANTITIES OF DEVICES REFER TO FLOOR PLANS AND RISER DIAGRAMS. WHERE THERE ARE DISCREPANCIES BETWEEN THE PLANS AND RISER, THE GREATER QUANTITY SHALL BE USED.
3. DEVICES AND CONNECTIONS SHOWN ARE FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO FIELD VERIFY THE AS-BUILT CONDITIONS PRIOR TO THE START OF ANY WORK.
4. RE-USE EXISTING END OF LINE RESISTORS AND RECONNECT TO NEW DEVICES. PROVIDE NEW AS REQUIRED.
5. CONTRACTOR SHALL VERIFY ALL WIRING WITH BASE BUILDING FIRE ALARM VENDOR AND OBTAIN WIRING DIAGRAMS BEFORE PROCEEDING WITH THE START OF ANY WORK.
6. DO NOT SPLICE FIRE ALARM CONDUCTORS. IF EXISTING WIRING IS NOT LONG ENOUGH TO REACH NEW LOCATION PULL NEW WIRE OR PROVIDE NEW CONDUIT AND WIRING TO SUIT FIELD CONDITIONS.
7. ALL EQUIPMENT SHALL BE COMPATIBLE WITH BASE BUILDING SYSTEM AND UL LISTED AND IN COMPLIANCE WITH ADA REQUIREMENTS.
8. FINAL CONNECTIONS ARE TO BE DONE BY ELECTRICAL CONTRACTOR UNDER THE SUPERVISION OF BASE BUILDING FIRE ALARM VENDOR. PROVIDE ADEQUATE SLACK FOR TERMINATIONS.
9. PROVIDE FAN SHUT DOWN CAPABILITY FOR FANS WITH A RATING LARGER THAN 2,000 CFM. SHUT DOWN SHALL BE ACCOMPLISHED BY ONE OR MORE OUTPUT CONTROL POINTS FROM THE FIRE ALARM SYSTEM TO RELAYS FOR SHUTDOWN. PROVIDE CONTROL AND MONITORING FOR ALL RELAYS. PROVIDE POWER, CONTROL RELAYS, MONITORING AND WIRING FOR ALL FIRE/SMOKE DAMPERS. DAMPER MONITORING SHALL BE FROM AN END SNITCH ON THE DAMPER VIA A RELAY. REFER TO HVAC PLANS AND SPECIFICATIONS FOR REQUIRED FIRE MODE OPERATION OF ASSOCIATED DAMPERS AND FANS.
10. DUCT DETECTORS SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR ALONG WITH FURNISHING OF THE SAMPLING TUBES. DUCTWORK MODIFICATIONS AND INSTALLATION OF SAMPLING TUBES SHALL BE BY THE MECHANICAL CONTRACTOR. FOR FANS RATED LARGER THAN 2,000 CFM PROVIDE DUCT DETECTOR IN SUPPLY DUCT; FOR FANS RATED LARGER THAN 15,000 CFM PROVIDE DUCT DETECTORS IN SUPPLY AND RETURN DUCTWORK.
11. EXISTING BUILDING SYSTEMS NOT SHOWN (UNLESS A PART OF ONE INSTALLATION) SHALL REMAIN INTACT. DO NOT REMOVE EXISTING BASE BUILDING FIRE ALARM DEVICES UNLESS SPECIFICALLY DIRECTED. RE-INSTALL ALL EXISTING FIRE ALARM EQUIPMENT, WHICH IS TO REMAIN IF REMOVED FOR INSTALLATION OF NEW CEILING OR DUE TO DEMOLITION. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW CABLES TO ALL EXISTING FIRE ALARM EQUIPMENT THAT IS RELOCATED. COORDINATE EXISTING WORK WITH EXISTING BUILDING FIRE ALARM SYSTEMS. THE CONTRACTOR SHALL VERIFY THAT ANY MODIFICATIONS TO EXISTING SYSTEMS ARE COMPLETED AND IN WORKING ORDER.
12. PROVIDE ALL REQUIRED EXPANSION PANELS, PC BOARDS, POWER SUPPLIES, SPEAKER AMPLIFIERS, BATTERIES, FUSE CUTOUTS AND BRANCH CIRCUITS, ETC., FOR A COMPLETE AND OPERATION FIRE ALARM SYSTEM.
13. SPEAKERS AND STROBES SHALL BE WIRED ON ALTERNATING A-B CIRCUITING IN ALL AREAS.
14. DURING THE INSTALLATION, THE EXISTING FIRE ALARM SYSTEM MUST REMAIN OPERATIONAL. WHEN NOT OPERATIONAL, A CERTIFIED FIRE WATCH MUST BE PROVIDED BY CONTRACTOR.
15. ALL DEVICES SHALL BE CIRCUITED IN" ELECTRIC METALLIC TUBING (EMT) WITH COMPRESSION COUPLINGS, BELOW 80" AFF. SET SCREW COUPLINGS ARE NOT ALLOWED.
16. ALL NEW DEVICES SHALL BE TIED INTO EXISTING FIRE ALARM CONTROL PANEL. VERIFY ROUTING IN FIELD.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR FILING FOR INSPECTION BY THE FDNY AND SHALL COORDINATE THE ATTENDANCE OF ALL NECESSARY TRADES AND PERSONNEL.
18. INSTALLATION SHALL BE TESTED COMPLETELY PRIOR TO THE FDNY INSPECTION.
19. ANY LETTER OF DEFECT SHALL BE SELF-CERTIFIED BY THE CONTRACTOR.
20. A COPY OF THE FDNY LETTER OF APPROVAL SHALL BE FORWARDED TO BUILDING MANAGEMENT.
21. FIRE ALARM SHALL BE IN ACCORDANCE WITH ALL REQUIREMENTS AS SET FORTH BY 2008 BUILDING CODE.



FIRE ALARM RISER DIAGRAM

N.T.S.



NOTES:

1. CONTRACTOR SHALL UTILIZE BASE BUILDINGS' FIRE ALARM VENDOR TO CONNECT TO BUILDING FIRE ALARM SYSTEM.

FIRE ALARM SYSTEM

F◀	COMBINATION FIRE ALARM SPEAKER AND STROBE LIGHT UNIT - FLUSH WALL MOUNTED AT 80" ABOVE FINISHED FLOOR.
F	FIRE ALARM DOUBLE ACTION PULL STATION, NYC APPROVED - WALL MOUNTED AT 48" ABOVE FINISHED FLOOR.
F	FLUSH WALL MOUNTED STROBE LIGHT UNIT
H	CEILING MOUNTED AREA HEAT DETECTOR
M/R	AC UNIT WITH STARTER AND ADDRESSABLE FAN SHUTDOWN RELAY
D	DUCT MOUNTED SMOKE DETECTOR WITH REMOTE TEST SWITCH & REMOTE ACTIVATION INDICATION LED
E	EXISTING DEVICE TO REMAIN
N	NEW DEVICE
ER	EXISTING DEVICE TO BE RELOCATED
RL	RELOCATED DEVICE

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ISSUES:

No.	Date	Description
1	06.14.10	ISSUED FOR REVIEW
1	06.23.10	ISSUED FOR BID

SEAL:

DRAWN BY: RT

SCALE: As Noted

DRAWING TITLE: Fire Alarm Plans & Specifications

DRAWING NO.
FA-101.00

SHEET 1 OF 1