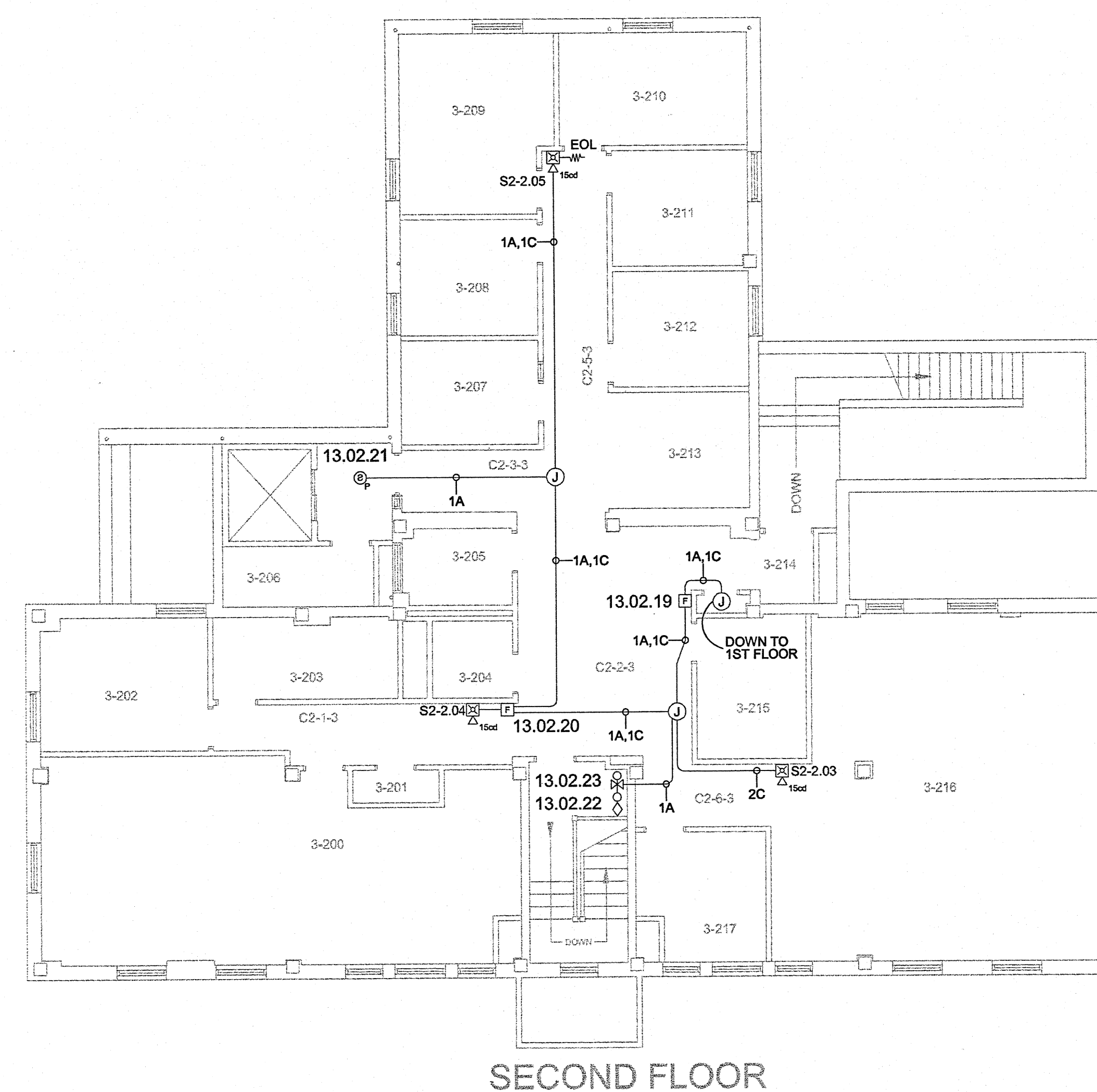


**SYMBOL LIST**

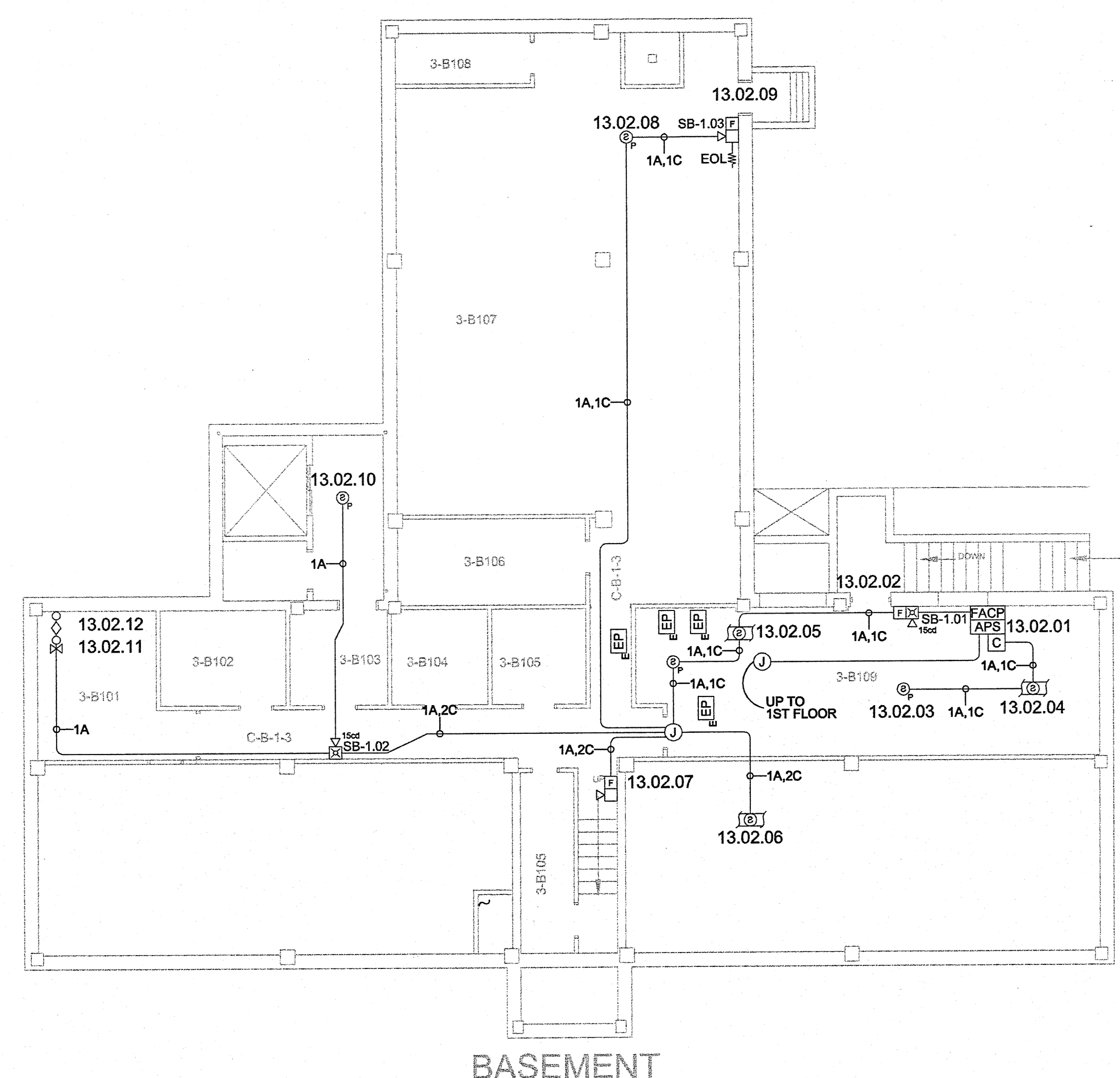
[FCU]	FIRE SYSTEM CONTROL UNIT
[APS]	ALARM DEVICE POWER SUPPLY
[FPCP]	FIRE PUMP CONTROL PANEL
[EFCR]	ELEVATOR RECALL CONTROL RELAYS
[EFSR]	ELEVATOR POWER SHUTDOWN RELAYS
[SNA]	SITE NETWORK FIRE ALARM ANNUNCIATOR PANEL
[FAP]	FIRE ALARM PRINTER
[UPS]	UNINTERRUPTIBLE POWER SUPPLY
[CRT]	CRT WITH KEYBOARD - OPERATOR'S TERMINAL
[TC]	FIRE ALARM TERMINAL CABINET
[RA]	REMOTE ANNUNCIATOR
[ML]	MAGNETIC DOOR LOCK RELEASE
[RL]	REMOTE INDICATOR LAMP
[SD]	SMOKE DAMPER
[EP]	ELECTRICAL PANEL
[KFS]	KITCHEN HOOD FIRE SUPPRESSION SYSTEM
[MPS]	MANUAL PULL STATION
[PDS]	PHOTOELECTRIC SMOKE DETECTOR (S-SOUNDER SMOKE DETECTOR)
[HDS]	HEAT DETECTOR
[ADS]	AIR DUCT SMOKE DETECTOR
[S]	SPEAKER (CEILING MOUNT)
[HWS]	HORN WITH STROBE (WALL MOUNT) (SP=SPEAKER WITH STROBE)
[H]	HORN (WALL MOUNT)
[SL]	STROBE LIGHT (WALL MOUNT)
[JB]	JUNCTION BOX
[RM]	RELAY MODULE
[AMM]	ADDRESSABLE MONITOR MODULE
[MDH]	MAGNETIC DOOR HOLDER
[FWS]	FIRE SPRINKLER WATERFLOW SWITCH
[FVS]	FIRE SPRINKLER VALVE SUPERVISION SWITCH
[A]	16-2C SHIELDED FPLP CABLE - (S/LC)
[B]	16-2C SHIELDED FPLP CABLE - (SPEAKER)
[C]	14-2C UNSHIELDED FPLP CABLE - (NAC)
[D]	16-2C UNSHIELDED FPLP CABLE - (DOOR HOLDER POWER)
[E]	16-2C UNSHIELDED FPLP CABLE - (DUCT DETECTOR POWER)

**General Notes**

- All wiring shall be in compliance with Article 760 of the enforced version of the National Electric Code (NFPA 70), the National Fire Code (NFPA 72) and local building and fire codes.
- AC input power to the fire alarm system power supplies requires a dedicated single phase, 20 amp, 120 volt circuit with ground. Mark these circuits "FIRE ALARM SYSTEM".
- Traditional "Hard Wired" initiating and indicating circuits are circuited in series-parallel utilizing a resistor for integrity supervision of the circuit's conductors. Wire all circuits as shown. No parallel branching of conductors is permitted.
- Analog signaling line circuits are parallel and do not require a supervision resistor. In certain applications, signaling line circuits are installed in series-parallel for a higher performance level. Wire all circuits as shown. Contact Mac Systems before deviating from the drawings.
- Device Placement:
  - Smoke detectors and heat detectors shall be located at least 3' from and air register and at least 4" from the wall.
- Equipment Elevations:
  - Control Units - 72" AFF to top of the cabinet.
  - Annunciators - 80" AFF to the centerline of the cabinet.
  - Manual pull stations - 42" - 54" to the operating handle of the device. Use switch height if in these parameters.
  - Audible Visual Devices - 80" AFF or 6" below the ceiling to the centerline of the outlet box whichever is lower.
  - Visual Devices - 80" AFF or 6" below the ceiling to the centerline of the outlet box whichever is lower.
  - Audible Devices - 90" AFF or 6" below the ceiling to the centerline of the outlet box whichever is lower.
- Outlet box requirements:
  - Manual pull stations - Single gang box or 4" square box with a single gang plaster ring.
  - Smoke detectors - 4" square box with a round plaster ring. Use a 2 1/8" deep box with an extension ring and no plaster ring if the smoke detector has an integral audible alarm.
  - Heat detectors - 4" square box with a round plaster ring.
  - Monitor modules - 4" square box with a blank cover.
  - Control modules - 4" square box - 2 1/8" deep.
  - Strobe Horns and Strobe lights - Single gang box or 4" square box with a single gang plaster ring. The plaster ring may be deleted for surface mount installations.
  - Speakers and Speaker Strobe - 4" square box - 2 1/8" deep with an extension ring.
  - Door Holders - Single gang box or 4" square box with a single gang plaster ring.
- Special Notes:
  - Voltage drop and battery calculations will be performed in the field based upon actual wire lengths using Wheelock version 6 voltage drop calculator.
  - Fire alarm speakers will be connected to the system so that no more than 20 watts of power will be consumed per circuit.
  - Actual device, control unit, and power supply locations will be shown on the record drawings. Cable quantities, types, and locations will also be shown on the record drawings.



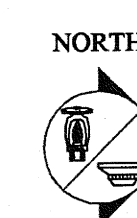
SECOND FLOOR



BASEMENT



FIRST FLOOR



**MAC Systems**  
 210 South Norfolk  
 Tulsa, Oklahoma 74120  
 Voice (918) 582-1148 Fax (918) 582-3700  
 Oklahoma Alarm License # 0363

Department of Veterans Affairs  
 VA Medical Center  
 921 NE 13th Street  
 Oklahoma City, Oklahoma 73104  
 SCALE: 1/8" = 1'-0" DRAWN BY: John Quinn  
 DESIGNER: John Quinn A/E  
 JOB NUMBER: 15254 DRAWING DATE: As-Built - 02/16/07  
 FLOOR: Building 3 All Floors  
 DRAWING TYPE: Fire Detection and Alarm System  
 SHEET NUMBER: FA1.35