BASEMENT
FIRE ALARM PLAN

SCALE: 1/4"=1'-0"  0  2'  4'  8'

## GENERAL NOTES:

1. THESE DRAWINGS ARE DIAGRAMMATIC. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.
2. INSTALLATION SHALL COMPLY WITH NEC, NFPA 72 AND ALL OTHER APPLICABLE CODES AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
3. WIRING DEPICTED ON THESE PLANS IS SCHEMATIC – ACTUAL WIRE LOCATIONS MAY DIFFER FROM THESE PLANS. WIRING SHALL BE PERFORMED AS ACTUAL BUILDING CONSTRUCTION CONDITIONS ALLOW AND TO MINIMIZE PENETRATIONS THROUGH AREA SEPARATION WALLS AND FIRE WALLS. THE USE OF A RACEWAY IS PERMITTED AS LONG AS NO 110V OR HIGHER VOLTAGE CABLES ARE IN THE SAME RACEWAY.
4. FIRE RATINGS SHALL BE MAINTAINED FOR ALL PENETRATIONS THROUGH FIRE-RATED CONSTRUCTION.
5. POWER FOR ALL FIRE ALARM PANELS AND FIRE ALARM POWER SUPPLIES MUST BE PROVIDED BY A DEDICATED AC BRANCH CIRCUIT. THE LOCATION OF THE BRANCH CIRCUIT BREAKER SHALL BE PERMANENTLY IDENTIFIED AT THE CONTROL UNIT AND SHALL HAVE A RED MARKING IN ACCORDANCE WITH NFPA 72.
6. POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST REMAIN SEPARATED IN CABINET. ALL POWER-LIMITED CIRCUIT WIRING MUST REMAIN AT LEAST 0.25" AWAY FROM ANY NONPOWER-LIMITED CIRCUIT WIRING. FURTHERMORE, ALL POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST ENTER AND EXIT THE CABINET THROUGH DIFFERENT KNOCK OUTS AND/OR SEPARATE CONDUITS.
7. WHEN UTILIZING CLASS "A" CIRCUITS, SEPARATE OUTGOING AND RETURN CONDUCTORS OF CLASS "A" CIRCUITS BY A MINIMUM OF 12" WHERE RUN VERTICALLY AND 48" WHERE RUN HORIZONTALLY.
8. WHEN UTILIZING SHIELDED CABLE TIE SHIELDS THROUGH AND INSULATE AT EACH JUNCTION BOX. INSULATE AND TAPE BACK AT END.
9. ALL FIRE ALARM CABLING SHALL BE ACCEPTABLE TO THE FIRE ALARM EQUIPMENT MANUFACTURER FOR THE INTENDED PURPOSE.
10. SMOKE DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER CONSTRUCTION CLEAN-UP IS COMPLETED AND FINAL.
11. LOCATE SMOKE DETECTORS A MINIMUM OF THREE (3) FEET FROM MECHANICAL DIFFUSERS. WALL-MOUNTED SMOKE DETECTORS SHALL BE LOCATED A MINIMUM OF 4" AND A MAXIMUM OF 12" FROM CEILING. CEILING-MOUNTED SMOKE DETECTORS SHALL BE MOUNTED ON CEILINGS AND NOT ON THE BOTTOMS OF BEAMS OR JOISTS.
12. PROVIDE SYNCHRONIZATION OF ALL VISUAL NOTIFICATION APPLIANCE CIRCUITS. PROVIDE ALL REQUIRED SYNC MODULES. PROVIDE A MULTI-SYNC MODE SLAVE CONNECTION BETWEEN ALL SYNC MODULES.
13. VERIFY ALL FIELD SELECTABLE AUDIBILITY SETTINGS OF NOTIFICATION APPLIANCES WITH FIRE ALARM CONTRACTOR.
14. UPON COMPLETION OF THE FIRE ALARM SYSTEM INSTALLATION AND PROGRAMMING, THE INSTALLING CONTRACTOR SHALL PERFORM FINAL TESTING OF THE ENTIRE SYSTEM, PER ALL APPLICABLE CODES, AND SHALL COORDINATE AND PERFORM A FINAL FIRE ALARM SYSTEM INSPECTION.
15. PROVIDE OFF-SITE MONITORING AS REQUIRED BY THE INTERNATIONAL FIRE CODE, SECTION 907.15 AND THE LOCAL AUTHORITY HAVING JURISDICTION.
16. INSTALLING CONTRACTOR SHALL, PHYSICALLY, LABEL ALL INITIATING DEVICES AND NOTIFICATION APPLIANCE CIRCUIT END OF LINE (WHEN WIRING CLASS "B"). THESE LABELS SHALL BE IN PLACE PRIOR TO START-UP AND TESTING.

## FIRE ALARM SYMBOL LEGEND

NOTE: ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT

| SYMBOL | DESCRIPTION | MOUNTING |
|---|---|---|
| FCP | FIRE ALARM CONTROL PANEL | WALL-TOP @ 66" |
| FSA | FIRE SYSTEM ANNUNCIATOR | WALL-TOP @ 66" |
| | SMOKE DETECTOR | CEILING |
| | HEAT DETECTOR | CEILING |
| CM | ADDRESSABLE CONTROL MODULE | FIELD VERIFY |
| MM | ADDRESSABLE MONITOR MODULE | FIELD VERIFY |
| P | MANUAL PULL STATION | WALL @ 48" |
| | WATER FLOW SWITCH | BY OTHERS |
| | VALVE TAMPER SWITCH | BY OTHERS |
| MH | MINI-HORN | WALL 80"-96" |
| | HORN / STROBE | WALL 80"-96" |
| | STROBE | WALL 80"-96" |

| ABBREVIATION | DESCRIPTION |
|---|---|
| E | EXISTING |
| G | WITH GUARD |
| P | PENDENT MOUNT |
| R | RESIDENTIAL (110V) |
| S | SOUNDER BASE |
| WP | WEATHER PROOF |
| EOL | END OF LINE RESISTOR |
| EOLR | END OF LINE RELAY |
| AWG | AMERICAN WIRE GAUGE |
| TWP | TWISTED PAIR |
| TWSP | TWISTED SHIELDED PAIR |
| FPLP | FIRE POWER LIMITED PLENUM |
| FPLR | FIRE POWER LIMITED RISER |

SPEAKER WATTAGE (2W) — STROBE CANDELA 75 — 30

L1D001 OR D01
(L – DENOTES LOOP #)
(D or M – DENOTES DETECTOR OR MODULE #)
DEVICE ADDRESS

1-#16/2 TWP
WIRE TYPE ABBREVIATED
CONDUCTOR COUNT
WIRE SIZE
# OF CABLES (IF OMITTED ONLY 1 CABLE NEEDED)

## OPERATIONS MATRIX

| FIRE ALARM INPUT | FIRE ALARM OUTPUT: ACTIVATE ALARM INDICATOR | ACTIVATE AUDIBLE ALARM | ACTIVATE SUPERVISORY INDICATOR | ACTIVATE AUDIBLE SUPERVISORY SIGNAL | ACTIVATE TROUBLE INDICATOR | ACTIVATE AUDIBLE TROUBLE INDICATOR | TRANSMIT ALARM SIGNAL | TRANSMIT SUPERVISORY SIGNAL | TRANSMIT TROUBLE SIGNAL | ACTIVATE NOTIFICATION APPLIANCES |
|---|---|---|---|---|---|---|---|---|---|---|
| SMOKE DETECTORS | ● | ● | | | | | ● | | | ● |
| PULL STATIONS | ● | ● | | | | | ● | | | ● |
| WATERFLOW SWITCHES | ● | ● | | | | | ● | | | ● |
| VALVE TAMPER SWITCHES | | | ● | ● | | | | ● | | |
| FIRE ALARM AC POWER FAIL | | | | | ● | ● | | | ● | |
| FIRE ALARM LOW BATTERY | | | | | ● | ● | | | ● | |
| OPEN CIRCUIT | | | | | ● | ● | | | ● | |
| GROUND FAULT | | | | | ● | ● | | | ● | |
| NAC SHORT CIRCUIT | | | | | ● | ● | | | ● | |
| LOSS OF AC TO BUILDING | | | | | ● | ● | | | ● | |

| REVISION | DESCRIPTION | DATE |
|---|---|---|
| 0 | ISSUED FOR REVIEW & APPROVAL | 3/20/2016 |

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## FIRE ALARM PLAN - BASEMENT

| | |
|---|---|
| DRAWN | JS<br>UNICAD JOB #16171 |
| CHECKED | WAYNE B. HAWS<br>NICET IV 90496 |
| DATE | 3/18/2016 |
| REVISION | Date: 04/08/16 |
| SCALE | |

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