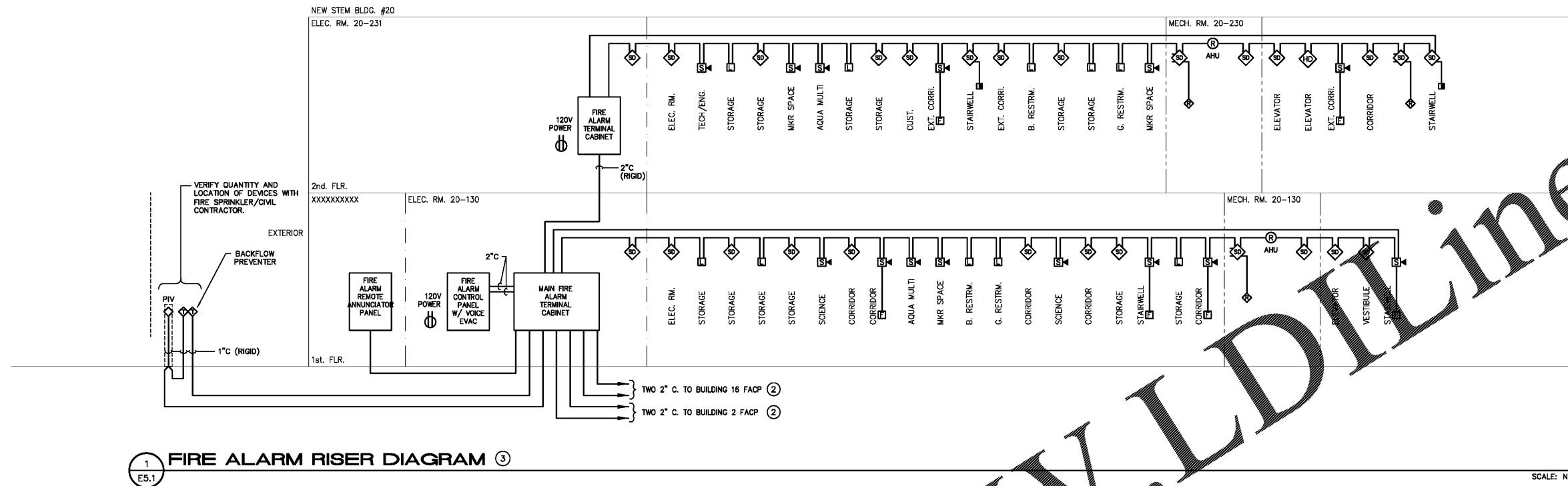


This information is intended for the use of the contractor and is not to be used for any other purpose. The user hereby acknowledges that it is not to be used for any other purpose.

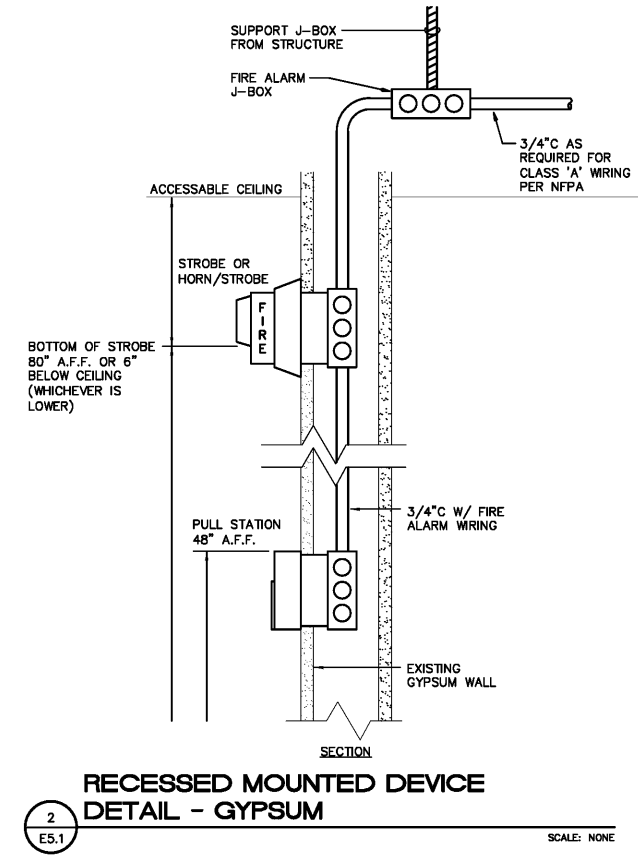


1 FIRE ALARM RISER DIAGRAM 3
E5.1

SCALE: NONE

| SYSTEM INPUTS | CONTROL UNIT ANNUNCIATION | | | | | | | | SYSTEM OUTPUTS | | | | | | | | | | | | | | | | | | |
|--|---------------------------|---|---|---|---|---|---|---|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | |
| 1 MANUAL PULL STATION | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 2 HEAT DETECTION | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 3 AREA SMOKE DETECTION | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 4 DUCT SMOKE DETECTOR (PER RESPECTIVE AHU) | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 5 REMOTE TEST (PER RESPECTIVE DUCT SD) | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 6 AREA SMOKE DETECTION AT DAMPER | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 7 FIRE ALARM AC POWER FAILURE | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 8 FIRE ALARM SYSTEM LOW BATTERY | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 9 OPEN CIRCUIT | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 10 GROUND FAULT | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 11 NOTIFICATION APPLIANCE CIRCUIT SHORT | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 12 AUXILIARY POWER SUPPLY TROUBLE | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 13 ANY BYPASS/DISABLE FUNCTION | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 14 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |

- GENERAL FIRE ALARM NOTES**
- ELEVATOR OPERATIONS SHALL CONFORM TO THE FIREFIGHTERS EMERGENCY OPERATION REQ'S ASME A17.1.
 - FIRE ALARM SYSTEM SHALL BE U.L. CERTIFIED AND APPROVED FOR CENTRAL STATION SERVICES.
 - REFER TO FIRE ALARM MATRIX FOR FIRE ALARM SYSTEM FUNCTION, OPERATION, AND PROGRAMMING.
 - ALL VISUAL NOTIFICATION DEVICES SHALL BE 75CD MINIMUM.
 - AUDIBLE EMERGENCY ALARMS SHALL PRODUCE A SOUND THAT EXCEEDS THE PREVAILING EQUIVALENT SOUND LEVEL IN THE ROOM OR SPACE BY AT LEAST 15 dBA OR EXCEEDS ANY MAXIMUM SOUND LEVEL WITH A DURATION OF 60 SECONDS BY 5dBA, WHICHEVER IS LOUDER. SOUND LEVELS FOR ALARM SIGNALS SHALL NOT EXCEED 120 dBA.
 - ALL 120VAC CIRCUITS SHALL BE SURGE PROTECTED AND HAVE BREAKER LOCKS INSTALLED. COLORED RED. CIRCUITS TO BE LABELED FACP. PROVIDE LABEL WITH CIRCUIT NUMBER AND RESPECTIVE ELECTRICAL ROOM NUMBER.
 - ALL EOL'S REQUIRED SHALL BE LANDED IN FATC AND LABELED.
 - ALL SURGE PROTECTION FOR LOW VOLTAGE CIRCUITS SHALL BE INSTALLED IN THE FATC OR DEDICATED CABINET; LABELED AND DATED.
 - COMPLETE FIRE ALARM COVERAGE IS REQUIRED THROUGHOUT CONSTRUCTION FOR BRIEF PERIODS TO ACCOMMODATE TRANSITION FROM EXISTING TO NEW WORK, FIRE WATCH TO BE PROVIDED BY CONTRACTOR UNLESS NOTED OTHERWISE. PROVIDE 48 HOURS ADVANCED NOTICE.
 - IF REQUIRED, VOICE SYSTEM SIGNALING SHALL BE DIGITAL.
 - PAINT ALL REUSED AND NEW ELECTRICAL BOXES AND COVER PLATES RED. MARK 'FA' ON COVER PLATE IN WHITE LETTERS.
 - CONTRACTOR SHALL REPLACE ALL COMPONENTS OF DUCT SMOKE DETECTORS INCLUDING BUT NOT LIMITED TO SAMPLING TUBES, HOUSING, WIRING, REMOTE TEST SWITCHES (KEY ACTIVATED), DEVICES, SHUTDOWN RELAYS, ETC. ABANDONED OPENINGS IN DUCTWORK SHALL BE SEALED AND INSULATION REPAIRED TO MATCH EXISTING. SAMPLING TUBE SHALL BE COMPOSITE PLASTIC.
 - PROVIDE AS-BUILTS, CUT SHEETS, CERTIFICATIONS, O&M MANUALS, ETC IN DOCUMENT BOX. AS-BUILTS SHALL INDICATE LOCATIONS OF ALL SURGE AND MODULE CABINETS.
 - PROVIDE ADDITIONAL BATTERY CAPACITY AS REQ'D. TO ACCOMMODATE PROPOSED DEVICES.
 - UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL REPROGRAM, TEST, AND RECERTIFY FIRE ALARM SYSTEM.



2 RECESSED MOUNTED DEVICE DETAIL - GYPSUM
E5.1 SCALE: NONE

- RISER DIAGRAM NOTES**
- RISER DIAGRAMS ARE PROVIDED FOR REFERENCE ONLY. THE CONTRACTOR SHALL SUBMIT DETAILED WIRING AND CONDUIT LAYOUTS SHOWING CONDUIT ROUTING, SIZES AND QUANTITY OF CONDUCTORS.
 - PROVIDE AND INSTALL MONITORING AND CONTROL RELAYS AT BOTH BUILDING #2 AND #16 FIRE ALARM CONTROL PANELS TO INITIATE ALARM AND NOTIFICATION FROM BUILDING #20'S FIRE ALARM CONTROL PANEL. THE INITIATION OF ANY FACP ALARM AND OCCUPANT NOTIFICATION AT BUILDINGS #2, #16, OR #20 SHALL INVOKE THE SAME EVENT IN THE OTHER TWO BUILDINGS. THE 3 FACPS SHALL PERFORM IN UNISON, SIMILAR MANNER.
 - PROVIDE AND INSTALL NEW UNDERGROUND FEEDERS. FIELD-VERIFY ROUTE TO MINIMIZE INTERFERENCE/OBSTRUCTIONS.

Order Plans

| Contract No: | 16117.00 | |
|--------------|----------|------|
| Job No: | 117030 | |
| Date: | 10-23-17 | |
| Drawn: | WLM | |
| Revisions | | |
| No. | Date | Note |
| | | |
| | | |