ADDENDUM NO. 03

February 7, 2024

ZCS – Elementary Schools Finish Upgrades and Fire Alarm Replacement & ZCHS Asphalt Replacement
900 Mulberry St.,
Zionsville, IN 46077

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated December 26, 2024, by Fanning Howey Associates (Architect). Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 3 – 1 through ADD 3 - 2 and Fanning/Howey Associates, Inc. Addendum No. 3 dated February 07, 2024, consisting of three (3) pages, Specification Sections 28 31 11 – Digital Addressable Fire-Alarm System and eight (8) drawings.

Note from Construction Manager:

This Addendum No. 03 only applies to Work included as part of original Bid Category #06 – Fire Alarm & Intercom at Multiple Buildings. No changes to Bid Categories #01 - #05.

A. **00 31 00 – Bid Form**
1. Revised specification section is included as part of this Addendum. Attached specification section shall supersede previous specification section.

B. **01 12 00 – Multiple Contract Summary**
2. Revised specification section is included as part of this Addendum. Attached specification section shall supersede previous specification section.

C. **01 21 00 – Allowances**
1. Revised specification section is included as part of this Addendum. Attached specification section shall supersede previous specification section.

D. **01 23 00 – Alternates**

1. Revised specification section is included as part of this Addendum. Attached specification section shall supersede previous specification section.

END OF ADDENDUM

CONTRACTOR'S BID FOR PUBLIC WORKS FORM NO. 96

Format (Revised 2013)
(Amended for ZCS)

ZCS – Elementary Schools Finish Upgrades and Fire Alarm Replacement & ZCHS Asphalt Replacement

Zionsville Community Schools

(Boone, County)

PART I

(To be completed for all bids. Please type or print)

Date (month, day, year):_____

BIDDER (Firm) _____

Address _____ P.O. Box _____

City/State/Zip ___

Telephone Number: _____ Email Address: _____

Person to contact regarding this Bid_____

Pursuant to notices given, the undersigned offers to furnish labor and/or materials necessary to complete the public works project of:

_____

Insert Category No. (s) and Name(s)

Of public works project, ***ZCS – Elementary Schools Finish Upgrades and Fire Alarm Replacement & ZCHS Asphalt Replacement***, in accordance with Plans and Specifications prepared by ***Fanning Howey Associates, 350 E New York St. Ste. #300, Indianapolis, IN 46204,*** as follows:

BASE BID

For the sum of _____

(Sum in words)

_____DOLLARS ($_____)

(Sum in figures)

The undersigned acknowledges receipt of the following Addenda:
Receipt of Addenda No. (s) _____

PROPOSAL TIME

Bidder agrees that this Bid shall remain in force for a period of sixty (60) consecutive calendar days from the due date, and Bids may be accepted or rejected during this period. Bids not accepted within said sixty (60) consecutive calendar days shall be deemed rejected.

Attended pre-bid conference YES _____ NO_____

Has visited the jobsite YES _____ NO_____

The Bidder has reviewed the Guideline Schedule in Section 01 32 00 and the intent Of the schedule can be met. YES _____ NO_____

Bidder has included their Written Drug Testing Plan that covers all employees of the bidder who will perform work on the public work project and meets or exceeds the requirements set in IC 4-13-18-5 or IC 4-13-18-6. YES _____ NO_____

The Skillman Corporation's diversity initiative is to create a program to encourage, assist and measure the active participation of Minority- Owned, Women-Owned, Veteran – Owned and Disabled Individual-Owned Businesses. The Program is to ensure that MWVDBEs are provided full and equal opportunity to participate in all Skillman Corporation's Projects.

Bidder has included:
DBE: YES _____% NO _____
MBE: YES _____% NO _____
WBE: YES _____% NO _____
VBE: YES _____% NO _____

The undersigned further agrees to furnish a bond or certified check with this Bid for an amount specified in the Notice to Bidders. If Alternate Bids apply, submit a proposal for each in accordance with the Plans and Specifications.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit bases, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS
(if applicable)

I, the undersigned bidder, or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ALTERNATE BIDS

A blank entry or an entry of "No Bid", "N/A", or similar entry on any Alternate will cause the bid to be rejected as non-responsive only if that Alternate is selected. If no change in the bid amount is required, indicate "No Change".

****MARK "ADD" OR "DEDUCT" FOR EACH ALTERNATE****

Alternate Bid No. 1 – Paint Hollow Metal Frames at Boone Meadow Elementary

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 2 – Paint Hollow Metal Frames at Stonegate Elementary

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 3 – Furniture Moving at Boone Meadow Elementary

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 4 – Furniture Moving at Stonegate Elementary

Change the Base Bid the sum of_____
(sum in words)

ADD
_____DOLLARS ($_____) DEDUCT
(sum in figures)

Alternate Bid No. 5 – Fire Alarm by Siemens

Change the Base Bid the sum of_____
(sum in words)

ADD
_____DOLLARS ($_____) DEDUCT
(sum in figures)

Alternate Bid No. 6 – Fire Alarm by Notifier

Change the Base Bid the sum of_____
(sum in words)

ADD
_____DOLLARS ($_____) DEDUCT
(sum in figures)

Alternate Bid No. 7 – Fire Alarm by National Time and Signal Corporation

Change the Base Bid the sum of_____
(sum in words)

ADD
_____DOLLARS ($_____) DEDUCT
(sum in figures)

PART II

(For projects of $150,000 or more – IC 36-1-12-4)

These statements to be submitted under oath by each bidder with and as a part of his bid. (Attach additional pages for each section as needed.)

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you?_____If so, where and why?

_____

_____

_____

4. List references from private firms for which you have performed work.

_____

_____

_____

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed Work. (Examples could include a narrative of when you could begin, complete the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)

2. Please list the names and addresses of all subcontractors (i.e. persons or firms outside your own firm who have performed part of the work) that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

3. If you intend to sublet any portion of the work, state the name and addresses of each subcontractor, equipment to be used by the subcontractor, and whether you will required a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

4. What equipment do you have available to use for the proposed Project? Any equipment used by subcontractors may also be required to be listed by the governmental unit.

_____

_____

_____

_____

5. Have you into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which corroborate the process listed.

_____

_____

_____

_____

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of Bidder's financial statement is mandatory. Any Bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the Contract must be specific enough in detail so that said governing body can make a proper determination of the Bidder's capability for completing the Project if awarded.

SECTION IV CONTRACTOR NON-COLLUSION AFFIDAVIT

The undersigned Bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this Bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporations has, have, or will receive directly or indirectly, any rebate, fee, gift, commission, or thing of value on account of such contract.

SECTION V OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT

Dated at _____this _____ day of _____, 20

_____
(Name of Organization)

By

_____

_____
(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____)
) SS:
COUNTY OF _____)

Before me, a Notary Public, personally appeared the above-named

_____

Swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this _____ day of _____,

_____
(Title)

_____
Notary Public

My Commission Expires: _____

County of Residence: _____

END OF SECTION 00 31 00

SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and General Provisions of the Prime Contract, including amended General Conditions and other Division 1 Specification Sections, apply to Work of this Section.

1.02 SUMMARY

A. The intent of this Section is to indicate the Work required by the Contractors and to provide information regarding the duties, responsibilities, and cooperation required by the Contractors, with similar requirements for the subcontractors and suppliers.

B. Owners right to maintain current operations

C. Occupancy requirements

D. Work by Owner

E. Permits, fees, and notices

F. Labor and materials

G. Verifications of existing dimensions

H. Project security

I. Coordination of work

J. Time of commencement and completion

K. Schedule of contract responsibilities

1.03 WORK UNDER SEPARATE CONTRACTS

A. Prime Contracts are defined to include the following contracts described in the Schedule of Contract Responsibilities included hereinafter; and each is recognized to be a major part of the project, with Work to be performed concurrently and in close coordination with Work of other Prime Contracts.

B. The "Contract Documents," as defined in the General Conditions, include "the Drawings." Although Drawings are grouped and identified by classification of the Work, Contractors shall be responsible for their Work as specified herein and as

indicated on the Drawings. Although the majority of the Drawings are "to scale," Contractors are directed to use indicated dimensions for determining material quantities and for other reasons. No additional monies will be allowed due to Contractors using "scaling instruments" to determine material quantities or for other reasons.

C. Separate prime contracts will be awarded as per the **"Schedule of Contract Responsibilities"** (see Part 3 – Execution). Contractors shall include Work required by the Specifications and Drawings for each contract area defined in the Schedule.

D. Work for the complete construction of the Project will be under multiple prime contracts with the Owner. The Construction Manager will manage the construction of the Project.

E. Each Contractor shall be responsible for demolition and disposal of existing items relative to his Contract.

1.04 ADMINISTRATIVE RESPONSIBILITIES OF PRIME CONTRACTORS AND CM

A. The Construction Manager shall be responsible for the maintenance of the Construction Schedule and management of every phase of the Work.
   1. Each Contractor shall read the Specifications and Drawings for other separate Contracts for fixed equipment and the like to be incorporated or attached or built into the Work; and familiarize himself with the requirements and responsibilities of other Contracts to enable the required coordination and supervision.
   2. Each Contractor shall also familiarize himself with other items to be incorporated into the Work including equipment and Work by the Owner.
   3. Each Contractor shall cooperate with the Construction Manager in notifying him when the Work is at a stage to require the services of other Contractors and shall notify the Construction Manager in the event that such other Contractors do not carry out their responsibilities in connection with such notification.

B. Contractors shall cooperate with and assist the Construction Manager in the preparation of construction progress and procedures, schedule of product deliveries, and their effect on the overall project progress and completion. Other Contractors shall cooperate in getting their Work and the Work of their subcontractors completed according to the schedule as prepared and maintained by the Construction Manager. Each Contractor shall immediately notify the Construction Manager of a delay in delivery of products or the scheduled date of completion that may affect the total progress of construction.

C. The Owner will furnish the topographical survey, either as a part of these Drawings or separately, giving the general topographical lines existing at the site and the property lines.

D. Contractors required to make connections to existing utilities, especially sewerage where gravity flow occurs, shall verify grades and locations at points of such connections and shall notify the Construction Manager of circumstances which would adversely affect the proper flow or connection to such facilities.

1.05 PRIME CONTRACTORS USE OF PREMISES

A. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
   1. Owner Occupancy: Allow for Owner occupancy and use by the public.
   2. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.

B. Use of the Existing Building: Maintain the existing building in a weathertight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.

1.06 OWNERS RIGHT TO MAINTAIN OPERATIONS

A. During the course of this Project, normal and customary functions and operations must be maintained. The Contract Documents are intended to define a strict separation between the school activities of students and staff from the activities of the construction project.

B. The Construction Manager, Architect, and Owner will not tolerate any visible or audible actions initiated or responded to by any employees of Contractors on this Project toward any students, teachers, or staff members at the school system. Violators shall be promptly removed from the site.

C. The Owner intends to instruct students, teachers, and staff to refrain from communications with Contractor's personnel working on this Project. All communication with Owner and staff shall be through the Construction Manager.

D. Contractors must expend their best effort toward protection of the health, safety, and welfare of occupants on the Owner's property during the course of Work on this Project.

1.07 OCCUPANCY REQUIREMENTS

A. Full Owner Occupancy: The Owner will occupy the site and existing building during the entire construction period. Cooperate with the Owner during

construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with the Owner's operations.

B. Partial Owner Occupancy: The Owner reserves the right to occupy and to place and install equipment in completed areas of the building prior to Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.
   1. The Construction Manager will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner occupancy.
   2. Party which obtained general building permit shall obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.
   3. Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy, the Owner will operate and maintain mechanical and electrical systems serving occupied portions of the building.
   4. Upon occupancy, the Owner will assume responsibility for maintenance and custodial service for occupied portions of the building.

1.08 WORK BY OWNER

A. The Owner intends to complete the following items of Work outside the provisions of these Contract Documents. Contractors shall not restrict or interfere with the Owner's right to the Project to accomplish this Work.
   1. Equipment and furniture except as scheduled and specified under Divisions 11 and 12 and shown on the Drawings.
   2. Items which may be deleted from Contracts for Work as required by the Contract Documents.
   3. Existing school maintenance work.
   4. The purchase and supplying of certain materials as noted in the Project Manual.
   5. The Owner, under separate contract, shall provide removal of identified asbestos containing materials from the existing structure. The asbestos report is available through the Construction Manager upon request.

1.09 PERMITS, FEES, AND NOTICES

A. The Construction Manager will secure the general building permit for the Owner. Each Contractor shall secure and pay for other permits, governmental fees, and licenses necessary for the proper execution and completion of his Work, which are applicable at the time the bids are also received. Fees to relocate utilities on Owner's property shall be included in the bid of the Contractor doing the relocation.
   1. State filing fees for plan approval are the responsibility of the Owner and will be paid by the Owner.

B. Utility Tie-Ins: Shall be arranged with local utility company and other involved parties for minimum interruption of service.

C. Shutdowns of existing systems shall be limited to minimum time required and scheduled with other involved parties. Provide 2 days written notice of shutdown to Construction Manager and Owner.

D. Inspections of installed work shall be performed by the governing authority as arranged for by the Contractor. Work shall not be covered until approved.

E. Each Contractor shall give notices and comply with laws, ordinances, rules, regulations, and orders of public authorities bearing on the performance of his Work. If a Contractor observes that the Contract Documents are at variance therewith, he shall promptly notify the Construction Manager in writing, and necessary changes shall be adjusted by appropriate notification. If a Contractor performs Work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Construction Manager, he shall assume full responsibility therefore and shall bear the costs attributable thereto.

1.10 LABOR AND MATERIALS

A. Unless otherwise specifically noted, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of his Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

B. Each Contractor shall enforce strict discipline and good order among his employees or other persons carrying out Work of his Contract and shall not permit employment of unfit person or persons or anyone not skilled in the task assigned to them.

C. Contractors and Subcontractors shall be subject to such rules and regulations for the conduct of the Work as the Owner may establish. Employees shall be properly and completely clothed while working. Bare torsos, legs and feet will not be allowed. Possession or consumption of alcoholic beverages or drugs, tobacco or other noxious behavior on the site is strictly prohibited. Violators shall be promptly removed from the site. Smoking is not permitted on school property or within school buildings.

D. Contractors will conduct criminal background checks (extent of and/or service to be used will be established by the Owner) on every employee assigned to work on the Project and clear them through the National Sex Offender Registry prior to their assignment to Project. Contractors will require the same of sub-contractors.

E. ID Badges will be issued by The Skillman Corporation upon receipt of verification from the Contractor that the employee/subcontractor employee or independent contractor has a satisfactory record to work on the Project.

F. E-Verify Compliance: Pursuant to I.C. 22-5-1.7, Contractor shall enroll in and verify the work eligibility status of all newly hired employees of Contractor through the E-Verify Program (Program). Contractor is not required to verify the work eligibility status of all newly hired employees through the Program if the Program no longer exists. Also pursuant to I.C. 22-5-1.7, Contractor must execute an affidavit affirming that the Contractor does not knowingly employ an unauthorized alien and confirming Contractor's enrollment in the Program, unless the Program no longer exists, shall be filed with the Owner prior to the execution of this contract. This contract shall not be deemed fully executed until such affidavit is delivered to the Owner.

Contractor and its subcontractors shall not knowingly employ or contract with an unauthorized alien or retain an employee or contract with a person that contractor or its subcontractor subsequently learns is an unauthorized alien. If Contractor violates this provision the Owner shall require Contractor to remedy the violation not later than thirty (30) days after the Owner notifies Contractor. If Contractor fails to remedy the violation within the thirty (30) day period, the Owner shall terminate the contract for breach of contract. If Owner terminates the contract, Contractor shall be liable to the Owner for actual damages in addition to any other contractual remedies. There is a rebuttable presumption that Contractor did not knowingly employ an unauthorized alien if Contractor verified the work eligibility status of the employee through the Program.

Prior to performing any work, Contractor shall require each subcontractor to certify to Contractor that the subcontractor does not knowingly employ or contract with an unauthorized alien and has enrolled in the Program. Contractor shall maintain on file a certification from each subcontractor throughout the duration of this contract or project which is the subject of this contract. If Contractor determines that a subcontractor is in violation of this provision, Contractor may terminate its contract with the subcontractor for such violation. In Accordance with I.C. 5-16-13 Contractor must provide the E-Verify Case Number of every employee that works on the project. This requirement includes the contractor's subs and suppliers to the fourth (4^{th}) tier.

G. The Owner is requiring that all contractors' personnel and their onsite employees and subcontractors submit to expanded history and child protection index check. Contractors shall enroll in the Safe Vendor Program through Safe Hiring Solutions www.safehiringsolutions.com. Enrollment in Safe Vendor will ensure contractors employees are vetted in accordance with I.C. 20-26-5-10 for expanded criminal history and expanded child protection index check. Contractor is responsible for the cost of enrollment and employee background check. All contractors' personnel and employees, once cleared for work will be issued a project identification badge that must be worn at all times while on site. All contractors/subcontractors employees shall provide name, address, picture state driver's license or picture identification card and/or Safe Vendor Card to The Skillman Corporation Site Manager upon request.

H. Pursuant to Indiana Code 5-16-13 Requirements for Contractors on Public Works Projects enacted by the Indiana Legislator requires, in addition to requirements already in effect, contractors to comply with the following:

1. Tier 1 –General/Prime Contractors to self-perform 15% of their total Contract.
2. Qualification thru the Department of Administration or INDOT requirement in accordance with IC 4-13.6-4.
    a. **Bids shall not be considered unless (1) the Prime Bidder and (2) all lower tiered subcontractors whose subcontract value is estimated to be $300,000 or more are qualified at the time of the bid in accordance with IC 4 – 13.6 – 4.**
3. Include Written Drug Testing Plan that covers all employees of the bidder who will perform work on the public work project and meets or exceeds the requirements set in IC 4-13-18-5 or IC 4-13-18-6 with Bid.
4. Minimum Insurance Requirements $1M/occurrence $2M/aggregate. However, check your bidding requirements as the Owners may have higher limit requirements.
5. Mandatory enrollment in E-Verify by all contractors down to the 4th Tier Sub Contracts and must provide the case verification number of all employees working on the project.
6. Prohibits contractors down to the 4th Tier Sub Contract from paying employees in cash.
7. Requirement to retain payroll records for 3 years
8. All contractors down to the 4th Tier Sub Contract must comply with Fair Labor Act, Indiana's Workers Compensation and Unemployment Compensation Insurance.
9. Mandatory Training Requirements based upon number of employees.
10. Failure to comply may result in debarment from public works projects for up to 4 years.

I. All contractors down to the 4th Tier Sub Contract must maintain general liability insurance in at least the following amounts: Each Occurrence Limit of $1,000,000 and General Aggregate Limit of $2,000,000. Other requirements and limits may apply see specification section 00 50 00 Schedule of Insurance Requirements.

1.11 CUTTING AND PATCHING

A. Refer to Section 01 73 29 – Cutting and Patching, for provisions on this subject.

1.12 VERIFICATIONS OF EXISTING DIMENSIONS

A. When verification of existing dimensions is required, the Contractor requiring said verification for the construction or fabrication of his material shall be the Contractor responsible for the procurement of the field information.

1.13 PROJECT SECURITY

A. Each Prime Contractor shall take all reasonable precautions to prevent injury, damage or loss to people and property in, on and adjacent to the project. This shall include not only their own work or property but that of other contractors and the Owner.

B. If deemed necessary by The Construction Manager a project wide security program may be developed for the purpose of preventing damage or loss at the project site or property adjacent thereto. Once accepted by the Owner, contractors shall comply.

1.14 SCHEDULE OF CONTRACT RESPONSIBILITIES - SCOPE

A. Contractors shall submit their proposals based on the work included under each contract area as listed herein. Include Work necessary for a complete project, as shown on the Drawings and called for in the Specifications.

B. Questions concerning the phasing or "Schedule of Contract Responsibilities" should be directed to the Construction Manager, who will be the interpreter and be responsible for this Schedule of Contract Responsibilities and Contract Breakdown, prior to submitting proposals and during construction.

C. The requirements of Division 1 are a part of the Work of each and every contract area. The Contractor for any one contract area shall be familiar with the Work and requirements of all other contract areas.

D. Certain Specification Sections describe Work to be performed under several contract areas. (Example: 06 10 00 - Rough Carpentry.) Provide Work of this nature as required for each contract area whether or not enumerated in the Schedule of Contract Responsibilities.

E. The following contract areas are broken down by Specifications Section conforming basically to the CSI format.

F. The Drawings and Specifications as furnished for each of the Contracts is for the convenience of the Contractor in preparing a proposal for this Project. However, each Contractor is responsible to review the complete set of Drawings and Specifications to assure that Work required to be installed to complete his phase of the Work is included in his proposal. This "Schedule of Contract Responsibilities" is a definition of the work as it is to be bid in separate contracts. Where a specific item of Work is not defined, but is normally inherent to a trade, or is included in the scope of the applicable technical revision, it will be the responsibility of that Contractor to include the Work in his proposal.

G. This "Schedule of Contract Responsibilities" is to aid each Contractor in defining the Scope of Work to be included in his proposal. However, omissions from this "Schedule of Responsibilities" do not relieve the Contractor from including in his proposal that Work which will be required to complete his Contract. Each Contractor should read the "Schedule of Contract Responsibilities" completely to familiarize himself with the Work of other Contractors that may have Work in adjacent areas and to coordinate the interfacing problems that may occur as the work is assembled and constructed.

H. Where specific Work is to be completed under a particular phase of the Project and the Work is wholly or partially completed by other trades because of the type of work involved or jurisdictional trade agreements, the Contractor will be responsible to subcontract the Work as necessary to complete the Work included in his Contract. No delay in the Work will be allowed due to the failure of the Contractor to subcontract related work required by jurisdictional trade agreements.

1.15 COORDINATION OF WORK

A. Each Contractor is responsible to coordinate his Work with the Work of other trades and other Contractors and requirements of the school system. The Contractor must make space allowances for Work of other Contractors; provide necessary openings where indicated or implied by the Drawings and Specifications. Each Contractor is responsible to protect his own Work.

1.16 TIME OF COMMENCEMENT AND COMPLETION

A. The Contractor shall commence work within ten (10) days after being notified in writing to proceed and shall complete the Work within the time limitations established in the Form of Agreement.
   1. It is anticipated that construction will start within **60** calendar days after receipt of bids.
   2. Construction shall be complete within **201** consecutive calendar days, or earlier, after Notice to Proceed.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 SCHEDULE OF CONTRACT RESPONSIBILITIES

3.02 GENERAL REQUIREMENTS

A. PROVIDED BY OWNER THROUGH THE CONSTRUCTION MANAGER

Section	01 32 00	Schedules and Reports
Section	01 45 10	Testing Laboratory Services
Section	01 59 10	Project Office
Section	01 71 50	Final Cleaning

B. PROVIDED BY ALL CONTRACTORS AS APPLICABLE

Section	01 12 00	Multiple Contract Summary
Section	01 21 00	Allowances
Section	01 23 00	Alternates
Section	01 25 00	Contract Modification Procedures
Section	01 28 00	Schedule of Values
Section	01 29 00	Applications for Payment
Section	01 31 00	Project Meetings
Section	01 32 00	Schedules and Reports
Section	01 33 00	Submittal Procedures
Section	01 35 16.01	Alteration Project Procedures for Schools
Section	01 40 00	Quality Requirements *should be provided by architect*
Section	01 45 10	Testing Laboratory Services (Paragraph 1.05)
Section	01 50 50	Temporary Facilities and Controls
Section	01 54 60	Environment Protection
Section	01 54 80	Utility Protection
Section	01 56 30	Water Control
Section	01 56 90	Housekeeping & Safety
Section	01 59 20	Offices and Sheds
Section	01 60 00	Product Requirements
Section	01 72 50	Work Layout
Section	01 73 29	Cutting and Patching
Section	01 77 00	Contract Closeout

All Contractors shall provide their Superintendents with radios capable of handling multiple channels and compatible with radios used by the Construction Manager.

Autodesk Build is replacing **PlanGrid**. **Autodesk Build** does not require users to purchase a license. **Contractors** will be invited to the project and required to use this tool. **Autodesk Build** will be used as the **Current Set** and **As-Built Record Drawings.** Additionally, it will be used to track **Issues** for **Safety**, **QA/QC**, **Non-Compliance Issues**, **Work Completion List** and **Punch List**.

C. PROVIDED BY DESIGNATED CONTRACTORS

Section	01 51 10	Temporary Electricity, Lighting and Warning Systems
Section	01 51 50	Temporary Water
Section	01 51 60	Temporary Sanitary Facilities
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	01 53 10	Fences (Temporary Security)
Section	01 53 20	Tree and Plant Protection
Section	01 55 00	Access Roads and Parking Areas
Section	01 56 20	Dust Control
Section	01 56 80	Erosion Control
Section	01 57 60	Project Signs
Section	01 72 00	Field Engineering

3.03 BID CATEGORIES

A. BID CATEGORY NO. 1 – FLOORING at BOONE MEADOW ELEMENTARY

General Requirements in Paragraph 3.02.B above.

Section	01 51 10	Temporary Electricity, Lighting and Warning Systems
Section	01 51 50	Temporary Water
Section	01 51 60	Temporary Sanitary Facilities
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	02 41 19	Selective Demolition
Section	07 92 00	Joint Sealants
Section	09 01 91	Moisture Resistant/Water-Proof Flooring Adhesive for Concrete Slabs
Section	09 05 16	Existing Substrate Preparation for Floor Finishes
Section	09 65 13	Resilient Base and Accessories
Section	09 65 19	Resilient Tile Flooring
Section	09 68 13	Tile Carpeting
Section	09 68 16	Sheet Carpeting
Section	12 48 26.01	Entrance Carpet Tile

Clarifications:

1. Contractor must provide detailed two-week lookahead schedules and daily reports for coordination of access and logistics as portions of the building may be occupied by Owner and other Contractors.
2. Contractor to include 40-man hours as Man-Hour Allowance to be used at the direction of the Construction Manager. Any unused man-hours will be converted to a monetary value and credited to Owner at the end of the Project.

3. Contractor to review Alternates Specification Section for additional information related to moving furniture and loose equipment.

B. BID CATEGORY NO. 2 – FLOORING at STONEGATE ELEMENTARY

General Requirements in Paragraph 3.02.B above.

Section	01 51 10	Temporary Electricity, Lighting and Warning Systems
Section	01 51 50	Temporary Water
Section	01 51 60	Temporary Sanitary Facilities
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	02 41 19	Selective Demolition
Section	07 92 00	Joint Sealants
Section	09 01 91	Moisture Resistant/Water-Proof Flooring Adhesive for Concrete Slabs
Section	09 05 16	Existing Substrate Preparation for Floor Finishes
Section	09 65 13	Resilient Base and Accessories
Section	09 65 19	Resilient Tile Flooring
Section	09 68 13	Tile Carpeting
Section	09 68 16	Sheet Carpeting
Section	12 48 26.01	Entrance Carpet Tile

Clarifications:

1. Contractor must provide detailed two-week lookahead schedules and daily reports for coordination of access and logistics as portions of the building may be occupied by Owner and other Contractors.
2. Contractor to include 40-man hours as Man-Hour Allowance to be used at the direction of the Construction Manager. Any unused man-hours will be converted to a monetary value and credited to Owner at the end of the Project.
3. Contractor to review Alternates Specification Section for additional information related to moving furniture and loose equipment.

C. BID CATEGORY NO. 3 – PAINTING & WALLCOVERING at BOONE MEADOW ELEMENTARY

General Requirements in Paragraph 3.02.B above.

Section	01 51 10	Temporary Electricity, Lighting and Warning Systems
Section	01 51 50	Temporary Water
Section	01 51 60	Temporary Sanitary Facilities
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	02 41 19	Selective Demolition
Section	07 92 00	Joint Sealants
Section	09 21 16	Gypsum Board Assemblies

Section	09 72 16	Vinyl-Coated Fabric Wall Coverings
Section	09 91 23.61	Interior Painting/Repainting
Section	09 96 00	High-Performance Coatings
Section	10 26 00	Wall and Door Protection

Clarifications:

1. Contractor must provide detailed two-week lookahead schedules and daily reports for coordination of access and logistics as portions of the building may be occupied by Owner and other Contractors.
2. Contractor to include 80-man hours as Man-Hour Allowance to be used at the direction of the Construction Manager. Any unused man-hours will be converted to a monetary value and credited to Owner at the end of the Project.
3. Contractor to review Alternates Specification Section for additional information related to painting hollow metal door frames.
4. Contractor to install sealant for WVC at dissimilar material per General Finish Note(s).

D. BID CATEGORY NO. 4 – PAINTING & WALLCOVERING at STONEGATE ELEMENTARY

General Requirements in Paragraph 3.02.B above.

Section	01 51 10	Temporary Electricity, Lighting and Warning Systems
Section	01 51 50	Temporary Water
Section	01 51 60	Temporary Sanitary Facilities
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	02 41 19	Selective Demolition
Section	07 92 00	Joint Sealants
Section	09 21 16	Gypsum Board Assemblies
Section	09 72 16	Vinyl-Coated Fabric Wall Coverings
Section	09 91 23.61	Interior Painting/Repainting
Section	09 96 00	High-Performance Coatings
Section	10 26 00	Wall and Door Protection

Clarifications:

1. Contractor must provide detailed two-week lookahead schedules and daily reports for coordination of access and logistics as portions of the building may be occupied by Owner and other Contractors.
2. Contractor to include 80-man hours as Man-Hour Allowance to be used at the direction of the Construction Manager. Any unused man-hours will be converted to a monetary value and credited to Owner at the end of the Project.
3. Contractor to review Alternates Specification Section for additional information related to painting hollow metal door frames.
4. Contractor to install sealant for WVC at dissimilar material per General Finish Note(s).

E. BID CATEGORY NO. 5 – ASPHALT REPAIRS at ZIONSVILLE HIGH SCHOOL

General requirements in Paragraph 3.02.B above.

Section	01 51 10	Temporary Electricity, Lighting and Warning Systems
Section	01 51 50	Temporary Water
Section	01 51 60	Temporary Sanitary Facilities
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	01 53 10	Fences (Temporary Security)
Section	01 53 20	Tree and Plant Protection
Section	01 53 30	Barricades
Section	01 55 00	Access Roads and Parking Areas
Section	01 56 20	Dust Control
Section	01 56 80	Erosion Control
Section	01 57 60	Project Signs
Section	01 72 00	Field Engineering
Section	02 41 19	Selective Demolition
Section	07 92 00	Joint Sealants
Section	31 10 00	Site Clearing
Section	31 20 00	Earth Moving
Section	31 25 00	Erosion Control
Section	32 12 16	Asphalt Paving
Section	32 17 23	Pavement Markings
Section	32 91 13	Soil Preparation
Section	32 92 00	Turf and Grasses

Clarifications:

1. Contractor is responsible for any/all barricades, partitions, fencing signage, security measures, traffic control, etc. to perform the Scope of Work in a safe and efficient manner. Logistics are to be reviewed and approved by Construction Manager during Pre-Installation Meeting.
2. All concrete curb and walk noted in the "Zionsville Community High School Concrete and Asphalt Replacement Area 1" drawing set is to be excluded from this Project. Concrete work shown in this drawing set is by Others.
3. Painting of concrete curbs is by Others.
4. Contractor shall communicate any concerns regarding adjacent concrete work to the Construction Manager during the Pre-Award Meeting schedule to occur following bid opening.
5. Contractor shall include any/all removal and/or installation of parking bumpers and signage as noted in the Contract Documents.
6. Contractor is responsible for all pavement markings, less painting of concrete curbs.

F. BID CATEGORY NO. 6 – FIRE ALARM at EAGLE ELEMENTARY SCHOOL

General Requirements in Paragraph 3.02.B above.

Section	01 51 10	Temporary Electricity, Lighting and Warning Systems
Section	01 51 50	Temporary Water
Section	01 51 60	Temporary Sanitary Facilities
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	02 41 19	Selective Demolition
Section	07 84 13	Penetration Firestopping
Section	07 92 00	Joint Sealants
Section	26 00 05	Electrical Demolition
Section	26 00 50	General Electrical Requirements
Section	26 05 19	Low-Voltage Electrical Power Conductors and Cables
Section	26 05 26	Grounding and Bonding for Electrical Systems
Section	26 05 29	Hangers and Supports for Electrical Systems
Section	26 05 33	Conduit and Boxes for Electrical Systems
Section	26 05 35	Surface Raceways for Electrical Systems
Section	26 05 53	Identification for Electrical Systems
Section	28 31 11	Digital, Addressable Fire-Alarm System

Clarifications:

1. Contractor to include 40-man hours as Man-Hour Allowance to be used at the direction of the Construction Manager. Any unused man-hours will be converted to a monetary value and credited to Owner at the end of the Project.
2. Contractor to include painting of wall surface adjacent to new devices if new device profile is smaller than existing. Paint color to match existing.
3. All Fire Alarm Work must start 6/3/24 and complete by 8/1/24. This allows for seven (7) business days to test and commission the system prior to the first student day scheduled for 8/13/24. All systems must be fully functional to allow all building to operate normally for school.
4. Overtime and weekend work required to accomplish the above listed dates must be included in base bid.

G. BID CATEGORY NO. 7 – FIRE ALARM at PLEASANT VIEW ELEMENTARY SCHOOL

General Requirements in Paragraph 3.02.B above.

Section	01 51 10	Temporary Electricity, Lighting and Warning Systems
Section	01 51 50	Temporary Water
Section	01 51 60	Temporary Sanitary Facilities
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	02 41 19	Selective Demolition

Section	07 84 13	Penetration Firestopping
Section	07 92 00	Joint Sealants
Section	26 00 05	Electrical Demolition
Section	26 00 50	General Electrical Requirements
Section	26 05 19	Low-Voltage Electrical Power Conductors and Cables
Section	26 05 26	Grounding and Bonding for Electrical Systems
Section	26 05 29	Hangers and Supports for Electrical Systems
Section	26 05 33	Conduit and Boxes for Electrical Systems
Section	26 05 35	Surface Raceways for Electrical Systems
Section	26 05 53	Identification for Electrical Systems
Section	28 31 11	Digital, Addressable Fire-Alarm System

Clarifications:

1. Contractor to include 40-man hours as Man-Hour Allowance to be used at the direction of the Construction Manager. Any unused man-hours will be converted to a monetary value and credited to Owner at the end of the Project.
2. Contractor to include painting of wall surface adjacent to new devices if new device profile is smaller than existing. Paint color to match existing.
3. All Fire Alarm Work must start 6/3/24 and complete by 8/1/24. This allows for seven (7) business days to test and commission the system prior to the first student day scheduled for 8/13/24. All systems must be fully functional to allow all building to operate normally for school.
4. Overtime and weekend work required to accomplish the above listed dates must be included in base bid.

H. BID CATEGORY NO. 8 – INTERCOM at EAGLE ELEMENTARY, PLEASANT VIEW ELEMENTARY, ZIONSVILLE MIDDLE SCHOOL & ZIONSVILLE WEST MIDDLE SCHOOL

General Requirements in Paragraph 3.02.B above.

Section	01 51 10	Temporary Electricity, Lighting and Warning Systems
Section	01 51 50	Temporary Water
Section	01 51 60	Temporary Sanitary Facilities
Section	01 51 80	Temporary Fire Protection
Section	01 52 10	Construction Aids and Temporary Enclosures
Section	01 52 60	Rubbish Container
Section	02 41 19	Selective Demolition
Section	07 92 00	Joint Sealants
Section	26 00 05	Electrical Demolition
Section	26 00 50	General Electrical Requirements
Section	26 05 19	Low-Voltage Electrical Power Conductors and Cables
Section	26 05 26	Grounding and Bonding for Electrical Systems
Section	26 05 29	Hangers and Supports for Electrical Systems
Section	26 05 33	Conduit and Boxes for Electrical Systems
Section	26 05 35	Surface Raceways for Electrical Systems

Section	26 05 53	Identification for Electrical Systems
Section	27 01 00	Operation and Maintenance of Communications Systems
Section	27 01 11	Demonstration, Training and Warranty of Communications Systems
Section	27 05 00	Common Work Results for Communications
Section	27 05 26	Grounding and Bonding for Communications Systems
Section	27 05 28	Pathways for Communications Systems
Section	27 05 53	Identification for Communications Systems
Section	27 15 11	Conductors and Cables for Intercom, Public Address and Mass Notification Systems
Section	27 51 23	Intercommunications and Program Systems

Clarifications:

1. Contractor to include 120-man hours as Man-Hour Allowance to be used at the direction of the Construction Manager. Any unused man-hours will be converted to a monetary value and credited to Owner at the end of the Project.
2. Contractor to include painting of wall surface adjacent to new devices if new device profile is smaller than existing. Paint color to match existing.
3. All Intercom / PA Work must start 6/3/24 and complete by 8/1/24. This allows for seven (7) business days to test and commission the systems prior to the first student day scheduled for 8/13/24. All systems must be fully functional to allow all buildings to operate normally for school.
4. Overtime and weekend work required to accomplish the above listed dates must be included in base bid.

END OF SECTION 01 12 00

SECTION 01 21 00 – ALLOWANCES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including amended General Conditions and other Division-1 Specification Sections, apply to work of this Section.

1.02 REQUIREMENTS INCLUDED

A. The Specifications contain Allowances for particular items, methods of construction, quantities of materials, labor for certain items and these stated Allowances shall be included in the total lump sum bid price.
   1. Should the final amounts as determined from actual costs vary from these stated Allowances, the Contract price will be adjusted by Change Order as stated in the Conditions of the Contract.
   2. Under no circumstances shall work exceeding the stated Allowance amounts, proceed without a properly executed Change Order.

B. A "Schedule of Allowances" showing amounts included in each prime Contract Sum, is included at the end of this Section.

C. Product/Materials Allowance: At the earliest feasible date after award of Contract, advise the Architect and Construction Manager of scheduled date when final selection and purchase of each product or system described by each Allowance must be accomplished in order to avoid delays in performance of the Work.
   1. As requested by the Architect, obtain and submit proposals for the work of each Allowance for use in making final selection; include recommendations for selection which are relevant to the proper performance of the Work.
   2. Purchase products and systems as specifically selected (in writing) by the Architect.
   3. Submit proposals and recommendations for purchase of products or systems of Allowances, in form specified for Change Orders.
   4. When requested, submit a substantiated survey of quantities of materials, as shown in the "Schedule of Values", revised where necessary, and corresponding with Change Order quantities.
   5. Amount of Allowance includes:
      a. Net cost of product
      b. Delivery to the site
      c. Applicable taxes
   6. In addition to amount of Allowance, include in Bid, for inclusion in Contract Sum, Contractor's costs for:
      a. Handling at site, including unloading, uncrating, and storage
      b. Protection from elements, from damage
      c. Labor, installation, and finishing

d. Other expenses (e.g., testing, adjusting, and balancing) required to complete installation
e. Overhead and profit

D. Contingency Allowance: Contingency allowance shall be used only as directed for Owner's purposes. Proposal shall be submitted by Contractor for work requested in format similar to that required for Change Orders. Compensation to the Contractor for work requested utilizing this Allowance shall be for only Contractor's costs as defined by Paragraph 7.3.7 of the General Conditions, except no compensation shall be allowed for overhead and profit. At time of Project closeout, unused amounts remaining in contingency allowance shall be credited to Owner by Change Order.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 PRODUCT ALLOWANCE

A. Not applicable.

3.02 CONTINGENCY ALLOWANCES

Allow a lump sum additional work required but not indicated on Drawings or reasonably anticipated.

A.	Bid Cat. No. 01	Flooring at BME	$15,000
B.	Bid Cat. No. 02	Flooring at SGE	$15,000
C.	Bid Cat. No. 03	Painting & Wallcovering at BME	$15,000
D.	Bid Cat. No. 04	Painting & Wallcovering at SGE	$15,000
E.	Bid Cat. No. 05	Asphalt Repairs at ZHS	$25,000
F.	Bid Cat. No. 06	Fire Alarm at Eagle Elementary School	$15,000
G.	Bid Cat. No. 07	Fire Alarm at Pleasant View Elementary	$15,000
H.	Bid Cat. No. 08	Intercom at Eagle, PVE, ZMS & ZWMS	$15,000

END OF SECTION 01 21 00

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including amended General Conditions and other Division 1 Specification Sections, apply to work of this Section.

1.02 PURPOSE

A. The Bids for the Alternates described herein are required in order for the Owner to obtain information necessary for the proper consideration of the Project in its entirety.

1.03 ALTERNATES

A. Definitions: Alternates are defined as alternate products, materials, equipment, installations, or systems for the Work, which may, at Owner's option and under terms established by Instructions to Bidders, be selected and recorded in the Owner-Contractor Agreement to either supplement or displace corresponding basic requirements of Contract Documents. Alternates may or may not substantially change scope and general character of the Work; and must not be confused with "allowances", "unit prices", "change orders", "substitutions", and other similar provisions.

1.04 SCHEDULE OF ALTERNATES

A. ALTERNATE NO. 1: PAINT HOLLOW METAL FRAMES at BOONE MEADOW ELEMENTARY
Base Bid: All door frames do not paint and remain as existing.
Alternate: Prepare and repaint all interior hollow metal door frames. Refer to Drawings and Specifications Section 09 91 23.61 for additional information.

B. ALTERNATE NO. 2: PAINT HOLLOW METAL FRAMES at STONEGATE ELEMENTARY
Base Bid: All door frames do not paint and remain as existing.
Alternate: Prepare and repaint all interior hollow metal door frames. Refer to Drawings and Specifications Section 09 91 23.61 for additional information.

C. ALTERNATE NO. 3: FURNITURE MOVING at BOONE MEADOW ELEMENTARY
Base Bid: Owner is responsible for moving all furniture and loose equipment.
Alternate: Flooring Contractor to document, move and reinstall furniture and loose equipment in typical classrooms and corridors to allow installation of flooring material. The Owner will move and reinstall furniture and loose equipment located in administrative offices, storage spaces and media center.

D. ALTERNATE NO. 4: FURNITURE MOVING at STONEGATE ELEMENTARY
Base Bid: Owner is responsible for moving all furniture and loose equipment.
Alternate: Flooring Contractor to document, move and reinstall furniture and loose equipment in typical classrooms and corridors to allow installation of flooring material. The Owner will move and reinstall furniture and loose equipment located in administrative offices, storage spaces and media center.

E. ALTERNATE NO. 5: FIRE ALARM BY SIEMENS
Base Bid: Provide material, labor and equipment for installation of complete noncoded addressable system.
Alternate: Complete Fire Alarm system per Specification Section 28 31 11 utilizing Siemens parts, equipment and programming.

F. ALTERNATE NO. 6: FIRE ALARM BY NOTIFIER
Base Bid: Provide material, labor and equipment for installation of complete noncoded addressable system.
Alternate: Complete Fire Alarm system per Specification Section 28 31 11 utilizing Notifier parts, equipment and programming.

G. ALTERNATE NO. 7: FIRE ALARM BY NATIONAL TIME AND SIGNAL CORPORATION
Base Bid: Provide material, labor and equipment for installation of complete noncoded addressable system.
Alternate: Complete Fire Alarm system per Specification Section 28 31 11 utilizing National Time and Signal Corporation parts, equipment and programming.

PART 2 - PRODUCTS, PART 3 - EXECUTION (Not Used)

END OF SECTION 01 23 00

A D D E N D U M N O. 3

Multiple Fire Alarm & Intercom/PA Replacements

Zionsville Community Schools
Zionsville, Indiana

Project No. 223128.00

Index of Contents

Addendum No. 3, 7 items, 3 pages
New Project Manual Section: 01 23 00 – Alternates
Revised Project Manual Section: 28 31 11 – Digital, Addressable Fire-Alarm System
Revised Drawing Sheets: EG-E6.01, PV-E6.01, PV-E6.02, PV-E6.03, ZM-E6.01, ZM-E6.02, ZW-E6.01 and ZW-E6.02
Pre-Bid Request for Interpretation/Clarification Log

Date: February 7, 2024

FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS/ENGINEERS/CONSULTANTS

TO: ALL BIDDERS OF RECORD

ADDENDUM NO. 3 to Drawings and Project Manual, dated December 19, 2023, for Zionsville Community Schools, 900 Mulberry Street, Zionsville, Indiana; as prepared by Fanning/Howey Associates, Inc., Indianapolis, Indiana.
This Addendum shall hereby be and become a part of the Contract Documents the same as if originally bound thereto.

The following clarifications, amendments, additions, revisions, changes, and modifications change the original Contract Documents only in the amount and to the extent hereinafter specified in this Addendum.

Each bidder shall acknowledge receipt of this Addendum in his proposal or bid.

NOTE: Bidders are responsible for becoming familiar with every item of this Addendum. (This includes miscellaneous items at the very end of this Addendum.)

RE: ALL BIDDERS

ITEM NO. 1. REVISED PROJECT MANUAL SECTION

A. Section 28 31 11 – Digital, Addressable Fire-Alarm System has been revised, dated 2/7/24, and is included with and hereby made a part of this Addendum.

ITEM NO. 2. NEW PROJECT MANUAL SECTION

A. New Project Manual Section 01 23 00 – Alternates is included with and hereby made a part of this Addendum.

ITEM NO. 3. PROJECT MANUAL, SECTION 27 51 23 - INTERCOMMUNICATIONS AND PROGRAM SYSTEMS

A. Add 2.3.E Central Control Cabinet as follows:

E. Reusing the existing cabinet will not be acceptable.

B. Add Spec 2.4.B.4 CD/MP3/Bluetooth as follows:

4. One unit that combines the AM/FM radio and CD/MP3/Bluetooth such as Denon DN 300Z or Architect approved equals would be acceptable.

C. Add Spec 2.4.C.22 as follows:

22. Weather Radio antenna roof penetration, if needed, shall be provided by this contractor antenna cables. It is the responsibility of this contractor to provide pathways as necessary.

D. Replace 2.4.E as follows:

E. Provide 4-Input, stereo mic/line mixer

E. Replace Spec 2.9.B as follows:

B. Push to talk microphone shall require 5-pole XLR for microphone and contact closure to initiate an ALL-Call page.

F. Add Spec 2.10.C as follows:

C. Any additional speaker and cabling needing to be added to the system shall be covered within the allowance amount as a change order.

ITEM NO. 4. REVISED DRAWING SHEETS

A. Drawing Sheets: EG-E6.01, PV-E6.01, PV-E6.02, PV-E6.03, ZM-E6.01, ZM-E6.02, ZW-E6.01 and ZW-E6.02 have been revised, dated 02/7/24, and are included with and hereby made a part of this Addendum. These Drawings supersede the original documents.

ITEM NO. 5. DRAWING SHEET ZM-E6.03 – MEZZANINE LEVEL FIRE ALARM PLAN

A. Delete sheet in its entirety without substitution.

ITEM NO. 6. DRAWING SHEET ZW-E6.03 – MEZZANINE LEVEL FIRE ALARM PLAN

A. Delete sheet in its entirety without substitution.

ITEM NO. 7. DRAWING SHEET PV-E6.04 – FIRST FLOOR OVERALL INTERCOM/PA FLOOR PLAN

A. Remove and replace general note #9 as follows:

"9. CONTRACTOR SHALL PROVIDE TROUBLESHOOTING AND IDENTIFICATION OF DEFICIENCIES AS PART OF THE BASE BID. REPLACEMENT OF DEFECTIVE DEVICES / WIRING AND/ OR ADDITIONAL DEVICES AND WIRING SHALL BE PAID FOR VIA ALLOWANCE. SEE SPECIFICATION SECTION 27 51 23, PARTS 2.10 A – 2.10 C FOR FURTHER INFORMATION."

END OF ADDENDUM

SECTION 28 31 11 – DIGITAL, ADDRESSABLE FIRE-ALARM SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Fire-alarm control unit.
2. Manual fire-alarm boxes.
3. System smoke detectors.
4. Heat detectors.
5. Notification appliances.
6. Magnetic door holders.
7. Remote annunciator.
8. Addressable interface device.
9. Digital alarm communicator transmitter.
10. Fire alarm wire and cable.

1.2 DEFINITIONS

A. LED: Light-emitting diode.

B. NICET: National Institute for Certification in Engineering Technologies.

1.3 SYSTEM DESCRIPTION

A. Noncoded addressable system, with automatic sensitivity control of certain smoke detectors and multiplexed signal transmission, dedicated to fire-alarm service only. Fire alarm system shall utilize non-proprietary field devices such that maintenance activities such as replacement of pull station or strobes can be accomplished by Owner's personnel.

B. This is a delegated design. Contractor shall perform design of system and include all permitting and fees for local and State of Indiana review of fire alarm plans prior to commencement of construction activities.

1.4 SUBMITTALS

A. Shop Drawings: For fire-alarm system. Include plans, elevations, sections, details, and attachments to other work. Submit simultaneously with Product Data. Include the following as a minimum shop drawing requirement.
1. Submit to authorities having jurisdiction for approval, submittals reviewed and marked "No Exceptions Taken" by Architect.
2. Shop Drawings shall be prepared by persons with the following qualifications:
a. Trained and certified by manufacturer in fire-alarm system design.
b. NICET-certified fire-alarm technician, Level III minimum.
c. Licensed or certified by authorities having jurisdiction.
3. Comply with recommendations in the "Documentation" Section of the "Fundamentals of Fire Alarm Systems" Chapter in NFPA 72.
4. Include voltage drop calculations for notification appliance circuits.
5. Include battery-size calculations.
6. Include performance parameters and installation details for each detector, verifying that each detector is listed for complete range of air velocity, temperature, and humidity possible when air-handling system is operating.
7. Include plans, sections, and elevations of heating, ventilating, and air-conditioning ducts, drawn to scale and coordinating installation of duct smoke detectors and access to them. Show critical dimensions that relate to placement and support of sampling tubes, detector

housing, and remote status and alarm indicators. Locate detectors according to manufacturer's written recommendations.

8. Include voice/alarm signaling-service equipment rack or console layout, grounding schematic, amplifier power calculation, and single-line connection diagram.
9. Include 1/8-inch scale floor plans to indicate final outlet locations showing address of each addressable device. Show size and route of cable and conduits.
10. Show details of graphic maps.
11. Provide written Warranty as follows
    a. The Fire System shall have a 1 year warranty starting for the date of Beneficial Occupancy.
    b. Batteries shall have a full 1-year warranty and a 10-year pro rata warranty starting for the date of Beneficial Occupancy.

B. Quality Assurance/Control Submittals:
1. Product Data: For each type of product indicated.
2. Qualification Data: Provide Certification form, from the manufacturer, that the Installer and Persons preparing Shop Drawings are Qualified by the manufacturer. Submit qualifications simultaneously with Product Data.
3. Seismic Qualification Certificates: For fire-alarm control unit, accessories, and components, from manufacturer.
    a. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
    b. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
    c. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.
4. Field quality-control reports.

1.5 CLOSEOUT DOCUMENTS

A. General: Closeout Submittals are to be submitted with O and M Manuals only. Do not submit with other ACTION and INFORMATIONAL Submittals:
1. Operation and Maintenance Data: For fire-alarm systems and components to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include the following:
    a. Comply with the "Records" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.
    b. Provide "Record of Completion Documents" according to NFPA 72 article "Permanent Records" in the "Records" Section of the "Inspection, Testing and Maintenance" Chapter.
    c. Record copy of site-specific software.
    d. Provide "Maintenance, Inspection and Testing Records" according to NFPA 72 article of the same name and include the following:
        1) Frequency of testing of installed components.
        2) Frequency of inspection of installed components.
        3) Requirements and recommendations related to results of maintenance.
        4) Manufacturer's user training manuals.
    e. Manufacturer's required maintenance related to system warranty requirements.
    f. Abbreviated operating instructions for mounting at fire-alarm control unit.
2. Software and Firmware Operational Documentation:
    a. Software operating and upgrade manuals.
    b. Program Software Backup: On magnetic media or compact disk, complete with data files.
    c. Device address list.
    d. Printout of software application and graphic screens.
3. Extra Materials: Receipt for extra materials.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Personnel shall be trained and certified by manufacturer for installation of units required for this Project.
   1. Installation shall be by personnel certified by NICET as fire-alarm Level II technician.
   2. Distributors shall also be certified by the manufacturer.

B. Source Limitations for Fire-Alarm System and Components: Obtain fire-alarm system from single source from single manufacturer. Contractor shall confirm manufacturer as part of their bid.

C. Fire Alarm Wire and Cable Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
   1. Flame-Spread Index: 25 or less.
   2. Smoke-Developed Index: 50 or less.

D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

1.7 PROJECT CONDITIONS

A. Interruption of Existing Fire-Alarm Service: Do not interrupt fire-alarm service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary guard service according to requirements indicated:
   1. Notify Construction Manager no fewer than two weeks in advance of proposed interruption of fire-alarm service.
   2. Do not proceed with interruption of fire-alarm service without Construction Manager's written permission.

1.8 SEQUENCING AND SCHEDULING

A. Existing Fire-Alarm Equipment: While building is occupied by Owner prior to construction activities, maintain existing equipment fully operational. Existing system will be deactivated during construction. Coordinate with fire alarm monitoring company, Owner, and Construction Manager for duration of fire alarm outage during summer break.

B. Schedule interim checks of system during construction as required to validate new work and maintain schedule. Update Owner and CM with biweekly construction progress updates.

C. Equipment Removal: Remove existing disconnected fire-alarm equipment. Wiring shall be removed at Pleasant View.

1.9 SOFTWARE SERVICE AGREEMENT

A. Comply with UL 864.

B. Technical Support: Beginning with Substantial Completion, provide software support for two years.

C. Upgrade Service: Update software to latest version at Project completion. Install and program software upgrades that become available within two years from date of Substantial Completion. Upgrading software shall include operating system. Upgrade shall include new or revised licenses for use of software.
   1. Provide 30 days' notice to Owner to allow scheduling and access to system.

1.10 EXTRA MATERIALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Lamps for Remote Indicating Lamp Units: Quantity equal to 10 percent of amount installed, but no fewer than 1 unit.
   2. Lamps for Strobe Units: Quantity equal to 10 percent of amount installed, but no fewer than 1 unit.
   3. Smoke Detectors, Fire Detectors: Quantity equal to 10 percent of amount of each type installed, but no fewer than 1 unit of each type.
   4. Detector Bases: Quantity equal to 2 percent of amount of each type installed, but no fewer than 1 unit of each type.
   5. Keys and Tools: One extra set for access to locked and tamperproofed components.
   6. Audible and Visual Notification Appliances: One of each type installed.
   7. Fuses: Two of each type installed in the system.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Siemens Industry Inc, Building Technologies Division.
   2. NOTIFIER; part of the Honeywell's Fire Systems Group.
   3. National Time & Signal Corporation

B. Products of other manufacturers will be considered for acceptance provided they equal or exceed the material requirements and functional qualities of the specified product. The “Substitution Request Form” and complete technical data for evaluation must accompany requests for A/E’s approval. All materials for evaluation must be received by the Project Manager and Specification Department at least 10 days prior to bid due date. Additional approved manufacturers will be issued by Addendum.

2.2 SYSTEMS OPERATIONAL DESCRIPTION

A. Fire-alarm signal initiation shall be by one or more of the following devices and systems:
   1. Manual stations.
   2. Heat detectors.
   3. Smoke detectors.
   4. Duct smoke detectors.
   5. Automatic sprinkler system water flow.
   6. Fire-extinguishing system operation, including kitchen hoods.
   7. Water flow switches
   8. Fire standpipe system.

B. Fire-alarm signal shall initiate the following actions:
   1. Continuously operate alarm notification appliances.
   2. Identify alarm at fire-alarm control unit and remote annunciators.
   3. Transmit an alarm signal to the remote alarm receiving station.
   4. Unlock electric door locks in designated egress paths.
   5. Release fire and smoke doors held open by magnetic door holders.
   6. Activate voice/alarm communication system.
   7. Switch designated heating, ventilating, and air-conditioning equipment controls to fire-alarm mode.
   8. Close smoke dampers in air ducts of designated air-handling duct systems.
   9. Transmit an alarm signal to building management system per air-handling systems zone.
   10. Activate kitchen equipment shunt-trip circuit breakers on fire-extinguishing system operation.

11. Activate emergency shutoffs for gas and fuel supplies, including emergency generators where required by local codes.
12. Record events in the system memory.

C. Supervisory signal initiation shall be by one or more of the following devices and actions:
1. Valve supervisory switch.
2. Low-air-pressure switch of a dry-pipe sprinkler system.
3. Kitchen equipment shunt-trip supervision.

D. System trouble signal initiation shall be by one or more of the following devices and actions:
1. Open circuits, shorts, and grounds in designated circuits.
2. Opening, tampering with, or removing alarm-initiating and supervisory signal-initiating devices.
3. Loss of primary power at fire-alarm control unit.
4. Ground or a single break in fire-alarm control unit internal circuits.
5. Abnormal ac voltage at fire-alarm control unit.
6. Break in standby battery circuitry.
7. Failure of battery charging.
8. Abnormal position of any switch at fire-alarm control unit or annunciator.
9. Fire-pump power failure, including a dead-phase or phase-reversal condition.
10. Low-air-pressure switch operation on a dry-pipe or preaction sprinkler system.
11. First Responder Unit – Low battery (Supervisory).
12. First Responder Unit – Loss of power (Supervisory).

E. System Trouble and Supervisory Signal Actions: Initiate notification appliance and annunciate at fire-alarm control unit and remote annunciators.

2.3 FIRE-ALARM CONTROL UNIT

A. General Requirements for Fire-Alarm Control Unit:
1. Field-programmable, microprocessor-based, modular, power-limited design with electronic modules, complying with UL 864 and listed and labeled by an NRTL.
a. System software and programs shall be held in flash electrically erasable programmable read-only memory (EEPROM), retaining the information through failure of primary and secondary power supplies.
b. Include a real-time clock for time annotation of events on the event recorder and printer.
2. Addressable initiation devices that communicate device identity and status.
a. Smoke sensors shall additionally communicate sensitivity setting and allow for adjustment of sensitivity at fire-alarm control unit.
b. Temperature sensors shall additionally test for and communicate the sensitivity range of the device.
3. Addressable control circuits for operation of mechanical equipment.

B. Alphanumeric Display and System Controls: Arranged for interface between human operator at fire-alarm control unit and addressable system components including annunciation and supervision. Display alarm, supervisory, and component status messages and the programming and control menu.
1. Annunciator and Display: Liquid-crystal type, 2 line(s) of 40 characters, minimum.
2. Keypad: Arranged to permit entry and execution of programming, display, and control commands and to indicate control commands to be entered into the system for control of smoke-detector sensitivity and other parameters.

C. Circuits:
1. Initiating Device, Notification Appliance, and Signaling Line Circuits: NFPA 72, Class B.
a. Initiating Device Circuits: Style A.
b. Notification Appliance Circuits: Style Y.
c. Signaling Line Circuits: Style 4.

d. Install no more than 70 percent rated capacity of addressable devices on each signaling line circuit.
e. Install no more than 70 percent rated capacity of notification appliances on each notification appliance circuit.

2. Serial Interfaces: One RS-232 or USB port for service.

D. Door Controls: Door hold-open devices that are controlled by smoke detectors at doors in smoke barrier walls shall be connected to fire-alarm system.

E. Remote Smoke-Detector Sensitivity Adjustment: Controls shall select specific addressable smoke detectors for adjustment, display their current status and sensitivity settings, and change those settings. Allow controls to be used to program repetitive, time-scheduled, and automated changes in sensitivity of specific detector groups. Record sensitivity adjustments and sensitivity-adjustment schedule changes in system memory, and print out the final adjusted values on system printer.

F. Transmission to Remote Alarm Receiving Station: Automatically transmit alarm, supervisory, and trouble signals to a remote alarm station.

G. Primary Power: 24-V dc obtained from 120-V ac service and a power-supply module. Initiating devices, notification appliances, signaling lines, trouble signals, supervisory and digital alarm communicator transmitters shall be powered by 24-V dc source.
1. Alarm current draw of entire fire-alarm system shall not exceed 80 percent of the power-supply module rating.

H. Secondary Power: 24-V dc supply system with batteries, automatic battery charger, and automatic transfer switch.
1. Backup Battery: Premium, valve-regulated, recombinant-sealed, lead-calcium battery; spill proof; with a warranty per PART 1 above. Provide a single-stage, constant-voltage-current, limited battery charger, comply with battery manufacturer's written instructions for battery terminal voltage and charging current recommendations for maximum battery life.
2. Backup Power Supply Capacity: Comply with NFPA 72, but not less than 24 hours normal and 30 minutes alarm operation.

I. Instructions: Computer printout or typewritten instruction card mounted behind a plastic or glass cover in a stainless-steel or aluminum frame. Include interpretation and describe appropriate response for displays and signals. Briefly describe the functional operation of the system under normal, alarm, and trouble conditions.

2.4 MANUAL FIRE-ALARM BOXES

A. General Requirements for Manual Fire-Alarm Boxes: Comply with UL 38. Boxes shall be finished in red with molded, raised-letter operating instructions in contrasting color; shall show visible indication of operation; and shall be mounted on recessed outlet box. If indicated as surface mounted, provide manufacturer's surface back box.
1. Single-action mechanism, pull-lever type; with integral addressable module arranged to communicate manual-station status (normal, alarm, or trouble) to fire-alarm control unit.
2. Station Reset: Key- or wrench-operated switch.
3. Indoor Protective Shield: Factory-fabricated clear plastic enclosure hinged at the top to permit lifting for access to initiate an alarm. Lifting the cover actuates an integral battery-powered audible horn intended to discourage false-alarm operation.

2.5 SYSTEM SMOKE DETECTORS

A. General Requirements for System Smoke Detectors:
1. Comply with UL 268; operating at 24-V dc, nominal.

2. Detectors shall be four-wire type. If detectors are UL listed with the Fire Alarm Control Panel for power, alarm and trouble using a 2 wire system, then 2 wire detectors may be used.
3. Base Mounting: Detector and associated electronic components shall be mounted in a twist-lock module that connects to a fixed base. Provide terminals in the fixed base for connection to building wiring.
4. Self-Restoring: Detectors do not require resetting or readjustment after actuation to restore them to normal operation.
5. Integral Visual-Indicating Light: LED type indicating detector has operated and power-on status.
6. Remote Control: Unless otherwise indicated, detectors shall be analog-addressable type, individually monitored at fire-alarm control unit for calibration, sensitivity, and alarm condition and individually adjustable for sensitivity by fire-alarm control unit.
    a. Rate-of-rise temperature characteristic shall be selectable at fire-alarm control unit for 15 or 20 deg F per minute.
    b. Fixed-temperature sensing shall be independent of rate-of-rise sensing and shall be settable at fire-alarm control unit to operate at 135 or 155 deg F .
    c. Provide multiple levels of detection sensitivity for each sensor.

B. Photoelectric Smoke Detectors:
1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:
    a. Primary status.
    b. Device type.
    c. Present average value.
    d. Present sensitivity selected.
    e. Sensor range (normal, dirty, etc.).

C. Duct Smoke Detectors: Photoelectric type complying with UL 268A.
1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:
    a. Primary status.
    b. Device type.
    c. Present average value.
    d. Present sensitivity selected.
    e. Sensor range (normal, dirty, etc.).
3. Weatherproof Duct Housing Enclosure: NEMA 250, Type 4X; NRTL listed for use with the supplied detector.
4. Each sensor shall have multiple levels of detection sensitivity.
5. Sampling Tubes: Design and dimensions as recommended by manufacturer for specific duct size, air velocity, and installation conditions where applied.

2.6 HEAT DETECTORS

A. General Requirements for Heat Detectors: Comply with UL 521.

B. Heat Detector, Combination Type: Actuated by either a fixed temperature of 135 deg F or a rate of rise that exceeds 15 deg F per minute unless otherwise indicated.
1. Mounting: Twist-lock base interchangeable with smoke-detector bases.
2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.

C. Heat Detector, Fixed-Temperature Type: Actuated by temperature that exceeds a fixed temperature of 190 deg F.

1. Mounting: Twist-lock base interchangeable with smoke-detector bases.
2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.

2.7 CARBON MONOXIDE DETECTORS

A. Description: Listed for connection to fire-alarm system.
   1. Mounting: Adapter plate for outlet box mounting.
   2. Detector shall provide a means to test by introducing test carbon monoxide into the sensing cell.
   3. Detector shall provide alarm contacts and trouble contacts.
   4. Detector shall send trouble alarm when nearing end-of-life, power supply problems, or internal faults.
   5. Detector shall be listed to comply with UL 2075.
   6. Detectors shall be located, mounted, and wired according to manufacturer's written instructions.
   7. Test button simulates an alarm condition.

2.8 NOTIFICATION APPLIANCES

A. General Requirements for Notification Appliances: Connected to notification appliance signal circuits, zoned as indicated, with screw terminals for system connections, and shall be mounted on recessed outlet box. If indicated as surface mounted, provide manufacturer's surface back box.
   1. Combination Devices: Factory-integrated audible and visible devices in a single-mounting assembly, equipped for mounting as indicated and with screw terminals for system connections.

B. Horns: Electric-vibrating-polarized type, 24-V dc; with provision for housing the operating mechanism behind a grille. Comply with UL 464. Horns shall produce a sound-pressure level of 90 dBA, measured 10 feet from the horn, using the coded signal prescribed in UL 464 test protocol.

C. Visible Notification Appliances: Xenon strobe lights comply with UL 1971, with clear or nominal white polycarbonate lens mounted on an aluminum faceplate. The word "FIRE" is engraved in minimum 1-inch- high letters on the lens.
   1. Rated Light Output: 110 cd, unless indicated otherwise.
   2. Mounting: Wall mounted unless otherwise indicated.
   3. For units with guards to prevent physical damage, light output ratings shall be determined with guards in place.
   4. Flashing shall be in a temporal pattern, synchronized with other units.
   5. Strobe Leads: Factory connected to screw terminals.
   6. Mounting Faceplate: Factory finished, red.

D. Weatherproof Bells: Electric-vibrating, 24-V dc, under-dome type; with provision for housing operating mechanism behind bell. Bells shall produce a sound-pressure level of 94 dBA, measured 10 feet from bell. 10-inch size, unless otherwise indicated.

2.9 NOTIFICATION APPLIANCE CIRCUIT POWER SUPPLY UNITS

A. General Requirements for Notification Appliance Circuit Power Supply Unit:
   1. Power-limited design, complying with UL 864 and listed and labeled by an NRTL.

B. Notification Appliance Circuits: NFPA 72, Class B, Style Y.
   1. Install no more than 70 percent rated capacity of notification appliances on each notification appliance circuit.

C. Primary Power: 24-V dc obtained from 120-V ac service and a power-supply module. Initiating devices, notification appliances, trouble signals, and supervisory signals shall be powered by 24-V dc source.
   1. Alarm current draw of entire notification appliance circuit power supply unit shall not exceed 80 percent of the power-supply module rating.

D. Secondary Power: 24-V dc supply system with batteries, automatic battery charger, and automatic transfer switch.
   1. Backup Battery: Premium, valve-regulated, recombinant-sealed, lead-calcium battery; spill proof; with a full 1-year warranty and a pro rata 19-year warranty. With single-stage, constant-voltage-current, limited battery charger, comply with battery manufacturer's written instructions for battery terminal voltage and charging current recommendations for maximum battery life.
   2. Backup Power Supply Capacity: Comply with NFPA 72, but not less than 24 hours normal and 30 minutes alarm operation.

2.10 MAGNETIC DOOR HOLDERS

A. Products: Subject to compliance with requirements, provide one of the following products:
   1. Dorma-USA: EM508-24120
   2. Edwards Signaling: 1508-AQN5
   3. GE Security: 1508-AQN5
   4. Honeywell Notifier: FM996
   5. LCN Closers: SEM 7830/ SEM 1960
   6. Rixson Specialty Door Controls: 996/ 991
   7. Sargent Lock: 1560
   8. Siemens: SDH-3

B. Description: Units are equipped for wall mounting complete with matching doorplate.
   1. Electromagnet: Requires no more than 3 W to develop 25-lbf holding force.
   2. Wall-Mounted Units: Surface mounted at least 2.375-inches deep, with maximum 1.625-inch deep pin-pivoted door armature. The use of ball-jointed catches and extension links on door armatures is not permitted.
   3. Rating: 120-V ac.

C. Material and Finish: Brushed or painted aluminum.

2.11 REMOTE ANNUNCIATOR

A. Description: Annunciator functions shall match those of fire-alarm control unit for alarm, supervisory, and trouble indications. Manual switching functions shall match those of fire-alarm control unit, including acknowledging, silencing, resetting, and testing.
   1. Mounting: Flush or Surface as required cabinet, NEMA 250, Type 1.

B. Display Type and Functional Performance: Alphanumeric display and LED indicating lights shall match those of fire-alarm control unit. Provide controls to acknowledge, silence, reset, and test functions for alarm, supervisory, and trouble signals.
   1. Graphic Annunciator:
      a. Backbox: Cold rolled steel with welded and ground seams, finished with black polyester powder coating.
      b. Door: Satin finished stainless steel or brushed aluminum, with concealed piano hinge, secured by a key lock with no other visible fasteners.
      c. Graphic: Reversed printed polycarbonate lexan laminated to aluminum, with full color image, and LEDs indicating alarm, trouble, or supervisory condition, and fire alarm device type. Building detail shall be selected and color-coded as directed by Owner and Architect/Engineer.
      d. Provide keyed lamp test switch.
      e. Provide "power-on" LED indicator.

f. Wiring: LED and switch wiring shall be neatly harnessed to designated terminal blocks located in annunciator backbox.
g. Install alphanumeric display in face of graphic.
h. Install graphic annunciator adjacent to alphanumeric display.

2. Graphic Map:
a. Graphic: Full color image printed on the reverse side of a 10 mil polycarbonate Lexan laminated to a 1/8-inch rigid backing with a removable adhesive for future replacement.
b. Frame: Black anodized aluminum frame with concealed security hanging system to prevent unauthorized removal.
c. Location of fire-alarm control unit, main graphic map and other graphic maps shall be shown in red with "YOU ARE HERE" printed in red. Detection devices, nomenclature, and building detail shall be color coded as selected by Owner and Architect/Engineer.
d. Mounting: Adjacent to remote annunciator.

2.12 ADDRESSABLE INTERFACE DEVICE

A. Description: Microelectronic monitor module, NRTL listed for use in providing a system address for alarm-initiating devices for wired applications with normally open contacts.

B. Integral Relay: Capable of providing a direct signal to the following:
1. Circuit-breaker shunt trip for power shutdown.
2. Heating, ventilating, and air-conditioning equipment controllers for power shutdown.
3. Smoke dampers for closing.
4. Magnetic door holders, electric locks, coiling doors and grilles for releasing.
5. Building management system for equipment shutdown and alarm notification.
6. Gas and fuel solenoid valves for emergency shut-off.

C. Voltage Sensing Relay: Capable of detecting presence of 120 V ac for supervision of control power for shunt-trip circuit breakers.

2.13 DIGITAL ALARM COMMUNICATOR TRANSMITTER

A. Digital alarm communicator transmitter shall be acceptable to the remote central station and shall comply with UL 632 and be listed and labeled by an NRTL, and comply with NFPA 72, 2016 edition.

B. Dual-Path Communicator: Primary transmission channel for Internet Protocol (IP) communication connection and Secondary transmission channel for wireless cellular communication, and shall comply with UL 864 and be listed and labeled by an NRTL, and comply with NFPA 72, 2016 edition. Wireless communications protocol shall be compatible with the Owner's wireless service provider communications protocol. A separate, roof mounted antenna for wireless cellular communication shall be provided as required if signal reception from internal antenna on communicator is not sufficient.

C. Functional Performance: Communicator units shall receive an alarm, supervisory, or trouble signal from fire-alarm control panel and automatically dial a preset number via for a remote central station via dedicated Internet Protocol (IP) communication. A secondary transmission channel via wireless cellular communicator shall also be employed. When contact is made with central station, signals shall be transmitted. If service on either channel is interrupted for longer than 45 seconds, transmitter shall initiate a local trouble signal and transmit the signal indicating loss of channel to the remote alarm receiving station over the remaining channel within 4 minutes. Transmitter shall automatically report communication service restoration to the central station. Local functions and display at the digital alarm communicator transmitter shall include the following:
1. Verification that both transmission channels are available.
2. Programming device.
3. LED display.

4. Manual test report function and manual transmission clear indication.
5. Communications failure with the central station or fire-alarm control panel.

D. Digital data transmission shall include the following:
1. Address of the alarm-initiating device.
2. Address of the supervisory signal.
3. Address of the trouble-initiating device.
4. Loss of ac supply or loss of power.
5. Low battery.
6. Abnormal test signal.
7. Communication bus failure.

E. Self-Test: Conducted automatically every 24 hours with report transmitted to central station.

2.14 SMOKE DAMPERS

A. Smoke dampers, if existing. Provide fire alarm interface device, smoke dampers, remote alarm indicator and control wiring as required to operate smoke dampers as required in system operational description above.

2.15 PATHWAYS

A. Support of Open Cabling: NRTL labeled for support of Category 6 cabling, designed to prevent degradation of cable performance and pinch points that could damage cable.
1. Support brackets with cable tie slots for fastening cable ties to brackets.
2. Lacing bars, spools, J-hooks, and D-rings.
3. Straps and other devices.
4. Cable Ties: Comply with Division 26 Section “Identification of Electrical Systems.”

B. Cable Trays: Comply with requirements in Division 26 Section "Cable Trays for Electrical Systems."

C. Conduit and Boxes: Comply with requirements in Division 26 Section "Raceway and Boxes for Electrical Systems."
1. Outlet boxes shall be no smaller than 2 inches wide, 3 inches high, and 2-1/2 inches deep.

2.16 FIRE ALARM WIRE AND CABLE

A. General Wire and Cable Requirements: NRTL listed and labeled as complying with NFPA 70, Article 760.

B. Signaling Line Circuits: Twisted, shielded pair, not less than No. 18 AWG.

C. Non-Power-Limited Circuits: Solid-copper conductors with 600-V rated, 75 deg C, color-coded insulation.
1. Low-Voltage Circuits: No. 16 AWG, minimum.
2. Line-Voltage Circuits: No. 12 AWG, minimum.
3. Multiconductor Armored Cable: NFPA 70, Type MC, copper conductors, Type TFN/THHN conductor insulation, copper drain wire, copper armor with red identifier stripe, NTRL listed for fire alarm and cable tray installation, plenum rated, and complying with requirements in UL 2196 for a 2-hour rating.

2.17 IDENTIFICATION PRODUCTS

A. Comply with UL 969 for a system of labeling materials, including label stocks, laminating adhesives, and inks used by label printers.

B. Comply with requirements in Division 26 Section "Identification for Electrical Systems."

2.18 DEVICE GUARDS

A. In Gymnasiums and other spaces subject to damage, provide device guards around devices. Guards for manual pull stations shall not impede operation of pull station. Refer to drawing for additional information.

B. Description: Welded wire mesh of size and shape for the manual station, smoke detector, gong, or other device requiring protection.
   1. Factory fabricated and furnished by manufacturer of device.
   2. Finish: Paint of color to match the protected device.

PART 3 - EXECUTION

3.1 INSTALLATION OF PATHWAYS

A. Comply with requirements in Division 26 Section "Raceway and Boxes for Electrical Systems." for installation of conduits and wireways.

3.2 FIRE ALARM WIRING INSTALLATION

A. Comply with NECA 1 and NFPA 72.

B. Wiring Method: Install wiring in raceway according to Division 26 Section "Raceway and Boxes for Electrical Systems," and cable tray except as follows: within consoles, cabinets, desks, and counters and except in accessible ceiling spaces where unenclosed wiring method may be used. Use NRTL-listed plenum cable in environmental air spaces, including plenum ceilings. Conceal raceway and cables except in unfinished spaces. All vertical cable exposed to abuse, inside walls or surface mounted up to 12 feet above finished floor, shall be in conduit.

C. Wiring within Enclosures: Separate power-limited and non-power-limited conductors as recommended by manufacturer. Install conductors parallel with or at right angles to sides and back of the enclosure. Bundle, lace, and train conductors to terminal points with no excess. Connect conductors that are terminated, spliced, or interrupted in any enclosure associated with the fire alarm system to terminal blocks. Mark each terminal according to the system's wiring diagrams. Make all connections with approved crimp-on terminal spade lugs, pressure-type terminal blocks, or plug connectors.

D. Cable Taps: Use numbered terminal strips in junction, pull, and outlet boxes, cabinets, or equipment enclosures where circuit connections are made.

E. Color-Coding: Color-code fire alarm conductors differently from the normal building power wiring. Use one color-code for alarm circuit wiring and another for supervisory circuits. Color-code audible alarm-indicating circuits differently from alarm-initiating circuits. Use different colors for visible alarm-indicating devices. Paint fire alarm system junction boxes and covers red.

F. Wiring to Remote Alarm Transmitting Device: 1-inch conduit between the fire alarm control panel and the transmitter. Install number of conductors and electrical supervision for connecting wiring as needed to suit monitoring function.

3.3 REMOVAL OF CONDUCTORS AND CABLES
   1. Remove abandoned conductors and cables. Refer to Division 26 Section " Electrical Demolition" Specification.

3.4 EQUIPMENT INSTALLATION

A. Comply with NECA 305.

B. Comply with NFPA 72 for installation of fire-alarm equipment.

C. Equipment Mounting: Install wall-mounted equipment, with tops of cabinets not more than 72 inches above the finished floor.

D. HVAC: Locate detectors not closer than 3 feet from air-supply diffuser on return-air opening.

E. Duct Smoke Detectors: Comply with NFPA 72 and NFPA 90A. Install sampling tubes so they extend the full width of duct.
   1. Provide for air-handling units with capacity of 2000 cfm or greater.
   2. Provide for variable air volume type fan-powered terminal units served by return air plenums with capacity of 2000 cfm or greater.
   3. Provide within 5 feet of smoke dampers.

F. Remote Status and Alarm Indicators: Install near each smoke detector and each sprinkler water-flow switch and valve-tamper switch that is not readily visible from normal viewing position.
   1. Install flush in ceiling below duct smoke detectors, unless otherwise indicated.
   2. Install in public space near device they monitor. Do not install in normally unoccupied spaces.

G. Audible Alarm-Indicating Devices: Install not less than 6 inches below the ceiling. Install bells and horns on flush-mounted back boxes with the device-operating mechanism concealed behind a grille.

H. Visible Alarm-Indicating Devices: Install adjacent to each alarm bell or alarm horn and at least 6 inches below the ceiling.

I. Notification Appliance Circuit Power Supply Units: Provide quantity of units required for notification appliances indicated.
   1. Provide system smoke detector at each group of units.
   2. Provide 120 V, 20 A circuit to each unit.

J. Mechanical Equipment Rooms and Kitchens: Provide 190 deg F fixed heat detectors.

K. Device Location-Indicating Lights: Locate in public space near the device they monitor.

L. Fire-Alarm Control Unit: Surface mounted, with tops of cabinets not more than 72 inches above the finished floor.

M. Annunciator: Install with top of panel not more than 72 inches above the finished floor.

N. Wire Guards: Install wire guards on fire alarm devices located in gymnasia, multi-purpose rooms, stages, and shop areas.

O. Sprinkler Bell: Install weatherproof bell at fire department connections.

P. Digital Alarm Communicator Transmitter: Where digital alarm communicator transmitter is not installed in fire-alarm control unit, provide 1-inch conduit between fire-alarm control unit and digital alarm communicator transmitter.

Q. Additional mounting heights are specified in Division 26 Section "Wiring Devices."

R. Devices Supported by Ceiling Systems/Mounted on Acoustic Ceiling Tiles: Support devices from ceiling system using tile bridges (fire alarm system manufacturer's tile bridge accessory if available from supplied fire alarm device manufacturer). Devices shall be installed tight to acoustic ceiling tiles, with no visible gaps between device faceplate and ceiling.

3.5 CONNECTIONS

A. For fire-protection systems related to overhead coiling fire doors and coiling counter fire doors in fire-rated walls and partitions and in smoke partitions, comply with requirements in Division 08 Section "Overhead Coiling Fire Doors" and Division 08 Section "Coiling Counter Fire Doors." Connect hardware and devices to fire-alarm system.
   1. Verify that hardware and devices are NRTL listed for use with fire-alarm system in this Section before making connections.

B. Make addressable connections with a supervised interface device to the following devices and systems. Install the interface device less than 3 feet from the device controlled. Make an addressable confirmation connection when such feedback is available at the device or system being controlled.
   1. Smoke dampers in air ducts of designated air-handling duct systems.
   2. Air-handling unit controllers of designated air-handling systems.
   3. Variable air volume type fan-powered box controllers of designated air-handling systems.
   4. Unlock electric door locks in designated egress paths.
   5. Release magnetic door holders.
   6. Activate circuit breaker shunt-trip to designate kitchen equipment.
   7. Alarm-initiating connection to building management system of designated air-handling duct system.
   8. Alarm-initiating connection to activate theatrical lighting control.
   9. Alarm-initiating connection to activate emergency shutoffs for gas and fuel supplies.
   10. Alarm-initiating connection to overhead coiling fire doors and coiling counter fire doors.
   11. Supervisory connections at valve supervisory switches.
   12. Supervisory connections at low-air-pressure switch of each dry-pipe sprinkler system.
   13. Supervisory connections at kitchen equipment shunt trip breakers.
   14. Supervisory connections at fire-pump power failure including a dead-phase or phase-reversal condition.
   15. Supervisory connections at fire-pump engine control panel.
   16. Supervisory connections at first responder distributed antenna system.

3.6 IDENTIFICATION

A. Identify system components, wiring, cabling, and terminals. Comply with requirements for identification specified in Division 26 Section "Identification for Electrical Systems."

B. Install framed instructions in a location visible from fire-alarm control unit.

3.7 FIRESTOPPING

A. Comply with requirements in Division 07 Section "Firestopping."

3.8 GROUNDING

A. Ground fire-alarm control unit and associated circuits; comply with IEEE 1100. An equipment grounding conductor shall be installed in the branch circuit from the main service ground to fire-alarm control unit.

3.9 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.

B. Tests and Inspections:
   1. Visual Inspection: Conduct visual inspection prior to testing.
      a. Inspection shall be based on completed Record Drawings and system documentation that is required by NFPA 72 in its "Completion Documents, Preparation" Table in the "Documentation" Section of the "Fundamentals of Fire Alarm Systems" Chapter.
      b. Comply with "Visual Inspection Frequencies" Table in the "Inspection" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72; retain the "Initial/Reacceptance" column and list only the installed components.
   2. System Testing: Comply with "Test Methods" Table in the "Testing" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.
   3. Factory-authorized service representative shall prepare the "Fire Alarm System Record of Completion" in the "Documentation" Section of the "Fundamentals of Fire Alarm Systems" Chapter in NFPA 72 and the "Inspection and Testing Form" in the "Records" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.

C. Reacceptance Testing: Perform reacceptance testing to verify the proper operation of added or replaced devices and appliances.

D. Fire-alarm system will be considered defective if it does not pass tests and inspections.

E. Prepare test and inspection reports.

F. Maintenance Test and Inspection: Perform tests and inspections listed for weekly, monthly, quarterly, and semiannual periods. Use forms developed for initial tests and inspections.

G. Annual Test and Inspection: One year after date of Substantial Completion, test fire-alarm system complying with visual and testing inspection requirements in NFPA 72. Use forms developed for initial tests and inspections.

3.10 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain fire-alarm system.

END OF SECTION 28 31 11

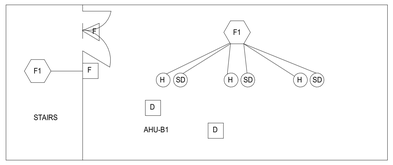
FANNING HOWEY

	PRE-BID REQUEST FOR INTERPRETATION/CLARIFICATION LOG				
Project No.	**RFI#**	**Date Received**	**Request for Interpretation Item**	**Dwg./ Spec.**	**Response**
ADDENDUM NO. 3					
223128.00	1	1/8/24	Can "Bogen Nyquist" be added to "CareHawk" as another approved intercom system manufacturer for intercom work bidding purposes.		The district is standardizing on the Carehawk intercom. No alternates will be considered.
223128.00	2	1/10/24	Substitution Request for Section 28 31 11 – Digital, Addressable Fire Alarm System - Edwards		Rejected
223128.00	3	1/10/24	1. Spec 2.3.E Central Control Cabinet. Can the existing rack be cleaned and reused, if it is sufficient? 2. Spec 2.4.A AM-FM Tuner and Spec 2.4.B CD/MP3/Bluetooth Can the Denon DN 300Z be used to combine all functions into one player? 3. Spec 2.4.C.19 Weather Radio antenna - Spec 3.1.S antenna mounts. Will a roof penetration be provided for antenna cables within an acceptable distance of the weather radio? 4. Spec 2.4.E 8- Input Mixer. Only 2 program sources are specified, which could be combined into one source. Will a 4 Ch mixer be acceptable? 5. Spec 2.9.B Push to talk microphone would require 5-pole XLR for microphone and contact closure to initiate an ALL-Call page. 6. Spec 2.10.A Troubleshooting wiring and devices. *"Include time to troubleshoot any existing wiring or devices that are not working after headend change over. These devices are as follows below."* Are there any known issues with existing wiring or devices? Will corrective action to correct the discovered issue be handled with a change order? 7. Spec 2.10.B Troubleshooting wiring and devices. *"During system testing, there may be a need to add devices to provide proper paging coverage as well."* Will any additional		1. No. The existing rack cannot be reused. 2. Yes. 3. No roof penetrations will be provided. This contractor will need to provide its own if it is needed. 4. Yes. 5. That is correct. 6. There are known issues in PVE but it is not confirmed if it is wiring, devices or old system issues, see addendum 3. 7. Yes. 8. No definite number is known at this time, see addendum 3.

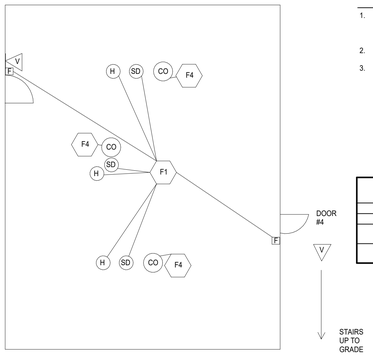
FANNING HOWEY

			speaker and cabling to the system be covered with a change order up to the allowance? 8. Drawing Sheet PV-E6.04 "*TROUBLESHOOTING TIME AND REPLACING A FEW OF THE EXISTING DEVICES SHOULD BE INCLUDED IN THE BID.*" Is there an acceptable or anticipated definition for "FEW" in this context?		
223128.00	4	1/10/24	In reviewing the Fire Alarm & Intercom drawings, I don't see that there is sufficient information to confirm the following: • Current number of homerun circuits at each schools Intercom headend equipment. • For Eagle Elementary and both Middle Schools I see the list of Fire Alarm devices indicated, based upon recent test reports. I honestly question the quantities provided. Like for Zionsville MS it reports 80 Duct Detectors & 97 Pull Stations, of which I believe to be misinterpreted or something. My question is if we would be allowed for a technician to stop by each school to look at the existing Intercom headend and confirm number of homerun circuits and look at each Fire Alarm Panel to see if we can confirm in their program the actual number of devices included.		Skillman can assist with coordinating a site visit. See revised documents. Fire alarm scope for elementary schools has been modified for system replacement, and middle school fire alarm work has been deleted and will not occur under this project. See addendum 3.
223128.00	5	11/15/24	Can test reports be included as part of the addendum.		No
223128.00	6	11/19/24	1. The existing Honeywell Fire Alarm systems are proprietary systems, so Tech and others are not able to connect up to the panels to download current points lists and configurations. a. Would the program points list be available from the owner to verify current devices and configurations? This would assist in determining existing field devices & modules that cannot be seen in a visual walk thru. 2. Would existing Fire Alarm as-built drawings be available?		1. Understood. Full system replacement. 2. No. 3. AutoCAD plans for creating shop drawings will be made available to contractor. 4. See contract documents. All existing door hold opens to be corrected and made functional upon completion of the project. 5. Raceways not part of this project and not intended to be reused for either paging or fire alarm work are not to be re-supported as part of this project. Verify existing conditions prior to start of work for any items found to be deficient.

			3. Will current CAD files be available per school with correct floorplans and room signage? 4. During visit we seen alterations that appear to be changes after original installations that may be required to be . a. See attached “ZMS Door Holder”. Appears there was a wall mounted magnetic door holder plated off. There is now a Magnetic Door Holder on the door. But the door is now held open with the latch shown preventing door from closing in event of an alarm. b. Is there any plans or documentation that show where rated smoke/fire doors are needing closed in each school? 5. During site visit we seen existing raceway hanging loose. a. See attached “PV Door Holder”. b. Will it be required to correct such items as the raceway in the base bid or would this be change order/contingency allowances?		



MEZZANINE PLAN



BOILER ROOM
NOT TO SCALE

GENERAL NOTES - DEMOLITION

1. REMOVE EXISTING FIRE ALARM EQUIPMENT SHOWN ON THIS PLAN, INCLUDING PULL STATIONS, SMOKE DETECTORS, DUCT MOUNTED SMOKE DETECTORS, FIRE SPRINKLER FLOW AND TAMPER SWITCH CONNETIONS (ADDRESSABLE INTERFACE DEVICES), NAC PANELS, FIRE ALARM ANNUNCIATORS, FIRE ALARM PANEL AND DIALER.
2. EXISTING RECESSED BOXES FOR EXISTING WALL MOUNTED NOTIFICATION DEVICES MAY BE REUSED FOR NEW DEVICES WHERE MEETING CURRENT FIRE ALARM CODE.
3. NOTIFICATION APPLIANCE CIRCUIT (NAC) POWER SUPPLIES/BOOSTERS ARE LOCATED IN THE SAME ROOM AS THE EXISTING FAP AND DIALER. REPLACE AND PROVIDE CIRCUITS AS REQUIRED.

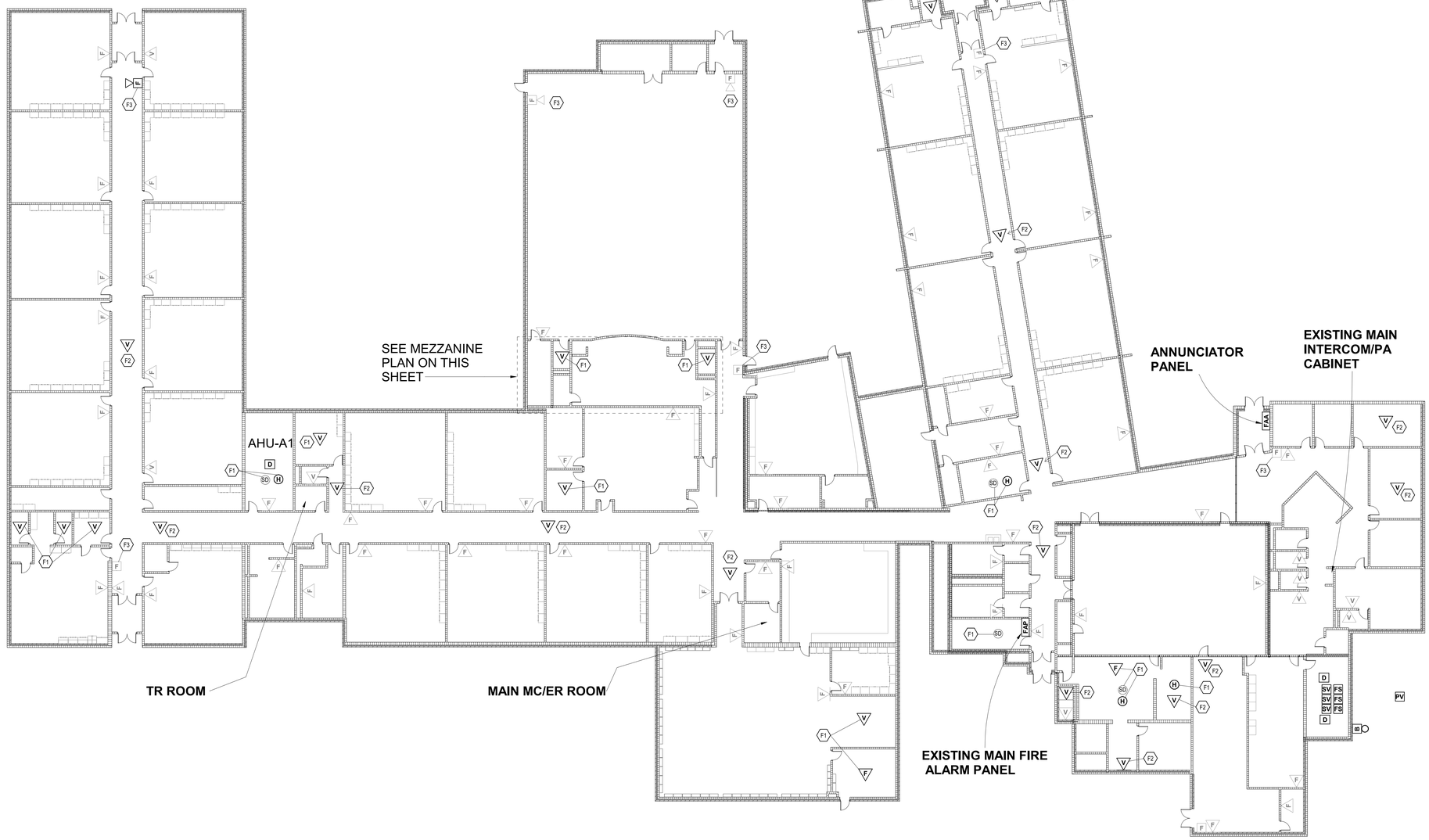
KEYNOTES	
F1	PROVIDE NEW DEVICE IN ROOM SHOWN.
F2	PROVIDE CEILING MOUNTED STROBE.
F3	PROVIDE NEW PULL STATION AT ADA COMPLIANT HEIGHT. FOR MASONRY SURFACES ONLY, PROVIDE SURFACE BOX AND RACEWAY AS NECESSARY TO EXTEND DOWNWARD.
F4	PROVIDE CARBON MONOXIDE DETECTOR (OR COMBINATION CARBON MONOXIDE/SMOKE DETECTOR AS AVAILABLE.

GENERAL NOTES - FIRE ALARM

1. ALL FIRE ALARM WORK SHALL BE COORDINATED WITH EXISTING FIRE ALARM EQUIPMENT FOR CONTINUOUS COVERAGE OF FACILITY WHILE OCCUPIED. SCHEDULE SWITCHOVER AND OUTAGES AT A TIME AGREEABLE TO OWNER, DURING PERIODS WHEN SCHOOL IS NOT IN SESSION. PROVIDE PROPOSED WORK PLAN WITH ANTICIPATED OUTAGE SCHEDULE FOR REVIEW AT START OF PROJECT. OWNERS SCHOOL SCHEDULE SHALL NOT BE IMPACTED BY FIRE ALRM REPLACEMENT. SCHEDULE ALL OUTAGES WITH A MINIMUM OF TWO WEEKS NOTICE FOR OWNER SCHEDULING. COORDINATE THROUGH CONSTRUCTION MANAGER.
2. FIRE ALARM LAYOUT IS SHOWN ON THESE PLANS FOR COVERAGE AREAS ONLY. EXISTING INFORMATION WAS GATHERED VISUAL OBSERVATIONS WITHOUT REMOVING CEILING TILES AND OWNERS EXISTING INFORMATION. CONTRACTOR SHALL PROVIDE FULL DESIGN DOCUMENTS FROM NICET ACCREDITED FIRE ALARM DESIGNER AS PART OF THEIR BID, INCLUDING LAYOUT AND CALCULATIONS (DELEGATED DESIGN). CONTRACTOR SHALL PROVIDE DEVICES FOR COMPLETE AUDIBLE AND VISUAL COVERAGE. CONTRACTOR SHALL SELECT VISUAL DEVICES WITH CANDELA RATINGS AS REQUIRED AND PROVIDE SUPPLEMENTAL DEVICES WHERE REQUIRED. CONTRACTOR SHALL ASSUME 60 DECIBELS AS ROOM AMBIENT NOISE LEVEL FOR AUDIBLE DESIGN.
3. CONTRACTOR SHALL REMOVE AND REINSTALL CEILING TILES AS REQUIRED FOR SCOPE OF WORK. REPLACE ALL TILES DAMAGED DURING CONSTRUCTION WITH NEW TILES MATCHING EXISTING.
4. REPLACE EXISTING HONEYWELL XLS3000 FIRE ALARM SYSTEM AND DEVICES WITH A NEW EQUIPMENT.
5. EXISTING CABLING FOUND SUITABLE SHALL BE REUSED THROUGHOUT THE SCHOOL.PROVIDE NEW WIRING FOR ALL NEW DEVICES.
6. VERIFY EXACT QUANTITY AND LOCATIONS WITH OF ALL SPRINKLER CONNECTIONS PRIOR TO FIRE ALARM SHOP DRAWING SUBMITTAL.
7. PROVIDE TWO WEEK NOTICE TO TOWN OF ZIONSVILLE FIRE DEPARTMENT FOR FINAL INSPECTION AND TESTING. COORDINATE SO THAT ANY CORRECTIVE WORK CAN OCCUR PRIOR TO RETURN OF STUDENTS TO SCHOOL.
8. KITCHEN HOODS DO NOT REQUIRE TIE-IN TO FIRE ALARM. FIRE SUPPRESSION SYSTEMS HAVE BEEN REMOVED.
9. EXISTING DEVICES (GREYED OR HALF-TONE) ARE EXISTING DEVICES TO BE REMOVED AND REPLACED WITH NEW IN THE SAME LOCATION UNLESS OTHERWISE INDICATED.
10. PROVIDE CONNECTIONS TO BUILDING FIRST RESPONDER DISTRIBUTED ANTENNA SYSTEM FOR MONITORING.
11. PROVIDE CATEGORY 6 CABLE TO FIRE ALARM DIALER FROM EXISTING IDF APPROXIMATELY 50' NORTH OF FAP.

GENERAL NOTES - INTERCOM/PA

1. FULLY REPLACE EXISTING DUKANE MCS350 MAIN ANALOG INTERCOM/PA SYSTEM WITH A NEW CAREHAWK INTERCOM SYSTEM HEADEND.
2. INSTALLING COMPANY SHALL BE A CERTIFIED AS AN INSTALLER OF CAREHAWK SAFETY COMMUNICATION PRODUCTS.
3. CENTRAL CONTROLLER SHALL INCLUDE AMPLIFIER, UPS AND ALL CARDS OR CONNECTIONS NEEDED TO PROVIDE A COMPLETE OPERATING FINAL SYSTEM.
4. COORDINATE THIS WORK TO HAPPEN IN PHASES THAT ACCOMODATE THE SCHOOLS PREFERENCE.
5. EXISTING WIRING, SPEAKERS, CALL IN BUTTONS AND VOLUME CONTROLS TO REMAIN IN PLACE AND BE REUSED WITH THE NEW PAGING/INTERCOM SYSTEM.
6. ONE ADMIN MAIN CONSOLE WILL NEED TO BE INCLUDED WITH THE SYSTEM AND LOCATED ACCORDING TO THE SCHOOLS DIRECTION.
7. OWNER WILL PROVIDE NETWORK EQUIPMENT AND PATCH CORDS ACCORDING TO NEEDS RELAYED TO THEM FROM THIS CONTRACTOR.
8. SYSTEM PROGRAMMING, TESTING & CERTIFICATION, AND TRAINING TO BE INCLUDED IN THIS PRICE.



1 - FIRST FLOOR - OVERALL FIRE ALARM & INTERCOM/PA FLOOR PLAN
SCALE: 1/16" = 1'-0"

MULTIPLE FIRE ALARM & INTERCOM/PA REPLACEMENTS

EAGLE ELEMENTARY SCHOOL
350 NORTH 6TH STREET
ZIONSVILLE, INDIANA 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

317-848-0966 WWW.FHAI.COM

PLAN NORTH

CONSTRUCTION DOCUMENTS

BRIAN W. BUTLER REGISTERED No. PE10800S STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: CDT
PROJECT NUMBER: 223128.00
PROJECT ISSUE DATE: 12.19.2023

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #3	2/7/24

FIRST FLOOR OVERALL FIRE ALARM & INTERCOM/PA PLAN

EG-E6.01

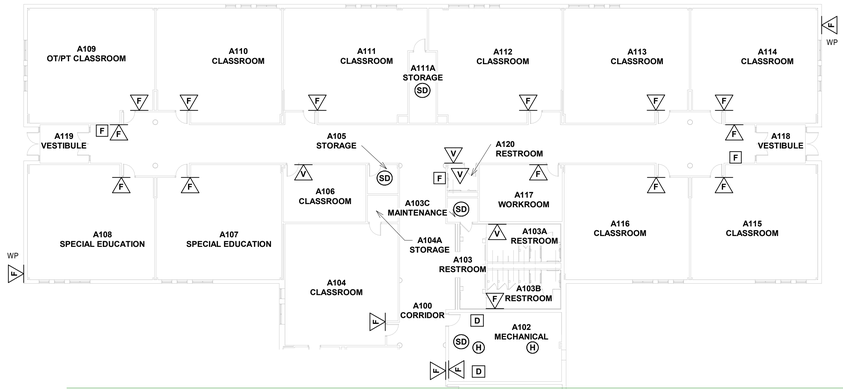
GENERAL NOTES - FIRE ALARM

1. ALL NEW FIRE ALARM WORK SHALL BE COORDINATED WITH EXISTING FIRE ALARM EQUIPMENT FOR CONTINOUS COVERAGE OF FACILITY WHILE OCCUPIED. SCHEDULE SWITCHOVER AND OUTAGES AT A TIME AGREEABLE TO OWNER, DURING PERIODS WHEN SCHOOL IS NOT IN SESSION. PROVIDE PROPOSED WORK PLAN WITH ANTICIPATED OUTAGE SCHEDULE FOR REVIEW AT START OF PROJECT. OWNER'S SCHOOL SCHEDULE SHALL NOT BE IMPACTED BY FIRE ALARM REPLACEMENT. SCHEDULE ALL OUTAGES WITH A MINIMUM OF TWO WEEKS NOTICE FOR OWNER SCHEDULING. COORDINATE THROUGH CONSTRUCTION MANAGER.
2. FIRE ALARM LAYOUT IS SHOWN ON THESE PLANS FOR COVERAGE AREAS ONLY. EXISTING INFORMATION WAS GATHERED FROM VISUAL OBSERVATION WITHOUT REMOVING CEILING TILES AND OWNERS EXISTING INFORMATION. CONTRACTOR SHALL PROVIDE FULL DESIGN DOCUMENTS FROM NICET ACCREDITED FIRE ALARM DESIGNER AS PART OF THEIR BID, INCLUDING LAYOUT AND CALCULATIONS (DELEGATED DESIGN). CONTRACTOR SHALL PROVIDE DEVICES FOR COMPLETE AUDIBLE AND VISUAL COVERAGE. CONTRACTOR SHALL SELECT VISUAL DEVICES WITH CANDELA RATINGS AS REQUIRED AND PROVIDE SUPPLEMENTAL DEVICES WHERE REQUIRED. CONTRACTOR SHALL ASSUME 60 DECIBELS AS ROOM AMBIENT NOISE LEVEL FOR AUDIBLE DESIGN.
3. NOTIFICATION APPLIANCE CIRCUIT (NAC) POWER SUPPLIES/BOOSTERS ARE NOT SHOWN ON THIS PLAN. CONTRACTOR SHALL PLACE UNITS IN CUSTODIAL CLOSETS OR ELECTRICAL ROOMS AS REQUIRED AND CONNECT TO A NEARBY POWER PANEL WITH A DEDICATED CIRCUIT WITH 2 #12, #12 G IN 3/4" CONDUIT AND RED LOCKING HANDLE ON CIRCUIT BREAKER. UPDATE PANELBOARD DIRECTORIES FOR IMPACTED PANELS.
4. PROVIDE WIRE GUARDS ON DEVICES IN GYM AND SIMILAR SPACES.
5. CONTRACTOR SHALL REMOVE AND REINSTALL CEILING TILES AS REQUIRED FOR SCOPE OF WORK. REPLACE ALL TILES DAMAGED DURING CONSTRUCTION WITH NEW TILES MATCHING EXISTING.
6. EXISTING WALL MATERIALS MAY BE PLASTER AND LATH AND/OR GYPSUM WALLBOARD. CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS AS NECESSARY FOR CUTTING IN NEW DEVICE BOXES.
7. VERIFY EXACT QUANTITY AND LOCATIONS OF ALL SPRINKLER CONNECTIONS PRIOR TO FIRE ALARM SHOP DRAWING SUBMITTAL.
8. PROVIDE TWO WEEK NOTICE TO TOWN OF ZIONSVILLE FIRE DEPARTMENT FOR FINAL INSPECTION AND TESTING. COORDINATE SO THAT ANY CORRECTIVE WORK CAN OCCUR PRIOR TO RETURN OF STUDENTS TO SCHOOL.
9. PROVIDE CONNECTIONS TO BUILDING FIRE RESPONDER DISTRIBUTED ANTENNA SYSTEM FOR MONITORING.
10. THE ENTIRE BUILDING SHALL BE CONNECTION TO ONE (1) NEW FIRE ALARM PANEL AT THE COMPLETION OF THIS WORK IN A LOCATION ACCEPTABLE TO THE OWNER. PROVIDE LABELING FOR SYSTEM SUCH THAT BOTH HALFS OF THE BUILDING ARE IDENTIFIED INDEPENDENTLY. COORDINATE WITH FIRE DEPARTMENT, CURRENTLY 4700 AND 4800 ARE UTILIZED TO INDICATE PORTIONS FOR FIRE RESPONSE.
11. PROVIDE CATEGORY 6 CABLE TO FIRE ALARM DIALER FROM EXISTING NEARBY IDF.

GENERAL NOTES - DEMOLITION

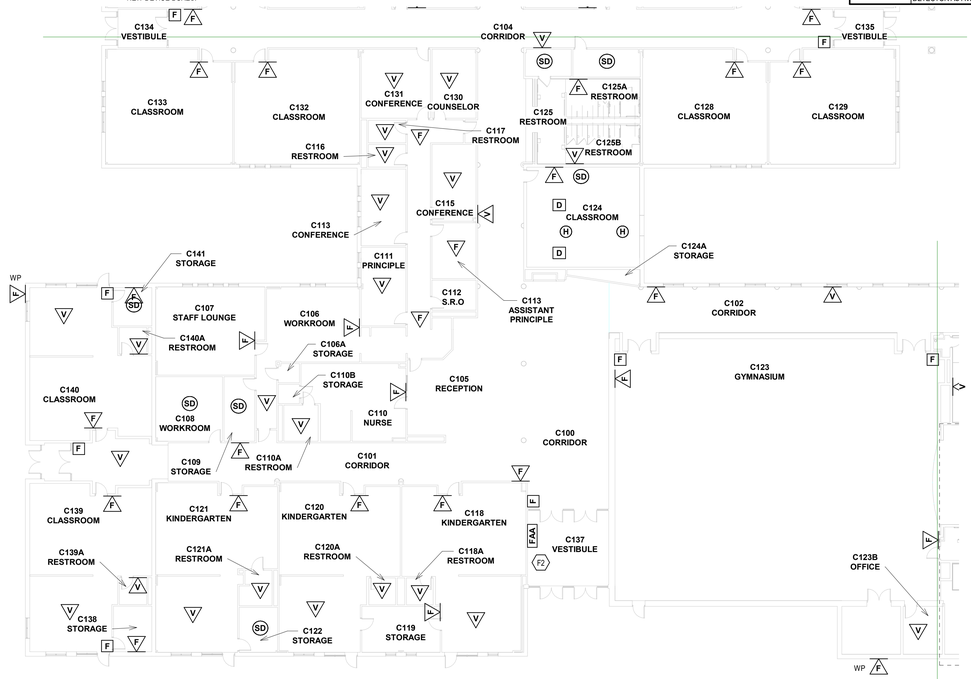
1. REMOVE ALL EXISTING FIRE ALARM EQUIPMENT IN THIS BUILDING, INCLUDING BUT NOT LIMITED TO, FIRE ALARM STROBES, HORN/STROBES, BELLS, PULL STATIONS, SMOKE DETECTORS, DUCT MOUNTED SMOKE DETECTORS, FIRE SPRINKLER FLOW AND TAMPER SWITH CONNECTIONS (ADDRESSABLE INTERFACE DEVICES), FIRE ALARM WIRING, NAC PANELS, FIRE ALARM ANNNICIATORS, FIRE ALARM PANEL AND DIALER.
2. EXISTING RECESSED BOXES FOR EXISTING WALL MOUNTED NOTIFICATION DEVICES MAY BE REUSED FOR NEW DEVICES WHERE MEETING CURRENT FIRE ALARM CODE.
3. EXISTING MANUAL PULL STATIONS IN UNITS E AND F SHALL BE RELOCATED TO NEW HEIGHT TO MEET ADA REQUIREMENTS. THE EXISTING PULL STATION SHALL BE REMOVED AND EMPTY BOX SHALL BE COVERED WITH PAINTED BLANK COVER PLATE. REFERENCE SECTION 26 05 33 FOR DEVICE PLATE AND PAINTING REQUIREMENTS.
4. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND INCLUDE ALL REMOVAL AS PART OF BID.

KEYNOTES	
F1	PROVIDE NEW FIRE ALARM PULL STATION AT EXISTING DOOR WITHOUT PULL STATION. CUT IN NEW FLUSH BOX AND CONCEAL WIRING WITHIN EXISTING WALL.
F2	REMOVE EXISTING FIRE ALARM PANEL (FAP) AND ENCLOSURE COMPLETE. PROVIDE A SECOND FIRE ALARM ANNUNCIATOR (FAA) AT LOCATION OF OLD FAP AND PATCH WALL TO REPAIR SURFACE TO MATCH EXISTING. SEE SHEET E6.02 FOR MAIN FIRE ALARM PANEL LOCATION AND ADDITIONAL FAA.
F3	PROVIDE CARBON MONOXIDE DETECTOR (OR COMBINATION CARBON MONOXIDE SMOKE DETECTOR AS AVAILABLE).



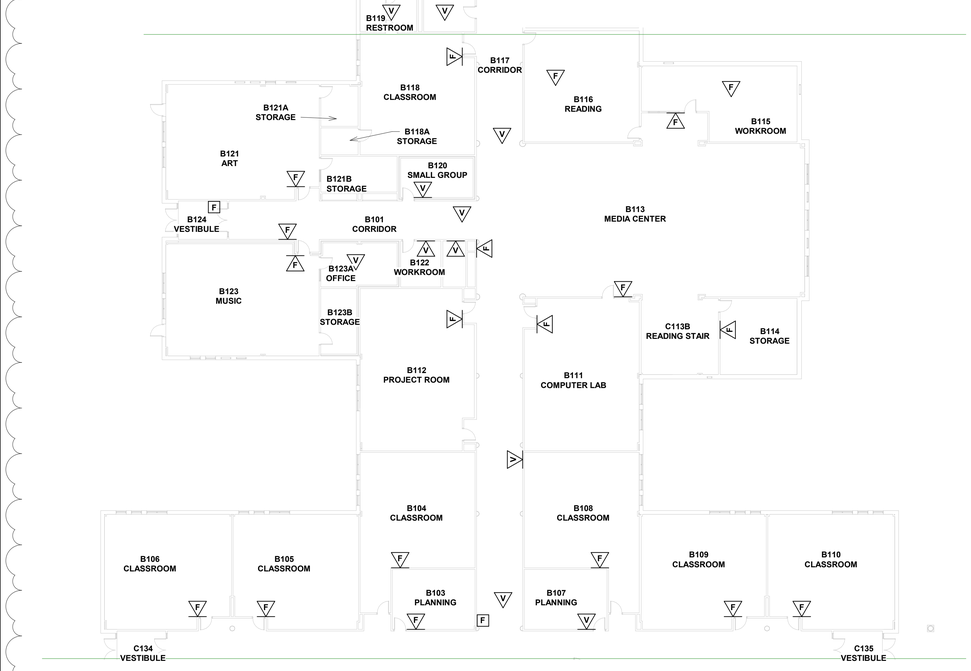
UNIT A - FIRST FLOOR FIRE ALARM PLAN

SCALE: 1/16" = 1'-0"



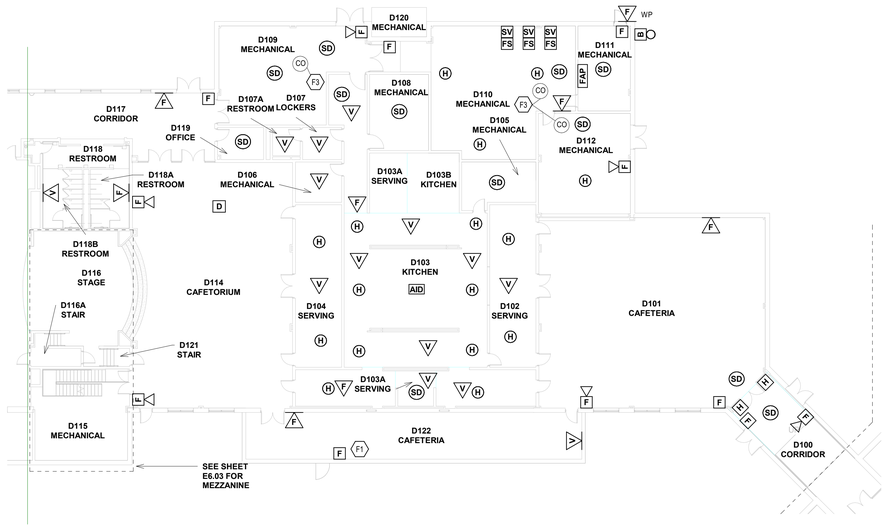
UNIT C - FIRST FLOOR FIRE ALARM PLAN

SCALE: 1/16" = 1'-0"



UNIT B - FIRST FLOOR FIRE ALARM PLAN

SCALE: 1/16" = 1'-0"



UNIT D - FIRST FLOOR FIRE ALARM PLAN

SCALE: 1/16" = 1'-0"

MULTIPLE FIRE ALARM & INTERCOM/PA REPLACEMENTS

PLEASANT VIEW ELEMENTARY
4700 SOUTH 975 E
ZIONSVILLE, INDIANA 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

317-848-0966 WWW.FHAI.COM

PLAN NORTH

CONSTRUCTION DOCUMENTS

BRIAN W. BUTLER REGISTERED No. PE19800026 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: CDT
PROJECT NUMBER: 223128.00
PROJECT ISSUE DATE: 12.19.2023

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #3	2/7/24

LOWER FIRE ALARM SYSTEM PLAN

PV-E6.01

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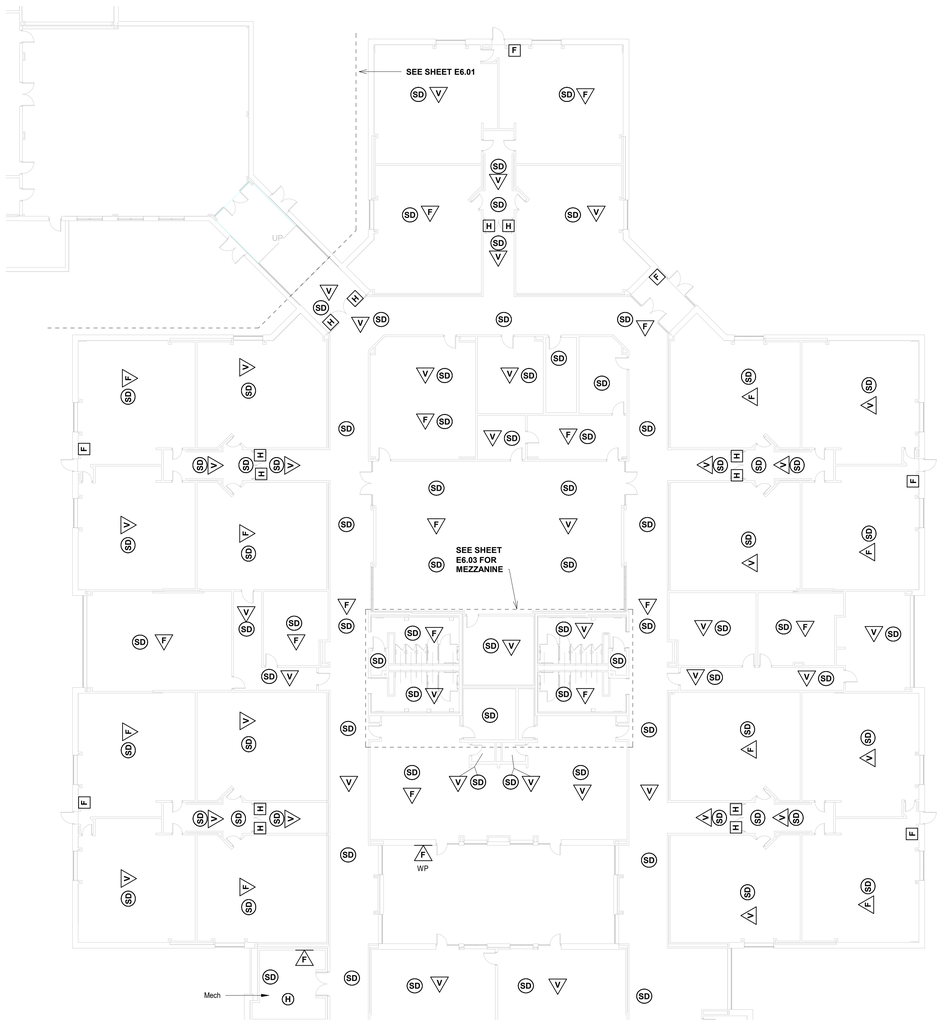
GENERAL NOTES - FIRE ALARM

1. ALL NEW FIRE ALARM WORK SHALL BE COORDINATED WITH EXISTING FIRE ALARM EQUIPMENT FOR CONTINOUS COVERAGE OF FACILITY WHILE OCCUPIED. SCHEDULE SWITCHOVER AND OUTAGES AT A TIME AGREEABLE TO OWNER, DURING PERIODS WHEN SCHOOL IS NOT IN SESSION. PROVIDE PROPOSED WORK PLAN WITH ANTICIPATED OUTAGE SCHEDULE FOR REVIEW AT START OF PROJECT. OWNER'S SCHOOL SCHEDULE SHALL NOT BE IMPACTED BY FIRE ALARM REPLACEMENT. SCHEDULE ALL OUTAGES WITH A MINIMUM OF TWO WEEKS NOTICE FOR OWNER SCHEDULING. COORDINATE THROUGH CONSTRUCTION MANAGER.
2. FIRE ALARM LAYOUT IS SHOWN ON THESE PLANS FOR COVERAGE AREAS ONLY. EXISTING INFORMATION WAS GATHERED FROM VISUAL OBSERVATION. WITHOUT REMOVING CEILING TILES AND OWNERS EXISTING INFORMATION. CONTRACTOR SHALL PROVIDE FULL DESIGN DOCUMENTS FROM NICET ACCREDITED FIRE ALARM DESIGNER AS PART OF THEIR BID, INCLUDING LAYOUT AND CALCULATIONS (DELEGATED DESIGN). CONTRACTOR SHALL PROVIDE DEVICES FOR COMPLETE AUDIBLE AND VISUAL COVERAGE. CONTRACTOR SHALL SELECT VISUAL DEVICES WITH CANDELA RATINGS AS REQUIRED AND PROVIDE SUPPLEMENTAL DEVICES WHERE REQUIRED. CONTRACTOR SHALL ASSUME 60 DECIBELS AS ROOM AMBIENT NOISE LEVEL FOR AUDIBLE DESIGN.
3. NOTIFICATION APPLIANCE CIRCUIT (NAC) POWER SUPPLIES/BOOSTERS ARE NOT SHOWN ON THIS PLAN. CONTRACTOR SHALL PLACE UNITS IN CUSTODIAL CLOSETS OR ELECTRICAL ROOMS AS REQUIRED AND CONNECT TO A NEARBY POWER PANEL WITH A DEDICATED CIRCUIT WITH 2 #12, #12 G IN 3/4" CONDUIT AND RED LOCKING HANDLE ON CIRCUIT BREAKER. UPDATE PANELBOARD DIRECTORIES FOR IMPACTED PANELS.
4. PROVIDE WIRE GUARDS ON DEVICES IN GYM AND SIMILAR SPACES.
5. CONTRACTOR SHALL REMOVE AND REINSTALL CEILING TILES AS REQUIRED FOR SCOPE OF WORK. REPLACE ALL TILES DAMAGED DURING CONSTRUCTION WITH NEW TILES MATCHING EXISTING.
6. EXISTING WALL MATERIALS MAY BE PLASTER AND LATH AND/OR GYPSUM WALLBOARD. CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS AS NECESSARY FOR CUTTING IN NEW DEVICE BOXES.
7. VERIFY EXACT QUANTITY AND LOCATIONS OF ALL SPRINKLER CONNECTIONS PRIOR TO FIRE ALARM SHOP DRAWING SUBMITTAL.
8. PROVIDE TWO WEEK NOTICE TO TOWN OF ZIONSVILLE FIRE DEPARTMENT FOR FINAL INSPECTION AND TESTING. COORDINATE SO THAT ANY CORRECTIVE WORK CAN OCCUR PRIOR TO RETURN OF STUDENTS TO SCHOOL.
9. PROVIDE CONNECTIONS TO BUILDING FIRE RESPONDER DISTRIBUTED ANTENNA SYSTEM FOR MONITORING.
10. THE ENTIRE BUILDING SHALL BE CONNECTION TO ONE (1) NEW FIRE ALARM PANEL AT THE COMPLETION OF THIS WORK. IN A LOCATION ACCEPTABLE TO THE OWNER. PROVIDE LABELING FOR SYSTEM SUCH THAT BOTH HALFS OF THE BUILDING ARE IDENTIFIED INDEPENDENTLY. COORDINATE WITH FIRE DEPARTMENT, CURRENTLY 4700 AND 4800 ARE UTILIZED TO INDICATE PORTIONS FOR FIRE RESPONSE.
11. PROVIDE CATEGORY 6 CABLE TO FIRE ALARM DIALER FROM EXISTING NEARBY IDF.

GENERAL NOTES - DEMOLITION

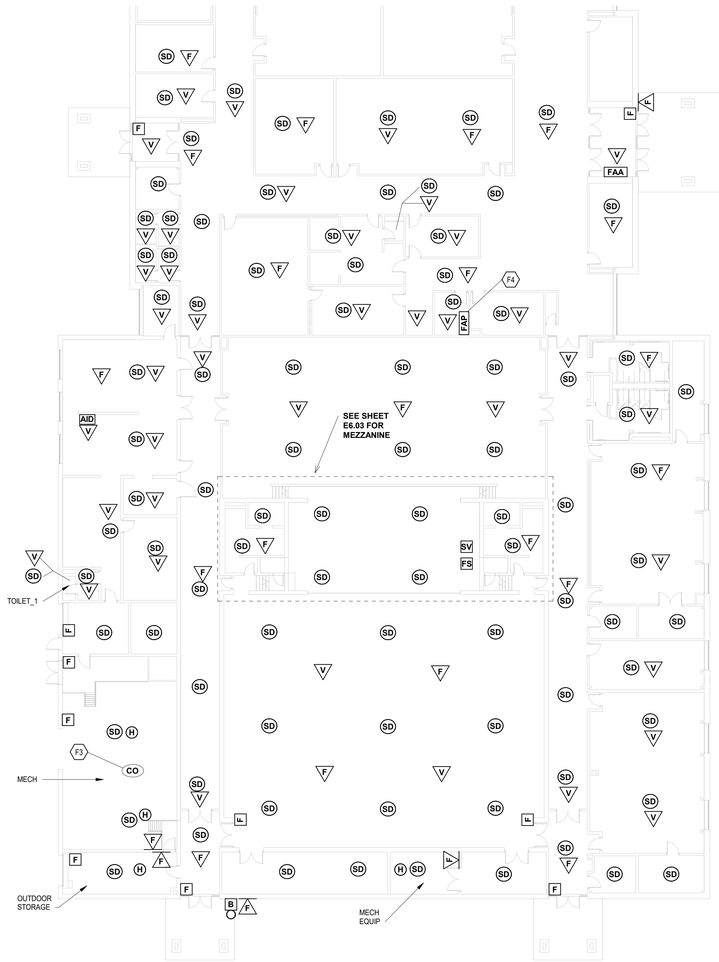
1. REMOVE ALL EXISTING FIRE ALARM EQUIPMENT IN THIS BUILDING, INCLUDING BUT NOT LIMITED TO, FIRE ALARM STROBES, HORNSTROBES, BELLS, PULL STATIONS, SMOKE DETECTORS, DUCT MOUNTED SMOKE DETECTORS, FIRE SPRINKLER FLOW AND TAMPER SWITH CONNECTIONS (ADDRESSABLE INTERFACE DEVICES), FIRE ALARM WIRING, NAC PANELS, FIRE ALARM ANNNCIATORS, FIRE ALARM PANEL AND DIALER.
2. EXISTING RECESSED BOXES FOR EXISTING WALL MOUNTED NOTIFICATION DEVICES MAY BE REUSED FOR NEW DEVICES WHERE MEETING CURRENT FIRE ALARM CODE.
3. EXISTING MANUAL PULL STATIONS IN UNITS E AND F SHALL BE RELOCATED TO NEW HEIGHT TO MEET ADA REQUIREMENTS. THE EXISTING PULL STATION SHALL BE REMOVED AND EMPTY BOX SHALL BE COVERED WITH PAINTED BLANK COVER PLATE. REFERENCE SECTION 26 05 33 FOR DEVICE PLATE AND PAINTING REQUIREMENTS.
4. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND INCLUDE ALL REMOVAL AS PART OF BID.

KEYNOTES	
F3	PROVIDE CARBON MONOXIDE DETECTOR (OR COMBINATION CARBON MONOXIDE SMOKE DETECTOR AS AVAILABLE)
F4	EXISTING FIRE ALARM LOCATION FOR UPPER BUILDING. COORDINATE SINGLE PANEL LOCATION WITH OWNER (NEW FAP IS SHOWN IN LOWER BUILDING ROOM D111).



UNIT E - FIRST FLOOR FIRE ALARM PLAN

SCALE: 1/16" = 1'-0"



UNIT F - FIRST FLOOR FIRE ALARM PLAN

SCALE: 1/16" = 1'-0"

MULTIPLE FIRE ALARM & INTERCOM/PA REPLACEMENTS

PLEASANT VIEW ELEMENTARY
4700 SOUTH 975 E
ZIONSVILLE, INDIANA 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

317-848-0966 WWW.FHAI.COM

PLAN NORTH

CONSTRUCTION DOCUMENTS

BRIAN W. BUTLER REGISTERED No. PE10500 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: CDT
PROJECT NUMBER: 223128.00
PROJECT ISSUE DATE: 12.19.2023

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #3	2/7/24

UPPER FIRE ALARM SYSTEM PLAN

PV-E6.02

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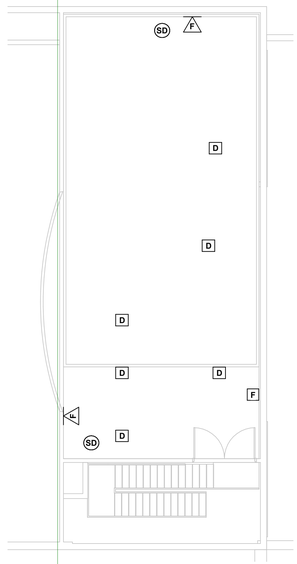
GENERAL NOTES - FIRE ALARM

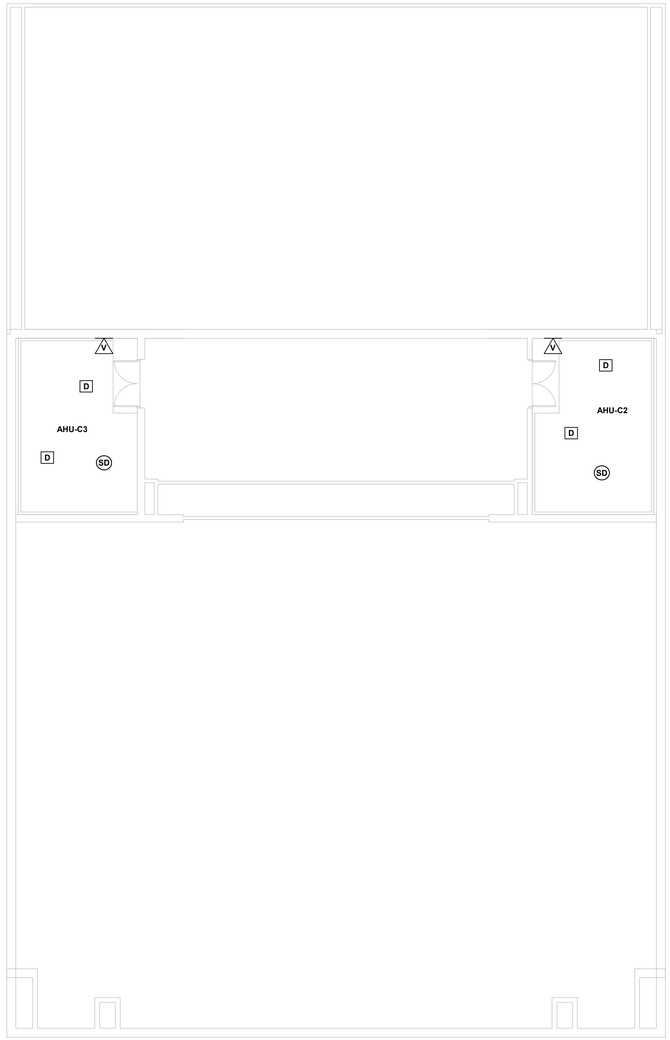
1. ALL NEW FIRE ALARM WORK SHALL BE COORDINATED WITH EXISTING FIRE ALARM EQUIPMENT FOR CONTINOUS COVERAGE OF FACILITY WHILE OCCUPIED. SCHEDULE SWITCHOVER AND OUTAGES AT A TIME AGREEABLE TO OWNER, DURING PERIODS WHEN SCHOOL IS NOT IN SESSION. PROVIDE PROPOSED WORK PLAN WITH ANTICIPATED OUTAGE SCHEDULE FOR REVIEW AT START OF PROJECT. OWNER'S SCHOOL SCHEDULE SHALL NOT BE IMPACTED BY FIRE ALARM REPLACEMENT. SCHEDULE ALL OUTAGES WITH A MINIMUM OF TWO WEEKS NOTICE FOR OWNER SCHEDULING. COORDINATE THROUGH CONSTRUCTION MANAGER.
2. FIRE ALARM LAYOUT IS SHOWN ON THESE PLANS FOR COVERAGE AREAS ONLY. EXISTING INFORMATION WAS GATHERED FROM VISUAL OBSERVATION WITHOUT REMOVING CEILING TILES AND OWNERS EXISTING INFORMATION. CONTRACTOR SHALL PROVIDE FULL DESIGN DOCUMENTS FROM NICET ACCREDITED FIRE ALARM DESIGNER AS PART OF THEIR BID, INCLUDING LAYOUT AND CALCULATIONS (DELEGATED DESIGN). CONTRACTOR SHALL PROVIDE DEVICES FOR COMPLETE AUDIBLE AND VISUAL COVERAGE. CONTRACTOR SHALL SELECT VISUAL DEVICES WITH CANDELA RATINGS AS REQUIRED AND PROVIDE SUPPLEMENTAL DEVICES WHERE REQUIRED. CONTRACTOR SHALL ASSUME 60 DECIBELS AS ROOM AMBIENT NOISE LEVEL FOR AUDIBLE DESIGN.
3. NOTIFICATION APPLIANCE CIRCUIT (NAC) POWER SUPPLIES/BOOSTERS ARE NOT SHOWN ON THIS PLAN. CONTRACTOR SHALL PLACE UNITS IN CUSTODIAL CLOSETS OR ELECTRICAL ROOMS AS REQUIRED AND CONNECT TO A NEARBY POWER PANEL WITH A DEDICATED CIRCUIT WITH 2 #12, #12 G IN 3/4" CONDUIT AND RED LOCKING HANDLE ON CIRCUIT BREAKER. UPDATE PANELBOARD DIRECTORIES FOR IMPACTED PANELS.
4. PROVIDE WIRE GUARDS ON DEVICES IN GYM AND SIMILAR SPACES.
5. CONTRACTOR SHALL REMOVE AND REINSTALL CEILING TILES AS REQUIRED FOR SCOPE OF WORK. REPLACE ALL TILES DAMAGED DURING CONSTRUCTION WITH NEW TILES MATCHING EXISTING.
6. EXISTING WALL MATERIALS MAY BE PLASTER AND LATH AND/OR GYPSUM WALLBOARD. CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS AS NECESSARY FOR CUTTING IN NEW DEVICE BOXES.
7. VERIFY EXACT QUANTITY AND LOCATIONS OF ALL SPRINKLER CONNECTIONS PRIOR TO FIRE ALARM SHOP DRAWING SUBMITTAL.
8. PROVIDE TWO WEEK NOTICE TO TOWN OF ZIONSVILLE FIRE DEPARTMENT FOR FINAL INSPECTION AND TESTING. COORDINATE SO THAT ANY CORRECTIVE WORK CAN OCCUR PRIOR TO RETURN OF STUDENTS TO SCHOOL.
9. PROVIDE CONNECTIONS TO BUILDING FIRE RESPONDER DISTRIBUTED ANTENNA SYSTEM FOR MONITORING.
10. THE ENTIRE BUILDING SHALL BE CONNECTION TO ONE (1) NEW FIRE ALARM PANEL AT THE COMPLETION OF THIS WORK. IN A LOCATION ACCEPTABLE TO THE OWNER. PROVIDE LABELING FOR SYSTEM SUCH THAT BOTH HALFS OF THE BUILDING ARE IDENTIFIED INDEPENDENTLY. COORDINATE WITH FIRE DEPARTMENT. CURRENTLY 4700 AND 4800 ARE UTILIZED TO INDICATE PORTIONS FOR FIRE RESPONSE.
11. PROVIDE CATEGORY 6 CABLE TO FIRE ALARM DIALER FROM EXISTING NEARBY IDF.

GENERAL NOTES - DEMOLITION

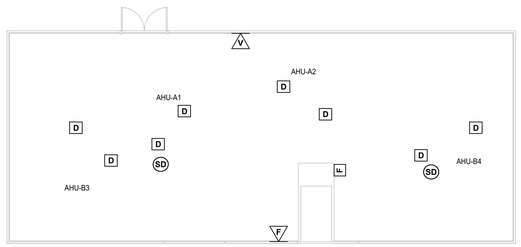
1. REMOVE ALL EXISTING FIRE ALARM EQUIPMENT IN THIS BUILDING, INCLUDING BUT NOT LIMITED TO, FIRE ALARM STROBES, HORN/STROBES, BELLS, PULL STATIONS, SMOKE DETECTORS, DUCT MOUNTED SMOKE DETECTORS, FIRE SPRINKLER FLOW AND TAMPER SWITH CONNECTIONS (ADDRESSABLE INTERFACE DEVICES), FIRE ALARM WIRING, NAC PANELS, FIRE ALARM ANNNCIATORS, FIRE ALARM PANEL AND DIALER.
2. EXISTING RECESSED BOXES FOR EXISTING WALL MOUNTED NOTIFICATION DEVICES MAY BE REUSED FOR NEW DEVICES WHERE MEETING CURRENT FIRE ALARM CODE.
3. EXISTING MANUAL PULL STATIONS IN UNITS E AND F SHALL BE RELOCATED TO NEW HEIGHT TO MEET ADA REQUIREMENTS. THE EXISTING PULL STATION SHALL BE REMOVED AND EMPTY BOX SHALL BE COVERED WITH PAINTED BLANK COVER PLATE. REFERENCE SECTION 26 05 33 FOR DEVICE PLATE AND PAINTING REQUIREMENTS.
4. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND INCLUDE ALL REMOVAL AS PART OF BID.



UNIT D - SECOND FLOOR FIRE ALARM PLAN
SCALE: 1/8" = 1'-0"



UNIT F - SECOND FLOOR FIRE ALARM PLAN
SCALE: 1/8" = 1'-0"



UNIT E - SECOND FLOOR FIRE ALARM PLAN
SCALE: 1/8" = 1'-0"

MULTIPLE FIRE ALARM & INTERCOM/PA REPLACEMENTS

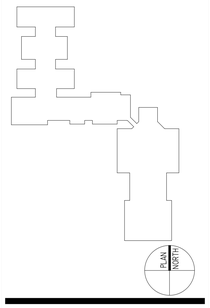
PLEASANT VIEW ELEMENTARY
4700 SOUTH 975 E
ZIONSVILLE, INDIANA 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

317-848-0966 WWW.FHAI.COM



CONSTRUCTION DOCUMENTS

BRIAN W. BUTLER REGISTERED No. PE 10000 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: CDT
PROJECT NUMBER: 223128.00
PROJECT ISSUE DATE: 12.19.2023

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #3	2/7/24

SECOND FLOOR FIRE ALARM SYSTEM PLAN

PV-E6.03

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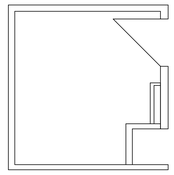
CALL-IN BUTTON

CS

TWO WAY CEILING SPEAKER

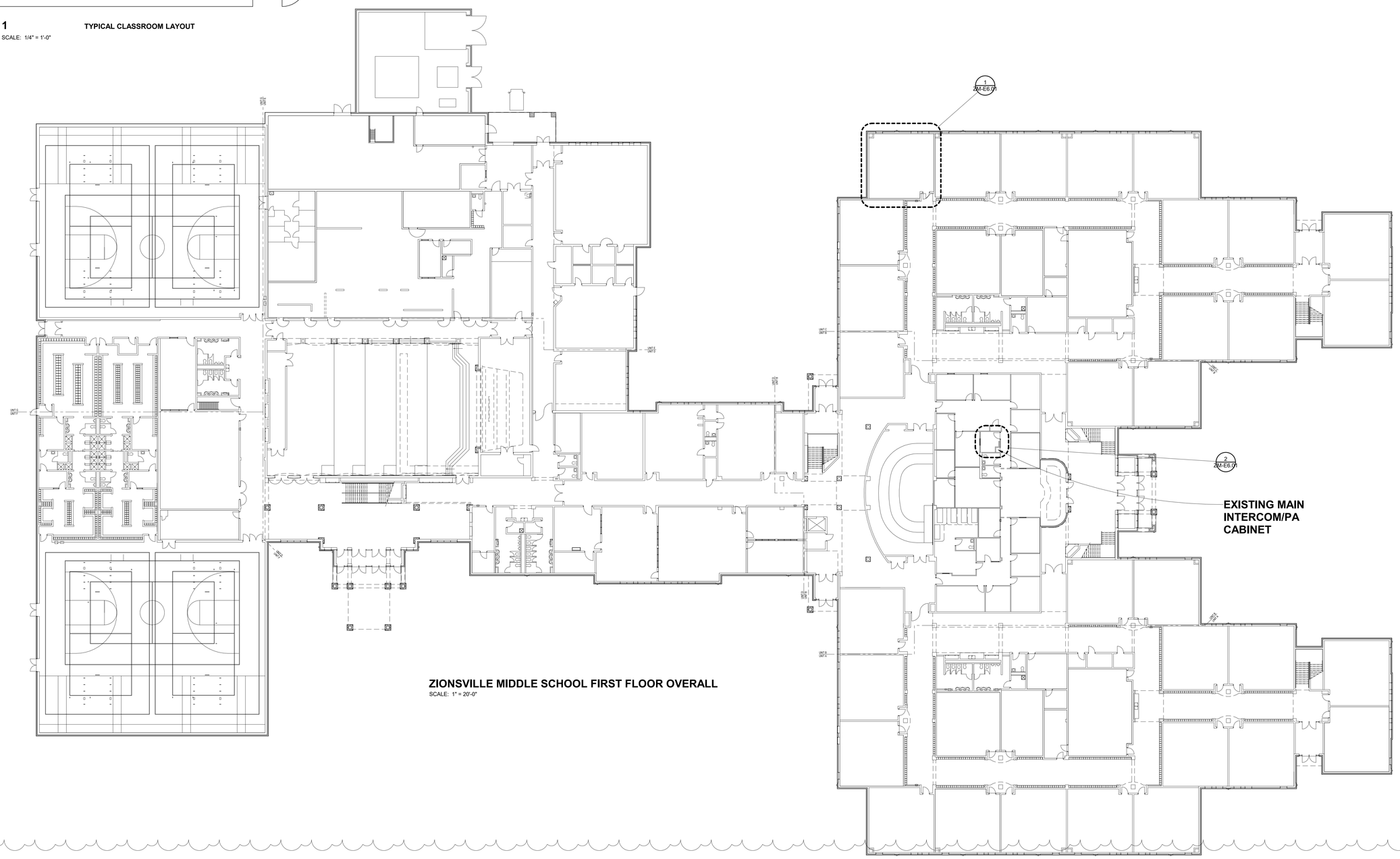


EXISTING MAIN INTERCOM PANEL LOCATION
SCALE: 1/4" = 1'-0"

GENERAL NOTES - INTERCOM/PA

1. FULLY REPLACE EXISTING DUKANE MCS350 MAIN ANALOG INTERCOM/PA SYSTEM WITH A NEW CAREHAWK INTERCOM SYSTEM HEADEND.
2. INSTALLING COMPANY SHALL BE A CERTIFIED AS AN INSTALLER OF CAREHAWK SAFETY COMMUNICATION PRODUCTS.
3. CENTRAL CONTROLLER SHALL INCLUDE AMPLIFIER, UPS AND ALL CARDS OR CONNECTIONS NEEDED TO PROVIDE A COMPLETE OPERATING FINAL SYSTEM.
4. COORDINATE THIS WORK TO HAPPEN IN PHASES THAT ACCOMODATE THE SCHOOLS PREFERENCE.
5. EXISTING WIRING, SPEAKERS, CALL IN BUTTONS AND VOLUME CONTROLS TO REMAIN IN PLACE AND BE REUSED WITH THE NEW PAGING/INTERCOM SYSTEM.
6. ONE ADMIN MAIN CONSOLE WILL NEED TO BE INCLUDED WITH THE SYSTEM AND LOCATED ACCORDING TO THE SCHOOLS DIRECTION.
7. OWNER WILL PROVIDE NETWORK EQUIPMENT AND PATCH CORDS ACCORDING TO NEEDS RELAYED TO THEM FROM THIS CONTRACTOR.
8. SYSTEM PROGRAMMING, TESTING & CERTIFICATION, AND TRAINING TO BE INCLUDED IN THIS PRICE.

1 TYPICAL CLASSROOM LAYOUT
SCALE: 1/4" = 1'-0"



ZIONSVILLE MIDDLE SCHOOL FIRST FLOOR OVERALL
SCALE: 1" = 20'-0"

INTERCOM/PA REPLACEMENTS

ZIONSVILLE MIDDLE SCHOOL
900 NORTH FORD ROAD
ZIONSVILLE, IN 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

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PLAN NORTH

CONSTRUCTION DOCUMENTS

BRIAN W. BUTLER REGISTERED No. PE 19900005 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: CDT
PROJECT NUMBER: 223128.00
PROJECT ISSUE DATE: 12.19.2023

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #3	2/7/24

FIRST FLOOR - OVERALL INTERCOM/PA FLOOR PLAN

ZM-E6.01

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GENERAL NOTES - INTERCOM/PA

1. FULLY REPLACE EXISTING DUKANE MCS350 MAIN ANALOG INTERCOM/PA SYSTEM WITH A NEW CAREHAWK INTERCOM SYSTEM HEADEND.
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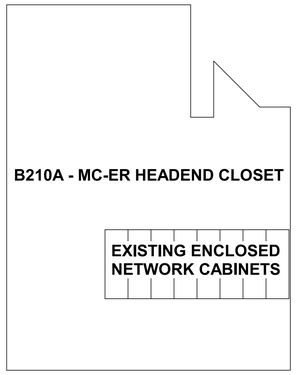
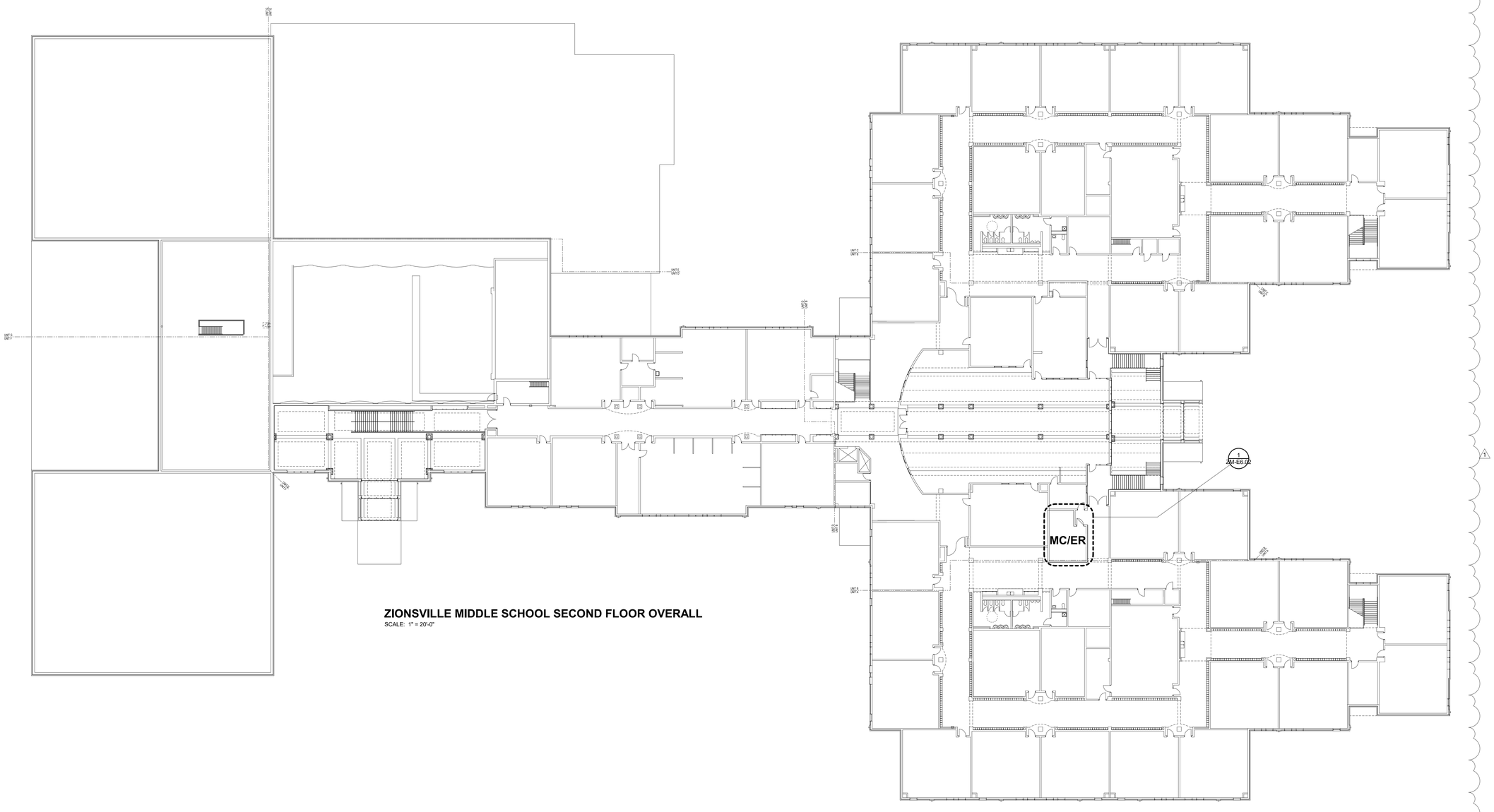


1 **MC-ER HEADEND CLOSET**
SCALE: 1/4" = 1'-0"



ZIONSVILLE MIDDLE SCHOOL SECOND FLOOR OVERALL
SCALE: 1" = 20'-0"

INTERCOM/PA REPLACEMENTS

ZIONSVILLE MIDDLE SCHOOL
900 NORTH FORD ROAD
ZIONSVILLE, IN 46077

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT
FANNING HOWEY
317-848-0966 WWW.FHAI.COM

PLAN NORTH

CONSTRUCTION DOCUMENTS

BRIAN W. BUTLER REGISTERED No. PE 11900006 STATE OF PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: CDT
PROJECT NUMBER: 223128.00
PROJECT ISSUE DATE: 12.19.2023

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #3	2/7/24

SECOND FLOOR - OVERALL INTERCOM/PA FLOOR PLAN

ZM-E6.02

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GENERAL NOTES - INTERCOM/PA

1. FULLY REPLACE EXISTING DUKANE MCS350 MAIN ANALOG INTERCOM/PA SYSTEM WITH A NEW CAREHAWK INTERCOM SYSTEM HEADEND.
2. INSTALLING COMPANY SHALL BE A CERTIFIED AS AN INSTALLER OF CAREHAWK SAFETY COMMUNICATION PRODUCTS.
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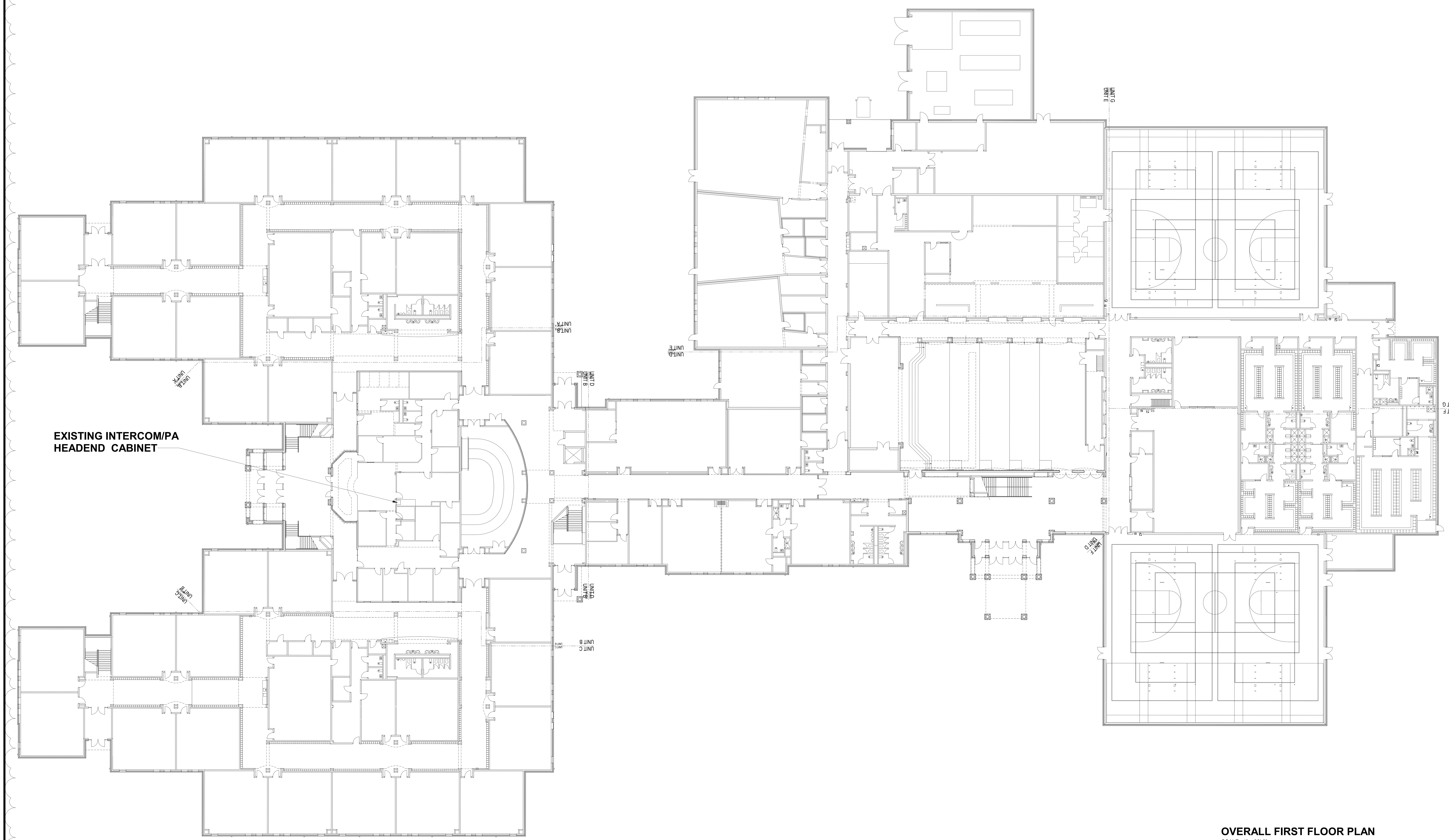

OVERALL FIRST FLOOR PLAN
SCALE: 1" = 20'-0"

INTERCOM/PA REPLACEMENTS

ZIONSVILLE WEST MIDDLE SCHOOL
5565 SOUTH 700 E
WHITESTOWN, IN 46075

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

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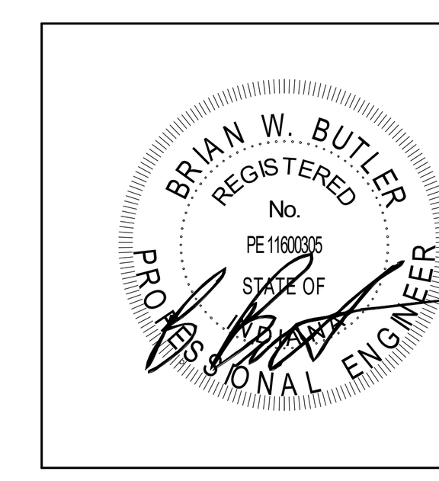
CONSTRUCTION DOCUMENTS



PROJECT MANAGER: JM
DRAWN BY: CDT
PROJECT NUMBER: 223128.00
PROJECT ISSUE DATE: 12.19.2023

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #3	2-7-24

OVERALL FIRST FLOOR INTERCOM/PA FLOOR PLAN

ZW-E6.01

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GENERAL NOTES - INTERCOM/PA

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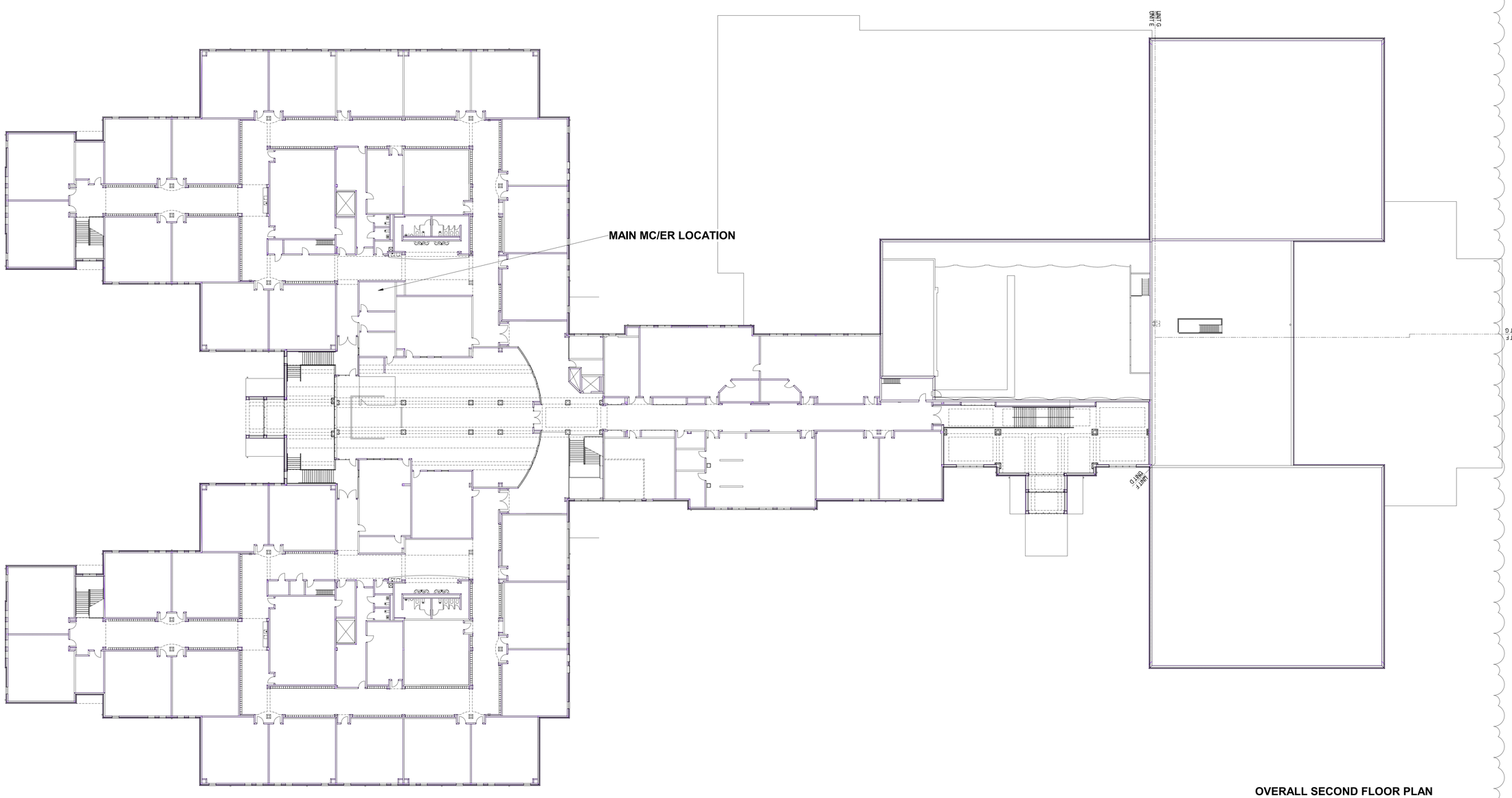

OVERALL SECOND FLOOR PLAN
SCALE: 1" = 20'-0"

INTERCOM/PA REPLACEMENTS

ZIONSVILLE WEST MIDDLE SCHOOL
5565 SOUTH 700 E
WHITESTOWN, IN 46075

ZIONSVILLE COMMUNITY SCHOOLS

ARCHITECT

FANNING HOWEY

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PLAN NORTH

CONSTRUCTION DOCUMENTS

BRIAN W. BUTLER
REGISTERED
No.
PE11800006
STATE OF
PROFESSIONAL ENGINEER

PROJECT MANAGER: JM
DRAWN BY: CDT
PROJECT NUMBER: 223128.00
PROJECT ISSUE DATE: 12.19.2023

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #3	2-7-24

OVERALL SECOND FLOOR INTERCOM/PA FLOOR PLAN

ZW-E6.02

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